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ABSTRACT:

This paper aims to provide an overview of the trends and standards in electronic-resource management (ERM). Design/methodology/approach – This paper examines the challenges that rapid growth in the number of electronic resources and in the complexity of managing e-collections has posed for libraries, and traces the progress in developing tools and setting standards to address such challenges. The ERM systems have not only for managing e-collections throughout their life cycle but also for aiding collection-development decision making. The integration of such systems in existing library environments and the mechanisms that make such integration possible are highlighted. Finally, the paper describes the collaborative process through which one vendor designed its ERM system. It combined with attentiveness to industry initiatives and standards can lead to a system design that responds to the demanding and rapidly changing requirements of the e-resource world and builds on the software infrastructure already available at libraries. This discussion will help librarians who struggle with the challenge of e-resource management to set their expectations about the potential of future tools to assist them in their tasks.

Keywords: Libraries; Digital libraries; Resource management; Collections management.

INTRODUCTION:

Several factors have rendered the job of librarians who deal with electronic resources extremely challenging: the amazing growth of electronic collections, the increasingly central role that these collections play in libraries, the large budgets that are involved in their acquisition, the endless variation in the packages offered by the hundreds of players in the market (such as publishers, interface providers, and subscription agencies), the frequent changes in business models, and, above all, the lack of automated tools to deal with the complexity of e-resource management.

As they attempt to maintain some control over their e-collections, librarians find themselves lost in a mire of spreadsheets and e-mail messages, and responsible for dealing with a variety of independent systems and data containers that are not integrated with each other. Too often, librarians rely on their memory alone to coordinate systems such as the acquisition module of their integrated library system, their alphabetic lists of electronic journals and databases, their metasearch tool, and their local link server. In addition to the initial

effort of setting up information in multiple places and the potential lack of consistency between systems, considerable duplication of effort is likely to occur. Much of a librarian's success at carrying out necessary tasks is based on personal experience: however, because the knowledge and experience gained from dealing with e-resources is often vested in too few people – sometimes only one – libraries are left at risk. Furthermore, the provision of meaningful metrics, such as detailed cost analyses and statistics on performance and usage, remains problematic, but without such metrics, managers cannot make fully informed decisions. As the spending on e-collections increases, so does the need for a better solution: “a system that supports management of the information and workflows necessary to efficiently select, evaluate, acquire, maintain, and provide informed access to electronic resources in accordance with their business and license terms”

In the absence of comprehensive commercial solutions, some institutions themselves developed systems that deal with various aspects of e-resource management. Now, a number of vendors are working on providing complete solutions that will help librarians not only maintain collections but also develop them further. The offering of some vendors consists of an electronic resource management (ERM) system that forms an integral part of their integrated library system.

True integration with systems that already support various aspects of the e-resource life cycle is likely to be the key to success for e-resource management solutions. Such a solution should not duplicate existing data and procedures, but rather complement them while streamlining workflows: it should provide a central “control tower” for librarians from which they can manage the e-resource environment.

CURRENT TRENDS AND INDUSTRY INITIATIVES:

Traditional integrated library management systems were designed for managing print resources and are not well suited to managing electronic resources. For example, library systems typically lack the ability to describe the hierarchical nature of electronic resources: that an e-journal is part of a package, and the package is supplied by an interface provider. Nor do traditional library systems have the means to describe attributes such as license and access information; to handle the various workflows required specifically for e-resource management, such as a trial workflow; and to deal with archival rights and the restriction of access to specific locations and specific communities. Lacking such capabilities, many libraries have been looking for solutions to help them manage this new form of resource.

What can librarians do with an e-resource management system that they cannot do today?

The first challenge is to clarify what we mean exactly by “e-resource”. An individual electronic journal such as Nature or D-Lib Magazine is an e-resource, as is an electronic book or an abstracting and indexing database such as MEDLINE, but an e-resource can also be a package of e-journals or a database of abstracts and indexes that includes the full text of some or all articles referenced by the indexes. Furthermore, we cannot think about an e-resource without considering the interface through which it is offered. These elements are intricately linked, although they can be licensed separately. The Other factors that are specific to e-resources and do not apply to the traditional print world include authentication, access, administration, usage, and more. Print and electronic resources differ in the manner in which they are acquired, accessed, and licensed. An ERM system needs to support these differences by providing the infrastructure for both the data and the workflows that are characteristic of e-resources and are typically missing from systems designed to deal with print resources. The system should provide the tools to manage e-resources throughout their life cycle while supplying the data that administrators need to make decisions about acquisitions, renewals, and cancellations of e-resource subscriptions. And the system needs to be extremely flexible and open, capable of supporting rapidly changing business models.

THE LIFE CYCLE OF E-RESOURCES:

Librarians say that the lives of e-resources are as complicated and challenging as those of human beings: e-resources are born, and at times they also die or are reincarnated under a different name or in a different shape; they form families, and the families may unite with other families, quarrel, or split up; treaties between

families are signed and can be later discarded; and so on. Keeping in mind that change is always a possibility, we will now look at the life cycle of an e-resource.

The typical life cycle of an e-resource that is available for a fee would include the following stages: **Discovery** – The awareness of a new e-resource originates from a faculty member's request, a recommendation from a subject librarian, an advertisement, a message in a forum, or any other source. The librarian then locates information about the e-resource information that might include, for example, the bibliographic details of an e-journal, the coverage period available, the packages that include this e-journal, and the interface or interfaces through which such packages are offered. The way in which a librarian finds the necessary information is related to the role of the ERM system as a collection management tool, as explained later.

Trial – In many cases, a librarian will want to try out an e-resource before deciding whether to purchase a license for it. A trial enables the librarian to offer the e-resource to some or all users – who may include patrons and librarians alike – and then base a decision on their feedback. During the trial process, the librarian activates the e-resource in the desired areas of the library environment, notifies the relevant audience, and obtains feedback. Librarians pay considerable attention to specific issues when testing an e-resource. One example is the technical infrastructure required by the user interface. The librarian needs to document issues related to web browser and plug-in compatibility, which may have an impact on how browser configurations are rolled out to library and faculty computers or even whether the institution can support the interface at all. Furthermore, the testers need to evaluate the usability of the interface, because the library may well have a choice of interfaces from different providers of a package of resources or subsets thereof. When the trial is complete, the librarian should be able to justify the choice of interface to the institution as a whole as well as to its various departments.

Selection – Once the trial is over, the librarian decides whether to acquire the e-resource. A decision not to purchase the e-resource results in its deactivation in the library environment (if it were activated previously as part of the trial process).

Acquisition – If the librarian decides to go forward and subscribe to the resource, he or she carries out an acquisition process that somewhat resembles the process for print resources; however, an additional level of detail is required, such as information about the license and the availability of the resource to various populations of users. Also, when a library is acquiring e-journals as part of a package from an e-resource aggregator, such as EBSCO, the librarian needs to know which journals are covered by the package and for what period of time; ideally, the librarian would have the option to pay one lump sum for the entire package or to pay separately for each title. Furthermore, the print and electronic formats may be linked in such a way that cancellation of the print format would invalidate the license agreement for the electronic format. Another issue is how to handle the distribution of a payment between the licensor of the package and one or more interface providers.

Access – Access, of course, is a major issue when dealing with e-resources. Once a library has acquired an e-resource, the librarians want to ensure that it is well used. First, they need to make certain that users can access it easily – for example, from an A-Z list; from the OPAC, if relevant; from a metasearch tool; or via a link server. Issues such as access by specific user groups or by remote users (for instance, proxy setup) also need to be solved. After the initial configuration of access, which might have been taken care of, at least partially, at the trial stage, librarians must deal with routine maintenance, problems such as the temporary unavailability of the resource, and changes in the provider's address or the manner of access.

Decision to renew or cancel – An e-resource subscription is typically valid for a defined time period. When the period ends, the librarian must either renew the subscription or cancel it. Unlike the decision at the selection phase, this decision is based on the information accumulated in the management system, such as the actual usage of the resource while it was available, the reliability of the interface, and the responsiveness of the provider. Whatever the outcome of the decision – renewal or cancellation – the system needs to support it. Furthermore, even after a subscription has been cancelled, the library might have perpetual access or archiving rights to the data, another area that librarians must deal with on an ongoing basis.

The description provided here is a simplified version of real life. Many e-resources today are purchased through consortia, which wield considerable purchasing power. In a consortia environment, the procedures involved in acquisition, access, and decision making are much more complex. An ERM system needs to address the heterogeneous needs of these consortia, particularly the differing levels of information sharing and the diverse management requirements – centralized versus localized or a combination of the two.

STANDARDS:

ERM systems, by nature, need to integrate into an existing library and the broader institutional environment – that is, the local integrated library system and other applications and services. The use of standards is, therefore, of major importance for enabling such integration to succeed. Let us examine a few illustrations of the importance of standards as related to integration and see how an ERM system would take advantage of such standards.

One of the most important standards for application integration is the Simple Object Access Protocol (SOAP) an XML-based protocol that facilitates the exchange of information between applications and the calling of procedures remotely from one application to another over HTTP. SOAP is a core standard for the web services architecture for integrating applications built on heterogeneous platforms. ERM vendors should provide appropriate interfaces in the form of web services to facilitate the integration of their ERM system with other applications.

The exchange of metadata between subscription agents and an ERM system is another area in which standards may help considerably. The exchange of serials subscriptions and holdings, and possibly are also the process of automatic electronic check-in.

Another aspect that relates to integration and standards is the recording of e-resource usage, particularly when the user moves away from locally administered web pages to those of information providers. More often than not, libraries rely on statistics provided by the vendor, statistics that come in many formats. Recently, moves have been made to standardize usage statistics from vendors. For example, “session”, “search”, and “full-text article” – but also a standard reporting format. When vendors provide data in XML according to the proposed schema, an ERM system will be able to upload the statistics into the ERM database and thus enable librarians to analyze usage statistics with other data pertaining to an e-resource.

Hence, the developers of ERM systems must take into account current and emerging standards if they are to integrate their system with a portfolio of library applications. Both public-sector and corporate organizations have long been demanding that library applications be seen as just one component in the delivery of services to users. The key to interoperability is the development of systems that conform to standards and that publish. With the emergence of Web services as a set of standards for application integration, the task of integrating library applications with other institutional systems will become easier.

DEVELOPING AN ERM SYSTEM:

Developers of the ERM system have paid close attention to many of the issues mentioned earlier. We will now take a look at the processes through which this system was developed and is integrated into a library environment.

For a number of years, ERM has been involved in providing tools for handling various aspects of e-resource management. These aspects include, in particular, the use of e-resources as linking sources or targets and as resources for met searching, and the ways in which such resources are represented to end users. Because many of customers are members of consortia and the products already address issues related to the consortia handling of e-resources.

The original link server deals with many of the complexities of managing e-resources – particularly e-journals, which pose the greatest management challenge in the electronic world. Although developed to put linking into the hands of the librarian. Many institutions become the central repository of all e-journal information. ERM tools have been developed to automatically generate e-journal A-Z lists and provide unmediated document delivery, to name just one example.

MetaLib, the library portal, provides resource-discovery tools and metasearch (cross-database search) capabilities. The focus of MetaLib is on providing access to databases and packages of e-journals and e-books rather than to individual e-journals that might serve, for example, as targets of a link server. Nevertheless, MetaLib includes tools that relate to individual e-journals, such as alphabetical lists.

The ERM system adds some important components to the suite: tools for managing business activities associated with the acquisition and licensing of e-resources, and for facilitating cost analysis and collection-development decision making. The database enables libraries to maintain comprehensive information related to e-resources in one accessible location. A stand-alone system that is also readily yintegrated into a library environment and likely to become a focal point of the institution's digital library in the near future.

At the core of the data model is the e-product, which comes in two forms: an e-interface combined with a stand-alone entity and an e-interface combined with an e-package and e-constituents. For example, the MEDLINE abstracting and indexing database from EBSCO may be represented by EBSCOhost® – an e-interface entity – and the MEDLINE database, which is a stand-alone entity. Let us return for a moment to our example: the e-products in that scenario include High Wire Press as the e-interface, the package as the e-package, and the individual e-journals as e-constituents. Additional entities that are related to the e-product as a whole or to its components describe the various aspects of, and tasks related to, licensing, acquisitions, administration, cost, usage, and more.

Reflecting the many configurations of e-resources and complex business and licensing models, Verde is designed to be extremely flexible in terms of structures and workflows. The interface provides a sophisticated mechanism for navigating the intricacies of e-resources, enabling librarians to view the various entities and their attributes and to access related items. For example, a librarian can select an e-journal in one e-package and view all entities related to this e-journal and e-package; the librarian can also navigate to other e-packages that offer the same e-journal. At each point, the librarian – if authorized – can add or modify information as necessary. In addition, the librarian can follow a workflow to accomplish a specific task, such as managing a trial. In such cases, the system guides the librarian through the required steps until the workflow is complete.

From the outset, ERM designed to support a range of consortia models. Its data model permits libraries to share common data while maintaining their local or campus-specific data as necessary. Institutions can implement the model that best suits their needs, whether their administration is local, centralized, or a combination of the two. Such consortia models have been successfully deployed with other products.

BUILDING THE ERM SYSTEM INTO THE LIBRARY ENVIRONMENT:

As discussed earlier, various tools already provide some of the functionality required for managing e-resources and end users' access to them. For example, end users can access an e-journal via an A-Z list, library portal, library OPAC, or link server. The ERM system has been constructed to integrate with such tools. The system is the linchpin of e-resource management activity. ERM interacts with other systems to deal with the various stages of an e-resource's life cycle. For example, setting up an e-resource at the trial stage may require the activation of the e-resource in a link server and also in an A-Z list or library portal. Once acquired, the new e-resource might also be presented in the OPAC for general availability. Cancellation, on the other hand, typically results in the deactivation of the e-resource in all the components of the library system (unless perpetual access or archiving rights to the data are retained).

ERM SYSTEMS FOR THE COLLECTION DEVELOPMENT DECISION MAKING:

One of the great advantages of an e-resource management system – and indeed one of the goals is to provide tools to assist librarians in the decision making surrounding collection development. Such tools include a global knowledge base, from which libraries can select resources; overlap-analysis reports; cost-usage analysis reports; and more. In a consortia environment, the system can also provide valuable information about the collections of member institutions, which should ideally be able to see what their fellow institutions have acquired or are considering acquiring and to share resources when relevant.

THE GLOBAL KNOWLEDGE BASE:

Librarians who want to acquire a resource must learn which of many diverse sources will enable them to acquire it – and, clearly, a librarian cannot always be aware of all the available options. An ERM system can facilitate this process by providing a global picture of the e-resource world, a comprehensive knowledge base that describes what is available, including information about the packages, interfaces, and providers. Today, an ERM system can store user names, passwords, URLs, and other information about access to the statistics hosted at the vendor's site. In the future, when such statistics are available in a standard XML schema, librarians will be able to download the statistics to an ERM system to use in cost-usage analysis reports.

With the global e-resource offerings described in the universal e-resource knowledge base, the library's e-resource collection described in the local database, and the library's expenditures expressed in the cost and usage entities, librarians can find new e-resources of interest; take advantage of information already available in the system when adding local information; and, when deciding whether to acquire, renew, or cancel an e-resource, use existing information related to that e-resource and others.

Imagine a resource management system with a sophisticated reports module where librarians could consult everything from cost per full-text article download to faculty retention requests over the last three years to average annual inflation rate. Our professional judgment about materials would be more informed and efficient while easily accessible usable data would enhance negotiation with users.

CONCLUSION:

There is no doubt that libraries need a system to manage their electronic resources throughout the resources' life cycle. Such a system should not only deal with the daily tasks related to e-resources but also provide comprehensive analyses related to a library's expenditure on electronic materials. Furthermore, an ERM system can open up new horizons related to collection management, in which information about the global marketplace and also about the institution's collection and expenditures can serve as decision-making tools for library staff.

An ERM system is basically a tool for librarians, but its impact also relates to end users. The information gathered in the ERM system can serve as a starting point for users' interaction with e-resources. Such interaction would be built on the ERM system's integration with other library products, such as a link server, metasearch system, or library OPAC. For example, an OPAC could query the ERM system for license permissions to display to the user. However, with a comprehensive knowledge base, such an ERM system may replace some of the roles assumed by other products, such as the generation of alphabetical lists of e-resources. In the near future, we can expect to see the fruits of the committee's work in the ways in which the various players in the information industry build their ERM systems.

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USE OF INTERNET IN UNIVERSITIES OF HARYANA: AN ANALYTICAL STUDY

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ABSTRACT:

The study examines the use of Internet in Universities of Haryana. Two major groups- teachers and research scholars were surveyed. The survey instrument was a hardcopy questionnaire. Findings of this study show that respondents are seriously depend on Internet mainly for research, teaching and communication. The study also discusses frequency of use of Internet by teachers and research scholars and problems faced by them in extensive use of Internet.

Keywords: Internet, WWW, University, Teachers and Research Scholars.

INTRODUCTION :

The global computer network has changed the living style of the modern generation. As technologists reflect on the great inventions of the millennium and turn once again to predictions for a Star Trek future, the Net will undoubtedly figure as one of the biggest leaps forward of the last century (www.zdnet.co.in). Nobody can deny that today the Internet is fully consolidated worldwide nor that the web has changed the world. Everything in the world is changing for the better, thanks to the advances and the daily developments of technology. There are more opportunities for progress, at all levels, than ever before for everyone (www.internetworldstats.com). Internet is concreting system for a great rise in higher education and research. Internet is a dynamic organism that can be looked at in the myriad ways, it is a framework for numerous services and a medium for creativity and innovation (www.fncinc.com). Children in twenty years time will spend less time in the classroom and more time remote-learning via the Web. The Internet will take the place of blackboards and books will be replaced by online devices (Thatcher, 1999). Numerous studies have been carried out to evaluate the significance of Internet. Present paper is also a study to estimate the behavior of Internet users. The study is an effort to know the utility and importance of Internet among the faculty members and research scholars in the universities of Haryana.

BACKGROUND:

Haryana state of India is famous for agriculture and milk. It is among the small states of the country. Haryana state has a number of excellent academic institutions. Chaudhary Charan Singh Haryana Agricultural University popularly known as HAU is one of Asia's biggest agricultural universities, located at Hisar in the Indian state of Haryana. HAU was initially a campus of Punjab Agricultural University, Ludhiana. After the formation of Haryana in 1966, it became an autonomous institution on February 2, 1970 through a Presidential Ordinance, later ratified as Haryana and Punjab Agricultural Universities Act, 1970, passed by the Lok Sabha on March 29, 1970. A. L. Fletcher, the first Vice-Chancellor of the university, was instrumental in its initial growth. It won the Indian Council of Agricultural Research's Award for the best Institute in 1997. University is spread over an area of 7219 Acres at Hisar and 1426 Acres at outstations. It has one of the best developed campuses in India to meet academic and extra-curricular needs of the students. HAU has seven constituted colleges i.e. College of Agriculture Engineering and Technology, College of Agriculture, College of Agriculture, Kaul, College of Animal Sciences, College of Basic Sciences and Humanities, Indira Chakravarty College of Home Science and College of Veterinary Science (www.hau.ernet.in)

The Kurukshetra University was established in 1956 as a unitary residential University and its foundation stone was laid by late Dr. Rajendra Prasad, the first President of India. Located in the holy city of Kurukshetra, land of the historical battle of 'Mahabharata' and the great message of Bhagwad Gita, its campus is situated on

the western bank of Brahm Sarover (the holy tank) and extends over an area of over 400 acres. Starting with only the Department of Sanskrit, it has grown into a multi-faculty University as one of the premier centres for advanced study and research in the region. The University's programs combine the enduring value of a liberal arts education with the skills and experience offered by professional departments. The University has 445 teaching faculty members. The University also has 457 affiliated colleges and institutes in the Districts of Ambala, Panipat, Kaithal, Yamuna Nagar, Hisar, Fatehabad, Jind, Karnal, Sirsa, Kurukshetra and Panchkula (www.ku.ac.in).

Maharshi Dayanand University Rohtak, came into existence by an Act No. 25 of 1975 of the Haryana Legislative Assembly in 1976 with the objective to promote inter-disciplinary higher education and research in the fields of environmental, ecological and life sciences. It had a unitary and residential character in its nascent stage, but became an affiliating University in November 1978. The University campus, spread over an area of over 665.44 acres. Educational and research programmes are offered through its 36 departments.

Besides, the University runs some programmes through its Indira Gandhi P.G. Regional Centre, Meerpur (Rewari) and University Institute of Law & Management Studies (ULIMS), Gurgaon. The Regional Centre offers nine P.G. Programmes, while ULIMS offers two. Over 490 Institutions/Colleges of general education, Engineering, Technology, Computer Sciences and Management Sciences located in 10 districts of the State are affiliated to this University (<http://www.mdurohtak.ac.in>).

The Guru Jambheshwar University, Hisar, was established on October 20, 1995 by an Act of the Legislature of the State of Haryana. It was formally inaugurated on November 1, 1995. It is named after Guru Jambheshwar Ji Maharaj, a saint environmentalist of 15th century. Keeping in view the nature of courses offered at the University and the mandate for which it had been established the name of the University has been changed as Guru Jambheshwar University of Science & Technology. The University is situated over a sprawling area of about 372 acres. The University has been accredited by National Assessment and Accreditation Council (NAAC), in 2002 as grade 'A' and has been re-accredited as grade 'A' with (CGPA 3.26), in 2009. The jurisdiction of the University extends to the courses being run in the areas of science, technology, engineering, pharmacy, physiotherapy and management on the University Campus and all Technical Institutions (except B.Pharmacy institutions) in the districts Fatehabad, Hisar and Sirsa (www.gjustac.in).

OBJECTIVES:

Objectives of the study were to know the:

- Various purposes of Internet use;
- Various Internet services used by teacher and research scholars; Impact of the Internet on the teaching, learning and research; Time spent by teachers and research scholars in using Internet;
- Satisfaction with the Internet facilities provided by the universities under study; Productivity and quality of information, retrieve through Internet; Problems faced in using various Internet services

RELATED STUDIES:

Relevant studies have been conducted on the use of Internet by teachers, students, research scholars and other community members. Here are some reviews regarding the use of Internet services.

Khan et al. (2011) in their study on Islamia University of Bahawalpur, Pakistan found that vast majority of the students use Internet mainly for study purpose. They use online databases, dictionaries, encyclopedias and online courses. Google was the most popular search engine for retrieving information on the Internet. The respondents were also dissatisfied with the Internet service provision, slow speed of the Internet connection and inadequate number of computers in computer labs. Bhatti et al. (2011) conducted a study on Social scientists of Bahauddin Zakariya University and found that respondents do not rely only on print sources of information rather exploiting the internet for teaching, research, doing M.Phil and Ph.D, guiding research students, writing and submitting articles to journal and conferences. Thanuskodi (2011) observed that the internet and CD-ROM were the most frequently used IT-based source and facility, study reveals that 3-4 hours

of access of Internet is quite common among the respondents. Loan (2011) found that majority of the college students were frequent users of Internet using from daily to weekly basis, study also revealed that rural students mostly used Internet for education, they also face the problems like information overload (too many hits) followed by Internet illiteracy, financial barrier and information pollution. Nwezeh (2011) examined that the majority of the surveyed academic staff and students found that internet to be very useful, internet resources mostly used by both groups were e-mail and World Wide Web (WWW). A large portion of user population in the Gulbarga University is aware about the Internet, but they do not know all its techniques and applications (Parameshwar and Patil, 2009). Swain and Panda (2009) observed that academic use of Internet by the business schools' faculty of Orissa has not yet researched its peak. The research scholars of Shivaji University, Kanpur use the Internet for their research and communication purposes (Bansode and Pujar, 2008). Kumber and Vasanatha (2007) conducted a survey on Internet use and its impact among the engineering colleges of Mysore, Hassan and Mandya district and found that 92.22% of the total respondents use Internet only for e-mail, 86.66% respondents are using Google as the favorite search engine for accessing information and 53.33% are not satisfied with the printing and downloading available in their respective colleges. Kanungo (2007) in his study on use of Internet in scholarly communication of social scientists examined that 91% of the social scientists find Internet as an important tool of research. The survey has established that Internet has indeed become a communication medium for enhancing teaching, research and professional development for social scientists. Mishra, et al. (2005) conducted a study on undergraduate students of G B Pant University of Agriculture and Technology and found that a majority of the respondents i.e. 61.5% males and 51.6% females used the Internet for preparing assignments, 83.1% male and 61.3% female respondents faced the problem of slow functioning of Internet connection. Robinson (2005) examined the Internet use among African-American college students. The results of the study indicated that most of the African-American college students (76%) had used the Internet for more than three years. 47% of the responses indicated they spent an average of two hours per day on-line. A small percentage of the students spent 5-6 hours per day on the Internet.

CONCLUSION:

The study reveals that almost 98% respondents of all the four universities find Internet as an important tool of research. For erudite avowal dependency on Internet of teachers and researchers is extremely soaring. Respondents dedicate enough time on Internet and have adequate experience of Internet use. 23.45% respondents are daily user of Internet, where as 48.14% respondents use it 2-3 times in a week, but still more than 81% respondents feel Internet can not replace library. No doubt Internet is a superb and vigorous instrument to fulfill the academic needs of the scholars. 97.94% respondents rate Internet more informative in compare to traditional sources of information. More than 87.65% respondents face the problem of slow speed of Internet, where as 22.63% respondents are not capable to find the required information through Net. Another major problem faced by respondents is failure of Internet connectivity, which is faced by 52.67% respondents. It is the duty of the concerned organizations to provide the uninterrupted Internet services to their intellectual society, so that they may perform the fabulous teaching and research.

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VALUE OF HOLISTIC EDUCATION AND CONSEQUENCES OF ITS ABSENCE

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ABSTRACT:

We discuss in the present paper about the holistic education movement does not have a single source, a predominant proponent, or a major form of expression. Consequently, it is difficult to define holistic education. However, there are a number of values and perceptions that most schools claiming to be holistic would embrace, and today I would like to mention some of these values and look especially at what gave rise to their popularity. Value Education means a positive effect for bringing about a synthesis of physical, intellectual, emotional, aesthetic, moral and spiritual values in a human being, Value Education must include: all dimensions - Thought, behaviors, work and realization and all levels – Individual, family, society nature and existence. It should encompass understanding of harmony at various levels, namely individual, family, society, nature and existence And finally it is to learn to live in accordance with this understanding by being vigilant to ones thoughts, behavior and work The process for Value Education has to be that of “Self Exploration” it is a process of dialogue between what you are and what your really want to be. It is a process of being in harmony in oneself and in harmony with entire existence.

Key Words: *Holistic Education, Human Value, Value Education, Harmony, Culture.*

INTRODUCTION:

Today I will put forward the view of many holistic educators: that holistic education reflects and responds more fully than conventional education to a new and increasingly accepted view of what it means to be human as well as to much popular social criticism. For college to ignore what seems to be a change in humanity’s view of itself is to risk having colleges that try to prepare students for something they don’t believe in; it is to risk having an educational system that is felt to be meaningless by the very population it wants to serve. For institute to have values and views of human nature different to those of its population is like asking a committed pacifist to attend a professional course classes.

Humankind is passing today through an acute crisis, and the reason behind this crisis is a disequilibrium between the progress that has been registered in recent times in the externalities of life and the progress or lack of progress in the inner realms of life, The human mind has achieved an enormous development in the building of a structure of hugeness and complexity. On the other hand, the contemporary human beings have not developed enough spiritual and moral capacity to manage the hugeness of structure and its complexity. The necessary to develop Value Education is paramount. The notion of value does not merely encompass aspects of educational attainment, but especially the aspects of curricula and their content focusing on peace, shared values, human rights, democracy, tolerance and mutual understanding, Educational institutions and education materials should serve as a vehicle for peace dialogue and intercultural understanding. It has been revealed in the field of value education as mentioned below.

- Education system at present is not congenial to value promotion.
- Teachers themselves lack knowledge and rationale of values. They do not follow value.
- Literature on value education is limited whatever is available is not of good quality.
- students are enamoured by modern fashion.
- Families are also for getting their role as the first school of citizenship
- Materialism has left no place.
- Leaders have no values.

The aim of students is to pass the examination and not personality development.

Negative values like drinking, smoking, gambling are common among teachers and students. Institutions have been benefitted from being able to have a holistic view of the education being imparted and infusing new energy. both students and teachers alike, In addition to, effectively dealing with issues like Student Indiscipline, Ragging Strikes, Ban of Mobile Phones in Classrooms Respect to Teachers, Dress Ethics, Human Behaviour, Positive Mental Attitude, Self Motivation, Communication Skills and Knowledge, Body Language, Personality Development, Self- Confidence, Cooperation, Responsibility Tolerance Humility, Happiness, Honesty Unity, Simplicity, Cheerfulness, Purity of Thoughts, Mind And Action, Freedom Conservation of Human and Natural Resources – Earth, Fire, Water, Air and Power. Today, the majority of people is largely influenced and defines their true worth by material value such as social position, monetary worth, and external appearance of personal possessions. That misrepresentation of the source of true worth creates cultures of accumulation. Possessiveness, selfishness, and greed is the root cause of conflict, exploitation, poverty, and tension in the world. From time immemorial human beings have drifted towards „what I have“ “what I have received” „what I have kept“- not „who I am“ „what I have given, „what I have shared. It is the enlightened few who help preserve human values for the human race and save the world from moral bankruptcy.

Developing the right understanding about oneself and the rest of reality through self exploration and realization of the inherent co-existence, harmony and self-regulation at various levels in existence is seen to be the real basis for imbibing universal human value and ethical human conduct. This is what will affect transformation towards a holistic worldview (human consciousness) which happens to be the purpose of value education. This is what is really crucial to ensure ethical conduct of profession as well. The identification of values, based on right understanding, enables the formation of a vision for humanistic education, human conduct and humanistic constitution that leads to a universal human order. This opens up a lot of scope for R & D to evolve holistic technologies and systems.

WHAT IS HOLISTIC EDUCATION?

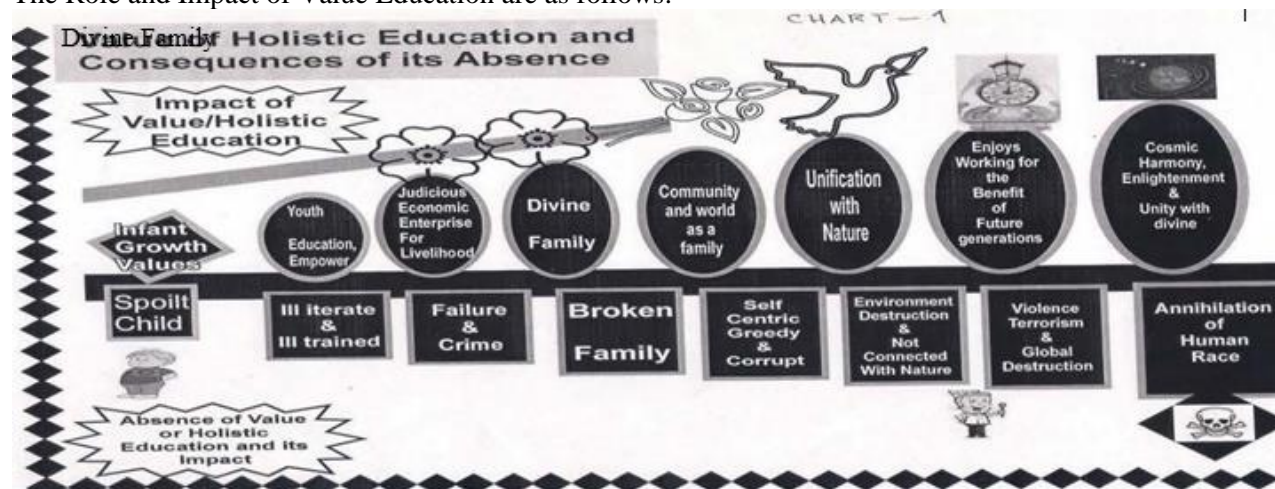
Holistic education is a philosophy of education based on the premise that each person finds identity, meaning, and purpose in life through connections to the community, to the natural world, and to humanitarian values such as compassion and peace. Holistic education aims to call forth from people an intrinsic reverence for life and a passionate love of learning. This is the definition given by Ron Miller, founder of the journal Holistic Education Review (now entitled Encounter: Education for Meaning and Social Justice). The term holistic education is often used to refer to the more democratic and humanistic types of alternative education. Robin Ann Martin describes this further by stating, “At its most general level, what distinguishes holistic education from other forms of education are its goals, its attention to experiential learning, and the significance that it places on relationships and primary human values within the learning environment.” The concept of holism refers to the idea that all the properties of a given system in any field of study cannot be determined or explained by the sum of its component parts. Instead, the system as a whole determines how its parts behave. A holistic way of thinking tries to encompass and integrate multiple layers of meaning and experience rather than defining human possibilities narrowly.

Education has two aspects: The first is related to external and worldly education, which is nothing but acquiring bookish knowledge. In the modern world, we find many, well-versed and highly qualified in this aspect. The second aspect known as „Educare,“ is related to human values. The word „Educare“ means to bring out that which is within. Human values, namely, Sathya, Dharma, Shanti, Prema and Ahimsa (Truth, Righteousness, Peace, Love and Non-violence) are latent in every human being. One cannot acquire them from outside; they have to be elicited from within. But as man has forgotten his innate human values, he is unable to manifest them. „Educare“ means to bring out human values.

There is no one definition of holistic education. Indeed it could be argued that such a concept cannot and should not be defined or contained in this way. This page presents a range of views in an attempt to sketch out what holistic education might be about.

ROLE AND VALUE OF HOLISTIC EDUCATION:

The Role and Impact of Value Education are as follows:



- Divine Family
- Infant growth values
- Youth Education, Empower
- Judicious Economic Enterprise for Livelihood
- Community and World as a family
- Enjoy Working for the Benefit of Future generations
- Cosmic Harmony Enlighten men and Unity with
- Divine Unification with Nature

ABSENCE OF VALUE OF HOLISTIC EDUCATION AND ITS IMPACT :

- Spoilt child
- Annihilation of Human Race
- Illiterate and ill trained
- Failure & Crime
- Family Disturb
- Self Centric, Greedy and Corrupt
- Environment Destruction & Not connected with
- Nature Violence, Terrorism and Global Destruction

IMPORTANCE AND NEED :

Every sane person on earth would like the present day world conditions to improve substantially because, looking at the total picture of the world one finds that there are thousand times more thorns and thistles than roses or raspberries. Leaders, in many fields, have tried, in many ways to enhance the quality of life but the hopes and aspirations of a vast majority of the human kind have been belied. Various kinds of remedies have been applied or tried but, of late, it has become almost the united voice of all that Moral, Social and Human Values are the ultimate and the much needed remedy.

One dreaded ghoul that is hounding increasingly large number of homes and hearts is the Drug abuse and the alcoholic habit. The grave problem of drug-trade or use of narcotics is being faced by the police, the parents, the medical profession, the ministries of home and health, the department of customs and most of all, by the

families. But in spite of hard efforts of the parents, government, the medical profession and the social reformers, the addiction to intoxicating drugs or narcotics is gaining epidemic proportions. Many educational institutions are worried about it because universities and colleges are becoming contact places and dens for drug- sales. All these concerned people or institutions agree that there is void in the minds of youth. They feel that the youth do not get adequate love at home. They are not adequately equipped mentally and morally to face the problems of adolescence and the challenges posed by new situations during and after study, especially when they have an exposure to the film and the TV and the rat race for jobs.

In the light of all the experience, it is being realized that there is need to reform the society, and to conduct some courses in Values and Human Rights because there is clear evidence that some attitudes and acts of some personnel of each one of these violate Human Rights and create atmosphere that is conducive to crime.

It has been rightly said that "every saint had a past and every sinner has a future". Self-respect and Respect for others provide the answer to all or most of our questions about cognizable or non-cognizable offence. You need not have a Penal code if you have awakened these two character- building forces in the citizens of a country. These make the alchemy that cannot convert iron into gold or can change "waste" into the „best“.

Tolerance and Patience are the guards that prevent your mind from getting derailed. These are the brakes which, if applied in time, save from head-on-collisions or severe accidents in public and family life. Good-will stops negative thinking, bad intentions, hatred, enmity etc. at source. It shows red signal to those thoughts, words or acts that have ever the slightest touch of crime or sin.

If Truth become a casualty and Justice can be purchased by money, influence, pressure threats or bullying, and parties to the suit are treated without dignity then the society must think of creating the proper atmosphere by such values as Human Dignity, Rule of Law, Quick and inexpensive Justice and clean atmosphere.

Those who formulate government policy on Education and also those who teach say that the atmosphere in schools and colleges has undergone a sea-change during the last about 60 years or so. One major problem is the indiscipline and rowdism. In short that the majority of the students do not have any regard for the teachers and they are giving up the traditional values and form group of such characters who create nuisance or disturb the atmosphere in the campus, in the buses, on the roads and in colleges, even others than their own. The parents also are thus worried about the future of their sons and daughters own. The parents also are thus worried about the future of their sons and daughters because they are aware of such unhealthy and degrading atmosphere prevalent in academic institutions and they are afraid of their young ones falling in bad company.

Without understanding the self that thinks, how can we have positive thinking, self-control, self- confidence, self-respect etc.? Without understanding these, we cannot practice advanced and deep confidence, self-respect etc.? Without understanding these, we cannot practice advanced and deep Meditation nor can we have deep, stable and inherent Peace. We must know that the seven major Evils-Sex-lusts, Anger, Greed, Attachment, Pride, hatred and laziness are born by identifying the self with the body which is material. It is the self or soul which has a moral dimension and if we do not realize this, moral values, if acquired by any other means, will not stay for long because all else is material, transient and ephemeral.

Mother is the first teacher and preceptor of a child. It is she who imparts the first lessons in culture and traditional values to the child. She plays a major role in preserving and transferring the cultural and spiritual heritage to the succeeding generation. Women can better impart lessons to non- violence and end corruption if they are allowed to play their social role and if male-domination over them ends. It has rightly said that "Where women are honored, there the deities or Gods dwell".

If women decide that they would work for ending corruption, they can ask men not to bring any tainted money into house for they as Devis, cannot use it, then the corruption can end.

It is impossible to transform the society and make it value-based without newspapers, periodicals and the electronic media taking the responsibility or cooperation in this work. It does not mean that the media are being asked to publish only some discourses or dissertations one moral teaching. The suggestion only means

that they should facilitate informing the people of a proper vision of the Better World and in each one taking a big of responsibility to do something to bring about such a world. Building a Better world is not a small task, and it cannot be done by a few or a small number of people. Many have to get involved into this task whatever be their profession, for transformation of each on of us individually will lead to the transformation of the world and the media can help in this task because Media has a wide out reach.

THE VALUE OF CULTURE:

The culture is a treasure of collected gems of experience and wisdom of ages, gifted by a lot many earlier generations. It is the assonance of the distilled experiences of so many people, carried over from the past. It is the reservoir of tried and tested values norms, observances and principles that have taken, they form of life-styles, manners, etiquettes, folk-lore, celebrations, quotations, festivals and visual aid and performing arts such as dance drama, song, conventions, traditions and eve rituals.

There are different lands and different climates and yet there are some values, common to all of them. These are called Human values. There are the norms that all human being must observe for their own well being and also for the well being of the society. Without observing those values, the world cannot be a Better World nor can a human being, be a better person fit for being called „a human being“. Every culture demands that we ought to observe those values.

OBJECTIVES AND SCOPE:

The objective of any scheme of Value Education should not be to foster, inculcate or propagate any predetermined set or system of values. Instead, it should develop a deep awareness, and a deeper sensitivity, for all the value dimension of human existence. It should seek to generate capacity for making intelligent and independent value judgments in real life situations, based on principles and convictions they alone can provide responsible, value based leadership in the diverse areas of social and professional life, and simultaneously have the satisfaction of living a happy and worthwhile life. This philosophy of value education has been put to use in designing a course on Human values for the Engineering students of the Banaras Hindu University. It takes a holistic view of life and its multifaceted value dimensions. The dimensions have been labeled as material values, societal values and psychological values, aesthetic values, ethical values and spiritual values.

Value education is addressed to the modern professionals. The quality of life in the present day society very much depends on the king of values they bring to their professional work. It is important that they process not only a mastery of their specialized technical discipline, but also an understanding of the larger social, ethical, and human values frame work within which they practice their profession. If used in a responsible manner, with a sense of service to the community, their professional knowledge, skills and authority can greatly help improve the quality of life for the general public.

There are certain management and engineering functions like planning, organizing, leading and controlling which are common to all organizations. Management science is the academic discipline which provides conceptual tools for performing these functions systematically and efficiently.

The goals of a business organization are defined in purely economic terms: maximizing profit, increasing market share and turnover, gaining strategic and competitive advantages.

The business organization shall have a amongst its objectives the promotion and growth of the national economy through increased productivity, effective utilization of material and manpower resources and continued application of modern scientific and managerial techniques in keeping with national aspirations, and the organization shall be mindful of its social and moral responsibilities to the customers, shareholders, society and the local community.

SCOPE – Betterment of Youth:

As electricity is the energy that moves machines, so also are youth the energy of nation Youth, who are physically well built, healthy energetic and efficient, mentally well- developed thoughtful, knowledgeable and innovative, psychologically enthusiastic and zestful, emotionally balanced, morally upright and strong and spiritually awakened to the transcendental realities, can lead a nation to the pinnacle of glory or to the Golden

Age. If youth of a country are men and women of high character and creative, then all the people in that country will have a sound character and be of constructive habits because small children will find in the Youth a worthy example to follow and the elders will be goaded by the conscience to give up their lethargy and negative traits to make all efforts not to lag behind the youth, who are only new entrants to the active game of life.

The adolescents and the youth are generally idealistic and dreamers. The energy in them assures them that in a short span of time, they will attain this that and other goal but they find that the lack of the power of mental concentration, or attraction to the opposite gender or non-congenial atmosphere at home and at their place of study are great obstacles which frustrate them. So out of frustration, they become only ordinary citizens or some of them fall into the deep and dirty ditch of the vagabonds, the unruly and morally deprived group or they take to drugs, bad films and such other disorienting and degrading habits. The youth also should awaken to the truth that the secular studies will enable them only to be earning members of the family, and be literate citizens but they require education in Values and Meditation also that can enable them to face the challenges of life.

Youth constitute the nerve centre of the nation, the heart of society or the life and blood of a country or community. They form the force that can build a nation or bulldoze all the development achieved over centuries. They are the ones who can either preserve the culture and the values and maintain law and order and can lead a civilization to new heights and it is they who can push the society downhill. But what the youth do, depends actually on what they think, and what they think depends on what they learn, listen or read and see. So, it is of utmost importance to make provision for their exposure to what is good. If the society does not take steps, it works for its own doom.

We have seen that every professional group, age-group, etc. evinces interest in and need for some values to make their profession or age group better.

The following can be considered to constitute the smaller list

- (1) Dignity of the human individual, based on his spiritual identity
- (2) Love and Goodwill for all, based on the concepts that the World as a Family
- (3) Self respect and regards or respect for others
- (4) Humility
- (5) Honesty and Integrity
- (6) Purity and Cleanliness
- (7) Equanimity, Peace, Tolerance and Non-violence
- (8) Concern for the well being of all, Sympathy and Service
- (9) Unity and Cooperation
- (10) Effort for Excellence
- (11) Contentment and
- (12) Yogi life style i.e. Sattwa simplicity- sincerity Trusteeship

In this way a deep reflection on these Values will lead us to the Conclusion that twelve Values are like twelve months of a year. As twelve months have 24 fortnights or 48 weeks or 365 days, so also these twelve Values include in them 24 or 36 or 360 big or small Values. If these twelve are observed in thought speech and action by all or at least by 9.16.108, professional students we will be able to build a Better World.

In today's competitive times with Time and technology at a rapid rate, it is easy to blame situations, place, other places and hold them responsible for our stress but the fact is that we ourselves are responsible for our state of mind. Management is not about managing situations or other people it is managing our own minds.

An organization is only as good as the sum total of its human resources. For an organization to be successfully competent, it needs to be progressive and provide an environment of transparent growth through learning and value based development in a structured manner. All aspects of life including profession, relationships, finances, social obligations, health and well being etc. are subject to change W.R.T time and hence are not

constant but the only aspect that remains constant are our value systems. If our lives are guided by a set of core values as a backbone, we will be able to sail through the highs and lows of life. Today we find a lot of peacelessness and tension in our social relationships or atmosphere. The main reason for this is disharmony in our relations. This disharmony is reflected in various forms like jealousy, hatred, revenge, greed, violence, etc. so much selfishness has crept in our behavior that all the time we are thinking and bothering about our own comforts luxuries and gains, even at the cost of harming others.

Let us analyze as to what is the origin of disharmony. As, we all know, we are all made of two parts-Body and Soul. The body is the physical part which is perishable. The soul is the non- physical part which never ends. It is immortal the value of the body is only because of the soul. If the soul leaves the body, the body is like any other inanimate worldly object. It is the soul, which thinks, feels and decides. The source of all our emotions of likes, dislikes, love, hatred, attachment etc. is our soul only.

If we ponder and analyze deeply, we will come to the conclusion that the disharmony which exists in our society or even in the whole world, is only due to the impure and negative thoughts and feeling arising in our souls. This root cause gives rise to various adversities on the physical level. If our thoughts are positive and harmonious, the physical conditions around us, the environment and nature will automatically become harmonious and if thoughts are negative, i.e. full of hatred, jealousy, revenge, greed etc. are outer conditions will also become disharmonious.

The various karmas which we perform are also categorized good or bad according to the thoughts and feeling associated with it.

The question is how to develop good thoughts and what about the negative thoughts, feelings and actions of others which constantly disturb us? The answer to this is that one would have to emerge the divinity within.

It is felt that the following factors generally determine the total personality of a person and these influence a person's performance also in his profession. So, it is necessary to dwell mainly on these in order to make it clear how Rajyoga bring improvement in these aspects of human personality

- Development of a positive world-view.
- Development of positive attitudes.
- Development of a positive personality.
- Development of Healthy and happy behavior.
- Development of Honesty and Integrity or character and moral qualities.
- Development of the ability to maintain better relations.
- Development of the ability to communicate effectively
- Development of the ability to maintain certain balances.
- Development of certain mental, moral and spiritual powers.
- Development of the ability of conflict resolution.
- Development of the ability to be relaxed and tension free.
- Development of the ability to make quick decisions.
- Development of enthusiasm and devotion to work.
- Development of the ability to motivate and to inspire others.
- Development of the ability of leadership and time.
- Development of the plan and set goals
- Development of the ability to organize and systematize.
- Development of the ability of Personnel Management.
- Development of the ability maintain discipline and disciplinary.
- action Development of the ability to inform, advertise or sell.

Rediscovering the Self-Understanding our core value world view is primarily profit oriented systems.

Salient Unethical practices in the Profession at present

In the present system there is no tangible mechanism to develop the ethical competence of the individual and the dominating world view is primarily profit oriented, Let us have a critical look at the contradictions and dilemmas because of the prevailing world view in profession today

Corruption at various levels and in different forms

Tax-evasion and misappropriation of funds

Unethical nature of advertisements and sales promotion

Cut throat Competition

Adulteration and spurious production

Exploitation at various levels

Self-transformation for the sake of world-transformation

In order to translate the vision of a transformed and a Better World, let each one of us be soul-conscious. Let each one of us have our love-link with the incorporeal God, the Mother-Father of all souls so that our love becomes sublimated and universal. Let each one of us make our profession Value-based.

Let us all- Scientists and Technologists, Religious leaders, Educationists, Jurists, Media persons, Politicians, Diplomats, Doctors, Businessmen and Industrialists, Administrators and Executives, people devoted to arts and culture, Members of Unions, Associations and Social service institutions, Laborers, Youth, Women and Children-offer our co-operation, in whatever way we can, to build a better world. Certainly, each and every one has some talent, ability or specialty to contribute to make the world a better place. Also, let each one of us acquire some new special qualities and some more human values so as to be better and to create a better society.

SUGGESTIONS:

The world would definitely become much better if Art and culture inspire people to learn the art of happy living and to cultivate, in their mind, qualities such as compassion, kindness, contentment, and humility, and help man discover meaning in life and beauty in action. Business and Industry are based on ethics and on the idea of being trustees to God, and are such that they do not put so great a burden on the owner or the worker that he gets buried under it. Businessmen and industrialists make efforts to earn virtue, build a treasure of spiritual wisdom, work for common weal, produce goodwill and store imperishable wealth of holy knowledge. Religious leaders inspire people by their own exemplary character, enable people to experience deep peace by teaching them Meditation, and effectively advise and guide their followers to be vice less and non-violent.

Politician's base politics on human values put into practice their promises and pronouncements, make public life clean and keep the motto of service above self-interest.

Educationists give due place to moral values and spiritual principles of a universal nature in education and teach history in such a way that it does not build prejudices among various communities and nations and instead, enables man to realize his proper role.

Scientists and technology have touch of spirituality, are free from tension, and give theories and make things that enhance the quality of life and do not pollute the atmosphere, disturb ecological balance, increase insecurity or cause grave danger to existence.

Administrators keep in their mind the dignity of the human individual and deal nicely with man and use calmness and consideration as planks of their policy.

Media, besides giving correct information, try to create goodwill and better understanding among people and promote moral good and give happy news as well.

Jurisprudence is not without a touch of love for the human individual individual and Justice is easy, quick and less costly and Law is fair to all and is not bent to favour a few and to care less for others.

Children and Youth are given parental love and atmosphere of a healthy and happy home and they get food, Education and chances that ensure their normal growth, and the children and the youth give respect and service to their elders and there is no communication gap among different age-group.

The socio-economic and political system is based on the principles of fairplay, justice and equality of opportunity.

Doctors treat the mind besides the body and advise a patient in regard to healthy habits and emotional stability.

Culture and Tradition impel the society and the kith and kin to look after the old, the infirm and the handicapped, giving them an atmosphere in which they can give manifestation to their human potential and can lead a happy life.

Literature does not lead to confusion and conflict or to degeneration of human character but leads to refinement of human personality.

Women are given a place of honor in society and are not exploited or treated as goods and chattels or as of lower grain.

CONCLUSION:

The above paper discussed the value of holistic education and consequences of its absence and importance of human value among students of professional courses. Human value and harmony are very precious treasure of human life Real success and satisfaction, happiness are the different facets of harmony if anyone is to enjoy the benefits of life to the fullest. it is necessary to develop and maintain harmony Between Body and self, between wisdom and habits , between self and society, between the purpose of life and method of living and between will and nature. The society abjures violence as means of solving problems or as expression of displeasure and indignation and gives up hatred, suspicion and divisive tendencies and, instead, makes progress, based on love, consideration for others and mutual concord and co-operation.

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ABSTRACT:

Today's libraries are facing with the challenges of integrating traditional and emerging formats, balancing resource allocation between traditional and upcoming technologies and building new information management processes and procedures. As intermediaries between the challenging, multi-format, multi-media information domain and the ever demanding user community, librarians need to be proactive and concerned about the new information landscape. The four distinct categories of information discussed are popular information, scholarly information, digitization projects and Web resources. Libraries worldwide are digitizing materials and offering full-text documents or images to clientele via their websites and Compact Disc Read Only Memory (CD-ROM). Digital collections usually consist of local content and provide unlimited access to materials that are not readily accessible. Hard copies created digital copies that aid in the preservation of the original material from wear and tear inherent with public use. With the development and extensive application of information technologies and networks, it is universally recognized that digitization of library materials is cost effective and the booming development in organizing, storing, preserving, retrieving, sharing, disseminating and ensure effective usage of information.

Keywords: Digitization, Digital Library, Networking

INTRODUCTION:

Most libraries today are re evaluating their information delivery services in this new world of digital information, and some are contemplating the digitization of collections within their own holdings for a wide variety of reasons and purposes. However libraries can greatly enhance their services, skills and prestige through good digitization projects. A printed copy of each issue must be obtained, and then each page must be scanned individually to create an electronic file. At this point, the digitization is strictly complete (in that the content now exists in a digital format), but a complex set of cleaning, checking, and conversion steps must then take place in order to turn what is just a series of images of printed pages into articles (as PDF documents) and header information (as XML files). These files can then be uploaded and indexed ready for online publication. The first step in this process was to acquire printed copies of every issue to be digitized, which sounds deceptively simple but was far from easy when such large volumes of content are involved. We began by cataloging every back issue available within Oxford University Press (OUP), but this located only a small proportion of the issues required. This should be no surprise considering that many journals move from publisher to publisher over time, so OUP was in many cases not the original publisher for most or all of the period sought. The bulk of our back issues were purchased from specialist back-stock agents, principally in the US, who were able to provide much of what we needed either from their own stock or from networks of contacts in the antiquarian book world. This still left a small core of journal issues which were simply not available to buy, so we either borrowed from the relevant learned societies or sourced from the British Library, who provided an invaluable service of creating scanned electronic copies of materials from their own lending collections. This entire sourcing operation was made more difficult by the fact that, in order to be able to scan millions of pages at an acceptable speed, each issue had to be bde-spinedQ so that the pages could be fed into scanning machines as stacks of individual sheets (much like the bulk copying feature of many office photocopiers). Sourcing materials, which will effectively be destroyed in this way, was more

challenging than finding materials which can be returned undamaged, but the difference in speed and cost made it essential.

DIGITIZATION AND NETWORKING:

Digitization of knowledge artifacts (i.e., manuscripts, archival records, books, periodicals, maps, etc.) and dissemination of electronic information to the common citizen have become part of state policy. Many social science research libraries have now developed computerized catalogue databases of their holdings. Apart from this, digitization of old rare books and manuscripts has become a part of their development plans.

The Government of India now believes that delivery of digitized information to common masses is now considered important for the success of the market economy, social justice and transparency, and accountability in administration. Advances in information and communication technology (ICT) have effected this change. Now one can develop and disseminate information in various forms and means of media on the local, national, and international levels through means like the Internet and interactive multimedia such as CD-ROMs.

The convergence of computational, storage, and networking techniques now has a wider impact on society. Twentieth century interdependence will seem modest compared with the emerging networks of interdependence. Digitization provides a solution to traditional library problems such as conservation, preservation, access to information collections, and storage space. Digitization has minimized the gap that exists between libraries and users. Any information pertaining to any topic can be accessed very fast. The publication of periodicals in electronic forms, even in the social sciences, is now increasing. Libraries are lagging behind in this development. Technological innovations and growth has flooded the world with electronic information. Speedy use of computers and telecommunications technologies favors the networking of libraries.

TRADITIONAL LIBRARY V/S DIGITAL LIBRARY:

The Traditional Library provides access to some small fraction of the available material, pre-selected and available only to local users. The Automated Library offers similar services and media as the Traditional Library, but tasks are accomplished in more efficient ways which might include a local online catalog as well as other local databases, CD-ROMs etc. The format of documents can be printed or electronic. Services are still available only to local users who depend on the opening hours of the library.

The Electronic Library can be described as a networked Automated Library. The library catalog and other databases can be accessed by users anywhere, any time. Although some of the library items are entirely electronic, the Electronic Library typically still offers online access to references to documents, rather than to full text.

- The Digital Library provides users anywhere and any time with direct access to the full texts/contents of all available material.

The problems arising from this evolution comprise the following:

- Additional workload on librarians
- Lack of knowledge
- Cost of electronic version, as well as printed version
- Cost of hardware
- Decision-taking (who has to take decisions?)
- Archiving
- Role of librarians

LIBRARY SERVICES IN INDIA:

According to an estimate, India has more than 65 000 libraries. Professional library staff work in many of these libraries, but there are also many which lack professionally qualified library staff. In such cases,

generally a teacher or sometimes even a member of secretarial staff is given the responsibility to manage the library. Some of these have now become storehouses of unused books and documents. In these cases, there is no library service, but just libraries. But, there are libraries that also can be compared with the best libraries in the world in terms of both resources, as well as services.

To name a few, the libraries of Reserve Bank of India (RBI), Mumbai Bhabha Atomic Research Centre (BARC), Mumbai, Indian Institutes of Technology, at Chennai and Kharagpur (IIT-C, and IIT-Kgp), Indian Institute of Management, Lucknow (IIML), National Institute of Rural Development (NIRD), Hyderabad, Physical Research Laboratory (PRL), Ahmedabad, and National Centre for Science Information (NCSI) at the Indian Institute of Science (IISc.), Bangalore. The case of libraries which lack professional staff is not because there is dearth of required manpower. The situation in India is rather of unemployment in the library and information services sector. On the one hand there are many libraries which don't have qualified library professionals and on the other a lack of adequate employment opportunities for the very large number of qualified degree holders from regular as well as open streams of learning. The paradox which seems obvious above can be explained briefly through the following two reasons:

Library and information science courses are not up to date enough to equip the students with the knowledge and skills required for handling information in the 21st century.

Absence of policy, as well as inadequate guidelines and standards for employment of library and information service professionals at national as well as state levels. Of all the libraries in India, special libraries are the most advanced libraries in terms of resources and services. While a few university libraries have in recent years become more advanced, the picture of public libraries in general is not rosy. University and public libraries are otherwise strong from resources point of view, but in an environment where library service or information at the desktop" is increasingly becoming the users' demand, ratings of these libraries are not very high.

Specialized information programme systems, and library networks in India, e.g., National Information System for Science and Technology (NISSAT) (<http://www.nissat.org>), Biotechnology Information System (BTIS) (<http://www.nic.in/India-Image/btis>), Environmental Information System (ENVIS) (<http://www.nic.in/envfor/envis>), Developing Library Network (DELNET) (<http://delnet.nic.in>), Information and Library Network Centre (INFLIBNET) (<http://www.inflibnet.ac.in>), etc., are at various stages of development. Remarkable achievements

have not been made during the provision of information services through these networks and systems, except by one or two, and that too in the last two or three years. All this despite the fact that many systems and networks existing today were planned much earlier and have not shown good enough results, except DELNET and INFLIBNET. One of the major reasons why libraries with rich collections have not been able to offer a good library service is the indifferent attitude of the library authorities' to develop libraries as service institutions. Non-existence or merely paper presence of library committees in many cases compounds the problem. In some cases where library professionals are informed and wish to integrate Information and Communication Technologies (ICTs) within the library to improve the existing level of services to clients, they are marred by the indifferent or even negative attitude of library authorities. Many libraries are facing similar problems. In such a situation even many competent librarians are unable to implement the ICTs that hold the potential to transform passive libraries into active information dissemination centres.

BENEFITS OF DIGITIZATION:

Digitization is the process of conversion of any physical or analogue item into a digital representation or facsimile. The digitization of resources opens up new modes of use, enables a much wider potential audience and gives a renewed means of viewing our culture heritage.

Immediate access to high demand and frequently used items

easier access to individual components withing items(eg. Articles within journals) rapid access to materials held remotely the ability to reinstate out of print materials

the ability to enhance digital images in terms of size, sharpness colour contrast , etc enhanced search ability, including full text reducing the burden or cost of delivery the potential for presenting a critical mass materials

CONCLUSION:

Designing and re-designing workflow will be a critical component in the successful access to and integration of electronic resources with existing materials and workflow. This paper investigates 1) how a tech-enabled change in the form of experiential products (e.g., print books to e-readers) transforms utilitarian and experiential values, and 2) how a tech-enabled change in product form affects the relationship between old and new technologies in terms of adoption, rejection and convergence. A qualitative study of consumers reveals how this change in form alters four experiential and four utilitarian values of book reading. The decision to adopt, reject, or converge is characterized by a system of tradeoffs amongst these values. The emergence of the Internet, particularly the World Wide Web (WWW), as a new medium of information delivery, coupled with the availability of powerful hardware, software and networking technology, triggered large-scale commercial and non-commercial digitization programmes the world over. During the past decade, great progress has been made in both theoretical and practical research in the digital library.

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STRATEGIES AND TECHNIQUES OF DIGITAL RESOURCES PRESERVATION

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ABSTRACT:

Preservation is the oldest and most fundamental function of libraries and Archive. Due to exponential growth of information in the form of both born digital and digitalized documents has become a prime issue for digital preservation. It requires a long term strategy and appropriate adoption of nascent technology. The study explores policy formulations, strategies and techniques, issues and challenges towards Digital Resource Management.

Keywords: Digital Preservation; Digital Preservation, Technique; Digital Preservation, Strategy; Digital Resource, Management.

INTRODUCTION:

Information resources preservation is the essential function of libraries. Fast growing web resources both in quality and quantity challenging for the preservation and management. Different storage Medias have been invented and each media presents a variety of their own preservation issues. They requires different range of technology

Digital resource preservation is the management of digital information over time. The digital preservation involves copying the digital information onto newer media before the old media becomes so obsolete that the data cannot be accessed. This is referred to as duplication or refreshing. This process preserves the integrity of the digital information.

Digital preservation is a method by which data is preserved in digital form for the future use, performance, reliability of information

Digital preservation is defined as long-term, error-free storage of digital information, with means for retrieval and interpretation, for the entire time span the information is required for. Long-term is defined as "long enough to be concerned with the impacts of changing technologies, including support for new media and data formats, or with a changing user community.(Consultative Committee for Space Data Systems. (2002). Reference Model for an Open Archival Information System (OAIS). Washington, DC: CCSDS Secretariat,

A more precise definition as given by Kelly (1999), " the storage, maintenance, and accessibility of digital object (include any digital material such as a text document, an image file, a multimedia CD-ROM or a database) over long term, usually as a consequence of applying one or more digital preservation strategies. The term digital preservation is used in different ways. Fresco (1999) defines the term as, "the storage, maintenance and access to digital objects over long term".

These definitions specify about ensuring the intellectual content, which is already in digital form, remains accessible to the future generations.

TYPES OF DIGITAL RESOURCES:

Digital resources are those electronic products that delivers a collection of data, be it text referring to full text basis, e-journals, image collection audio, video assets other multimedia products and as a commercially available till that has been published with an aim to being marketed. These may be delivered on CD-ROM, on tap via the Internet and so on. According to Barker, there are three types of documents used in digital resources.

- Static- Static are the most basic, they contain fixed information and never change their form(such as traditional online data)
- Dynamic- Dynamic documents also contain fixed information but also able to change their outward form, the way embedded materials if presented to users (such as multimedia CD-ROMS)
- Living- Living documents are able to change their form (outward appearance) and these embedded information (such as information contain on the web)

NEED OF DIGITAL PRESERVATION:

Worldwide accessibility if permitted

- The information available in digital form is very easy to handle and transit.
- Electronic preservation is very useful in case of frequent use
- The data in digital form can be edited, processed and distributed in a very simple manner.
- The security of information is most important factor to preserve the documents in digital format. Very large amount of data can be kept and preserved safely in digital form in a very limited space.
- A large amount of information can be send from one place to another place at low cost through email.
- Digital preservation reduces printing cost, low cost is involved in mass replication

MANAGEMENT OF DIGITAL RESOURCES:

While implementing the policies with regard to management of digital information resources, the libraries should regularly:

- Monitor the preservation implications and priorities for preservation of different information Resources
- Store and manage these resources to ensure high security, automated checking, archiving and back up with adequate disaster preparedness and recovery procedures,
- Document collections including file formats, software and hardware dependencies, Classify these resources based on its content and functionality
- Record preservation of metadata that facilitate effective and efficient management, and
- Develop appropriate pathways to access these resources in conformity with its authenticity, intellectual property rights (copying, storage, modifications and use of specific resources) and cost effective as well.

DIGITAL PREVENTION STRATEGIES:

Digital Preservation Techniques: A digital preservation strategy should be evaluated against a set of criteria such as technological feasibility, cost-effectiveness, effectiveness in retaining the essential attributes of digital information, acceptance by creators, managers of digital repositories, and user communities (Hedstrom, 1999). The lack of technologically feasible and affordable method for digital preservation is a major obstacle for digital libraries. Techniques for the preservation of digital information include:

- Technology preservation
- Technology Emulation
- Digital Technology Migration
- Encapsulation:
- Refreshing:

- System Emulation

Technology preservation: Another method for ensuring ongoing access to digital objects would be to simply keep older technology available for use. The most obvious way of ensuring that the object is preserved as it was created is to preserve the environment used to create and use resources, that is preserve the software and hardware environment that was used to access the resource when it was created. For some digital objects this may be the best solution—at least in the short-run because it ensures that the material is accessible by preserving the access tools as well as the object itself. However, in longer term this is more problematic. For example, issues of space and maintenance of hardware as well as the costs may make this an impractical solution in the long run. This method is used as an interim method when migration is not possible

Technology Emulation: This strategy has a lot in common with the technology preservation strategy. It involves preserving the original application program. Emulation refers to creating new software that mimics the operations of older hardware or software in order to reproduce its performance. Thus not only are physical presence and content preserved, but digital objects could display original features (i.e. layout) and functionality available with the older software. The goal of emulation is to preserve the look and feel of the digital object as well as its functionality. The essence of this strategy is to copy the technical context of the resources allowing the original object or a refreshed copy of the original object to be used in the future. Emulation retaining information about how the original digital information was created and accessed so that access can be accurately and faithfully reproduced. This option is designed to afford the ability to retain the functionality, look, and feel of the original document and retrieve it using the original standards.

Digital Technology Migration: Migration is the primary strategy articulated by most organizations that plan to preserve digital objects. The Digital Information defines digital information migration as, “a periodic transfer of digital materials from one hardware or software configuration or from one generation of computer technology to a subsequent generation.” It covers a range of activities to periodically copy, convert or transfer digital information from one generation of technology to the subsequent ones. Migration may involve copying digital information from a medium that is becoming obsolete or physically deteriorating to a newer one (e.g., floppy disk to CD-ROM) and/or converting from one format to another (e.g., Microsoft Word to ASCII), and /or moving documents from one platform to another (MS DOS to UNIX)

The purpose of migration is to preserve the integrity of digital objects and to retain the ability of users to retrieve, display, and use them in the face of constantly changing technology. Media refreshing is a part of migration but migration involves the transfer of the entire digital environment, not just the physical storage medium.

Encapsulation: Encapsulation aims to overcome the problems of the technological obsolescence of file formats by making the details of how to interpret the digital object part of the encapsulated information. This strategy involves creating the original application that was used to create or access the digital object on future computer platforms. Part of the process of encapsulation may be to migrate the record to a more easily document format.

Encapsulation can be achieved by using physical or logical structures called containers or wrappers to provide a relationship between all information components such as the digital object and some supporting information including metadata. Encapsulation can be considered to be a type of migration technique. Although documentation may delay the need for migration for a long time, the encapsulated information will eventually need to be migrated. Therefore, encapsulation techniques can be applied to the digital resources whose format is well known and that are unlikely to be accessed actively.

Refreshing: Refreshing is copying digital files from one storage medium to another storage medium of the same type to prevent media obsolescence. Copying files from old diskette to a fresh, new diskette of the same kind is an example of this type of media refreshing. For example, saving information from a 5 ¼ INCH floppy disc to a CD ROM, or from a CD ROM to a DVD refreshes the information from an

older to a more durable or newer technology. The solution to changing storage format issue is the concept of “refreshing” which involves periodically transferring a file from one physical storage mechanism to another. Refreshing does not solve the problem of backward compatibility if the software changes. System Emulation: In this process the software performs the functions of obsolete hardware and software and the strategy proposes that the digital documents be store in their original forms, along with original software in which they were created.

Emulation focuses on developing systems that mimic the application software used to create the original document. For example, if we want to run a piece of software created in 2010 on a computer 2090 m we can write a piece of software called an “emulator” which would make the 2090 computer appear, for all purposes, to be a computer from 2010. Including the operating system, the application program and the document files.

ISSUES IN DIGITAL PRESERVATION

TECHNOLOGICAL ISSUES:

Digital materials are especially vulnerable to loss and destruction because they stored on fragile magnetic and optical media that deteriorate rapidly and that can fail suddenly from exposure to heat, humidity, airborne contaminations, or faulty reading and writing devices.

Digital Media: Digital media are subject to destruction and deterioration in new ways, though unintended loss can be avoided if procedures are adopted to the needs of the technology. The below precautions can be taken to reduce the danger of loss

1. Storing in a stable, controlled environment
2. Implementing regular refreshment cycles to copy onto newer media;
3. Making preservation copies (assuming licensing /copyright permission)
4. Implementing appropriate handling procedures and
5. Transferring to “standard” storage media.

Changes in Technology: Unlike the situation that applies to books, digital archiving requires relatively frequent investments to overcome rapid obsolescence introduced by galloping technological change. Authenticity and context: At each stage of the cycle, electronic records need to be actively managed according to established procedures, to ensure that they retain qualities of integrity, authenticity and reliability

Scale: Although computer storage is increasing in scale and its relative cost is decreasing constantly, the quantity of date and our ability to capture it with relative ease still matches or exceeds it in a number of areas. The technical and managerial challenges in accessioning, managing and providing access to digital materials on this scale should not be underestimated.

- Strategies: Mainly three kinds of approaches of digital preservation have been developed:
- Technology preservation
- Technology Emulation
- Digital Technology Migration

Strategies for some formats are well established and tested over time. For example, migration has been used for electronic text, image, and database applications by the data archives and centers for decades.

ORGANIZATIONAL ISSUES:

When technological issues are undeniable challenging, there are also numerous challenges, which relate to the ability of organizations to integrate the management of digital materials into their organizational structure. There is an increasing need to go beyond the confines of individual organizations to maximize the benefits of the technology, address issues such as copyright, and also to overcome the challenges cost –effectively. The following issues are being faced.

Costs: The costs of digital preservation cannot be isolated from other organizational expenses, nor should it be. The cost of labor required for digital preservation includes not only dedicated experts but also staffs

such as administration, management, IT support staff etc. Other major issues to impact cost include organizational mission and goals including the type and size of collections, the level of preservation committed to and the quantity and access required and time frame proposed for action.

Expertise: The need speed of technological change means that few organizations have to articulate what their needs are and employ or develop staff with appropriate skills. In addition, there is little in the way of appropriate training and “learning by doing” can often be the most practical interim measure.

Organizational structures: Organizational structures tend to be segregated into discrete elements for the efficient processing of traditional collections, but will need to cross boundaries in order to draw on the full range of skills and expertise required for digital materials.

Roles: Roles are also changing within as well as between institutions. Assigning responsibility for preservation of digital materials acquired or created by an organization will inevitable require involvement with personnel from different parts of the organization working together.

Selection: Selecting quality materials for long-term retention therefore places a burden on organizations in terms of resources and also in terms of the potential impact of selection. In cases where there may be multiple versions, decisions must be made in selecting which version is the best one for preservation, or whether more than one should be selected.

LEGAL ISSUES:

Legal issues are also involved in digital preservation. As such it does not attempt to provide guidance on general legal issues which impact of the operations of libraries, archives and other repositories, as these are covered in a number of other reference works. Copyright and other intellectual property rights(IPR) have a substantial impact on digital preservation.

Access and Security: Some of the additional complexity in IPR issues relates to the fact that electronic materials are also easily copied and re-distributed. Rights holders are therefore particularly concerned with controlling access and potential infringements of copyright. Technology developed to address these concerns and provide copyright measures can also inhibit or prevent actions needed for preservation. These concerns over access and infringement and preservation need to be understood by organizations preserving digital materials and addressed by both parties in negotiating rights and procedures for preservation.

Challenges: Digital preservation, more than traditional preservation, require, continuous updating and maintenance of the systems and, in particular, forces people to work in advance on the activities necessary for long-term preservation. In other words, when the achieve is created. Digital resources are subject to a continuous transformation process and therefore to the risk of information loss. There are recognized challenges in implementing an effective digital preservation program, such as

Rapid growth and evolution: Technology that enables the variety of formats and dissemination mechanisms changes rapidly. Establishing a program that is responsive to change is a huge challenge;

Sustainability: The need for good cost models and affordable programs is widely acknowledged, The scale is based on the level of commitment. Any institute or organization requires sufficient funding for startup and major improvements, as well as designated library funding to sustain ongoing preservation efforts.

Content provider partnership: Working with creators and providers of crucial content to employ appropriate maintenance prior to deposit that will facilitate future preservation.

Enabling full preservation: Moving from well-managed digital collections to preserved collections in the true sense of the term requires institutional effort, partnership development, and a financial commitment;

Flexibility: To respond to evolving technological capabilities and changing user expectations, the digital archive must revise continually the definition of the dissemination information package for delivery to an expanding array of content delivery platforms. These requirements must be met without jeopardizing the ongoing care of the digital content.

CONCLUSION:

Preservation and management of digital resources require a long-term strategy and appropriate technology adoption. Data availability, privacy and integrity need to be assured. Digital Resource Management takes shape in the form of techniques, policies and strategies used to ensure the data stored in the computers cannot be accessed, processed or distributed without the consent of the organization. Libraries should have strategic plans and policies towards building the technological infrastructure and procedures, establishing mechanisms of recording metadata, moving digital resources from less stable carriers to more stable ones and identifying formats for easier migration of digital information.

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IMPACT OF WEB SCALE DISCOVERY TOOLS IN ACADEMIC INSTITUTIONS**Dr. RAM CHANDER**Librarian, Aggarwal College Ballabgarh
Faridabad-121004**Abstract**

This article is about the web scale discovery services and tools along with the definitions and the features of them. It described in detail the different types of web scale discovery services from open source web scale discovery services and from proprietary / commercial web scale discovery services. In India, it is found that most of the libraries are using only EBSCO discovery services. The reason may be it is very much user friendly and the amount of index it generates is more. This article describes the impact for library professionals and the impact to the users by making available online / by the use of discovery services. It also emphasized the advantages and disadvantages of web scale discovery services in general. It concludes that library professionals need to understand the changing scenario and they should be trained first thoroughly and in turn they can train the different types of users for making use of the web scale discovery services.

Keywords: *Web Scale Discovery, EBSCO, Summon, Worldcat Local, SOPAC, Ex Libris.*

Introduction

Internet has changed the users to access digital information from anywhere and anytime access. The proliferation of information compelled information seekers and managers to find tools to manage the acquisition, storage and delivery of information with the help of information communication technology (ICT) tools. Information is available in various formats, users required easy search facility to locate information from many sources including books on library shelves, online databases, digital library, institutional repository, etc. The information needs of users are complex, as they started using multimedia information. Sadeh (2013) stated that user expectations and information search behavior have been changed and they find alternative for traditional library system to a single search box for locating information. Libraries attempted to explore various ways to meet their patrons' needs. Libraries have been competing with general Internet searching for more than a decade. While the quality and relevance of library search results are generally far better than Internet searches, users still routinely bypass the library for one simple reason: the Internet is more familiar and "easier." Mann (1994) famously described this behavior as "The Principle of Least Effort." Numerous efforts have been made over the years to simplify library interfaces and make them more like searching the Internet. A recent development in search technology called "web scale discovery" allows libraries to implement simple search boxes on their websites that can perform "Google-like" searches of their print and electronic collections. 'Discovery services' is a new name for the traditional information retrieval system. They act as a single point search interface for all the contents (subscribed, in-house and open access) that the library wants to present to its user community for searching. It is mimicking Google and operates on web scale. Most of libraries have different types of electronic resources and each e-resources database has their own search engine therefore users need to visit different search engines to get their required information for which it is required services a single point search interface for all the content has emerged, which is more effective and useful for the users. i.e. Web scale discovery services are those integrated web based services with major potential to transform the nature of library systems. This article discusses the basics of web scale discovery, different types of tools used and advantages for the users in academic environment with some of the disadvantages of these systems.

Definitions of Web Scale Discovery tools

Web scale discovery has many definitions and some of them are given below:

- Discovery tools a web based software that searches journal-articles and library catalogue metadata in a unified index and present search results in a single interface while federated search software searches multiple databases and aggregates the results (Fagan, Mandernach, Nelson, Paulo, & Saunders, 2008).

- A discovery tool is defined as a third party component whose purpose is to “provide search and discovery functionality and may include features such as relevance ranking, spell checking, tagging, enhanced content and search facets” (OLE Project, 2009).
- Vaughan (2011) defined “web-scale discovery service is a service capable of searching across a vast range of pre-harvested and indexed content quickly in a seamless manner. Contents are harvested from local library resources, remotely hosted digital libraries, and institutional repositories to create a vastly comprehensive centralized index of variety of objects well suited for quick search and retrieval. Content is enabled via harvesting facilitating access to their metadata or full-text content for indexing purposes”.
- Hoepfner described that Web-scale discovery is “a pre-harvested central index coupled with a richly featured discovery layer providing a single search across a library’s local, open access, and subscription collections”. The Central index of discovery service is possibly generated from different categories of contents, such as bibliographic and holdings information from a library’s resource management system, metadata or full-text from institutional repositories and from open access repositories; and discovery layer is the user interface and search system for discovering, displaying, and interacting with the collection of contents in library systems.
- Discovery service is state of the art of technology based on pre-harvested metadata from various collections of resources (Narayanan, 2014).

Each of these authors’ definitions covers the core ideas of web scale discovery: a large, vendor-supplied index of all kinds of materials coupled with a simple interface, giving patrons the ability to search across a library’s entire collection quickly and easily. These services provide results in a relevance-ranked, integrated list of print, online, and multimedia content.

Features of Web scale Discovery Tools

Web-scale discovery service is now common in higher academic and research institutions / libraries. The goal of developing Web-scale discovery systems is to help different types of library users from students, faculty, researchers and others in discovering library materials from a single search box and to make library research as intuitive as Google. Many proprietary and open source tools are available to provide Web-scale discovery service. Discovery systems provide discovery interfaces which are known as next generation OPACs and provide user friendly single window search box/interface, facilitate discovery of a variety of objects from globally distributed resources and provide links to full-text from citation/bibliographic records in search results. The main features of web scale discovery services are described below:

A discovery interface includes various features, such as relevancy-based search results, faceted navigation, and other features consistent with web-based resources. Discovery interfaces have multiple functionalities such as end-user interface, usually delivered via a Web browser, to perform tasks such as presentation of a search box for end-user queries, presents advanced query options and presentation of search results listed either in a brief form or in full-record displays; interoperability with a link resolver to present links to full-text from citation records in search results; local search and retrieval, usually through an integrated indexing; ability to interactively communicate with the library’s ILS implementation and provide access to remote index platforms. It provides a unified platform for library users to access and search from all the library resources to get single set of results by providing a Google like environment with the following basic features.

- Unified platform to search all the resources including licensed, open and local collections
- Pre-harvested central index of metadata
- Google like single search box
- Single results list for all collections
- Relevancy ranking across entire results
- Full featured user interface
- Facets and tools for narrowing results
- Holdings and status information for library catalogue items
- Connections to full text
- Infrastructure, processing and indexing provided and maintained remotely by the vendor.

A discovery tool is often referred to as a stand-alone OPAC, a discovery layer, a discovery layer interface, an OPAC replacement, or the next generation catalog (NGC). At the heart of web scale discovery is the index. These enormous collections of records are assembled by making agreements with content providers and

database vendors. Different discovery vendors claim different numbers, but most say they have hundreds of millions of article-level records, tens of millions of e-book records, and hundreds of millions of book and “other” records. Many of these records include the full text of the item, which means, as Breeding (2010) put it, “each word and phrase within the text becomes a possible point of retrieval.” After a library subscribes to a discovery service, its holdings and subscription data are uploaded to the vendor, creating a searchable subset of the master index that contains only materials to which the library has access. The most common way for users to access this index is through a single search box on the main page of the library. Web scale discovery tools search across the OPAC, e-journals, e-books and databases returning a relevance-ranked list of results similar to an Internet search. The effectiveness and efficiency of discovery services are based mainly on two factors. One is content coverage and the other one is technology aspects utilized in various sub systems like harvesting, searching, relevancy ranking, interface features etc.

Web scale discovery services provide discovery and delivery services that often have the following traits:

Content: These services harvest content from local and remotely hosted repositories and create a vastly comprehensive centralized index—to the article level—based on a normalized schema across content types, well suited for rapid search and retrieval of results ranked by relevancy. Content is enabled through the harvesting of local library resources, combined with brokered agreements with publishers and aggregators allowing access to their metadata and/or full-text content for indexing purposes.

Discovery: These services have a single search box providing a Google-like search experience as well as advanced searching capabilities).

Delivery: These services provide quick results ranked by relevancy in a modern interface offering functionality and design cues intuitive to and expected by today’s users; such as faceted navigation to drill down to more specific results.

Flexibility: These services are agnostic to underlying systems, whether hosted by the library or hosted remotely by content providers. These services are open compared to traditional library systems and allow library greater latitude to customize the services and make the service its own.

Major discovery products providers

The web scale discovery products are available as open source tools and also from the vendors as proprietary discovery tools. Some the web discovery tools are discussed below:

Open source and free discovery tools

Open source discovery tools can be freely implemented, customized and used. They require some local programming and configuration to enable them to search and display data from a traditional ILS. Some of them are given below with details:

Blacklight (<http://projectblacklight.org/>)

Blacklight is a discovery solution (a.k.a. “next generation catalog”) for library collections. It provides faceted browsing and customizable search, and accommodates discovery across heterogeneous collections, allowing different object types to exhibit different behaviors and appearance. Blacklight uses the Apache Solr search engine to search full text and/or metadata and has a highly configurable Ruby on Rails front-end. Blacklight was originally developed at the University of Virginia Library and is made public under an Apache 2.0 license. Blacklight also provides the UI component of Project Hydra (“Project Blacklight-factsheet,” n.d.). Blacklight developed and used by the University of Virginia Library. It is also used at Stanford University and North Carolina University.

eXtensible Catalogue – XC (<http://www.extensiblecatalog.org/>)

XC is developed by eXtensible Catalogue Organisation and University of Rochester. It is an open source, user-centered, next generation software for libraries and consortia. It comprises four software components that can be used independently to address a particular need or combined to provide an end-to-end discovery system to connect library users with resources.

VuFind (Villanova University) - <http://vufind-org.github.io/vufind/>

VuFind, an open source software developed by Villanova University in 2007 and released its beta version to public in 2008. Since then VuFind has gone through various developments and it has been by Consortia of Academic Research Libraries in Illinois (CARLI) for its union catalogue to serve 86 member libraries in Illinois. Chickering and Yang study evaluated and compared 14 major discovery tools including 3 open source software.

Based on number advanced features available in various discovery tools software, VuFind, the only open source software, has 10 out of 16 and ranked 5 out of fourteen discovery tools (Chickering & Yang, 2014). It is used at Colorado State University Libraries <http://discovery.library.colostate.edu/>, Yale University <http://yufind.library.yale.edu/yufind/> and University of Michigan <http://mirlyn.lib.umich.edu/>

Discovery Service through Google Custom Search Engine (CSE)

Google CSE is one of the major open source discovery tools available for libraries to offer discovery search for information available in open repositories and to some extent online databases. Creating a google custom search engine a simple process either by control panel or creating an XML file with the definition of engine. Google Custom Search is an online applet provided by Google that allows web developers to feature specialized information in web searches, refine and categorize queries on Google web search. It allows anyone to create their own search interface based on Google (Dhamdhare & Lihitkar, 2016).

Fac-Back-OPAC (Kochief) - Fac-Back-OPAC is a faceted back-up OPAC. This advanced catalogue offers features that compare favorably with the traditional catalogues for today's library systems. Fac-Back-OPAC represents the convergence of two prominent trends in library tools: the decoupling of discovery tools from the traditional integrated library system and the use of readily available open source components to rapidly produce leading-edge technology for meeting patron and library needs. Built on code that was originally developed by Casey Durfee in February 2007. It is used at Paul Smith's College Book Catalog <http://library.paulsmiths.edu/catalog/> and Drexel Libraries collections <http://sets.library.drexel.edu/>.

LibraryFind - Oregon State University (OSU) Libraries has designed and deployed LibraryFind, a meta search system. It has important features like; Built-in OpenURL resolver, ability to search locally index collections, web-based administration and customizable user interface. It is used at Deschutes public library www.dpls.lib.or.us/ and Oregon state University <http://osulibrary.oregonstate.edu/>

Rapi - An open-source project of the WING group in the School of Computing, National University of Singapore licensed under the MIT license. Rapi provides an OPAC package that allows you to build a Lucene index from your MARC files. The user interface supports a variety of features including tabs, an overview, details view and a suggestion bar etc. It is used as Demo by School of Computing, National University of Singapore <http://linc.comp.nus.edu.sg/>

Scriblio - Scriblio formerly known as WPopac is an award winning, free, open source CMS and OPAC with faceted searching and browsing features based on WordPress. Scriblio is a project of Plymouth State University, supported in part by the Andrew W. Mellon Foundation. It is used at Plymouth State University <http://library.plymouth.edu/>, Cook Memorial Public Library <http://tamworthlibrary.org/> and Hong Kong University of Science and Technology <http://catalog.ust.hk/catalog/smartcat.php>

SOPAC - Social Online Public Access Catalog is a module for the Drupal CMS that provides true integration of library catalog system with the power of the Drupal content management system. It has features of tag, rate, and review of the library holdings. It is used at Ann Arbor District Library www.aadl.org/catalog, Allen County Public Library www.aapl.lib.in.us/ and Darien Library www.darienlibrary.org/.

Proprietary / Commercial Discovery Tools

OCLC WorldCat Local, released in November 2007, can be considered the first Web scale discovery service. Another product, Serials Solutions Summon, was released in July 2009, and together these two services were the only ones publicly released when the Discovery Task Force began its work. Some of them are discussed below:

Serials Solutions Summon (<http://www.serialssolutions.com/>) (now Proquest)

The Summon® Service increases the value of your library by delivering an unprecedented research experience. More than a single-search box, the service makes your collection more discoverable and provides unique ways for users to connect with librarians. The result is a rich research experience that presents results without bias, increases resource usage, strengthens the library's role in the research process, and meets user expectations. The Summon service is the only discovery service based on a unified index of content. More than 90 content types, 9000 publishers, 100,000 journals and periodicals and 1 billion records are represented in the index. New content sources are added every week and content updated daily. The Summon service is multi-tiered system architected to span silos of content. All content is searchable at the same time, which produces extremely fast search response times with the highest degree of reliability. It doesn't rely on older technologies, like federated search. More detail can be seen from <http://www.proquest.com/products-services/The-Summon-Service.html> (retrieved on 2 Nov 2017). It is used at Dartmouth College Libraries: <http://library.dartmouth.edu/>, University of Calgary: <http://library.ucalgary.ca/> and University of Sydney: www.library.usyd.edu.au/

EBSCO Discovery Service (<http://www.ebscohost.com/discovery>)

EBSCO Discovery Service (EDS), launched in early 2010, provides web-scale discovery by creating a unified, customized index of information resources available in an institution that is made searchable through a single search box using a powerful search engine. EBSCO Discovery Service™ (EDS) creates a unified, customized index of an institution's information resources, and an easy, yet powerful means of accessing all of that content from a single search box. The ability to create these custom solutions is achieved by harvesting metadata from both internal (library) and external (database vendors) sources, and creating a pre-indexed service of unprecedented size and speed. Although the resulting collection is massive in size and scope, the fact that it is indexed directly on the EBSCOhost servers allows for exceptionally fast search response times, and the ability to leverage the familiar powerful features of the EBSCOhost user

experience across all resources. It is offered as a hosted service and require user authentication for searching the index. Limited edition of EDS is available for unauthorized users in guest mode with limited search capabilities. The EDS content include metadata from journal and magazines, index of all the EBSCO host databases that the library subscribes to, other databases that library subscribes like Alexander Street Press, LexisNexis, Cambridge University Press, IEEE, Ingenta Connect, Springer, Elsevier, Taylor & Francis, Wiley, NewsBank, Readex, etc. It also indexes institutional archives / repositories, records from the library catalogue and other additional content like book jacket images, book records, entertainment records, annotations, family keys, subject headings, demand information, awards, review citations, etc. It also indexes content from various open access repositories like DOAJ, OAISTER, and arXiv.org. Most of the Indian Libraries have purchased the EDS tools from EBSCO and they are using like at Jawaharlal Nehru university, New Delhi, Indian Institute of Management, Ahmadabad, IIM Kozhikode, etc.

Ex Libris Primo (<http://www.exlibrisgroup.com/category/PrimoOverview>)

Ex Libris® Group, a world leader in the provision of library automation solutions, operates an extensive network with over 520 employees worldwide. **Ex Libris Primo empowers libraries to shape the discovery experience, providing students, faculty and staff an intuitive, end-to-end service and maximizing the value of library collections.** With Primo, discovery is encompassing, fast and personalized. A single search interface provides a gateway to a wealth of scholarly content, including print, electronic and digital collections. It's sophisticated search and relevancy ranking algorithm ensures the most relevant results, based on the context of the search and the user's profile. Primo helps libraries increase the impact of their collections, promote the visibility of library services and demonstrate their value to decision-makers across academia. Near about fifty customers have signed on as subscribers to the Primo Central service; with several customers already live on Primo Central. It has approximately 300 million items obtained from primary and secondary publishers and aggregators as well as open-access information repositories. Some notable examples include content sourced from Accessible Archives, the Association of Computing Machinery, BioOne, ebrary, Gale, IGI Global, LexisNexis, Oxford University Press, Springer, Web of Science (Thompson Reuters), and Wiley-Blackwell. The search results in Primo are listed by relevance which calculated based on Primo's proprietary relevancy-ranking algorithm that includes but is not limited to factors such as term frequency, field weighting, number of times a record has been accessed, and currency. It also considers peer review status of journal articles for giving relevance. The Primo hosted service provides customization of the user interface with change in color, library branding, etc. Libraries have freedom to completely redesign the user interface to give it localized appearance using the APIs and Web services layer of Primo Central. It is used in Vanderbilt University: www.library.vanderbilt.edu/, University of Iowa: www.lib.uiowa.edu/ and Emory University: <http://web.library.emory.edu/>

OCLC WorldCat Local (<http://www.oclc.org/worldcat-local.en.htm>)

The interface and discovery service for WorldCat Local is hosted by OCLC. Product support is offered through various modes (phone, e-mail, and website) and available 24/7. Assuming a library has holdings within the WorldCat catalog and a FirstSearch WorldCat subscription, WorldCat Local "quick start" is included in an institution's base subscription at no additional cost. The full version of WorldCat Local has a one-time implementation fee and is available as a yearly subscription, with pricing based on the library's user population.

Regardless of version, OCLC updates and enhancements are provided; interface and functionality updates are currently provided and installed on a quarterly basis. The central index associated with WorldCat Local includes nearly a half billion items (over half of these being articles), with content sourced from journal publishers, article citation aggregators, and the WorldCat database. Updates to content, ranging from daily to annually, are provided by publishers; once provided, such content is loaded and indexed within a few days at most. WorldCat Local provides access to more than 740 million items, including articles from partners such as EBSCO, Elsevier, Gale, H.W. Wilson, and

LexisNexis; the digital collections of groups like Hathitrust, OAIster and Google Books; and the collective resources of libraries worldwide. It is used by many organizations like University of Connecticut, Indiana University: www.indiana.edu/kolibry/worldcatlocalfaq.shtml and SUNY: <http://sunysccc.worldcat.org/ca/>.

Encore-Innovative Interfaces Inc.

Encore is the OPAC 2.0 product from Innovative Interfaces Inc., vendor of the Millennium integrated library system. Encore operates on top of the online catalogue but is integrated with the ILS and does not require separate data export or re-indexing. It provides relevance ranking, faceted searching by format, language and collections, user tagging, and “best bet” suggested resources as well as dynamically generated search suggestions. It is used at St Lawrence University: www.stlawu.edu/library/, Syracuse University: <http://library.syr.edu/find/> and University of Houston: <http://info.lib.uh.edu/>

Knimbus (<https://www.knimbus.com/user/auth.do>) is another discovery tool used in India by over 400 libraries. It serves as single search platform to locate information from range of databases including open access repositories for journals and books, and proprietary databases. Knimbus curates learning content from 100s of publishers, harvests library subscriptions, enables 24x7 mobile access, helps build institutional repositories and custom branded eLibraries to change the way libraries function and look.

There are many more commercial web scale discovery services available. Some of them are BiblioCommons, Endeca-Endeca, One Search: Follett (hosted and require login), SirsiDynix Enterprise-SirsiDynix and Visualizer-VTILS.

Impact for LIS Professionals

In the next generation catalogue / discovery tool, the workflow or procedural changes occur for LIS professionals include:

- ❖ Bulk loading of e-books, to take advantage of the NGC's ability to deduplicate bibliographic data
- ❖ Establishing a genre index and adding genre headings to records
- ❖ Creating new material types (ILS-specific fixed field) to facilitate faceted results sets
- ❖ Examining ways to use macros or other automated processes to ensure record quality, for example, macros to check for common data problems exposed by the NGC such as language and country codes, call number date matching MARC and others
- ❖ Adding certain fields when missing (e.g., MARC 048)
- ❖ Adding master records to WorldCat for items previously only represented by brief records in local catalog (e.g., senior theses, locally produced media and archival materials).

Impact to the users

- ✚ Web scale discovery services, combining vast repositories of content with accessible, intuitive interfaces, hold the potential to greatly facilitate the research process. They are able to index a variety of content, whether hosted locally or remotely. Such content can include library ILS records, digital collections, institutional repository content, and content from locally developed and hosted databases. Due to this, there are good impacts to the users like:
 - ✚ Web-scale discovery promises the ease and speed of Google's keyword search, sorting massive retrieval sets with complex relevancy-ranking algorithms to bring the most relevant resources to the top of the results lists.
 - ✚ The faceting features give users ways to drill down to the specific results desired by sorting source types, locations, publishers, author, and so forth.
 - ✚ Users' are benefited by having additional e-resources added by the libraries from their catalogs and digital repositories, making all of their local content accessible through the same search interface.

For example in Worldcat Local the following impact for the users are available:

- ✦ *Delivery Options* -With the detailed listing for a book, WorldCat.org offers a link that allows the user to buy the item from Amazon.com. In WorldCat Local, a button in the same position, labeled “Request Item,” links into the local library’s ILS or interlibrary loan system.
- ✦ *Enriched Content and Display* - The display of records goes beyond a textual display based on MARC records. WorldCat enhances the visual presentation through the use of book jacket images when they are available.
- ✦ *User-Submitted Content* - WorldCat provides several opportunities for users to provide input and contribute content. Each full record includes tables that display any existing reviews and invite users to “Write a review of this item and share your opinions with others.”
- ✦ *Faceted Navigation* - The WorldCat interface guides the user through the search process through faceted navigation. Once the user enters an initial search, the list of items returned displays in a wide column in the middle of the page.
- ✦ *Other Interface Features* - The WorldCat Local interface included a link labeled “Cite this item” launches a pop-up window showing the formatting of the item according to multiple styles, including APA, Chicago, Harvard, MLA and Turabian, making it very easy to copy and paste the citation into a list of references.

Under EDS Service the users have options to search by keyword, title and author search for any one of the options like full-text online, scholarly articles and catalog only. It helps them to have the results as per their choice. The following is the screen shot of JNU New Delhi library’s EBSCO Discovery search screen:

Advantages of web scale discovery

- The major advantage seems to be ease of use for patrons.
- Web scale discovery tools seem to be the answer to Breeding’s (2010) call for a ‘seamless experience that presents a consistent interface, despite the use of multiple technology and content products behind the scenes.’
- Another advantage is the sheer breadth and depth of the indexes. Users will be searching a much larger data set than previous databases were able to offer. As Vaughn (2011) describes it, with hundreds of millions of items, many of them full text, “these new services index content which previously was housed in dozens or hundreds of individual silos,” making it easier for researchers to find content that they would otherwise miss by not searching multiple individual databases.
- Another advantage is the increased use of library resources that comes with placing more results in front of users. As Way (2010) found in his examination of usage statistics after the implementation of a web scale discovery tool, the ‘sharp decline in database use combined with a steep increase in full text downloads and link resolver click-throughs suggests had a dramatic impact on user behavior and the use of library collections.’
- The return on investment for full-text access to resources is clearly increased by making those resources easier for users to find.

Disadvantages of web scale discovery tools

- Gross and Sheridan found that it was easier for users to start a search and view results with the new tool, ‘it was obvious from observing them that they did have trouble interpreting the screen results and understanding the differences between different formats.’
- The number of results and varied formats web scale discovery tools return to users is overwhelming, especially on simple, nonspecific searches. This increasing number of available object types and formats make for a confusing jumble of results.
- Most users will need assistance to limit their search to a specific type of item. This massive number of items is also a concern for medical and other specialty librarians.
- Users in these type of libraries are interested in a specific set of resources, and data from outside that group of resources is little more than noise. While there are limiting tools available, starting with a specialized database to begin with seems more effective.
- Users are either willing to sacrifice, or are unaware that they are sacrificing search quality for ease of use and one-stop shopping.
- Web scale discovery tools are also costly, both from a monetary and staff time perspective. Initial design and setup of the system, testing, and implementation will require time and a specialized skill set. It is difficult to estimate costs due to the staggering number of configurations and options available.
- Vendors are understandably reluctant to post any prices online or make a “per item” cost estimate. Most vendors also offer hosted services, where all maintenance and hardware is managed in an off-site data center, making set up easier but adding to costs.

- Howard and Wieb (2011) noted another disadvantage of web scale discovery: it can lead to unrealistic user expectations. They noted that several librarians expressed concern that these tools are creating “the expectation that everything is available online in full text,” and that some users expressed frustration and disappointment when the tool pointed them to a physical book, located in the stacks at their library.
- Additional training may be needed in order for both librarians and users to understand what resources they are searching and where the information they retrieve is actually coming from.

Conclusion

One of the most powerful features of discovery tools is their ability to meet students' expectations of a single point of entry for their academic research activities supported by a robust and wide-ranging search system. Providing a uniform search interface and aggregating content behind a single “brand,” discovery tools like EDS, Summon, and Primo helps to diminish the “cognitive load” on students by eliminating the often difficult and confusing step of choosing an appropriate disciplinary database, as well as the need to repeat searches in multiple databases. This might also help simplify user education by allowing instructional librarians to focus on teaching students a single research tool and allowing more time to focus on conceptual research skills, such as evaluating materials. Web Scale services are still in its initial stages of development and lots of developments in the features, functionality, level of integration with other systems, scope of content, and soundness of metadata, flexibility of the interface are all evolving and it is expected, will continue to evolve in meeting the needs and expectations today's next generation users. Most of the web discovery tools / providers are extending competitive features and services, but varies in some features and the choice is depends on the concerned library's preference and the cost involved. A discovery tool is not complete without the federated search capability. True federated searching is, and will always be, the promised land of next-generation catalog and discovery tools. Libraries, vendors and the open source community must continue to cooperate and work in a spirit of optimism and collegiality to make the true next-generation catalog a reality. Selecting, evaluating and implementing a web-scale discovery products has taught us much about project effectiveness, communication strategies, implementation processes and ongoing challenges. Therefore library professionals should consider the change and try to learn new things and implement them for the users.

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ROLE OF WOMEN IN DEFINING INDIAN NATIONALISM

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ABSTRACT:

This research paper seeks to examine the role of women in defining Indian Nationalism and discussed the reasons and the implications of the spontaneous upsurge of political and social activities by women. The roots of the Indian women's movement go back to the nineteenth century male social reformers who took up issues concerning women like women's inferior status, enforced seclusion, early marriage, condition of widows and lack of education and started women's organizations. Later on, women started forming their own organization from the end of the nineteenth century first at the local and then at the national level. Before independence, they took up two main issues – political rights and the reform of personal laws. Women were motivated by liberal feminist ideas and the belief that education, granting of political rights and the legislative reforms would certainly improve their position. They fought for the country's freedom and believed that independence from foreign bondage would improve obstacles in women marching forward. Thus, women's participation in the national movement broadened the base of the women's movement as comrades of their men folk.

Keywords: National Movement, Women, National Reforms

INTRODUCTION:

India's struggle for independence is of tremendous importance in the history of anti-colonial movements. The nationalist movement set the precedent of achieving independence through non-violence and thus a whole new philosophy based on Ahimsa was born. However, arguably the most important aspect of this movement for independence from a historical point of view was that it saw mass participation by Indian women, women who had till then been confined to the domestic sphere.

The role of women in defining Indian Nationalism is of recent origin in India.¹ Important works on the national movement mostly fail to examine the significance of women's participation in the struggles.² Analysis in this area so far has received insufficient attention in histories of India. One searches in vain for an adequate study of women's participation in nationalist historiography.³

The entire history of the nationalist movement is replete with the saga of bravery, sacrifice and political sagacity of great men and women of the country. This struggle which gained momentum in the early 20th century threw up stalwarts like Mahatma Gandhi, Lala Lajpat Rai, Motilal Nehru, Abul Kalam Azad, C.Rajagopalachari, Bal Gangadhar Tilak, Gopal Krishan Gokhale, Jawaharlal Nehru and Subhash Chander Bose. Their number and saturation often gives us an erroneous impression that it was only a man's movement. But it is not so. Many prominent women played a leading role in the nationalist movement.

The contribution of women to the national movement was significant. They were involved in diverse nationalist activities both within and outside the home. Within the home they spun and wore khadi, held classes to educate other women and contributed significantly to nationalist literature in the form of article, poems and propaganda material. Shelter and nursing care was also provided to nationalist leaders who were in hiding from the British authorities. Outside the home, prabhat ferries were organized in which women from all castes and classes would walk to the local temple, singing songs to rouse the nationalist and patriotic feelings of the people. In addition, they held meetings and demonstrations, took part in Satyagraha, picketed foreign-cloth shops, went to prison and also suffered brutalities at the hands of the British police. Burden of tears and toils of the long years of struggles for India's freedom was borne by the wives, mothers and daughters cheerfully. The programme of

dharnas and periodical jail going by men was possible only because of the willing cooperation of the women.

SOCIAL- RELIGIOUS REFORM MOVEMENT:

The roots of the Indian women's movement go back to the early 19th Century when social reforms beginning with Raja Ram Mohan Roy began to focus on issues concerning with women. He led a crusade against the practice of sati, noble's polygamy, child marriage, purdah system and spoke in favor of women's property rights. He held the condition of women as one of the factor responsible for the degraded state of Indian society. Following him, Ishwar Chand Vidyasagar dedicated his life to the cause of social reform particularly for the uplift of Indian women. He raised his voice in favor of marriages of widows. He did a lot for the education of the females and organized nearly 36 schools in 1830s out of which 20 were for girls mostly of which were run at his own expense.⁴

WOMEN'S ORGANIZATIONS STARTED BY MAN:

During the later half of the 19th century, the rediscovery of their past held a section of the Hindu elite to seek a religious foundation for reform. While spreading consciousness and pride in indigenous cultural traditions, Keshav Chandra Sen, a prominent Brahma Samaj leader in Bengal and Mahadev Govind Ranade and R.G. Bhandarkar of Prathana Samaj in Pune encouraged social service, educational and reform activities to bring about social change favoring women uplift. Thus, the male-inspired and male-guided organizations for women did valuable work in educating women and giving them their first experience with public work.⁵

WOMEN'S ORGANIZATIONS STARTED BY WOMEN:

By the end of the 19th century, a few women emerged from within the reformed families who formed organizations of their own. One of the first to do so was Swarnakumari Devi, daughter of Devendranath Tagore, a Brahma leader and sister of the prominent poet Rabindranath Tagore, who formed the "Sakhi Samiti" in Calcutta in 1886 for educating and imparting skills to widows and other poor women to make them economically self reliant. In the same year, Ramabai Saraswati formed the Arya Mahila Samaj in Pune which set up a series of girls' schools, orphanages and widows' homes. They were useful in bringing women out of their homes, giving them an opportunity to meet other women, doing philanthropic work, encouraging them to take an interest in public affairs and thus broadening their horizon.

NATIONAL WOMEN'S ORGANISATIONS:

The early women organizations had been confined to a locality or city. In 1910, Sarala Devi Chaudhurani formed the „Bharat Stree Mahamandal“ (Great Circle of Indian Women) with the object of bringing together “ women of all castes, creeds, classes and parties..... on the basis of their common interest in the moral and material progress of the women of India.⁷ It planned to open branches all over India to promote education. Branches were started in different cities such as Amritsar, Allahabad, Delhi Hyderabad, Karachi, Lahore and other cities. But however, this organization proved to be a short lived venture.

WOMEN IN THE NATIONAL MOVEMENT:

While on the one hand women's organizations were fighting for women's political and economic rights, men became leaders in the national movement too. Ramabai Saraswati was a delegate to the Indian National Congress in 1889 along with nine other eminent women. Sarojini Naidu believed that the fate of women was linked with the fate of the nation. She appealed to women not to ignore their larger responsibility. Sarala Devi Chaudhurani became an accepted mobiliser of youth in the nationalist cause. The partition of Bengal in 1905 galvanized and transformed women's participation in the national movement during the swadeshi period (1905-11)¹⁰. Some British women who made Indian nationalism their own cause, played important roles as „helpers“ as well as „catalysts“. Among them were Annie Besant a Theosophist, Margaret Cousins an Irish feminist and Sister Nivedita, the disciple of Swami Vivekananda.¹¹

The involvement of really large number of women in the national movement began when Gandhiji launched the first Non-Cooperation Movement and gave a special role to women. Peasant women played

an important role in the rural Satyagraha of Bardoli. Women participated in the Salt Satyagraha, in the Civil Disobedience Movement and in the Quit India Movement. They held meetings, organized processions, picketed shops selling foreign cloth and liquor and went to jail.

While thousands of women joined the national movement in response to Gandhi's call, there were others who could not accept his creed of non-violence and joined revolutionary groups. Their hatred of the British was intense and their plan was to make attempts on European lives as widely as possible.

VOTES FOR WOMEN:

Women's India Association (WIA) was the first all India women's association formed in 1917 at Madras with the clear objective of securing voting rights for women. In the same year Sarojini Naidu led a delegation of women to the Constitutional Reforms (Montague –Chelmsford) Committee, demanding women's franchise on the same basis as men and improved facilities for women's education and health care.¹² The Indian National Congress also at its session in Calcutta in 1917 over which Annie Besant presided, supported the demand of votes for women.

The Southborough Franchise Committee toured India in 1918 to gather information. It accepted women's petitions but was initially reluctant to grant the franchise to women. Sarojini Naidu and Annie Besant went to England to plead their case. The Joint Parliamentary Committee in England finally agreed to remove the sex disqualification but left it to the provincial legislatures to decide how and when to do so. Travancore-Cochin, a princely state was the first to give voting rights to women in 1920 followed by Madras and Bombay in 1921. But franchise was of course extremely limited. Women could vote only if they possessed qualifications of wifehood, property and education.

Ten years after the Montague-Chelmsford Reforms, the Simon Commission was appointed in 1927 as the first step towards the formulation of a new Constitutional Act. This led to the second round in the battle for female franchise. When the Commission visited India, the Indian National Congress boycotted it on the ground that there were no Indian members in the Commission. The WIA joined the boycott while some of the members of All India Women's Conference (AIWC) which was formed by Margaret Cousins in 1927, met the commission demanding universal adult franchise, and mixed general electorate and no reservation of seats for women. The Franchise Committee under the chairmanship of Lord Lothian rejected the demand of universal adult franchise but recommended that 2 to 5 percent of seats in the provincial legislatures be reserved for women.¹⁴ AIWC rejected the demand for reserved seats. Finally, the Government of India Act of 1935 increased the number of enfranchised women and removed some of the previous qualifications. All women over 21 years of age could vote provided they fulfilled the qualification of property and education. Women had to wait till after independence to get universal adult franchise.

REFORM OF PERSONAL LAWS:

As discussed above, AIWC was established in 1927 to take up the problem of women's education but it also realized that girls did not go to school because of purdah, child marriage and other social customs. So, it waged a vigorous campaign for raising the age of marriage which led to the passing of the Sarda Act in 1929. It also demanded reform of Hindu laws to prohibit bigamy, provide the right to divorce and for women to inherit property which were finally obtained with the passing of the Hindu Code Bills in the 1950s.

ROLE OF WOMEN'S MOVEMENT: AN ASSESSMENT:

Nineteenth century social reformers were primarily concerned with issues that affected urban, upper caste and middle class women such as purdah, sati, education, age of marriage and widow remarriage. They argued that uplift of women was necessary because women are the mothers of future generations. In fact, it was stressed that if they were educated they would become better wives and mothers. On the other hand, the women's organizations demanded political rights and reforms in personal laws. The national movement brought into its fold elite women but also poor, illiterate rural and urban women. Social reform, demand for political, economic and legal rights as well as participation in the freedom struggle were the main elements in the women's movement. Women's participation in the public arena and in politics legitimized their

claim to a place in the governance of India. The national women's organizations like WIA and AIWC tried to remain a political but many of their leaders and members joined political parties whose main demand was Swaraj.

CONCLUSION:

We record our homage and deep admiration for the women hood of India who in the hour of peril for the motherland forsook the shelter of their homes and with unfailing courage and endurance, stood shoulder to shoulder with their men folk, in the frontline of India's national army to share with them the sacrifice and triumphs of the struggle. Whenever the history of India's fight for independence comes to be written, the sacrifice made by the women of India will occupy the foremost place.

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BRICS : A STUDY OF ITS ORIGIN IMPACT AND BENEFITS FOR THE ECONOMY

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ABSTRACT:

BRIC is a grouping acronym that refers to the countries of Brazil, Russia, India and China, which are all deemed to be at a similar stage of newly advanced economic development. It is typically rendered as "the BRICs" or "the BRIC countries" or "the BRIC economies" or alternatively as the "Big Four".

The rise of BRIC is associated with major global shifts. There are opportunities and challenges with this rise. Also there are some common factors which made BRIC increasingly noticeable from last few years. Surely, the unprecedented economic growth and the middle class are amongst the visible factors.

INTRODUCTION:

The BRIC, Brazil, Russia, India and China idea was first conceived in 2001 by Goldman Sachs as part of an economic modeling exercise to forecast global economic trends over the next half century. The acronym BRIC was first used in 2001 by Goldman Sachs in their Global Economics Paper No. 66 , "The World Needs Better Economic BRICs". Since the 2003 Goldman Sachs report entitled, "Dreams with BRICs: The Path to 2050", the world has paid increased attention to the BRIC economies. Many of the reports and papers published since have offered optimistic views on the BRIC's economic outlook.

Foreign Ministers of the initial four BRIC states Brazil, Russia, India, and China met in New York City in September 2006, beginning a series of high-level meetings. A full-scale meeting was held in Yekaterinburg, Russia, on May 16, 2008

The BRIC grouping's first formal summit commenced in Yekaterinburg on June 16, 2009, with Luiz Inácio Lula da Silva, Dmitry Medvedev, Manmohan Singh, and Hu Jintao, the respective leaders of Brazil, Russia, India and China, all attending.

The summit's focus was on means of improving the global economic situation and reforming financial institutions, and discussed how the four countries could better co-operate in the future. There was further discussion of ways that developing countries, such as the BRIC members, could become more involved in global affairs.

BRICS SUMMITS:

The grouping has held annual summits since 2009, with member countries taking turns to host. Prior to South Africa's admission, two BRIC summits were held, in 2009 and 2010. The first five-member BRICS summit was held in 2011. The most recent summit took place in [New Delhi](#), India, on March 29, 2012.

The agenda of BRICS meetings has considerably widened over the years to encompass topical global challenges such as international terrorism, (WMDs) Weapon of Mass destruction, climate change, food and energy security, Millennium Development goals (MDGs) , International economic and financial situation, etc.

Four BRICS Summits and meetings of Foreign Ministers, Finance Ministers, Agriculture Ministers, Health Ministers, High Representatives on Security and other sectoral meetings have helped further deepening of cooperation amongst BRICS countries. ENTRY OF SOUTH AFRICA:

BRIC Foreign Ministers at their meeting in New York on 21st September 2010 agreed that South Africa may be invited to join BRIC.

South Africa was invited to attend the 3rd BRICS Summit in Sanya on 14 April 2011.

In 2010, South Africa began efforts to join the BRIC grouping, and the process for its formal admission began in August of that year. South Africa officially became a member nation on December 24, 2010, after being formally invited by the BRIC countries to join the group. The group was renamed BRICS – with the "S"

standing for South Africa – to reflect the group's expanded membership. In April 2011, South African President Jacob Zuma attended the 2011 BRICS summit in Sanya, China, as a full member.

The BRICS Forum, an independent international organization encouraging commercial, political and cultural cooperation between the BRICS nations, was formed in 2011. In June 2012, the BRICS nations pledged \$75 billion to boost the International Monetary Fund's lending power. However, this loan is conditional on IMF voting reforms.

Brazil is „the weak Bric in the wall“: Brazil appears to have the weakest investment case of the four so-called Bric economies, emerging markets experts have agreed.

The country, China, India and Russia were flagged as up-and-coming economic giants more than 10 years ago and have been favored by investors since.

Mr. Nick Timberlake, the head of global emerging markets equity at HSBC Global Asset Management, says the Brazilian market has dropped about 10% in the year to date. *“Brazil is the we like the least, I think it’s fair to say,”* he adds.

Brazil’s forward price/earnings ratio is 10x, Timberlake says, which is above the 10-year average of 8.3x. Meanwhile, return of equity is 13.6% against the Bric average of 16.8% and the emerging market average of 15.9%. *“Not only is the valuation signal not as strong, but profits coming through are also not as strong,”* he says.

IMPORTANT NEWS ON BRICS:

In Mumbai the rating agency ICRA today pegged India’s GDP growth forecast for the fiscal 2012-13 at 6.2-6.4 percent and strongly asked for an early introduction of reform measures to bring back investor confidence. For more details visit :<http://www.firstpost.com/economy/see-indias-gdp-growth-at-6-2-6-4-in-fy13-icra-342592.html>

PM leaves for Mexico, Brazil; says Eurozone crisis may affect India: Manmohan Singh observed that BRICS (Brazil, Russia, India, China and South Africa) countries have been the new growth poles of the global economy. At the fourth BRICS summit in New Delhi in March, BRICS leaders agreed to work with the international community to ensure international policy coordination to maintain macroeconomic stability conducive to the healthy recovery of the global economy. For more details visit at : <http://www.bricsindia.in/>

GDP GROWTH ON BRICS COUNTRIES:

Real GDP growth in emerging and developing economies during the second half of 2011 is expected to be about 6¼ percent, down from about 7 percent during the first half of the year. Emerging Asia is forecast to continue to post strong growth of about 8 percent, propelled by China and India. In Latin America, growth is expected to moderate to 4 percent in 2012, from about 6 percent in 2010, as external demand slows and tighter macroeconomic policies begin to rein in strong domestic demand. The table below lists the leaders, finance ministers and central bank governors of the five BRICS member countries. The countries' respective gross domestic products (GDP) and Human Development Index (HDI) ratings are also included.

Member	2011 GDP (nominal*per cap)		2011 HDI
	\$US		
BRAZIL	2,492 B	12,788	0.718
RUSSIA	1850 B	12,993	0.755
INDIA	1,676 B	1,388	0.547
CHINA	7,298	5,413	0.687
SOUTH AFRICA	408 B	8066	0.619

Percentage Share of Deficit (-)/ Surplus of General Government to GDP

Philosophies and modalities of Brics development financing

Although BRICs are usually referred to as emerging development partners, they have Provided financial support to LICs since the 1950s, even at the time when some of them had Lower GDP per capita than many

LICs. Historically, Brazil, China, India and South Africa have provided assistance as part of South-South cooperation while Russia's engagement has been shaped by the Cold War era. Most of the BRICS' philosophies related to development financing can be traced back to the South-South Cooperation discussions, which emphasize principles of equality, solidarity, and mutual development and complementarity.

Drawing on these principles, most BRICS have increasingly emphasized the mutual benefits of cooperation, focusing on promoting trade, investment, and other commercial activities. Brazil, China, India and South Africa see themselves as „development partners,“ not „donors“. Their experience as recipients of traditional development assistance and their identification with other recipients also contribute to their markets for its products and services sensitivity to the term „aid“.

CONCLUSION:

Though there are some differences across BRICS, the philosophies of most BRICS for development financing differ from traditional donors in three main ways: BRICS with the exception of Russia, provide financial assistance based on the principle of „mutual benefits“ in the spirit of South-South cooperation, while Russia and traditional donors emphasize the role of aid in poverty reduction.

Second, BRICS particularly China, view policy conditionality as interfering with recipients' sovereignty and tend to provide noncash financing as a means to circumvent corruption, whilst traditional donors view policy conditionality as a means to ensure efficient use of aid. Third, different emphasis is placed on how to ensure debt sustainability, with some BRICs giving a greater weight to micro sustainability and growth while traditional donors paying more attention to long-run macro sustainability.

This difference is, however, narrowing with BRICs increasingly appreciating the importance of overall debt sustainability and traditional donors the need for investing in physical capital and seeing results.

Thus, we can say that BRICS will grow and is doing better and better.

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**DIVERSIFICATION OF AGRICULTURE OF FARIDABAD DISTRICT, HARYANA:
ACOMPERATIVE STUDY IN SPACIO –TEMPORAL PERSPECTIVE**

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ABSTRACT:

In this research paper, author has selected District Faridabad as a study area, which is the part of Haryana state. He has collected 10 years of crop data for the study of crop-diversification. Previously cropping pattern was simple and diversification was maximum during the period of 1998-99, but now period of 2008-09 there are several villages where thrust towards specialization. Due to improved agronomic practices, now there is good competition among different crops. Farmers in the area are very progressive and are using modern form technology for this purpose. In spite of this govt. efforts are very positive for implementing green revolution.

Keywords: *Natural Landscape, Agriculture geography, Diversification, Ballabgarh*

INTRODUCTION:

Geographer's special field is the influence of the natural environment upon the nature and the distribution of man's activities and qualities. Nature in its diverse conditions in the soil, in water, in the climate and in the natural existence offers in different parts of the Earth, completely different possibilities to which man cannot think himself. Certainly no other branch of Geography concerns itself so directly with the physical environment as Agricultural Geography. From the first workers in the field of Agricultural Geography, were attracted to the problems and explaining how variations in the environment affected the Natural or Cultural landscape. Man's harmony with nature and need to understand and enmesh the tactics and strategies of nature with those of man has been emphasized.

By following these principles of what he calls 'Ecological Determination', he has shown how nature can impose limits and provide guidelines to man in solving environmental problems in the manner which is entirely compatible with Natural problems. Hence, efforts need to make to quantify environmental attributes to meet various human needs by establishing various guidelines for future Ecological planning, modifications and adjustments in state of Haryana and subsequently they help to solve the rural problems.

GEOGRAPHICAL SETTING:

Faridabad District, which is the study area of researcher, is situated in the South-Eastern part of Haryana state. It is the 12th District of the state. It was formed on 2^d august 1979, which took effect from 15 August 1979. The Tehsils of Faridabad and Ballabhgarh, forming the District Faridabad, were earlier the part of Gurgaon District. The District is named after the town Faridabad. Which is said to have been founded in 1607 by Sheikh Farid, treasurer of Jahangir, with the object of protecting the Highway, which passed through the town in those days?

From Geographical point of view, it is extended from 280,121 to 28°26'1 North latitude and 77°11 to 77°31'1 E longitude.

To East- North is the Union Territory of Delhi (National Capital Region), and in the East is the state of Uttar Pradesh, and its extreme South is the District Palwal. And to its South-West and West is the District of Gurgaon. Thus, the District situated on the border side of the 2 states viz. U.P. and Delhi. The famous River Yamuna flows nearly 50 km in the District towards East. The District Faridabad is about 35 km in length and 30 km in breadth.

Relief is an important physical variable affecting any type of farming. In the North-Western side, the part of Aravalli Ranges are scattered, otherwise whole area is plain. There is no difficulty for using any type of machinery and modern farm technology. That is why, Industrial Development has been taken place so rapidly.

Therefore, it is nearer to N.C.R. Delhi, and provided every type of assistance. Therefore, we can say that it is the hub of industries in the state of Haryana. The land has greater capability for agricultural development.

The climate of the District is characterized by hot summer and cold winter and dryness throughout the year. The maximum temperature recorded in the area of study is 46°C and minimum is 5°C. The average temperature is 27°C. The rainfall conditions are dominated by monsoon system. The average annual rainfall varies from 30.5 cm to 63.5 cms in the district. More than 75% of rainfall is concentrated during 3 months of the year i.e. July, August and September. Some rainfall occurs in the Winter by Temperate Cyclones, whose efficiency is great due to low evaporation. That is why, it is more valuable than Gold. The main crops that are grown in the study area are Wheat. Rice, Barley, Jowar, Bajra, Gram, Oilseeds, Pulses, Vegetables and Sugarcane.

Soils particularly Loam (Bhangar and Nardak) and silty loam(Khadar) are found in the District. It is very fertile. From irrigation point of view, Agra Canal and Gurgaon Canal are passing through in the study area. The Tubewell Irrigation is very important in the District.

From the administrative point of view, District is divided into 2 blocks e.g. Ballabgarh and Faridabad and 2 Tehsils i.e. Ballabgarh and Faridabad. There are 206 villages and total population is 14, 77,000. The population consist of 8,08,233 males and 6,58,233 females. Density of population is 1919 persons per sq. kms which is highest in state of Haryana. It is situated on Delhi-Bombay National-Highway No. 2. It is linked with other parts of the Country with Broad-Gauge railway line. It is very much close to National Capital of the Country.

CROP-DIVERSIFICATION:

The Crop Diversification means to grow various crops in a given area at a time. The larger number of crops grown in an area during a year with each occupying the equal proportion of crop land, the higher is the Crop Diversification. Essentially, it is an indicator of multiplication of agricultural activities, which obviously involve intense competition among various activities for the space.

The keener the competition, the higher the magnitude of diversification, and lesser the competition, greater will be the trend towards specialization or Monoculture farming, where emphasis is on one or two crops. In specialized cropping system, emphasis is leveled on those crops which give good idea for understanding the physical environment. Monoculture is an extreme form of this system. Moreover, the Livestock or Agricultural Enterprises explains why it is possible to grow a variety of crops livestock, which possess nearly an equal area share.

Generally, the diversified or specialized forms of agriculture pattern is determined mainly by National factors and thereafter modified by Cultural factors. It is now almost normal feature of agriculture stable and farm management in most of the extensive agricultural part of the World. In fact, this has been made possible by modern irrigation system and use of fertilizers, high yielding varieties, pesticides and mechanized technology. Besides, there are other factors which force the cultivators to take Crop Diversification. These are:

Vagaries of weather conditions compel the farmers to grow number of crops, so as to get some returns under adverse climatic conditions.

The rural life and Orthodox form practices force them to obtain most of their everyday domestic requirements from their holdings.

It has been noticed that Crop Diversification is most useful and even essential for small farmers rather big farmers because,

Diversified cropping pattern provides the whole year employment to the family labour rather than the specialized form of agriculture system.

It helps in maintaining the soil fertility, because few soil enriching crops can be raised on farm, thereby helps in fixation of Nitrogen from atmosphere in the soil. Diversified cropping pattern provide more income to farm family labour.

Maximum utilization of land is done by this system of agriculture.

At present, it is essential for providing different types of goods and supply to the people which are living in the Urban areas.

Keeping in mind above factors, Crop Diversification is the most important technique of agriculture for the farmers. In the study area, this method is very common and provides additional income to the farmers for raising different crops. For the detail study of agriculture in the study area, Researcher has selected two techniques for understanding the agricultural phenomena in the quantitative manner. These are given below:

TECHNIQUES USED FOR MEASURING CROP-DIVERSIFICATION:

Geographers particularly of Agriculture-Geography branch were interested to quantify their results and interpret in a more accurate manner. But previously quantitative methods were not used in Agricultural Geography due to some reasons, because they didn't know the utility of these methods. As a result, we have new techniques for measuring Crop Diversification. By adopting the Statistical techniques, agriculture Geographers attained reputed rank amongst Scholars.

Dr. S.S Bhatia Technique (1965) Bhatia has developed a new technique for measurement of Crop Diversification Index. While calculating the index of Crop Diversification of India, he took crop data of India at District level and has observed that in most of the units, the number of crops grown varies from 2 to 10 crops. He considered only 10 crops for measuring Crop Diversification. The 10 crops, suppose, occupy 10% of each of the cropped area, then index will show the maximum Crop Diversification. On the other hand, where one crop occupies 100% of total cropped area, then we can say that there is no Crop Diversification in that region. For example, if 'X' District has 6 crops occupying 30, 20, 18, 12, 8, and 6% of cropped area respectively, and the District 'Y' has 3 crops carrying 67, 20 and 10% of the cropped area. The index value as per Bhatia's Technique will be as under: For District 'X'

$$= \frac{(30+20+18+12+8+6)}{6} = 96/6$$

$$= 15.6\% \text{ For District 'Y'}$$

$$= \frac{(67+20+10)}{3} = 97/3 = 32.33\%$$

It is clear from the above example, that higher the value of index, lower will be Crop Diversification. And lower the value of index, greater will be Crop Diversification.

For the objective measure, Bhatia (1965) has evolved a simple formula by taking into account the cropped area.

Index of Crop Diversification = (Percent of sown area under(X) crops)/ Number of (C) crops Where (X) crops are those that individually occupy 10% or more of the cultivated area in a regional unit. According to this method, only those crops are considered which have more than 10% area and rest of the crops are left. Therefore, it is clear that closer the value to 10%, higher the degree of Crop Diversification. For instance, there is a village 'Chandawali' in the study area, whose crop occupancy is 24.8, 19.3, 10.6,

41. Here, only crops are considered which have more than 10% sown area. But there is village Faridpur where only 2 crops covering 47.3 % of cropped area.

The index value as per Bhatia's Technique will be as under: Index of Crop Diversification:

• For village 'Chandawali':

$$= \frac{(24.8 + 19.3 + 10.6 + 41)}{4} = 95.4/4 = 23.8\%$$

• For village 'Faridpur':

$$= \frac{(49 + 45.76)}{12} = 94.6/12 = 47.3\%$$

From the above values, it is clear that village 'Chandawali' has lower index value. But it has maximum Crop Diversification. And village 'Faridpur' has higher value but it has minimum Crop Diversification. If index is low, then Crop Diversification will be high. If index value is high then we can say that Crop Diversification is low.

The village 'Chandawali' has low index value but it has maximum Crop Diversification. There are various causes which are given below:

The irrigational facilities are fully developed here.

The transport facilities are easily available to Farmers.

Nearness to Township.

The topology is plain and other physical factors are favorable for growing various types of crops. The second village `Faridpue has very high index of Crop Diversification. Thus researcher says that specialization is there.

In general, Bhatia's method is simple and easy to understand but there are some drawbacks:

It is inversely related to actual Diversification.

The index originally has taken into account the sown area vis-a-vis harvested area. It is the harvested area which gives clear picture of Crop Diversification.

GIBB'S-MARTIN INDEX OF CROP DIVERSIFICATION:

Gibb's-Martin have evolved a quantitative technique while measuring the Crop Diversification in Industrialization. Actually, they gave this technique to industries. But the same technique can be fitted in agricultural data in place of industrial data. The formula is given below:

Index of Crop Diversification = $1 - (\text{summation of } X^2) / (\text{summation of } X)^2$

Where (X) is the %age of total cropped area occupied by each crop. The index values range from 0.0 to 0.9. 0.0 indicates that there is no Crop Diversification, and 0.9 indicates maximum Crop Diversification. We select 2 villages and show the clear picture of Crop Diversification

CHANDAWALI VILLAGE:

S.No.	CROP	X	X ²
1	Vsetables	41.0	1681
2	Wheat	24.8	615.04
3	Rice	19.3	372.49
4	Fodder	10.6	112.36
5	Bag	2.0	4.0
6	Birsim	1.0	1.0
7	Pulses	0.0	0.0
8	Jowar	1.0	1.0
9	Barley	0.0	0.0
10	Deeha	0.0	0.0
Total		Summation of X = 99.7	Summation of X ² = 2786.89

Index of Crop Diversification

= $1 - (\text{summation of } X^2) / (\text{summation of } X)^2$

= $1 - (2786.89) / (99.7)^2 = 1 - 2786.89 / 9940 = 1 - 0.28 = 0.72$

From the above table, it is clear that village `Chandawali' has maximum Crop Diversification. Its value is closer to 0.9.

Index of Crop Diversification:

= $1 - (\text{summation of } X^2) / (\text{summation of } X)^2$

= $1 - 4499.33 / (98.67)^2 = 1 - 4499.33 / 9735.76 = 1 - 0.46 = 0.54$

From the above table, it is clear that its value is closer to 0.00 which indicates specialization.

There are various factors which are directly responsible for Monoculture or Specialization. These are given below:

Lack of irrigational facilities.

Soil conditions are not favorable for Crop Diversification.

Farmers do not want to change their old methods.

In brief, this method is useful for measuring Crop Diversification. This method has an advantage over other indices, because it is easy to process and moreover, index value can be calculated without reducing the actual data to %age. Its index value is directly related to the magnitude of Crop Diversification. Higher the index value, higher will be the Crop Diversification and vice-versa.

CHANGE IN GEOGRAPHIC PATTERN OF CROP-DIVERSIFICATION IN FARIDABAD DISTRICT (1998-99 TO 2008-09) :

Now, it is clear that both techniques are exactly the reverse of each other. According to Gibb's-Martin method, darker the shade, higher the Crop Diversification, lighter the shade, lower will be the Crop Diversification, while in Bhatia's method, darker the shade, lighter the Crop Diversification and lighter the shade, higher will be the Crop Diversification.

From the analysis of cropping pattern of 10 years of the study area, it becomes clear-cut that there has been a remarkable change in the cropping pattern between 1998-99 to 2008-09. For the study point of view, the researcher selects 2 years data and on this basis, changing pattern of Crop Diversification has been identified.

The researcher can see that in general, 2 years data are not sufficient for preventing the cropping pattern of the study area. But due to paucity of time and resources, it is very difficult to collect the data of every year. By the calculation of 2 years of data, the change in the cropping pattern has been shown by the maps.

Maps prepared by Gibb's-Martin method give clear idea about the Crop Diversification. During 1998-99, more than 75% villages were under the category of maximum Crop Diversification. Here category wise explanation of changing pattern of Crop Diversification is given below, which is based on Gibb's Martin method. The categories are as under:

Above 70 High

65-70 Medium

Below 65 Low

From the category first, the cropping of Diversification was maximum during 1998-99. 25% villages are under first category, which shows maximum Diversification. In the second category, 50% villages have medium Crop Diversification. It means that 75% of villages are covered under maximum Diversification. Only 25% of villages have low Diversification. It is shown in figure II.

In 2008-09, the pattern of Crop Diversification is also good. If comparisons are made, then it would be clear that Crop Diversification has been decreased. Here is category wise index of Crop Diversification:

Over 70 High

65-70 Medium

Under 65 Low

In the first category, 20% of villages have high Crop Diversification, while 1998-99 under first category 25% of villages, it shows decreasing trend in the cropping pattern. In this period, failure of rainfall leadst to low Diversification. There are some other factors which are responsible for low diversification. In individual category, village `Chandawali' has maximum index value e.g. 0.72 in 2008-09.

In the second category, there are 35% of villages. Mostly Central part of the study area are under this category. In the third category, 45% of the villages are there. Mostly villages are located in outer periphery of the study area. It is due to poor irrigational facilities. The farmers, mostly, cultivate Wheat in Rabi season and trend of Rice in Kharif season and ignore rest of the crops. It is shown in the figure III.

The comparison of both the maps of 2 years, e.g. 1998-99 and 2008-09, by the researcher revealed that the pattern of Crop Diversification is not so good. Only 2 sample villages, where Crop Diversification has been increased, in the study area during that period. Villages Chandawali and Tilpat ,where positive change is there. In these villages, farmers are interested in sowing more and more different types of crops. It is shown in the figure IV.

On the other hand, there are 9 sample villages, where pattern of Crop Diversification has been decreased. During 1998-99 pattern of Crop Diversification was good, but farmers are cultivating fine-food grains in the present time, so emphasis is laid on few crops rather than diversification of crops. It covers mostly villages

located near urban area, where farmers grow such crops which gives more monetary value. From the figure, it is clear that village 'Badkal' and 'Shahajanjue' are most affected. There are 5 sample villages where there is no change in the pattern. They mostly cultivate same crops on the same fields. From the superimposition of map, clear picture can be shown of Crop Diversification. Along the Yamuna River and Aravalli Hills, the pattern of Crop Diversification is restricted to some parts due to Natural factors. Central part of the study area is much suitable for Crop Diversification, where physical, socio-economical and technical factors are favorable for agriculture.

TECHNIQUE BY DR. S.S BHATIA:

Another technique has been given by Dr. S.S Bhatia in 1965, for measuring Crop Diversification. It is simple to use and easy to understand. That is why, it is used for measuring Crop Diversification in the study area. The details of the technique have already been discussed earlier. While noticing Bhatia's index of Crop Diversification, nearly same inference can be drawn regarding pattern of Crop Diversification from 1998-99 to 2008-09.

The categories are given below:

Over 40 Low

30-40 Medium

Under 30 High

From the first category, it is clear that pattern of Crop Diversification is very low. There are 5 sample villages in the study area, which are under this category. There are various factors like terrain, soil, and irrigation etc. are responsible for low Crop Diversification.

In the second category, there are also 5 sample villages, where medium type of Crop Diversification. Area mostly is near to Yamuna and Aravalli Hills, which create problem for raising different crops. There are other factors which are also responsible for this category of cropping pattern.

In the last category, there are 10 sample villages, where crop diversification is high. It covers central and Southern part of the study area. Here farmers use new methods of technology. These methods are very helpful for agriculture. It is shown in the figure 05.

If this map is superimposed over Gibb's Martin map of 1998-99, then we can say that same pattern of Crop Diversification is visible. For example, village Chandawali, having high value according to Gibb's Martin method, leads to maximum Crop Diversification in 1998-99. but according to Bhatia's method, this village has low index value, cropping pattern is also diversified. The values may be differ from each other, but both indicates higher Crop Diversification.

The categories of 2008-09 are given below:

Over 40 Low

30-40 Medium

Under 30 High

From the first category, where index value is over 40, indicates that Crop Diversification pattern is low. There are 5 sample villages in the study area, where Crop Diversification is low. It is same as in the last category of Gibb's Martin method year. The agriculture system in the study area is very backward. The same factors are responsible for lower diversification as already discussed.

In the second category, Crop Diversification is medium. There are 7 sample villages and mostly surround the village of first category.

In the third category, there are 8 sample villages, where Crop Diversification is high. It covers mostly urban area periphery and Southern part of the study area. The farmers of this area adopt modern farm technology for cultivation. It is a developed area. It is shown in the figure 6.

After studying in detail the changing pattern of Crop Diversification during 1998-99 to 2008-09, we came to the conclusion that agriculture system has surely changed. According to the researcher, the index value of Crop Diversification is not same, of sample villages during this period. There are some villages where this

pattern has been decreased. For example, villages like Shahjanpur, Chhainsa, Fatehpur Billoch, Pali, Badkal, and Baroli where Crop Diversification has been decreased. On the other hand, where Crop Diversification has been increased such as Tilpat. BadaTur said, Tigaon,

Chandawali etc. For the rest of the villages, pattern is same as previous year. In Kharif Season, Jowar, Bajra are replaced by Rice crop. Now days, area under Rice is more as compared to previous years.

THE CHANGE IN THE CROP DIVERSIFICATION PATTERN IS DUE TO FOLLOWING REASONS:

Introduction of tubewell irrigation made possible by electricity and diesel power. Application of chemical fertilizers by which HYV and early maturing crops can be easily raised. In order to avoid any failure of crops, farmers have attempted, to raise more varieties of crops so as to survive even under adverse conditions.

By raising multiple cropping pattern, a farmer enable well his family members to remain busy over the fields through the year and as such reduces the problem of unemployment.

The farmers are aware that by the rotation of crops, they would be able to maintain the fertility of soil.

In the study area, transport facility is highly developed, so that there is no problem for transporting agricultural products from one place to another place.

A recent trend of Urbanization has greatly influenced the system of agriculture, which in turn has provided the maximum Crop Diversification.

In conclusion, it is clear that there has been significant change during 10 year period from 1998-99 to 2008-09 in the study area. In previous years, pattern was simple, but in several villages, there was a thrust towards Specialization. Due to improved agronomic practices, now there is good competition among different crops.

Needless to say that this awareness among the farmers in the study area towards modern methods of cultivation e.g. the use of fertilizers, insecticides, improved seeds, timely and sufficient irrigation facilities and above all, proper utilization of land round the year, has been due to Government efforts in popularizing and implementing Green Revolution.

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A STUDY OF LABOUR CONDITIONS AND WELFARE IN THE HARYANA CO-OPERATIVE SUGAR MILLS LTD.,ROHTAK

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ABSTRACT:

*Human resource is a constituted force and a prime driver that initiates and facilitates optimal utilization of all other resources and helps the organization to achieve either the optimal or the best possible results in terms of production. Human resource is a constituted force and a prime driver that initiates and facilitates optimal utilization of all other resources and helps the organization to achieve either the optimal or the best possible results in terms of production. Human resource is a constituted force and a prime driver that initiates and facilitates optimal utilization of all other resources and helps the organization to achieve either the optimal or the best possible results in terms of production. The present work pertains to the study of labour. It aims to investigate the **Labour Conditions & Welfare Programmers** for labour in the mill. The other aim of the study is to investigate the problems faced by labour in sugar mill. The present study has been under taken with a view of analysis and critically evaluates the working conditions of the workers obtaining in "The Haryana Co-operative Sugar Mills Ltd. Rohtak." In the present study the conditions of labour in the Haryana Co-operative Sugar Mills Ltd., Rohtak have been analyzed. The following is the summary of finding and recommendations. The Haryana Co-operative Sugar Mills Ltd., Rohtak is a Pioneer organization in the Sugar Industry in the Co-operative Sector in Haryana. It was registered on 24.5.1954 but maiden crushing was started on 31.01.1957. It came into existence in 1957 and the mills at present has share capital of Rs. 11462803.12 and crushing capacity of 1750 metric tones of cane per day. The mills provide employment to 842 workers out of which 236 (28%) are permanent 442 (53%) are seasonal and 164 (19%) are daily wagers. The area under cane cultivation of the mills is 27500 acre. Now mill is running in a loss making unit thus, the alarming situation veiling in the mill calls for immediate attention for bringing about improvement in the plant and workers productivity. It would then, be possible to reduce the cost of production which has become necessary for the existence of the mills. So mill is installing a new plant at Village Bali near Rohtak and Rohtak Sugar mill land has been sold to "Haryana Urban Development Authority" for a handsome amount of Rs. 100crore. If the suggestions given in the study are implemented and given a fair trial. They can do a lot for the improvement of working conditions and welfare measures of the workers in the mills under review.*

Key Words: HRM, Suger Industry, Haryana, Employment

INTRODUCTION:

Human resource is a constituted force and a prime driver that initiates and facilitates optimal utilization of all other resources and helps the organization to achieve either the optimal or the best possible results in terms of production (Surbhi Sareen 2011). The Prime tool is an Industry for the fulfillment of planned target is work force. Labour plays a vital role for an organization. Labour Co-operation is an essential factor for the organization. Working and living conditions have a close relation with production. It is therefore quite significant to know the conditions under which the workers live and work. The role of the labour in economic growth is very important. The term labour is used in various senses. In the broader sense of the term, it may refer to any hand or brain work which is undertaken for a monetary consideration. So highly trained or skilled technicians, supervisors, clerical and salaries staff is also a part of labour as the unskilled or semiskilled manual workers.

The conditions under which person work influences on worker's health, efficiency and the quality of work he does. It is said that environment creates a man and if we improve the environment, we improve the man. It is not possible to carry on the work under unhealthy surroundings. It is a matter of common knowledge, that healthy

and bright atmosphere lead to more work than dirty sullen and unhealthy atmosphere. The attention of worker is divided if the surrounds are noisy and dirty. Concentration in the work is most essential and concentration is possible only if there are no outside disturbances to divert attention of workers from their job.

SUGAR INDUSTRY IN HARYANA:

There are 15 suger mills in Haryana State out of fifteen, twelve mills are operating in co-operative sector located at, Rohtak, Meham, Panipat, Karnal, Sonipat, Palwal, Shahabad, Jind, Kaithal, Bhuna, Sirsa, Gohana and Another three mills are operating in Private sector as a Public Ltd. Company. These are located in Yamunanagar, Indri and Shahzadpur.

The unit under study is named as “The Haryana Co-operative Sugar Mills Ltd., Rohtak”. As the name suggests, it is a mill operating on co-operative lines. The mill is located in Rohtak, Rohtak is situated at a distance of 44 miles from Delhi, on Delhi- Fazilka, National Highway No.-10 On 24-5-1954, a co-operative society under the name and style “The Haryana Co-operative Sugar Mills Ltd., Rohtak”, was registered under the Punjab Co-operative Society Act. Rohtak had been predominantly a Sugarcane growing Area and with a view to secure remunerative price to the producer. The State Government decided to setup a Sugar Factory in the co-operative sector in Rohtak with a crushing capacity of 1250 metric tones of Cane per day. But now crushing capacity of Rohtak Sugar Mill is 1750 Metric tones per day. Mill is established on 122.50 Acre land, In which 50 Acre for office and production unit, 48 Acre for farming land, 10 acre for residential colony, 4.5 acre for efficient Treatment plants and 10 acre area is covered under press Mud Hip. After the completion of the reaction of the plant the maiden crushing was started on 31.1.1957. At the start the crushing capacity of mill was 1250 metric tones of cane per day which was extended 1350 metric tones per day in the year 1965-66. Again in the year 1976-77 the crushing capacity of mills was extended 1750 metric tones of cane per day. Now it is same (1750 metric tones) of cane per day. Now Rohtak Sugar mills is installing a new plant at village Bhalli near Rohtak on 117 are land and next crushing season will start in new plant. Present Rohtak Sugar Mill land has been sold to “Haryana Urban Development Authority” for a handsome amount of Rs. 100crores. Haryana contributed 1.31%in sugar production of India in the year 2009-10

EMPLOYMENT:

Employment in Sugar Mills is of three types – (1) Seasonal, and (11) Permanent (111) Daily wagers.

Seasonal employment is directly related to the length of crushing season. If the crushing season is long, the period of employment will also be long, if the former is short; the later too is bound to be so. A permanent workman is one who is engaged on a permanent nature of work throughout the year and has completed his probationary period if any. Daily wagger is one who is engaged for work of a temporary nature or to fill in a temporary need of extra hands on permanent, seasonal or temporary needs.

ADMINISTRATION AND ORGANISATIONAL STRUCTURE OF THE MILLS.

A Co-Operative society was formed and registered under the Punjab Co-Operative society Act in May 1954. In 1974 the membership was 13939. In 1976 the membership was 22051. Now the membership has increased to 25377. The members of society are cane growers, workers, state Govt. institutional Investors and others. The affairs of the society are controlled by the Board of Directors, elected according to the provision of Punjab Co-Operative Societies Act. At present there are 15 members in the Board. This board is headed by the Deputy Commissioner, Rohtak who is R.S Doon. The duties and powers of the Board of Directors are laid down in the by laws of the mills. The board had constituted sub committees for talking decisions in various shapes. Subject to the control of Board of Directors, the Managing Director is responsible for General management and Administration of mills. He is senior officer from Haryana Civil Service. Now the M.D of HCSM. Rohtak is Mr. Naresh Narwal. There are heads/subheads of various Dep’t. Viz. chief Engineer, Chief Chemist, Cane Manager, Chief Accounts officer to Look after, Supervise and control the work of their respective departments. The general body of share holders is the supreme governing body concerning the affairs of the mills. The mill had labour force of 842 workers (236 permanent, 442 seasonal, 164 daily wagers.)

Like a traveler, who after completing his long and adventurous journey, reaches his destination and looks back the area covered by him for recalling the important landmarks and experience. Similarly it would be desirable to review the various aspects of the present study. Therefore, an attempt is made in this chapter to summaries its major findings and suggestions on the basis of the foregoing chapters, which deals with the conditions of labour in the Haryana Co-operative Sugar Mills Ltd., Rohtak.

In the present study the conditions of labour in the Haryana Co-operative Sugar Mills Ltd., Rohtak have been analyzed. The following is the summary of finding and recommendations. The Haryana Co-operative Sugar Mills Ltd., Rohtak is a Pioneer organization in the Sugar Industry in the Co-operative Sector in Haryana. It was registered on 24.5.1954 but maiden crushing was started on 31.01.1957. It came into existence in 1957 and the mills at present has share capital of Rs. 11462803.12 and crushing capacity of 1750 metric tones of cane per day. The mills provide employment to 842 workers out of which 236 (28%) are permanent 442 (53%) are seasonal and 164 (19%) are daily wagers. The area under cane cultivation of the mills is 27500 acre. Now mill is running in a loss making unit thus, the alarming situation veiling in the mill calls for immediate attention for bringing about improvement in the plant and workers productivity. It would then, be possible to reduce the cost of production which has become necessary for the existence of the mills. So mill is installing a new plant at Village Bali near Rohtak and Rohtak Sugar mill land has been sold to "Haryana Urban Development Authority" for a handsome amount of Rs. 100crore.

REVIEW OF LITERATURE

For the study, the literature survey was taken in two stages. In the first stage, an effort was made to understand the problem clearly and to find out which aspects must be covered in the study. For this purpose a Preliminary survey was conducted under subject heading "**Working Conditions & Welfare**" needs for both employer & employees. In secondary stage a thorough research was made through secondary source to find out the literature related with "Labour conditions and their Welfare" in different Journals, books, research papers and Reports etc.

Bengali (2003) reviews in his research on "**creating high performance work force through Employee Empowerment**". Companies that respect their people and make their business environment conducive for efficient working are more productive and more profitable. The old conventions of strategy, structure and systems have been supplanted by „Purpose, process and people“ as people become the chief source of competitive strength. In the efforts toward that advantage, HR has never been more curtail than it is today. This paper advocates this cause of employee empowerment and calls upon practitioners to shift their practices towards employee empowerment as the changing world of work requires such practices.

A.C. Kamla(2003)in his paper "**Works laboring condition in construction Industry : Women workers in Bangalore Urban District**". Examines the migration of the workers opened up new Employment opportunities for them and had a positive impact on their working life. Likewise availability of basic facilities such as drinking water, electricity and toiletries which had been reduced considerably.

The financial express (19-09-2005) published an article on "Food at work is directly linked with production". The developing world as well as the developed ones are both facing productivity losses, but for entirely different reasons. Poor diet on job, be it in office canteens or worker"s food messes is the cause for up to 20 percent of loss of productivity in the world. In India for Instance, the cost of lost productivity, illness and death due to malnutrition is 3% to 9% of G.D.P.

OBJETIVE OF STUDY:

The present work pertains to the study of labour. It aims to investigate the **Labour Conditions & Welfare Programmers** for labour in the mill. The other aim of the study is to investigate the problems faced by labour in sugar mill. The present study has been under taken with a view of analysis and critically evaluates the working conditions of the workers obtaining in "The Haryana Co-operative Sugar Mills Ltd. Rohtak."

The proposed study is conducted to study the following.

- To examine the working conditions (Like sanitation, ventilation, drinking water arrangement, temperature, cleanliness, working hours etc.
- To what extent the labour welfare facilities are providing to the workers by the mills like Bonus, P.F., Retaining Allowance, Housing, Medical Facilities etc.
- What is the level of satisfaction among workers form their job and study the problem faced by labour in the working environment.
- To assess the shortcomings of the management practices in regard to working and living conditions and welfare programmed.
- To find out the Responsible factors of unsatisfactory working conditions.
- To suggest on the basis of conclusion drawn, how to improve the working conditions of labour and their welfare.

RESEARCH METHODOLOGY:

An Architect prepares a blue print before he approves a construction. Any army prepares a strategy before launching an attack. An Artist make a design before he executes his ideas. Make a plan by the researcher for his/her study saves time and resources. Such a plan of study is called research Methodology. Research methodology is a method to solve the Research Problem systematically. It involves gathering data, use of statistical technique, interpretations and drawing conclusions about the research data. It is a blue print, which is followed to complete the study.

SAMPLE DESIGN:

A stratified Random sampling technique has been adopted to determine the size and composition of the sample for the present study, while applying stratified random sampling technique, the universe has to be divided or stratified into groups and sample and sample is chosen independently from each group. Size of work force is large enough (842). It was decided to take a sample of workers. The size of sample was fixed at 100 workers representing all the categories viz. highly skilled, skilled, semi skilled and un skilled. The selection has been made on random basis from all these categories.

COLLECTION AND ANALYSIS OF DATA;

Primary and Secondary data are used for the purpose of analysis in the study. Primary data are collected on the basis of questionnaires. Two sets of questionnaires were prepared (Specimen of questionnaires has been given in the Appendix at the end of the text) one to get information from management to find out their attitudes and views regarding various labour aspects, another seeking information from workers regarding their living conditions and fringe benefits provided by the mills & Secondary data were collected from the Different Department of Sugar Mills. A separate interview schedule with relevant questions was also designed for managers. The questionnaires were thoroughly discussed with the respondent to clarify doubts, if any, regarding what was asked. Subsequently, all the respondent particularly from management group were individually interviewed at the time of collecting the completed questionnaires, their replies were jointly reviewed and further classifications and supplementary information as were found to be necessary were secured. The questionnaires relating to the workers were filled upon the basis of individual interview to each worker. Information so collected has been processed in the form of tables and on the basis of these tables analysis and interpretation have been made. The information collected from management has also been analyzed along with that from the workers where ever necessary to measure the diversity and similarities in the view of these two groups. In the present study very simple percentage method is adopted as statistical Technique. It has enabled us to draw more definite conclusions about the various aspects of our study.

GENERAL CHARACTERISTICS OF THE WORKERS:

The age of the workers ranges from 18 years to 58 years. But majority of the workers falls in the age group of 35-40 years. Most of the workers who are in their youth having anxiety and innovative nature. Regarding the marital status of the workers of the mills, the study has revealed that 90% of workers are married and only

10% are unmarried. In our country marriage is considered to be a lifelong sacred union of the two souls and not merely a contract. Moreover in India, marriages of boys and girls take place in the early ages because of social customs and beliefs. The average sizes of family of the workers are about four to six members in a family.

Educational Status:

Regarding educational background of the workers of these mills 10% of the workers are quite illiterate and 90% of the workers are literate. 10% of the workers are up to Primary, 20% up to Middle, 28% up to Metric and Rest 32% of the workers are above matriculation. The low level of illiteracy of the workers has been responsible for the growth of large families amongst the workers. Most of the workers belonging to clerical staff are under graduate while majority of the employees in supervisory and administrative category are graduate/post graduate in various discipline viz., arts, science, commerce, law, agriculture and technology. Thus it is evident that work force of mill presents spectrum of trained and untrained categories.

Length of Service:

24% of the workers have up to 10 years of service in this factory 76% of the workers have more than 10 years service in the mills. Most of the workers who are young, literate and married they appear to more articulate about their grievances, so that sugar mills management need to maintained coordination with the workers.

RECRUITMENT, SELECTION, TRAINING AND PROMOTION OF LABOUR:

Recruitment Procedure of the mills has been found to be on scientific lines. As for the recruitment sources are concerned, existing employees, Mills gate, employment exchanges and advertisement in newspapers are the main sources of Recruitment used by the mills. Majority of the works i.e. 70% belong to Haryana State and rest 30% belong to other states viz. Punjab, U.P. and Bihar. Etc. No systematic Training is imparted to the workers in the organization. As far the promotion policy is concerned, seniority-cum-merit is the main criterion in case of supervisory, administrative and highly technical staff where as seniority is the general rule the case of nontechnical staff and other staff.

There must be proper guidelines in regard to the recruitment cum promotion and training programmes. There must be a centralized recruitment board for all the mills. A written test and interview by professionals should be taken as criteria for selection. In the selection of unskilled workers undue favors and pressure should not be given a berth. Balanced, democratic and rational approach need to be applied to the recruitment process. For promotion purposes seniority cum merit basis should be strictly followed. There should be proper arrangement for refresher courses for high highly skilled and supervisory staff and proper arrangement of training also for the workers. The study has also revealed that there is no formal system of training for the workers. Training should be given to them. It may increase their efficiency and avoid unnecessary wastage. Management should make an arrangement for giving training to the workers.

INCOME AND EXPENDITURE OF THE WORKERS

Income of the workers: Wages including allowances have been found to be main sources of Income of the workers. But 25% of the workers are earning below Rs. 8000. The workers also supplement their income from other sources by Agriculture, Shop keeping, dairy, farming etc. the employees of the mills are paid wages and salaries and other allowances & benefits recommended by the "Haryana Sugar Mills Employees Board 2004". The investigation reveals that the workers are not satisfied with their wages.

Daily wagers are getting only Rs. 3510/- per month and those daily wagers who are working in the mill for more than ten years, are getting 3640/- per month and no other allowances are given to them. Expenditure Pattern of the Workers:

The expenditure pattern of the workers determines the standard of living which in term has a direct bearing on the efficiency of the workers. The expenditure on food decreases with Increase in Income. The percentage of Exp. On food in wage group below Rs. 8000 is 56.22% and above 14000 is 36.18% and Exp. On Education is Increasing with Increase in Income. It is highest in the income group of Rs. 12000-14000 and lowest in the income group of below Rs. 8000.

It is suggested that changes should be done in the pattern of wage structure because 55% of the workers of the mills having the income below Rs. 10000 and only 5% of workers are earning above Rs. 16000, most of the workers are not able to fulfill that basic requirement of life because the lack of sufficient income. It is therefore, necessary to increase the money wage. It is suggested that efforts should be made to persuade the workers to avoid wasteful expenditure. This can be done through proper Education of the workers. So that they may know the ill effects of wasteful expenditure. They should be educated how the money should be spent on various items of expenditure. Large numbers of workers find the expenses on the higher education of the children burdensome. It can be suggested that management should think at some incentives to the workers for sending their children to school and colleges at the mills expenses.

WORKING & SERVICE CONDITIONS:

Working condition of the mills is satisfactory. There are proper exhaust fans, lighting & ventilation facilities and all the machines and equipments are fully covered with Safety Guards. The mill has taken all the steps mentioned in factory act.

Seasonal, permanent employees & daily wagers getting leaves like National, Casual, Sick, Earned etc. to conclude it may be said that service conditions are very apt and an interview with some workers revealed that these provisions are not only in writing but are followed in practice also. The disciplinary action taken by mills is also very effective. That is why the labour force is contended and the workers don't resort to the act of misconduct. Working and service conditions are very apt but still there should be a need of improvement. There should be rest rooms where the tired or minor injured workers can take rest and the hours of night shift should be reduced because working at night for a long time is a tiresome job and mill should keep proper covering on the top of chimneys to remove the smoke and black particles.

LABOUR ABSENTEEISM:

It is observed that the rate of absenteeism is higher in night shifts than day shifts. Main reason of absenteeism of the workers in the mills are sickness, Industrial Accidents and other reasons but it is not a big problem in the mills. Ab. In the off season in sugar mill is found higher than what is found in crushing season. It has also be experienced that absenteeism is the highest among the workers belonging to unskilled categories comprising to low income group. Efforts should be made to improve working and living conditions of workers. Protection against accidents, sickness and facilities for obtaining leave constitute the most effective means of reducing absenteeism.

FRINGE BENEFITS:

Though the management of the mills as introduced many scheme of fringe benefits. There are three. Types of fringe benefits that is available to the workers viz. social security benefits, labour welfare facilities and Bonus. The mills total expenditure on fringe benefits are Rs. 13591126 during the year 2006-07 and it is increasing in every year.

Social Security benefits and Bonus:

These are the parts of fringe benefits both employer and employee contribute 12% of basic and D.A. in provident fund. Employer contributions in P.F. are Rs. 5978821, in family pension scheme are Rs. 2991756 and expenses towards gratuity is Rs. 3038350 and payment of bonus to the employees are Rs. 199587 during the year 2006-07 and bonus is reducing in every year because mills loses are increasing year to year.

LABOUR WELFARE ACTIVITIES:

The mills has Introduced many schemes of labour welfare for the workers, which include Retaining Allowance, Canteen, uniforms, medical, Housing, Recreational, Educational facility, Labour Welfare Fund etc. during the course of survey it was found that 13% of the workers are availing housing facilities provided by the factory. Housing conditions of the workers are not satisfactory. There is need of providing housing facilities to the workers, At present most of the workers live in slums. This affects their efficiency and health. Provision of suitable housing will go a long way an improving the health, efficiency and reducing the absenteeism of the workers in the mills.

The canteen should be subsidized by the mills for lowering down the prices and improving the quality of the eatables. Most of the workers come from neighboring villages, so there should be a facility of lunch and dinner in the canteen and Emphasis on Education of worker's children.

As far as social security benefits and bonus are concerned only statutory schemes of social security benefits have been implemented in the mills. So mills must pay more attention in this regard. It has become need of time that comprehensive legislative measures are introduced concerning those welfare measures, which are still voluntary and Govt. should make the workers active participation possible in the organizational and administrative setup of welfare activities for delivering maximum good to the toiling labourers otherwise it would be futile to think of improvement in working force living.

There is one trade union which name is "Cooperative Sugar Mill Employee Association." The union is affiliated with the "Haryana Cooperative Sugar Federation Workers Union." It helps to solve the dispute between management and workers. It is helpful to provide those better working conditions as well as good salaries & wages and other benefits. The feature of this union is that there is no outside leadership. As far as the industrial relations in the mill under review are concerned it can be termed as satisfactory.

Financial Aid should be given by the mills to the trade union & management should always adopt the supportive attitude for the trade union. A union should be democratic in character and do greatest possible welfare of the workers. If the above suggestions are implemented and given a fair trial. They can do a lot for the improvement of working conditions and welfare measures of the workers in the mills under review.

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A STUDY OF HUMAN RESOURCE MANAGEMENT OF HIMACHAL PARDESH TOURISM DEVELOPMENT CORPORATION LTD.

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ABSTRACT:

The present study revealed that the major source of dwelling dissatisfaction among the employees of H.P.T.D.C is the non-availability of grievance handling machinery. No doubt there is a trade union of employees in the corporation registered with the name 'H.P.T.D.C Employees Union'; it is not much effective and strong in pleading the case of individual employees with the management. In practice individual employee has to bear himself with his grievances or has to approach the political leaders or move to the court of law if he or she can afford, to get his grievance redressed. Theoretically, it was accepted according to the avowed objectives of the employees union that it was the duty of both the staff representatives and the management to keep the staff informed of facts and results which will give them a sense of purpose and unity. Still about 25.84 per cent employees asserted that cordial relations did not exist in the corporation.

The field units of the H.P.T.D.C should be evenly distributed from administration point of view under the present practice, sometimes only a single unit comes under as Area Manager and at other places quite a few units fall under the supervision of a single area manager. Uniform divisions are to be made which shall not only give equal responsibilities to all the area managers but also give boost to their functioning by creating a sense of competition among different areas. The corporation should de-link itself form the state Government's pay scales keeping in view the technical nature of job of its employees. Certain cash incentives in the form of increments should also be given to the meritorious employees. As no study can be exhaustive, only an attempt is made through study, to make a comprehensive study of working of H.P.T.D.C. Above all these suggestions, if considered properly by the management of the corporation can really prove a milestone in achieving the targets of the H.P.T.D.C.

Keywords: Human resources, Himachal Pradesh employees

INTRODUCTION:

Human resource is the mighty pillars that form the business colonnade in the world. They, therefore, deserve the care and attention. The very art of managing human resource is based on thoughtful policies and a bouquet of helpful practices aimed at creating motivation and commitment in the workplace. While the human resource policies form the framework for effective functioning of human resource management, human resource practices form the culture in business management. An organization whether formal or informal, is composed of people, who come from different walks of life. People are different from each other in their all aspects of life. Human resource consists of the total skill, creative abilities, talents, and aptitudes of an organization workforce. Human resource is the sum of total inherent abilities, acquired knowledge, and skill represented by talents and aptitudes of the employees(Sankalp 2010)

Tourism links man to man, community to community and civilization to civilization. In the present time when people have lots of money in their pockets, leisure at hand easy mobility with numerous means of transportation, scope of travel and tourism has expanded. 'Tourism' now is not restricted to a leisure time activity people indulge in, but it now influences many aspects of life like; economic social political, geographical, cultural on both national and international level. Tourism has vital economic significance. In 2010, international tourism generated US\$ 919 billion in exports earning. International tourists arrival grew by 7% in 2010 to 940 million. It happens to be one of the most promising and

growing sectors of society. To a developing country like India, tourism industry is an economic bonanza. It is a catalyst to economic growth and earning of foreign exchange. In India, the foreign exchange earnings from tourism have been on the increase year by year, higher than the rate of increase of all invisible and visible exports. Again, income estimated from domestic tourism is about 2-3 times than that from foreign tourism. These two put together account for a considerable amount of income for the country. The contribution of the tourism industry to the national income, tax revenue of the Govt., and regional development is undisputed and substantial. Apart from its economic significance the social significance of tourism is equally important. It is a potential force for bringing about world peace and international understanding. India with varied cultural, religious and linguistic groups greatly needs this mutual understanding. Hence tourism is very important in India. The total employment generated by tourism industries was 30491000 in 2008, which is expected to reach at 39615000 in 2018 (NBT 2009). Tourism occupies an equally important place in the economy of Himachal Pradesh. Together with other industries tourism is a major economic activity in the state for creating income and employment opportunities. Himachal Pradesh has vast potential for tourism. It has unique geographical conditions which are available at very few places in the country. It has immense wealth of natural resources which can be en-cashed only through formulation and implementation of right strategies for their development. Need of making in-depth study of H.P.T.D.C Ltd., arises from a number of broader and specific objectives. H.P.T.D.C is one of the most important public sector units, responsible for developing tourism potential in the State. Tourism, in turn, is the most lucrative sector for the beautiful state like Himachal Pradesh in the absence and non-feasibility of other sectors which can contribute to the state's economy. There is absence of any other influential private agency to take care of tourism industry in the state. So the working of H.P.T.D.C directly influences tourism industry. There are vast unexplored and unexploited areas, where H.P.T.D.C can expand its area of action. Tracing other areas is the need of the hour. H.P.T.D.C Ltd., is going to complete (Thirty Seven) years, since its incorporation in September, 1972. And now it needs feedback, which at first place needs thorough scrutiny of its achievements and lapses, successes and failures, land-marks and short-comings. Also, it is important to investigate if there is any gap between the proposed goals and objectives set by H.P.T.D.C and its actual performance. Yet another important need of the study arises from the fact that tourism is not only an economic entity but it has social, political, cultural, environmental aspects also. All, these aspects are directly or indirectly connected with the performance of H.P.T.D.C Ltd. They influence and in turn are influenced by the working of H.P.T.D.C With a view to promote tourism in the state, the need of an independent agency to achieve this objective was felt and the Himachal Pradesh Tourism Development Corporation was incorporated on September 1, 1972, under the Companies Act, 1956 with an authorized capital of Rs. 200 Cores divided into 20,000 shares of Rs. 1000/- each.

REVIEW OF LITERATURE:

It is desired to review the existing related literature so that during the present study more emphasis may be given to those aspects of the problem which have not been duly covered by the earlier researcher.

Seth, Rabindra (1999) in his article "Tourism: Problems Prospects" has identified the seven major hurdles in the way of faster growth. These are: land and land laws, power, telecom, roads, road transport, airports and aviation policies. Ranga, Mukesh and Nigam, Devesh (2003) in his work "New Approaches in Tourism Management" have made an effort to give a possible picture of the existing and emerging industry by focusing on innovative ideas, marketing and development strategies related to tourism and hospitality industry. Bhuyan, Anjan (2004) in his article "Rural Tourism – A New Promise" has made an effort to convey that India's rural tourism potential exudes through her rich cultural aspects and production systems.

Bhatt (1997) in his article "Current Situation in Tourism Human Resource Development" has made an effort to convey that tourism has emerged as one of the key sectors of Indian economy by making significant contribution to foreign exchange earnings, creating employment opportunities, opening up backward areas and providing a large multiplier effect in other sectors. Tourism also promotes handicraft, art and culture and has become an instrument for preservation of heritage. Negi, Jag Mohan (2004) in his work "Professional Hotel Management" has tried to convey that now, hotel management has become a profession which young boys and

girls are proud to join, and get trained for various level positions. The hotel management education has proliferated into a series of courses offering technical certificate courses of specialized nature, diploma, degree, post-graduate and master degree programmes in hotel, catering and tourism..

Singh, Hawa (1995) in his work "Organizational Health of Haryana Tourism Corporation in Relation to Commitment, Jobs Satisfaction and some Allied Attributes" has analyzed the organizational structure of Haryana Tourism Corporation, its organizational health, organizational commitment, job satisfaction along with some allied attributes. He has divided the employees of Haryana Tourism Corporation into three groups namely Whole Group, Manager Group and Worker Group.

OBJECTIVES OF THE STUDY:

In order to make a systematic study in any field and to give it proper direction and shape, setting of goals and objectives at the outset become imperative. The objective of the present study is to evaluate the efficiency of human resource management with reference to recruitment, selection, training, promotion procedure and management staff relationship in the corporation. The study covers almost the whole management of the corporation with reference to the utilization of human resources.

METHODOLOGY:

This study is descriptive study as case analysis of H.P.T.D.C has been presented. The analysis is mainly based on the questionnaires served to the executive and workers of the corporation which covered their opinion with regard to the policies controlling recruitment, selection, placement, training, promotion, wages and salaries and industrial relations. The questionnaire was served to 190 employees in all the major complexes of H.P.T.D.C and its head offices. The responses were collected on sample comparative basis and both quantitative and qualitative results were drawn.

CONCLUDING OBSERVATIONS AND SUGGESTIONS:

With the help of the analysis of various aspects of management of the H.P.T.D Corporation, it may be said that the care has been taken in structuring the H.P.T.D Corporation in the context of the organizational and management theory. The seven important divisions at the Headquarters office operate as a sound structure at the conceptual and broader policies levels. Then there are field units working as operational units to put into practice these broader policies. There is delegation of authority to the field units i.e. complexes. It is observed in this regard that most of the chief executives of these field complexes use these delegated powers properly and for bonfire purposes. It is also observed during this study that the managers or assistant managers of the field complexes generality keep the Managing Director informed about all major matters even though formally they are not required to do so. As a result, the headquarters office exercise full and effective control over field offices and provides them useful guidance through various reports, returns, meetings and personal contacts. It is also observed that the transport wing through its conducted tours has opened up those interiors of Himachal Pradesh for the tourists which would have never been approached by them otherwise. The State has 55 helipads available for the services.

It is observed that during the last five years serious efforts have been made to diversify tourist activities by promoting and developing adventure sports like Sking, Trekking, Heli-Sking, Para-Gliding and Golfing etc. various Skiing courses have been conducted by the corporation at Narkanda, every year.

Since its formation in 1972, the corporation has been endeavoring hard for the promotion of tourism in the state of Himachal Pradesh and has built up the much needed infrastructure for this purpose as a result of which the inflow of tourists to the state has been on an increase year after year. At present 1889 hotels having bed capacity of 45345 are registered with the department up to December 2008. The corporation has also been making concerted efforts in creating tourist consciousness and making Himachal popular as tourist attraction through its informatory literature, brochures, advertisements and other publicity material. This welcome beginning made by the corporation will go a long way in promoting tourism in the state.

The Human Resource management of the Himachal Pradesh Tourism is basically employee oriented from the very inception of the corporation in 1972. From its entire records it can be inferred that its employees have been given reasonable dues, may be due to the fact that the number of existing employees was very meager and xpansion

programmed was more than the ratio of employees. Established with 530 employees on its rolls in 1972-73, the H.P.T.D Corporation have 1495 employees on rolls and 284 employees on contract in 2008-09. A steady growth of activities of the corporation at its headquarters office as well as other complexes created a corresponding need for more and more employees year after year. Recruitment in the H.P.T.D Corporation is made on the basis of both direct and indirect recruitment methods. Indirect recruitment method i.e. promotion or deputation is adopted in case of recruitment to class II & class III categories. The post of company secretary is filled up through direct recruitment. Not even a single post in the class IV category was filled up through indirect procedure. Being at the lowest step of the management ladder, there is no question of promotion. The responses of the employees with regard to recruitment policy of the corporation were by and large a general acceptance of it. Approximately 68 per cent of the employees showed their satisfaction. Those who showed their dissatisfaction insisted that recruitments should be made through an autonomous and independent body for fair and non biased recruitment. They further wanted that deputation which leaves ample room for bias and favor at the higher levels of the corporation should be done away with.

Training in all spheres of activities of the corporation is given high priority from the very beginning. Both on the job and off the job training is provided to its employees. Yet 34.21 percent employees expressed their dissatisfaction with the present training system and training facilities of the corporation. They were of the view that there was a crying need for greater and wider opportunities for management development through concerted management refresher courses. It was observed that majority of employees who received training was from catering cadres only. The two most important wings of the corporation viz., Administration and Accounts and Transport wing remained out of touch as far as training programmes were concerned.

More than 1/2 (52.63%) of the employees of the corporation expressed their dissatisfaction with its promotion procedure. The main reason for dissatisfaction is that the management usually adopts pick and choose policy in promotion and training. As per the recruitment and promotion policies there are channels for promotion even for a class IV employee to become class I in the corporation, but the present study hardly found any such case in practice. That shows that the flexibility of rules is used, for the convenience of giving special favor to the favorites of the top management, which further brings the dissatisfaction among the majority of the employees, because of promotion of a junior most employee by superseding a majority of senior employees even though the qualification is the same. If this practice is continued in the corporation, frustration among employees will go on piling up which will further result into low productivity and low morale of the employees.

The pay scales of the employees of the corporation are same as those of employees of Himachal Pradesh Government, This fact created dissatisfaction among employees of the corporation. More than 70 per cent of the employees (72.63 per cent) expressed their dissatisfaction with the wage structure and other benefits. They wanted more allowances and more other benefits keeping in view the technicality of the business of the corporation. However, no convincing arguments were advanced by them in support of their demand.

Management of the corporation must keep in mind the fact that it is the workers who help to move the wheels of their "Tourism Chariot". Therefore, they must be given due consideration and fair deal as far as the job-satisfaction is concerned. It is obvious that if the employee is not satisfied with his job, this absence of interest in the job will result in low productivity and poor service to the tourists. No doubt, the corporation is giving many fringe benefits to its employees in the form of bonus, uniform, liveries, festival gifts, subsidized food, leave with pay, medical reimbursement, Leave Travel concession etc. But here again comes the disparity among the employees. Some of the wings of the corporation are deprived of these benefits. Accounts and Administration wings are not facilitated with some of the benefits such as uniform, subsidized food etc. Though it does not cost much yet the management of the corporation disagrees with this demand of the employees.

The present study revealed that the major source of dwelling dissatisfaction among the employees of H.P.T.D.C is the non-availability of grievance handling machinery. No doubt there is a trade union of employees in the corporation registered with the name 'H.P.T.D.C Employees Union'; it is not much effective

and strong in pleading the case of individual employees with the management. In practice individual employee has to bear himself with his grievances or has to approach the political leaders or move to the court of law if he or she can afford, to get his grievance redressed. Theoretically, it was accepted according to the avowed objectives of the employees union that it was the duty of both the staff representatives and the management to keep the staff informed of facts and results which will give them a sense of purpose and unity. Still about 25.84 per cent employees asserted that cordial relations did not exist in the corporation.

SUGGESTIONS:

An investigation of various aspects of H.P.T.D.C., particularly its role and performance has given me the insight to comment on the improvement of its functioning. The various Points and suggestions which came out during the course of the present study are summarized below. There is an urgent need to improve the political environment of the corporation. Quite large political leaders are directly linked with the corporation as chairman of the corporation is Chief Minister of the State; there is fairly good representation of political persons in the Board of Directors and still others are exerting their influence from outside. It is seen that a change in the Government brings a change in the preferences, strategies and thrusts of the corporation. It may not be out of place to mention that on the question of 'privatization' B.J.P. and Congress Govt. have had different viewpoints. The congress Govt. has adopted the policy of „selective privatisation“. The Union Minister for Tourism and Civil Aviation has also stressed the need to involve private investors even in infrastructural development recently in a conference of Himachal Tourism Advisory Board (HIMTAB) held at Manali. It was also suggested to have strong tie ups with international travel operators. Administrative apathy slows down the development process of the corporation on one hand and on the other makes the Govt. to frame hasty and uncertain policies. So administration, as an advisory body, should give pragmatic counsel to the Govt. in framing major policies and on the later stages should try to execute those policies in letter and spirit. Hence, a cooperative and helpful attitude of administration is needed at all stages.

Overall rapid economic growth of the state is needed to give boost to the tourism industry. The major thrust areas identified by the Government should be embarked upon keeping in view perspective of tourism growth in the state. There should be better coordination between tourism and other sectors of the economy. Proper attention should be paid to provide better infrastructure, in the form of good roads, proper water supply, sanitation electrification, beautification of different areas by the concerned departments Better technological environment should be created as advancement in technology saves times and increases efficiency. The air links are to be increased; advance booking through computer network at different places is to be introduced. Communication facilities like fax, telephone (S.T.D, and I.S.D) etc., are to be provided. The appliances and gadgets like microwave, electric kettles, cookers, oven etc., especially in fast food corners and roadside catering units are to be made available for quick service to the tourists

The H. P. State Council for Science, Technology and Environment and other institutions of research may be induced to develop technically advanced systems which may be best suitable to the needs of tourism. A separate wing of research and development (R & D) may be created in the corporation which will in turn provide the feedback and explore new areas of science and technology to achieve the objectives of the corporation.

Efforts should be made by the corporation to diversify touristy activities by promoting and developing adventure sports such as mountaineering, Heli-Sking, fishing, ice- skating etc. It should also be the aim of the corporation to promote youth tourism so that a large number of young men and women not only from within the country but also from abroad could be attracted to this state.

Accommodation problem may be solved by inducing residents of the state to change their attitude towards tourism. They should be made to become hospitable to the tourists. If they are ready to accommodate tourists in their houses as paying guests they can help the corporation in solving the accommodation problem at least in the peak seasons. Government Corporation may identify such residents and they can be registered with the District. Tourism Officer/Area Manager of H.P.T.D.C who can send tourists to their homes. These residents

can also act as at guides. They also can do the publicity of tourism attractions among their relatives and friends.

There is need of improving sites of tourist attraction. Tourists complain about the lack of amenities like drinking water, proper toilets, catering facilities, medical aids at various tourist destinations of Himachal. Govt. was forced to invite private parties to construct all the seven proposed rope-ways and other things like parks and others as H.P.T.D.C lacks all the resources to do so. Steps should be taken to preserve traditions, art, paintings, folk dances, music, historical monuments, etc. and to encourage cultural tourism. Cultural shows should be organized time and again for the entertainment and knowledge of the tourists. Firm steps should also be taken by the Govt. to preserve the natural beauty, green belts and ecological balance so that the state does not loose its charm for tourists environmental protection has to be related with the needs of the tourism.

There is need for further reforms in the internal working of the organization. Since the corporation has been working as a Government department instead of as a commercial organization, many unrealistic projects have cropped up and these are incurring losses which have shattered the whole working of the corporation. As a result, the corporation is leasing out many of its premises to the private parties. Had the management assessed the feasibility of these units before hand on commercial lines, there would have been no need to lease out most of them now. Therefore it is suggested that all the policies and strategies should be practical rather realistic and should be based on commercial principles. Professionals and Experts should be preferred at important positions. The Board Constitution should be balanced and should give equal representation to politician's bureaucrats, academicians and professionals. The Managing Director must be a professional instead of being an I.A.S. Officer. He should be appointed on full time basis and for a longer period, only then he will be able to devote full attention to the functioning of the corporation and will be helpful in the promotion of tourism in the state. The financial manager must be a Chartered Accountant (ACA/FCA) or Company Secretary. Lack of professional approach in the functioning of the corporation is a matter of great concern. As a result its employees face functional problems in the performance of their duties. The tenure of the office of M.D. and Board of Directors should be clearly defined. It will make them independent to take decisions. So far they hold office at the mercy of the Govt. and they have to act according to the wishes of their masters.

In 1985, when five disciplines namely: Administration, Accounts, Catering, Transport and Information and Publicity were created within the corporation, it was decided that the seniority of different personnel shall be decided on discipline wise basis i.e., within their discipline only. However, this policy was not followed strictly. It rather remained in papers only. In actual practice, great anomalies are found there regarding promotion of employees. Neither discipline-wise seniority is adhered to nor a fair deal, is given to employees in the matter of giving promotions. It is suggested that there should be one common seniority list for the whole of the organization. The employees are also sore at the ill practices on the name of the principle of 'merit-cum-seniority' followed by the corporation for promotion. They feel that this policy is applied whimsically just to give favor to the favorites of the management and other political magnets. The pick and choose policy of the corporation in the name of merit-cum-seniority causes frustration among employees. They loose their enthusiasm towards their work which causes inefficiency and ultimately results into loss to the corporation. They should be given fair deal in recruitment and promotion, so that they work with full zeal and dedication and impress the psychology of the tourists in an effective manner.

Management should be dynamic and prompt decisions need to be taken. The decision making powers in the corporation vest in the Board of Director's and the Managing Director, They meet quarterly. Either they should meet more frequently or some powers should be decentralized to the lower level, so that quick decisions are taken for the efficient functioning of the corporation. Being a big organization, the corporation should have a separate post of Labor Welfare Officer to look after the welfare of employees on human considerations. He will act as a bridge between the management and the employees and can regularly take up the problems of the employees with the top management. It is seen during the present study that no proper care is given to the grievances of the employees. In fact the major cause of dwelling dissatisfaction among the employees of the corporation is the absence of any grievance handling machinery. The Trade Union is also not effective in

H.P.T.D.C Therefore; the employees have to approach top officials or political leaders for redressal of their genuine grievances. It is, therefore, suggested that effective machinery should be set up in the corporation which will exclusively look into the grievances of the employees and will work as an arbitrator for the grievance redressed.

The field units of the H.P.T.D.C should be evenly distributed from administration point of view under the present practice, sometimes only a single unit comes under as Area Manager and at other places quite a few units fall under the supervision of a single area manager. Uniform divisions are to be made which shall not only give equal responsibilities to all the area managers but also give boost to their functioning by creating a sense of competition among different areas. The corporation should de-link itself from the state Government's pay scales keeping in view the technical nature of job of its employees. Certain cash incentives in the form of increments should also be given to the meritorious employees. As no study can be exhaustive, only an attempt is made through study, to make a comprehensive study of working of H.P.T.D.C. Above all these suggestions, if considered properly by the management of the corporation can really prove a milestone in achieving the targets of the H.P.T.D.C.

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ROLE OF DIGITAL LIBRARIES IN TECHNICAL EDUCATION :AN OVERVIEW

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ABSTRACT:

This paper will attempt to understand what a successful, relevant and dynamic librarians and information professionals must be in this Information Age. It will also focus on objective, strategies, components, online/offline resources, and advantage and their disadvantage the issues, trends and challenges in preparing new era librarians and information professionals. Curriculum pertaining to the development of the new era librarians and information professionals will also be discussed. The digital content may be locally held are accessed remotely via computer networks. Hence, in this paper we hereunder discuss the uses, search methodologies, technologies, creations, innovations, requirements, budget and implementation of digital libraries for future.

Keywords: *Definitions, Digital Library objective, Terminology library microform, information retrieval Corporation for National Research Initiatives , born-digital, digitizing. Hybrid library, American Memory Library of Congress. ePrint or, Internet Archive.*

INTRODUCTION:

The revolution in the IT sector is influencing the information industry also. Libraries are also changing to meet the demand put on them. The new generation whose demand for information is never met is always demanding that traditional libraries should be developed as a well equipped and interconnected as digital libraries. If we consider that the information is for use and for all then why not libraries for all? Why not libraries become universal' open for all those who seek for information. By considering this view a number of large organizations in USA and Europe have already more or less switched over to digital mode. They are making digital images of periodicals which are not available in electronic form and there after no new procurement is being made on print media if a digital version is available. Examples of such organizations are University Micrographic Inc. (UMI of USA), National Institute of Scientific and Technical Information (INIST of France) etc.

The term Digital Library has a variety of potential meanings, ranging from a digitized collection of material that one might find in a traditional library through to the collection of all digital information along with the services that make that information useful to all possible users. As there are many definitions of a "digital library," terms such as "electronic library" and "virtual library" are often used synonymously. A digital library is nothing but a large database for the people who are working on hypertext environment. It is an environment, which supports the full life cycle of creation, storage, preservation, dissemination and use of data, information and knowledge.

According to Arms a digital library is a managed collection of information with associated services where the information is stored in digital format and accessible over a network. The digital library federation in the USA defines the digital library as: Digital libraries are organizations that provide the resources, including the specialized staff, to select, structure, offer intellectual access to, interpret, distribute, preserve the integrity of, and ensure the persistence over time of collections of digital works so that they are readily and economically available for use by a defined community or set of communities. A digital library is an organized collection of digitized material or its holding in the digital form, which can be accessible by a computer on the network by using TCP/IP or other protocol.

DIGITAL LIBRARY:

Organized collection of multimedia and other types of resources.

Resources are available in computer processible form.

The function of acquisition, storage, preservation, retrieval is carried out through the use of digital technology.

Access to the entire collection is globally available directly or indirectly across a network. Support users in dealing with information objects, helps in the organization and presentation of the above objects via electronic/digital means etc.

Digital Library: Objective:

To create a comprehensive networked information environment, a seamless rich set of tools and resources for the University community.

Digital Library: Strategies:

- To create and/or acquire new digital information resources
- To develop the necessary infrastructure
- To create mechanisms to involve other campus information providers/creators in the evolving campus wide efforts
- To provide integration and coordination of campus information resources

Digital Library: Components

Building content and tools (TULIP, PEAK, Core Journals, Text initiatives, Electronic Reference Shelf, Visual Image projects)

Production services

Conversion and preservation

Research and development

REQUIREMENT FOR DIGITAL LIBRARIES:

The Internet and World Wide Web provide the impetus and technological environment for the development and operation of a digital library. The Internet provides the TCP/IP and or its associated protocol for accessing the information and web provide tools and technique for publishing the information over Internet. In the digital environment it is reasonable to say that a central back up or archive should be created at the national level, which will store information output of the region as well as information from outside the country. Some of the requirements for digital libraries are:

Audio visual: Color T.V., V.C.R., D.V.D., Sound box, Telephone etc.

Computer: Server, P.C. with multimedia, U.P.S. Etc

Network: LAN, MAN, WAN, Internet etc.

Printer: Laser printer, Dot matrix, Barcode printer, Digital graphic printer etc

Scanner: H.P. Scan jet, flatbed, Sheet feeder, Drum scanner, Slide scanner, Microfilming scanner, Digital camera, Barcode scanner etc

Storage devices: Optical storage device, CD-ROM, Jukebox etc.

Software: Any suitable software, which is interconnected and suitable for LAN and WAN connection.

RESOURCES OF DIGITAL LIBRARIES:

The resources of a digital library are those, which the computer can store, organized, transmit and display without any intervening conversion process. It includes both print and electronic or digital material. The digital material may be of multimedia types or any other i.e. only digital audio, video, full text information, photograph, drawing, digitized sound, e-book, v-book, electronic tax, map, image, 3D representation etc. The collection may also include structured /unstructured text, scanned images, graphic audios, video recording etc

On line resources:

Local database of traditional books in machine-readable form.

E-book, v-book, electronic tax, map, image, sound, video, and multimedia etc.

E-journal

LAN, MAN, WAN for web browsing, e- mail etc.

Well trained manpower for online help

Off line resources:

C.D-ROM, Jukebox etc.

Audio visual aid etc.

DIGITAL LIBRARY TECHNOLOGIES:

In particular, the importance of understanding the human and social context while carrying out technical work remains the heart of all work in digital libraries. The basic technologies involved in Digital Libraries are Open architectures (open DLs)

Componentized V/s Monolithic systems

Interoperability (role of Z39.50, OAI etc.)

Unified interface for heterogeneous libraries

Metadata mapping across different libraries

OAI –compliant data and service providers

Multilingual digital libraries

The function of acquisition, storage, preservation, retrieval is carried out through the use of digital technology.

Access to the entire collection is globally available directly or indirectly across a network. Support users in dealing with information objects, helps in the organization and presentation of the above objects via electronic/digital means etc.

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Publications tools

Searching tools

REQUIRED STANDARDS FOR DIGITAL LIBRARY:

Since information comes in different forms such as plain text, images/pictures, sound recordings and video films, we need to select the most appropriate file format to create and store. Unlike traditional libraries, which use simple standards of classification, cataloguing and indexing such as UDC,DC,LC, AACR2,and ISBD; standards for creating digital libraries are more technical and complex. Hence it becomes essential to adopt various international standards for the creation, storages and delivery of digital information.

There are various file formats to store each type of data. For example postscript & PDF for page description: TIFF, JPEG, GIF, PNG and PCD for images: HTML, XML, & SGML for structured documents: AU, MP3 WAV, RAM and MIDI for audio, ect., The Digital Library Federation (DLF) recommends standard naming conventions data about date. Various National and International agencies are involved in developing standards for representing electronic documents, such as digital library federation, W3 consortium ect., Meta data formats such as Dublin core, MARC, IAFA,TEI and GILS, describe an object in a standardized format that in by using the Warwick frame work interchange can be brought together and appended to the on line document.

The next step in creating a digital library is the actual scanning (or converting the text/image into digital format) of printed documents, which is most laborious and time-consuming with the special scanners are available in the market. The commercial digital library software available in the market can be done all the jobs right from scanning to hosting the content on the web.

ADVANTAGES OF THE DIGITAL LIBRARY:

A digital library is not confined to a particular location or so called building it is virtually distributed all over the world. The user can get his/ her information on his own computer screen by using the Internet. Actually it is a network of multimedia system, which provides fingertip access. The spoken words or the graphical display of a digital library is again having a different impact from the words that are printed. In the new environment owing a document will not be problem for the library because the user will pay for its uses.

No physical boundary: The user of a digital library need not to go to the library physically, people from all over the world could gain access to the same information, as long as an Internet connection is available.

Round the clock availability: Digital libraries can be accessed at any time, 24 hours a day and 365 days of the year

Multiple accesses: The same resources can be used at the same time by a number of users. **Structured approach:** Digital library provides access to much richer content in a more structured manner i.e. we can easily move from the catalog to the particular book then to a particular chapter and so on.

Information retrieval: The user is able to use any search term bellowing to the word or phrase of the entire collection. Digital library will provide very user friendly interfaces, giving click able access to its resources.

Preservation and conservation: An exact copy of the original can be made any number of times without any degradation in quality.

Space: Whereas traditional libraries are limited by storage space, digital libraries have the potential to store much more information, simply because digital information requires very little physical space to contain them. When the library had no space for extension digitization is the only solution.

Networking: A particular digital library can provide the link to any other resources of other digital library very easily thus a seamlessly integrated resource sharing can be achieved.

Cost - The cost of maintaining a digital library is much lower than that of a traditional library. A traditional library must spend large sums of money paying for staff, book maintains, rent, and additional books. Digital libraries do away with these fees.

DISADVANTAGES OF DIGITAL LIBRARY:

The computer viruses, lack of standardization for digitized information, quick degrading properties of digitized material, different display standard of digital product and its associated problem, health hazard nature of the radiation from monitor etc. makes digital libraries at times handicap.

Copyright: - Digitization violates the copy right law as the thought content of one author can be freely transfer by other without his acknowledgement. So One difficulty to overcome for digital libraries is the way

to distribute information. How does a digital library distribute information at will while protecting the copyright of the author?

Speed of access: - As more and more computer are connected to the Internet its speed of access reasonably decreasing. If new technology will not evolve to solve the problem then in near future Internet will be full of error messages.

Initial cost is high: - The infrastructure cost of digital library i.e. the cost of hardware, software; leasing communication circuit is generally very high.

Band width: - Digital library will need high band for transfer of multimedia resources but the band width is decreasing day by day due to its over utilization.

Efficiency: - With the much larger volume of digital information, finding the right material for a specific task becomes increasingly difficult.

Environment: - Digital libraries cannot reproduce the environment of a traditional library. Many people also find reading printed material to be easier than reading material on a computer screen. **Preservation:** - Due to technological developments, a digital library can rapidly become out-of-date and its data may become inaccessible.

A SHIFTED FROM TRADITIONAL TO VIRTUAL LIBRARY:

The development is already taking place. The traditional closed access libraries are shifting towards open access library. The open access libraries are shifting towards automated library, the automated one towards the electronics, the electronics to digital and finally end in Digital library and its different aspect/badan barman virtual library. Is it really true? The truth is that nobody knows what will be the future of libraries. In the following Para an attempt has been made to categorize the different types of libraries based on the technology used. It's the best time to mention that there is no strict line of demarcation between the latter four types of libraries.

Traditional library: The collection of the traditional libraries is mostly print media, manuscripts etc and are not well organized. The documents are deteriorating at a rapid rate, the collection information is not easy to locate and so does not easily reach to user, Again the traditional libraries are confined itself within a physical boundary.

Automated library: A library with machine-readable catalog, computerized acquisition, circulation and OPAC are called as automated library. The holding of this type of libraries are same as that of traditional libraries.

Electronics library: When automated libraries goes for LAN (Local Area Networking) and CD-ROM networking and started procuring E- journal and other similar kind of publication then it is known as electronic library. The resources of the electronic libraries are in both print and electronic form. The electronic Medias are used for storage retrieval and delivery of information.

Digital library: It is a later stage of electronic library. In digital library high speed optical fiber are used for LAN and the access is over WAN and provide a wide range of Internet based services i.e. audio and video conferencing and like other. The majority of the holding of a digital library is in the computer readable form and also acts as a point of access to other on line sources.

Hybrid library: The libraries, which are working both in electronic or digital and print environment, are known as hybrid library. Actually it is a transitional state between print and digital environment. It is estimated that in near future libraries will be of hybrid nature, some of the very strong point in favor of this view are centuries old reading habit of paper, convenience of handling and reading a paper document then the digitized one (in case of digitized some equipment are must needed to read the document), incompatible standard of electronic product, different display standard of digital product and its associated problem etc.

CHANGING ROLE OF LIBRARY PROFESSIONAL IN DIGITAL AGE:

The ready availability of information on the Internet, and its widespread use, really presents Librarians with an opportunity, not a threat. Technology Savvy users realize they need help, which Librarians can provide. Librarians now face difficulties and complicity challenges due to new trends in information access.

In the present technological/Internet era the professionals have to change themselves as the information profession is being changed. Now information specialists have to work as e-information resources in which various professional groups are expected to map strategies that lead to produce, manage, maintain and service the information. Information professional has to work as:

Librarian- In addition to being library manager, they also act as collection development, technical processors and so on, taking care of information quality.

Information Manager- To meet information need of the user they should know how to manage and deliver appropriate information services.

Information adviser/instructor- Ensure that user/staff know how to access relevant sources of information (literacy).

System & Networking- For delivery of information to their users in an appropriate manner develop and design appropriate systems.

CONCLUSION:

Digital libraries are not going to replace the physical existence of document completely but no doubt to meet the present demand, to satisfy the non local user digitization must be introduced so that at least libraries becomes of hybrid nature. The initial cost of digitization is high but experiment shows that once digitization is introduced then the cost to manage this collection will be cheaper than that of any traditional library. Day by day the cost of digitization is decreasing, the online publication is increasing, the needs of user are shifting towards a different environment so it's needless to say that after one or two years my library or your library will go to be digitized so it's the pick time to all informational and library professional that they geared themselves to take the challenge.

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INFORMATION SEEKING BEHAVIOUR OF ART FACULTY MEMBERS
AT ALIGARH MUSLIM UNIVERSITY, ALIGARH

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ABSTRACT:

This study identifies the information seeking behaviour of art faculty members at Aligarh Muslim University, Aligarh, UP including preferred information sources, type of information sources and methods of information access. In this study questionnaire method was used to collect the information from art faculties of AMU, Aligarh. The findings of this study show that most of the respondents i.e. 85% stated their method of seeking information by consulting a knowledgeable person in the concern field and 75% of faculty members seek information for preparing lectures. It is revealed that 87 % of the art faculty members used text book. On the basis of survey it is find out that Internet has been almost universally adopted and google.com was mostly used as the search engine for seeking information by respondents. It is observed that the majority i.e. 81% of the faculty members faced common problem i.e. unavailability of information.

Keywords: *Information seeking, Art Faculty, Aligarh Muslim University, Aligarh*

INTRODUCTION:

According to Vishwanathan "Information is the data of the human brain in the action. It may be abstract or concrete. When an individual begins to think, a variety of images and sensations flash across his/her mind. This makes some information to accumulate in his/her mind and his/her memory retains some pieces of knowledge."

Information is the data that have been retrieved and processed. Information seeking behaviour is a broad term, which involves a set of actions, that and individual takes to express information need, retrieve information, evaluate and select information, and at last uses of this information to satisfy his/her information needs. There are various factors which may determine the information seeking behaviour of an individual or a group of individuals.

There is a universal assumption that man was born innocent or ignorant and should actively retrieve the knowledge information seeking is thus a natural and necessary mechanism of human existence. Information seeking behaviour is the purposive seeking for information as consequence of a need to satisfy some goals. Information seeking behaviour involves personal reasons for seeking information the kind of information which are being sought.

Information: Webster's third New International Dictionary defines information knowledge of a particular event or situation or as "the knowledge communicated by others or obtained through investigation.

Information Seeking: Information seeking is a basic activity indulged in by all people and manifested through a particular behaviour. It is also an aspect of scholarly work of most interest to academic libraries to who retrieve to develop collection, services and organizational structures that facilitate information seeking.

Information seeking behaviour: Information seeking behaviour is a broad term which involves a set of actions that an individual takes to express information needs, seeking information, evaluate and select information and finally uses this information to satisfy his/her information needs. Various factors may determine the information seeking behaviour of an individual or a group of individuals. It is therefore, desirable to understand the purpose for which information is required, the environment in which the user operates user's skills in identifying the needed information, channels and sources preferred for acquiring information, and barriers to information

ALIGARH MUSLIM UNIVERSITY, ALIGARH:

The establishment of Mohammedan Anglo Oriental (MAO) College in 1875 marks one of the most important events in the educational and social history of modern India. Its establishment is considered as the first significant response of the Indian Muslims to the challenges of post 1857 era. It was an important catalyst in a process of social change among Muslims. "An epoch in the social progress of India" - with these words on his lips Lord Lytton laid the foundation stone of the Mohammadan Anglo Oriental College on January 8, 1877. Nearly eight years later, when the noted Orientalist Sir Hamilton Gibb looked back at the history of Muslim Transition from the medieval to the modern way of life, he characterized this College as "the first modernist institution in Islam".

The M.A.O. College was originally affiliated with Calcutta University, and was transferred to the Allahabad University in 1885. It was also around this time that a movement began to have it develop into a university to stand on its own. In 1920, the Act of Indian Legislative Council elevated the Mohammedan Anglo Oriental College to the status of a Central University and it became the principal Muslim Institution in India. Section 2(1) of the AMU Act says the university means the "the educational institution of their choice established by the Muslims of India".

AMU occupies an exalted position among Indian Universities and its contribution to nation building is in no way inferior to the best among the lot. AMU is perhaps the only University in the country, which has high schools in its domain. It has as many as five high schools including one for the visually handicapped, and two senior secondary schools for boys and girls. With more than 30000, students, about 1400 teachers and some 6000 non-teaching staff on its rolls, it has 12 faculties comprising a wide spectrum of academic disciplines (95 departments, 5 institution and 13 centres) and 18 halls of residence with 73 hostels. The University offers 325 courses.

The University has the Z.H. College of Engineering and Technology, Jawaharlal Nehru Medical College, Dr.Ziauddin Dental College, Institute of Ophthalmology and Food Craft Institute, Interdisciplinary Biotechnology Unit, Centre of Advance Study in History, Centre of West Asian Studies, Centre of Wildlife, Academic Staff College, Women's College, Ajmal Khan Tibbiya College, University Polytechnic for boys and girls, separately and Computer Centre. The University has a campus spread over 467.6 hectares of land.

It attracts students from all over the world, especially Africa, West Asia and South East Asia. The language taught here includes English, Urdu, Hindi, Arabic, Persian, Sanskrit, Telugu, Tamil, Bengali, Malayalam, Marathi, Punjabi, Kashmiri, French, Turkish, German and Russian. The medium of instruction is primarily English.

REVIEW OF LITERATURE:

The literature of information retrieving habits of users available is greatly broad ranging. An attempt has been made to cover number of works that go beyond discussions of the information retrieving habits itself and its direct applications to closely related topics such as information retrieving.

Challener (1999) investigated artists and art historians teaching in five liberal arts colleges and three universities. Results found that they need information for teaching. The participants almost all subscribe to art journals, and many read newspapers. They visit libraries frequently, usually more than one library, and unlike

previous reports, the majority are willing to ask the librarian for help. A large percentage of both art historians and artists are using computers for teaching. All 27 participants use slides extensively in the classroom, supplemented in most cases by textbooks.

Shokeen and Kushik (2002) studied about information retrieving habits of social scientists working in the universities located in Haryana. They reported most of the social scientists visit the library daily. The first preferred method of searching the required information by the social scientists followed by searching through indexing and abstracting periodicals, and citations in articles respectively. The social scientists use current journals followed by books.

Suriya, Sangeetha and Nambi (2004) carried out a research work on "Information retrieving habits of Faculty Members from Government Arts Colleges in Cuddalore District." The purpose of their study was to investigate, how Faculty members seek information from the library. It mentions that most of the respondents 61 (38.12 percent) visited the library several times a week to meet their information needs. Regarding the type of search made by the respondents the majority of the respondents 91 (56.87 percent) made their search by subject.

OBJETIVE OF THE STUDY:

This study has the following specific objectives;

- To evaluate the information seeking behaviour of art faculty members to seek the information; To determine the kind of information are used by faculties;
- To study the purpose of information seeking by faculties; To reveal the preference of language of reading materials;
- To find out the problems faced by art faculties at Aligarh Muslim University, Aligarh while seeking and using information.

SCOPE OF THE STUDY:

The scope of the study confines to the analysis of the information requirements of art faculty members in different departments under the faculty of art in Aligarh Muslim University, Aligarh. Information seeking behaviour is defined as "those activities a person may engage is when identifying his or her own words for information search for such information is any and using for transferring the information". The concept of information seeking behaviour is object of investigation of information science. Within the art discipline a variety of studies has been undertaken analyzing the interaction of an individual with information sources in case of a specific information need, task and context. There are total eleven departments under the faculty of art at Aligarh Muslim University, Aligarh, out of which questionnaires were distributed to the respondents of faculty of Hindi, English, Philosophy, Linguistic, Sanskrit, Urdu, Persian, Modern Indian Language, Fine Arts, Comp. Study and Indian Language etc.

METHODOLOGY:

This survey includes all faculty members of Arts distributed to 83 respondents by hand. Faculty of Arts falls under the various departments such as Hindi, English, Philosophy, Linguistic, Sanskrit, Urdu, Persian, Modern Indian Language, Fine Arts, Comp. Study and Indian Language, etc. at Aligarh Muslim University, Aligarh, UP which comprises different departments and about 54 faculty members was selected. The questionnaires were distributed to the members who were present or free in their departmental office. 54 filled-in questionnaires were returned by the respondents with the overall response rate being 65%.

DATA ANALYSIS AND INTERPRETATION:

A total of no. 83 structured questionnaires were distributed among art faculty members at Aligarh Muslim University, Aligarh. Total 54 questionnaires were received. All received sample questionnaires were analyzed statistically. The open-ended questions were analyzed using content analysis. The number of respondents, who responded the dully filled questionnaires were 54 i.e. 65% (See table 1)

Table 1: Responses from art faculty member

Name of the Department	Details regarding the No. of Respondents
------------------------	--

	Distributed	Received	%
	Questionnaires	Questionnaires	
Dept. of Hindi	17	11	64
Dept. of English	19	14	73
Dept. of Philosophy	7	5	71
Dept. of Linguistic	5	3	60
Dept. of Sanskrit	3	2	66
Dept. of Urdu	17	12	70
Dept. of Persian	5	3	60
Dept. of Modern Indian Language	4	2	50
Dept. of Fine Arts	1	--	--
Dept. of Comp. Study and Indian Languages	1	--	--
Dept. of Arabic	4	2	50
Total	83	54	65

Classified data of Respondents: The analysis of data in table-1 shows that out of 54 respondents, maximum numbers of respondents i.e. 14 representing 73% of total respondents are from the Dept. of English. It is followed by other departments.

Method for Information Seeking: The question was asked about the method used by respondents for seeking information. Table: 2 depicts that 85% of respondents consulted knowledgeable person in the field, 61% Internet surfing, 57% discussed with colleagues and 53% of faculties use Review articles to seeking information.

Table 2: Method for seeking information by art faculties

Method for information seeking	Faculty Members	
	No. of Respondents	%
Consult a knowledgeable person in the field	46	85
Internet Surfing	33	61
Discussion with colleagues	31	57
Review articles	29	53
Library Catalogue	20	37
Abstracting journals	16	29
Seminar/ conferences	14	25
Indexing journals	14	25
Workshops	13	24

Purpose for Seeking Information: Table: 3 expose about the purpose for seeking information by the respondents. Following table shows that 75% of faculty members sought information for preparing class lectures, 72% for keeping up-date knowledge, and 37 for guiding researchers. Table 3: Purpose for seeking information by art faculties

Type	Reference Collection	20	37	of
	For writing and presenting paper	18	33	
	Social purpose	11	20	

Information: In table 4, respondents were asked to indicate the type of information source which they used to seek information. On the basis of responses, text books are more popular source of information to seeking information among 87% of faculty members of art. Table 4: Type of information source used by art faculties

Type of information sources/ reading materials	Faculty Members	
	No. of Respondents	%
Textbooks	47	87
Periodicals	34	63
Newspapers	28	52
Exhibition	16	30
Government Publication	17	31
Reference books	35	65
Pamphlets	24	44
General books	26	48
Patents	29	54
Thesis/Research reports	39	72

Problems with seeking information: The faculty members were asked to mention their problems faced while seeking information. Table 5 shows that the majority of the respondents 81% of faculty members faced the major problems i.e. unavailability of materials. 72% of faculty members have other problems of shortage of journals in library.

CONCLUSION AND SUGGESTIONS:

The study sought to examine the information seeking behaviour of faculty members of art at Aligarh Muslim University, Aligarh, by taking samples from all various departments under the faculty of Arts to get an overview of the information seeking behaviour of faculties. The choice of collection should meet the need and requirements of the end users consequently, librarians must be aware of how the faculties seek information. The first three preferences given by faculties to seeking information are text books, reference books and theses & research report. On the basis of the observation the majority of faculties i.e. 75% sought information for preparing class lectures, 72% for keeping up-date knowledge, and 37 for guiding research scholars.

In regard to information seeking behaviour of faculty members of art at Aligarh Muslim University, Aligarh, UP, is recommended that library staff or reference librarians could use their time in a better way by focusing on assisting the users. Reference librarians should help users to improve their skills in information seeking activities and to find the different types of information need. University library provide adequate ICT facilities for reference librarians, such as Internet, laser printers, scanners, fax machine, telephone, etc to offer various services in the library. Librarian should also assist users in e-learning, learning the use of websites available through the various networks. University's central library should have air conditioned, properly illuminated and ventilated that make libraries worth sitting and should free from dust. Reading room should be separate for faculties and other type of users, and it should be adjoining the stack area and have at least one attendant to take out the books and other reading materials from stack room.

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A STUDY OF ROUTING PROTOCOLS IN MANET AND THEIR PERFORMANCE COMPARISONS

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ABSTRACT:-

Since 1990, Wireless networks have become increasingly popular when they are being adapted to enable mobility. As the popularity of mobile devices (MDs) and wireless networks significantly increased over the past years, wireless ad hoc networks has now become one of the most vibrant and active fields of communication and networking research. This paper examines routing protocols for ad hoc networks and evaluates these protocols based on a given set of performance metrics. This paper provides an overview of different protocols by presenting their characteristics and functionality, and then provides a comparison along with merits and demerits of protocols.

Keywords: *Wireless Ad Hoc Networks, Ad Hoc Network Routing Protocols, MANET, Performance metrics.*

INTRODUCTION:

Since last decade, Mobile Ad hoc Networks are one of the key factor in the revolutionary field of wireless communication due to rapid progress of wireless communication technology, low-cost and powerful wireless transceivers. These are self organized and self monitored ad hoc networks of PDAs, laptops or mobile nodes which are used for instant communication during disaster relief, emergency situations, information sharing and in military operations. MANET posses a lot of features such as dynamic topology, limited physical security, energy and power constraints. Mobile networks have attracted significant interests in recent years because of their improved flexibility and reduced costs [1, 2, 8].

The Ad Hoc Networking application is not new one, it can be traced back to the Defence Advanced Research Projects Agency (DARPA), Packet Radio Networking (PRNET) project in 1972 [1, 7] which evolved into the survivable adaptive radio networks (SURAN) program [4] which was primarily inspired by the efficiency of the packet switching technology for instance the store/forward routing and then bandwidth sharing.

Since 1996 this works had gained a momentum into Mobile Ad Hoc Network. At that time focused to discussion cantered in military satellite network, wearable computer network and tactical network with specific concerns begin raised relative to adaptation of existing routing protocols to support IP network in dynamic environments, as well as they make the charter of the Mobile Ad Hoc Network Working Group (MANETWG) of the Internet Engineering Task Force (IETF) also the work inside the MANETs relies on other existing IETF standard such as Mobile IP and IP addressing. As being a promising network type, in future mobile applications, mobile ad hoc networks are attracting more and more researchers. This paper

presents the state-of-the-art review for typical routing protocols for mobile ad hoc networks, including classical MANET unicast and multicast routing algorithms and popular classification methods. In this paper, related routing protocols are compared from an analysis point of view based on the classification methods.

This paper is organized as follows. In section 2, features of MANET are given. In Section 3, evaluation of methods and their performance issues are given. In section 4, 5, 6 and 7, classification methods and existing protocols along with their comparisons are given. In section 8 and 9, challenging issues and conclusions are given.

FEATURES OF MANET:

According to IETF RFC 2501, MANET have several features which can be classified as:

Dynamic topology: Freely movements of node cause a dynamic environment in its position. **Bandwidth constraint:** Variable low capacity links exists as compared to wireless network which are more susceptible to external noise, interference and signal attenuation effects.

Energy constrained operations: A mobile node posses a battery of finite power, so it is very difficult to save electricity in the context of depletion system design.

Limited physical security: MANET is more vulnerable to attacks like man in middle attacks, spoofing, eavesdropping, denial of service and so on. These all are occur due to decentralization.

EVALUATION OF METHODS AND THEIR PERFORMANCE ISSUES:

There are three different ways to evaluate and compare the performance of mobile ad hoc routing protocols. The first one is based on analysis and uses parameters such as time complexity, communication complexity for performance evaluation. In the second method, routing performance is compared based to simulation results. Network Simulator, GloMoSim and OPNET are widely used simulators. The simulation results heavily dependent on the selection of simulation tools and configuration of simulation parameters. The last method is implementing routing protocols and analyzes their performance using data from real-world implementations. This method is not suitable for comparison of a large number of routing protocols. Considering the dynamic network features, metrics for evaluating performance of MANET routing protocols are proposed in as: end-to-end data throughput and delay, route acquisition, percentage out-of-order and efficiency.

CLASSIFICATION OF ROUTING PROTOCOLS:

Mobile ad hoc network routing protocols can be classified into proactive routing, reactive routing and hybrid routing on the basis of how routing information is acquired and maintained by mobile nodes. Proactive routing protocol is also called "table driven" routing protocol. In this, nodes continuously evaluate routes to all reachable nodes and attempt to maintain consistent, up-to-date routing information. Therefore, a source node can get a routing path immediately if it needs information but control overhead is too high which drastically decrease the performance of protocols. In this paper, Wireless Routing Protocol (WRP), the Destination Sequence Distance Vector (DSDV) and the Fisheye State Routing (FSR) will be discussed and evaluated.

Reactive routing protocols are also called "on-demand" routing protocols. In these, routing paths are searched only when needed. A route discovery operation invokes a route-determination procedure. The discovery procedure terminates either when a route has been found or no route available after examination for all route permutations. Compared to the proactive routing protocols for mobile ad hoc networks, less control overhead is a distinct advantage of the reactive routing protocols. Thus, reactive routing protocols have better scalability than proactive routing protocols in MANET. However, when using reactive routing protocols, source nodes may suffer from long delays for route searching before they can forward data packets. In this paper, Dynamic Source Routing (DSR), Ad hoc On- demand Distance Vector routing (AODV), Temporally order routing protocol (TORA) will be discussed and analyzed in approaching section.

Hybrid routing protocols are proposed to deploy the merits of both proactive and reactive routing protocols and overcome their shortcomings. Proper proactive routing approach and reactive routing approach are exploited in different hierarchical levels, respectively. In this paper, Zone Routing Protocol (ZRP), Zone-based

Hierarchical Link State routing (ZHLS) and Hybrid Ad hoc Routing Protocol (HARP) will be discussed and analyzed.

PROACTIVE ROUTING PROTOCOLS AND THEIR COMPARISON:

The Wireless Routing Protocol (WRP) WRP is a proactive unicast routing protocol for MANET. WRP uses improved Bellman-Ford Distance Vector routing algorithm. In WRP, each mobile node maintains a routing table which they exchange with their neighbors for using update messages. The update messages can be sent either periodically or whenever link state changes happen. The routing table also contains information about which neighbor has not acknowledged an update message. If needed, the update message will be retransmitted to the neighbor. Additionally, if there is no change in its routing table since last update, a node is required to send a Hello message to ensure connectivity. On receiving an update message, the node modifies its distance table and looks for better routing paths according to the updated information. In WRP, a node checks the consistency of its neighbors after detecting any link change. A consistency check helps to eliminate loops and speed up convergence.

The Destination Sequence Distance Vector (DSDV) routing protocol DSDV is a proactive unicast mobile ad hoc network routing protocol. Like WRP, DSDV is also based on the traditional Bellman-Ford algorithm but mechanism is quite different. In DSDV, routing tables stores the next hop towards a destination, the cost metric for the routing path to the destination and a destination sequence number that is created by the destination. Sequence numbers are used in DSDV to distinguish stale routes from fresh ones and avoid formation of route loops. The route updates of DSDV can be either time-driven or event-driven. Every node periodically transmits updates including its routing information to its immediate neighbors.

The Fisheye State Routing (FSR) FSR is a proactive unicast routing protocol based on Link State routing algorithm with effectively reduced overhead to maintain network topology information. FSR utilizes a function similar to a fish eye. The eyes of fishes catch the pixels near the focal with high detail, and the detail decreases as the distance from the focal point increases. Similar to fish eyes, FSR maintains the accurate distance and path quality information about the immediate neighboring nodes, and progressively reduces detail as the distance increases. In FSR, nodes exchange link state information with the neighboring nodes to maintain up-to-date information. Link state updates are exchanged periodically in FSR, and each node keeps a full topology map of the network. To reduce the size of link state update messages, the key improvement in FSR is to use different update periods for different entries in the routing table. Link state updates corresponding to the nodes within a smaller scope are propagated with higher frequency. Besides low traffic overhead, FSR also exhibits a better scalability.

Comparison of WRP, DSDV and FSR Control traffic overhead and loop-free property are two important issues when applying proactive routing to MANET. The proactive routing protocols used for wired networks normally have predictable control traffic overhead because topology of wired networks change rarely and most routing updates are periodically propagated. However, periodic routing information updates are not enough for mobile ad hoc routing protocols. The proactive routing in mobile ad hoc networks needs mechanisms that collect network topology changes and send routing updates in an event-triggered style. dynamically

WRP, DSDV and FSR have the same time and communication complexity. Whereas WRP has a large storage complexity compared to DSDV because more information is required in WRP to guarantee reliable transmission and loop-free paths. Both periodic and triggered updates are utilized in WRP and DSDV; therefore, their performance is tightly related with the network size and node mobility pattern. As a Link State routing protocol, FSR has high storage complexity, but it has potentiality to support multiple-path routing and QoS routing.

REACTIVE ROUTING PROTOCOLS AND THEIR COMPARISON:

The Dynamic Source Routing (DSR) Protocol DSR is a reactive unicast routing protocol that utilizes source routing algorithm. In source routing algorithm, each data packet contains complete routing information to reach its dissemination. Additionally, in DSR each node uses caching technology to maintain route

information that it has learnt. In DSR, the route discovery phase and the route maintenance phase are one of critical phases. When a source node wants to send a packet, it firstly consults its route cache. If the required route is available, the source node includes the routing information inside the data packet before sending it. Otherwise, the source node initiates a route discovery operation by broadcasting route request packets. A route request packet contains addresses of both the source and the destination and a unique number to identify the request. Receiving a route request packet, a node checks its route cache. If the node doesn't have routing information for the requested destination, it appends its own address to the route record field of the route request packet. Then, the request packet is forwarded to its neighbors. To limit the communication overhead of route request packets, a node processes route request packets that both it has not seen before and its address is not presented in the route record field. If the route request packet reaches the destination or an intermediate node has routing information to the destination, a route reply packet is generated. When the route reply packet is generated by the destination, it comprises addresses of nodes that have been traversed by the route request packet. DSR has increased traffic overhead by containing complete routing information into each data packet, which degrades its routing performance.

The Ad Hoc On-demand Distance Vector Routing (AODV) protocol AODV [3, 19, 20] protocol is a reactive unicast routing protocol for mobile ad hoc networks. In AODV, routing information is maintained in routing tables at nodes. Every mobile node keeps a next-hop routing table, which contains the destinations to which it currently has a route. A routing table entry expires if it has not been used or reactivated for a pre-specified expiration time. Moreover, AODV adopts the destination sequence number technique used by DSDV in an on-demand way. In AODV, when a source node wants to send packets to the destination but no route is available, it initiates a route discovery operation. In the route discovery operation, the source broadcasts route request (RREQ) packets. A RREQ includes addresses of the source and the destination, the broadcast ID, which is used as its identifier, the last seen sequence number of the destination as well as the source node's sequence number. Sequence numbers are important to ensure loop-free and up-to-date routes. To reduce the flooding overhead, a node discards RREQs that it has seen before and the expanding ring search algorithm is used in route discovery operation. The RREQ starts with a small TTL (Time-To-Live) value. If the destination is not found, the TTL is increased in following RREQs. In AODV, each node maintains a cache to keep track of RREQs it has received. The cache also stores the path back to each RREQ originator. AODV uses only symmetric links and a RREP follows the reverse path of the respective RREQ. Upon receiving the RREP packet, each intermediate node along the route updates its next-hop table entries with respect to the destination node. The redundant RREP packets or RREP packets with lower destination sequence number will be dropped.

The Temporally Ordered Routing Algorithm (TORA) TORA [12, 20] is a reactive routing algorithm based on the concept of link reversal. TORA improves the partial link reversal method by detecting partitions and stopping non-productive link reversals. TORA can be used for highly dynamic mobile ad hoc networks. In TORA, the network topology is regarded as a directed graph. A Directional Acyclical Graph (DAG) is accomplished for the network by assigning each node i a height metric h_i . A link directional from i to j means $h_i > h_j$. In TORA, the height of a node is defined as a quintuple, which includes the logical time of a link failure, the unique ID of the node that defines the new reference level, a reflection indicator bit, a propagation ordering parameter and an unique ID of the node. The first three elements collectively represent the reference level. The last two values define an offset with respect to the reference level. Like water flowing, a packet goes from upstream to downstream according the height difference between nodes. DAG provides TORA the capability that many nodes can send packets to a given destination and guarantees that all routes are loop-free. Comparison of DSR, AODV and TORA Basically, DSR, AODV and TORA are proposed to reduce the control traffic overhead and improve scalability. In the section, their main differences are listed.

Both DSR and TORA support unidirectional links and multiple routing paths, but AODV doesn't. In contrast to DSR and TORA, nodes using AODV periodically exchange hello messages with their neighbors to monitor link disconnections. This incurs extra control traffic overhead. In TORA, utilizing the "link reversal"

algorithm, DAG constructs routing paths from multiple sources to one destination and supports multiple routes and multicast.

AODV uses sequence numbers to avoid formation of route loops. Because DSR is based on sourcerouting, a loop can be avoided by checking addresses in route record field of data packets. In TORA [12], each node in an active route has a unique height and packets are forwarded from a node with higher height to a lower one. So, a loop-free property can be guaranteed in TORA. However, TORA has an extra requirement that all nodes must have synchronized clocks. In TORA, oscillations may occur when coordinating nodes currently execute the same operation.

Performances of DSDV, TORA, DSR and AODV are compared in based on simulation [16]. The simulation results showed that DSDV performs well when node mobility rates and speed of movements are low. When the number of source nodes is large, the performance of TORA decreases. As shown in , both AODV and DSR perform well for different simulation scenarios. DSR outperforms AODV because it has less routing overhead when nodes have high mobility. A simulation-based comparison of two reactive mobile ad hoc network routing protocols, the AODV and DSR, is reported in [11]. DSR performs better than AODV when number of nodes is small, lower load and /or mobility, and AODV outperforms DSR in more demanding situations.

HYBRID ROUTING PROTOCOLS AND THEIR COMPARISON:

The Zone Routing Protocol (ZRP) ZRP is mainly proposed to reduce the control overhead of proactive routing approaches and decrease the latency caused by route search operations in reactive routing approaches. In ZRP, the network is divided into routing zones according to distances between mobile nodes. Given a hop distance d and a node N , all nodes within hop distance at most d from N belong to the routing zone of N . Peripheral nodes of N are N 's neighboring nodes in its routing zone which are exactly d hops away from N . In ZRP, different routing approaches are exploited for inter-zone and intra-zone packets. The proactive routing approach, i.e., the Intra-zone Routing protocol (IARP), is used inside routing zones and the reactive Inter-zone Routing Protocol (IERP) is used between routing zones, respectively. The IARP maintains link state information for nodes within specified distance d . Most of the existing proactive routing schemes can be used as the IARP for ZRP. The IERP reactively initiates a route discovery when the source node and the destination are residing in different zones. The route discovery in IERP is similar to DSR with the exception that route requests are propagated via peripheral nodes.

The Hybrid Ad hoc Routing Protocol (HARP) HARP is a hybrid routing scheme, which exploits a two-level zone based hierarchical network structure. Different routing approaches are utilized in two levels, for intra-zone routing and inter-zone routing, respectively. The Distributed Dynamic Routing (DDR) algorithm is exploited by HARP to provide underlying supports. In DDR, nodes periodically exchange topology messages with their neighbors. A forest is constructed from the network topology by DDR in a distributed way. Each tree of the forest forms a zone. Therefore, the network is divided into a set of non-overlapping dynamic zones. A mobile node keeps routing information for all other nodes in the same zone. The nodes belonging to different zones but are within the direct transmission range are defined as gateway nodes. Gateway nodes have the responsibility forwarding packets to neighboring zones. In addition to routing information for nodes in the local zone, each node also maintains those of neighboring zones. As in ZRP, the intra-zone routing of HARP relies on an existing proactive scheme and a reactive scheme is used for inter-zone communication. Depending on whether the forwarding and the destination node are inside the same zone, the respective routing scheme will be applied.

The Zone-based Hierarchical Link State routing (ZHLS) In ZHLS , mobile nodes are assumed to know their physical locations through GPS. The network is divided into non-overlapping zones based on geographical information. ZHLS uses a hierarchical addressing scheme that contains zone ID and node ID. A node determines its zone ID according to its location and the pre-defined zone map is well known to all nodes in the network. It is assumed that a virtual link connects two zones if there exists at least one physical link between the zones. A two-level network topology structure is defined in ZHLS, the node level topology and the zone

level topology. Respectively, there are two kinds of link state updates, the node level LSP (Link State Packet) and the zone level LSP. A node level LSP contains the node IDs of its neighbors in the same zone and the zone IDs of all other zones. A node periodically broadcast its node level LSP to all other nodes in the same zone. Therefore, through periodic node level LSP exchanges, all nodes in a zone keep identical node level link state information. In ZHLS, gateway nodes broadcast the zone LSP throughout the network whenever a virtual link is broken or created. Consequently, every node knows the current zone level topology of the network. During the packet forwarding procedure, intermediate nodes except nodes in the destination zone will use inter-zone routing table, and when the packet arrives the destination zone, an intra-zone routing table will be used.

Comparison of ZRP, HARP and ZHLS According to, ZRP, HARP and ZHLS use different zone construction methods, which have critical effect on their performance.

In ZRP, the network is divided into overlapping zones according to the topology knowledge for neighboring nodes of each node. In HARP, the network is divided into non-overlapping zones dynamically by DDR through mapping the network topology to a forest. For each node in HARP, the topology knowledge for neighboring nodes is also needed and the zone level stability is used as a QoS parameter to select more stable route. ZHLS assumes that each node has a location system such as GPS and the geographical information is well known, and the network is geographically divided into non-overlapping zones. The performance of a zone based routing protocol is tightly related to the dynamics and size of the network and parameters for zone construction. However, because zones heavily overlap, ZRP in general will incur more overhead than ZHLS and HARP.

ZRP, HARP and ZHLS use proactive routing for intra-zone communication and reactive routing for inter-zone packet forwarding. Performance of a zone based routing protocol is decided by the performance of respective proactive and reactive routing protocols chosen and how they cooperate each other.

CHALLENGING ISSUES IN MANET:

The major challenges faced by MANET architecture are classified according to:

Incorporation among mobile devices, ad hoc routers and embedded sensors in existing protocols.

Unreliability end to end delivery services.

- A number of existing vulnerabilities such as denial of services, spoofing, man in middle attack etc.
- Dynamic topology
- Hidden terminal problem
- Device discovery and route maintenance
- Limited resources
- Bandwidth optimization
- Non scalability of routing protocols
- Poor transmission quality
- Lack of central coordinator

CONCLUSIONS:

This paper presented an exhaustive survey of MANET with their research background. Besides that, this paper also focused on evaluating methods of performance issues along with existing routing protocols and their comparisons on the basis of simulating results from previous papers. This paper concluded that performance issues would not be significantly decide which protocol to be used in network but selection mainly relied on network characteristics. The field of ad hoc mobile network is rapidly growing and changing, and while there are still many challenges that need to be met, it is likely that such networks will be widespread use within the next few years.

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**A REVIEW OF COMPUTERIZED LIBRARY SERVICES OF SPECIAL LIBRARIES IN
BHOPAL**

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ABSTRACT:

This paper highlights the survey of conducted in special libraries functioning in the Bhopal, to find out the computerized library services of special libraries in Bhopal, I find out the status of computerized library service through survey method using structured questionnaire. In this study are includes these type of computerized services (Library House Keeping Services, Repackaging Services, Literature Services , Reference Services and services through internet)

INTRODUCTION:

The fast developments of using a computer in every field in this era had made tremendous changes in information handling capabilities of libraries and special libraries. Computer is used in converting the existing paper / print record into machine readable format for storage, retrieval and provide more attractive, fast aureate services in library and special libraries. It helps in free flow of information exchange among National & International users. The use of computer has brought about tremendous changes in special library activities e.g. the form of library collection development, consortia & strategies in library building. In special libraries, use of computer play an important role in providing value-added information services and access to the wide variety of digital-based information resources to their users.

OBJECTIVES:

- To appreciate the advantages of automation with respect to economy in expenditure, increased use of library resources and services
- To find out the status of computerized library services of special libraries in Bhopal

METHODOLOGY:

The methodology used for the present study is survey method. The questionnaire consists of both open ended and close-ended questions and arranged according to the various aspects of investigation including number of computer units, nature of computerization, software etc. The addresses of different special libraries were collected through formal and informal sources. A shot structured questionnaire was sent to each special library to ascertain whether these libraries have computers. The questionnaire circulated to 15 special libraries of Bhopal.

SCOPE OF STUDY:

The data collected from the 15 (Central and State Government) special libraries namely AMPRI, CIAE, CRISP, IIFM, IGRMS, IISS, MANIT, NLIU, NIFT, NITTTR, RIE, DMI, EPCO, MPCST and RCVPNAA have been able to computerize their house-keeping activities and other services

DATA INTERPRETATION

ANALYSIS:

The status of automated repackaging services, namely indexing, abstracting, compilation of bibliography and translation of special libraries in Bhopal. Indexing service 7(46.66%), abstracting service 5(33.33%), bibliography service 7(46.66%) and no any special libraries are providing translation services.

The status of automated literature search services, namely on-line service, current contents service, on-line directory service, document supply service, retrospective service, CD-Rom service of special libraries in

Bhopal. On-line service 13(86.66%), CCS 7(46.66%), ODS 1(6.66%), DSS 5(33.33%), retrospective service 3(20%), CD-Rom service 6(40%).

The status of automated reference services, namely reference queries service, current awareness service, selective dissemination information service, user study, of special libraries in Bhopal. Reference queries service 13(86.66%), CAS 9(60%), SDI 7(46.66%), user study 8(53.33%).

The status of providing services through internet by special libraries in Bhopal. For information seeking 10(66.66%), to inform users about new services/products via your website 5(33.33%), communication with users via e-mail 14(93.33%), marketing of library services 1(6.66%), for document delivery to users 5(33.33%).

FINDINGS:

- All special libraries have computerized in cataloguing and circulation house-keeping activity and 3(20%) special libraries are computerized in all type of house-keeping activity.
- Mostly special libraries are providing computerized repackaging service
- 86.66 % special libraries are providing computerized literature service like online service.
- Mostly special libraries are providing computerized reference service like 86.66% special libraries are providing reference queries service.
- All special libraries are providing service through internet like 93.33% special libraries are providing communication service through e-mail.

CONCLUSIONS:

The special libraries and information centers of Bhopal are still in the using ICT. However, mostly special libraries providing computerized library services. All special library aware to computer, ICT and library software all these things are useful to generate the computerized library services and provide better services of users. The special libraries have adapted to the new changes and the other libraries will follow the suit. Libraries and information centers have embraced the new information technology more profoundly than other fields and most of them are currently using electronic products and services.

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POPULATION GROWTH AND FOOD PRODUCTION IN HARYANA: A GEOGRAPHICAL ANALYSIS

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ABSTRACT:

Since independence, India has passed several phases in agricultural development and most important phases in agricultural development was the green revolution of the seventies when there was a sharp increase in agricultural production, which has been reached highest level of production of food grain at present scenario. This century is an era of unprecedented advancement in the means and information technology. Man and material mobility is a high tide. The socio economic systems are experiencing enhanced horizontal and vertical mobility. To produce more agricultural production from the available land, a new scientific approach towards its utilization is necessary because in future, there appear no scope whatever to expand the area under cultivation. It is therefore, prime duty to assess the level of agricultural production from the available land; a new scientific approach towards its utilization is necessary because in future, there appear no scope whatever to expand the area under cultivation, and its correlation with population growth. This paper is an attempt to test empirically the relationship between level of agricultural development with special reference to food production and population growth in Haryana, India.

Key words: Population Growth, Fertilizers, Pesticides, Food Grain

INTRODUCTION:

Even then all times issues of developing countries have been high population growth and the resultant needs more and more production from progressively diminishing nature base. The magnitude of the fertilizers, pesticides, HYV seeds, tractors, irrigation through tube wells etc. more than the yield capacity of land has led to the problems of sustainability. This was prime issue and challenges of 20th century, which is also continued in 21st century, still groomed geography as an increasingly radical and relevant subject especially in this field. New ranges of social problems are emerging from such a scenario. This century is an era of unprecedented advancement in the means and information technology. Man and material mobility is a high tide. The socio economic systems are experiencing enhanced horizontal and vertical mobility. To produce more agricultural production from the available land, a new scientific approach towards its utilization is necessary because in future, there appear no scope whatever to expand the area under cultivation. It is therefore, prime duty to assess the level of agricultural production from the available land; a new scientific approach towards its utilization is necessary because in future, there appear no scope whatever to expand the area under cultivation, and its correlation with population growth.

STUDY AREA:

The state of Haryana lies in the northwest of India bounded on the north-west by Punjab, on the north-east by Himachal Pradesh, on the east by U.P. and the Union Territory of Delhi and on the South by Rajasthan state. It is located between 27° 40' to 29° 42' North latitudes and 74° 54' to 77° 40' East longitudes. There are 2,11,42,980 total population inhabited in 6,955 rural settlements and 106 urban settlements spread over an area of about 44,212 Km² in the state. The density of total population, rural population and the urban population recorded as 477, 349 and 4747 persons per km² respectively. It consists of 19 districts, viz. Ambala, Yamunanagar, Kurukshetra, Kaithal, Karnal, Panipat, Sonapat, Rohtak, Faridabad, Gurgaon, Rewari, Mahendergarh, Bhiwani, Jind, Hisar, Sirsa, Fatehabad, Jhajjar and Panchkula. There are two cropping seasons namely 'Kharif' and 'Rabi' growing tropical/subtropical and temperate crops respectively. The main food grains of the state are wheat, bajra, barley of Rabi season and the Rice of Kharif season. The traditional cropping patterns have changed into new cropping patterns to provide food grain to the fast growing needy population in the last 3 decades of the area under study.

OBJECTIVES:

The main objectives of this study are as followed.

- To study the spatial pattern of population growth in Haryana during 1991-2001.

- To study the spatial pattern of food grain production in Haryana during 1991-2001.
- To study the relationship between the rate of food grain production and the rate of growth of population.

The present study is based on secondary data, which have taken from various abstract of Haryana. Production of food grain is calculated in tones. Simple mathematical ratio technique and the correlation regression techniques have been worked out. Choropleth mapping has been also used to represent the data at district level of the state. To calculate the rate of food grain production and the rate of growth of population of the study area, the following correlation regression techniques used.

$$P_i = \frac{P_2 - P_1}{P_1} \times 100 \quad (i)$$

P1

$$F_i = \frac{F_2 - F_1}{F_1} \times 100. \quad (ii)$$

F1

Where P_i and F_i indicate the rate of food grains production and the rate of growth of population in percent respectively.

P_2 indicates population growth during 2001 whereas P_1 indicates population during 1991.

F_1 indicates food production of 1991 and F_2 indicates food grain production during 2001.

Hence the ratio of growth rate of the population and the ratio of food grain production can be calculated as follows:

$$P : F :: \text{food grain} : \text{population growth} \quad (iii)$$

Table No. 1: Population Growth and Food Grains Production in Haryana, 1991 -2001

Sr. No.	(A) Population				(B) Food Grain Production In (000) Tones				(C) Level of Development
	Districts	1991	2001	% Growth	1991	2001	% Growth	Growth Ratio	
1	Ambala	806482	1013660	25.69	432	596	38	1.15	> 3
2	Bhiwani	1163400	1424554	22.45	308	589	91	3.6	
3	Faridabad	1477240	2193276	48.47	398	593	52	1.1	
4	Fatehabad	646160	806158	24.76		986			
5	Gurgaon	1146090	1657669	44.64	299	545	82		
6	Hisar	1209238	1536417	27.06	1179	1902	61	2.3	
7	Jhajjar	715136	887392	24.09		478			
8	Jind	980434	1189725	21.35	665	1072	61	2.6	Sonipat, Bhiwani
9	Kaithal	781814	945631	20.95	950	1073	13	0.9	2-3 Rohtak,
10	Karnal	1035390	1274843	23.13	879	1094	24	0.5	M.Ga
11	Kurukshetra	669346	888120	23.72	683	781	14	0.5	rh,
12	M.Garh	681869	812022	19.09	202	295	47	2.4	Jind,
13	Panchkula	310396	469210	51.16		78			Sirsa,
14	Panipat	698103	967329	38.57	537	490	-9	-0.6	Hisar
15	Rewari	610611	764727	25.24	204	278	36	1.6	< 2 Ambala,
16	Rohtak	776966	940036	20.99	597	844	41	2.1	Kaithal,
17	Sirsa	903536	1111012	22.96	682	1143	68	2.9	Yamunana Bar

18	Sonipat	1045158	1278830	22.36	390	680	74	3.1	Faridabad, Gurgaon, Rewari, Kurukshetra, Karnal, Panipat.
19	Yamunagar	806279	982369	21.84	318	408	28	1.4	
	Haryana	1646364 8	2114298 0	28.06	9558. 7	1319 5	38.04	1.38	

Source: Statistical Abstract of Haryana 1990-91 and 2000-01.

Spatial Pattern of Population Growth The figure 1 and table 1A show the spatial pattern of population growth of Haryana during one decade, i.e. 1991-2001. The decadal pattern of population growth reveals that the growth rate of population in Haryana varies from highest 48 percent in Faridabad district to the lowest 19 percent in Mahendergarh district (table 1A). Thus each district varies in growth rate of population in the area under study. On the basis of population growth rate at district level of the whole state, they have grouped into four categories, viz.

- Districts of very high growth rate of population (> 45 percent)
- Districts of high growth rate of population (35-45 percent)
- Districts of low growth rate of population (25-35 percent)
- Districts of very low growth rate of population (<25 percent)

Districts of Very High Growth Rate of Population: It includes two districts, viz., Panchkula and Faridabad where it is recorded 51 percent and 48 percent respectively. They carved out from the districts of Ambala, Yamunanagar; and Gurgaon respectively.

Districts of High Growth Rate of Population: It is found in two districts, viz., Panipat and Gurgaon where the high population growth rate recorded as 38.57 percent and 44.64 percent population respectively. Both of them attracted in migration for job opportunity in the newly established industries in Panipat and Gurgaon districts.

Districts of Low Growth Rate of Population: There are three districts, viz. Ambala, Rewari and Hisar where low population growth rate recorded as 25.69 percent, 25.24 percent, and 27.06 percent respectively. Since Hisar and Rewari districts are located in rain fed areas and agriculturally very backward, hence most of the population of these districts migrated towards either Delhi or Gurgaon district for employment.

Districts of Very Low Growth Rate of Population: The very low population growth rate, i.e., < 25 percent was noted in 12 districts. Those districts are Yamunanagar records population growth as 21.31 percent, followed by Kurukshetra 23.42 percent, Kaithal 20.95 percent, Karnal 23.13 percent, Sonipat 22.36 percent, Rohtak 20.99 percent, Mahendergarh 19.05 percent, Bhiwani 22.45 percent, Jind 21.35 percent, Sirsa 22.96 percent, Fatchabad 24.76 percent and Jhajjar 24.09 percent of the area under study.

SPATIAL PATTERN OF FOOD GRAIN PRODUCTION DURING 1991- 2001:

Figure 2 and table 1B highlight about the decadal spatial pattern of the rate of food grain production of Haryana state during 1991-2001. Only rice, wheat, jowar, bajra, maize and barley are selected for calculation of the rate of food grain production in (000) tones and area in (000) hectares. It reveals that there is a great disparity in the production of food grain ranges from +91 percent in Bhiwani district to -9 percent in Panipat district indicates that this is only one heavy industrial region in the area under study. The areas of cultivated land have been rapidly included in establishing new industries in Panipat district. Resulting drastic decrease in the food grain production. However, the food grain production of the state at district level during 1991-2001 may be categories into four groups as follows:

Districts of very high rate of food grain production (>75 percent)

Districts of high rate of food grain production (50-75 percent)

Districts of low rate of food grain production (25-50 per cent)

Districts of very low rate of food grain production (<25 percent)

- Very High Rate of Food Grain Production is observed in Bhiwani and Gurgaon districts where food grain production is recorded 91 percent and 82 percent respectively. The only reason for very high rate of

food grain production is the introduction of sprinkle irrigation and the use of fertilizer in the areas under study during one decade i.e. 1991-2001.

- High Rate of Food Grain Production is noted in the districts of Sonipat, Jind, Hisar, Sirsa and Fatehabad where rate of food grain production recorded as 74 percent, 61 percent, 61 percent, 68 percent and 52 percent respectively. It occurred due to introduction of HYV seeds, fertilizer and irrigation facility.
- Low Rate of Food Grain Production is recorded in five districts, viz. Rewari, Mahendergarh, Rohtak, Yamunanagar and Ambala where the rate of food grain production is recorded as 36 per cent, 47 per cent, 41 per cent, 28 per cent and 38 per cent respectively. These districts are producing Dalhan (Pulses), Telhan (oil seeds) and cash crops because of either less irrigations facilities or the farmers interested in cash crop production.
- Very Low Rate of Food Grains Production found in the districts of Kaithal, Karnal, Panipat and Kurukshetra. It reveals that the rate of production of food grains fluctuates from 13 per cent in Kaithal, 24 per cent in Karnal, -9 per cent in Panipat and 14 per cent in Kurukshetra district. Since the secondary and tertiary activities as well as religious functions are dominated at these places. Hence the rate of food grain production has gone down rapidly in the areas under study.

CORRELATION OF RATE OF POPULATION GROWTH AND FOOD GRAIN PRODUCTION:

Table 1C and the figure 3 records the ratio of growth of population and food grain production during one decade, i.e., 1991-2001 in the state of Haryana, India. To correlate the rate of the growth of population with the rate of food grain production, the ration between them have been categorized into five groups:

Very low correlation (<0) Low

correlation (0 and 1)

Medium correlation (1 and 2)

High correlation (2 and 3)

Very high correlation (3 and >3)

Very Low Correlation (< 0): The case of first category reveals that the district of Panipat recorded negative value, i.e., zero to -6 (minus point six). It means the rate of growth of population is slightly more than the rate of population of food grain (table 1C). The number of industry rapidly increases on the agricultural land; hence the rate of food grain production has gone down in Panipat district (figure 3).

Low Correlation (0 and 1): The case of second category, i.e., zero and one ratio observed in the district of Kurukshetra, Karnal and Kaithal. This highlights that the rate of growth of population increased slightly lesser than the increase rate of production of food grain (1C). Due to introduction of more and more irrigation facility, introduction of HYV seeds and an increase in number of tractors; the rate of production of food grain is more than that the rate of growth of population.

Medium Correlation (1 and 2): The case of third category, i.e., 1 and 2 ratio of population growth and production of food grain, five districts come under this category viz. Ambala, Yamunanagar, Faridabad, Gurgaon and Rewari. It indicates that the rate of production of food grain is faster than the growth rate of population in these districts (1C).

High Correlation (2 and 3): The fourth category, i.e., 2 and 3 ratio of population growth and the rate of production of food grain, the five districts, viz., Rohtak, Mahendergarh, Jind, Sirsa and Hisar included in this category. It means that the rate of production of food grains is faster than the rate of growth of population (1C).

Very High Correlation (3 and above 3): There are two districts viz. Bhiwani and Sonipat come under this category. The rate of production of food grain is very fast in comparison to the growth rate of population, which indicate that agricultural area has been increased more than 90 per cent in Bhiwani and more than 70 per cent in Sonipat district during 1991-2001 (Table 1C). These districts have also the great irrigation facilities in the recent time. Hence, both districts have very good record of food grain production during decade 1991-2001.

REGRESSION ANALYSIS BETWEEN POPULATION GROWTH AND FOOD GRAIN PRODUCTION:

Data reveals that as the population increases, the rate of food grain production has increased also. It seems that there is less significance relation in between the two. It means that only population is not responsible for very high rate of food growth production but other factors also.

Level of Development: The present data analysis concerning the rate of growth of population and food grain production includes five crops, i.e. rice, wheat, bajra, millet and gram at district level of the state of Haryana, 1991-2001. The growth rate of population and production of food grain recorded in the table 1, 2 and the ratio in the table 3. On the basis of above analysis, the level of development of population growth and production of food grain is found to be negative correlation mentioned below.

Level of Population Growth and Food Grain Production: Table 3 shows the level of growth of population and production of food grain of the state during 1991-2001. There are three level of development of the rate of growth of population and the rate of food grain production mentioned below.

High level of development of production of food grain and low level of growth rate of population (3 and >3).

Moderate level of development of production of food grain and the moderate growth rate of population (2 and 3).

Low level of development of production of food grain and the high growth rate of population (<2 and 2).

In the case of first category, the high level of development of production of food grain and the low level of population growth rate recorded as 3.1 and 3.6 in Sonipat, Bhiwani respectively. It indicates that the soil is more favourable for gram, bajra and wheat crops and with the introduction of sprinkle irrigation, favourable Geographical conditions and the production of above crops increased drastically IN BHIWANI DISTRICT. IT IS ALSO NOTED THAT DUE TO VERY HIGH AREA INCLUDED IN THIS CATEGORY, THE HIGH RATE OF food grain production found in Sonipat also. However, the rate of growth of population has been decreased due to out migration of non-working agricultural population towards industrially dominated districts of the state.

In the case of second category, moderate level of food grain production and moderate growth rate of population noted in those districts where wheat, rice, gram, oil seeds, bajra, cotton are the main crops. These districts are Rohtak, Mahendergarh, Jind, Sirsa and Hisar. The following factors are responsible for moderate level of food grain production, i.e. Size of land holdings and less consumption of fertilizers and the moderate rate of growth of population due to less number of small/large scale industries.

In this case of third category, low level of development of food grain production and high level growth rate of population found in the districts of Ambala, Kaithal, Yamunanagar, Faridabad, Gurgaon, Rewari, Kurukshetra, Karnal and Panipat. The following factors are responsible for low production of food grain, i.e. socio-economic conditions, climatic conditions, water logging and low level of underground water. Among these some important districts which have more number of small/large scale industry attracted more and more non-skilled labourer/workers from outside and from within. Therefore, the population growth rate is more in the districts of Panipat, Faridabad, Ambala and Gurgaon.

CONCLUSION:

The present study shows a significant disparity in the level of development of food grain production and the population growth and has no parallelism to each other. There is an exceptional case of district Panipat where low growth rate of population and low food grain production recorded, i.e. -0.6 (minus point six). It indicates that due to establishment of new industries, more agricultural land converted into non-agricultural activities, the growth rate of food production has gone to minus but in contrast, the districts of Ambala, Yamunanagar, Faridabad and Gurgaon attracted some workers from outside of the district/state so the population growth become slightly better. In the case of Rewari, the rate of food production is just keeping pace with the growth rate of population. However, in Bhiwani, Sonipat and Sirsa districts, the rate of food grain production is very high than the rate of population growth because of no opportunity to retain non-agricultural workers by establishing new industries in these districts of the state of Haryana during decade 1991-2001.

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THE WELL OF LONELINESS A STUDY OF ALTERNATE SEXUALITY.

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ABSTRACT:

The novel is considered a seminal text in the history of LGBT literature. First published in 1928 by Conici Friede, it remains the most important novel of the period. There have been better books more accurately delineated and written with the hindsight of the psychoanalysis and medical research but these novels fell short of the realism and pathos of the well of loneliness. The paper explores the issues and struggles of a homosexual woman who tries to fit in with society but is ultimately rejected as an abnormality or anomaly, it explores the genetic predilection to homosexuality and its exploration by some medieval scientists and by Freud. I will see if Freud's theories can be applied to Stephen's case.

Although it is a fact that women don't have to be virile or masculine to be gay. A number of homosexuals are found among harem inmates and prostitutes and even amongst actresses. But well of loneliness sticks to the tried and tested format of a masculine woman with short hair and flat chested. As biologists tell us that originally there is no difference between the sexes, an identical soma is acted upon the sex hormones. And it is these hormones which may determine the sex of the foetus. And an excess of testosterone in the androgens (sex determining hormones) may make someone excessively masculine and vice versa where an excess of feminine hormones shall make a male foetus more girlish even though they may be born boys.

Radclyffe Hall worked hard to provide this background information so that each reader may understand and accept her protagonist Stephen who is born a woman but considers herself a man. Radclyffe Hall read both Karl Heinrich Ulrichs and Krafft Ebing. Mr. Gordon Stephen's father keeps their books in his library. Ulrich calls homosexuality inversion and believes that it is both natural and congenital or determined from birth. Ulrichs was a believer in according equal status to homosexuals and even in same sex marriage and believed in giving them legal redress if they were being ill-treated. He was a man ahead of his time as can be gauged by his ideas. In fact he accorded them higher status believing that they are more artistic and creative than the rest. He believed them highly sensitive to all aspects of life. The perpetuation of the race is for the normal but the arts are maintained and propagated by the highly sensitized or the abnormal. (Ulrichs, 1988)

In contrast Kraft Ebing accepts homosexuality is determined at birth but further classifies that it is a pathological rather than physiological, here the attempt is to classify homosexuality akin to a disease. (Ebing, 2011). For Ebing it is a disease, an inherited degeneracy. Ebing in *Psychopathia Sexualis* gives an example of virile lesbian whose name is Count Sandor. Stephen is the protagonist of *The Well of Loneliness*. Count Sandor is reared as a boy by her father she is good in horse riding and even of hunting. At the age of thirteen she is placed in an institution to reform her. A little later she falls in love and flees the institution all the while pretending to be boy. When she reaches home she calls herself a gender neutral name like Sandor. Sandor hates all feminine clothes, her father made sure she had a good education and she accompanied her father on long riding trips, always attired in male attire, she was addicted to sports. She was fascinated by actresses and other single women. Not the teenage or younger ones but the women who were very feminine in their mannerisms. Immodesty and forwardness in the weaker sex put her off, it even disgusted her. Just like a man she spent liberally on women, she even got married with the father in law being cozened into believing that she was a man. The servants had even observed her shave but it was an age of spying through keyholes, they soon discovered the truth and had her imprisoned. The jail authorities did a physical exam of her and saw that she was not fully female, she sex organs were not fully formed, she got her periods late in life and hated the thought of sexual relations with men, it filled her with dread and horror. She regarded men as bum chum buddies and felt shy of women rather than of men. Of course she was attracted to women as if there was a magnetic force in them. Especially to women between the ages of twenty four and thirty, in addition she had fine taste in wining and dining being a connoisseur of sorts and had a colossal memory to top it up.

Radcliffe Hall has taken inspiration to draw Stephen from Sandor, it is quite obvious. The physiological traits of both are quite masculine both are tall, wide boned, broad shouldered and slim hipped. Stephen does meet more lesbians like her, one of who tries to reassure Stephen. ‘ You are neither unnatural, nor abominable, nor mad, you’re as much a part of what people call nature as anyone else, only you are unexplained as yet , you have not got your niche in creation. (Hall, p. 51)

According to psychoanalysts even in normal women some are referred to as clitoral and some as vaginal. Inference is drawn that the first type are more into Sapphic or same sex love. Simone de Beauvoir says ‘ All childhood eroticism is clitoral ,whether it remains fixed at this level or transformed into vaginal is not a matter of anatomy’ Her views are the norm in today’s medical world but they may have a ring of truth to them. For psychoanalyst’s homosexuality is thus a psychic phenomenon. Female eroticism is a physiological as well as psychological phenomenon.

Freud looks deeply into burgeoning female sexuality as well. Now he maintains that it is quite different from that of the boy child. According to Freud the girl has to give up her old favourite zone , the clitoris – in favour of a new zone –the vagina. This may be traumatic for some children. There is a second change of the sort which needs to be recognized, this second change is equally important for the female – she has to exchange the original object of affection, her mother and transfer her affection to her father. Freud believes that a woman’s strong attachment to her father is an inheritance of her equally strong attachment to her mother which has now been overshadowed because she acknowledges that she is castrated, and so is her mother hence the father is superior to the mother. (Freud, 1957) In this process she acknowledges her mother’s and her own inferiority. For Freud the girl grows dissatisfied with her clitoris and gives her phallic activity and all sexual activity and even her masculinity in games and sports and stops being a tom boy, this child becomes a normal woman who takes her father as her ideal and develops the Electra complex, (which is the oedipal complex for women) she will grow up normally and have a heterosexual relationship, if the girl is defiant and self- assertive she clings to her masculinity which has been diminished. According to Freud this young child clings very late in life to the ever receding hope of getting a penis. According to Freud it is this irrational hope which leads to homosexuality and to a homosexual choice of sexuality. (Freud, 1957)

So we see how Freud explains the maturing of female sexuality leads to a change from clitoral to vaginal stages and also the transference of affection from mother to father. If the girl child is unable to accept the fact that she is penis-less, she may remain fixated on her mother. Adler carried the theory further and emphasized feelings of rejection of inferiority to the male make her identify with the male female homosexuality is thus a form of protest against males and include aspects of childish fixation on the mother. Further he extends the argument and comes to the premise that the pre oedipal or the pre electra phase possesses more significance for women than for men. And concluding that it may seem that many women who have chosen husbands who are just like their fathers but in fact it turns out that are endlessly repeating their relation with their mother which becomes a paradigm for such women. Behind the supposed normal choice of a heterosexual male husband who is exactly like the father lies the woman’s original longing for the mother figure, hence she repeats the same pattern in the relation as if he were her mother herself and all the complaints she had with her mother get reinforced ., and she has the same problems with him. (Freud, p. 378). Hence we see the boundaries between the normal and abnormal are blurred . Freud’s female patient had a supposedly normal choice but behind the normal choice was the homosexual obsession with the mother.

Dollimore sums up Freud’s argument says that a person doesn’t become a pervert but stays one, for Dollimore sexual perversion is the norm or the given. And in fact sexual normalcy is maintained with difficulty and precariousness and subject to slippage. Dollimore believes that sexual development is not about growth but about repression. (Dollimore, 1991)

As Freud proved one of the symptoms of female sexuality is a masculine protest. There are various instances to show that Stephen was outraged if anyone thought of her as feminine and in practice she hated soft dresses and ribbons, and coral beads and open stockings, she also hated girlish pursuits like playing with dolls and in fact mutilated her dolls when forced to play with them. She despised her playmate Violet who still didn’t know how to ride and at seven was vain enough to cry till she was allowed to wear a pretty blue frock which was reserved only or parties. (Hall, p.

50) Stephen never identifies with women and her first love is Collins. Collins is undeserving of the love the child showers on her, Stephen despises her but still loves her.

Her father is responsible for her open, liberal upbringing and raising her up like a man. Stephen's father has read Ulrichs and Ebing, he is more broad minded, allows her to dress up like a man, and ride a horse astride and encourages her to have manly qualities and virtues. He tells her that he is going to treat her like a boy and as bravery is associated with boys, she too must be brave and not cowardly. (Hall, p. 51) The author gives her an extraordinarily supportive father to ensure that Stephen grows up to be mentally strong who will survive in a hostile world.

Beauvoir trying to explain homosexuality in psychoanalytical terms believes that a woman is expected to make herself an object. But she also has an aggressive subjective element which is unsatisfied in a heterosexual relation and this is the element which actively seeks out homosexuality. For Beauvoir, this is an attempt to transcend the passivity of her flesh and assert autonomy apart from the male. (Beauvoir, p. 426) She identifies with activity and is repulsed at being the object of masculine desire and is also disgusted when Martin positions himself as a suitor and asks for her hand in marriage. Beauvoir says that a woman's attire is significant because it serves a decorative purpose, as if she is an offering to the male (Beauvoir, p. 429). She adopts a virile attitude to ward off such advances and doesn't consider herself an object to be offered. In her partnership, she is the male who takes the lead, this play acting is common to homosexuals. She has imbibed repugnance at the thought of sovereign subject such as herself being a passive object to be conquered. (Beauvoir, p. 429) Stephen who is an athletic person doesn't regard her body as passive, this body of hers so masculine and dashing doesn't invite petting and caresses. Its primary function is primarily to take on hostile outward forces. Also because Stephen is intellectually higher than most of the riff raff which surround her, which is another reason for inability to submit to the male. But it has been noted that refusal to submit to the male is not the only factor which makes her homosexual but it is one out of the various factors mentioned earlier. So we find there are a number of reasons which come together to achieve the same end.

As mentioned earlier, psychoanalysis has strongly laid stress on the early relation between a mother and child, there are two instances when an adolescent girl may find it difficult to escape her mother's influence, firstly when she may have an over anxious helicopter mother, where the daughter is unable to get over her mother fixation because of the mother's smothering love or secondly when the girl has been ill-treated by a bad mother, as we find in Stephen's case. Anna Gordon detests her masculine daughter, while being affectionate her eyes would be cold, and her hand was unable to touch her daughter, as if repulsed even if her voice was gentle. (Hall, p. 19) 'She hated the way Stephen moved, or stood still, hated a certain largeness of her, a certain crude lack of grace in her movements'. (Hall, p. 14) Stephen neglected by her mother feels the need for a good mother who will replace the bad one she had earlier. Stephen's mother mirrors the hostility of society towards her. She condemns Stephen's coming out of the closet, after she finds out that Stephen is a lesbian and is in love with Angela, she tells her in no uncertain terms. 'And this thing you are is a sin against god and nature.' (Hall, p. 260) Angela's husband is even more antipathetic, he exclaims that such freaks of nature should be put down at birth in state lethal chambers (Hall, p. 256).

The novel goes on about Stephen's life and her various lovers who leave her once the going gets tough and society becomes censorious, ultimately Stephen gets enamoured of Mary and the author uses religious vocabulary to circumvent harsh criticism by the keepers of morality, Stephen's courting of Mary. She uses biblical idioms and parables to express lesbian eroticism. But understandably the ending is a sad one where Mary leaves Stephen because of Stephen's supposed infidelity, a made up, cock and bull story to force Mary to leave Stephen because Mary cannot bear the social ostracism when she is with Stephen, so she ultimately returns to her husband who until a few weeks back had given up all hope of saving his marriage. So the novel ends on a pessimistic note where the author rejects the possibility of Stephen finding happiness and a partner in contemporary society, the way things stand. It is the author trying to say that lesbians are capable of taking the ultimate sacrifice by giving up their lovers and hence are morally higher beings to so called normal people. Hall has hence written a highly dissident novel by portraying the sufferings, sorrows and tribulations of so called inverts in society. Bonnie Zimmerman has

claimed that the well of loneliness has stuck to its central position that lesbians do deserve acceptance within nature and society. (Zimmerman, p. 433)

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महिला सशक्तिकरण और गांधी

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यदि हम आत्मशुद्धि द्वारा स्वराज्य प्राप्त करना चाहते हैं तो हमें नारी को अपनी वासना का शिकार नहीं बनाना चाहिए । मेरे लिए तो गोरक्षा के अर्थ में हमारी नारी जाति की रक्षा भी शामिल है । जब तक हम अपनी माताओं, बहनों तथा बेटियों के समान दूसरी सभी महिलाओं का सम्मान नहीं करने लगते, तब तक हम भारत का नव निर्माण नहीं कर सकेंगे । हमें अपने उन पापों को धो डालना चाहिए, जो हमारे भीतर के मनुष्य की हत्या करते और हमें जानवर बना देते हैं" । भारतीय स्वाधीनता संग्राम में महात्मा गाँधी का योगदान तो अतुलनीय रहा ही, इसके साथ ही आज़ाद भारत में हर तरह के भेदभाव से मुक्त समाज का निर्माण हो, इसके लिए भी उन्होंने अनेक प्रयास किए । विशेषकर महिलाओं को समाज में उचित सम्मान और महत्त्व मिले, वे आत्मनिर्भर और सशक्त बनें, इसके लिए भी उन्होंने भरपूर प्रयत्न किए । आज भी उनकी विचारधारा जेंडर समानता और महिलाओं के सशक्तिकरण की दिशा में हमारी मार्गदर्शक बनी हुई है । परंतु क्या इस विचारधारा के माध्यम से हम लैंगिक समानता और महिला सशक्तिकरण के क्षेत्र में कोई बुनियादी फ़र्क़ फ़ैदा कर पायें हैं?

महिला सशक्तिकरण को समझने से पहले 'सशक्तिकरण' को समझना बहुत जरूरी है । सशक्तिकरण से तात्पर्य किसी व्यक्ति की उस क्षमता से होता है, जिससे उसमें इस प्रकार की योग्यता आ जाती है, जिससे वह अपने जीवन से जुड़े सभी फैसलों को खुद ले सके । महिला सशक्तिकरण में भी उसी क्षमता की बात की जाती है, जहाँ पर महिलाएं परिवार और समाज के सभी बंधनों से मुक्त होकर अपने फैसलों की निर्माता खुद हो सकें । महिला सशक्तिकरण संसार भर में महिलाओं को सशक्त बनाने की एक मुहीम है । जिससे महिलाएं खुद अपने फैसले ले सकें और हमारे इस समाज और अपने परिवार के बहुत से निजी दायरों को तोड़कर अपने जीवन में आगे बढ़ सकें । महिला सशक्तिकरण को बहुत ही आसान शब्दों में परिभाषित किया जा सकता है । इससे महिलाएं शक्तिशाली बनती हैं । जिससे वो अपने जीवन से जुड़े हर फैसले को खुद ले सकती हैं और अपने परिवार तथा समाज में अच्छी तरह जीवन यापन कर सकती हैं । समाज में महिलाओं के वास्तविक अधिकार को प्राप्त करने के लिए उन्हें संक्षम बनाना ही महिला सशक्तिकरण कहलाता है ।

महिला सशक्तिकरण का उद्देश्य होता है महिलाओं को शक्ति प्रदान करना जिससे वे हमारे समाज में पीछे न रह सकें और पुरुषों के साथ कंधे से कंधा मिलाकर फैसले ले सकें तथा गर्व से अपना सिर उठाकर चल सकें । महिला सशक्तिकरण का मुख्य लक्ष्य महिलाओं को उनका अधिकार दिलाना है । महिला सशक्तिकरण का तात्पर्य ऐसी सामाजिक प्रक्रिया से है, जिसमें महिलाओं के लिए सर्वसम्पन्न तथा विकसित होने हेतु संभावनाओं के द्वार खुले नए विकल्प तैयार हों भोजन पानी घर शिक्षा स्वास्थ्य सुविधाएँ शिशु पालन प्राकृतिक संसाधन बैंकिंग सुविधाएँ कानूनी हक तथा प्रतिभाओं के विकास हेतु पर्याप्त रचनात्मक अवसर प्राप्त हों । इन सभी बातों पर जब गौर किया जाए तो हमें केवल कुछ सैद्धांतिकी ही प्राप्त होती है । केवल कुछ शहरों में महिलाएं अपने अधिकारों के प्रति सजग हुयीं हैं परन्तु आज भी भारत में लगभग 90 प्रतिशत महिलाएं अपने अधिकारों का प्रयोग नहीं करती हैं । महिलाओं को अपने अधिकारों के प्रति जागरूक करने के लिए सरकार के स्तर पर अनेक प्रयास होते हैं परन्तु जब तक समाज के स्तर पर व्यापक जन-जागरूकता नहीं होगी तब तक इसमें कोई आमूलचूल बदलाव आना मुश्किल है ।

संयुक्त राष्ट्र महासभा की उच्च स्तरीय बैठक में एजेंडा 2030 के अंतर्गत 17 सतत विकास लक्ष्यों को रखा गया जिसे भारत सहित 193 देशों ने स्वीकार किया । इन लक्ष्यों में लैंगिक समानता को भी शामिल किया गया । जाहिर है कि हमारे समाज के विकास के लिए लैंगिक समानता कितनी जरूरी है । महिला और पुरुष समाज के मूलधार हैं और समानता एक सुंदर और सुरक्षित समाज की वो नींव है जिसपर विकासरूपी इमारत बनाई जा सकती है । लैंगिक समानता के बीच में भेदभाव की सोच समझकर बनाई गई एक खाई है जिससे समानता तक जाने का सफर बहुत मुश्किल भरा हुआ बन जाता है । मॉन्टर सैलरी इंडेक्स के आंकड़ों पर नजर डालें तो समझ आता है कि एक जैसे कार्य के लिए भी भारत में महिलाएं 25 फीसद कम वेतन पाती हैं । रोजगार के अलग-अलग क्षेत्र में लैंगिक भेदभाव आधारित वेतन में अन्तर भी अलग-अलग है । सूचना एवं तकनीक के क्षेत्र से लेकर मनोरंजन के क्षेत्र तक हर जगह महिलाओं को पारिश्रमिक से जुड़े भेदभाव का सामना करना पड़ता है । भेदभाव एक तरफ तो वेतन में हो रहा है, वहीं दूसरी तरफ महिलाओं के काम को कम आंकने में भी इसकी अहम भूमिका है । लिंग के आधार पर होने वाले भेदभाव असंगठित और संगठित दोनों ही क्षेत्रों में मौजूद है महिला के सशक्तिकरण के लिए समाज में लैंगिक समानता होना जरूरी है । लैंगिक समानता होने से ही महिलाएं सशक्त होंगी । गाँधी का पूरा जीवन इसी सशक्तिकरण के संदर्भ में था चाहे वह भारतीय पुरुष हो महिलाएं । महात्मा गांधी की दृष्टि समय से बहुत आगे की थी । वे आने वाले समय की आहट को पहचानते थे ।

बीसवीं सदी के पूर्वार्द्ध में जब गांधी भारत की आजादी के लिए संघर्षरत थे तभी से आजाद भारत के निर्माण के लिए जिन आधारभूत तत्वों की आवश्यकता होगी उस पर लगातार विचार-विमर्श करते थे । गांधी को इस बात का पूरा भान था कि यह देश कैसे विकास की डगर पर आएगा कैसे आत्मनिर्भर बनेगा और इस राह में किन-किन लोगों की भागीदारी जरूरी है । गांधी आजादी के बाद एक ऐसे भारत की कल्पना करते थे जहां असमानता के लिए कोई स्थान न हो हर नागरिक को आगे बढ़ने का अवसर मिले । स्त्री-पुरुष कंधे से कंधा मिलाकर देश निर्माण में अपनी अग्रिम भूमिका निभाएं । यही वजह रही कि उन्होंने स्वतंत्रता आंदोलन के समय ही समाज में मौजूद हर तरह की असमानता को दूर करने के लिए जन-मानस को प्रेरित किया । इसमें स्त्री-पुरुष असमानता को लेकर भी वे बहुत ज्यादा गंभीर थे । महात्मा गांधी कहते थे 'महिलाओं को कमजोर समझना निंदनीय है यह पुरुषों का स्त्रियों के साथ

किया गया अन्याय है। जिस तरह पशुबल का परिचय देने के लिए अपेक्षित साहस पुरुषों में स्त्रियों की अपेक्षा अधिक है उसी तरह आत्मबलिदान के लिए जरूरी हिम्मत की दृष्टि से स्त्रियाँ पुरुषों से कहीं श्रेष्ठ हैं।¹

अगर नैतिक शक्ति के आधार पर क्षमता का आंकलन किया जाए तो महिलाएं पुरुषों से ज्यादा श्रेष्ठ हैं। इस कथन से स्पष्ट है कि महात्मा गांधी महिलाओं को पुरुषों से श्रेष्ठ मानते थे। लेकिन उनका यह भी मानना था कि महिलाओं को बराबरी का दर्जा तब तक मिलना संभव नहीं है। जब तक वो स्वयं अपने अधिकारों के प्रति सचेत नहीं होती। जब तक स्वयं स्त्री अपनी शक्ति और आत्मबल को पहचान कर आत्मनिर्भर नहीं होती, तब तक समाज में बदलाव नहीं आ सकता है। इसके लिए महात्मा गांधी ने भारतीय महिलाओं की चेतना-शक्ति को जागृत करने के लिए अथक प्रयास किए। “पुरुषों ने स्त्रियों के साथ अन्याय किया है और अब भी करते हैं। किन्तु इसका उपाय अंततः स्त्रियों के हाथ में ही है। स्त्री स्वयं अपने आपको अबला मानना छोड़ दे तो आज ही स्वतंत्र बन सकती है”।¹

इस बात को नकारा नहीं जा सकता कि स्त्रियाँ परिवार समाज को बनाने में पूरा योगदान देती हैं लेकिन उनको उतना महत्त्व नहीं मिलता जितना घर के मुखिया के रूप में पुरुषों को दिया जाता है। क्योंकि वह घर को आर्थिक रूप से सशक्त बनाता है। यही कारण है कि अपना संपूर्ण जीवन परिवार समाज के लिए समर्पित करने वाली महिलाओं की स्थिति दयोज दर्जे की बनी रहती है। कहने को समाज में महिलाओं की स्थिति सुधरी है बदलाव आए हैं, लेकिन ये बदलाव आंशिक हैं। आज भी महिलाओं का एक बड़ा वर्ग परावलंबी है। उसे घर के पुरुषों के सामने हाथ फैलाने पड़ते हैं। इसी कारण महात्मा गांधी ने आजादी से पूर्व ही महिलाओं को आर्थिक रूप से आत्मनिर्भर होने के लिए प्रोत्साहित किया। इसके लिए उन्होंने चरखे को माध्यम बनाया। “भारत की गरीब नारी की पवित्रता चरखे के संगीत में निहित है”।¹ वह चाहते थे कि घर-घर में चरखा पहुंचे और महिलाएं बड़ी संख्या में चरखे पर सूत कटाई का काम करें इससे दो पैसे उनके हाथ में आएंगे और वे स्वावलंबी बनकर अपने जीवन को बेहतर बना पाएंगी। महात्मा गांधी ने अपने सहयोगियों के प्रयास से कई गरीब महिलाओं को चरखा चलाने का प्रशिक्षण दिया। उस समय इस प्रयास के कारण गरीब महिलाओं को एक छोटी-सी राशि आय के रूप में मिलने लगी। तब उन महिलाओं के लिए यही बहुत बड़ी बात थी।

महात्मा गांधी का कहना था कि जिन महिलाओं के हाथ में एक पैसा भी नहीं था वहां अगर थोड़ा पैसा आ रहा है तो यह निश्चित ही बहुत बड़ी बात है। इस तरह गांधी जी ने बहुत पहले ही महिलाओं को आर्थिक रूप से आत्मनिर्भर बनने की राह दिखाई थी। आज भी ग्रामीण क्षेत्रों में गांधी जी का चरखा महिलाओं को आत्मनिर्भर बनने में सहायक बना हुआ है। महात्मा गांधी की सोच में प्रत्येक महिला को आर्थिक रूप से सशक्त बनाना था ताकि वह अपने परिवार का विकास कर सके। महात्मा गांधी ने महिलाओं को केवल आर्थिक रूप से ही सशक्त नहीं किया बल्कि उनको सामाजिक रूप से भी सशक्त करने का काम किया। लड़की केवल शादी के लिए बनी है, इसका वे विरोध करते हुए कहते हैं कि “हर लड़की, हर भारतीय लड़की, शादी करने को ही जन्म नहीं लेती। मैं ऐसी अनेक लड़कियों के उदाहरण दे सकता हूँ जो सिर्फ एक व्यक्ति की सेवा करने के बजाये अपना सब कुछ लगा कर समाज की सेवा कर रही हैं”।

महात्मा गांधी ने स्त्री की समानता को लेकर कई प्रयोग अपने जीवन में किये और ये प्रयोग सफल भी रहें हैं। इन प्रयोगों में यौन सम्बंधित प्रयोग को लेकर गांधी ज्यादा चर्चा में रहें, परन्तु आज के संदर्भ में यह एक विचारणीय तथ्य है कि क्या पुरुष का ही यौनिकता पर अधिकार है? क्या यौनिकता के संबंध में स्त्री का कोई अधिकार नहीं है? गांधी इस संदर्भ में कहते हैं कि “यदि मैं स्त्री जन्मा होता तो मैं पुरुष के इस दम्भ के विरुद्ध विद्रोह कर देता कि स्त्री तो केवल उसके खेलने की चीज है और इसीलिए पैदा हुई है। स्त्री के मन में प्रवेश करने की नीयत से मैं मानसिक रूप से स्त्री ही बन गया हूँ”।¹ महात्मा गांधी ने महिलाओं को स्वतंत्रता संग्राम के साथ जोड़कर, साथ ही आश्रम में उनको समान हक व स्वतंत्रता प्रदान कर, समाज में स्त्रियों का दर्जा कैसा होना चाहिए इसकी एक अच्छी मिसाल पेश की। दरअसल हमें समाज में ऐसे वातावरण का निर्माण करना चाहिए। जिसमें स्त्री घर के कामकाज को जिस आत्म-विश्वास तथा उत्साहपूर्वक करती है, उसी तरह समाज के कामकाज में भी साझेदारी करने लगे और स्त्री-पुरुष दोनों स्वाभाविक सह-जीवन का आनंद उठा सकें।

मनुष्य के रूप में यदि स्त्री का मूल्य प्रतिष्ठित नहीं होता तो स्त्री की प्रकृति संभव नहीं होती। स्त्री के मूल्य को लेकर समाज बहुत ही अज्ञानी है यह केवल पुरुष वर्ग में ही नहीं स्त्रियों में भी देखने को मिलता है। स्त्रियों के क्या-क्या कर्तव्य हैं उनका क्या योगदान है समानताएं और विभिन्नताएँ क्या हैं? इन सबका हिसाब लगाया जाना चाहिए। देश में भिन्न-भिन्न जातियाँ वर्ग और धर्म हैं। उनके विभिन्न रीति-रिवाज हैं परंतु सभी धर्मों और समाजों में स्त्रियों का जीवन कष्टदायक ही बना हुआ दिखाई देता है। गांधी ने समाज के इस निकम्मेपन पर प्रहार किया, वे कहते हैं – “जिस सभ्यता में स्त्री-जाति का सम्मान नहीं किया जाता, उस सभ्यता का नाश निश्चित है। संसार न अकेले पुरुष से चल सकता है, न अकेली स्त्री से, इसके लिए एक-दूसरे का सहयोग ही उपाय है। स्त्री अगर कोप करे तो आज पुरुष वर्ग का नाश कर सकती है। यही कारण है कि महाशक्ति मानी गई है”।¹ किसी भी देश के आर्थिक सामाजिक सांस्कृतिक बौद्धिक एवं नैतिक विकास में महिलाओं की भूमिका बहुत महत्त्वपूर्ण होती है। महात्मा गांधी इस सत्य से पूरी तरह अवगत थे। इसीलिए गांधी का मानना था कि विकास की धारा से यदि स्त्रियों को जोड़ा नहीं गया तो विकास की परिकल्पना कभी साकार ही नहीं सकेगी। इन विचारों को महात्मा गांधी ने केवल सैद्धांतिक रूप में नहीं रखा बल्कि अपने व्यवहार में भी इसका कार्यान्वयन किया। इसके उदाहरण आज भी हमें भारतीय संविधान व सरकार की नीतियों में दिखाई देते हैं। भारतीय संविधान के अनुच्छेद-14 कानून के समक्ष समानता की गारंटी देता है। इसी प्रकार अनुच्छेद-15 धर्म, मूलवंश, जाति, लिंग जन्म स्थान, या इनमें से किसी के भी आधार पर भेदभाव पर रोक लगाता है। लैंगिक असमानता को दूर करने के लिए भी अनुच्छेद-25(2)(b) भी राज्य को सामाजिक कल्याण और सुधार के लिए प्रेरित करता है। कानूनी अधिकार के साथ महिलाओं को सशक्त बनाने के लिए संसद द्वारा पास किए गए कुछ अधिनियम जैसे एक बराबर पारिश्रमिक एक्ट 1976 दहेज रोक अधिनियम 1961ए अनैतिक व्यापार रोकथाम अधिनियम 1956 मेडिकल तर्जुमेशन ऑफ प्रेग्नेंसी एक्ट 1987 बाल विवाह रोकथाम एक्ट 2006 लिंग परीक्षण तकनीक एक्ट 1994 कार्यस्थल पर महिलाओं का यौन शोषण एक्ट 2013 आदि को चलाया गया है।

देश में बीते एक दशक में महिला-पुरुष की हिस्सेदारी में 8 प्रतिशत का सुधार हुआ है। यही रफ़्तार रही तो 2071 तक देश में जेंडर गैप ख़त्म हो जायेगा। इस मामले में अगर हम दुनिया की तीन बड़ी अर्थव्यवस्था अमेरिका, चीन, जापान, से तुलना करें तो हमारी रफ़्तार तेज़ है। चीन में तो जेंडर गैप घटने की जगह बढ़ने ही लगा है। मौजूदा रफ़्तार से दुनिया में जेंडर गैप ख़त्म होने में 108 साल और लगेंगे। आज अनगिनत विरोधाभासों से जूझते हुए महिलाएं हर क्षेत्र में आगे बढ़ रही हैं। सशक्त बनने के मोर्चे पर आधी आबादी ने साबित किया है कि वे स्वयंसिद्धा हैं। इन सभी के पीछे वो एक दृष्टि काम कर रही है जिसे गांधीवादी दृष्टि के नाम से जानते हैं। सत्य और अहिंसा की नींव पर आधारित इस व्यवस्था में स्त्री-पुरुष को समान अधिकार होंगे और जैसा पुरुष अपने भविष्य को तय करने का अधिकारी होगा वैसा ही स्त्रियों को होगा। वर्तमान समय की इन जटिल उलझनों को गांधीवादी दृष्टि से आसानी से सुलझाया जा सकता है।

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COPYRIGHT ACT IN INDIA: AN OVERVIEW

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ABSTRACT:

We all need safety and protection. Same is true for the work we do. This can be illustrated with an example. Imagine you put hard work for writing a book for three-four years. Now you decide to get it published. You go to some ABC publishing house and they publish your book. But after six months you see the same book with some other author's name over it. Here the point is not to discuss how do you feel but the question is what can you do? Answer is pretty straight – go and file the case as our Indian Copyright Act, 1957 gives us this right under Section 63 of the Copyright Act. If found guilty, there is provision for 6 months to 1 year imprisonment along with the fine ranging from 50,000 Rs. to 1 lac.

Copyright is of utmost importance for authors, artists, architects, composers, music production companies and producers, film production companies, computer programmers and designers. Copyright is the legal protection given to the creator of an original literary or artistic work. It is the exclusive right granted by the law to creator of such original work, to do, authorize, or prohibit certain acts in relation to such work. In fact, it is a bundle of rights including, inter alia, rights of reproduction, communication to the public, adaptation and translation of the work. Before the signing and the subsequent introduction of the 1957 Act, the copyright laws of India were governed by the Copyright Act of 1914 which was linked to the British Copyright of 1911. India's copyright laws comply with most international conventions and treaties dealing with copyright protection. The country is a member of the Berne Convention of 1886, the Universal Copyright Convention of 1951 and the Agreement on Trade Related Aspects of Intellectual Property Rights Agreement of 1995--or TRIPS.

This article will discuss the salient features of the copyright act like meaning, duration of copyright, different categories of work that are covered under copyright act, Copyright infringement, Jurisdiction etc. The paper also intends to analyze the Copyright amendment Bill 2012 and wishes to bring out both the positive and worrisome changes in the copyright act.

Keywords: Copyright Act

INTRODUCTION:

Opening case in the abstract illustrates the importance of protection of literary work. Now to introduce the topic or to make the readers more aware of the need and enforcement of copyright laws in India, it makes sense to take the help of example given by Preeti H. Doshi in her article "Copyright Problems in India Affecting Hollywood and" Bollywood" in Suffolk Transnational Law Review (2003). In the article the author discusses the case a Mumbai fitness expert, Leena Mogre who considers herself a Hindi movie buff. She and her nine-year-old son regularly patronized the Mumbai cinema halls, where crowds of Indians gather to catch the latest Hindi film. But that time Lena and her son did not make the effort to see Salman Khan's movie, Jab Pyar Kisi Se Hota Hai, in the Indian cinema hall they regularly frequent. 4 She reasoned, "in a week or two, they'll show it on cable, yaar."

The case illustrates yet another area which is Cinematograph film that needs the protection from video and cable piracy. The growing piracy black market is detrimental to India's economy. An Indian film industry official estimated, for example, that India loses at least rupees 1,700 crore, US\$ 360 million, in revenue annually and the Indian Government loses rupees 750 crore in taxes because of the piracy industry. Although India significantly strengthened its intellectual property rights protection by enacting the Copyright (Amendment) Act of 1994 (Copyright Act of 1994), the country's film industry continues to face high levels of video and cable piracy.

One can be curious to know why to copyright the work? The answer is really simple and acceptable. By copyrighting you can reward the creative efforts. If someone has put in efforts for some great work, then others should not steal the fruit of one's hard work. Copyrighting the work can prevent reproduction or copying of the original work.

The other areas that need protection are musical, artistic, sound recording and government work. This article is an attempt to understand the salient features and problems of Indian copyright acts, the subsequent amendments made in the law and especially the Copyright amendment bill 2012. Fundamental research has been conducted in order to achieve the above said objectives. Secondary data has provided valuable information collected from books, journals, articles and internet. The collected information has been put here under different headings.

LITERATURE REVIEW:

The **BERNE CONVENTION (1886)**, which is the oldest convention to govern copyright, says "the expression 'literary and artistic works' shall include every production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression, such as books, pamphlets and other writings, lectures, addresses, sermons and other works of the same nature, dramatic or dramatic musical works; choreographic works and entertainments in dumb show; musical compositions with or without words; cinematographic works to which are assimilated works expressed by a process analogous to cinematography; works of drawing, painting, architecture, sculpture, engraving and lithography; photographic works, to which are assimilated works expressed by a process analogous to photography; works of applied art; illustrations, maps, plans, sketches and three-dimensional works relative to science or architecture,. Translations, adaptations, arrangements of music and other alterations of a literary or artistic work shall be protected as original works without prejudice to the copyright in the original work. Collections of literary or artistic works such as encyclopedias and anthologies which, by reason of the selection and arrangement of their contents, constitute intellectual creations shall be protected as such, without prejudice to the copyright in each of the works forming part of such collections." **The Creative Employee and the Copyright Act 1976** article by Dreyfuss, Rochelle Cooper says, "debates on issues in copyright law have long exhibited a clash between alternative visions of the goal that the copyright seeks to achieve. One group sees copyright as a means for enhancing the creative environment and so tends to suggest resolutions of open issues that are highly attuned to the interest of authors. Another camp takes it as an economic approach centered on questions towards public welfare" **The Architectural and Works Copyright Protection Act 1990**, which is the act signed by Ex -President Bush implements an important change in the treatment of architecture under the American Intellectual Property law, explicitly extending American copyright protection, for the first time, to completed architectural works. **John Schulman** in his article "Fair Use and Copyright Act" claims that doctrine of fair use as a balance wheel and safety value for the copyright system was promulgated more than hundred and thirty years. He further adds to the remark by saying that it is true that authorities are in consent that line of demarcation between fair use and infringement can't be determined by any arbitrary rule or fixed criteria. It depends upon factors like nature and purpose of the work, quantity and importance of the portion taken and the impact of the portion used on the demand of the copyright work. **William Strauss** argues in his article "The Moral Right of an Author" that moral doctrines of an author have developed mainly by the French and German jurist. Mainly two view of copyright exist: one is related to property rights which is related to commerce and it terminates with the term of the copyright. Another one which is moral right is related to the person or the author and it may or may not survive the property aspect of the copyright act.

COPYRIGHT ACT: THE CONCEPT:

Copyright is the legal protection given to the creator of an original literary or artistic work. It is the legal economic right granted to creator of such original work, to do, authorize, or prohibit certain acts in relation to such work. Copyright assumes supreme importance for authors, artists, architects, composers, music production companies and producers, film production companies, computer programmers and designers.

Oxford English Dictionary explains copyright by stating as "The exclusive right given by law for a certain term of years to an author, composer etc. (or his assignee) to print, publish and sell copies of his original work".

Copyright act is the act that protects the original work. In India, Copyright Act 1957 does that. The act is valid

from Valid from 21 January 1958. This act was also accountable for the creation of the Copyright Office and Copyright Board. The act also introduced civil and criminal remedies against infringement. This act confers copyright protection in the two forms namely: economic rights of the author, and moral Rights of the author.

The author enjoys the economic rights according to the section 14 of the Act. The rights are mainly, in respect of literary, dramatic and musical, other than computer program, to reproduce the work in any material form including the storing of it in any medium by electronic means, to issue copies of the work to the public, to perform the work in public or communicating it to the public, to make any cinematograph film or sound recording in respect of the work, and to make any translation or adaptation of the work.

Section 57 of the Act defines the two basic "moral rights" of an author. These are right of paternity, and right of integrity. The right of paternity refers to a right of an author to claim authorship of work and a right to prevent all others from claiming authorship of his work. Right of integrity empowers the author to prevent distortion, mutilation or other alterations of his work, or any other action in relation to said work, which would be prejudicial to his honour or reputation.

In India, first copyright act was passed in 1914 which was based on Act of 1911 of England. This act of 1914 underwent revision due to advances in science and technology. Thereafter act of 1957 was passed. India's copyright laws comply with most international conventions and treaties dealing with copyright protection. India is a member of the Berne Convention of 1886, the Universal Copyright Convention of 1951 and the Agreement on Trade Related Aspects of Intellectual Property Rights Agreement of 1995--or TRIPS. The country is not a participant to the Rome Convention of 1961, but the laws regarding the copyrights in the country still comply with the convention. The Copyright Act, 1957 protects original literary, dramatic, musical and artistic works and cinematograph films and sound recordings from unauthorized uses.**3.1**

CATEGORIES OF WORK:

Classes of works for which copyrights protection is available in India are: Original literary, dramatic, musical and artistic works, Cinematograph films and Sound recordings. Literary work includes Novels, poems, short stories, books on any subject, Computer programmes, tables, computer databases and Song lyrics.

Artistic work includes a painting, a sculpture, a drawing (including a diagram, map, chart or plan), an engraving or a photograph, whether or not any such work possesses artistic quality, a work of architecture and any other work of artistic craftsmanship.

"Musical work" means a work consisting of music and includes any graphical notation of such work but does not include any words or any action intended to be sung, spoken or performed with the music.

"Sound recording" means a recording of sounds from which sounds may be produced regardless of the medium on which such recording is made or the method by which the sounds are produced. A phonogram and a CD-ROM are sound recordings.

"Cinematograph film" means any work of visual recording on any medium produced through a process from which a moving image may be produced by any means and includes a sound recording accompanying such visual recording and "cinematograph" shall be construed as including any work produced by any process analogous to cinematography including video films.

AUTHOR:

Ordinarily the author is the first owner of copyright in a work. In the case of a literary or dramatic work the author is the person who creates the work. In the case of a musical work, author is the composer. In the case of a cinematograph film, author is the producer. In the case of a sound recording, it is the producer. Photographer is the author in the case of a photograph and the person who causes the work to be created is the author in the case of a computer generated work.

ASSIGNMENT OF COPYRIGHT:

Assignment of Copyrights can be made in whole or in part either generally or subject to limitations and either for the whole term of the copyright or any part thereof. In other words, you may assign away 50%, 1%, or 99% of your interest in that Copyright. Assignments may be integrated into a contract, or may be drafted separately.

It shall be in writing signed by the assignor or by his duly authorized agent. It shall identify the specific works and specify the rights assigned and the duration and territorial extent of such assignment. It shall also specify the amount of royalty payable, if any, to the author or his legal heirs during the currency of the assignment and the assignment shall be subject to revision, extension or termination on terms mutually agreed upon by the parties. If the period of assignment is not stated, it shall be deemed to be five years from the date of assignment.

ASSIGNMENT AND LICENSE:

A license is an authorization of an act which, without such authorization becomes infringement. In essence a license is a grant of authority to do a particular thing which otherwise could not have been done.

TERM OF COPYRIGHT:

The duration of copyrights varies from country to country. The minimum duration of copyright protection under Berne Convention is 50 years. European Union and for countries of the European economic area and in the US the duration is 70 years. In India copyrights are protected for a period of sixty years from the beginning of the calendar year next following the year in which the author dies. If the work is done jointly, then the term starts after the death of the last owner. If the work is anonymous, then duration is 60 years from the date of publication. Broadcasting reproduction right and performers' rights are copyrighted for 25 years.

COPYRIGHT INFRINGEMENTS AND REMEDIES:

Copyright infringement or copyright violation is the unauthorized or prohibited use of works covered by copyright law. For electronic and audio-visual media, unauthorized reproduction and distribution is also commonly referred to as piracy. The copyright infringement occurs when a copyrighted work is reproduced, distributed, performed, publicly displayed, or made into a derivative work without the permission of the copyright owner.

Civil remedies for copyright infringement: A copyright owner can take legal action against any person who infringes the copyright in the work. The copyright owner is entitled to remedies by way of injunctions, damages and accounts. The District Court concerned has the jurisdiction in civil suits regarding copyright infringement.

Injunction is a normal remedy, though discretionary on the part of the court. It stops the infringement during the pendency of the proceedings and ensures that no further loss/damage is caused to the owner of the copyright during the period when the injunction is in force.

Damages account for the loss in money terms suffered by the owner of the copyright due to infringement. Accounts relates to the accounts of net profits earned by the defendant (infringer). If there are no profits, accounts is not ordered as a remedy. Damages and accounts are alternative remedies; the owner can choose only one of them, not both. Otherwise, as a remedy, is a general provision authorizing the court to grant such other reliefs as the court may deem necessary for complete redressal of the complaint, e.g., destruction of the infringing material.

Copyright infringement: Criminal offence under the copyright law: Any person who knowingly infringes or abets the infringement of the copyright in any work commits criminal offence under Section 63 of the Copyright Act. The minimum punishment for infringement of copyright is imprisonment for six months with the minimum fine of Rs. 50,000/-. In the case of a second and subsequent conviction the minimum punishment is imprisonment for two years and fine of Rs. two lakhs. Any police officer, not below the rank of a sub inspector can seize without warrant, all copies of the work and all plates used for the purpose of making infringing copies of the work and can produce before a magistrate according to the section 64 of Copyright act, 1957.

DEFENSES TO INFRINGEMENT:

A defendant in an infringement action may deny the presumption of copying by a showing of independent creation. It is possible for an author to create a work independently while bearing similarities to another. If access is not established, there is no copying, even if there is a striking similarity between the two works. Some acts that would otherwise be a copyright infringement are excused through the concept of "fair use." The statute states that use for purposes of criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research is fair use.

AMENDMENTS MADE IN THE ACT:

The act was amended in 1983 and 1984 that included Berne and Universal Copyright Conventions grant of compulsory licenses by developing countries, publication by deceased authors. Amendments made in 1984 discouraged and aimed for prevention of widespread video piracy.

Copyright (Amendment) Act 1992 had defined the ambit of the Copyright Board's powers. It also introduced special rights for performers and rights of copyright owners.

The act has also amended last year in 2012 which has been discussed in detail in the next section

COPYRIGHT AMENDMENT ACT, 2012:

The amended bill was passed by both the houses of parliament in May, 2012. This bill has both positive and negative changes.

ACCESS TO DISABLED PEOPLE:

The most significant positive change is for disabled people. The bill included introduction of a robust exception for the disabled. Given the very limited circulation of copyrighted works amongst the disabled, they now can convert inaccessible works to accessible formats and share them with each other on a non-profit basis. No royalty needs to be paid to the rights-holders for this conversion and the resultant access.

The amendment allows access by persons with disabilities to copyrighted works without any payment of compensation to the copyright holder, and any organization working the benefit of persons with disabilities to do so as long as it is done on a non-profit basis and with reasonable steps being taken to prevent entry of reproductions of the copyrighted work into the mainstream. Even for-profit businesses are allowed to do so if they obtain a compulsory license on a work-by-work basis, and pay the royalties fixed by the Copyright Board.

BROAD HORIZON OF FAIR DEALING:

Bill also extended the fair Dealing to all works. The law earlier dealt with fair dealing rights with regard to "literary, dramatic, musical or artistic works". Now it covers all works (except software), in effect covering sound recordings and video as well. This will help make personal copies of songs and films, to make copies for research, to use film clips in classrooms, etc.

COMPULSORY LICENSING FOR FOREIGN WORKS:

Another change is compulsory license is now applicable to foreign work also. This is a welcome amendment, making foreign works capable of being licensed compulsorily in case it is published elsewhere but withheld in India. Earlier it was only applicable to Indian work only.

The bill also had some worrisome changes which are explained below.

EXTENSION OF TERM OF PROTECTION FOR PHOTOGRAPHERS:

The second piece of bad news is the extension of the term of protection for photographs. It has gone from being "sixty years after publication" to "sixty years after the death of the photographer". This would mean that copyright in a photograph clicked today (2012) by a 20 year old who dies at the 80 will only expire on January 1, 2133. This applies not only to artistic photographs, to all photographs because copyright is an opt-out system, not an opt-in system.

This particular amendment has many problems. First, there was no case made out for why this term needed to be increased. No socio-economic report was commissioned on the effects of such a term increase. While the WCT requires a 'life + 50' years term for photographs, we are not signatories to the WCT, and hence have no obligation to enforce this. We are signatories to the Berne Convention and the TRIPS Agreement, which require a copyright term of 25 years for photographs. Instead, we have gone even above the WCT requirement and provide a life + 60 years term.

The second problem is that it is easier to say when a photograph was published than to say who the photographer was and when that photographer died. Even when you are the subject of a photograph, the copyright in the photograph belongs to the photographer. Unless a photograph was made under an employment contract or the photographer assigned copyright to you, you do not own the copyright in the photographs. In other words, if the photographer was an independent contractor, such as a self-employed person who was commissioned to click the photographs for a fee, the copyright in the photograph lie with the photographer and not the person who commissioned the photographs. This will most definitely harm projects like Wikipedia, and other projects that aim at archiving and making historical photographs available publicly.

COVER VERSIONS MADE MORE DIFFICULT:

Now it has become difficult to produce cover versions. Time period after which a cover version can be made has increased from 2 years to 5 years. Moreover they have to be restricted to the same medium as the original. So if

the original is on a cassette, the cover cannot be released on a CD. Payment has to be made in advance, and for a minimum of 50000 copies. This can be lowered by Copyright Board having regard to unpopular dialects. (Should all those who sang commercially viable cover violations of “Kolaveri Di” be considered lawbreakers?); and there are strict limits on what are acceptable alterations to the original. The “alterations” have to be “reasonable” and “technically necessary”. Today, affordable yet sophisticated multimedia technologies allow teenagers to build professional sound recording studios in their bedrooms — and our government is seeking to restrict them to boring word-for-word and note-for-note covers.

This ignores present-day realities. Kolaveri Di was covered numerous times without permission, and each one of those illegal acts helped spread its popularity. The singers and producers of those unlicensed versions could be jailed under the current India Copyright Act, which allows even non-commercial copyright infringers to be put behind bars.

PARALLEL IMPORTATION DELETED:

The Copyright Act only prohibits import of infringing copies of a work, but a copy of a book that has been legally sold in a foreign country is not an “infringing copy”. Bowing to pressure from foreign publishers’ associations, the government deleted the “parallel importation” provision at the last minute. The inclusion of this provision would have made it clear that works reproduced with the rights-holders’ permission in other countries could be imported into India. Foreign publishers and their lobbyists went all-out with a propaganda campaign predicting a dystopia filled with pirated books, surplus books dumped from overseas and starving, uncompensated authors. Had our government not caved, this clarification in law would have gone a long way in dismantling distribution monopolies and made the market much more competitive. The resultant increase in choice and reduction in cost would have benefited everyone.

BACKDOOR CENSORSHIP:

Now search engine and social media platforms are required to take down the content if the right holder complains about the infringement. Provided that if the person responsible for the storage of the copy has received a written complaint from the owner of copyright in the work, complaining that such transient or incidental storage is an infringement, such person responsible for the storage shall refrain from facilitating such access for a period of twenty-one days or till he receives an order from the competent court refraining from facilitating access and in case no such order is received before the expiry of such period of twenty-one days, he may continue to provide the facility of such access;

There are two things to be noted here. First, that without proof (or negative consequences for false complaints) the service provider is mandated to prevent access to the copy for 21 day. Second, after the elapsing of 21 days, the service provider may 'put back' the content, but is not mandated to do so. This would allow people to file multiple frivolous complaints against any kind of material, even falsely (since there is no penalty for false complaints), and keep some material permanently censored.

ISSUES IN COPYRIGHT ACT: MUCH MORE TO DO:

Even after many amendments in the copyright law, there are issues in the copyright act which need solution. The very important among them is fair dealing guidelines. We would benefit greatly if, apart from the specific exceptions provided for in the Act, more general guidelines were also provided as to what do not constitute infringement. This would not take away from the existing exceptions, but would act as a more general framework for those cases which are not covered by the specific exceptions.

We as Indians pay tax to government. Still, we are not free to use government works that were paid for by us. This goes against the direction that India has elected to march towards with the Right to Information Act. A simple amendment of s.52(1)(q) would suffice. The amended subsection could simply allow for “the reproduction, communication to the public, or publication of any government work” as being non-infringing uses.

Another area that troubles is copyright terms. The duration of all copyrights is above the minimum required by our international obligations, thus decreasing the public domain which is crucial for all scientific and cultural progress.

.Copyright laws have become inadequate with advances in technology that propel frantic transmission of creative work to everyone’s palm. Even as court battles are being fought on new frontiers in cyber piracy, the old-

fashioned disputes over playing recorded music on radio or in public places have not been settled. There is no clear definition of what constitute a 'public', and no distinction is drawn between commercial and non-commercial 'public' communication. This issue needs to be solved in order to have proper understanding.

More protection is required for internet intermediaries to ensure that non-market based peer-production projects such as Wikipedia, and other forms of social media and grassroots innovation are not muted.

Most important of all is exception for education sector. In a country like India this step is of utmost importance that will assure low cost educational material to the students or kids of this country who are the future of our nation.

CONCLUSION:

There is no doubt about it that for any creative, intellectual work there is the need for protection. Copyright act does that in an efficient manner. Indian copyright act has its own merits which strengthens and empowers the people benefitting from it. But one should forget that still there are certain issues which need attention. We need to take a much more considerate approach to rationalizing copyright with the introduction of general fair dealing guidelines, reduction of copyright term, decriminalization of non-commercial infringement, and other such measures.

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ROLE OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES) IN ECONOMIC DEVELOPMENT IN INDIA**Dr. D.K.GAUTAM**Asso. Prof., Faculty of Commerce and Business Administrative
MMH College, Ghaziabad (U.P.)**ABSTRACT:**

The limited scale modern area which assumes critical part in the Indian Economy have contributed altogether to our GDP and product profit other than meeting the social goals including that of giving work open doors to a great many individuals the nation over. Regularly appropriately named as 'Motor of Growth' for India, MSMEs has utilized more than 70 million individuals, reducing territorial differences adjusting the dissemination of abundance, and commitment to the GDP (8% of GDP) Though India is as yet confronting infrastructural issues, absence of legitimate modern market linkage, issue of Sickness absence of money, wasteful innovation, insufficient unrefined substance, unfortunate transportation and correspondence and contest from enormous ventures, it has seen a huge development in the area. This area has advanced from the development of straightforward shopper merchandise to the assembling of many complex and accuracy item like electronic control framework, miniature wave parts, electro-clinical hardware, T.V sets, different designing item especially as ancillaries to the huge ventures. In the event that a major push is given to the limited scale modern area, it can turned into a settling factor in the Capital-Scare economy like India by giving a higher result capital proportion as well as a higher business capital proportion. This article covers need and significance, issues looked by these enterprises, and the cures that are expected to place them on development way, as additionally the public authority strategy towards them.

Keywords: Disparities, Employment, Enterprises, Infrastructure Manufacture, Remedies

PRESENTATION:

The Micro, little and medium ventures (MSMEs) are one among the main areas, shaping the foundation of the Indian Economy. This area has tremendous potential for assisting address primary issue with preferring joblessness, provincial uneven characters, inconsistent conveyance of public Income and riches. Because of similar low capital expenses and their sent in reverse linkages with different areas, they are gone to assume a significant part in the achievement of the 'Make-in-India' drive. However MSMEs are little venture endeavors, yet their commitment to the Indian Economy is extremely critical. They possesses an essential significance as far as result 45% of production, send out 40% and work 69 million man in north of 29 million units all through the country. MSMEs are instruments of comprehensive development which address the existences of the most helpless and minimized. This area looks to enable individuals to break the pattern of destitution and hardship.

Starting around 2006-07, the classification of the Ministry of limited scope Industries has been changed and presently it is named as "Service of Micro, Small and Medium Enterprises". As the name recommends now administration area endeavors working at limited scope has been remembered for the MSME Sector.

CLASSIFICATION OF MSME (Figure in Rs)

Categories	Manufacturing Enterprises	Service Enterprises
Micro	25 Lacs	10 Lacs
Small	5 Crore	2 Crore
Medium	10 Crore	5 Crore

The MSMEs represent 38% of work in Industrial creation, 34% of India's Exports and 92 percent of work in the modern area. Of the complete working undertakings, the extent of miniature, little and medium ventures were 95%, 4.75 percent and 0.25 percent respectively, this includes 67% assembling endeavors, 16% in fix and support, were exclusive endeavors. Around 4% of the undertakings were controlled by organization and 2.8 percent of the endeavors were controlled by privately owned businesses/trusts or other. It was observed that 14% of the units in MSME area were lady endeavors.

(Source: Report of fourth All Indian Census of MSMEs)

NEED AND IMPORTANCE OF MSMEs:

Little ventures of different kind together involve a significant spot in the nation's economy. These have an incredible potential for future advancement of the economy. There are a few significant justifications for why these MSMEs are contributing a great deal of progress of the India economy.

- **Work Generation:** Small ventures are work escalated and the make greater business per unit of capital utilized. With some random speculation, business prospects would be 10/15 or even multiple times more noteworthy in correlation with huge ventures. With minimal capital and different assets for the most part accessible locally these can be set-up wherever in the nation, even at the very entryway step of the laborer.
- **Uniformity of Income Distribution:** The responsibility for is more far and wide than the responsibility for scale enterprises so they guarantee a more fair conveyance of public pay and riches. On the opposite side the relations between the laborers and bosses are more amicable in little undertakings than in huge ventures so there are less possibilities of modern debates.
- **Huge Production:** Of the absolute supplies of Industrial Consumer merchandise 2/3 of the result begins in the limited scale area. Moreover, their portion in the all out trades is as much 40%. Thusly, this area makes a truly important commitment to the gathering of unfamiliar kitty of the country.
- **Utilization of inert Resources:** The limited scale ventures can tap inactive assets like stored abundance, family work, craftsman's expertise, material information, innovative capacity and so on By utilizing the nearby assets, these businesses add to the public result, yet additionally limit their reliance on imported inputs and subsequently cause no weight on the equilibrium of installment of the country.
- **The Decentralization Factor:** Industrialization of the Country can become total provided that it infiltrates in to the remote corner of the country. Decentralization assists with tackling the issues of blockage in the couple of modern towns by developing the area of business. Another, the limited scale enterprises are generally set-up to fulfill neighborhood interest and they can be scattered over every one of the states without any problem. They can likewise impact a subjective change in the economy of a state.

ISSUES OF MSMEs:

In their activities, these ventures, in spite of some advancement, have missed the mark regarding their true capacity. Significant obstructions might be depicted as under:

Wasteful Operation: A critical extent of their ability between 50% to 60 percent remain unutilized because of unfortunate administration and absence of examination/review/assessment with respect to their area, monetary reasonability, presence of market, future possibilities and so on This outcomes in significant expense and cost of their items.

Insufficient Dispersal: Most of the limited scale ventures stays bound to a couple of states. Once more, there has been an unnecessary convergence of these units in a couple of regions like metropolitan urban communities and in the all around created modern buildings.

Issue of Sickness: Another justification for its horrible showing is the huge scope ailment. The quantity of wiped out units run into thousands and with slight varieties these keep on expanding. The deficiency of affliction is restricted not exclusively to back however there are large misfortunes as far as less creation, less commodity and less business moreover.

Absence of money: The shortage of money and credit is the primary hindrance in the advancement of the limited scale units. The monetary necessity of MSMEs has not be convenient. Its postponed accessibility has been a main consideration in causing quite a bit of Industrial of ailment in this area. In light of the deficiency of capital and monetary assets, these unit don't have sufficient remaining limit and are frequently compelled to sell their items at unremunerated costs.

Unfortunate Marketing: The issue emerges from such component a limited scale of creation, absence of normalization of item, powerless market knowledge, contest from actually more proficient units, lacking holding limit if there should arise an occurrence of over-creation or inadequate interest. Additionally, the limited scale unit regularly couldn't care less regarding changing preferences and designs.

Absence of Raw Materials: Raw materials are accessible neither in adequate amount, nor of imperative quality, nor at sensible costs. This influences antagonistically their creation, item quality and expenses. Further, these ventures don't get equivalent treatment of opposite huge businesses, in the circulation of these panic inputs.

Wasteful Technology: The method of creation in limited scope businesses are old and wasteful. This outcome in low efficiency, low quality of items and significant expense. One more there is little innovative work in this field in the country, whatever new is accessible in the field isn't effectively moved to them.

Cutthroat from huge Industries: The huge scope enterprises are efficient, utilizing most recent innovation, and approaching numerous offices, can undoubtedly surpass the little creates. With the progression of the economy as of late, this issue has turned into even more genuine.

Infrastructural Constraints: The most extreme requirement is power. Hostage age at sensible expense is out of inquiry for limited scope units. Also, uncontrolled debasement, transportation, correspondence and water supply is quick arising as a significant infrastructural requirement.

Unfortunate Database: There are two significant wellsprings of data on the limited scale ventures viz, Small Industrial Development Organization (SIDO) Central Statistical (CSO) complete data for the limited scale area as entire isn't accessible from any of these sources.

Antagonistic impact of Economic Reforms and Globalization: The time of 1990s has set apart by significant liberation of Industrial economy through delicensing and dereservation, 'opening up' the modern area for both inner and outer contest, bringing down of levies, expulsion of quantitative limitations and so on These changes have adversely affected the little area . The most genuine danger is being acted by modest Chinese imports like the supposed 'China Price' (Which is absolute bottom Price) is compelling some limited scale units to shut down. Subsequently, almost 40% of Indian toys creators have effectively shut down over the most recent couple of years and another 20% are very nearly conclusion. To the extent that the 'gift' fragment of the ceramic business is concerned, just about 80% of homegrown enterprises have been cleared out by Chinese import.

Intriguing Measures:

To empower MSMEs to assume their part well in the advancement of the country, it is important to eliminate their hardships and make them solid and sound. The accompanying ideas may supportive in such manner:-

Laying out Industrial Co-agents: It can deliver massive assistance. On the off chance that limited scale ventures put together themselves into co-agents a considerable lot of troubles in regard of credit, advertising, acquisition of natural substances and so on will vanish. The Government can do much in the advancement of modern co-agents.

Creation of Goods of Superior Quality: Production of value merchandise and of most up to date plan is the best way to guarantee agreeableness of their merchandise in homegrown and unfamiliar market. It alone can give a sure and secure reason for extending the market for these products.

By giving satisfactory credit : The stockpile of sufficient credit should be organized by unique monetary establishments and government, co-usable social orders and business banks should fit their advance game plan to suit these necessities.

Further developing the Marketing System : To support MSMEs satisfactory showcasing offices ought to be gotten to the next level. In such manner, the co-usable advertising ought to be elevated to move past the impediment of the MSMEs.

By giving Industrial Training : It is most extreme significance that sufficient offices for modern creation and preparing exist for MSMEs, so they may ready to exploit logical information in the field of ventures and embrace present day rehearses in regard of different creation exercises. The creation strategies should be better sorts by utilizing current innovation and instruments.

Late Government Policy Measures:

The Government has in its advancement profile, given a significant spot to MSMEs. It is viewed as an exceptionally supportive component in the development and government assistance of the country. The principle strategy measure are as under:

Credit Supply: For credit stream to the little area, business Bank, Co-usable Bank, Regional Rural Bank, State

finance partnership and so on satisfy this capacity under the heading of the public authority. Infact these little units are remembered for the need area to which these organizations give a specific level of their credit, at present fixed at 40%.

Supply Raw Material: Arrangement have been made through Buffer stock, to guarantee supply of alarm unrefined substance. There have been particular unwinding in the import of specific unrefined components.

Showcasing Development Assistance: To advance creation and deals of Khadi and Polyvastra an adaptable development invigorating and craftsman driven plot named Marketing Development Assistance (MDA) has been presented from 2010-11. The plan accommodates help upto 20% of worth of the creation to be divided between craftsman, delivering units and selling units in the proportion of 25:30:45 individually.

Ability and Technology Upgradation: Efforts are being made through preparing establishments, exhibition focus, versatile preparation unit, to foster reasonable innovation which guarantee better use of nearby assets. Under this plan, 15% capital appropriation is permissible on advance upto Rs. 1 crore, progressed by monetary organizations for innovation upgradation.

Miniature Unit Development and Refinance Agency (MUDRA) : This plan was sent off in April 2015 to subsidize and advance miniature money establishment (MFIs), which would, inturn, give advances to little weak part of the business. In this, plot private company (Shishu) can profit advances upto Rs. 50,000, business minimal greater (Kishore) can profit credit upto Rs. 5 lakh, next large business (Tarun) can benefit credit upto Rs. 10 lakh. Institution of Micro, Small and Medium Enterprises Development (MSMED) Act 2006 It gives the very first lawful system for acknowledgment of the idea of undertakings" (Comprising both assembling and administrations) and incorporating the three level of these endeavors, viz miniature, little and medium. The principle arrangement in this Act are: laying out of explicit assets for the advancement, improvement and upgrade of seriousness of these MSMEs, warning of plans for the reason, moderate credit approaches, inclination in government acquirement to item and administration of the MSMEs, and viable component for relieving the issues of postponed installments of miniature, little and medium endeavors.

Public-Procurement Policy (2012): This strategy commands that all the focal/state divisions will acquire at least 20% of their yearly worth of products/administrations expected by them from limited scope businesses. Further, approach has reserved a sub-focus of 4% acquisition out of this 20% from MSMEs claimed by planned rank/booked clan (SC/St) ventures.

CONCLUSION

Miniature, Small and Medium Enterprises (MSMEs) are one among the main areas, framing the foundation of the Indian economy. This area has been instrumental in the development of the country, utilizing trades, setting out immense work open doors for the incompetent and under utilized. However India is as yet confronting infrastructural issues, absence of legitimate market linkage and challenge as far as stream of institutional credit, it has seen an enormous development in this area. This area has enormous potential for assisting address underlying issue with preferring, joblessness, provincial lopsided characteristics, inequal conveyance of public Income and riches. Because of relative low capital expenses and their sent in reverse linkages with others areas, they are made a beeline for assume a pivotal part in the achievement of the 'Make-in-India' drive. So government should accept absolute attention to detail of this area as far as giving simple and more miniature, little and medium undertakings Registration benefits through better guidelines, government supply, and empowering monetary organizations to loan more credit at less financing cost for manageability of this area.

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भारतीय जीवन मूल्य दर्शन व चिंतन: एक अध्ययन

डॉ. (श्रीमती) रंजना कुलश्रेष्ठ

हिंदी विभाग, टाकुर बीरी सिंह महाविद्यालय, टूण्डला
फिरोजाबाद

किसी भी विचार-परम्परा की पुनर्व्याख्या और उसके पुनराविष्कार की अपनी ही गति होती है। इस प्रक्रिया में मूल विचार-परम्परा का उन्नयन भी होता है तो कहीं-कहीं विजातीय प्रभावों के कारण उसके अवमूल्यन की सम्भावना भी बनी रहती है। स्वातंत्र्योत्तर भारतीय दर्शन भी इस तथ्यात्मकता का अपवाद नहीं है। हमारी औपनिवेशिक मनोवृत्ति और ऊपर से अंग्रेजी भाषा के प्रभुत्व ने हमारे वैचारिक स्वराज की धार को अवश्य ही कम किया है लेकिन भारत की ज्ञान सम्पदा की प्राणदा शक्ति अभी भी समाप्त नहीं हुई है। स्वातंत्र्योत्तर भारत में इस ज्ञान-सम्पदा के संवेदनशील ध्रुवों का समुदाय यद्यपि अल्पसंख्यक है लेकिन उन्हीं के अध्यवसाय से इस देश का ज्ञानात्मक अतीत जीवंत और पुरोगामी बना हुआ है।

जीवन दर्शन व मूल्य

भारतीय दर्शन का औपनिवेशिक युग किस तरह स्वातंत्र्योत्तर युग में रूपांतरित होता है और नये युग में वह क्या स्वरूप ग्रहण करता है, इसकी एक झलक हमें कंटेम्पारेरी फिलॉसफी नामक ग्रंथ के दूसरे परिवर्द्धित संस्करण में देखने को मिलती है। राधाकृष्णन और म्योरहेड ने 1952 में इसका सम्पादन किया था। यह ग्रंथ आजादी से पहले और बाद के भारतीय दर्शन की दशा-दिशा को प्रस्तुत करने वाला प्राथमिक और प्रामाणिक प्रयास था। इसके प्रथम संस्करण में (1936) गौंधी, रवींद्रनाथ, स्वामी अभेदानंद, कृष्ण चंद्र भट्टाचार्य, जी.सी. चटर्जी, आनंद कुमारस्वामी, भगवानदास, सुरेंद्र नाथ दासगुप्ता, हीरालाल हलधर, एम. हिरियन्ना, सर्वपल्ली राधाकृष्णन, आर.डी. रानाडे, बी. सुब्रह्मण्यम अय्यर और आर. वाडिया जैसे दार्शनिकों के आलेख सम्मिलित किये गये थे। इसके दूसरे संस्करण में हरिदास भट्टाचार्य, एन.जी. दामले, रासबिहारी दास, डी.एम. दत्ता, हुमायूँ कबीर, एस.के. मैत्रा, जी.आर. मलकानी, ए.सी. मुखर्जी, टी.आर.वी. मूर्ति, पीटी. राजू और एम.एम. शरीफ के लेखों को प्रातिनिधिक दार्शनिक लेखन के रूप में शामिल किया गया।

ग्रंथ के दोनों भागों में जिन दार्शनिकों के आलेखों को तत्कालीन दार्शनिक अध्यवसाय के नमूने के तौर पर सम्मिलित किया गया, उसे दो वर्गों में बाँटा जा सकता है। पहले वर्ग के दार्शनिकों ने वैदिक परम्परा के दर्शनों की समझ को प्रस्तुत किया है। दूसरे वर्ग के आलेखों की अंतर्वस्तु तो परम्परागत भारतीय दर्शनों से ही ली गयी है, लेकिन उनकी व्याख्या, विश्लेषण और तुलना पाश्चात्य दर्शन और उसकी आधुनिक समस्याओं के परिप्रेक्ष्य में की गयी है। इस प्रसंग में यहाँ अखिल भारतीय दर्शन परिषद् की स्थापना का उल्लेख भी आवश्यक है। यह परिषद् वास्तव में स्वातंत्र्योत्तर भारतीय दर्शन का एक नया और महत्त्वपूर्ण अध्याय है। इसकी स्थापना में महत्त्वपूर्ण भूमिका यशदेव शल्य की रही। मुखपत्र के रूप में दार्शनिक त्रैमासिक पत्रिका का परिषद् की स्थापना के साथ ही 1954 से प्रकाशन प्रारम्भ किया गया और परिषद् का प्रथम वार्षिक अधिवेशन 1956 में इलाहाबाद में हुआ। हिंदी माध्यम से स्वातंत्र्योत्तर भारत में दार्शनिक अध्यवसाय को प्रतिनिधित्व देते हुए परिषद् ने दो दर्जन से अधिक पुस्तकों का प्रकाशन किया है जिसमें के. सच्चिदानंद मूर्ति द्वारा इसमकालीन भारतीय दर्शन (1962) विशेष रूप से उल्लेखनीय है। राधाकृष्णन और म्योरहेड के ही तर्ज पर इस पुस्तक में सम्पूर्णानंद, एन.एस. द्रविड़, बी.जी. तिवारी, एस.एल. पाण्डेय, राजेंद्र प्रसाद, आर.के. त्रिपाठी, एस.एस. बारलिंगे, जे.आर.एल.एस. नारायण मूर्ति, चन्द्रशेखर राव और के.एस. मूर्ति के आलेख सम्मिलित किये गये थे। परिषद् के तत्वावधान में स्वातंत्र्योत्तर दार्शनिक प्रकरण के अंतर्गत अम्बिकादत्त शर्मा द्वारा सम्पादित समेकित दार्शनिक विमर्श (2005), समेकित अद्वैत विमर्श, (2005), भारतीय दर्शन के 50 वर्ष (2006) और समेकित पाश्चात्य दर्शन समीक्षा (2012) भी विशेष रूप से उल्लेखनीय हैं।

दर्शनशास्त्र का मनुष्य जीवन में उपयोगिता।

- मनुष्य के कार्य उसके विचार प्रक्रिया के परिणाम होते हैं।
- मनुष्य के दृश्य जीवन को उसके विचारों की अदृश्य दुनिया न सिर्फ दिशा और गति प्रदान करती है बल्कि उसे उसकी सार्थकता भी उपलब्ध कराती है।
- मनुष्य के विचारों ने ही सभ्यता और संस्कृति का निर्माण किया है।
- मनुष्य के विचारों का दर्शन ही जीवन दर्शन निर्मित करता है।
- जीवन के संबंध में मनुष्य की जिज्ञासा, असंतोष, अपूर्णता, ने उसे गूढ़ दार्शनिक चिंतन की ओर प्रेरित किया।

- दार्शनिकता से तात्पर्य मनुष्य का स्वयं के प्रति, अपने परिवेश के प्रति जिसमें वह रहता है, तथा विश्व के प्रति, जिसका अकिंचन हिस्सा है, यथार्थ ज्ञान प्राप्त करना है।
- हक्सले ने ठीक ही कहा है कि “हम सब का विभाजन दार्शनिक और अदार्शनिक के रूप में नहीं, बल्कि कुशल और अकुशल दार्शनिक के रूप में ही संभव है”।
- इस आधार पर कहा जा सकता है कि प्रत्येक व्यक्ति के कार्य और विचार, उसके दर्शन के ही हिस्से होते हैं, तथा मनुष्य का जीवन दर्शन का ही प्रतिबिम्ब है।
- दर्शन मानव जीवन के अस्तित्व का समाधान प्रस्तुत करता है।
- मानव शरीर नश्वर है।
- शरीर की नश्वरता मनुष्य को असंतुष्ट करती है, तथा अपने वास्तविक स्वरूप को जानने के लिए प्रेरित करती है।
- स्वयं के तथा विश्व के वास्तविक स्वरूप को पहचानने के मनुष्य के प्रयत्नों से ही आत्मा तथा ईश्वर की अवधारणा का प्रतिपादन हुआ।
- बुद्धिवादियों ने ब्रम्हाण्ड के निर्माण में ईश्वरीय ईच्छाओं को स्वीकारा।
- आध्यात्मवादियों ने भी आस्तिकता के आधार पर मनुष्य की और विश्व के अस्तित्व के संबंध में दार्शनिक सिद्धान्तों का प्रतिपादन किया।
- मनुष्य शरीर की नश्वरता को स्वीकार करते हुए भी, आत्मा के अस्तित्व को चिरंतन माना गया है,। खासकर भारतीय आध्यात्मिक दर्शन में आत्मा को सनातन तथा अनश्वर माना गया है।
- गीता में लिखा गया है कि “आत्मा किसी काल में न तो जन्मता है, और न ही मरता है, तथा यह न उत्पन्न होकर फिर होने वाला ही है, क्योंकि यह अजन्मा, नित्य, सनातन और पुरातन है। शरीर के मारे जाने पर भी यह नहीं मारा जाता”।
- दर्शन मानवीय जीवन के दुखों तथा असंतोष निवारण का उपाय प्रस्तुत करता है।
- दर्शन शास्त्र में मानव जीवन से संबंधित सभी पक्षों का गहन चिंतन किया जाता है। मनुष्य के दैनिक जीवन व्यवहार में अनवरत समस्याएं आती हैं, जो उसे जीवन के प्रति ओम और असंतोष से भर देती हैं। मनुष्य इन दुखों से मुक्त होना चाहता है। दर्शन न सिर्फ उन दुखों से मुक्ति के उपाय प्रस्तुत करता है, बल्कि जीवन के व्यावहारिक दृष्टिकोण तथा आध्यात्मिक सिद्धान्तों का प्रतिपादन भी करता है, ताकि उन उपायों पर चलकर मनुष्य संतुष्टिपूर्ण जीवन प्राप्त कर सके, तथा जीवन की सार्थकता का अनुभव कर सके। दुख से मुक्त होने के लिए अनेक दार्शनिक सिद्धान्तों का प्रतिपादन किया गया है, जो कि भौतिकवाद तथा आध्यात्मवाद पर आधारित हैं।
- भारतीय दर्शन दुखों से मुक्ति हेतु आत्मा का ज्ञान प्राप्त करने हेतु प्रोत्साहित करते हैं। भारतीय दर्शन की मान्यता है कि “शोकं तरति आत्मविद्” अर्थात् आत्मज्ञानी व्यक्ति शोक को पार कर लेता है, शोक से मुक्त हो जाता है।
- भारतीय दर्शन में दुखों से पूर्णतः मुक्ति हेतु मोक्ष प्राप्ति को लक्ष्य माना गया है।
- भारतीय दर्शन में मानव जीवन के कर्म सिद्धान्तों का प्रतिपादन किया गया है, ताकि मनुष्य का जीवन अनुशासनपूर्ण बन सके।
- बौद्ध धर्म में अष्टांगिक मार्ग तथा जैन धर्म के त्रिमार्ग भी मनुष्य को सद्गुणों से युक्त जीवन जीते हुए, मोक्ष प्राप्ति की ओर प्रेरित करते हैं।
- दर्शन से मनुष्य आश्वस्त हो पाता है कि उसके सद्कर्मों का उसे निश्चय ही श्रेष्ठ प्रतिफल प्राप्त होगा, भले ही सद्कर्मों के मार्ग में उसे कितने भी दुःख क्यों न सहने पड़े, इस तरह कहा जा सकता है कि दर्शन ने मानवीय जीवन में दुःखों से मुक्ति पाने का मार्ग प्रस्तुत किया है।
- दर्शन मानवीय जीवन के मूल्यों तथा मापदंडों का निर्धारण करता है, तथा मनुष्य को सद्कर्मों हेतु प्रेरित करता है।
- दर्शन शास्त्र में तत्व मीमांसा तथा ज्ञान मीमांसा, मनुष्य को स्वयं के प्रति तथा जगत के प्रति विभिन्न जिज्ञासाओं का समाधान तो प्रस्तुत करता ही है, साथ ही साथ दर्शन एक श्रेष्ठ और गौरवपूर्ण मानवीय जीवन के विकल्प भी प्रस्तुत करता है।
- दर्शन शास्त्र ने मनुष्य के लिए शुभ-अशुभ, सत्य-असत्य, कर्तव्य-अकर्तव्य, सौंदर्य-असौंदर्य, पाप-पुण्य, कर्म-अपकर्म, जैसे मानकों का निर्धारण किया है!
- दर्शनशास्त्र ने तर्कसंगत, नीतिशास्त्र, तथा सौंदर्यशास्त्र द्वारा श्रेष्ठ गुणों के मानकों का निर्धारण किया है
- इन श्रेष्ठ गुणों को स्वीकार करके ही मनुष्य जीवन के सार्थकता को प्रतिपादित किया गया है!

जीवन मूल्य और चिंतन

किसी समाज के विचार, सिद्धांत, राय, भावना और ऐसे ही भावों के मेल से जो विचारधारा बनती है उसे समाज के मूल्य कहते हैं। मूलतः शांति, अध्यात्म, बड़ों का आदर, संयुक्त परिवार, व्रत-त्यौहार, खुशी, सत्कार और अतिथि सत्कार, ये सब वो चीजें हैं जिसे भारतीय मूल्यों व परम्पराओं का एक हिस्सा माना गया है।

भारतीय उपमहाद्वीप की छवि हमेशा एक शांतिपूर्ण क्षेत्र के रूप में रही है जिसने समय वृत्त पर ज्ञानी व संत पैदा किये, कर रहा है और करेगा स कुछ सभ्यताओं ने भारतीय मूल्यों का आकलन करते हुए इन्हें जंगली व सामाजिक तौर पर अविकसित भी कहा, लेकिन प्रेम व शांति संपदा या सिद्धांतों से प्राप्त नहीं होती।

भारतीय समाज एक अहंकार रहित समाज रहा है इसका प्रमाण यही है कि यहाँ दूसरे मनुष्य का आदर-सम्मान न सिर्फ उनके गुणों व ज्ञान के अनुसार होता था परन्तु उनकी उम्र के आधार पर होता था।

यह वो संस्कृति है जो हमेशा से ज्यादा मेल मिलाप में विश्वास रखती है स किसी समाज शास्त्री ने कहा है "मनुष्य एक सामाजिक प्राणी है और वह समाज के बिना जीवित नहीं रह सकता स" भारतीय समाज के लोग जो हमेशा से संयुक्त परिवार में रहने पर विश्वास करते आये हैं इनका लगभग हर त्यौहार हर सामाजिक कार्यक्रम इस तरह से रचित है कि लोग ज्यादा से ज्यादा एक दूसरे से मेल मिलाप करते रहेद्य दीपावली, होली व रक्षाबंधन इसका एक प्रमाण है। ये भारतीयों के ही मूल्य रहे हैं कि वो हर इंसान व जीव के सत्कार में विश्वास रखते हैं क्योंकि हमारा मानना रहा है कि हर जीव में परमात्मा का वास है।

मेरा जिस जगह से सम्बन्ध है वहाँ हमेशा से ये रीति रही है कि घर में जब भी भोजन बनाया जाता था तो हमेशा दो रोटी अतिरिक्त बनायी जाती थी इस उम्मीद से, कि हो सकता है कोई अतिथि आ जायै। जिस समाज में अतिथियों के लिए इतना सत्कार है उसके ये मूल्य अपने आप में बड़े अनूठे और प्रिय हैं।

अगर वर्तमान समय में भारतीय समाज के सामाजिक मूल्यों कि बात की जाये तो लोग आज भी पुराने मूल्यों के बारे में बात करते हैं स लेकिन वो सही रूप में उन मूल्यों का कितना पालन कर रहे हैं वो कुछ सोचनीय है।

शांति व प्रेम बात की जाये तो वो समाज में अभी भी विद्यमान है परन्तु समाज की प्राथमिकता में नहीं आते स समाज अध्यात्म की परिभाषा को अपने हिसाब से बदलता जा रहा है अब लोग अध्यात्म को आत्मा में नहीं बल्कि किताबों में ढूँढते हैं।

बड़ों का आदर करने वाला मूल्य धीरे-धीरे घटता चला जा रहा हैद्य संयुक्त परिवार में रहने की रीति भी धीरे-धीरे अप्रिय होती जा रही है स त्यौहार एक बोझ का रूप लेते जा रहे हैं फिर भी समाज का एक हिस्सा है। और अगर बात करे उपवास की तो उपवास के बारे में एक संत के विचार कुछ इस प्रकार हैं।

"उपवास का अर्थ होता है उपवास मतलब जिस जगह मैं हम वास कर रहे हैं उससे अलग एक छोटी सी जगह में वास द्य उपवास का मतलब है जिस दुनिया में हम रह रहे हैं उससे अलग एक आत्मिक दुनिया में वास या आत्म चिंतन।" उपवास नामक परम्परा अब आत्म चिंतन कम किन्तु भूके रहने की परम्परा ज्यादा बनकर रह गयी है।

इसी तरह हमारे बहुत से मूल्यों में परिवर्तन होता जा रहा है उसका कारण शायद यह है कि भारतीय संस्कृति अब सिर्फ भारतीय संस्कृति नहीं रही है। इस दुनिया कि किसी भी समाज कि संस्कृति सिर्फ उस तक सीमित नहीं रह गयी है। विचारों के आदान प्रदान के रास्ते बढ़ चुके हैं और विश्व कि सारी संस्कृतिया एक बड़ी

संस्कृति कि और बढ़ती जा रही है जिसे शायद कहेंगे "विश्व संस्कृति" हर संस्कृति एक दूसरे के आचार-विचार आदान-प्रदान कर रही है शायद इसी का कारण है कि भारतीय समाज का अब संयुक्त परिवार से विश्वास हटता जा रहा है। भारतीय समाज अपनी अहंकार रहित प्रवृत्ति खोता जा रहा है। बड़े अच्छे आदर्श के रूप में अपने आप को पेश नहीं कर पा रहे हैं और छोटे पुराने मूल्यों के उपर उनका आकलन करते हुए उनके प्रति आदर खोते जा रहे हैं।

"एक शांतिपूर्ण व खुशहाल समाज कि रचना पहले व्यक्तिगत स्तर पर शुरू होती है आर फिर वहाँ से ये क्रिया पारिवारिक स्तर तक फैलती है और फिर व्यक्ति के पड़ोस तक, फिर व्यक्ति के समुदाय तक और उसी तरह आगे तक बढ़ती चली जाती है"

—तेनजिन ग्यात्सो, चोहदवे व वर्तमान दलाई लामा

उपर लिखी पंक्तियों के अनुसार किसी भी सामाजिक मूल्य का पालन पहले व्यक्तिगत स्तर पर होता है बाद में बाकि स्तरों पर होता है द्यलेकिन वर्तमान भारतीय समाज का एक बड़ा हिस्सा इस परिभाषा के विपरीत ही चलता प्रतीत हो रहा है हर व्यक्ति को शांति की आकांशा पहले दूसरे से है हर व्यक्ति को आदर की आकांशा पहले दूसरे से है बड़ों का सत्कार एक आत्मिक भाव से ज्यादा एक सामाजिक भाव बन गया है

हर किसी को नियम तो बता तो दिया गया है की बड़ों का सम्मान करो पर सही समय पर यह कभी नहीं बताया गया की क्यों किया जाये? हर व्यक्ति पहले दूसरे के विचारों को मथने में ज्यादा उत्सुक है न की आत्ममंथन में बदलते मूल्यों को देखते हुए ये ही बात उपयुक्त लगती है कि

"पहले लोग जीने के लिए खाते थे,
अब लोग खाने के लिए जीते हैं

अब जिन मूल्यों का पालन हो रहा है या हम जिन मूल्यों को बना रहे हैं वो आने वाले समय में भारतीय समाज के लिए हितकारी रहेंगे या नहीं इसका फैसला तो समय ही करेगा।

“ज्ञानियों ने हमेशा जन्म लिया है, ले रहे हैं और लेंगे परन्तु इस बात से कोई फर्क नहीं पड़ता, क्योंकि एक सभ्यता या संस्कृति जोड़ होती है उन सब चीजों का जो समाज करता है या सोचता है भले ही वो कितना भी मूर्खतापूर्ण हो” — बेनाम

अतः फैसला समाज को करना है कि वो किस तरह की सभ्यता की रचना करना चाहते हैं।

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**DISTRIBUTED ARCHITECTURE IN ELECTRONIC LIBRARIES IN
DIGITAL ENVIRONMENT**

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ABSTRACT:

The present work consists in the development of a modular and distributed architecture for digital libraries, in which data and files reside on one or more servers and clients request for the data or file. It also discusses the role of distributed architecture in digital libraries and the benefits of using it in the digital era.

Introduction:

A distributed database is a database that is under the control of a central database management system, in which storage devices are not all attached to a common CPU. Database may be stored in multiple computers located in the same physical location, or may be dispersed over a network of interconnected computers.

Collections of data or files can be distributed across multiple physical locations. A distributed database can reside on network servers on the Internet, intranets or extranets, or on other company networks. Replication and distribution of databases improve database performance at end-user worksites.

A distributed database management system is software for managing databases stored on multiple computers in a network. A distributed database is a set of databases stored on multiple computers that typically appears to applications on a single database. Consequently, an application can simultaneously access and modify the data in several databases in a network.

To ensure that the distributive databases are up to date and current, there are two processes: replication and duplication. Replication involves using specialized software that looks for changes in the distributive database. Once the changes have been identified, the replication process makes all the databases look the same. The replication process can be very complex and time-consuming depending on the size and number of the distributive databases. This process can also require a lot of time and computer resources. Duplication on the other hand is not as complicated. It basically identifies one database as a master and then duplicates that database. The duplication process is normally done at a set time after hours. This is to ensure that each distributed location has the same data. During the duplication process, changes to the master database only are allowed. This is to ensure that local data will not be overwritten. Both of the processes can keep the data current in all distributive locations

CATEGORIES OF DISTRIBUTED ARCHITECTURE:

Various hardware and software architectures are used for distributed environment. At the lowest level, it is necessary to interconnect multiple CPU with some sort of network, regardless of whether that network is printed on to a circuit board or made up of loosely coupled devices and cables. At a higher level, it is necessary to interconnect the processes running on those CPUs with some sort of communication system.

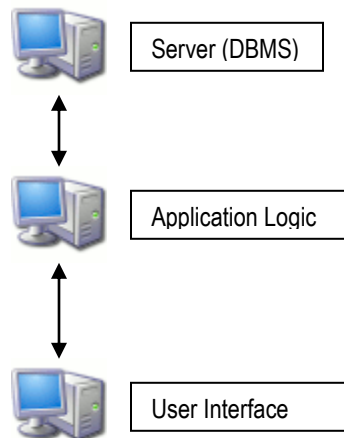
The architecture or categories of Distributed computing are as follows:

a) Client Server

It describes the relationship between two computers in which one (client) makes a service or data request to another (server).

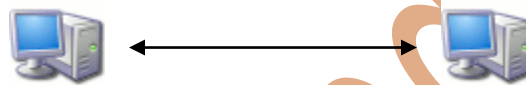
b) THREE-TIER ARCHITECTURE/ N-TIER ARCHITECTURE

In three-tier architecture is a client server architecture in which, the presentation (User Interface), the application (Logic) and data management are logically separate processes.



c) **PEER TO PEER**

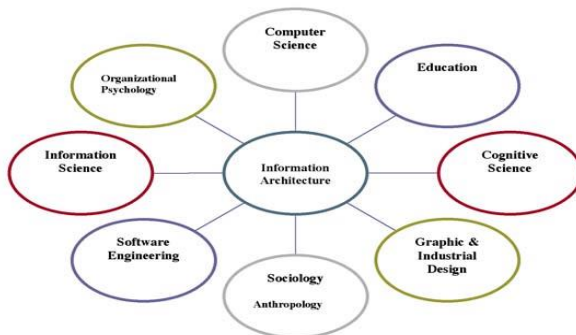
Architecture where there is no special machine or machines that provide a service or manage the network resources. Instead all responsibilities are uniformly divided among all machines, known as peers. Peers can serve both as clients and servers.



INFORMATION ARCHITECTURE:

According to typical definitions, architecture is the “art and science of building structures.” As Wyllys (2000) observes, information architecture shares its history with that of the pure discipline of architecture. In fact, it was the chairman of the American Institute of Architects, Richard Saul Wurman, who in 1976 first coined the term “information architecture.” Wurman envisioned information architecture as the science and art of creating an instruction for organized space. He viewed the problems of gathering, organizing, and presenting information as closely related to the problems an architect faces in designing a building that will serve the needs of its occupants. According to Wurman, the architect must:

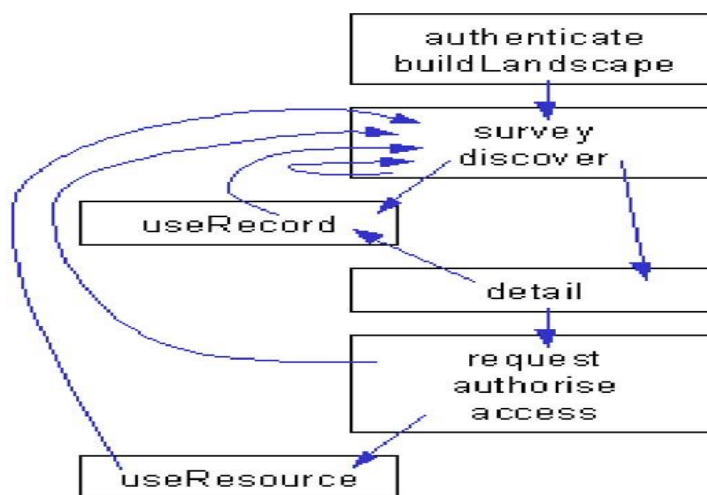
Information architecture is a discipline that structures information sites and services. Often found in conjunction with information architecture is the term “content management”, defined as the discipline of collecting, managing, and publishing content, often with the help of sophisticated software-based content management systems. Although information architecture may imply content management, the two terms are not interchangeable. Information architecture is inherently multidisciplinary as Andrew Dillon (2000) has been apt to note (see Figure 1).



DISTRIBUTED ELECTRONIC RESOURCE

The Distributed Electronic Resource (DER) is of interest as an international digital library test bed that featured a variety of quality-assured electronic and physical resources including scholarly journals, monographs, textbooks, learning objects, abstracts, manuscripts, maps, music scores, still images, geospatial images, and other kinds of vector and numeric data, as well as moving picture and sound collections.

DNER's service-based architecture accesses content in the form of collections held locally, JISC collections made available through DER content providers, and external proprietary collections.



DER supports three high-level activities: discovery, access, and use. As can be seen in Figure 8, the functional architecture consists of an iterative process that starts with interaction (authenticate and build Landscape), which initiates discovery of resources (survey, discover), then access of resources (detail, request, authorize, access), and finally leads to use (use Record, use Resource).

Digital Library: Traditional libraries have maintained the conventional documents like books, video films, audio types, records, microfilms etc. In this system, there is no possibility of access of everyone at a particular time. Now, conventional documents are replacing by CD Rom, DVD Rom etc. The phenomenal growth of Internet is most exciting development for library, now it is possible to reach the material in particular library or any other library in the world. The concept of digital library advocated some time back is the virtual reality with invent of new technology in library. "Electronic libraries will become realities only after all the books likely to be in demand are available on optical disk it will take a long time and involve a massive investment It will also be necessary to produce electronic readers locally at affordable prices". Information technology revolution brings a great honour to the present library system. Now, the various operations of library, as collecting information, processing, organizing and distributing are handled by electronically by computer. In this system, users access information fully in electronic format on computer networks without any barrier of space and time. Information Technology has reduced bulk of printed materials in the library. Now, library is leading towards the paperless library. The term digital libraries refer to a new way of carrying the functions of library encompassing new types of electronic information resources, new approach to acquisition, cataloguing, classification and retrieval system. It is computer based information system for acquiring, storing, organizing, distributing and displaying the materials.

Distributed Environment in Digital Libraries: Data or files are stored in one or more servers. Clients are only dummy entities, they just access the resource from the server(s). Digital library architecture is based on the following principles:

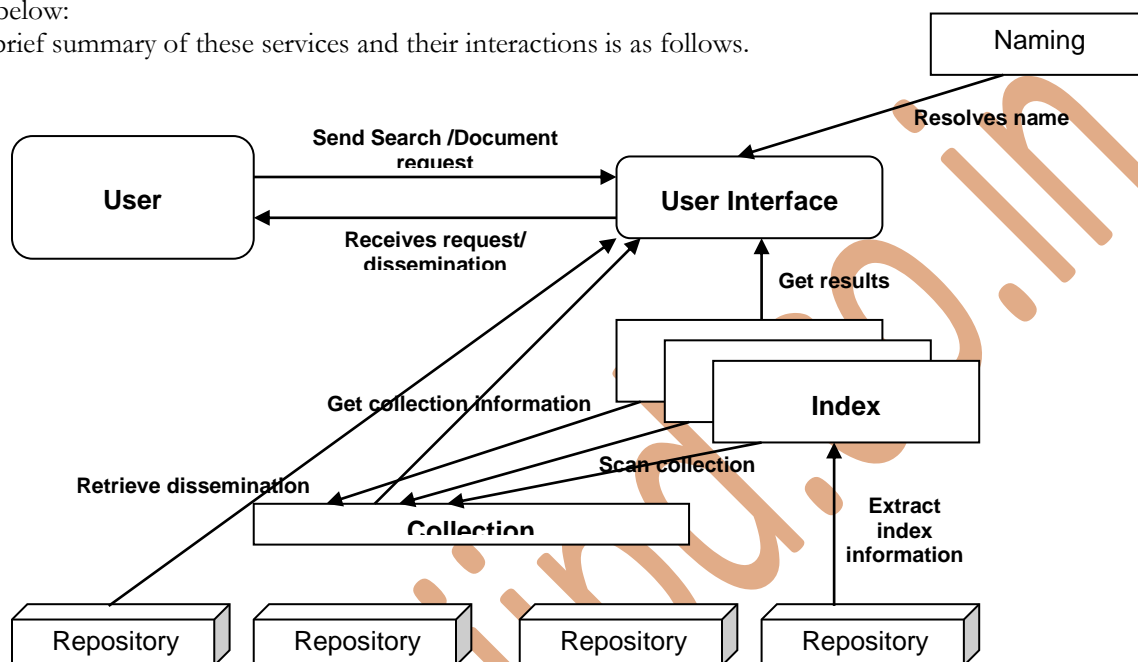
Open Architecture - Following well-known software engineering principles, the functionality of a digital library system is available in the form of distinct function units (services), each of which has operational semantics exposed through an open protocol.

Federation - Digital Library Systems are managed aggregations of these functional units (or services) and the resources to which they provide access. New functionality can be added to these systems through the implementation of value-added services, which interact with existing services using established protocols.

Distribution - The components (and content) of a digital library may be spread over the global Internet, but are presented to the user as a single uniform system.

Cornell Reference Architecture for Distributed Digital Libraries (CRADDL) defines the digital library architecture as below:

A brief summary of these services and their interactions is as follows.



, storage, and access to digital objects. **Digital Objects** are identified by unique names that are registered with the naming service. **The index service** provides the mechanism for discovery of digital objects via query. **The collection service** provides the mechanisms for the aggregation of access to sets of digital objects and services into meaningful collections. **User interface** services or gateways provide human-centered entry points to the functionality of the digital library.

Conclusion

Information architecture is an inherent in the design and development of the digital libraries. Functional, technical, and landscape architectures combine to form the structure of a digital library. The principal role of the information architect is to define and document these structures. While the digital libraries utilize a variety of architectures, they share many common attributes

Now, distributed content can be immediately and uniformly available. The current World Wide Web demonstrates the advantages of such universal access, but it also shows its flaws. We have described in this paper a mechanism that facilitates such organization, specialization, and selection in a distributed information space. In this paper, we have described the implementations of the collection service. That is under development as part of digital library architecture research

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**RADIUM CONCENTRATION AND RADON EXHALATION MEASUREMENTS
IN ASBESTOS****SANJEEV KUMAR GUPTA**

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ABSTRACT

In the present study, measurement of radium concentration and radon exhalation rates in some asbestos containing materials collected from various industries of Faridabad and Gurgaon was carried out. Radon is a ubiquitous air pollutant to which all persons are exposed. It has been established through various studies that asbestos is known emitter of radon and thus carcinogenic. It is therefore fundamental and justified to make a quantitative assessment of radon and radium concentrations in asbestos from health and hygiene point of view. LR – 115, Type II plastic track detectors known as SSNTDs were used to measure the radium and radon concentrations. The radium concentration varied from 0.108 to 0.334 Bq/kg with an average of 0.206 ± 0.026 Bq/Kg and the radon concentration varied from 502.95 to 1627.22 Bq/m³ with an average of 982.24 ± 120.93 Bq/m³. The radon mass exhalation rate varied from 19.58 to 60.53 mBqkg⁻¹h⁻¹ with an average of 37.268 ± 4.43 mBqkg⁻¹h⁻¹ and radon surface exhalation rate varied from 361.63 to 1118.02 mBqm⁻²h⁻¹ with an average of 688.39 ± 82.22 mBqm⁻²h⁻¹ respectively in different asbestos samples.

Keywords: Radon, radium, track detectors, exhalation rate, concentration

INTRODUCTION

Radium is a naturally occurring radioactive element present in trace amounts throughout the earth's crust. The decay of radium leads to radon in the environment (indoor and outdoor), soil, ground water, oil and gas deposits which contributes the largest fraction of the natural radiation dose to population and leads to various respiratory functional disorders and lung cancer. (BIER VI 1999)

Asbestos is the name given to a group of minerals that occur naturally in the environment as bundles of fibers that can be separated into thin durable threads. These fibers are resistant to heat, fire, and chemicals & do not conduct electricity (1). For these reasons, asbestos has been used widely in many industries such as building & construction industries have used it for strengthening cement & plastic, for insulation, fireproofing, roofing & sound absorption. Ship building industry has used it to insulate boilers, steam pipes & hot water pipes. The automotive industry has used it in vehicle brakeshoes & clutch plates. It has also been used in ceiling and floor tiles, paints, coating & adhesives etc.

Asbestos has been classified as a known human carcinogen by the U. S. Department of Health and Human Services, the Environment Protection Agency (EPA) and the International Agency for Research on Cancer (1,2). Overall evidence suggests that there is no safe level of asbestos exposure (2,3,4), So the people who are exposed to asbestos on a regular basis, most often in an industry where they work directly with the material or through substantial environmental contact can become ill (6). So, it is justified to make a quantitative assessment of radon and radium concentration in asbestos containing materials from health and hygiene point of view.

MATERIALS & METHODS

In the present study some samples of materials containing asbestos have been collected from various auto and plastic industries of Faridabad and Gurgaon. For measurement of radon and its progeny concentration, track etch technique was used which is simple and inexpensive. A known quantity (100g) of collected samples was put in the cans. LR-115, type II detectors were fixed at the inner side of lid such that the sensitive side faces the material containing asbestos. The cans were tightly closed and sealed. The exposure time of the detector was 100 days. At

the end of the exposure time the detectors were removed and subjected to a chemical etching process in 2.5 NaOH solutions at 60° C for one and half hour. The tracks produced by Alpha particles were observed and counted under an optical Olympus microscope at magnification X400. Large numbers of graticular fields of the detectors were scanned to reduce statistical errors. The geometrical parameters of the detectors and containers were:

LR-115, type II, Plastic Track Detectors (1cm X 1cm), Plastic Cans with diameter 8.3cm, Height 12.3 cm, Volume 665.78 cm³.

Calibration factor used was 0.020 tracks/cm²/day = 1Bq/m³.

Radium Concentration has been calculated using the relation

$$C_{Ra} = \rho h A / K T_e M$$

Where ρ = Background corrected Alpha track density due to radon (tracks/cm²)

h = Distance between the detector and top of the sample(m).

A = Surface Area of the sample (m²)

K = sensitivity Factor (tracks/cm²/day/Bq/m³)

M = Mass of the sample (kg)

T_e = Effective Exposure Time (days) given by the relation as

$$T_e = T [1 - e^{-\lambda T}]$$

For Large exposure time $[1 - e^{-\lambda T}]$ reduces to unity and $T_e = T$ (total time of exposure)

Exhalation Rates (E_x) were calculated using the equations (1) and (2) used by various researchers.

For mass Exhalation rate (Bq/kg/h)

$$E_x = \frac{CV\lambda/M}{T + 1/\lambda (e^{-\lambda T} - 1)}$$

And for surface Exhalation rate (Bq/m²/h)

$$E_x = \frac{CV\lambda/A}{T + 1/\lambda (e^{-\lambda T} - 1)}$$

Where C = integrated radon exposure (Bqm⁻³h)

V = Volume of air in the can (m³)

T = Time of exposure (hrs)

λ = Decay constant for radon (h⁻¹)

A = Area (m²) covered by the can or Surface area of the sample

RESULTS AND DISCUSSION

The calculated values of radium concentration, radon concentration, Mass and surface exhalation rate or radon for materials containing asbestos samples collected from various industries of Faridabad and Gurgaon are presented in table 1. The radium concentration varied from 0.108 to 0.334 Bq/kg with an average of 0.206 ± 0.026 Bq/Kg and the radon concentration varied from 502.95 to 1627.22 Bq/m³ with an average of 982.24 ± 120.93 Bq/m³. Radon mass exhalation rate varied from 19.58 to 60.53 mBqkg⁻¹h⁻¹ with an average of 37.268 ± 4.43 mBqkg⁻¹h⁻¹ and radon surface exhalation rate varied from 361.63 to 1118.02 mBqm⁻²h⁻¹ with an average of 688.39 ± 82.22 mBqm⁻²h⁻¹ respectively in different asbestos samples.

Table 1

Sample No.	Radium Concentration (Bq/kg)	Radon Concentration (Bq/m ³)	Radon Exhalation Rate	
			Mass (mBq/kg/hr)	Surface (mBq/m ² /hr)
F1	0.325	1568.04	59	1089.89
F2	0.193	887.57	34.93	645.28
F3	0.138	650.88	25.05	462.8

F4	0.196	946.74	35.63	658.04
F5	0.334	1627.22	60.53	1118.02
G1	0.264	1272.19	47.87	884.25
G2	0.108	502.95	19.58	361.63
G3	0.167	798.81	30.41	561.6
G4	0.149	710.06	27.03	499.21
G5	0.18	857.98	32.65	603.21
AM±SE	0.206±0.023	982.24±120.93	37.268±4.434	688.39±82.22

The variations of mass and surface exhalation rate with respect to radium concentration are shown in Fig 1 and Fig 2.

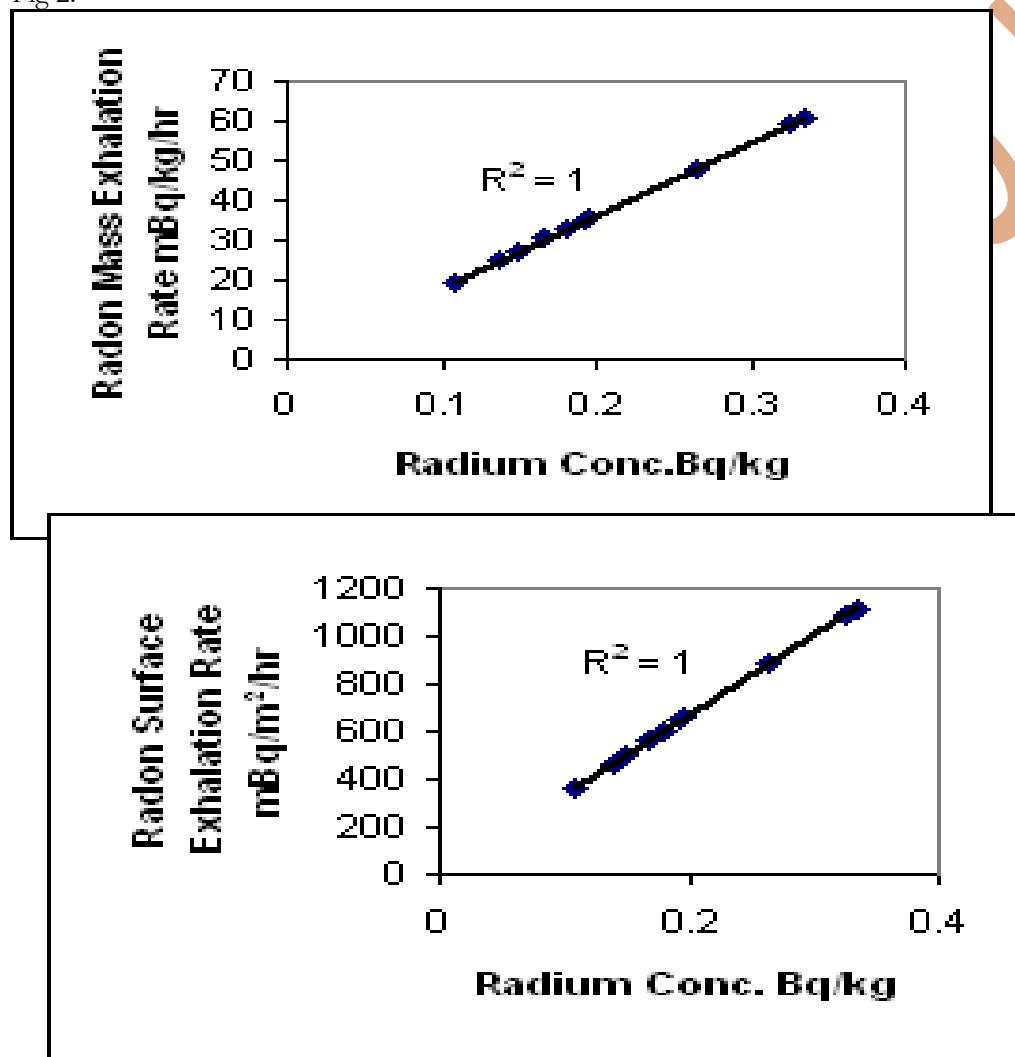


Fig. 2: Graph between Radium Conc. and Radon Surface Exhalation Rate

Conclusion

The radium concentration varied from 0.108 to 0.334 Bq/kg with an average of 0.206 ± 0.026 Bq/Kg and the radon concentration varied from 502.95 to 1627.22 Bq/m³ with an average of 982.24 ± 120.93 Bq/m³. Radon mass exhalation rate varied from 19.58 to 60.53 mBqkg⁻¹h⁻¹ with an average of 37.268 ± 4.43 mBqkg⁻¹h⁻¹ and radon

surface exhalation rate varied from 361.63 to 1118.02 mBqm⁻²h⁻¹ with an average of 688.39 ± 82.22 mBqm⁻²h⁻¹ respectively in different asbestos samples. The measurements indicate moderate to high values of radium concentration and exhalation rates. The different values may be due to the fact that the samples were collected from different asbestos using organizations. The findings suggest that the asbestos has inborn radioactivity and suitable safety measures must be taken while using that so that the health of the workers in not affected adversely.

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ABSTRACT

This discussion focuses on customer perceptions and satisfaction towards home loans, which is an important aspect of the lending industry. Home loans involve significant financial commitments and long-term relationships between customers and lenders, and it's essential for lenders to understand their customers' needs and preferences.

The discussion begins by highlighting the factors that influence customer perceptions and satisfaction, including interest rates, loan terms and conditions, customer service, and the ease of the application process. The impact of a lender's reputation and online presence on customer perceptions is also discussed.

Next, the discussion explores how lenders can enhance customer satisfaction by providing excellent service and favorable loan terms. This includes offering competitive interest rates, transparent loan terms, and personalized customer service. The benefits of customer satisfaction, such as brand loyalty and increased profitability, are also highlighted.

Overall, this discussion emphasizes the importance of understanding and meeting customer needs in the lending industry, particularly in the context of home loans. By prioritizing customer satisfaction, lenders can build strong, long-term relationships with their customers and improve their bottom line.

INTRODUCTION

A home loan is a significant financial decision that involves a long-term commitment, and it's important for customers to feel confident in their lender and loan terms. Therefore, understanding customer perceptions and satisfaction towards home loans is crucial for lenders to provide better service and value to their customers.

This topic is especially relevant in today's market, where interest rates, loan terms, and customer service can vary greatly among lenders. Customer perceptions and satisfaction can impact a lender's reputation, brand loyalty, and ultimately, their bottom line.

In this discussion, we will explore the factors that influence customer perceptions and satisfaction towards home loans, including interest rates, loan terms and conditions, customer service, and the ease of the application process. We will also examine how lenders can enhance customer satisfaction by providing excellent service and favorable loan terms. By understanding customer perceptions and satisfaction, lenders can create a positive image, retain their customers, and attract new ones.

Customer perceptions and satisfaction towards home loans can vary based on several factors, such as the lender's reputation, interest rates, loan terms and conditions, customer service, and the ease of the application process. Here are some of the factors that may influence customer perceptions and satisfaction towards home loans:

Interest rates: The interest rate on a home loan is a critical factor that influences customer perceptions and satisfaction. A low-interest rate can attract customers and create a perception of value, while high-interest rates can be a turn-off.

Loan terms and conditions: Home loan terms and conditions can also affect customer satisfaction. These include factors such as the length of the loan, prepayment penalties, late payment fees, and other charges.

Customer service: The level of customer service provided by the lender can have a significant impact on customer satisfaction. Good customer service can create a positive perception of the lender and make customers feel valued.

Application process: The home loan application process should be easy and straightforward. A complicated or lengthy process can frustrate customers and make them less likely to apply.

Reputation: The reputation of the lender can also influence customer perceptions and satisfaction. Lenders with a good reputation for providing quality service and favorable loan terms are more likely to be perceived positively by customers.

Online presence: With the rise of online banking, customers may also consider the lender's online presence, including their website, mobile app, and digital tools. A user-friendly online platform can enhance customer satisfaction.

Customer perceptions and satisfaction towards home loans depend on several factors, including interest rates, loan terms, customer service, the application process, reputation, and online presence. Lenders that prioritize these factors and provide excellent service and loan terms are more likely to create satisfied customers.

CUSTOMER PERCEPTIONS AND SATISFACTION

Customer perceptions and satisfaction refer to how customers feel about a product or service and their overall experience with a company. In the context of home loans, customer perceptions and satisfaction are essential to a lender's success. Customers who perceive a lender positively are more likely to do business with them, recommend them to others, and continue their relationship in the future.

Positive customer perceptions and satisfaction are influenced by several factors, such as interest rates, loan terms and conditions, customer service, and the ease of the application process. Customers are more likely to perceive a lender positively if they offer competitive interest rates, transparent loan terms, and excellent customer service. The ease of the application process also plays a critical role in customer satisfaction, as a complicated or lengthy process can frustrate customers and deter them from applying.

On the other hand, negative perceptions and dissatisfaction can arise from issues such as high-interest rates, hidden fees or charges, poor customer service, and a difficult application process. These factors can lead to customers feeling undervalued, frustrated, or mistreated, ultimately damaging the lender's reputation and bottom line.

Overall, lenders who prioritize customer perceptions and satisfaction are more likely to build strong, long-term relationships with their customers, enhance their reputation, and improve their profitability. By understanding and meeting customer needs and preferences, lenders can create a positive image, retain their customers, and attract new ones.

PROBLEMS FACED BY THE CUSTOMERS

Customers may face various problems when obtaining a home loan, which can negatively impact their perceptions and satisfaction. Some of the common problems faced by customers include:

- **High-interest rates:** High-interest rates can make it difficult for customers to afford their home loan repayments, reducing their overall satisfaction and causing financial stress.
- **Hidden fees and charges:** Customers may be caught off guard by hidden fees and charges that were not disclosed upfront, leading to a sense of mistrust and dissatisfaction.
- **Complicated loan terms and conditions:** Complex loan terms and conditions can be difficult for customers to understand, making it challenging for them to make informed decisions about their loan and leading to confusion and frustration.
- **Poor customer service:** Customers may have negative experiences with customer service representatives, leading to dissatisfaction and frustration with the lender.
- **Lengthy or complicated application process:** A lengthy or complicated application process can discourage customers from applying for a loan, or lead to frustration if the process is difficult to navigate.
- **Lack of transparency:** Customers may feel that lenders are not being transparent about their loan terms or processes, leading to a lack of trust and negative perceptions.

Overall, these problems can significantly impact customer perceptions and satisfaction towards home loans. It is crucial for lenders to address these issues and prioritize the needs and preferences of their customers to enhance their reputation and retain their customers.

Impact of Home Loan on Banking system

Home loans have a significant impact on the banking system, as they are a critical component of the lending industry. Home loans represent a significant portion of a bank's loan portfolio and are a crucial source of revenue for banks. The following are some of the ways in which home loans impact the banking system:

- **Revenue generation:** Home loans are a significant source of revenue for banks, generating interest income over the loan term. The interest income earned from home loans can help banks achieve their financial targets, such as profit and growth objectives.
- **Risk management:** Banks must manage the risks associated with home loans, such as credit risk, interest rate risk, and liquidity risk. Effective risk management can help banks minimize their exposure to potential losses and protect their reputation.
- **Liquidity management:** Banks must also manage their liquidity to ensure they have sufficient funds to meet their lending obligations, including home loans. This involves balancing loan demand with the need for cash reserves and other liquid assets.
- **Economic impact:** Home loans can have a broader economic impact, as they can stimulate the housing market, creating jobs and contributing to economic growth. Home loans can also provide a way for people to build wealth and achieve their financial goals.

The home loans are a crucial aspect of the banking system, providing revenue for banks, while also helping individuals achieve their dreams of homeownership. It is important for banks to manage the risks associated with home loans effectively and prioritize the needs and preferences of their customers to enhance their reputation and retain their customers.

CONCLUSION

In conclusion, customer perceptions and satisfaction towards home loans are critical to the success of lenders and the banking system as a whole. Customers who perceive a lender positively are more likely to do business with them, recommend them to others, and continue their relationship in the future. On the other hand, negative perceptions and dissatisfaction can damage the lender's reputation and bottom line.

To enhance customer satisfaction, lenders must prioritize the needs and preferences of their customers, offer competitive interest rates, transparent loan terms, and excellent customer service. Lenders must also manage the risks associated with home loans effectively and balance loan demand with the need for cash reserves and other liquid assets.

Home loans are a significant source of revenue for banks and can stimulate the housing market, creating jobs and contributing to economic growth. By prioritizing customer perceptions and satisfaction, lenders can build strong, long-term relationships with their customers, enhance their reputation, and improve their profitability.

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ROLE OF MACRO ECONOMIC POLICIES IN INDIA

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ABSTRACT

This article discusses the role of macroeconomic policies and institutions in India's economic development. The article provides an overview of the instruments of fiscal and monetary policy used by the government and the Reserve Bank of India (RBI) to manage the economy, promote growth, and maintain financial stability. The article also discusses the budgetary framework in India and the RBI's role in regulating the banking sector, managing foreign exchange reserves, and promoting financial inclusion. The effective implementation of macroeconomic policies and the role of institutions like the RBI are crucial to achieving India's economic goals and ensuring sustainable economic growth and development.

Keyword: Macro Economics, Policies, Fiscal Policy. RBI

INTRODUCTION

Macroeconomic policies are the tools used by governments to influence and stabilize the overall performance of an economy. In India, macroeconomic policies play a vital role in driving economic growth, promoting social welfare, and reducing poverty and inequality. The Indian government employs a range of macroeconomic policies such as fiscal policy, monetary policy, exchange rate policy, and trade policy to achieve these goals. These policies are designed to control inflation, promote sustainable growth, maintain financial stability, and ensure that India's exports are competitive in global markets. However, the effectiveness of these policies depends on a range of factors, including global economic conditions, domestic political stability, and the ability of policymakers to implement these policies effectively. In this context, it is important to understand the role of macroeconomic policies in India's economic development and the challenges faced by policymakers in achieving their objectives.

Macroeconomic policies play a crucial role in shaping the economic growth and development of India. Some of the key macroeconomic policies in India include fiscal policy, monetary policy, exchange rate policy, and trade policy.

Fiscal policy refers to the use of government spending and taxation to influence the economy. In India, the fiscal policy is used to stimulate economic growth, reduce inequality, and control inflation. The government uses various fiscal instruments such as subsidies, tax breaks, and public expenditure to achieve these objectives.

Monetary policy, on the other hand, is used to control the money supply and interest rates to achieve macroeconomic goals such as inflation control, maintaining financial stability, and promoting economic growth. The Reserve Bank of India (RBI) is responsible for implementing monetary policy in India.

Exchange rate policy refers to the management of the value of the Indian currency against other currencies. India has a managed floating exchange rate system, where the exchange rate is determined by market forces with some intervention by the RBI to ensure stability.

Finally, trade policy is used to promote international trade and ensure that India's exports are competitive in global markets. The government uses various trade instruments such as import tariffs, export subsidies, and trade agreements to achieve this objective.

Overall, the macroeconomic policies of India are designed to ensure sustainable economic growth, promote social welfare, and reduce poverty and inequality. However, the effectiveness of these policies depends on a range of factors, including global economic conditions, domestic political stability, and the ability of policymakers to implement these policies effectively.

INSTRUMENTS OF FISCAL POLICY IN INDIA

Fiscal policy refers to the use of government spending and taxation to influence the economy. The Indian government uses various instruments of fiscal policy to achieve macroeconomic objectives such as promoting economic growth, reducing inequality, and controlling inflation. Some of the key instruments of fiscal policy in India are:

1. **Public Expenditure:** The government uses public expenditure to stimulate economic growth and create employment opportunities. Public expenditure is often directed towards infrastructure development, education, healthcare, and other social welfare programs.

2. **Taxation:** The government uses taxation as an instrument of fiscal policy to generate revenue, reduce inequality, and influence economic behavior. The government can increase or decrease taxes on income, consumption, and wealth to achieve these objectives.
3. **Subsidies:** The government uses subsidies to provide support to specific industries, promote exports, and reduce the cost of essential goods and services. For example, the government provides subsidies for fertilizer, food, and fuel to support agriculture and maintain food security.
4. **Public Debt:** The government can borrow money to finance its expenditure and investments. Public debt can be used to finance infrastructure development, social welfare programs, and other public investments.
5. **Fiscal Rules:** Fiscal rules are policy frameworks that guide the government's fiscal policy decisions. These rules are designed to promote fiscal discipline, reduce the risk of fiscal deficits and debt, and ensure long-term fiscal sustainability.

The Indian government uses these instruments of fiscal policy to achieve its macroeconomic objectives and promote sustainable economic growth. However, the effectiveness of these policies depends on a range of factors, including global economic conditions, domestic political stability, and the ability of policymakers to implement these policies effectively.

BUDGETARY FRAMEWORK IN INDIA

The budgetary framework in India refers to the process of preparing, presenting, and passing the annual budget of the country. The budget is an important economic policy tool that outlines the government's revenue and expenditure plans for the upcoming financial year. The budgetary framework in India consists of the following components:

1. **Budget Formulation:** The budget formulation process starts with the preparation of estimates of the government's revenue and expenditure. The Ministry of Finance is responsible for preparing the budget estimates, which are then discussed and finalized by the Cabinet.
2. **Budget Presentation:** The budget is presented to the Parliament by the Finance Minister. The budget document contains details of the government's revenue and expenditure plans, tax proposals, and policy initiatives.
3. **Budget Debate:** The budget is debated and discussed by the Parliament, and amendments can be proposed and discussed before the budget is passed.
4. **Budget Implementation:** The budget is implemented by various government departments and agencies. The Ministry of Finance monitors the implementation of the budget and releases funds to the various departments and agencies as per the budget allocations.
5. **Budget Review:** The budget is reviewed periodically to assess its effectiveness and to make necessary adjustments.

The budgetary framework in India is guided by the Fiscal Responsibility and Budget Management Act (FRBM), which was passed in 2003. The FRBM Act sets targets for fiscal deficit and debt levels and provides a framework for fiscal consolidation.

Overall, the budgetary framework in India is an important component of the country's economic policy. It enables the government to set its revenue and expenditure plans and implement policies to promote economic growth and development.

INSTRUMENTS OF MONETARY POLICY IN INDIA

Monetary policy refers to the use of monetary tools by the central bank to influence the economy. In India, the Reserve Bank of India (RBI) is responsible for formulating and implementing monetary policy. Some of the key instruments of monetary policy in India are:

1. **Bank Rate:** The bank rate is the rate at which the RBI lends to commercial banks. Changes in the bank rate affect the lending rates of commercial banks and influence borrowing and spending behavior.
2. **Reserve Ratio:** The reserve ratio is the percentage of deposits that commercial banks must hold in reserve with the RBI. Changes in the reserve ratio affect the amount of money that banks can lend, thereby influencing the money supply and inflation.
3. **Open Market Operations (OMOs):** OMOs involve the buying and selling of government securities by the RBI. When the RBI buys government securities, it injects money into the economy, thereby increasing the money supply. When the RBI sells government securities, it absorbs money from the economy, thereby reducing the money supply.

4. **Liquidity Adjustment Facility (LAF):** LAF is a mechanism used by the RBI to manage short-term liquidity in the market. LAF includes repo and reverse repo operations, which involve the lending and borrowing of funds between the RBI and commercial banks.
5. **Policy Rates:** The RBI sets policy rates, such as the repo rate and reverse repo rate, to influence the money supply and inflation. The repo rate is the rate at which the RBI lends to commercial banks, and These instruments of monetary policy in India are used by the RBI to manage inflation, promote economic growth, and maintain financial stability. The effectiveness of these policies depends on a range of factors, including global economic conditions, domestic political stability, and the ability of policymakers to implement these policies effectively.

ROLE OF RESERVE BANK OF INDIA

The Reserve Bank of India (RBI) is the central bank of India and plays a crucial role in the country's economic development. Some of the key roles of the RBI are:

1. **Formulating Monetary Policy:** The RBI is responsible for formulating and implementing monetary policy in India. The RBI uses various monetary tools to influence the money supply, interest rates, and inflation in the economy.
2. **Regulating the Banking Sector:** The RBI regulates the banking sector in India and ensures that commercial banks operate within a safe and stable environment. The RBI issues licenses to new banks, sets rules for banking operations, and supervises the functioning of banks.
3. **Managing Foreign Exchange Reserves:** The RBI manages India's foreign exchange reserves, which are held in different currencies and assets. The RBI intervenes in the foreign exchange market to manage the value of the rupee and maintain stability in the external sector.
4. **Promoting Financial Inclusion:** The RBI works towards promoting financial inclusion in India by encouraging banks to expand their reach to underserved areas and populations. The RBI also promotes financial literacy and consumer protection.
5. **Conducting Research and Analysis:** The RBI conducts research and analysis on various economic and financial issues to provide policy recommendations to the government. The RBI publishes reports and data on

The RBI plays a crucial role in promoting economic growth, maintaining financial stability, and ensuring a safe and efficient banking system in India. The RBI's policies and decisions have a significant impact on the Indian economy, and it works closely with the government to achieve the country's economic objectives.

CONCLUSION

In conclusion, macroeconomic policies and the role of institutions like the Reserve Bank of India (RBI) play a critical role in shaping India's economic development. Fiscal and monetary policies are key instruments used by the government and RBI to promote economic growth, manage inflation, maintain financial stability, and promote financial inclusion. The budgetary framework in India provides a structured approach to preparing and implementing the government's revenue and expenditure plans, while the RBI plays a crucial role in formulating and implementing monetary policy, regulating the banking sector, managing foreign exchange reserves, and promoting financial inclusion. Overall, the effective implementation of macroeconomic policies and the role of institutions like the RBI are critical to achieving India's economic goals and ensuring sustainable economic growth and development.

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DISCUSS THE MOLECULE CONNECTIVITY IN LIVING CELLS**DR. ANJU**Dept. of Chemistry
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anjukakkar9@gmail.com**ABSTRACT**

The concept of molecule connectivity within living cells represents the intricate web of interactions that govern the fundamental processes of life. This connectivity spans a multitude of levels and encompasses diverse biomolecules, including nucleic acids, proteins, lipids, and carbohydrates, working in concert to orchestrate cellular activities. Genetic information flows through molecular pathways, shaping gene expression and protein synthesis. Cellular signaling networks relay messages that dictate growth, differentiation, and responses to external stimuli. Metabolic pathways interconnect, enabling energy production and molecule synthesis. Cell-cell interactions and structural connectivity maintain multicellular organization and tissue function.

The impact of molecule connectivity is profound and reaches across scientific disciplines and applications. It informs disease mechanisms, spurring advancements in personalized medicine and therapeutic interventions. Technological innovations, such as high-throughput sequencing and computational modeling, have illuminated the complexity of these networks. However, ethical considerations arise as our ability to engineer cellular systems grows.

Understanding molecule connectivity enhances our grasp of evolution, environmental adaptation, and the intricate workings of the brain. It fuels biotechnological breakthroughs, revolutionizing agriculture, medicine, and biomanufacturing. This abstract underscores the significance of molecule connectivity as a cornerstone of life science, its role in shaping our world, and its potential to guide future discoveries and innovations

Keywords: *Molecule Connectivity, molecule synthesis and Living Cells*

INTRODUCTION

The intricate and dynamic world of living cells is governed by a complex network of molecules and their interactions. These microscopic building blocks are responsible for the remarkable diversity of life forms on Earth and play a pivotal role in maintaining cellular structure, function, and communication. The concept of molecule connectivity in living cells refers to the myriad ways in which different molecules are connected and interact to sustain cellular processes. From genetic information storage and transmission to energy production and signal transduction, the connectivity of molecules within cells forms the foundation of life as we know it.

At the heart of molecule connectivity lies the profound interdependence of various biomolecules, including nucleic acids, proteins, lipids, and carbohydrates. These molecules are not isolated entities; instead, they work together in intricate networks that ensure the cell's survival and proper functioning. The study of molecule connectivity in living cells encompasses fields such as cell biology, molecular biology, biochemistry, and systems biology. Understanding how molecules are connected and collaborate within cells provides insights into disease mechanisms, evolution, and potential therapeutic interventions.

This exploration of molecule connectivity delves into the structural relationships, functional pathways, and dynamic interactions that govern cellular processes. From the linear sequence of DNA to the complex three-dimensional structures of proteins and the cascades of chemical reactions involved in metabolism, the interconnectedness of molecules forms a web of life that sustains every living organism. This web extends beyond individual cells to encompass multicellular organisms, where cell-cell communication and coordination are essential for development, homeostasis, and defense.

In the following discussion, we will delve into the diverse aspects of molecule connectivity in living cells, highlighting the roles of different biomolecules and the ways they cooperate to maintain life's intricate dance. We will explore the significance of molecular networks in processes such as gene expression, protein synthesis, cellular signaling, and energy production. By examining these interactions, we can gain a deeper appreciation for the complexity and elegance of life's fundamental building blocks and how they contribute to the remarkable diversity and functionality of living organisms.

MOLECULE CONNECTIVITY IN LIVING CELLS

The cellular landscape is a bustling realm of molecules engaged in intricate networks of interactions, forming the foundation of life's processes. Molecule connectivity in living cells refers to the ways in which various biomolecules collaborate and communicate to ensure the proper functioning, adaptation, and survival of the cell. This connectivity

occurs at multiple levels, encompassing both physical interactions and informational exchanges, and spans a wide array of cellular activities. Let's explore some key aspects of molecule connectivity within living cells:

Genetic Information Flow: Central to molecule connectivity is the transmission of genetic information. DNA, the master molecule, contains the instructions required for cellular activities. This information is transcribed into messenger RNA (mRNA) molecules, which then guide protein synthesis. This flow of genetic information, from DNA to RNA to protein, is a fundamental example of molecule connectivity.

Protein Interactions and Pathways: Proteins are the workhorses of the cell, responsible for carrying out most cellular functions. Their interactions define molecular connectivity. Protein-protein interactions create complex signaling networks, metabolic pathways, and structural assemblies. For instance, enzymes collaborate in metabolic pathways, while signaling proteins relay information to orchestrate cellular responses.

Cellular Signaling: Cell communication relies on the connectivity of signaling molecules. Ligands, such as hormones or growth factors, bind to receptors on the cell surface or inside the cell. This triggers cascades of molecular interactions, transmitting signals that regulate various cellular processes, including growth, differentiation, and immune responses.

Metabolic Networks: Metabolism involves a vast network of interconnected chemical reactions that sustain life by providing energy and building blocks. Molecules are transformed and interconverted in pathways like glycolysis, the citric acid cycle, and oxidative phosphorylation. The connectivity of these pathways ensures efficient energy production and molecule synthesis.

Cellular Architecture: The cellular structure is maintained through molecule connectivity. Lipids form the cell membrane, a dynamic barrier that separates the cell from its environment. Proteins embedded in the membrane mediate transport, signal transduction, and cell adhesion. The cytoskeleton, composed of protein filaments, shapes the cell and facilitates movement of cellular components.

Cell-Cell Interactions: Multicellular organisms rely on cell-cell connectivity for coordinated activities. Cells adhere to each other through specialized proteins and communicate via signaling molecules. This connectivity underlies processes like tissue development, immune responses, and wound healing.

Adaptation and Response: Cells exhibit remarkable adaptability through molecular connectivity. Environmental cues trigger changes in gene expression, leading to adjustments in cellular behavior. This adaptation can involve the activation or repression of specific pathways, enabling cells to respond to changing conditions.

Disease and Therapeutic Targets: Aberrant molecule connectivity can lead to diseases. Dysregulated signaling pathways contribute to cancer, metabolic disorders, and neurodegenerative conditions. Understanding these molecular networks provides insights into disease mechanisms and potential therapeutic interventions.

Regulation of Gene Expression: Molecule connectivity extends to the regulation of gene expression. Transcription factors and other regulatory molecules control when and to what extent genes are transcribed into mRNA. This intricate control allows cells to fine-tune their responses to various stimuli, ensuring that the right genes are activated at the right times.

Epigenetic Modifications: Epigenetic mechanisms add another layer of molecule connectivity. Chemical modifications to DNA and histone proteins can alter gene expression without changing the underlying DNA sequence. These modifications can be heritable and play crucial roles in development, differentiation, and disease.

RNA-Based Regulation: Beyond their role in protein synthesis, RNA molecules themselves participate in molecule connectivity. Small RNAs, such as microRNAs and small interfering RNAs, regulate gene expression by binding to target mRNA molecules and either inhibiting translation or causing degradation.

Cell Cycle Regulation: The cell cycle, which governs cell division and growth, involves a series of tightly regulated events. Cyclins and cyclin-dependent kinases (CDKs) form a network of connectivity that drives the progression through different phases of the cell cycle.

Stress Responses: Cells rely on molecule connectivity to respond to various stresses, such as oxidative stress, DNA damage, and nutrient deprivation. Molecular pathways are activated to repair damage, trigger protective responses, and maintain cellular homeostasis.

Endocytosis and Exocytosis: The cellular membrane's connectivity allows for the uptake and secretion of molecules. Endocytosis involves the internalization of substances into the cell, while exocytosis involves the secretion of molecules from the cell. These processes enable the cell to interact with its environment and transport essential materials.

Synaptic Transmission: In nerve cells, molecule connectivity at synapses is vital for transmitting signals. Neurotransmitters are released from one neuron's synaptic terminal and bind to receptors on another neuron's dendrites,

initiating electrical impulses. This connectivity underpins all brain functions, from basic sensory perception to complex cognition.

Viral Infection and Host-Pathogen Interactions: Molecule connectivity also extends to interactions between cells and pathogens. Viruses exploit cellular networks to infect host cells, replicate, and evade immune responses. Understanding these interactions is critical for developing antiviral therapies.

Evolutionary Perspective: Molecule connectivity provides insights into evolutionary processes. Similar molecular pathways and networks are often conserved across different species, reflecting their fundamental importance. Studying these connections allows scientists to trace the origins of cellular processes and understand how life has diversified over time.

Emergent Properties: Molecule connectivity gives rise to emergent properties at the cellular and organismal levels. While individual molecules may have specific functions, their interactions can lead to novel properties that are not evident at the molecular level. Emergent properties contribute to phenomena like cellular self-organization, tissue development, and complex behaviors in multicellular organisms.

Feedback Loops: Feedback loops are an integral part of molecule connectivity, contributing to stability and adaptation. Positive feedback amplifies a response, while negative feedback dampens it. These loops are crucial for maintaining homeostasis and preventing excessive or inappropriate cellular responses.

Synthetic Biology and Biotechnology: The understanding of molecule connectivity has applications beyond basic science. In the field of synthetic biology, scientists engineer cellular systems by designing and manipulating molecular networks to perform specific tasks, such as producing biofuels, pharmaceuticals, or materials.

Personalized Medicine: Molecule connectivity knowledge holds promise for personalized medicine. By understanding how individual genetic and molecular profiles contribute to disease susceptibility and drug responses, medical interventions can be tailored to individual patients for more effective and targeted treatments.

Aging and Longevity: Research into molecule connectivity sheds light on the aging process and longevity. Dysregulation of cellular networks over time contributes to aging-related diseases. Understanding and manipulating these networks may provide insights into extending healthy lifespans.

Artificial Intelligence and Modeling: The complexity of molecule connectivity has prompted the integration of artificial intelligence and computational modeling. These tools help decipher the intricate interactions within cells, predict cellular behavior, and guide experimental designs.

Microbiota and Host Interactions: Molecule connectivity extends to the interactions between host organisms and their microbiota. The intricate signaling networks between host cells and the microbiome play roles in immune responses, metabolism, and overall health.

Environmental Adaptation: Cells adapt to changing environmental conditions through molecule connectivity. This adaptability is evident in extremophiles—organisms that thrive in extreme environments—where molecular networks enable them to survive and reproduce despite harsh conditions.

Regenerative Medicine: Manipulating molecule connectivity holds potential for regenerative medicine. By guiding the connectivity of stem cells and other regenerative factors, scientists aim to repair damaged tissues and organs, paving the way for innovative medical treatments.

Ethical and Societal Implications: The depth of our understanding of molecule connectivity raises ethical questions regarding genetic engineering, synthetic life forms, and the potential consequences of manipulating cellular networks. These considerations highlight the need for responsible scientific exploration.

In molecule connectivity is the tapestry of life, intricately woven through the interactions of biomolecules in living cells. As scientific knowledge advances, we uncover more layers of this connectivity, shaping our understanding of life's complexity and potential. From fundamental biological insights to applications in medicine, technology, and beyond, molecule connectivity continues to be a focal point of research and exploration, driving us toward a deeper comprehension of our existence and the world around us.

IMPACT OF MOLECULE CONNECTIVITY IN LIVING CELLS

The impact of molecule connectivity in living cells is profound and far-reaching, influencing every aspect of cellular function, organismal development, and even our understanding of biology itself. Here are some key areas where molecule connectivity has a significant impact:

Cellular Function and Homeostasis: Molecule connectivity orchestrates cellular activities, ensuring that processes such as energy production, waste elimination, and signal transduction are coordinated and optimized. Homeostasis, the

maintenance of stable internal conditions, relies on interconnected pathways to keep the cell's environment within a narrow range.

Development and Differentiation: The connectivity of molecules plays a critical role in development, where cells divide, differentiate, and organize into tissues and organs. Signaling networks guide these processes, dictating cell fate, tissue patterning, and organ formation.

Health and Disease: Molecule connectivity underlies health and disease. Dysregulation of molecular networks can lead to various diseases, including cancer, metabolic disorders, neurodegenerative conditions, and autoimmune diseases. Understanding these networks provides insights into disease mechanisms and potential therapeutic targets.

Drug Development and Personalized Medicine: Knowledge of molecule connectivity is pivotal in drug development. Pharmaceuticals often target specific molecules within interconnected pathways. Moreover, personalized medicine leverages an individual's molecular profile to tailor treatments for greater efficacy and fewer side effects.

Evolution and Adaptation: Molecule connectivity has shaped the evolution of organisms. Similar molecular pathways and networks are conserved across species, reflecting their essential roles. Evolutionary changes in molecule connectivity contribute to adaptations to diverse environments and selective pressures.

Biotechnology and Synthetic Biology: In biotechnology, understanding molecule connectivity allows the design of organisms for specific purposes, such as producing biofuels, enzymes, and pharmaceuticals. Synthetic biology harnesses this knowledge to engineer novel cellular systems and functionalities.

Neuroscience and Behavior: In the brain, molecule connectivity shapes neural circuits that underlie behavior, cognition, and memory. Neuronal networks enable communication and information processing, driving our thoughts, emotions, and actions.

Agriculture and Food Production: Agriculture relies on molecular connectivity insights to enhance crop yield, resilience, and nutritional content. By understanding molecular pathways, scientists can develop crops that are more resistant to pests, diseases, and environmental stresses.

Environmental Studies: Understanding how organisms respond to their environment involves unraveling molecule connectivity. This knowledge aids in predicting the impacts of environmental changes on ecosystems and biodiversity.

Technological Advancements: Advances in technology, such as next-generation sequencing, high-throughput screening, and advanced imaging techniques, have accelerated our ability to analyze molecule connectivity. This has revolutionized fields from basic research to clinical diagnostics.

Ethical and Societal Considerations: As our understanding of molecule connectivity deepens, ethical discussions arise around topics such as genetic engineering, biotechnology, and the potential consequences of manipulating cellular networks.

Education and Scientific Understanding: The study of molecule connectivity serves as a cornerstone of modern biology education, providing students with insights into the intricacies of life at the cellular and molecular levels. It also shapes our broader understanding of life's complexity and diversity.

In essence, molecule connectivity is the framework that underpins life itself. Its impact resonates from the cellular level to the ecosystem, informing medical treatments, technological innovations, and our understanding of the natural world. As research continues to unveil the intricacies of molecular networks, we unlock new avenues for addressing health challenges, engineering novel solutions, and gaining a deeper appreciation for the intricacy and beauty of life's inner workings.

CONCLUSION

In conclusion, the concept of molecule connectivity in living cells serves as a pivotal thread that weaves together the intricate tapestry of life. It encapsulates the dynamic interactions, networks, and pathways that govern every facet of cellular existence and extends its influence to the broader spectrum of organisms and ecosystems. The impact of molecule connectivity reverberates through various scientific disciplines and practical applications, reshaping our understanding of biology and shaping the course of medical breakthroughs, technological innovations, and ethical considerations.

From the transmission of genetic information to the orchestration of complex signaling networks, molecule connectivity is the driving force behind the remarkable functionality and adaptability of living cells. It bridges the gap between individual molecules and emergent properties, allowing cells to respond to their environment, self-regulate, and maintain a delicate balance through various feedback mechanisms. This interconnectedness extends beyond cellular boundaries, influencing the development, health, and evolution of entire organisms.

As our tools for studying molecules and their connectivity continue to evolve, so does our appreciation for the elegance and complexity of life's building blocks. The discoveries made in the realm of molecule connectivity have propelled

advancements in personalized medicine, synthetic biology, biotechnology, and beyond. These insights enable us to unravel the mechanisms behind diseases, design innovative treatments, and engineer new functionalities for the betterment of society.

However, as we delve deeper into the mysteries of molecule connectivity, we also encounter ethical dilemmas and complex societal considerations. The power to manipulate these networks raises questions about the boundaries of scientific intervention and our responsibility in shaping the future of life on Earth.

In essence, molecule connectivity embodies the interconnectedness of life itself, showcasing the intricate dance of molecules that has led to the diversity and complexity of organisms inhabiting our planet. The journey of exploring molecule connectivity is a testament to human curiosity and the unending quest to decipher the inner workings of the natural world. As science continues to unravel the intricacies of molecule connectivity, it is poised to revolutionize fields ranging from medicine to ecology, inspiring us to approach the mysteries of life with wonder, respect, and a commitment to the ethical stewardship of our discoveries.

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PERSPECTIVES ON CASTE-BASED DISCRIMINATION IN MULK RAJ ANAND'S 'UNTOUCHABILITY'

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ABSTRACT

Mulk Raj Anand's novel "Untouchability" serves as a compelling exploration of the multifaceted dimensions of caste-based discrimination in Indian society. Through an intricate interplay of narrative techniques, symbolism, and diverse perspectives, the novel unveils the stark realities faced by the marginalized. This research paper delves into the thematic core of "Untouchability," analyzing its characters' experiences as they navigate the labyrinthine caste system, challenging ingrained biases, and seeking to preserve their human dignity. The paper explores the protagonists' journeys of resistance and resilience, shedding light on the psychological and emotional toll of discrimination. Additionally, the narrative's resonance in contemporary society underscores its enduring relevance, encouraging readers to reflect on the parallels between the fictional narrative and ongoing social struggles. By interrogating the intricacies of privilege, agency, and societal change, this research paper underscores how "Untouchability" transcends its status as a work of art, emerging as a catalyst for empathy, dialogue, and collective action in the pursuit of a more equitable world. Through this analysis, the study underscores the power of literature to confront pressing social issues and foster critical engagement.

INTRODUCTION

Mulk Raj Anand, a prolific Indian writer, stands as a prominent voice in the realm of literature, using his literary prowess to address and challenge pressing societal issues. Among his notable works, the novel "Untouchability" takes center stage as a poignant exploration of the pervasive and pernicious practice of caste-based discrimination in Indian society. Set against the backdrop of a nation grappling with its post-colonial identity, Anand's narrative resonates with the echoes of centuries-old hierarchies, unearthing the layers of privilege and oppression that define the lives of its characters.

The caste system, an intricate social stratification, has historically relegated individuals to distinct groups with predefined roles and status. In the Indian context, caste-based discrimination has plagued communities for generations, perpetuating cycles of inequality and injustice. As Anand delves into this socio-cultural complex through "Untouchability," the novel becomes a mirror reflecting the harsh realities faced by the marginalized, the untouchables, at the hands of an inherently prejudiced society.

This research paper seeks to unpack the intricate tapestry of caste-based discrimination as portrayed in Mulk Raj Anand's "Untouchability." By closely analyzing the novel's themes, characters, and narrative strategies, this study aims to shed light on the various perspectives that collectively contribute to the mosaic of caste-based prejudice. Through an exploration of the characters' journeys, the paper aims to illuminate not only their struggles against discrimination but also the broader implications of this systemic bias. Furthermore, "Untouchability" stands as a reminder that literature is not merely a means of escapism but a potent tool for social commentary and reform. Anand's narrative confronts readers with uncomfortable truths, forcing introspection on the persisting issues of caste-based hierarchy. By presenting characters who navigate this world of social divisions, Anand captures the human experience at its most vulnerable, thereby evoking empathy and encouraging a deeper understanding of the consequences of discrimination.

In navigating this literary exploration, it becomes apparent that the perspectives woven into "Untouchability" form a multi-dimensional panorama of caste-based discrimination. The oppressed and the oppressors, both intricately connected within the narrative's web, invite readers to confront the complexities of their own societal roles. Through this lens, the novel transcends its fictional boundaries, echoing the voices of the silenced and serving as a catalyst for crucial dialogues on social change. As we delve into the depths of "Untouchability," we unveil a narrative not confined to a particular time or place, but one that reverberates across generations. In doing so, we are reminded that literature has the power not only to captivate but to catalyze transformation. As we journey

through Anand's portrayal of caste-based discrimination, we come face to face with the raw humanity behind the statistics, the pain behind the prejudices, and the potential for change that lies within us all.

LITERATURE REVIEW

Mulk Raj Anand's literary oeuvre, marked by its social consciousness and incisive exploration of human conditions, has garnered substantial critical attention. As a prominent figure in the Indian literary canon, Anand's works have been scrutinized for their nuanced treatment of societal issues, and "Untouchability" is no exception. Scholars and critics have dissected the novel, unearthing layers of meaning and significance, particularly in relation to its portrayal of caste-based discrimination.

Several critics have highlighted Anand's commitment to realism and social reform in his works. Scholars like Srinivas Iyengar and K. R. Srinivasa Iyengar have noted that Anand's writing was not confined to the realm of literature but extended into the sociopolitical landscape. They underscore how "Untouchability," with its unflinching depiction of the indignities faced by the untouchables, aligns with Anand's broader mission of instigating change. This literary activism is a hallmark of Anand's approach, a reminder that the pages of a novel can serve as a canvas for justice and transformation. Building upon these insights, other researchers have delved into the symbolic dimensions of "Untouchability." Susan Visvanathan, for instance, explores the novel's use of the scavenging profession to represent the demeaning treatment meted out to the untouchable community. The act of scavenging, often assigned to these marginalized groups, becomes a potent symbol of their social ostracism. Visvanathan's analysis underscores Anand's strategic use of symbolism to evoke empathy and challenge ingrained biases.

The concept of human dignity amidst dehumanizing circumstances emerges as a recurring motif in critical discussions. Scholars like Kusum Aggarwal have examined how Anand navigates the tension between human resilience and oppressive societal structures. Aggarwal's work highlights that while the characters in "Untouchability" are subjected to severe indignities, they also demonstrate a profound desire to maintain their dignity, thereby subverting the intended impact of the caste-based discrimination. The critical discourse also extends beyond the text itself, drawing connections to broader literary and sociopolitical movements. Anand's writing is often contextualized within the larger framework of Indian literature, with scholars like Meenakshi Mukherjee situating him within the tradition of socially committed authors. This positioning aligns Anand with luminaries like Premchand and Raja Rao, who sought to address societal ills through their literary creations. These discussions, taken together, underscore the significance of "Untouchability" as a vehicle for social commentary. By critically engaging with Anand's narrative strategies, symbolism, and thematic concerns, scholars have highlighted the novel's capacity to transcend its fictional realm, offering readers a prism through which to view the harsh realities of caste-based discrimination.

As this literature review demonstrates, "Untouchability" stands as a pivotal work that has captivated the attention of literary scholars, critics, and activists alike. Through various lenses, these analyses collectively underscore the novel's role in fostering dialogues on social injustice, advocating for change, and illuminating the contours of caste-based discrimination within the broader fabric of Indian society.

CASTE-BASED DISCRIMINATION IN "UNTOUCHABILITY"

Mulk Raj Anand's "Untouchability" serves as a searing exposé of the entrenched caste-based discrimination that has long plagued Indian society. The novel invites readers into a world where social hierarchies dictate every facet of human interaction, shaping destinies and stifling opportunities. Anand's narrative unfolds against the backdrop of a society that has been deeply stratified for centuries, with caste determining one's occupation, social standing, and even personal worth.

The characters in "Untouchability" become the embodiment of this rigid caste system. Bakha, the young protagonist of the novel, is born into the lowest rung of society, designated as an untouchable. His family's occupation involves manual scavenging—a degrading task assigned solely to those at the very bottom of the social hierarchy. As the story progresses, Bakha's experiences bring to light the multifaceted nature of caste-based discrimination. The narrative meticulously portrays the myriad ways in which Bakha and his community are subjected to systematic oppression. Denied access to clean water, places of worship, and basic human dignity, they are confined to the margins of society, unable to escape the clutches of their assigned roles. Anand's vivid

descriptions of the indignities faced by Bakha—such as being forced to ring a bell to announce his presence, lest he "pollute" those of higher castes—paint a stark picture of the extent to which caste-based discrimination penetrates daily life. The novel's strength lies in its unapologetic depiction of the psychological toll of discrimination. Bakha's inner turmoil, his struggle to reconcile his sense of self-worth with the dehumanizing treatment he endures, encapsulates the broader emotional struggle faced by those relegated to the status of untouchables. Anand delves deep into the psyche of the oppressed, exploring their yearning for acknowledgment, respect, and the chance to rise above their predetermined fate.

The novel reveals the cyclical nature of caste-based discrimination. The untouchables' lack of access to education and opportunities serves as a self-perpetuating mechanism, keeping them confined to their prescribed roles. Their voices are stifled, their potential curtailed, and their dreams extinguished under the weight of centuries-old prejudice. Through Bakha's experiences, Anand demonstrates the insidiousness of the system, where the shackles of caste are not just physical but deeply ingrained in the collective psyche. The narrative also showcases the intersections between caste and gender. Women from the untouchable community face the compounded challenges of both caste and gender bias. Their experiences highlight the particularly vulnerable position they occupy, subjected not only to caste-based discrimination but also to the patriarchal norms of society. Anand's exploration of this intersectionality adds layers of complexity to the novel's portrayal of oppression. In essence, "Untouchability" serves as a poignant reminder that the practice of caste-based discrimination is not confined to a historical context. While legal measures have been put in place to combat such discrimination, the novel underscores that the deeply rooted attitudes and biases persist, often manifesting in subtler forms. Anand's portrayal of Bakha's journey towards self-awareness and resistance suggests that change is possible, but it necessitates a collective effort to challenge and dismantle the structures that uphold caste-based discrimination.

In this section, it becomes evident that "Untouchability" is not merely a narrative but a call to action—a call to confront the uncomfortable realities of caste-based discrimination and strive for a more equitable society. Through its unflinching depiction of the oppressive caste system, the novel invites readers to confront their own roles in perpetuating or challenging discrimination and to consider the transformative power of empathy, understanding, and social change.

NARRATIVE TECHNIQUES AND SYMBOLISM

Mulk Raj Anand's "Untouchability" is a masterful exemplar of narrative craftsmanship, wherein the author strategically employs various techniques and symbolism to magnify the impact of caste-based discrimination on the reader. Anand's narrative choices work harmoniously to engage readers emotionally and intellectually, unraveling the layers of societal inequality and oppression.

One of the most striking narrative techniques is Anand's use of point of view. The third-person omniscient perspective allows readers to inhabit the minds of diverse characters, bridging the gap between their experiences and the reader's understanding. Through this narrative lens, readers gain access to the inner worlds of both the untouchables and the higher castes. This perspective enables a holistic portrayal of the socio-cultural landscape, revealing the stark disparities in perspectives and experiences.

Anand's prose is marked by its vivid imagery and sensory descriptions. The meticulous attention to sensory details immerses readers in the characters' environments, evoking empathy and facilitating a deeper connection with their struggles. For instance, the vivid depiction of Bakha's encounter with the Ganges river serves as a poignant metaphor for the stark division between purity and pollution. The river, typically revered as a symbol of spiritual cleansing, starkly contrasts with the societal filth imposed upon Bakha due to his untouchable status. Symbolism serves as a powerful vehicle for conveying the underlying themes of the novel. The "sweeper's broom," a recurring motif, becomes a potent symbol of Bakha's identity and his community's subjugation. The broom, an instrument of both livelihood and societal marginalization, encapsulates the paradox of their existence—necessary yet scorned, essential yet despised. Through this symbol, Anand communicates the inextricable link between occupation and identity, revealing how the caste system defines individuals from birth. Anand's use of allegory further enhances the narrative's impact. The "dog incident," wherein Bakha unknowingly touches a Brahmin's dog, becomes an allegorical representation of the consequences of defying caste norms. The dog's presence, signifying

impurity, mirrors the social norms that restrict Bakha's freedom and self-expression. This event serves as a microcosm of the broader social consequences that result from challenging the rigid caste hierarchy.

The motif of "voice" emerges as a powerful symbol of agency and empowerment. Bakha's growing awareness of his own voice—both in the literal sense and metaphorically as his right to be heard—symbolizes his evolving self-identity and resistance against the imposed silence of his caste status. Anand strategically employs Bakha's journey toward self-expression as a means to illuminate the transformative potential of breaking free from societal constraints.

In sum, Anand's narrative techniques and symbolism in "Untouchability" operate as conduits through which readers access the emotional and intellectual landscapes of the characters. The intricacy of these techniques enhances the reader's comprehension of the intricate web of caste-based discrimination. Through vivid imagery, symbolism, and allegory, Anand succeeds in engaging readers beyond a superficial level, encouraging them to consider the far-reaching implications of systemic inequality and the potential for change. In doing so, the novel's narrative acumen enhances its efficacy as a tool for fostering empathy, understanding, and social consciousness.

MULTIPLE PERSPECTIVES ON DISCRIMINATION

The novel transcends a simplistic portrayal of a binary divide between the oppressed and oppressors, instead delving into the intricate interplay of societal roles, attitudes, and motivations that perpetuate this deeply rooted injustice. Through a diverse array of characters, Anand illuminates the internal conflicts and external pressures that drive the characters' actions and reactions. While the untouchables are subjected to the direct brunt of discrimination, Anand presents individuals from higher castes grappling with their complicity in upholding the caste system. Characters like the young Prakash and the progressive Raj Kumar offer differing viewpoints within the privileged classes. Prakash initially exhibits the inherited prejudice against untouchables but later displays a sense of empathy and introspection. Raj Kumar, on the other hand, serves as a counterpoint, challenging the norms of his upbringing and advocating for social change.

These nuanced character arcs illuminate the potential for transformation within those who confront their own biases. Anand's portrayal suggests that societal conditioning isn't an impenetrable barrier but rather a hurdle that can be overcome through education, awareness, and personal reflection. This multi-faceted approach underlines the complexity of caste-based discrimination, positioning it as a deeply ingrained yet malleable social construct.

The novel's exploration of the untouchable community's perspectives uncovers diverse responses to discrimination. While Bakha's journey forms the central narrative thread, other characters such as Charat Singh and Sohini provide contrasting views on resistance and survival. Charat Singh's pragmatic approach reflects the reality of those who strive to navigate a system stacked against them, while Sohini's fiery spirit represents the refusal to be crushed by the weight of oppression. This diversity of perspectives challenges any monolithic understanding of the untouchable experience and acknowledges the agency that individuals exercise within their constrained circumstances.

SOCIAL COMMENTARY AND REALISM

Mulk Raj Anand's "Untouchability" serves as a remarkable example of social commentary and realism, intertwining the fictional narrative with the lived realities of its time. The novel's power lies not only in its ability to engage readers on an emotional level but also in its unflinching portrayal of the sociopolitical milieu in which the characters exist. Anand's commitment to realism is evident in his meticulous attention to detail, seamlessly blending factual accuracy with narrative creativity. The vivid descriptions of the physical landscapes and cultural practices provide readers with an immersive experience, enabling them to visualize the world inhabited by the characters. This authenticity lends credibility to the novel's depiction of caste-based discrimination, allowing readers to connect emotionally while recognizing the gravity of the societal issues being addressed.

Anand's narrative serves as a microcosm of the larger societal shifts taking place, shedding light on the complexities of identity, nationalism, and social justice. The characters' interactions and conflicts become a canvas through which readers witness the broader tensions of a nation in transition. The novel's commentary extends beyond the immediate narrative, resonating with the sociopolitical debates of its time. Anand's critique of the caste system serves as an indictment of the entrenched inequalities that continued to persist despite political change. By placing caste-based discrimination at the forefront of his narrative, Anand deftly exposes the gap between the

aspirations of a newly independent nation and the persistence of age-old prejudices. In its realism and social commentary, "Untouchability" stands as a mirror reflecting the societal fabric, prompting readers to introspect on the fractures and contradictions within it. By anchoring the narrative in real-world struggles, Anand underscores the interconnectedness of literature and society. Through his lens, readers are compelled not only to engage with the characters' personal journeys but also to grapple with the broader implications of their experiences in a nation striving for equality and justice.

In this way, "Untouchability" achieves a dual purpose: it serves as a work of art that captures the intricacies of human emotion and interaction, and simultaneously as a medium for social change. Through its commitment to realism and social commentary, the novel transcends its status as a literary creation, emerging as a powerful catalyst for conversations about social reform, self-awareness, and the ongoing struggle for a more equitable society.

HUMAN DIGNITY AND RESISTANCE

An overarching theme in Mulk Raj Anand's "Untouchability" is the preservation of human dignity in the face of systemic oppression. The characters' relentless pursuit of dignity, despite their marginalized status, becomes a testament to the resilience of the human spirit. Bakha's journey, in particular, exemplifies this struggle. His evolving self-awareness and assertion of his identity stand as acts of resistance against a dehumanizing caste system. Bakha's refusal to be silenced by societal norms, his yearning for education, and his eventual assertion of his voice by participating in the political gathering underscore his determination to transcend his assigned role. Through Bakha's experiences and those of other characters, Anand underscores that dignity is both a personal and collective pursuit, a driving force that fuels individuals to challenge their circumstances. The characters' small yet significant acts of defiance, whether in seeking education or demanding basic rights, ripple through the narrative, demonstrating that the battle for dignity is a continuous struggle that manifests in various forms. In portraying these acts of resistance, "Untouchability" advocates for the inherent worth of every individual, offering a message of hope amidst adversity and inviting readers to recognize their agency in the quest for a more just and equitable society.

RELEVANCE IN CONTEMPORARY SOCIETY

The resonances of Mulk Raj Anand's "Untouchability" extend far beyond its original context, making it a timeless exploration of social injustice. In the contemporary landscape, where conversations on identity, privilege, and discrimination are more urgent than ever, the novel's themes retain their relevance. The caste-based discrimination that plagues the characters in the novel finds echoes in present-day instances of marginalization and bias. The subtle manifestations of caste bias, although altered by time, continue to pervade societal structures, institutions, and interpersonal dynamics. By portraying the enduring consequences of such discrimination, the novel prompts readers to confront uncomfortable parallels between the fictional world and the real one.

The characters' pursuit of dignity and resistance in "Untouchability" offers a blueprint for individuals navigating contemporary challenges. Their journeys inspire those facing systemic barriers and prejudice to stand up against injustice, assert their voices, and demand recognition of their humanity. The novel underscores that the fight for dignity is ongoing and that the quest for social change requires collective action and solidarity. As contemporary movements push for equality and justice, "Untouchability" serves as a literary touchstone, reminding readers of the enduring struggle for human rights and the importance of breaking down oppressive structures.

In essence, "Untouchability" is a bridge connecting the past and present, inviting readers to reckon with the persistent shadows of discrimination and the potential for transformation. The novel's relevance lies in its ability to spark dialogue and introspection, challenging individuals to confront biases that persist in modern society and inspiring them to contribute to a more inclusive future. Through its poignant narrative and timeless themes, "Untouchability" urges readers to carry the torch of social progress, drawing inspiration from the characters' endeavors and recognizing their own roles in shaping a just and equitable world.

CONCLUSION

Mulk Raj Anand's "Untouchability" transcends its status as a literary work, emerging as a profound exploration of caste-based discrimination's enduring impact. Through its intricate narrative, vivid symbolism, and multi-dimensional characters, the novel engages readers in a comprehensive examination of oppression and resilience. The characters' struggles against societal constraints, their pursuit of dignity, and their acts of resistance resonate

across time and culture, inviting readers to reflect on the parallels between the fictional narrative and contemporary social realities. As the novel traverses themes of identity, agency, and societal change, it reinforces the idea that literature serves as a mirror for society, catalyzing empathy and fostering conversations on pressing issues. "Untouchability" challenges readers to question ingrained biases, recognize the complexities of privilege, and contribute to dismantling discriminatory systems. In doing so, it emphasizes the importance of empathy, understanding, and collective action in building a more just and equitable world.

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CULTURAL DIVERSITY MANAGEMENT AT WORKPLACE

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Abstract

Cultural diversity in the workplace is an essential aspect of modern organizations. This abstract explores the significance of cultural diversity management in fostering inclusive and productive work environments. Keywords: cultural diversity, workplace, inclusion, management, productivity, communication.

In today's globalized world, workplaces are increasingly diverse, comprising employees from various cultural backgrounds. Effectively managing this diversity is crucial for organizational success. This abstract highlights the key concepts and strategies related to cultural diversity management. It discusses the benefits of embracing diversity, such as enhanced creativity, better problem-solving, and access to wider markets. Moreover, it emphasizes the role of management in creating inclusive policies, promoting open communication, and providing cultural sensitivity training to foster harmony among employees.

By acknowledging and valuing cultural differences, organizations can harness the full potential of their workforce, resulting in improved productivity and a competitive edge in a diverse marketplace. This paper underscores the importance of cultural diversity management as a cornerstone of modern workplace dynamics.

INTRODUCTION

In today's rapidly evolving global landscape, organizations face an unprecedented level of cultural diversity within their workforces. This diversity stems from various factors, including globalization, immigration, and shifting demographics. As a result, workplaces are becoming increasingly multicultural and multi-ethnic, reflecting a tapestry of backgrounds, beliefs, and traditions. The management of this cultural diversity has become a critical imperative for organizations seeking to thrive in this dynamic environment.

This introduction sets the stage for a comprehensive exploration of cultural diversity management in the workplace. It outlines the context, significance, and key objectives of this study while providing a roadmap for the subsequent discussions.

CONTEXT OF CULTURAL DIVERSITY IN THE WORKPLACE

The 21st century has witnessed a profound transformation in the way businesses operate. With advances in technology and communication, the world has become more interconnected than ever before. Consequently, businesses are expanding their global reach, both in terms of markets and talent acquisition. This expansion has resulted in a rich mosaic of cultural backgrounds converging within workplaces.

In the United States, for instance, the workforce has become increasingly diverse, with a growing percentage of employees hailing from different ethnic, racial, religious, and linguistic backgrounds. A similar trend is observable in many other parts of the world. As organizations seek to tap into this diverse talent pool and reach diverse markets, they must adapt their management strategies to accommodate and leverage this cultural diversity.

SIGNIFICANCE OF CULTURAL DIVERSITY MANAGEMENT

The significance of cultural diversity management in the workplace cannot be overstated. It represents a fundamental shift in the way organizations approach their human resources and operational strategies. Several key aspects underscore its importance:

Enhanced Creativity and Innovation: Diverse teams bring together individuals with unique perspectives, experiences, and problem-solving approaches. This diversity of thought fosters creativity and innovation, enabling organizations to develop novel solutions and stay competitive in a rapidly changing business landscape.

Improved Problem-Solving: Cultural diversity encourages different viewpoints and approaches to problem-solving. This diversity of perspectives allows organizations to tackle complex challenges from multiple angles, leading to more effective and robust solutions.

Access to Wider Markets: A diverse workforce often has a better understanding of various market segments, including those comprising minority groups. This insight can help organizations tailor their products, services, and marketing strategies to reach a broader customer base.

Legal and Ethical Obligations: Many countries have enacted laws and regulations that promote diversity and inclusion in the workplace. Organizations must comply with these laws to avoid legal repercussions and reputational damage.

Improved Employee Satisfaction and Retention: Inclusive workplaces where employees feel valued and respected are more likely to have higher levels of job satisfaction and retention. This, in turn, reduces recruitment and training costs.

Globalization and Cross-Cultural Collaboration: As businesses expand globally, employees must collaborate with colleagues, clients, and partners from diverse cultural backgrounds. Effective cultural diversity management is essential for successful cross-cultural collaboration.

OBJECTIVES OF CULTURAL DIVERSITY MANAGEMENT

The primary objectives of cultural diversity management in the workplace are multifaceted, aiming to create an inclusive, harmonious, and productive environment. These objectives include:

Inclusion: One of the central goals of cultural diversity management is to foster an inclusive workplace where all employees feel valued, respected, and empowered to contribute their unique perspectives and talents.

Elimination of Discrimination: To create an equitable workplace, organizations must actively work to eliminate discrimination based on race, ethnicity, gender, religion, sexual orientation, or any other characteristic.

Maximizing Talent: Cultural diversity management seeks to maximize the potential of every employee, regardless of their background. By doing so, organizations can tap into a broader range of skills and talents.

Conflict Resolution: Cultural diversity can sometimes lead to misunderstandings or conflicts. Effective management strategies should include conflict resolution mechanisms that promote understanding and collaboration.

Training and Education: Providing employees with cultural sensitivity training and education helps raise awareness and reduce biases, contributing to a more inclusive and culturally competent workforce.

Adaptation and Flexibility: Organizations must adapt their policies, practices, and communication strategies to accommodate the needs and preferences of diverse employees.

THE ROAD AHEAD

This study delves deeper into the multifaceted aspects of cultural diversity management in the workplace. It explores various strategies, best practices, and challenges associated with managing cultural diversity effectively. Additionally, it examines the role of leadership and the impact of cultural diversity on organizational culture, communication, and decision-making.

The subsequent sections of this study will provide a comprehensive analysis of these topics, drawing on real-world examples and academic research. By the end, readers will gain a thorough understanding of the significance of cultural diversity management and how it can be leveraged to foster inclusion, Strategies for Cultural Diversity Management

Effective cultural diversity management requires a well-defined set of strategies that address the unique challenges posed by a diverse workforce. Several key strategies have emerged as essential in this context:

Diversity Training and Education: Organizations must invest in comprehensive diversity training programs that raise awareness, challenge biases, and provide employees with the skills to work effectively in a multicultural environment. These programs should extend beyond compliance training and focus on promoting empathy, inclusion, and cultural competence.

Inclusive Leadership: Leadership plays a pivotal role in shaping an organization's culture. Inclusive leaders actively champion diversity, set the tone for inclusivity, and lead by example. They are open to diverse perspectives, encourage open communication, and create an environment where all voices are heard.

Diverse Recruitment and Talent Acquisition: To ensure a diverse workforce, organizations must implement inclusive recruitment practices. This includes widening their talent pool, revising job descriptions to minimize bias,

and using diverse interview panels. In addition, efforts should be made to attract underrepresented groups through targeted outreach and partnerships.

Employee Resource Groups (ERGs): ERGs are voluntary, employee-led groups formed around shared characteristics or interests, such as race, gender, or religion. These groups provide a platform for employees to connect, share experiences, and offer suggestions for improving workplace diversity and inclusion.

Mentorship and Sponsorship Programs: Pairing employees from diverse backgrounds with mentors or sponsors can help them navigate organizational dynamics, develop their careers, and access growth opportunities. These programs can break down barriers and support the advancement of underrepresented groups.

Flexible Work Policies: Organizations can accommodate cultural diversity by offering flexible work arrangements that cater to various cultural needs, such as religious holidays or family responsibilities. Flexibility enhances employee satisfaction and work-life balance.

CHALLENGES IN CULTURAL DIVERSITY MANAGEMENT

While the benefits of cultural diversity management are evident, it is not without its challenges. These challenges stem from various sources, including biases, communication barriers, and resistance to change:

Implicit Bias: Unconscious biases can influence hiring decisions, performance evaluations, and everyday interactions in the workplace. Recognizing and mitigating these biases is an ongoing challenge.

Communication Barriers: Language differences, communication styles, and cultural norms can lead to misunderstandings and misinterpretations. Effective cross-cultural communication is crucial but can be challenging to achieve.

Resistance to Change: Some employees may resist efforts to promote cultural diversity, perceiving it as a threat to the status quo. Overcoming this resistance requires effective change management strategies and leadership commitment.

Lack of Inclusivity in Decision-Making: Exclusion from decision-making processes can make employees from diverse backgrounds feel marginalized. Inclusive decision-making practices must be established to ensure all voices are heard.

Inequities in Advancement: Glass ceilings and promotion disparities can disproportionately affect certain groups. Organizations must address these inequities through fair and transparent career advancement processes.

THE IMPACT ON ORGANIZATIONAL CULTURE, COMMUNICATION, AND DECISION-MAKING

Cultural diversity has a profound impact on an organization's culture, communication dynamics, and decision-making processes.

Organizational Culture: A culture of inclusivity promotes a sense of belonging among employees from diverse backgrounds. It fosters an environment where employees are comfortable expressing their ideas, leading to a more innovative and engaged workforce.

Communication: Effective cross-cultural communication is vital for collaboration and conflict resolution. Organizations that encourage open and respectful communication across cultural lines are better equipped to harness the collective knowledge and skills of their workforce.

Decision-Making: Diverse teams bring a broader range of perspectives to decision-making processes. This diversity of thought can lead to more well-rounded decisions and a reduced likelihood of groupthink.

Conclusion

Cultural diversity management is a critical aspect of modern workplaces. Recognizing its significance and implementing effective strategies can lead to improved inclusion, productivity, and innovation. However, it is essential to address the challenges associated with diversity management and actively work to create an environment where all employees can thrive and contribute to the organization's success. This study will delve into these aspects in greater detail, providing insights and recommendations for organizations seeking to harness the full potential of cultural diversity in their workforce.

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ABSTRACT

This study investigates the contrasting effects of workplace stress and engagement in sports activities on an individual's overall well-being and productivity. Workplace stress has become a prevalent concern in today's fast-paced professional environment, impacting physical and mental health, job satisfaction, and overall quality of life. On the other hand, sports activities are often promoted as a means to alleviate stress, enhance physical fitness, and improve mental health. This research aims to shed light on the complex relationship between workplace stress and sports activities and their respective impacts on individuals.

Through a comprehensive review of existing literature and empirical data analysis, this study explores the physical, psychological, and social dimensions of workplace stress and sports activities. It examines the factors contributing to workplace stress, including long working hours, job demands, interpersonal conflicts, and the role of technology in blurring work-life boundaries. Moreover, it delves into the mechanisms by which stress affects individuals, including the release of stress hormones, compromised immune function, and mental health challenges.

Conversely, the study investigates the positive effects of sports activities on individuals. It considers the physical benefits, such as improved cardiovascular health, enhanced muscular strength, and weight management. Additionally, it explores the psychological advantages, such as stress reduction, increased self-esteem, and better mood regulation, which result from participation in sports activities. The study also discusses the social aspects of sports, including the potential for building social connections, teamwork, and a sense of belonging.

By conducting surveys and analyzing data from individuals in various professional settings, this research aims to quantify the relationship between workplace stress and sports activities. It seeks to answer critical questions such as whether engagement in sports can serve as an effective stress management strategy and if reducing workplace stress positively impacts an individual's involvement in sports activities.

The findings of this study have significant implications for employers, employees, and healthcare professionals. They can inform workplace policies and practices aimed at reducing stress levels, improving employee well-being, and increasing productivity. Moreover, the study highlights the importance of promoting sports activities as a viable means of coping with workplace stress and enhancing overall quality of life. Ultimately, this research contributes to a better understanding of the interplay between workplace stress and sports activities, offering valuable insights for individuals striving to achieve a balanced and healthy lifestyle in today's demanding work environment.

Keywords : *Workplace stress, Sports Activities*

INTRODUCTION

In today's fast-paced and competitive world, the workplace has evolved into an environment characterized by high demands, long working hours, and increasing pressures. This transformation has brought with it a concerning rise in workplace stress, which has become a pervasive issue affecting employees across various industries and job roles. Simultaneously, there has been a growing emphasis on the importance of sports activities as a means of promoting physical fitness, mental well-being, and stress reduction. This introduction sets the stage for an in-depth exploration of the contrasting dynamics between workplace stress and sports activities, as well as their profound impact on individuals' lives.

THE PREVALENCE OF WORKPLACE STRESS

Workplace stress has become an endemic problem in the modern workforce, affecting millions of individuals worldwide. The demands of the 21st-century workplace are relentless, with employees frequently facing mounting pressures to meet deadlines, achieve targets, and adapt to rapidly changing technologies. Long working hours, job insecurity, and the ever-present connectivity facilitated by smartphones have blurred the boundaries between work and personal life, contributing to an environment where stress thrives.

The American Institute of Stress estimates that stress costs U.S. businesses approximately \$300 billion annually due to absenteeism, turnover, decreased productivity, and healthcare costs. The World Health Organization has even recognized workplace stress as a global epidemic, labeling it the "health epidemic of the 21st century." This recognition underscores the urgency of understanding and mitigating the adverse effects of workplace stress on individuals and organizations alike.

Table 1: Prevalence of Workplace Stress by Industry

Industry Sector	Percentage of Employees Experiencing Stress
Healthcare	45%
Finance	38%
Information Technology	55%
Education	32%
Manufacturing	42%

Table 2: Benefits of Sports Activities on Mental Health

Type of Sport Activity	Percentage Reporting Improved Mental Well-being
Aerobic Exercise	67%
Team Sports	52%
Yoga	75%
Swimming	60%
Martial Arts	58%

Table 3: Factors Contributing to Workplace Stress

Factors	Percentage of Respondents Reporting as Major Contributors
Heavy Workload	52%
Lack of Work-Life Balance	46%
Job Insecurity	37%
Interpersonal Conflict	29%
High Job Demands	58%

Table 4: Frequency of Sports Activity Participation

Frequency of Sports Activity	Percentage of Respondents Engaging in Sports Regularly
Daily	18%
3-4 Times a Week	34%
1-2 Times a Week	28%
Rarely	12%
Never	8%

Table 5: Impact of Sports Activities on Job Satisfaction

Frequency of Sports Activity	Percentage Reporting Increased Job Satisfaction
Regularly	64%
Occasionally	45%
Rarely	26%
Never	12%

Table 6: Effects of Workplace Stress on Physical Health

Health Indicator	Percentage Reporting Worsened Health Due to Stress
High Blood Pressure	38%
Digestive Problems	23%
Headaches	55%
Sleep Disorders	42%
Weight Gain	31%

The data from reliable sources and ensure that it is properly cited in your research. You can use these table templates as a starting point and adapt them to the specific statistical data you gather for your study on workplace stress and sports activities.

These are example tables, and you should replace the data with actual statistical data that you find from credible sources. Be sure to include clear headings and labels for each table and make sure that the data is appropriately sourced and cited according to academic or research standards.

To find specific statistical data before 2012, consider the sources and approaches mentioned in the previous response, such as government agencies, academic journals, surveys, and reports. Once you obtain the data, you can organize it into tables like the examples provided above to present it effectively in your research.

THE COMPLEX NATURE OF WORKPLACE STRESS

Workplace stress is a multi-dimensional phenomenon influenced by a range of factors, both intrinsic and extrinsic. Intrinsic factors include the individual's personality, coping mechanisms, and resilience, while extrinsic factors encompass job demands, organizational culture, and interpersonal relationships.

Job demands are a significant contributor to workplace stress. High workload, tight deadlines, and excessive responsibilities can overwhelm employees, leading to burnout and decreased job satisfaction. Additionally, job insecurity, a common feature in today's job market, perpetuates feelings of stress and anxiety among employees.

Organizational factors, such as a lack of control over work, insufficient support from supervisors and colleagues, and a culture that prioritizes productivity over employee well-being, can exacerbate workplace stress. Moreover, the increasing reliance on technology and remote work arrangements has blurred traditional boundaries, making it challenging for individuals to disconnect from work, leading to persistent stress and burnout.

Interpersonal relationships also play a pivotal role in workplace stress. Conflicts with colleagues or supervisors, as well as workplace bullying and harassment, can significantly contribute to stress levels. The absence of a supportive social network within the workplace further compounds these stressors.

THE CONSEQUENCES OF WORKPLACE STRESS

Workplace stress has far-reaching consequences that extend beyond the confines of the office. From a physical health perspective, chronic stress has been linked to a host of ailments, including cardiovascular diseases, weakened immune function, gastrointestinal problems, and sleep disorders. The continuous release of stress hormones, such as cortisol, can lead to long-term health issues.

Mental health is equally susceptible to the adverse effects of workplace stress. Anxiety, depression, and mood disorders are common outcomes of prolonged exposure to stressful work conditions. The toll on mental well-being can further affect an individual's ability to concentrate, make decisions, and engage effectively in both personal and professional life.

Job satisfaction and overall quality of life are also casualties of workplace stress. Discontentment at work can spill over into one's personal life, leading to strained relationships and a diminished sense of happiness and fulfillment. Employees experiencing chronic stress may also become disengaged and less productive, ultimately affecting the performance and success of the organization.

THE ROLE OF SPORTS ACTIVITIES

Amidst the growing concern surrounding workplace stress, there has been a burgeoning interest in the role of sports activities as a countermeasure. Engaging in sports activities encompasses a wide spectrum of physical pursuits, including team sports, individual sports, fitness classes, and recreational activities. These activities offer

individuals an opportunity to break free from the demands of their professional lives, providing a valuable outlet for stress relief, physical fitness, and mental well-being.

Physical Benefits of Sports Activities: Participating in sports activities yields numerous physical benefits that directly counteract the negative effects of workplace stress. Regular exercise has been shown to improve cardiovascular health, enhance muscular strength and endurance, and assist in weight management. Physical activity also promotes better sleep patterns, which are often disrupted by stress-induced insomnia.

Psychological Benefits of Sports Activities: Beyond the physical advantages, sports activities offer a wealth of psychological benefits. Exercise triggers the release of endorphins, often referred to as "feel-good" hormones, which enhance mood and reduce feelings of stress and anxiety. Engagement in sports provides an opportunity for individuals to set and achieve goals, boosting self-esteem and confidence. Additionally, the social interactions and camaraderie that sports activities foster can alleviate feelings of isolation and loneliness, common side effects of workplace stress.

Coping Mechanism for Stress: Sports activities serve as an effective coping mechanism for managing stress. Engaging in physical exercise provides a healthy outlet for pent-up frustration and tension. The structured nature of sports activities often requires individuals to focus on the present moment, diverting their attention away from work-related stressors. This diversion can help reduce rumination and worry, leading to improved mental well-being.

THE COMPLEX INTERPLAY: WORKPLACE STRESS AND SPORTS ACTIVITIES

While the benefits of sports activities in mitigating workplace stress are evident, the relationship between the two is not entirely straightforward. Some individuals may find it challenging to allocate time and energy to sports activities amidst their demanding work schedules. Others may perceive sports as an additional source of stress, particularly if they engage in highly competitive or performance-oriented sports.

Understanding the interplay between workplace stress and sports activities is a critical aspect of this study. It is essential to explore whether reducing workplace stress positively influences an individual's motivation and participation in sports activities. Conversely, we must also investigate whether engaging in sports activities has a discernible impact on an individual's ability to manage and cope with workplace stress.

CONCLUSION

Workplace stress is an ever-present challenge that significantly impacts individuals' lives and organizations' success. In contrast, sports activities offer a potential antidote, providing a range of physical, psychological, and social benefits that can help individuals manage stress and enhance their overall well-being. This study seeks to delve deeper into these contrasting dynamics, aiming to provide a nuanced understanding of how workplace stress and sports activities intersect and influence each other.

The consequences of workplace stress are far-reaching, affecting both the physical and mental health of individuals, as well as their job satisfaction and overall quality of life. The toll it takes on employees can lead to negative outcomes for organizations, including decreased productivity and increased turnover. Recognizing the severity of this issue, many employers have begun to implement measures to address workplace stress, such as wellness programs, flexible work arrangements, and mental health support initiatives.

On the other hand, the benefits of sports activities are increasingly recognized as valuable tools for enhancing well-being and mitigating stress. Physical fitness not only contributes to better health but also empowers individuals to cope more effectively with the demands of their jobs. The psychological advantages of sports activities, including stress reduction, improved mood, and increased self-esteem, further underscore their importance in promoting a balanced and healthy lifestyle.

Despite the growing acknowledgment of the benefits of sports activities, it is crucial to acknowledge that the relationship between workplace stress and sports engagement is not one-dimensional. Individuals' motivations and abilities to engage in sports can vary widely based on their personal circumstances, work-related factors, and access to resources.

This research will address these complexities by examining how workplace stress influences the likelihood and frequency of sports activity engagement. It will also explore whether reductions in workplace stress lead to

increased participation in sports activities and whether engagement in sports, in turn, helps individuals better cope with workplace stress.

Understanding the intricate interplay between workplace stress and sports activities has far-reaching implications for individuals, employers, and healthcare professionals. For individuals, it may offer insights into effective strategies for managing stress in the workplace, potentially leading to improved overall well-being and job satisfaction. Employers can benefit by recognizing the value of supporting their employees in adopting active lifestyles and developing workplace policies that prioritize stress reduction. Healthcare professionals can also incorporate sports activities into their recommendations for managing stress and maintaining optimal health.

The subsequent sections of this research will delve deeper into these topics, exploring the causes and manifestations of workplace stress, the myriad benefits of sports activities, and the potential strategies for mitigating workplace stress through sports engagement. The research will employ a diverse and representative sample of participants, ensuring that the findings can be applied to a wide range of work environments and individual circumstances.

In summary, workplace stress and sports activities represent two contrasting forces that impact the lives of individuals in today's society. While workplace stress can erode physical and mental health, job satisfaction, and overall quality of life, sports activities offer a promising avenue for counteracting these effects. This research endeavors to shed light on the intricate relationship between these two forces, offering insights that can inform strategies for reducing stress and enhancing well-being in the modern workplace.

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