

**JOB INVOLVEMENT AND ORGANISATIONAL CLIMATE: A STUDY OF SOCIAL  
SCIENCE ORGANISATIONS IN GURGAON**

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**ABSTRACT:**

*Modern organization is a complex entity. It consists of many individuals, who working in different functions and role, are engaged in the pursuit of some overall goal or a set of goals. Every organization operates in terms of a set of policies and norms, which are sometimes clearly laid down while at other times in the form of traditions and conventions. To plan, coordinate and control its various activities, an organization requires individuals who, in their day-to-day interaction, reflect a variety of leadership styles and skills in dealing with their subordinates. The sum total of these and many other such activities creates an internal environment which each organization accounts for its uniqueness and identity. Members of an organization work within and are continuously influenced by these internal environments which are also organizational culture or organizational climate.*

**INTRODUCTION:**

Though the concept of organizational climate has received a very significant recognition by the researchers in the field of industrial and organization psychology. Since organizational climate is considered as the unique characteristics or the personality of an organization, which may have influence over the behavior and attitude of the staff. The study of the climate of an organization can help to predict the performance of the staff to a certain extent.

The present study is focused on looking into the impact of organizational climate on the job involvement of the professionals who are serving in the social science organisations in Gurgaon.

Job involvement has been widely studied mostly by industrial psychologists. The concept of job involvement has gained much importance in recent years, because of its pivotal role providing a link between performance of one hand and employees' needs and quality of working life on the other.

Job involvement is the degree to which a person is identified psychologically with his work or the importance of work in his total self- image (Lodhal and Kejner,1965).It is the internationalization of values about the goodness of work in the worth of the person, and perhaps it thus measures the case with

which the person can be further socialized by an organization.

In a nutshell, we can aver that there is a great deal of confusion and diversity about the construct of job involvement has been treated in the existing literature. However, it is notable that the confusion is not only at the theoretical/conceptual level but also continues in the empirical treatment in the studies of job involvement. Summarily, it may be said that it has been considered in following three ways:

First, theoretical perspective of job involvement is known as the individual difference variable. Hall and Mansfield (1971) are of opinion that if job involvement is indeed personal characteristics then there should be little change in it under period of organizational stress. Some persons have also denoted the importance of individual difference in the job involvement.

Second, theoretical perspective of job involvement describes it as a function of situation. Vroom (1962) has reported that job factor can influence the degree to which an employee is involved in his job. According to the theory it may be surely influenced by the situational factors.

The last theoretical perspective of job involvement emphasizes an interaction between individual and situation. In the other words, we can say that job involvement is influenced by the interactional effects of

individual and situations. Wanous (1974) suggested that job involvement is an interactional function of individuals socialization process and characteristics of job. For Wanous it is likely that an involvement prone individual will become involved when holding a job with such characteristics.

Finally, to conclude, we may define job involvement as “an employees’ psychological and identification with his job, contingent upon the extent to which he perceives the job satisfying his intrinsic and/or growth needs. Although there may be many such factors which influence the job involvement of the members of the organization but in the present study only organizational climate factor has been taken in account.

**Sample**

The present was undertaken on 230 (Male 120 and Female 110) professionals of four organisations in Gurgaon. The sample was selected on the basis of non-profitability “Accidental sample” technique.

**MEASURES**

Measure used for measuring organizational climate was an abridged version BOCI (Business Organisational Climate Index) by Payne (1971). Eighteen items of BOCI which

appeared most relevant were taken and responses were again obtained on a few points rating scale ranging from very false (1) to very true (5) the total climate score was obtained by summing up the responses for all the items. The cronbach Alpha for the scale is reported by 58. The scale used for measuring involvement of a person in their job, was developed by Agrawal (1980). The J.I.S. comprise 32 items (28 true-keyed and 4 False-keyed) each to be rated on 5 point scale ranging from strongly agree (1) to strongly disagree (5). The items are related to twelve dimensions and discriminatory power of the items is considerably high, validity and reliability of the scale were well established.

**DATA COLLECTION/ANALYSIS:**

The “measures” were administered individually to each respondent who was assured that information provided by him will be kept confidential and will be used only for research purpose. The source on each statement with five point rating scale was measured. The data were analyzed for organizational climate in terms of means and standard deviations and correlations with job involvement. The statistical analysis of data is reported in Table 1 and

**Results:** A perusal of table 1 shows means and standard deviations of organizational climate and job involvement.

**Table1: Means and Standard Deviations of Organisational Climate and Job Involvement**

Name of the Variable	Moderate Score	Mean Score	SD	No. of Respondents
Organisational Climate	54.00	57.24	0.91	230
Job Involvement	96.00	87.63	9.79	230

The mean score of organizational climate is 57.24 and standard deviation is 3.91. The mean

score of job involvement is 87.63 and standard deviation is 9.79.

**Table 2 :Correlation of Organizational Climate and Job Involvement**

Job Involvement	
Organizational Climate	0.08
P < 005	

Table 2 deals with the correlation of organizational climate with job involvement.

The correlation coefficient is 0.08 which is less than the significance level of 0.05.

It is thus evident that internal environment or the personality of an organization is a tune which helps and motivates its employees to be in tune with high job involvement. Internal environment is a sum total of different factors i.e. high pay, normal work load, promotional opportunities etc. it has to be promoted to attain the prime goal of high job involvement. Internal environment is spirit and soul of an organization which a good for high job involvement; hence its balance has to be catered for.

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INFORMATION LITERACY COMPETENCY AMONG THE FACULTY MEMBERS OF  
JAMIA MILIA ISLAMIA, NEW DELHI : A CASE STUDY



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**ABSTRACT:**

*In this study, an attempt has been made to know the information literacy competency among the Faculty Members of the Science and Social Science Department of Jamia Milia Islamia, New Delhi. Survey method was applied to analyze the information literacy competency among the Faculty Members of Jamia Milia Islamia, New Delhi. Data was collected through questionnaire method. The study examine the means and method of searching ability in various in IL tasks, constraints in acquiring IL skill and type of training needs in IL related resources and services.*

**Keywords:** Information Literacy, Information Literacy Competency, Faculty Members, Jamia Milia Islamia.

**INTRODUCTION:**

With the increasing complexity in education due to the technological developments, developing information literacy competency for lifelong learning should be the vital element of education. The information society of the modern world needs person who must know what, where and how of information gathering and use. Larger part of individual's activities has some sort of information orientation be it identification, storage, access, retrieval consolidation or application of that information. Infact an individual's future role shall be largely dependent on his/her ability to handle his required information conveniently. What information found is not important, but to use that information to complete the assigned task is of great importance.

The educational institutions have an opportunity, and a challenge, to prepare individuals to meet the demands of information age, Recipients of a quality education share certain attributes like critical thinking, problem solving, a global vision and a multicultural perspective, preparedness for work, and good citizenship.

**INFORMATION LITERACY:**

Information literacy is the competency that empowers one are with the required "knowledge about information, its nature and available formats; skills to fetch the relevant information by sifting that irrelevant, and attitude for consuming and sharing information by ethical means and practices."<sup>1</sup> In the

contexts of IL empowerment can be defined as "providing users with the skills necessary to find and exploit information that they need for work, study and leisure"<sup>2</sup>.

The definition given on the Michigan University Libraries<sup>3</sup> website states "information literacy" as an essential component in the educational development of each student."

Lupton<sup>4</sup> opined that in Includes : Library research skills and information technology literacy, but is broader than these. IL is not just about finding and presenting information, it is about higher order analysis, synthesis, critical thinking and problem solving. It involves seeking and using information for independent learning, lifelong learning, participative citizenship and soul responsibility.

Llyod<sup>5</sup> further extended this definition and felt that "information literate People have a deep awareness, connection and fluency with the information environment. Information literate people are engaged, enabled, enriched and embodied by social, procedural and physical information that constitutes an information universe. IL is a way of knowing that universe."

**SIGNIFICANCE OF INFORMATION LITERACY:**

Information literacy is not only significant to individuals for various levels of education but even for various occupations, daily decision making and problem – solving, thus enabling lifelong learning process.

Increasing attention to IL is partly the result of information overload especially related to the growth of digital information, which has even caused a new ailment called information fatigue syndrome (IFS)<sup>6</sup>, and partly because of new focus on student learning in a lifelong learning context.<sup>7</sup>

UNESCO'S IFAP (Information for all programme 2006) accentuates, "Everybody should have the opportunity to acquire the IL skills in order to understand, participate actively and benefit fully from the emerging knowledge societies."<sup>8</sup>

#### OBJECTIVES OF THE STUDY:

- To find out the gender wise differences in information literacy among the faculty members of science and social science departments of Jamia Milia Islamia, New Delhi.
- To assess the extent of information literacy among the faculty members of Jamia Milia Islamia.
- To identify the areas of strengths and weaknesses in information literacy skill among the faculty members of Jamia Milia Islamia.
- To identify the various types of training needed to the faculty members of Jamia

#### Gender-wise Distribution of Respondents:

Table -1

Faculty of Science		Faculty of South Science	
Respondents	No. of Questionnaire Received	Respondents	No. of Questionnaire Received
Male	65 (59.09%)	Male	60 (44.77%)
Female	45 (40.90%)	Female	74 (55.22%)

Gender wise analysis revealed from Table -1 that in the faculty of science male respondents are more in number (59.09%) in comparison to female respondents (40.9%), whereas in the

#### IT skills of Respondents:

Table -2

Kind of IT knowledge	Faculty of Science		Faculty of Social Science	
	No.	%	No.	%
Internet	80	72.72%	85	63.43%
MS-office/ DTP Tools	15	13.63%	30	22.38%
Multimedia	10	9.09%	12	8.95%
Programming Language	05	4.54%	07	5.22%

Table -2 reveals that in the faculty of science 80 respondents (75.72%) have knowledge of Internet applications, followed by 15 respondents (13.63%) have working

Milia Islamia regarding the information literacy resources and services.

- To know the various constraints faced by the faculty members of Jamia Milia Islamia in acquiring IL skill.

#### METHODOLOGY:

Data regarding the study were collected through questionnaire method questionnaires were distributed among the faculty members of the departments of science of social science of Jamia Milia Islamia, New Delhi. Total number of 168 questionnaires was distributed among the faculty members of the department of science and 110 questionnaires were received with the respond rate of 65.47 %. Total number of 195 questionnaire were distributed among the faculty members of the department of social science and 134 questionnaire were received with the respond rate 68.71%.\

#### ANALYSIS AND INTERPRETATION:

Analysis and interpretation of data is the correlation between the raw data and significant results leading to conclusions. A detailed analysis of the data and its interpretation is given below in form of tables

faculty of social science female respondents are more in number (55.22%) in comparison to male respondents (44.77%).

knowledge of MS-office or other DTP tools. 10 respondents (9.09%) use multimedia applications but only 5 (4.45%) use programming languages.

In the faculty of social science 85 respondents (63.43%) have knowledge of Internet applications. A significant number 30 (2238%) have working knowledge of MS-office/DTP

Tools, followed by 12 respondents (8.95%) use multimedia applications but only 07 (5.22%) use programming language

**Use of Internet search Tools :**

**Table -3**

Internet Search Tools	Faculty of Science		Faculty of Social Science	
	No.	%	No.	%
Search Engines	55	68.75%	58	68.23%
Subject Gateways	12	15%	22	25.88%
On-line bibliographic databases	07	8.75	05	5.88%
Digital Library	06	7.5%	-	-
Web Portals	-	-	-	-

Table -3 shows that in the faculty of science 55 respondents (68.75%) use search engines for searching the internet. Only 12 (15%) use subject gateways, 7 respondents (8.75%) use online bibliographic databases, and 6 (7.5%) use digital libraries. Web portals are not used by any respondent.

In the faculty of social science 58 respondents (68.23%) use search engines. 22 respondents (25.88%) use subject gateways and online bibliographic databases are used by only 05 respondent (5.88%) digital library and web portals are not used by any respondent.

**Knowledge of operating systems:**

**Table – 4**

Operating Systems	Faculty of Science		Faculty of Social Science	
	No.	%	No.	%
MS-Windows	90	81.81%	105	78.35%
Linux	11	10%	20	14.92%
MS-Dos	05	4.54%	06	4.47%
Unix	04	3.63%	03	2.23%

Table 4 shows that in the faculty of science 90 respondent (81.81%) have the knowledge about operating system, Microsoft windows. Only 11 respondents (10%) have knowledge about Linux. Knowledge about the MS-DOS and Unix is very low among the respondents of faculty of science.

In the faculty of social science 105 respondents (78.35%) have the knowledge about Microsoft windows. Only 20 respondents (14.92%) have Knowledge about Linux. Knowledge about MS-DOS and unix operating system is also very low among the respondents of Faculty of Social Sciences

**Use of General Purpose application software :**

**Table – 5**

Application Software	Faculty of Science		Faculty of Social Science	
	No.	%	No.	%
Microsoft Word	105	95.45%	130	97.01
Microsoft Excel	92	83.63%	108	80.59%

Microsoft Powerpoint	65	59.09%	95	70.89%
DBMS	10	9.09%	8	5.97%

Table -5 shows that in the faculty of science 10 respondents (95.45%) use Microsoft word; 92 respondents (83.63%) use Microsoft Excel; 65 In the Faculty of Social Science, 130 respondents (97.01%) use Microsoft world; 108 software is used by only 10 (9.09%) respondents

respondents (59.9%) use Microsoft Powerpoint and only 10 respondents (9.09%) use DBMS.

(80.59%) use MS-Excel; 95 (70.89%) use Power point and DBMS

**Purpose for using E-resources:**

**Table – 6**

Purpose	Faculty of Science		Faculty of Social Science	
	No.	%	No.	%
To Update subject knowledge	102	92.72%	130	97.01%
To Support Research	96	87.27%	126	94.02%
To Prepare Course Material for Teaching	86	78.18%	115	85.82%
To write paper for publication	83	75.45%	104	77.61%
To atend seminars/ workshops	80	72.72%	91	67.91%
To Carry out project works	66	60%	76	56.71%

Table 6 reveals that in the Faculty of Science 102 respondents (92.72%) stated that they need electronic information resources to keep their knowledge upto dated, followed by 96 (87.27%) for research support, 86 (78.418%) for preparing course materials; 83 (74.45%) for writing papers for publications; 80 (72.72%) for seminars/workshops, and 66 (60%) for carrying out projects.

In the Faculty of Social Science 130 respondents (97.01%) stated that they need e-resources to keep their knowledge up to date; followed by 126 (94.02%) for research support; 115 (85.82%) for preparing course materials; 104 (77.61%) for writing paper for publications; 91 (67.91%) for seminar/workshop, and 76 (56.71%) for carrying out projects.

**Type of Training Needed for Faculty members :**

**Table – 7**

Type of Training	Faculty of Science		Faculty of Social Science	
	No.	%	No.	%
Internet Tools and Techniques	89	80.90%	108	80.59%
Search Techniques	79	71.81%	117	87.31%
Use of software's	82	74.54%	112	83.58%
Digitizing old and rare materials	68	61.81%	92	68.65%
Evaluation of online resources	72	65.45%	88	65.67%

Table 7 shows that in the Faculty of Science, 89 respondents (80.90%) stressed the need of training in internet tools and techniques. Training on effective search techniques should be provided as needed by 79 (71.81%) respondents, 82 (74.54%)

respondents are in need of training for the use of software's. 68 (61.81%) respondents viewed that they need training for digitizing old and rare documents. 72 (65.45%) need training in evaluating online resources.

In the Faculty of Social Science, 108 respondents (80.59%) stressed the need of training in internet tools and techniques. Training of effective search techniques should be provided as needed by 117 (87.31%) respondents. 112 (83.58%) respondents are in need of training for the use of software, 92

(68.65%) respondents viewed that they need training for digitizing old and rare documents. 88 (65.67%) respondents need training in evaluating online resource

**Constraints in Acquiring IL skill :**

**Table – 8**

Constraints	Faculty of Science		Faculty of Social Science	
	No.	%	No.	%
Lack of in service training programmes	93	84.54%	69	51.49%
Personal Inability	75	68.18%	52	38.80%
Poor infrastructure facility	75	68.18%	51	38.05%
Tight working schedule	73	66.36%	48	35.82%
Lack of co-operation from authority	69		62.72%	38 28.35%

Table – 8 shows that in the Faculty of Science, according to 93 (84.54%) respondents, lack of in service training programmes is a major constraint. However, 75 (68.18%) respondents accepted that their personal inability is also a constraint in acquiring information literacy skills. Poor infrastructure facility is constraint for 75 (68.18%) respondents. Tough working schedule is the problem faced by 73 (66.36%) respondent. Around 62.72% of the total respondents viewed that authority is too much non-cooperative in improving IL skills.

In the Faculty of Social Science, according to 69 (51.49%) respondents, lack of in service training programme is a major constraint in acquiring IL skills. Flower 52 (38.80%) respondents accepted their personal ability as a big barrier in acquiring IL skills. Poor infrastructure facility is also a constraint for 51 (38.05%) respondents. Tough working schedule is also a major problem for 48 (35.82%) respondents. Around 38 respondents (28.35%) opined that co-operation from authority is not satisfactory in improving IL skills.

**FINDINGS:**

- Gender wise analysis reveals that in the Faculty of Science male respondents are more in number in comparison to female respondents, whereas in the faculty of social science female respondents are more in number in comparison of male respondents.
- Majority of the Faculty members have internet knowledge.

- Search engines are most frequently used for browsing and searching the web. Other tools such as subject gateways, bibliographical databases, digital libraries, etc. are used much less.
- Majority of the respondents have the knowledge about the OS Microsoft windows knowledge about the other OS such as Linux, MS-DOS, Unix etc. is very low among the Faculty members.
- Vast majority of the faculty members use General purpose application software such as MS-Word and MS-Excel-Use of Microsoft power point in comparatively low and use of DBMS is extremely low.
- A majority of faculty members use information in order to update their knowledge in their respective subject area. More than 70% use e-resources for the purpose of research support, preparation of course materials and preparation of scholarly articles for publication. More than 60% use e-resources to carry out their project works.
- About 85% of the respondents demanded training in internet tools and techniques. About 80% of the respondents need training in using different softwares.
- Majority of the respondents expressed that lack of in service training programmes is a major constraint. Personal inability, Poor infrastructure facility and tight working schedule is problem for around 70% respondents.



**RECOMMENDATIONS:**

- University should have a separate fund and the other measurable support for an information Literacy agenda.
- Technological infrastructure needs to be implemented to enable better utilization of online resources.
- Faculty should network with those who are already using e-information to make use of their knowledge and skill.
- Central library of the university should start IL programme to educate the Faculty members.
- There is a need to develop tutorials related to database search skills internet skills and evaluation of web resources, etc.

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DATA MINING AND ITS APPLICATION IN LIBRARIES OF BIOTECHNOLOGICAL  
RESEARCH INSTITUTE IN UTTAR PRADESH: AN OVERVIEW

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**ABSTRACT**

*Data mining functionalities are used to specify the kind of patterns to be found in data mining task. These tasks are classified into descriptive and predictive models. Data can be stored in many different types of database. Data warehouse is the recently emerged architecture which is a repository of multiple heterogeneous data at a single set in order to facilitate management decision making. Data Mining is the result of natural evolution of information technology. This technology makes a large number of database and information repositories available for information retrieval and data analysis. Data mining techniques can be involved in analyzing these large data sets.*

**Keywords :** *Data warehouse, Data Analysis ,Descriptive models, Heclictive models and Information technology.*

**INTRODUCTION:**

In recent time, data mining has attracted attention in the information industry due to the availability of large amount of data. This information can be used for application in business management, market analysis and science. It is the result of natural evolution of information technology. The star progress of computer technology in the past decades has led to large supplies of powerful computers with strong huge storage media. This technology makes a large number of data base and information repositories available for information retrieval and data analysis.

Data mining and Data warehousing are increasingly becoming popular among IT professionals, academics and pupils. In the last few years, almost in every meeting which has any thing to do with databases. Neural networks, genetic algorithms, E-commerce, or Artificial intelligence has had a theme or session on Data mining and warehousing. Researchers from different disciplines are gradually being attracted to work in this new frontier of research. No. of organizations are considering the deployment of a warehousing is a major progressive step and as a matter of pride. Primary objective of any information system is always to provide service to the users with the state of art information capabilities. For this purpose one must have the clear understanding of the user need/requirement and also the sources available at ones desk. Many new technology and techniques are adopted for this purpose. Our capabilities of generating and collecting data have been

increasing rapidly every day, in this age of information technology. This explosive growth in stored data has generated an urgent need for new technologies and automated tools to assist in transforming the data into useful information and knowledge.

Data warehousing and Data Mining Technology is a adopted to provide Quality services to the clients in the changing environment.

**DEFINITION:**

“Data Mining is the research for the relationships and global patterns that exists in large data bases but are hidden among lost amount data. Such as the relationship between patient data and their medical diagnosis”.

“Data Mining refers to using a variety of techniques to identify nuggets of information or decision-making knowledge in the database and extracting these in such way that they can be put to use in areas such as decision making support, prediction, forecasting and estimation”.

**DATA WAREHOUSING:**

Data warehousing is a subject oriented, integrated, non volatile and time variant collection of data in support of the organization.

Data warehousing incorporate all different types of information which are related to the organization or institution and which will be used by all the users.

A data warehouse can be viewed as an information system with the following attributes.

- It is database designed for analytical tasks using data from multiple applications:

- It supports users with relatively long interactions;
- Its usage is read intensive;
- Its content is periodically updated;
- It contains both historical and current data;
- It presents data in different manner or specified manner.

#### **CLASSIFICATION OF DATA MINING:**

From a data analysis point of view, data mining can be classified into two categories:

**Descriptive Data Mining:** It describes the data set in a concise and summarative manner and presents interesting general properties of the data.

**Predictive Data Mining:** It analyzes the data in order to construct one or a set of models and attempts to predict the behavior of new data sets.

**Importance:** The major reason that data mining has attracted a great deal of attention in the information industry in recent years is due to the wide availability of large amounts of data and the imminent need for running such data into useful applications.

Data mining can be viewed as a result of the natural evolution of information technology. The steady and amazing progress of computer, hardware technology in the past three decades has led to large supplies of powerful computers, data collection equipment and storage media.

Data can be stored in different types of databases, one of which is the data warehouse and it includes data clearing, data integration and Online Analytical Processing (OLAP).

The fast growing tremendous amount of data, collected and stored in large and numerous databases, has far exceeded our human ability for comprehension without powerful tools.

Data mining is a powerful tool that overcomes all the above problems by extracting or mining knowledge from the large amount of data and provides the necessary information and knowledge to the users.

#### **LIBRARIES UNDER THE STUDY:**

1. Central Drug and Research Institute (CSIR), Lucknow (UP).
2. Central Institute of Medical and Aromatic Plants (CSIR), Lucknow (UP).
3. National Botanical Research Institute (CSIR), Lucknow (UP).
4. Industrial toxicology Research Centre (CSIR), Lucknow (UP).
5. Birbal Sahni Institute of Palaeobotany (DST), Lucknow (UP).
6. Industrial toxicology Research institute, Lucknow (UP).

#### 7. Indian Institute of Technology, Kanpur (UP). **DATA MINING IN LIBRARIES AND INFORMATION SERVICES:**

Libraries play a vital role within their institutions as repositories and providers of information resources.

This fact provides the basis for the strategic importance of library data mining. By ascertaining what users need to know and how well these needs are served. Because some readers may not have a detailed sense of the behind the scenes activities in Libraries. So a data focused overview of the internal working of libraries is provided. Workflow in any library creates a number of data sources appropriate for data mining in libraries. Before a library obtains new information resources, a librarian assesses the needs of the existing collection in light of available and upcoming publications. Next, acquisition personnel obtain the information resources specified from this needs assessment. Once the library obtains requested new resources, cataloging personnel either create or purchase a catalog record for the new resource. The circulation department then makes the resource available to end users. Depending upon the size of the library and the scope of its operations, these activities fall within the purview of one, a dozen, or possible hundreds of different employee organized into specialized departments. After an information resource appears in the library's collection, users can locate it using catalogue search systems and bibliographic databases. Increasingly catalogues and databases are all cross-linked, and each user's search record and traversal of links can appear in log files. When user find resources that they wish to borrow, the circulation department records their selection in a database that tracks the location of each resource owned by the library. As this overview suggests, all functional process of the library collection-assessment, acquisition, cataloging, and user searching, and circulation generate large reserves of available data that document information resource acquisition and use. Library information systems frequently use large relational databases to store user information, resource information, circulation information and possible bibliographic search logs. Forward thinking authors in the field of library science began to explore sophisticated uses of library data some years before the concept of data mining became popularized. Nutter (1987) explored library data sources to support decision making, but lamented that "the ability interpret and to apply them" Johns on and Weckert (1990)

developed a data-drive expert system to help select library materials and Vizine-Goetz, Weibel & Oskins (1990) developed a system for automated cataloging based on book titles. A special section of Library Administration and Management (“Mining your automated system”) included articles on extracting data to support system management decision (Mancini, 1996), extracting frequencies to assist in collection decision-making. (Atkins, 1996), and examining transaction logs to support collection management (Peters, 1996).

More recently, Banerjee (1998) focused on describing how data mining works and ways of using it to provide better access to the collection. Guenther (2000) discussed data sources and bibliomining application, but focused on the problems with heterogeneous data formats. Doszkocs (2000) discussed the potential for applying neural networks to library data to uncover possible associations between documents, indexing terms, classification codes, and queries. Liddy (2000) combined natural language processing with text mining to discover information in “digital library” collection. Lawrence, Giles, and Bollacker (1990) created a system to retrieve and index citations from works in digital libraries. Gutwin, Paynter, Witten, Nevill\_manning, and Frank (1999) used text mining to support resource discover.

#### WHY USE DATA MINING?

Recently a number of publications have examined the use of data mining methods in insurance and actuarial environment and this can be contrasted with the use of “classical” approaches such as generalized linear models. The main reasons for the increasing attractiveness of the data mining approach are as follows :

- It overcomes the shortcomings of traditional methods that operate under the assumption that data are distributed normally (as is the case in linear regression) or according to another distribution in the exponential family, such as binomial, Poisson or Gamma (as is required for a generalized linear model). Classical linear methods are based on such assumptions, which can be incorrect and may be difficult to test.
- It relies more than traditional models on the intense use of computing power. This results in analyses that are less time consuming and more flexible in terms of selection of predictors than those carried out by classical methods. Classical methods applied to large data sets can take longer to develop models and

have particular trouble selecting important interactions between predictors.

- It is able to handle categorical variables with a large number of categories (for example, occupation, industry or postcode). Classical methods can have trouble dealing with such variable : as a result, they are either left out of the model, or having to be grouped prior to inclusion.
- Some data mining methods such as CART have methods to handle incomplete or noisy data, which are improvements over those available for traditional linear methods.

#### APPLICATION OF DATA MINING:

In today’s e-business environment, Data mining is beginning to garner more and more attention. Because data mining is about exploration and analysis, by automatic or semi-automatic means, quantities of data can help to uncover meaningful patterns and rules. These patterns and rules help corporations improve their marketing, sales, and customer support operations to better understand their customers. Over the years, corporations have accumulated very large databases from applications or other operational systems. Within these operational systems lie untapped values hidden inside these data. Data mining techniques help organizations see these patterns within the data. Recently, Microsoft has initiated the OLE DB for Data mining API with a number of leading data mining providers. This API defines a data mining query language based on SQL syntax. Data mining models are treated as a special type of relational table. Prediction operations are considered as a special kind of join. Microsoft SQL Server Analysis Services 2000 introduces the Microsoft data mining provider, which is based on the OLE DB for DM standard. The provider includes two data mining algorithms : Microsoft Decision Trees and Microsoft Clustering, both patented by Microsoft Research.

#### RECOMMENDATIONS:

Effective quality solutions need to keep up with the complexity of the manufacturing process. Data of individual processes should be combined to quality data warehouses to model the whole production process. Quality data warehouses should be designed to consider the needs of the final user (online supervisors, engineers, or even higher-level managers).

Increasingly, failures in manufacturing processes can no longer be attributed to a single root cause failure but are associated with a combination of causes somewhere downstream of the process that

lead to a malfunction. Sophisticated reporting techniques like OLAP are needed to describe where the problem occurs, and with data mining, analysts can identify which combination of causes were responsible for the problem. The case studies, a printing process and an analysis of failures in hard disk drives, demonstrate the unique value of data mining solutions to manufacturing problems and the return of investment associated with implementing.

#### CONCLUSION:

The marketplace has changed drastically over the past 10 to 15 years. Production has become more complex. Most companies face increased competition both at home and abroad. Manufacturing industries have reacted with increased investment in information technology to streamline production process and to assemble data about their customers. Often going hand in hand with the drive for economics of scale is the move to restructure companies into smaller and more efficient sub units with a large service component capable of reacting more quickly to ever increasing customer expectations information delivery system have been or are being introduced to track customer loyalty and market trends as early as possible.

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DIGITAL PRESERVATION OF ARCHIVES

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**ABSTRACT:**

*The manuscript is designed to show the importance of digitization of written or audio video materials. Digital preservation is the most prevalent issue for archives today. Digitalization is the conversion of analog materials to bit map form. Digitalization undoubtedly assists the archivist and preservation for future fulfilling the requirement. It also enables the large number of researchers to get their hands on a particular archival item. It also improves to access the quality. Development and application of e-tools are being used in libraries and archives field. The preservation of born-digital content may include format transformations to facilitate long-term preservation and to provide better access.*

**Keywords:** - Digitalization, E-tools, Archives, Digital standards.

**INTRODUCTION:**

To prevent and stop the damage or loss to archives material like manuscript on paper, palm leaf, birch bark, parchment, it is utmost important that the verity of fungus, insects and rodents are to be controlled. To preserve the most valuable material for countries various steps needs to done. One of them is digitization of archives materials. Another important thing in digitization is survey condition, accessibility, rapidity of invention all over the world etc. The explosion of e-literature in multidimensional form and voluminous development has urged the libraries to adopt new technologies for collection development and reduce the space and costs of information. Today, most of the librarians are facing w economic problems and space type. The high degree of aspiration for knowledge of the users is the assessment of the digital sources. But digital preservation is a long and necessary process for future. It is a systemic way of policies, strategies and action to ensure access to reformatted and born digital content regardless of the challenges of media failure and technological changes. Digital preservation aims to ensure that digital media and information systems are still interpretable into the indefinite future. Each necessary component of this must be migrated, preserved or [emulated](#). Typically lower levels of systems ([floppy disks](#) for example) are emulated, bit-streams (the actual files stored in the disks) are preserved and operating systems are emulated as a [virtual machine](#). Now a large quantity of information exists in digital forms, including emails, blogs, social networking websites, national elections websites, web photo albums, and sites which change their content over time. With digital

media it is easier to create content and keep it up-to-date, but at the same time there are many challenges in the preservation of this content, both technical and economic.

**DIGITALIZATION:**

Digitalization is the process of converting the content of hysical form to digital format. For this we use different types e-tools like optical scanner, digital cameras, computer system, etc are used to digitize image by translating them into bit maps.

**Digital Preservation:** Digital preservation includes a wide range of activities starting from storage to transformation, depending on the nature of the resource and the source. The range of preservation services could be equally wide. Although preservation strategies vary for different types of materials and between institutions, adhering to nationally and internationally recognized standards and practices is a crucial part of digital preservation activities. Jantz and Gialo (2005) opines that “digital preservation encompasses activities which are necessary for long term maintenance of a byte stream including metadata) sufficient to reproduce a suitable facsimile of the original document; and for the continued accessibility of the document contents through time and changing technology. Vinitha et al., (2007) Digital preservation refers to the various methods of keeping digital material alive into future

Digital preservation requires not only the maintence and distance recovery procedures but determining the appropriate metadata needs for each type items and objects. Digital preservation includes a wide range of activities starting from

storage to transformation, depending on the nature of the resources and the sources.

#### PROCESS OF DIGITIZATION:

Conversion of [analog information](#) in any [form](#) (text, photographs, voice, etc.) to [digital](#) form with suitable [electronic devices](#) such as [scanner](#) or specialized [computer chips](#). In this process information can be processed, stored and transmitted through digital [circuits](#), [equipment](#) and [networks](#).

**Storage:** The storage location of paper or microform records during the digitization Conversion process must be controlled both to assure the ability to retrieve the records and to assure the records.

**Retrieval:** Retrieval means maintenance of indices of storage location to allow users to retrieve records when required. Use audit trails generated from the document logs or file access logs to track when original records are removed and returned from the storage location.

#### DIGITIZATION GOALS AND OBJECTIVES:

The digitization process from paper or microform to electronic form must ensure that record should not lose. The digitization conversion process must also indicate the original record maintenance. Accurate control process must establish that all records are converted. IGNCA (Indira Gandhi National Center for the Arts) has a conservation wing to provide conservation treatment again IGNCA resort to microfilming to preserve the content of a manuscript. Now a manuscript copy is a digitized copy that is more convenient. National manuscript mission launched a project for digitization of these types of materials. In other word digital copy proves to be handy to provide efficient access. By today IGNCA have digitized 5 lakh manuscripts, 20,600 microfilm rols, 17087 rolls. Another famous mission for digitization was established in 2004 as pilot project named NMM (NATIONAL MANUSCRIPT MISSION).

#### MAJOR STEPS FOR DIGITIZATION OF DOCUMENT:

The amount and type of digital collections in institutional grows with the time. It is highly essential to select materials for digital preservation keeping in view the demands of readers and future values.

- Selection of material that to be digitized.
- Make the required process easy and accessible.
- Maintenance of selected materials.

- Digitization of physical form for digital formats.

The process of digitization seeks to identify and use appropriate methods to maintain the significant characteristics for which our digital collections were collected.

- Get adequate information about the image to ensure retrieval from a database.
- Get the copyright situation.
- Find out various image modalities that are available in the collection.
- Determine whether it is technically feasible to capture the information.
- Determine who will use the image.
- Long term use of the materials.

#### USE OF E-TOOLS FOR DIGITIZATION:

A digital object is merely an opaque string of bits without the intermediation of some technical system that is capable of transforming those bits into an appropriate representation interpretable by the human perceptual and cognifacilities. Digital imaging is an inter linked system of hardware, software, image database and access sub-system with each having their own components. Many e-tools we used for digitization include several core and peripheral system. Here we explain some major e-tools:

**Computer system:** In this system all applications that belong to all type support images, latest version of adobe reader, photoshop and all type of image control, ram 4gb -8gbfor fast working.

**OPTICAL SCANNER:** Scanners are used for acquisition of an electronic image into a computer from in its original form like photograph, text, manuscript. Once the printed pages are scanned they may be in the given formats. Scanning resolution must be set to capture all important details from the originals. One method used to determine minimum scanning resolution for illustrations involves measuring the width of the smallest stroke and setting the scan resolution to capture that stroke with a designated number of pixels (Kenney and Rieger, 2000).GIF (Graphic Interchange Format), HTML (Hypertext Markup Language), JPEG (Joint photographic Experts Group), PDF (Portable Documents Format), SGML (Standard Generalized Markup Language), TIFF (Tag Image File Format) are some of the important examples.

**DIGITAL CAMERA:** For digital image we use an electronic device as digital camera which create an electronic file that forms into square picture elements (pixels) when displayed on a viewing device (e.g., a computer monitor). The displayed

image is a two-dimensional matrix of thousands or millions of pixels each of which has its own address, size, and color representation. Digitization of photograph means converting or capturing its image electronically through a scanner or digital camera. Digital image processing software allows to magnify an image to see the pixels and sometimes measure the numeric color values for each pixel – like a sophisticated, computer generate and paint-by-number matrix. People use digital images in many ways. Digital images are stored electronically on media such as computer hard drives, CDs, DVDs, or magnetic tapes. There are certain terminologies are in use such as “dpi” (dots per inch) and “ppi” pixels per inch.

**IMAGE CAPTURES SOFTWARE:**

OCR (Optical Character Recognition) is a technology that enables to convert different types of documents such as scanned paper documents, PDF files or images captured by a digital camera into editable and searchable data. The entire process of data conversion from original paper document, image or PDF takes less than a minute, and the final recognized document looks just like the original.



**TRAC:** TRAC “provides tools for the audit, assessment and potential certification of digital

repositories, establishes the documentation requirements required for audit delineates a process for certification and establishes appropriate methodologies for determining the soundness and sustainability of digital repositories”.

**DRAMBOORA:** The DRAMBORA (Digital Repository Audit Method Based on Risk Assessment) process is arranged in six stages and concentrates on evaluation of like hood and potential impact of risks on the repository. The auditor is required to describe and document the repository’s role, objectives, policies, activities and aspects in order to identify and assess the risks associated with these activities and assets and define appropriate measures to manage them.

**PLATTER:** PLATTER (Planning Tool for Trusted Electronic Repositories) is intended to be used as a complementary tool to DRAMBORA, NESTOR, and TRAC. It is based on ten core principles for trusted repositories and defines nine strategic objective plans, covering such areas as acquisition, preservation and dissemination of content, finance, staffing, succession planning, technical infrastructure, data and metadata specifications, and disaster planning. The tool enables repositories to develop and maintain documentation required for an audit.



Convert to digital form





(Source Internet)

*In rough form Manuscript that convert and storage in digital form*

### SELECTION OF METADATA

**Metadata:** A digital object does not have any meaning to human being unless the content is described with descriptive structural and technical way. Preservation application must be accompanied by metadata to be successful. The preservation metadata forms a crucial element of digital preservation. It is commonly agreed that preservation metadata is the key to successful digital preservation. Information recorded about a digital object, both at time of creation and during its life cycle, is crucial to the long term readability of the file. Compiling a preservation metadata scheme however is more difficult. One of the best way to overcome metadata problem is to digital preservation from the outset is to involve the authors in contributing preservation metadata during the creation and ingest process and to embed digital preservation into the repositories workflow, which will ease the later preservation work.

**Right Information Management:** Preservation of metadata contains archival information which is needed for the long term preservation object information and that restricted the uses of digital object with technical protection measures. For uses they received preservation of paid if rules.

**Systematic control digital content:** The all find object document can be systematically managed with meta data fields. It also provides a file name

with categorized objects.

**Encapsulation:** In this process we organize the different object in one place. It enables that the association of files with digital objects would have details of how to interpret that object by using logical word as wrappers or containers that provide technical information for use in future development of viewers through e- device.

### PRESERVED ARCHIVES MATERIALS:

**Manuscripts:** Manuscripts mean which is written by hand. The term of manuscript has been used in the past to cover different ready materials. In 16<sup>th</sup> and 17<sup>th</sup> centuries the term man scripted was used to indicate a bound volume of loose collection of documents, deeds, and letters. The archives division responsible for the collection cataloging and maintenance of the libraries unpublished historical collections, including diaries, autobiographies, correspondence, business and personal records. Subject areas covered in Marriott manuscripts collections include politics, communication, Architecture, Ethnic groups, science, Engineering and medicine, History, philosophy and Religion, outdoor recreation, mining, visual .

**Paintings :** Painting is a mode of creative expression, and the forms are numerous. Drawing, composition and other aesthetics may serve to manifesto the expressive and conceptual intention of the practitioner. It can be symbolism, emotion,

political, social structure etc. There are many types of painting as oil painting, water color, pastel, ink hot wax, nature color, enamel, spray paint, tempera etc. Some paintings are very ancient that is very useful for our society.

**Microfiche:** A small sheet or card that size (4" X 6") or 105 mm by 148 mm containing microfilmed images of pages, read with a microfilms reader. Microfiche can be produced from duplicated jacketed micro film from source of documents using a step-and-repeat camera and from computer output Microfiche (COM). Many pages of text fit onto a single fiche and their major advantage is in saving shelf space. Many government documents are issued in fiche format. It can read with special machine included with magnifier glass and projector. I can also we used to convert the digital image with scanner.

**Microfilm:** Microphotographs of printed material on a reel of cellulose film viewed using a microfilm reader/printer (in Marriott located on Level I in the documents area). Items in awkward or frail formats (such as newsprint ) and popular magazines subject to damage from heavy use are often purchased in microfilms format rather than being bound between hard covers. It consist in the reduction of image to a small size that read with optical assistance.

**Filmstrip:** Filmstrip are made up of a series of still pictures placed in sequential order on 35mm filmstrip which are available in two different formats. These formats are single or half framed

and double or full framed. Still pictures which are stored in filmstrips can be viewed only using projector.

**Audio-Videos:** It is first developed in 1951 with different technologies. Videos mean recording manipulating and displaying moving images, especially in a format that can be presented on a television. That times recorded speeches, movement, and other activity of famous person. AV materials are available in a bulk verity and quantity like maps, slides, photographs, filmstrips, sound filmstrips, motion pictures, sketches and cartoons, micro films, monographs, video recording. The commonly used AV material of DVC-pro, MiniDV, Dvcam, Betacam, Umatic H/b L/b, BCN, CD, DVD, Quad, Gramophone etc.The digital video tapes are supposed to be of longer durability.

**Digital Audio Tape:** This is the latest version of the tape. It is used in the computer for storing processed data, backing up data stored in disk and interchanging programs and data between organizations. These are available in 60.90 and 120 minutes length.

**DVD (Digital Versatile Disc) :** The DVD is the new generation of optical disc storage technology. It has replaced the laser disc, and eventually could replace audio CD and CDRom. It is stored in a 133 minute movie in one side of a DVD. It can hold up to 17 GB of video, audio, photos or other information.

TYPES OF MATERIAL	TEMPRATURE	MOISTURE	LIGHT (LUX)	Remark
Paper manuscript	10 <sup>0</sup> c	100%	150 lux	Also used dust free chamber , glass covers and sunlight filter strip on window.
Palm leaf	10 <sup>0</sup> c	70%	150 lux	
Paper painting	15 <sup>0</sup> c -22 <sup>0</sup> c	45%-65%	50 lux	
Film strip or A/V	20 <sup>0</sup> c -22 <sup>0</sup> c	45%-50%	5 to 30 lux	
Floppy disk, hard disk,cd,dvd.	17 <sup>0</sup> c -20 <sup>0</sup> c	35%-45%	5 to 20 lux	

**ADVANTAGE**

- This approach has the distinct advantage of being universal and easy to implement for preserving digital information.
- The advantage of preserving more of the display, dissemination, and computational characteristics of the original materials of libraries and archives.
- This strategy simplifies migration and may lower digital preservation costs by reducing the amount of customized reformatting needed as technology changes.
- Cost sharing for technical and training support.
- The consortium has been offered better terms of licenses for use archival access and preservation of subscribed electronic resources and 24 hours all days.
- Facilities to build up digital libraries.
- Digital information can be transferred across successive generations of technology.
- A single interface and access point providing scope for electronic archive searching always provide an edge to needy user.

**DISADVANTAGE:**

- Some of the problems of DP include high initial costs to the publishers.
- The acceptance of EJs depends upon the user-friendly retrieval software.
- As a prerequisite, EPs necessitate the availability of a computer and communication network to the subscriber.
- When we faced with the responsibility for preserving digital materials, then archives and libraries face a series of complex and difficult based on the size of the original materials.
- All current preservation methods involve trade-offs between what is desirable from the standpoint of functionality, dependability, and cost.
- The preservation community is only beginning to explore possible alternatives to storing digital information in "software-independent" form.
- Copy right problems.
- Require trained staffs for handling electronic devices.

**CONCLUSION:**

It is evident from the above discussion that the digitization of the information is an utmost important aspect in today's world. It enables the audience to go through the materials in short period of time and provides broader range of accessibility. The material available today may be of great use in future so its preservation is again an important issue. So some important know how and technologies may be helpful in its preservation as discussed in detail in the text.

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## ABSTRACT:

*The paper deals with the need of Resource Sharing Network in India. The objective of this network is to develop resource sharing strategy for India and make cooperation among different types of LIC networks which include National Library of India. Internet technologies have brought a drastic change in this regard, specially Z39.50 protocol has provided a common platform which help to develop a Union catalogue. This protocol has made resource sharing as a reality. National Resource Sharing Network in India. Given that no library can afford to purchase, house, and preserve every information source that its patrons might need, information resource sharing, in the form of interlibrary loan (ILL) and document delivery (DD), has become a core library service. Of course, information sharing is an activity that librarians must balance with other equally essential responsibilities, such as preservation concerns, cost considerations, and the maintenance of circulating collections for local patrons. This paper also shows the comparison between different LIS networks and provides an economical model for developing the National Resource Sharing Network in India.*

*Keywords: Objectives of the national resource sharing network in India, The Patron Perspective, Internet and resource sharing, Resource sharing networks in India, Coordination among library networks*

## INTRODUCTION:

The question facing librarians today is whether such services represent a threat to library resource sharing or a new opportunity for librarians to help patrons overcome the constraints of distance and access information and materials. Historically, a variety of technologies-e.g., manuscript catalogs, union lists, railroads, mail services, telephones, microfilm, teletype machines, fax machines, and computers-have each made the discovery and delivery of information for library patrons more reliable, affordable, and thus possible. In particular, advances in computer technology are what first led to the modern era of ILL in the 1970s, when OCLC established its online database of library holdings and began to facilitate online requesting of interlibrary loans. Next, the personal computer revolution of the 1980s and the development of the web in the 1990s combined to make online searching increasingly easy and popular (Straw, 2003). Additionally, during this period, increased speed and storage capacity of computers helped librarians manage and address the information

explosion, skyrocketing materials costs, storage needs, and preservation issues.

Since the Alexandrian library, the aim of librarians and the hope of scholars has been to amass in a single library all the resources for research in various branches of knowledge. Though this was always a fantastic and imaginary notion, none the less, it has persistently seduced collectors and readers into pursuing unrealistic objectives and into making false assumptions. Due to the exponential growth and the increasing cost of information resources, it is difficult for a library to acquire all the document, which are required by the user of a library. A library Collection could be classified into two groups – one satisfy the core interests of the institution to which the library belongs, and other serving peripheral interest. Faced with financial crunch, while a library could restrict acquisition of materials in the peripheral areas, it tries its best not shed anything from its core acquisition list. Therefore in a collective development situation, it is logical for a library to look up the other institutions for meeting its peripheral interest. Even in this situation a library can drop an item from the core item to the same

ensured by another library in the neighborhood. To achieve aforesaid objectives various library and information center networks were emerged. A number of resource sharing networks has been observed at local, regional, national and international levels. Normally three levels of Library networks are seen in India include Metropolitan Library network (MAN), Country wide Network like INFLIBNET(For University libraries) and sectoral networks like BTISNET, ENVIS, FOSTIS etc. These Networks are working according to their objectives of providing information resources to its member libraries rationalizing acquisition and utilization of information resources; providing current awareness services; helping to automate their member libraries. As one of the objectives of the networks is to adopt cooperation between different networks, except few there is not a single agency who will promote the cooperation among the networks available in India. Not a single network has mentioned the role of national library in the resource sharing activity, which is regarded as the national wealth of the information resources. The objective of the National library is to cater information needs of the nation while it is confined to Kolkata region. In spite of developing a National Bibliography it does not have the national union catalogue, where in countries like USA, UK, Canada have developed National Union Catalogs which are also available online through the World Wide Web. So there is a need for developing a resource sharing network in which national library should play major role.

## **OBJECTIVES OF THE NATIONAL RESOURCE SHARING NETWORK IN INDIA:**

- To develop a resource sharing strategy for India at both national and regional level.
- To develop a database of Information resources available in India with the help of existing information networks.
- Proper use of Information Technology (IT) in providing information services in all disciplines.
- To achieve economy in the use of resources, both money, man and materials (3Ms).
- To establish cooperation among different types of Information networks, information centers, libraries including National Library of India.

- To encourage the formation or promotion of existing resource sharing networks in all States.
- To promote and support adoption of standards in library networks and operations.
- To foster discussion in the library and information communities on all aspects of resource sharing, including:
  - Cooperative cataloguing,
  - Coordinated collection development,
  - Interlibrary loan and document delivery, and
  - Resource sharing database

## **THE PATRON PERSPECTIVE:**

Interlibrary loan, in its current incarnation, is undeniably a valuable service for library patrons, but it is not now, nor has it ever been, an ideal one. Resource limitations, local needs, and preservation concerns often necessitate library-centric policies and procedures. These in turn limit lending and borrowing options, which aggravate patrons whose expectations for libraries are increasingly shaped by the often immediate, free access to online material that web-based information services provide.

More specifically, patrons want to see the full text of the item, no matter how old it is, how rare it is, or where in the world it is located. They do not want a limit on how many items they can request, and they want to get materials quickly and for little or no cost (beyond tuition or taxes, that is). Also, they want to be able to take loans home, renew them from home, and receive reminders before items become overdue. Furthermore, they want to return items to their nearest library-not necessarily the library they made their request from-or by mail. Relatedly, they want to access materials online or have materials sent to them so they do not have to go to a library to pick them up. Nevertheless, despite wanting to do so much online, away from their libraries, they still want to be able to talk to a library staff member about their requests, problems, and questions.

## **The Library Perspective**

One of the foremost roles and purposes of librarians is to be honest brokers of information, unbiased toward or against any particular service, whether library-based or not. Librarians in ILL departments have long been aware of patron preferences for resource sharing, but technical and financial constraints and responsibilities to

lending libraries and posterity limit their ability to meet all patron needs and expectations.

Now that web-based information services like Google are providing instructive examples of what people want, as well as the technology to help librarians offer more high-quality information and services, librarians can make various positive changes. For instance, because of an increased awareness of online information, people may request more obscure items from more ILL departments, which will encourage more libraries to get involved in resource sharing. In addition, ILL librarians can now regularly use web search engines themselves as one-stop verification tools for checking incomplete or incorrect citations, decoding journal title abbreviations, and finding contact information for authors, libraries, and associations.

### **THE SOCIETAL PERSPECTIVE:**

By preserving the written record and offering public access to it, libraries have long contributed to the progress of civilization. Certainly, information sharing is a public good that is useful, perhaps even essential, for human survival and success, and ILL still serves as a necessary access point to the world of information beyond the Internet and local library collections. In order to remain relevant and vibrant in the future, however, libraries and library services must develop in light of, and in relation to, contemporary social ideals and issues beyond the scope of individual patrons or contemporary libraries. And, as always, librarians must also consider their role in and responsibility to society and posterity.

Although the Internet can be a democratizing force, it is severely limited by the extent to which all people can-or cannot-afford computers and connections. Therefore, libraries can and should continue to play a role in facilitating access for patrons who might otherwise become disenfranchised information have-nots. Just as the retention and redevelopment of local rather than worldwide food chains are being touted as a practical solution for improving the health of people and the environment, there is wisdom in maintaining and developing sustainable core and specialized local library collections and services, including no-fee ILL services. In this way, all individuals can access the information they need to survive, flourish, and participate fully in society.

### **INTERNET AND RESOURCE SHARING:**

Librarians have always wanted to share resources. Early on, paper union catalogues were developed so that the location of library resources would be known. This method of keeping track of locations was expensive and cumbersome. For those librarians old enough to remember, searching through the Union catalogues of printed books was quite a time consuming and a physically demanding job.

Advances in web technologies and storage technologies enabled libraries to automate their resources and services in a number of ways. Today's librarians are looking for new and innovative ways to leverage the web to share these resources and deliver to full range of library services. The web provides an ideal environment in which to maximize the benefits of these wide-ranging technology advances. It is characterized by the following:

- Library collection from different libraries;
- Connection of member libraries via the internet;
- No single location to host distributed library collection;
- The use of a common search form; the search module goes to the different databases and
- does a local search and pools all the harvested search results, which are then returned to the user's screen. A good distributed database setup will work, if participating databases will have a uniform set of indexes and search functions.

### **Advantages of using a distributed search engine**

- Local resource centers have full control (design and management) over their collection.
- Information retrieved is current and dynamic.
- Different database systems can work together.
- Eliminates a lot of factors, such as
  - redundant data storage,
  - maintenance cost of a central data storage location, and
  - total downtime of the system

### **RESOURCE SHARING NETWORK IN WORLD WIDE:**

In the developed countries resource-sharing networking was started long back. USA is the

birthplace of library networking and by now libraries in each state is networked to local, regional and national network.. OCLC was founded in 1967, OCLC introduced an online shared cataloging system for libraries in 197. The Interlibrary Loan service was introduced in 1979 and since then has been used for more than 114 million loans among 6,700 libraries around the world. The First Search service was introduced as a reference tool in 1991 and is now used by 19,246 libraries. The US Department of Education offers networking grants, supports inter-library loan projects, automation and retro-conversion projects, resource sharing schemes, etc. besides providing regular federal grants annually to the public and academic libraries. Resource Sharing works in UK is also well established. The best example is Birmingham Library Co-operative maintenance Project (BLCMP) in Birmingham which has 13 million bibliographic records of books, serials, music etc. in its database and its catalogues get a hit rate of above 90 per cent with more than 60 libraries comprising public libraries, college libraries, university libraries, national and special libraries. BLCMP has introduced EDI clearing house service in libraries.

## **ROLE OF THE NATIONAL LIBRARY:**

The networking role of the national libraries, needs to be defined. The national libraries will continue to share a major responsibility for collection building although networking provides a means to evolve some collection responsibilities to other libraries. Networking should result in an increase in the number of remote users of the national collections, making them more truly national, and enabling the information to be more accessible to researchers of all kinds. The National Library of India in particular has a valuable contribution to make in this regard. National library should introduce document delivery service. Like other National Libraries I promote part in inter library loan (ILL). The national library in common with other libraries will need to develop greatly improved methods of document and information delivery.

## **RESOURCE SHARING NETWORKS IN INDIA:**

The growth of library Networks in India can be traced to the initiatives made by NISSAT in establishing CALIBNET in 1986, DELNET in 1988 and other networks subsequently. DELNET has emerged as the first operational library network in India and was initially sponsored by

the National Information System for Science and Technology (NISSAT), It is currently being promoted with the the support of the National Informatics Centre (NIC). About 276 libraries have joined DELNET as institutional and associate members. DELNET has been actively engaged with the compilation of various Union Catalogues of the resources available in member-libraries. It has already created the Union Catalogue of Books both in CCF and MARC format, Union List of Current Periodicals, Union Catalogue of Periodicals, CD-ROM Database, Database of Indian Specialists includes eminent scientists, educationists and writers from all over the country, Database of Periodical Articles, Union List of Video Recordings, Urdu Manuscripts' Database, Database of Theses and Dissertations, DEVINSA Database, sample databases of language publications using GIST technology and several other databases. DELNET launch DELSIS, a powerful library networking software. DELSIS (DELNET system for Informa tion Services) is an integrated modular system which supports DELNET online databases. University Grants Commission (UGC) established INFLIBNET in 1988 as a national level network .Though the progress of INFLIBNET has not been at the level as it was planned but it is working as promoting agency for Universities libraries to automate their libraries and make them available through network. There has not been much progress made by BONET and CALIBNET as library networks. They have prepared no union catalogues. MALIBNET has also not prepared union catalogue, which is a must for resource sharing. INSDOCsupported the formation of MALIBNET in Chennai in 1993. BALNET in Bangalore was registered as a society in 1997. The network in the Ecological and Environmental Economic Studies established in India, with the help of the World Bank, and Government funding. Coordination among library networks NISSAT envisaged formation of registered societies. These societies could frame their own rules appropriate to local condition and network developemnt needs. The ADINET (1993) is strongly linked with INFLIBNET, DELNET with NIC, MALIBNET with INSDOC and MYLIBNET with CFTRI. The BONET(1994) and PUNENET(1992) could be viewed more or less as institutional projects, where BONET is with NCST, PUNENET is managed by consortium of three institutions

namely Bio informatics center at Pune university, C-DAC and NCL. The above Networks are developed for providing information resources to its participating libraries but there is not a single agency which is taking care of promoting the cooperation among different networks.

**Model of national resource sharing network**  
State and central governments should promote the development of resource sharing network in state and National level and should ensure the development of an infrastructure to support a decentralized service model. INFLIBNET is a nation wide library network with the following basic objective. To establish a computer communication network for linking libraries and information centres in universities, deemed to be universities, colleges, UGC information centres, institutions of national importance and R&D institutions etc. We may extend the scope of INFLIBNET else we can design a national resource sharing network on following model.

The model of resource sharing includes the following:

- Development of National Resource sharing Network by the Government of India under ministry of Human Resources Development as a hub for co-ordinating all networking activities.
- Each Individual library should automate their library collection and their bibliographic database should be accessible through network.
- Each individual library should connect to their immediate nodal network
- Each entity of the network should follow the Z39.50 standard protocol for resource sharing.
- Development of different specialized sectoral network like BTIS, ENVIS, CSIRNET,
- MANLIBNET in the field of Medical science, Law, humanities and other specialized subjects
- Each Nodal Library network should design the subject gateway with the help of librarians and subject specialists.
- The Nodal network should provide a common database of electronic journals to its participating libraries.
- All the Universities and college libraries should automate their library's collection and connected to INFLIBNET

- There should be a state public library network which should encourage co operation
- among public libraries in respective states.
- Central network is supposed to get the information from the libraries through the
- regional network both MAN, Sectoral Network and other networks.
- Nodal library can also think about the digital libraries where information can be
- shared at a very low cost and it will eliminate the cost of document delivery through
- the postal and other media.

## CONCLUSION

Although libraries have long shared materials on a case-by-case basis, ILL has been an institutionalized library service for only about a century, and ILL as we know it has only existed for a few decades. Therefore, we cannot know whether web-based information services such as Google are merely the next transformative, if disruptive, technologies for ILL departments to incorporate, or whether they represent a complete paradigm shift for the future of information resource sharing. This may be why the vision of the Rethinking Resource Sharing Initiative—a group of librarians and vendors working to consider this subject from a broad perspective—does not even mention any particular resource-sharing process or technology in their vision statement. Instead, their goal is to: "Create a new global service framework that allows individuals to obtain what they want based on factors such as cost, time, format, and delivery. This framework will encompass promoting and exposing library services in a variety of environments

Information technology today has made resource sharing a reality. Therefore, it is necessary

- to build a National resource sharing network in India. India has basic infrastructure for
- creating of a National resource sharing network. So this model can be considered as cost
- effective model for developing resource sharing network in India. If all the countries will
- develop their National Resource Sharing Network in their respective counties we can develop



- a International Resource Sharing Network and make the Bibliographic control full fledged.
- Today Internet making the whole world as a global village, this internet also has the
- capability to integrate all the libraries of world to a single global library with the development
- of National Resource sharing network.

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## IMPLEMENTATION OF INSTITUTIONAL REPOSITORIES: AN ORGANIZATIONAL APPROACH



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### ABSTRACT:

*The number of repositories has been established in India since the establishment of Eprints@IISc the first repository of India. Most of the repositories have been established due to individual and institutional initiatives. The organizational initiatives are the recent phenomenon in establishing Institutional Repositories. The adoption of Open Access Policy by CSIR in 2009 and ICAR in 2013 are the initiatives on the part of Indian research organizations for the establishing Institutional Repositories. The organizational approach or repository consortia have been successful in the establishment of repositories within the organization or consortia. The paper makes the analytical study of organizational approach for establishing Institutional Repository taking into consideration various issues and challenges*

The Directory of open Access Registries (OpenDOAR, 2013) and The Registry of Open Access Repositories (2013) are the well known authentic sites listing repositories from various countries. OpenDOAR listed 62 repositories (as on 17.10.2013) from India out of which 56 repositories were Institutional Repositories, 5 Disciplinary Repositories and 3 Aggregating Repositories.

CSIR has taken a lead among other major research funding agencies in India by endorsing an OA policy. On 6<sup>th</sup> Feb 2009 CSIR recommended all the CSIR labs to set up interoperable Institutional Repositories and ETD Repositories. All the research papers published from all CSIR labs should be deposited in the Repository or the research papers should be published in OA Journals. It has also recommended that all the CSIR published journals should be made OA. The OA policy of CSIR is listed as Multi-Institutional Mandate in ROARMAP. (ROARMAP, 2013)

CSIR has created a Central platform for the Institutional Repositories the CSIR-CENTRAL. (CSIR Central, 2013) This platform provides central hosting facilities for many CSIR laboratories with links to other CSIR repositories hosted in their respective laboratories. CSIR Central is maintained by CSIR-Unit for Research and Development of Information Products, Pune. Currently (as on 17.10.2013) there were 39 CSIR laboratories and 28 laboratories had their repositories listed on the CSIR-CENTRAL. The 18 CSIR repositories were hosted in their

respective institution while 10 repositories were hosted on the central server of the CSIR-CENTRAL. With these initiatives CSIR has been successful in the implementation of institutional repositories within the organization.

According to Directory of R & D Institutions, Department of Science and Technology (2010) there are 4288 research institutions in India. According to Annual Report 2010-11, University Grants Commission (2011) there are 523 Universities in India. All such academic and research institutions fall under various Government Ministries / Departments / Agencies like CSIR, ICAR, ICMR, DST, DOAE, MOES, and UGC etc. which fund these institutions and decide the broader objectives and policies of their respective institutions. All such institutions have the potential to create Institutional Repositories (IRs). Therefore the 56 of IRs created so far as listed in OpenDOAR is very less as compared to target institutions. Apparently CSIR as a research organization has been successful in the implementation of repositories. This study will make a survey of various key issues for the successful implementation of institutional repositories especially with reference to organizational approach. Based on this survey some recommendations have been made for the successful implementation Institutional Repositories

### SAMPLE SELECTION:

A study of selected Institutional Repositories was made to see how the organizational approach can

be successful in the implementation of Institutional Repositories. What are the issues and challenges in the implementation of Institutional Repositories? The focus of Open Access and the primary objective of Open Access Repositories is to provide Open Access to peer-reviewed research articles which are the most copyright restricted content in the institutional Repositories. Therefore data was collected from the functional Institutional Repositories archiving research article with other type of contents in their collection. Based on this criterion 49 repositories were selected for data collection.

**RESEARCH METHODOLOGY:**

The repositories being web based Open Access archives of digital contents were easily accessible through internet. Therefore the web based survey method was used to collect the real data about the selected repositories. Compliance to Open Archives Initiative Protocol for meta-data Harvesting (OAI-PMH) protocol is one of the important requirements for the Open Access Institutional Repositories. This protocol was used to test the OAI-PMH response as well as some of the data elements. The OpenDOAR and ROAR provide comprehensive factual data about the listed Institutional Repositories. Therefore some of the data elements were collected through these sites. ROARMAP (2013) was used to collect data

regarding mandatory self archiving policies of repositories. Wherever possible data collected from Open-DOAR and ROAR was verified visiting the repositories.

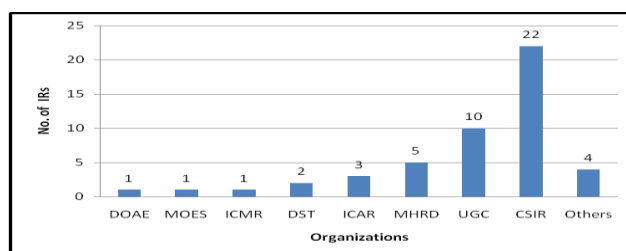
**ORGANIZATION WISE DISTRIBUTION OF IRS:**

The organizational support plays a very crucial role in the organization wide establishment of repositories. The data analyzed to find out the distribution of repositories according to their organizational setup to which their parent institutions belong. One repository (2.04%) under study belonged to DOAE, MOES and ICMR each 2 repositories (4.08%) belonged to DST, three repositories belonged to ICAR, five repositories (10.20%) belonged to MHRD, 10 repositories (20.40%) belonged to UGC and 22 repositories (44.89%) belonged to CSIR while 4 repositories (8.16%) belonged to other types of organizations. Out of the 22 repositories of CSIR, 10 repositories under study were hosted on central server of CSIR-Central.

The CSIR emerged as the single largest organization having 22 repositories constituting 44.89 % of all the repositories under study. This may be attributed to the extensive organizational support was provided by the CSIR to the constituent CSIR research laboratories through CSIR-CENTRAL

**Table No. 1: Organization wise distribution of IRs**

Sr. No.	Organizations	No. of IRs	% of IRs
1	DOAE	1	2.04%
2	MOES	1	2.04%
3	ICMR	1	2.04%
4	DST	2	4.08%
5	ICAR	3	6.12%
6	MHRD	5	10.20%
7	UGC	10	20.40%
8	CSIR	22	44.89%
9	Others	4	8.16%



**Organization wise distribution of IRs**

**Records in the Repositories:** Filling the repositories with contents specially the peer reviewed research articles is the challenging task for institutional repositories. The data analyzed to see the number of records in repositories. Table No. 2 depicts that 30 repositories (61.22%) have number of records within the limit of 2000 records, 4 repositories (8.16%) have records within the

range of (2001-4000) and (4001-6000) each, 5 repositories (10.20%) have records within the range of (4001-6000) and only 6 repositories have more than 8000 records. Therefore filling the repositories is still a challenging task as majority of repositories (61.22 %) are having less than 200 record

**Table No. 2: Records in the Repositories**

Sr. No.	Record Range	No. of IRs	% of IRs
1	0-2000	30	61.22%
2	2001-4000	4	8.16%
3	4001-6000	4	8.16%
4	6001-8000	5	10.20%
5	>8000	6	12.24%

**Policy Framework:** A strong policy framework is necessary for the systematic and planned implementation of Institutional Repositories (IRs) in any institution. According to Budapest Open Access Initiative (2012) “Every institution of higher education should have a policy assuring that peer-reviewed versions of all future scholarly articles by faculty members are deposited in the institution’s designated repository”. There were 3.

broadly two types of policies were identified for the IRs Strategic Policies and Operational Policies. **Strategic Policies:** The strategic policies are in the form of mandatory self-archiving policies or Open Access Policies of the institutions or the parent organization. ROARMAP (2013) shows 11 registered policies from India depicted in Table No.

Sr.	Institutions	Type of Mandate	Date
1	National Institute of Technology, Rourkela (NITR)	Institutional-mandate	12 .05.2006
2	Bharathidasan University	Institutional-mandate	04 .01.2007
3	National Knowledge Commission	Proposed-funder-mandate	13.01.2007 18.09. 2007
4	Council of Scientific & Industrial Research (CSIR)	Proposed Multi-institutional	10.02.2009
5	Madurai Kamaraj University	Institutional-mandate	29.10.2009
6	<a href="#">Mahatma Gandhi University</a>	Other – Non-mandate	18.10.2009
7	National Institute of Oceanography (NIO)	Institutional-mandate	06.12.2010
8	Indian Institute of Horticultural Research (IIHR)	Institutional-mandate	17.09.2011
9	M S University	Institutional-mandate	12.04.2013
10	Indian Council for Agricultural Research (ICAR)	Multi-institutional	19.05.2013

**Table No. 3: OA Policies from India registered in ROARMAP**

Retrieved September 16, 2013 from <http://roarmap.eprints.org/>

There were two multi-institutional mandate from India CSIR (2009) and ICAR (2013). The three Institutional Mandate of the repositories under study are listed in this table Dspace@NITR, (2006), DRS@NIO (2010), the repository under CSIR and E-Repository@IIHR (2011) the repository under ICAR.

**Operational Policies:** These policies are concerned with the day to day operations of the repository. Under the broader policy framework of strategic policies operational policies are defined.

The following operational policies were identified in the repositories under study.

- Metadata Policy - Access (MPA)
- Metadata Policy - Reuse (MPR)
- Data Policy - Access (DPA)
- Data Policy - Reuse (DPR)
- Content Policy (CP)
- Version Control Policy (VCP)
- Submission Policy (SP)
- Preservation Policy (PP)
- Withdrawal Policy (WP)
- Closure Policy (Cl.P)

The Table No. 4 depicts the status of various types of operational policies in the 49 Institutional Repositories under study. (Appendix - 3)

**Table No. 4: Status of Operational Policies of Institutional Repositories**

Sr.	Types of Policies	D*	D* (%)	UD*	UD (%)	US*	US (%)	UK*	UK (%)
1	Metadata Policy - Access (MPA)	12	24.48	31	63.26	2	4.08	4	8.16
2	Metadata Policy - Reuse (MPR)	13	26.53	31	63.26	1	2.04	4	8.16
3	Data Policy - Access (DPA)	13	26.53	31	63.26	1	2.04	4	8.16
4	Data Policy - Reuse (DPR)	13	26.53	31	63.26	1	2.04	4	8.16
5	Content Policy (CP)	13	26.53	31	63.26	1	2.04	4	8.16
6	Version Control Policy (VCP)	13	26.53	30	61.22	2	4.08	4	8.16
7	Submission Policy (SP)	16	32.65	24	48.97	2	4.08	4	8.16
8	Preservation Policy (PP)	14	28.57	24	48.97	7	14.28	4	8.16
9	Withdrawal Policy (WP)	8	16.32	30	61.22	7	14.28	4	8.16
10	Closure Policy (Cl.P)	5	10.20	32	65.30	8	16.32	4	8.16

Note: \*All types of policy information of the various institutional repositories under the present study has been described in following four categories Defined (D), Undefined (UD), Unstated (US)

and Unknown (UK) depending upon their status in a particular repository.

**The details of the categories are as mentioned below.**

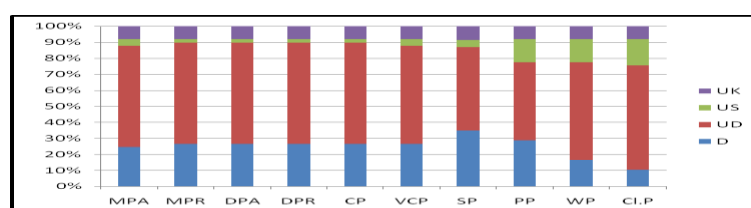
**Defined (D):** When there was any information regarding particular type of policy for the repository its status was depicted as defined (D).

).

**Undefined (UD):** When it is clearly mentioned in the particular slot for policy that “policy is not yet defined” its status was depicted as undefined (UD)

**Unstated (US):** When there is information about policies but a particular type of policy is neither stated as undefined nor covered in the policy information. Its status was depicted as Unstated (US)

**Unknown (UK):** When there is not at all any information regarding a particular type of policy is available but a particular type of policy its status was depicted as Unknown (UK)



**STATUS OF OPERATIONAL POLICIES:**

The data suggest that most defended operational policy is submission policy 16 repositories (32.6%) and least defined policy is closure policy defined by 5 repositories (10.2%). The Operational policies are largely undefined, unstated or unknown in most of the repositories. Therefore it appears that to frame such policies was not the priority of the repositories. While a policy framework is required not only for strategic decisions but also for the operational management of repositories. OpenDOAR provides a Policies Tool

(<http://www.opendoar.org/tools/en/policies.php>)

for framing policies which may be used a standard reference for framing policies. It is expected that most of the academic research institutions already having repositories will adopt a policy framework for their repositories for smooth operation of repositories.

**SOFTWARE PLATFORM:**

The selection of Software platform is important consideration in establishing the repository. Most common choices for repository software are “Open

Source Software”, “Commercial Software” or in-house developed software. The Software hosting services and software support services are available for Open Source Software. Therefore there are options for hosting software locally at the institution level or at the central place as CSIR-URIDP has created Central Hosting Platform CSIR-Central for hosting repositories of CSIR or a commercial vendor may host the repository software. Selection of software its hosting, customization and maintenance or long term support are the some of the considerations in the selection of repository software.

Current statistics regarding usage of open access repository software in the world from OpenDOAR (2014) shows that 1105 repositories (42.1%) use DSpace and 372 repositories (14.2%) use E-prints software,119 repositories (4.5%) use Digital Commons and72 repositories use OPUS (2.7%) and 55 repositories (2%) use Greenstone. The Table No. 5 depicts software used by the Institutional Repositories under study.

**Table No. 5: Choice of Software Platform**

Sr. No.	Software Platform	No. of IRs	% of IRs
1	Eprints	26	53.06%
2	D-Space	23	46.93%

Data suggest 26 repositories (53.06%) under study were using E-Prints software while 23 repositories (46.93%)

were using DSpace Software. None of the repository has used any commercial software. The CSIR repositories were having the largest share among the repositories under study. The 22 repositories under study were from CSIR out of which 18 repositories were using E-Prints while 4 repositories were using D-space. The CSIR provided technical support for the implantation of repository using Eprints. The manual for the installation of Eprints software was provided on the CSIR-CENTRAL. Due to the organizational support most of the CSIR repositories were using Eprints. While the world over as well as in India

DSpace has been the software of choice over EPrints. This analysis suggests that organizational support plays a crucial role in the selection of software.

**CHOICE OF METADATA:**

Dublin core metadata standard was the minimum requirement of implementing the repositories. Most of the repositories use unqualified Dublin Core. Repositories support parallel metadata schema to enhance access and retrieval of complex digital objects. Most supported parallel metadata schemas were METS, DIDL, UKETD-DC.

**Table No. 6: Choice of Metadata Formats in IRs**

Sr. No.	Metadata Formats	No. of IRs	% of IRs
1	OAI-ORE	4	8.16%
2	OAI-BIBL	8	16.32%
3	CONT-OBJ	16	32.65%
4	UKETD-DC	24	48.97%
5	DIDL	26	53.06%

6	RDF	29	59.18%
7	METS	32	65.30%
8	OAI-DC	49	100%

**Types of Contents:** The repositories currently selected for study archive the entire scholarly output including research articles. Currently the focus of Open Access is on Journal articles but it is not limited to research articles. There was wide variety of contents in the repositories besides research articles. The mandatory policies of the organizations like CSIR / ICAR and Institutional mandates also require depositing the research articles of faculties. Therefore the research articles were the most important content in any institutional repository. 89.79% repositories under study archive journal articles while 61.22% repositories archive conference papers. After journal articles most archived contents were e-Theses & Dissertations (ETD) archived by 59.18% repositories, Book/ Book Chapters archived by 46.93% repositories and Teaching Learning Objects archived by 24.48% repositories. Therefore the most archived content in the repositories of academic and research institutions

was the research article published in journals and conference proceedings. Besides journals other contents mostly archived by the repositories were ETD, Book / Book Chapters and Learning and Teaching Objects (LTO). The research output in the form of patents, research data, Images and audio video contents were less archived by the repositories. Though ETD, LTO, research data are specific categories of documents may be archived in separately in repositories but only two institutions National Institute of Technology, Rourkela (NITR) and Indian Institute of Science, Bangalore (IISc.) repositories for their Institutes the ETD Repositories (ETD@IISc, e-thesis@NITR) and another repository for other scholarly material ([Eprints@IISc](#), [Dspace@NITR](#)) made separate repositories one for ETD and another scholarly contents. Other institutions archived the entire academic and research output including ETD in one institutional repository

**Table No. 7: Type of Contents in Institutional Repositories**

Sr. No.	Content Types	No. of IRs	% of IRs
1	Others	21	42.85%
2	Data	1	2.04%
3	Images	4	8.16%
4	Multi Media	5	10.20%
5	Video	7	14.28%
6	Pre-Print	7	14.28%
7	Patents	8	16.32%
8	Reports	8	16.32%
9	LTO	12	24.48%
10	Book/Chap.	23	46.93%
11	ETD	29	59.18%
12	Conf.	30	61.22%
13	Jour. Art.	44	89.79%

**Choice of File Formats:** Institutional Repositories use various types of File Formats for archiving various types of contents like text, images, audio, video and multimedia contents. The Table No. 8 depicts the wide variety of file formats used by the repositories for archiving their contents. The long term support to these file formats and open standards were some of the considerations while selecting the file formats for archiving contents. The PDF was the most preferred file format for the

full text documents followed by HTML and MS-Word (Doc/Docx) format. It was observed that there were very few full text documents in Text, PS and TeX format. The most preferred choice of Indian repositories for file formats of text documents was PDF followed by HTML and MS-Word (Doc/Docx) format. The repositories archived the images mostly in JPEG multimedia contents in PPT format and videos in MPEG format.

Most of these formats, PDF, HTML, JPEG and MPEG were Open file formats except MS-Word format (Doc/Docx) which is proprietary software

extensively used. Therefore repositories preference was for open file formats but popular proprietary formats like MS-Word were also used.

**Table No. 8: File Formats in Institutional Repositories**

Sr. No.	File Formats	No. of IRs	% of IRs
1	AVI	4	8.16%
2	MPEG	5	10.20%
3	PPT	4	8.16%
4	GIF	1	2.04%
5	JPEG	3	6.12%
6	TeX	1	2.04%
7	PS	1	2.04%
8	Text	3	6.12%
9	HTML	8	16.32%
10	MS-Word	8	16.32%
11	PDF	49	100%

**OAI-PMH Compliance :** The wide visibility and easy accessibility to the contents of the repositories are the two core features of any repository. The compliance of the repositories to OAI-PMH protocol developed by OAI ensures that repository data is harvested by the service providers or harvesters like OAISTER, BASE etc. The base URL of an individual repository may be tested for the response to the OAI-PMH verbs. Repositories under study were tested for the valid response to OAI-PMH verbs and it was found that only 41 repositories (83.67%) were responding to the OAI-PMH verbs. In the absence of up-to-date information about the correct base URL of repository the service providers will not be able to harvest metadata of such repositories. The registration of base URL of repository in OAI Registry will ensure the conformance OAI-PMH protocol. The registration of repositories in the data base of data providers with prominent service

providers like OAIster, BASE, Scientific Commons and CASSIR (service provider for Indian repositories) will ensure OAI-PMH compliance and will also enhance the visibility of repositories.

**Author Support:** The self-archiving and Institutional repositories being recent concepts for academic community repositories provide support to authors in submission of articles as well as on awareness regarding copyright and other issues. The survey shows that 26 repositories (53.06%) were providing author support for self-archiving while rest of the 23 repositories (46.93%) did not provide any visible support to authors. Amongst the repositories providing author support, 23 repositories (46.93%) provided author support on copyright issues and 13 repositories (26.53%) provide visible author support in submission of articles in the repositior

**Table No. 9: Author Support in Institutional Repositories**

Sr. No.	Author Support	No. of IRs	% of IRs
1	Author Support	26	53.06%
2	No Author Support	23	46.93%

In view of the low level of awareness of academic community authors need support for content submission; copyright and other issues related to self-archiving. It is recommended that repositories should provide content submission procedure as well as awareness on copyright issues. The repositories provide link to SHERPA/ ROMEIO publisher's policies.

**Value Added Services :** Repository Administrators are required to monitor the usage of

repository contents as a part of planning and policy making for content recruitment. Repositories provided download statistics of an article as well as citations of a particular article in the repositories were also linked with article. This feed back to authors encourages for further deposits in the repositories. The increased download and citation counts are able to visualize the impact of access and visibility provided through Open Access Repositories. The download statistics report the



usage of a repository item while citation analysis provides impact of the usage. Therefore this type of value addition provisions in the repositories were adopted as the content recruitment strategies by the some repository administrators. But this was not the common practice in the Indian IRs. The only 8 repositories (16.32%) are providing Value Added Services in terms of article (item) level download statistics being provided to the users.

The 41 repositories under study (63.26%) do not offer any type of value Added Services. The research funding agencies like CSIR or ICAR etc. may be keen to know the impact of Open Access being rendered through the repositories. These statistics will be useful to substantiate any special funds being provided by the research funding agency for the Open Access.

**Table No. 10: Value Added Services (VAS) in Institutional Repositories**

Sr. No.	VAS	No. of IRs	% of IRs
1	VAS (Download Statistics)	8	16.33%
2	No VAS	41	83.67%

**Repository Administration:** Repositories surveyed for to find out the staff managing and administering the repositories. All the repositories were managed by the existing staff for library or other work but no separate position for the repository work was available in the institutions hosted repositories. The repository administrator's details available on the repositories were surveyed

and it was found that 29 repositories (59.18%) had Library Professionals as the Repository Administrators, while 12 repositories (24.48%) had computer professionals as the repository administrators and 8 repositories especially in CSIR Laboratories were run by other non professionals (scientists).

**Table No. 11: Administration of Institutional Repositories**

Sr. No.	Repository Administrators	No. of IRs	% of IRs
1	Library Professionals	29	59.18%
2	Computer Professionals	12	24.48%
3	Others (Scientists)	8	16.32%

Therefore the library professionals were playing key role in the management of repositories in majority of institutions. It is therefore evident that roles of library professionals and the Libraries of the institutions were significant in the management of repositories.

**RECOMMENDATIONS**

In view of the above observations made in this study following suggestions are proposed for the successful implementation of Institutional Repositories in the academic and research organizations of India.

- The Apex bodies like ICMR, DST, DBT, DOAE, MOES, and UGC are required to frame mandatory Open Access Policies for their constituent institutions and funded research.
- The establishment of Open Access Institutional Repositories by the constituents of an organization must be mandatory. A consortia approach is recommended for the implementation of

repositories within a organization.

- The organizations may provide central hosting facility like CSIR for the constituent institutions or a Central Repository of the organization may be created as the designated repository of the organization.
- A central harvester for the repositories of the organization will provide one point search facility for all the repositories within the organization. The harvester will also ensure OAI-PMH compliance of the repository.
- The systematic and planned implementation of repositories requires structured organizational support. A nodal agency or implementation committee may be assigned the task of organization wide implementation preferably through a portal like CSIR-Central.
- Under the broader policy framework of the organization Institutions may frame their own mandatory policies. All the

institutions are recommended to frame operational policies mentioned for the smooth functioning of the repository.

- The repositories are recommended to use Open Source Software Eprints and D-space. The use of one software in all the constituent institutions will be helpful in providing centralized technical support and capacity building within the organization.
- The adoption of standard practices in metadata creation and using Qualified Dublin Core as the minimum Metadata Standard in the repositories. The parallel metadata Schema like METS, DIDL, UKETD-DC should be used to enhance the access & retrieval of complex digital objects.
- The repositories may archive all the scholarly output of the institution in one repository only. Repository may define types of documents acceptable in the repository. The separate repositories for special category of documents like ETDs and LTO may be a future consideration.
- Repositories must define the supported file formats so that long term continued accessibility and readability of contents in these file formats may be assured. Preference must be given to Open Standard File Formats.
- Repositories mostly use PDF format for text documents. Therefore repositories requiring compulsory deposit of text documents in PDF must provide support to authors for converting other file formats in PDF format.
- The minimum implementation of OAI-PMH is required to ensure compliance with recommendation for registering in OAI Registry. The latest base URLs of many repositories were not available while few were not OAI-PMH compliant therefore proper implementation of OAI-PMH in the repository software must be ensured.
- Wide visibility of the repository requires the registration of repository in prominent service providers like OAIster, BASE, and Scientific Commons etc. The compulsory registration in the Indian harvester CASSIR will ensure one point search of all Indian repositories.
- In view of low level of awareness regarding repositories and self-archiving intensive awareness campaign is required within the organization. Various types of author support for awareness, content submission and copyright should be available on the homepage of the repository.
- Library professionals may be preferred for the Repository Administration considering the complexities involved and various technical and professional abilities required. The expertise available within institution on IT, Copyright etc. may be harnessed for this purpose.
- There are Central Repositories for ETD like Shodhganga, where it is compulsory to deposit Ph.D. theses according to new recommendations of UGC. Such a Central Repository may be created for the compulsory submission of research articles from public funded research to follow the mandate or bill.
- In view of the increasing advocacy for the public funded research by ICAR OA Policy and National Knowledge Commission recommendations it is recommended that a bill may be passed in parliament mandating open access to all the public funded research in India.

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**ABSTRACT:**

*In the changing information environment, electronic information resources are dominating in the agricultural academic and research activities and in turn researchers have realized the importance as well. The projects of (e-JUST and IMPEL) undertaken by famous libraries and studies conducted by the professionals reveal that there is good orientation programmes for the effective utilization of the resources. In this paper an attempt has been made to review the important findings of the previous studies and surveys conducted by library and information professionals on use of electronic resources in the field of agriculture sector.*

**INTRODUCTION**

Electronic information services are the keys to the development of agriculture, agricultural education, research and agricultural extension education in developed and developing countries. The significant developments in the field of Information and Communication Technology (ICT) have created revolutionary changes in all field of agricultural knowledge. Agriculture Libraries, being the reservoirs of knowledge, are no exception to this development. One of the main objectives of agricultural universities and agriculture R&D libraries is to process, organize and disseminate the much-needed agricultural information to the users in right time. In changing agricultural scenario and rapid development of agriculture science and technology, the importance of agricultural information service is vital to the progress of agriculture. In the present scenario, libraries are the main facilitators in the scholarly communication system. Therefore, the library is a place where books and other sources of information are kept for learning, teaching, research and extension in the changing information environment. The electronic information resources are dominating in the research activities and in turn researchers have realized the importance as well. At the same time the usage of electronic

information resources is also gaining momentum day by day. Libraries and Information Centres are playing a very important role in providing information to the users by building print and electronic collection in agricultural sector. In India, direct application of computerized information systems to the farmers is not feasible in the present conditions; utilization of information system has been demonstrated by Annon (1993).

The National Agricultural Research System of India has necessary infrastructure and is well equipped with laboratories, libraries, and manpower. It also has the largest scientific manpower. It is estimated that the country today has over 60,000 scientists under various government and non-governmental organizations engaged in active research, excluding technical, administrative and supporting personnel. The scientific manpower – management personnel, scientists and teachers engaged in research, education & extension work in agricultural sector –has been estimated to about 31,000 Sreenivasulu, et.al. (2001).

Agricultural Information Transfer System (AITS) is ever-evolving due to ongoing development in Information and Communication Technology (ICT).

Development of new improved ICT technologies, transform the methods of development, documentation, dissemination, and diffusion (4 Ds) of information (Reddy, D.E., 2008).

Retrospective literature search on LISA, EBSCO, ARIST, EMERALD, Springer & Kluwer databases and online open source journals have revealed that a number of studies have been reported from abroad as well in India in field of agriculture. In this paper an attempt has been made to review the important findings of the previous studies and surveys conducted by the professionals.

## **REVIEW OF THE RELATED LITERATURE AWARENESS ABOUT ELECTRONIC RESOURCES**

Agrawal Singh and Singh (2008) mentioned use and positive impact of e-journals in agriculture libraries. Similarly study conducted by Moghaddam and Talawar (2008) reflect a growing interest in electronic journals among users at the Indian Institute of Science.

Abdol Hamid Papzan and Jafar Yaghoubi (2008) had conducted a study on identifying electronic information needs of agriculture faculty members in Iran. The result shows that the main use of electronic information sources was for their research work. About three quarter of faculty members preferred electronic sources to printed ones. Also the findings showed that the main information needs of the faculty members were research papers publish in the journals, seminar and symposium announcements, lists of research journals. The result also indicated that there was a significant relationship between faculty members' skills in computer and internet surfing and their use of this facility.

Devi, Maya (2010) the study reveals that more than one third (45.8%) of the agriculture scientists of CISH used electronic resources daily in comparison with 28.9% agricultural scientist of IISR.

Salaam, M.O. and Aderibigbe, N.A (2010) had conducted the case study about awareness and utilization of the essential electronic agriculture library (EEAL) by academic staff of University of Agriculture, Abeokuta. In this study majority of the academic staff (51.3%) hold a doctorate degree and 20.9% MSc. Degree holder &

17.1% of respondents M.Agri degree holder & 10.07 % respondents M.V.Sc. degree holder. The findings of the study was 34.7% of the respondents use TEEAL whenever necessary. Reasons that most respondents have attributed to their usage of TEEAL resources include research and publication needs (73.4%), references for their lectures (58.9%) and reading to abreast of the current trend in their various field of research (60.2%). 34.2% of respondents claimed that they preferred the hardcopy of journal to electronic format and that demand on their time have prevented their exploration of electronic resources. This supports the findings of Johnston C (1998). The study also identifies electricity problem and poor internet connectivity as hindrances to utilization of these electronic resources.

## **ELECTRONIC RECOURSES ACCESSING FROM INTERNET**

Ogunjobi T. E. and Fagbami O.O (2012) studied use of the internet by researchers in Agricultural research institutes in Ibadan, Oyo State. The result showed that most researchers acquired computer knowledge without undergoing formal training in the use of the internet. Mostly they learnt through self development (51.02%), friends (30.61%), workshops seminars and conferences (20.41%) and computer school (15.31%). The researcher used the internet mostly for research purposes (76.53%). Communication (40.82%), knowledge acquisitions (20.41%), and news sourcing (10.20%). However, researchers in Agriculture Research Institutes have identified slow internet connections (75.51%) as the major problem in their use of the internet. The study identified the readiness of the researchers to use the internet for their research work but the usage of the resource is limited due to the slow speed of connections available to them. The study therefore recommends that various institutes should acquire more bandwidth for their internet connections to accommodate more computers and to improve the internet speed. Internet network must be active and continuously sustained in order to make these valued resources effective in all our agriculture research institutes.

Thanuskodi, S. (2010) had conducted a case study on 'Use of internet and electronic resources for agricultural Science Information'. Study highlights that internet has emerged as

the most powerful medium for storage and retrieval of information. Since past few years, free online information sources like e-journals, e-books, e-databases have increased considerably. The traditional library system is going to transform into digital library systems. Information seeking is important for students of agricultural sciences who have access to many dedicated electronic resources. Internet and CD-ROM were the most frequently used IT – based sources and facilities. The present study shows that majority of the student does not have own personal computer or laptop. Majority of the respondents (57.28%) feel that the internet and electronic resources can not replace the print resources. The use of e-resources and internet services in order to preference is 34.55% e-databases, 24.54% e-journals, 16.36% e-books, 15.45% e-mail and 9.10% DVD/CD-ROMs.

## USAGES OF ELECTRONIC RESOURCES

Ongus, Raymond Walfula and Nyamboga, Constantine Matoke (2002) expressed their views that stringent economic conditions, coupled with the proliferation of information have incapacitated many agricultural research libraries in developing countries. Traditional means of document delivery have slumped, causing widespread user-dissatisfaction. Consequently, Compact Disc-Read Only Memory (CD-ROM) technology continues to gain preference, especially in Africa, as an electronic means of hastening document access. The Essential Electronic Agricultural Library (TEEAL), employing CD-ROMs, is examined in relation to its potential in promoting agricultural research at Egerton University in Kenya. A critical analysis of pertinent administrative and technical issues is made with envisaged challenges in focus. Ultimately, suitable solutions for sustainability and improvement are proffered. It reveals that world out put of literature, which is 18,92,906 number of records for the year 1990-94, India's contribution is 87,92,906 records which is 4.60%, contribution on Himachal is 2,451 records which is 0.13% to the world out output and 2.81% to the total Indian output. Periodical publications are most dominant form in which scientific information is communicated in the subject. The fact that 91.55% appeared in the form of journal articles. Symposia proceedings 3.1% and books 2.86%.

Okorie, C.N and Agboola, I.O. (2010 ) were conducted a study on Availability and Use of Electronic Resources in Agricultural University Libraries. The study were analysed that maximum (16% ) respondents makes use of E-mail both within and outside the library. 14% respondents consults e-journals while 10.6% cataloguers glue to E- cataloguing. 50% of the respondents used TEEAL electronic database followed by AGORA (41.6%), AGRIS (2.5%), CB ABSTRACT (1.6%), TROPAC (1.16%), AGRICOLA (3.0%). The reasons for using e-resources in which 50% indicated time saving as most important reason and 75% of the respondents shows a satisfactory towards the existing e- resources in the libraries.

Uzuegbu, C. P. & Chukwu, O.C. & Ibegwam, A. (2012). This study is a 3-week experiment using Michael Okpara University of Agriculture Umudike (MOUUAU) Digital Library and clients as study area and population respectively. Having observed the problem of students and researchers underutilization of electronic databases subscribed by academic institutions in Nigeria, the research was aimed at testing students and researchers approach to a new method that may enhance usage of subscribed electronic databases and recommend it if positive. Dummy links, representing some of the Universal Resource Locators (URLs) of the databases subscribed by MOUUAU were created as the desktop page of ten computers in the digital library. Designed purposively, a click on the dummy links referred clients to the librarian. The record of clients who reported to the Digital Librarian as a result of the dummy upload request was collated. Apart from finding that, gender, level of study and purpose of visit are electronic database utilization variables, the study reveals that creating URL links on desktop pages would effectively sensitize and increase students' utilisation of the various electronic databases subscribed by individual Nigerian academic institutions. The experiment's result show that URL links would effectively introduce subscribed electronic databases to students and researchers much better than any other means. Price, Adrian (2000) NOVAGate is a subject-based information gateway covering electronic resources in the agricultural, veterinary and related fields. The service, which opened in July 1998, is produced by the veterinary and

agricultural libraries of the five Nordic countries - Denmark, Finland, Iceland, Norway and Sweden - which serve the NOVA University. The gateway covers Nordic and European resources as well as the resources of international organizations, but being planned is a network of subject gateways which will give access to a wide range of international quality resources within the agricultural, veterinary and related fields. The service uses the ROADS software.

The survey conducted by Lazinger et. al.(1997) of the faculty members of the Hebrew University of Jerusalem provided data on Internet access as of 1995. The results showed higher usage by the members of the faculties of Science, Medicine, and Agriculture than the members of the faculties of Social Sciences and Humanities.

Sharma, Chetan and et, al. (2011), conducted a study seeking to emphasise the use of e-resources by teachers and research scholars in the National Dairy Research Institute (NDRI) and the National Bureau of Animal Genetic Resources (NBAGR). The study reveals that the majority of the respondents are well aware of the various e-resources in their respective field and confidently use them regularly. E-Journals are the most preferred e-resource among the respondents. They seek the help of e-resources to perform their routine exercises, i.e. teaching, research, entertainment and communication. Some major problems faced by the respondents are slow speed of internet, difficulty in retrieving contents and poorly designed web sites.

Devi, Maya (2010). The study explores the use of electronic resources by the agriculture scientists of central Institute for sub-tropical Horticulture (CISH) and Indian Institute of sugarcane Research (IISR). The result reveals that scientist working in CISH are more dependent on electronic resources for their work in comparison with scientists of IISR. The number of agricultural scientists who visited library daily is found to be more in IISR institution. The satisfactions of scientists towards the utilization of electronic sources in both the institutions were not found to be more significant, i.e. more than one forth (29.2%) of the agriculture scientists in CISH were fully satisfied, likewise 26.3% of the agriculture

scientists working in IISR expressed fully satisfied.

## USAGE OF AGRICULTURE NETWORK DATABASES

Shilpa et.al. (2013) Agriculture is multidisciplinary subject consisting of crop sciences horticulture, forestry, animal sciences and fisheries, etc. each of which has its own importance. So the development of e-content in each discipline will be a challenging job. There is also need to formulate an IT strategy to automate and bring all agriculture libraries into one network. Madhu (2012) study reveals that IIPM library had very good ICT infrastructure for providing online databases services to faculties and students community and majority of the users accessing the e-resources through Wi-Fi network.

Pattanaik, P.K and Parida, B (2013). The agricultural scientists working different agricultural research institutes of Odish mostly prefer AGRICOLA (84.53%) Elsevier Science Direct (70%) followed by Bio Science information Services, Philadelphia, BIOSIS (67.97%) and Emerald database (50.27%) are the preferred database.

Rokade, S.M. and Rajyalakshmi (2006) study reveals that International Information Systems for Agricultural Sciences and Technology (AGRIS) database is available with MPKV Rahuri and Dr PDKV library, The AGRIS, Agriculture on line access (AGRICOLA), Food Science and Technology database (FSTI); Common wealth agricultural Bureaux Index (CABI) data bases are available with MKV Parbhani and Dr BSKKV library has no the databases. It is observed that internet, e-mail, CD Rom database services are provided by MPKV Rahuri, MKV Parbhani, Dr PDKV Akola and current awareness service is provided by MKV Parbhani. Dr BSKKV library Dapoli is not providing electronic services. It is observed that MAU library is providing manual and electronic services to the users. Out of 150 users the manual services are used by the 20% users, internet 23.33%, e-mail 6.67%, electronic services through INFLIBNET 33.33%, DELNET 11.34% and ARISNET 5.33% to the users. The internet and INFLIBNET services are mostly used by the users of the library.

Hasan, Nabi and Sewa Singh (2007). Presents an assessment of contributions on Himachal Pradesh to agriculture and allied fields based on publications indexed in AGRICOLA, AGRIS, CAB abstracts and FSTA CD-ROM databases during 1990-1994. Attempts to provide detailed analysis of 2,451 contributions on Himachal Pradesh covered by the databases of the study period. The major finding of the study is literary output in agriculture and allied sciences for world, India and Himachal is fluctuating the study period; contribution to agriculture and allied sciences literature on Himachal as covered by the AGRICOLA, AGRIS, CAB Abstracts and FATA CD-ROM databases for the year 1990-94 numbered 2,451 records. Contribution on Himachal to the world is 0.13% and to the India it is 2.81%. and majority of the publications are published as journal articles with 91.55% of the total records and majority of the articles were published in English language followed by French, German and Spanish.

ICAR & ISNAR (1994) The project "Agricultural Research Information System (ARIS)" is being implemented to bring information management culture to National Agricultural Research System (NARS) so that agricultural scientist can carry out research more effectively by having systematic access to research information available in India as well as in other countries; for better project management of agricultural research; and for modernization of the office tools. The basic infrastructure required for linking all ICAR institutes has already been created. The E-mail connectivity has been established to 72 out of 86 ICAR institutes by linking through dial-up including six institutes with VSAT connectivity using NICNET and ERNET services.

Singh, Gajendra, et.al. (1997) To exploit the potential of modem computing power in planning and management of agricultural research and scientific communication, ICAR started an Agricultural Research Information System Network (ARISNET). Basic guidelines to implement this project were provided by a team of experts from ICAR and International Service for National Agricultural Research (ISNAR). A phased implementation is recommended to create infrastructure for ARISNET, a National Wide Area Network for

agricultural research with its headquarters at ICAR, New Delhi.

Sharma, R.D (1989) The four information modules in are designed for Agricultural Research Information System Network (ARISNET) to standardize usage of the different software for the day-to-day activities of the scientists and office automation. ARISNET has four information modules namely Agricultural Research Personnel Information System (ARPIS); Agricultural Research Financial Information System (ARFIS); Agricultural Research Library Information System (ARLIS) and Agricultural Research Management Information System (ARMIS).

### USAGE OF CD-ROM DATABASES

Gooch (1995) reported that even though many libraries and information units in Africa adopted the CD-ROM technology pretty well, the sustainability of CD-ROM databases appears to be threatened by low usage statistics, lack of confidence from library and information staff, unfamiliarity of users with the system, and lack of awareness by managers about its potential as a valuable resource to support research.

Okorie, Chituru Nancy.(2010). The results revealed that non-final-year students prefer to use OPAC whereas the final-year, postgraduate students, and academic staff regularly use CD-ROM databases such as TEEAL, MEDLINE, CAB Abstracts, INFOTRAC, and Agricola. The majority of the users were satisfied with these automated electronic information services. The major constraints identified by the respondents were lack of basic infrastructures, limited number of computer terminals available for use, and incessant power outages. The acquisition of CD-ROM databases has revolutionized literature and document delivery in the University of Agriculture Library,

The 40 leading publishers under the aegis of Food and Agriculture Organization of the United Nations started a programme called, 'Access to Global Online Research in Agriculture' (AGORA), which provides toll-free or low-cost access to major scientific journals in the disciplines of agriculture and related sciences to public institutions in developing countries. Started in October 2003, AGORA programme provides access to 1278



journals across 107 countries (Wu, J. and Ochs, M.A., 2006).

## SATISFACTION LEVEL

Amarnath (2006) examines the satisfaction levels of users regarding internet, CD-ROM databases, online databases, e - resources etc. as well as the services provided by the Punjab Agriculture University Library. Rokade and Rajyalaksmi (2006) conducted a survey on the information needs of the users and e-information services available in Dr. Panjabrao Deshmukh Krishi Vidyapeeth Library, Akola. Sharma, Singh and Sharma (2011) emphasize the use of e resources by the teachers and research scholars in the National Dairy Research Institute (NDRI) and the National Bureau of Animal Genetic Resources (NBAGR).

Singh, K.P. and Bebi (2012) The study revealed that hundred percent of the respondents were aware about e-journals available in their libraries. Five e-journals are browsed regularly by the agriculture scientists. PDF and word doc are the most preferred format for downloading articles for e-journals. The scientists of Indian Agriculture Research Institute [IARI], National Bureau of Plant Genetics Resources [NPGR] and Indian Agricultural statistics Research Institute [IASRI] have expressed full satisfaction with the quality of e-journals.

## CONSORTIUM E-RESOURCES IN AGRICULTURE IN INDIA

Visakhi, P. (2009). "Consortium for e-Resources in Agriculture" has revealed that the e-resources utilisation among the Agriculture Research Institutes in India through consortium. CeRA (Consortium for e-resources in agriculture) was launched successfully on 30<sup>th</sup> April 2008 at its headquarters at IARI, New Delhi. Access to CeRA was initially given to the following 124 Agriculture research institutes through an IP address in India. Out of 124 institutes, 114 institutes successfully received access through IP address, but institutes located in remote and north eastern areas got access through username and password. Consortium entered into an agreement for three years under centralised funding. The subject coverage of this consortium are Agriculture, Veterinary Science, Fisheries, Crop Science, Computer Science, Soil Science, Animal Science etc. by

the publication of Springer Link, Annual Reviews, CSIRO Australia, Science Direct.

## CONCLUSIONS

The current trends in e-environment suggest a complete revolution in the status of collection development. As ICT advances, the emphasis of agricultural academic and research libraries has focused upon the intrinsic excellence of collection development suitable to e-information resources. The e-resources have considerable impact on the collections of agricultural libraries. The advantages of e-resources as a means of easily and rapidly accessing of books, journals, magazines, thesis and images of various types are now widely recognized in agriculture research. An important advantage of e-resources to academics is the increase accessibility to information sources that are current and relevant to research, learning and studying. The e-resources have helped to solve the problem of non-availability of information resources in printed format. The e-resources has created access to databases which has helped in actualizing the objectives of the institutions in the areas of transforming, repositioning and re-engineering the University and research centres of Agriculture to make information available towards poverty reduction, improvement in the standard of living and wealth creation in the communities.

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WOMEN IN THE AGE OF TAGORE: AN OVERVIEW



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After the very rough sketch of the background, from which Tagore rose and the principal achievements of his life, those special circumstances of his personal life are to be taken to which his growth and development as an artist established. Those very aspects of his life are to be taken which have to be borne in mind when considering his relationship with women.

Not that Tagore himself had ever sought a peer figure in a woman. Like most male heterosexual artists even upto this day, he needed women more as sources of encouragement, as sources of Shakti for his own generativity, than as friends on equal terms.

He was intensely aware of the cruelty on women and looked forward to the coming of an epoch, when women would become equal partners of men. He was sympathetically opposed to religious principle and could be described as a man who was a humanist. Women in Tagore's life were the main aspiration to his literary career.

Among the different factors that shaped Tagore's view on women, the impression of his family is great. But apart from this impression in his early career, a few other women deeply impressed Tagore's life. He could easily mix with the women.

The age of Tagore was, thus, the period of "dissolving creeds and clashing theories." The people of the day tried to arrive at reconciliation, particularly, in their outlook on women. They accepted forceful masculinity, yet they submitted to the spell of feminine ideals. They allowed merger in sex but at the same time pressed that it should be limited to the sphere of conjugal fellowship between man and woman. However, a forceful propaganda for the emancipation of women and removal of poverty was carried on by the intellectuals and the humanitarian philosophers and reformers of the day and Tagore was impressed by this to a considerable extent.

It is said that "mother is the first Teacher of Child", but Tagore's mother Sarada Devi had little time or determination to look after her

youngest son. When he grew up into a little boy, he was left, along with nephews and nieces of, more or less, the same age, to the care of servants. The mother, whose health had broken down after the birth of the fifteenth child, had a vast household to supervise with a many daughters and daughters-in-law, sons and sons-in-law and their children. But she must have been a woman of unique character, tact and patience to keep such a house together and in harmony. It is a pity that not more is known of this remarkable woman, who made possible the greatness of others' while leaving little trace of her own.

But the hunger for mother's affection which never appeared in childhood was to survive in the son as a current desire for feminine affection and care. Its visit echoes can be heard in the shining child poems he wrote in the peak of his manhood, some of which were later published in English as "Crescent Moon".

Sarada Devi was no doubt proud of her remarkable husband, but being a religious reformer possessed by a sense of mission, he could hardly have been an easy-husband to live with. Herself, the daughter of an biased caste Hindu family, she must have needed considerable flexibility of mind to tolerate his criticizing belief's zeal. Her numerous progeny, robust, handsome and talented overflow with power presented problems of their own. Some of them were genius or near geniuses and some were abnormal cases. Tagore's mother died very soon.

The other children of Sarada Devi, the most noteworthy apart from the youngest son, were the two daughters, the eldest, Saudamini, who looked after the infant poet and was later the devoted companion and caretaker of the aged Maharshi and the fifth daughter, Swarna Kumari who was a famous musician and writer and is recollected as the first woman novelist of Bengal. Swarna Kumari's two daughters also got worthy distinction, Hiranmayi as a social worker and Sarada as a writer, musician and active participant in the political struggle for national freedom.

The most significant woman who came in the life of Tagore was his brother Jyotindranath's wife Kadambri Devi. She was only a little elder than Rabi, who desired to be her playmate. He circled round her at a safe distance, but did not dare go near. She who came from outside to become one of them, who was unknown and yet their own, infatuated him strongly and he desired to make friends with her. But as soon as he drew near, the youngest sister would snap at him, "what'd you boys want here, off you go."<sup>1</sup> The insult made the despair more appalling. But after his return from Dalhousie, Amritsar, Himalayas, Shanti Niketan with his father, all this was now transformed. The unwelcome intruder had immediately become an interesting visitor. He was now center of interest of his mother's open air gatherings on the roof terrace in the evening. There he told his tales, recited poems and surprised the audience with the tit-bits of astronomical knowledge he had collected from his father. The biggest feather in his cap was his recitation of Ramayana in the original Sanskrit of Valmiki and the intelligence and skill was only too eager to surprise the audience among whom was the youngest daughter-in-law of the family whose adoration he desired.

After the death of his mother, his elder brother Jyotindranath and his attractive wife Kadambri gave their affection on him and gave to this motherless boy a home in their little household such as he had never know before. In his sister-in-law he found playmate and guardian angel who not only replaced his mother but more than replaced her and purified and maintained his wild adolescent desires. She was young enough to play at doll's weddings and in such situations, invited her young brother-in-law to partake of the feast. She was an excellent cook and made him happy with dishes which were unknown in Brajeswar's cuisine.

She would make him help her in household hobbies, in cutting betel-nuts or in laying out in the sun to dry finely cut mango slices which make the sweetest preserve. She gave affection on him and yet continuously teased and snubbed him for failings, real or imaginary, so as not to make the intelligent boy too alert of his achievements. When he read to her his new compositions, she only smiled and remarked, how much better other poets had written. She only appreciated his skill for cutting betel-nut

finely and "would never admit that I had any other good quality, so much so that even made me angry with God for giving me such a faculty appearance."<sup>2</sup> Whenever he was inclined to praise himself on his own performance, she reminded him of a Sanskrit saying that "unworthy aspirant after poetic fame departs in jeers."<sup>3</sup> Thus, while she checked his pride from growing, she sedulously encouraged the best in him, for at that time his most hard ambition was to win her appreciation.

She herself was a genuine lover of literature and music and had a keen and fast sensibility. It was she who gave him a taste for the lyrics of Biharilal Chakravarty, a contemporary, whom Rabi grew to praise. Tagore himself has stated in Reminiscences: "My sister-in-law was a great lover of literature. She did not read simply to kill time, but the Bengali books which she read filled her whole mind. I was a partner in her literary enterprises."<sup>4</sup>

She also shared with him her keen admiration of his eldest brother Dwijendranath's recently published poetic composition, Svapnaprayan (Dream Journey), a superb allegory and a masterpiece of metrical experiments whose "beauties had become intertwined with every fibre of my heart",<sup>5</sup> to quote Tagore's own words. That was the time when the novels of Bankim Chandra Chatterjee were being serialized in the literary journal Bangadershan "taking the Bengali heart by storm..... when Bangadershan came there no midday nap for anyone in the neighbourhood. It was my good fortune not to have to snatch for it, for I had the gift of being an acceptable reader. My sister-in-law would rather listen to my reading aloud than read for herself. There were no electric fans then but as I read I shared the benefits of her hand fan."<sup>6</sup>

Thus, there developed between the motherless boy and this childless lady a warm affection and friendship which satisfied and sublimated the pent-up, confusing desires of his adolescence and warmed his wayward genius into fruitfulness.

While she offered the emotional stimulus and the conscious warmth and shade which he desired most at that age, it was her husband Jyotindranath who gave the first essential discipline and direction to his vague and informed talent. Himself at the top of his generative powers, Jyotindranath took young

Rabi under his wing and made him an under-trainer in the workshop of his genius.

Rabindranath's near and dear sister-in-law immediately committed suicide. She was only twenty-five then. This tragedy left a very deep scar on Rabindranath's mind. It was the first great sorrow of his life, his first experience of the horrible reality of death. He had known his mother's death earlier but he was then too young to feel its impression and the loss was more than made up for by the affection his sister-in-law had given. But her loss none could fill. During the most impressionable years of his life, had been his comrade, his faithful and his shelter. After this, he was to face death again and again, and suffered many bereavements in his life, but no other loss ever had so deep an impression on his mind and his genius. It did not break him, it made him. It was the moving of the soul out of which he came out strong and matured. He pays tribute to his sister-in-law in these words:

"If you are not before my eyes, it is because you are my very light, that shines in them – you are the green in the earth's green, the blue in the harvest blue, the inmost rhythm in the harmony at my universe. No one knows not even I that you are the music in my songs. The poet within the poet."<sup>7</sup>

"I had not realized till then", he recalled later:

"that there could be gaps in life's familiar patchwork of smiles and tears to which I had clung unable to see anything beyond it. When death came and what had been there as part of life became suddenly a gaping void, I felt utterly lost. Everything else had remained the same, the trees, the soil, the sun, the moon and the stars; only she was as real as they, indeed far more real than they, for I had felt her touch on every aspect of my being – only she was on every aspect of my being – only she was not there, she had vanished like a dream. This terrible paradox baffled me ....."<sup>8</sup>

The second lady who came in contact with Rabindranath was Annapurna. Tagore met her in Bombay. Rabindranath moved to Ahmedabad with his brother Satyendranath, the idea being that a few months' stay with his England educated brother would give him the essential preliminary training and polish in the usage of English language and manners. After a few months' stay in Ahmedabad, his elder brother felt that it would do Rabi more good and

prepare him better for her visit to England if he stayed with a family where he would have more practice in conversational English and where he might learn to feel comfortable in the company of ladies used to the Western way of living. So, he sent Rabi to Bombay to stay with the family of a Marathi friend, Dr. Atmaram Pandurang Turkhud, a prominent physician and a social reformer of advanced, progressive views. The burden of "educating" Rabi fell on the young daughter of the family, lovely to look at, who had lived in England and was highly well etiquetted by the standards of those days. Anna was only a bit older than Rabi. The teacher enjoyed her burden and the pupil was engaged with so lovely a teacher. How much he learnt during the two months he stayed there we do not know, but there grew up between the teacher and pupil a tender and innocent closeness which left a permanent influence on his memory. Recalling this episode at the age of eighty Rabindranath wrote:

"My own attainments were only ordinary, and she could not have been blamed if she had ignored me. But she did not do so. Nor having any store of book learning to offer her, I took the first opportunity to tell her that I could write poetry. This was only capital I had with which to gain attention. When I told her of my poetical gift, she did not receive it in any carping or dubious spirit, but accepted it without question. She asked the poet to give her a special name, and I chose one for her which she thought very beautiful. I wanted that name to be entwined with the music of my verse, and I enshrined it in a poem which I made for her. She listened as I sang it in the Bhairavi mode of early dawn, and then said, 'Poet, I think that even if I were on my death-bed, your songs would call me back to life'. There is an example of how well girls know how to show their appreciation. They simply do it for the exaggeration. They simply do it for the pleasure of pleasing. I remember that it was from her that I first heard praise of my personal appearance, praise that was after very delicately given. For example, she asked me once very particularly to remember one thing, 'you must never wear a beard. Don't let anything hide the outline of your face'. Everyone knows that I have not followed that advice. But she herself did not live to see any disobedience proclaimed upon my face."<sup>9</sup> The name Rabindranath gave her was Nalini. The name of the imaginary

sweetheart in his long narrative poem Kavi Kahini published earlier. He used to read this poem to her and to translate it into English for her. She encouraged not one but many poems of his, in which he lingers lovingly on the name Nalini. Nothing more is known of their friendship, for it seems that shortly after she married a Scotsman and died not long after. But Rabindranath never forgot her memory and his references to her in his later life, whether in conversation or in writing, are infused with calmness and respect.

Having returned from England when he landed in Bombay was Anna still there and did he see her or try to see her again? No one knows. Even the name he gives to the heroine of his drama, Bhagna Hriday is Nalini – a name that never stopped to visit young Rabi's imagination.

In England, Rabindranath had not only children to play with at home but had interesting social life in the evenings. The boy had an eye for observation and described what he saw in his letters home, like he makes distinction between Indian women and British women: "Despite the many differences between the ways of women here and in our own country, there is one thing common between them. Society trains and equips them, each in its fashion, to win the highest bidder."<sup>10</sup>

Rabindranath's days in London, after his return from Torquay, were enjoyably spent. He was lucky in finding a home with a friendly English family, that of one Dr. Scott. When he first reached the house, only the white haired doctors, his wife and eldest daughter were there. The two young daughters were warned at the prospect of their home being attacked by a "blackie", had gone off to stay with a relative. They came back only when they were ensured that the stranger was harmless. In course of time, he became every one's dear, including the dog Tabby's, who would not eat until he had played with him. Mrs. Scott treated him like a son and looked after him with more affection and anxious care than he had known from his own mother. Her devotion to her husband and family influenced him greatly. The daughters, too, grew very fond of him, particularly the third one who was more or less of his age and could sing and play on the piano. She taught him many English and Irish Songs.

His earlier observations on English society and specially the role and ways of its women, which had been merged with not a little irony and

satiric comment, now underwent a change and he began actually to praise the attraction as well as the strength of character of women brought up in a free society. This appreciation was freshly expressed in his letters written home and caused an uneasiness among the elders, who started to surprise if it was wise to let the couraging boy loose in England after his elder brother came back home. So, a peremptory order went from India that Rabindranath was to cut short his studies and return with his brother. Was the young boy happy or heart-broken at this turn of incidents? He has himself stated in his Reminiscences that he was overjoyed at the prospect of returning home, "The light of my country, the sky of my country, had been silently calling me."<sup>11</sup> This was no doubt true, for from the point of view of his generative description, his stay abroad had been comparatively barren and he must at times have desired for the stimulus which had released and fed his powers at home. On the other hand, it must have been a troublesome twist to break away from the new and sweet attachments he had formed abroad, "Mrs. Scott took me by the hand and wept. Why did you come to us", she said, "if you must go so soon?"<sup>12</sup>

Rabindranath did not tell about what the daughters said, but a poem published in Bharati gives some idea of what he felt. Here is a rough and crude translating of it in English prose, for what it is worth. The poem is entitled Du-Din (Two Day

As I set my face home wards to the east I ask myself:

Will I ever return to these shores, will I ever pass and perhaps one day when I am sitting alone by a river bank in a faraway land and the sun is sinking to the west, a storm of memory will of a sudden sweep over my heart, a lightning flash will reveal a face once familiar and the echo of an old song will reverberate in the sky. This face, made as if a million flowers had gone into its making and this hair loose and disheveled will haunt my sleep night after night and these eyes wistful with longing will look into mine and a voice broken with tears will whisper, "Must you leave? Must you?"<sup>13</sup>

Second time when Rabindranath went to London, he took the first chance to visit the house where he had spent such happy days of youth with the Scott family. He was despaired to learn that the family had left the house and no one knew where they had gone. But the

youthful love was now only a memory and London had many other compensations. English girls would be glad to read what he noted in his diary about their grandmothers:

“It is a pleasure to walk along the street here. One is sure to see a pretty face. Patriots at home will, I hope, forgive my admiration of these fair faces, their red lips and shapely noses and eyes that reflect the blue of the sky.”<sup>14</sup>

Once again, he praises the European society where women because they are given their due share of freedom, help to make the nation strong and contrasts it with the Indian society where women’s only function seemed to be to serve and tease man and thereby to make less powerful about.

In the year 1883, Tagore was married to Bhavtarini. The bride was eleven years old daughter of one Benimadhav Raichaudhary who happened to be an employee in the Tagore estate. This marriage was arranged because the Maharshi, though progressive in religious matters, was conservative in the maintenance of social forms. The girl must be of Brahmin parentage. The choice was essentially limited to a few families belonging to the same Piral sub-caste in the small provincial town of Jessore.

The girl was from a poor family; also the girl had no beauty and was almost uneducated, having read the first Bengali primer only. History has its ironies and thus, this unromantic marriage was arranged for one of the most romantic men of the age. Keeping in view the social conventions that held sway in that period, what occurred was not very strange. Nor was it wondering that Rabindranath only surrendered to the choice. For all his dashing romanticism and his active individuality in the field of literary experiments, he was a meek and loyal son and was so much under the magic of his father’s personality that not only was the latter’s word law for him but he believed that the Maharshi could not be in the wrong. The not so beautiful bride proved to be an excellent wife, the kind he really needed. Himself incorrigibly romantic what he desired from a wife was not further courage but an antidote. Had he married only a beauty he might have got tired of her, but he could not get tired of the protective fence of care and ease which his wife not attracting unnecessary attention built around him and never stopped to be thankful for the self-

effecting devotion with which she helped his genius fruitful. After marriage Bhavtarini’s name was transformed into Mrinalini, a beautiful name, very likely given by the husband, perhaps his only starting in this incident. Nalini was a name always dear to his heart and somehow Mrinalini second to attach it. As a matter of fact, he was at this time working on a prose drama of that name. The plot was familiar, a rehash of his earlier adolescent attractions centering round a lovely and true hearted girl called Nalini.

Mrinalini died in 23<sup>rd</sup> November, 1902. For twenty years, this lady, self removing and gracious, had looked after him with unspotted devotion and had borne him five children. Though young and living in the midst of a rich and wealthy society, she dressed very simply and wore almost no jewellery and had joyfully accepted herself to her husband’s ideals. She felt uneasiness only when he came in the way of her dressing her children in her fine clothes. Nor did she remain illiterate for long. She soon obtained proficiency not only in her own language but in English and Sanskrit as well. At her husband’s willingness, she translated into Bengali a short version of the Ramayana from the original Sanskrit. She also acted on the stage in his play Raja Rani and gave an excellent expression of the role she was given. No wonder then that she won her husband’s heart in the end, who gave enough proof of his devotion when she took to bed. For two months, he nursed her day and night, denying to engage a professional nurse. There was no electric fan in those days and contemporary witnesses have left on record their praise of the husband who was always at the bedside, his hand-fan moving gently over her. When she died, he spent the whole night on the terrace walking up and down having given strict orders that no one was to interfere him.

Ketaki Kushari Dyson also says: “As a Bengali, I have always known that Victoria Ocampo had been a disant Muse to our great poet in the last seventeen years of his life; his Argentine hostess of 1924 and the mysterious ‘Vijaya’ to whom his book of poems, Purabi (1925) had been dedicated.”<sup>17</sup>

It was the Nobel Prize which made the meeting of Tagore and Ocampo possible. There was a



suggestive gap of his artistic and political experience.

Like R.N Tagore, Victoria Ocampo (1890-1979) was born into a wealthy and aristocratic environment, into a class which had been actively indulged in the making of the history of the region. Though her father's side as well as through her mother's side, she received a family background, the complicated and unexpected results of which are intermixed with the story of the development of Argentina from a colony of Spain into a separate South American Nation.

Thus, we have another interesting point of sameness between Tagore and Ocampo. Neither obtained any formal academic qualifications, the former because he dropped out of academies; the latter because she was kept out of them, but even then both generated major cultural institutions in their countries.

Victoria Ocampo did receive quite a few honours before she died both in her own country and abroad – for example, she was made a member of the Argentine Academy of Letters in 1977, received honorary degrees from Harvard and Visvabharti, was even made a Commander of the order of the British Empire, but her status, like Tagore's rests not on honours given but on the solid material of her achievements and the memory of a longer than life personality she has left behind her.

At the outside, we see a young woman who is highly intelligent and at the same time, thanks to a mainly literature based education unimprovably romantic. She is bursting with desires and inspirations and has no real outside for them. She is very sensuous and clearly highly sexed, but while inspired to deck herself to look attractive to men, she is refused, as females in a patriarchal society almost always are, all real descriptions of her sexuality.

When Tagore was in Buenos Aires, Victoria and her friend Adelia Acevedo managed to get an interview with Tagore (on 7<sup>th</sup> or 8<sup>th</sup> Nov.) Elmhirst received them first in the hall spoke of his tensions. The condition of Tagore's heart was giving concern; the doctors had examined him and it was their opinion that he ought not to cross the Andes by the high attitude trans-Andean railway the proposed visit ought to be cancelled. Tagore should have complete rest in the country before leaving Argentina. At once, Victoria Ocampo found herself proposing that she would lodge the poet and his secretary in a

quanta or country house in nearness of the city. The proposal was made before any clear thought on how it could actually be implemented. She did not own any quanta in any nearness and did not know if her parents would be willing to lend her theirs. But she was ready to move heaven and earth to find an acceptable and calm shelter for the improvement of health of her hero:

"After this, the two women climbed the hotel stairs to Tagore's suite of rooms to meet the great man. Victoria was paralyzed with shyness at the real presence of the man. So close to her heart; whose work she had studied so carefully and let her friend do the talking, but Adelia's inconsequential remarks not connected with that Ocampo herself would have liked to have said, simply irritated her. Dreaming of her plan to host Tagore in Villa, she cut the visit short very soon, to the astonishment of Adeia, who knew how eagerly Victoria had waited for this meeting."<sup>18</sup>

It was on 15<sup>th</sup> November that Tagore wrote his first poem for Victoria Ocampo 'Atithi' (The Guest); He also translated it into English to show it to Victoria.

Tagore's hostess was clearly an attractive and elegant woman and the mistress of her own time. But how was Tagore to guess that her most enthusiastic desire had been to know him personally? How was he to know that perhaps no one in the west had studied his works with such care in three languages; Spanish, French and English, as she had done, unless she herself told him about it? Tagore's habitual reserve and shyness slowly finished as she began to point out how difficult it was for her to explain to him, in the medium of a language which was neither her nor her first language, how devoted she was to him and, how much she praised his philosophical and mystical ideas.

She was highly influenced by Tagore and his personality. In an article entitled, 'Anglo Sobre Rabindranath Tagore' (Something about Rabindranath Tagore), she puts a lot of strain on his talent for conversation. He was one of the most spiritual and brilliant causeurs she had met. His sense of the comic was very sharp, although his smile always kept its sweetness. His irony, very clear, never had a bitter taste. When angry, he would use acute and direct descriptions, but he would not then use any satire. His irony was not like that of so many others a secretion of importance, nor a disguise

for anger and envy. It was something acid, fresh sauce, like lemon juice. She knew that many people accused him of posing, but she was completely sure that he was not a poseur. He was totally sincere. His moods were always changeable like the weather. There were days when he did not wish to convey with anybody, when he kept an almost total silence; there were other days when he was full of talkativeness. On some days, he was as happy as a child leaving his lessons; on other days he was sad. In the early days of their friendship, she accepts his silences produced a paralyzing sense of fear in her.

Tagore would read out to her in a high voice the poems he wrote. That was music. He would try to ask her pronounce certain Bengali words. He would desire her to learn Bengali, pressing that until she could read him in the original she could not be said to have read him in the real sense.

Tagore read Baudelaire. Tagore was not complaining about the sexual desire in Baudelaire, but about the use of furniture – imagery to decorate the sexual theme. As any one familiar with the works of Tagore will know he was richly aware of the sexual desire dimensions of our existence, but as Ocampo herself felt, his was a sensuousness that was continuously crossing the limits of the senses. The interesting postscript to all this is the fact that the meaning of the Baudelaire lines which had eluded Tagore at Chapadmalad was, according to him, explained on board of the ship that took him away from Argentina by means of the armchair that Ocampo had pressed on giving him. This armchair had a favourite seat of Tagore at Miralrio. Ocampo persisted that Tagore must take it with him, and had the door of his cabin in the ship Giulio Cesare removed from its hinges by a workman so that the armchair could be placed inside. From the ship Tagore wrote to Ocampo on 5<sup>th</sup> January, 1925 that he spent a great deal of his time ‘deeply buried’ in her armchair which had at last explained to him ‘the lyrical meaning’ of the Baudelaire poem he had read with her. Ocampo replied on 15<sup>th</sup> January, in a markedly arch fashion: “So at last, you understood Baudelaire Through my armchair... I hope that you May understand through that some piece of Furniture what the lyrical meaning of my devotion is.”<sup>19</sup>

There can be no doubt that both Tagore’s remark and Ocampo’s rejoinder have sexual nuances. The chair was an extra problem for Elmhirst to worry about at the other end, of course, but it not only reached Europe, but boarded yet another ship along with Tagore and lastly reached India. It is still placed in the Tagore Museum at Rabindra Bhawan Shanti Niketan. Tagore often sat on it during his last illness and wrote two poems on it in the year of his death. That piece of furniture became to him the symbol of Ocampo’s love for him, one might almost say to her embrace, and it has become an important item in the Tagore Ocampo mythology of the Bengalis.

It is interesting to note that in a letter to his daughter in India, he wrote in general terms about the hospitality which ‘they’ were giving, hiding the fact that he was really being hosted by an Argentine woman writer, something which he did not hide when writing to his daughter-in-law who was at that time in Europe. May be he did not want any gossip to spread in India.

No, it had not been an easy time. Tagore had found fans who had read him and one in particular who had read him with great care, a beautiful woman who loved and praised him intensely and wanted to serve him in some day. But he had not found enough response towards his ideas and ideals, especially those concerning to education and Vishwabharti. He did not find an intelligentsia with the members of which he could link, with whom he could have a dialogue. It was natural, therefore, that soon Argentina would come to mean for him one thing only; the woman, Victoria Ocampo his fan par excellence, who could be his muse and provide him with artistic aspirations. This, more or less, is what he said to her in his letter of 13<sup>th</sup> January, 1925 from the ship Giulio Cesare, “For me the spirit of Latin America will ever dwell in my memory incarnated in your person.”<sup>20</sup>

Victoria was by no means the only sexual woman to write letters to Tagore describing love and appreciation. Tagore must have been well habituated to receiving emotional letters from female appreciations. In the thirties, a young and beautiful Hungarian artist, Elizabeth Brunner’s letters to Tagore describe the most ardent, girlish devotion:

“..... My dearest, dearest poet, I wish to see you, I wish to hear you..... I feel if I can't see you my heart will break! .....”<sup>21</sup>

Another foreign and female appreciator of Tagore was Andree Karpeler five years older than Victoria. Tagore's letters to Karpeler who was unsatisfied with her husband, are equally affectionate and playful:

“.....though I have very great love for your big Scandinavian, I can not forgive him for snatching you away from neighbourhood.”<sup>22</sup>

In fact, all letters consider that they have intense feeling of love for each other. She wrote in one of her letters:

“I was glad to give you all I could have. I was full of love; suffering because my love was stifling me torturing me as love does when it finds no immediate expression.”<sup>23</sup>

She described her endless desire. “Days are endless since you went away.”<sup>24</sup> These are most immense and personal experience of his life which he also shown in his works.

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**ABSTRACT:**

*The library has a significant role in research and development. The review of literature is a step for research and development for the purpose of creating new knowledge in the concerned field. The review of literature in the concerned field of research is as important as it is the foundation of research. Almost each and every aspect of research need to be taken care of regarding its availability in libraries or elsewhere for creating new concept in research. The revision or review of the concerned available literature is the basic need to avoid duplication and making fresh innovation for the concerned research problem.*

*The present paper is based on the role of libraries in making review of literature for the purpose of research. In this paper it has been observed that the availability of e-resources in libraries has fairly increased. The facilities to provide information to the users with the help of technology by using different services also increased in the libraries as compared to the earlier days.*

**INTRODUCTION**

The libraries assist in finding, using and interpreting appropriate information that opens up opportunities for lifelong learning, literacy enhancement, informed citizenship, recreation, creative imagination, individual research, critical thinking, and ultimately, empowerment in an increasingly complex world [1].

There are many types of libraries throughout the world. The Libraries play significant role in research and developmental activities. The libraries may have traditional information resources or e-resources. The electronic resources may be online or offline. Today most of the libraries have several databases consisting of books and journals. Some of the libraries are providing rich source of information by using different database like Abstracting and full-text databases, Citation databases, such as Web of Science, Scopus, JSTOR, EBSCO and SAGE etc. Many abstracting journals and electronic databases are available through the Library's Research Gateway. The large number of journals/periodicals and books are available with the said databases. These journals consist of several research article based on certain issues or case studies or certain problems.

These studies are used to extend the new concept for further research.

All over the world libraries are dedicated to providing free and equitable access to information for all. The information may be in written, electronic or audio-visual form. The libraries play a key role in creating study environments and promoting reading habits by offering relevant and attractive reading material for all ages and all levels of education and research.

Writing the literature review is a very important task while making a study or research in any field. Having gathered the relevant details about the literature to write the review requires a library. The types of library and their different kind of services will depend on the level of studies.

**THE REVIEW OF LITERATURE**

'Literature' covers everything relevant that is written on a topic: books, journal articles, newspaper articles, historical records, government reports, theses and dissertations, etc. The important word is 'relevant'.

The review, like other forms of expository writing, has an introduction, body and conclusion, well-formed paragraphs, and a logical structure. However, in other kinds of expository writing, you use relevant literature

to support the discussion of your thesis; in a literature review, the literature itself is the subject of discussion.

A literature review is a description of the literature relevant to a particular field or topic.

A critical literature review is a critical assessment of the relevant literature. It is unlikely that you will be able to write a truly critical assessment of the literature until you have a good grasp of the subject, usually at some point near the end of your research. A critical literature review shows how prevailing ideas fit into your own thesis, and how your study agrees or differs from them.

A literature review gives an overview of the field of inquiry: what has already been said on the topic, which the key writers are, what the prevailing theories and hypotheses are, what questions are being asked, and what methodologies and methods are appropriate and useful.

The Cooper [6] and some other scholars defined the literature review as under:

According to Cooper (1988) '... a literature review uses as its database reports of primary or original scholarship, and does not report new primary scholarship itself. The primary reports used in the literature may be verbal, but in the vast majority of cases reports are written documents. The types of scholarship may be empirical, theoretical, critical/analytic, or methodological in nature. Second a literature review seeks to describe, summaries, evaluate, clarify and/or integrate the content of primary reports.'

"In writing the literature review, the purpose is to convey to the reader what knowledge and ideas have been established on a topic, and what their strengths and weaknesses are. The literature review must be defined by a guiding concept (eg. your research objective, the problem or issue you are discussing, or your argumentative thesis). It is not just a descriptive list of the material available, or a set of summaries.

<http://www.utoronto.ca/writing/litrev.html>

A literature review is more than the search for information, and goes beyond being a descriptive annotated bibliography. All works included in the review must be read, evaluated and analyzed (which you would do for an annotated bibliography), but relationships between the literature must also be identified

and articulated, in relation to your field of research.

Thus, a literature review is an evaluative report of information found in the literature related to your selected area of study. The review should describe, summaries, evaluate and clarify this literature. It should give a theoretical base for the research and help you (the author) determine the nature of your research. Works which are irrelevant should be discarded and those which are peripheral should be looked at critically.

## STEPS OF LITERATURE REVIEW

There are several steps in developing a literature review. These include:

- ❖ Selecting the topic
- ❖ Setting the topic in context
- ❖ Looking at information sources
- ❖ Using information sources
- ❖ Getting the information
- ❖ Information Management (Organizing information)
- ❖ Positioning the literature review
- ❖ Writing the literature review

## THE LITERATURE REVIEW PROCESS AND THE LIBRARY

A good literature review requires knowledge of the use of indexes and abstracts, the ability to conduct exhaustive bibliographic searches, ability to organize the collected data meaningfully, describe, critique and relate each source to the subject of the inquiry, and present the organized review logically, and last, but by no means least, to correctly cite all sources mentioned [2]. It is the library that offers a range of training for research students. The library will assist people with the production of literature reviews including sessions on electronic databases, using the bibliographic management software.

Find out what has been written on your subject. Use as many bibliographical sources as you can to find relevant titles. Bibliographies and references in key textbooks and recent journal articles are browsed from the library for the purpose of review. The key texts and relevant journals are asked from the library only.

The Library has a provision for several services to provide right information to right user at right time. The library focuses on information retrieval process for betterment of the use of library resources. The Library provides CAS, SDI, Abstracting, Indexing and other relevant services like photocopying for the maximum

use and promotion of literature available for various purposes.

## **LIBRARY AND SEARCH STRATEGIES**

Library is helpful to browse the desired information for the purpose of review of literature in any disciplines. The search strategy for searching concerned information is very useful for making a quality research (especially when searching electronic databases). The search strategy can be revised in the library to have relevant databases for your research. Some people annotate their search strategy as they conduct their searches, noting the database used, the date searched, and the number of records retrieved from the library.

## **Current Awareness Services and Literature Review**

Current Awareness Services are available in the libraries from a number of databases (as well as from publishers and websites). Such services are useful in keeping you up to date with literature of the concerned field. As new resources are added to various databases, current awareness services automatically notify you of relevant citations or table of contents.

## **ELEMENTS OF LITERATURE REVIEW AND LIBRARY**

The reviewer has certain elements for literature review while browsing the literature from the libraries. While making research in any concerned field, the review of literature consists of the following elements:

- ❖ Provide a context for the research.
- ❖ Justify the research.
- ❖ Ensure the research hasn't been done before (or if it is repeated, that it is marked as a "replication study").
- ❖ Show where the research fits into the existing body of knowledge.
- ❖ Enable the researcher to learn from previous theory on the subject.
- ❖ Illustrate how the subject has been studied previously.
- ❖ Highlight flaws in previous research.
- ❖ Outline gaps in previous research.
- ❖ Show that the work is adding to the understanding and knowledge of the field.
- ❖ Help refine, refocus or even change the topic.

The reviewer has all the elements in mind while he browses literature from the library. If the reviewer missed the certain elements while browsing the literature, this will influence the

quality of his/her work. The reviewer can use the library services and facilities to fulfill their objectives regarding the review of literature. This also may be helpful in avoiding duplication of research in certain fields.

## **ANNOTATED BIBLIOGRAPHY AND LIBRARY**

An annotated bibliography deals with each text in turn, describing and evaluating the text, using one paragraph for each text. If you are writing an annotated bibliography, you may need to summarize each item briefly, but should still follow through themes and concepts and do some critical assessment of material. Use an overall introduction and conclusion to state the scope of your coverage and to formulate the question, problem, or concept your chosen material illuminates.

Library is a store house of knowledge. A reviewer can make a annotated bibliography on certain topic from the literature available in the library. Annotated bibliography has its multiple uses for research and development.

## **PROBLEMS AND CHALLENGES OF LIBRARIES**

**Lack of Funds:** Libraries have to be appropriately funded if they are to be effective and attractive. But many libraries worldwide are under-funded.

**Lack of Professional Staff:** Many libraries in poorer countries are run by non-professional staff. It is assumed that any volunteer or teacher can manage a library. But the quality of a library service depends on the professional quality of its staff, and this in turn depends on the quality and relevance of the training that they have received.

**Management of Relevant and Non-Relevant Material:** Management of relevant and non-relevant reading material is also very important while browsing the resources from the libraries. Well managed resources in libraries are helpful and easily accessible to reviewer for making literature review of the concerned field.

**The Content Management Software's:** There are large numbers of content management system software available to maintain the contents of certain topics. Some of them are freely available for the use of literature management for example: Joomla, wordpress etc. EndNote is a reference database that enables you to create your own list of bibliographical references. The EndNote software is provided on the Software Essentials

CD or via the ITS Software Library and makes it possible to connect to selected library catalogues and online databases and to incorporate references directly into an EndNote database. It is also possible to export bibliographic records whilst you are searching the Deakin Library catalogue into EndNote. EndNote is a bibliography maker which can locate cited works in its databases and build and format appropriate lists automatically. It can be used in conjunction with a word processing package.

The End Notes databases are also helpful in literature review. It is helpful to download records, Internet searching using Netscape, Library catalogue searching, off-campus student orientation, subject resources, and research skills.

## CONCLUSION

The Library plays a significant role in providing information resources for making study on a particular topic. The library tools and techniques are very helpful in making literature review for a particular topic. In fact library is a complementary to research. A strong base can only be created for research with a quality of literature review. The library is the only source for studying the earlier concepts related to the study for further research.

Libraries are also custodians of the literature by collecting, storing and disseminating popular and academic knowledge and reading material for current and future generations. Libraries play the most important role worldwide in helping to bridge the information gap by providing free access to information and communication technologies, particularly the Internet. They are inclusive in that they build bridges between individuals at the local level and the global level of knowledge. In today's world, access to modern information technology is currently one of the most attractive library services.

For various reasons, libraries are the perfect place to provide literature for all users. They

have ideally easy access to all the resources needed to run a new study or research. The reviewer can access printed and audio books, magazines for all reading levels, videos and newspapers to fulfill their objectives. Libraries are friendly and hospitable places, ideally with service oriented opening hours and approachable staff.

Knowledge is infinite and continuum. Finding the concerned literature from known knowledge is not an easy task for the purpose of review of literature. We have to have access to the libraries for review of literature to maintain the quality of concerned study. The library plays a significant role in making the judgment for the scope of further studies if the review of literature made seriously for differentiating the relevant study.

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### ABSTRACT

*The Indian Federalism is unique in nature and is tailored according to the specific needs of the country. Federalism is a basic feature of the Constitution of India in which the Union of India is permanent and indestructible. Both the Centre and the States are co-operating and coordinating institutions. Tension and conflict of the interests of the Centre and the respective states is an integral part of Indian federalism. Prevention as well as amelioration of conflicts is necessary. The nation was committed to a socio economic revolution not only to secure the basic needs of the common man and also the economic unity of the country. That is why Indian federalism has been made federal in form but unitary in practice. It is the political reality which determines the constitutional reality. Therefore, the political dimensions of federalism are more important than the constitutional dimension. The nature of Indian federalism has been changing with the nature of party system and leadership. After 2014 parliamentary elections, emergence of Narendra Modi headed B.J.P. government reversing the trends and could lead reversion of the creation of a highly centralized system. What shape of Indian federalism will be in near future, it is difficult to say.*

**Keywords:** Dynamics, Federalism, Constitution, Indian, Political, Unitarian,

### INTRODUCTION

India is one of the largest countries in the world not only in terms of population but also in terms of territories. It is heterogeneous from the linguistic, ethnic and cultural standpoints. It is also marked by great disparities in the distribution of land and population among its 28 constitutional units which are known as the states. Its jumbo size and enormous diversities forced the constitution makers of the country to opt for a federal structure. However, the central government has been made more powerful than those of the states due to historical necessity and the threats of the destructive forces. That is why Indian federalism has been made federal in form but unitary in practice.

The noted American historian of Indian constitution, G. Austin, had described Indian federalism as cooperative federalism (Austin, 1966). This concept is distinct from K. C. Wheare's concept of federalism, who says the central and regional governments of a country shall be independent of each other within its sphere. As against this, the concept of cooperative federalism implies a strong central government. This does not however, mean that the provincial governments are weak (Wheare 1963). W.H. Morris Jones had termed it as a bargaining federalism. It has now been converted into cooperative competitive federal

system according to Prime Minister, Narendra Modi.

In the above context, it will be interesting to examine the trends of Indian federalism like Unitarian federalism, cooperative federalism, bargaining federalism, cooperative competitive federalism. As a matter of fact, Indian federalism is so unique and so dynamic that it cannot be understood by using any one of these concepts in isolation.

The nature of Indian federalism cannot be understood without keeping in mind the nature of centre state relations laid down in the constitution. In this context we have to keep in view the compulsions as well as intentions of the makers of Indian constitution. Did they create a federal system with a strong centre but weak states or did they design a federalism having a strong centre with strong states? Or, did they create a system of cooperative federalism or bargaining federalism or cooperative competitive federal system?

It is the political reality which determines the constitutional reality. Therefore, the political dimensions of federalism are more important than the constitutional dimension. The nature of Indian federalism has been changing with the nature of party system and leadership. Carl J. Friedrich (1968) envisages, if the government is federally structural, parties must adapt themselves to such a structure. However, this



does not happen in India. During the one party dominance of congress party from 1950-1967, from 1971-1976 from 1980-1989 and after 2014, the centre remained stronger than the states. During the one party dominance the Indian federalism was converted in to Unitarian federalism. Similarly during the period of competitive dominance from 1967 to 1971, it had been converted in to conflicting federalism. During the Janata Party phase from 1977-1979 the Centre had lost grip on states. During the phase of Bi-polar Multi party system from 1989 to 1991 and 1998 to 2014, the balance had once again tilted in favor of states due to the logic of regionalization of Indian politics. Furthermore we had cooperative federalism during Nehru era due to democratic and decentralized leadership style of Prime Minister Jawahar Lal Nehru. But the dominance of Congress-I led by Indira Gandhi de-federalized the Indian polity as leadership style of Prime Minister Indira Gandhi and character of congress-I (Singh, 2009).

The dawn of coalition politics at centre after 1989, however, had reversed the situation. In this changed context of Indian politics, regional political parties and regional political leaders have become more powerful than before. The central governments were being formed with their support. This weakened the central government and strengthened the state governments. But this new type of situation too strengthened federalism in India. The states, as a result got more autonomy and the misuse of 356 has been minimized.

Besides, the processes of LPG that had been initiated in 1991 too had brought about a paradigm shift in the nature of Indian federal system. However, the outcome of the 2014 parliamentary elections and emergence of Narendra Modi headed BJP Government in the centre has the potential of reversing these trends and could lead to the reversion of the creation of a highly centralized federal system in India. Because, 2014 parliamentary elections has been widely recognized as a critical elections in India's electoral history. These have resulted in the formation of a coalition government which in fact is a single party government .But it is not only virtually a single party government but a government in which the Prime Minister is very powerful. So much so that instead of parliamentary system, our government has practically become a Prime

Ministerial system of government. As a matter of fact, it has assumed the character of a Presidential system of government because of the concentration of all the powers in the Prime Minister's office. It is a hard truth that the people did not vote for the BJP. They had voted for Mr. Narendra Modi. That is why these elections can also be described as personality based elections. The voters had to decide whether it should be Modi or not. They practically had no other choice. Consequently these had become plebiscitary elections in which the charisma of Modi's personality became the key factor. Besides, these have reversed the trend of regionalization of the Indian politics.

Consequently the regional leaders and regional parties have become rather weak after these elections and the national leader, Mr. Modi, has become very powerful. Hence the balance of power has shifted in favor of the centre. The planning process has also been affected. The Planning Commission, which found no mention in the Constitution earlier, had become a super cabinet, has now been replaced by the Niti Aayog. This may in the near future lead to decentralized planning instead of the centralized planning or at least it will now give greater share to the states in the planning process.

What shape of Indian federalism will be in near future, it is difficult to say. Let us hope that there remains no tension in center- state relations and inter-state relations. However, the bargaining capacity of the central government has been considerably increased in comparison to the states. Moreover, the BJP ruled states have got greater bargaining capacity than the Non-BJP ruled states.

Let us hope that instead of conflict and confrontations, we shall have cooperation and amity between the central government and the states. But this can be possible only if the central government and the state governments follow Federal Dharma. They must respect each other's domain. The office of the Governor should also not be misused. Article 356 may be used only rarely and that too after it becomes unavoidable.

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RECOGNIZING AND MANAGING STRESS: COPING STRATEGIES FOR ADOLESCENTS

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ABSTRACT

Adolescents face the challenges of stress nearly every day and often report that school, pressure to have good grades, money, relationships, parents, being a teen parent, jobs, sex, STD's/AIDS, violence and fighting, and friends are all contributing factors to raising stress levels. The amount of stress is often influenced by anger, anxiety, depression, and self-esteem. 2 Teens further identified outside pressure coming from multiple combinations of school, athletics, clubs, work, church, friends, and family. Some teens choose unhealthy options to deal with stress and may smoke or use drugs, self-harm, become depressed, or give up on life altogether. Adolescents can recognize what is causing them stress and learn how to manage their stress in a healthy and productive manner. Students need to know there are positive ways to cope with the stressors in their lives, and being able to manage stress and cope with stressors may not only benefit the students, but may also help their academic performance too. Some students cope more effectively than others after being faced with stress. Preparing adolescents how to respond to stress from multiple factors may help them to have less stress in their futures. There are several ways to help reduce stress, but most commonly the workable solution is either decrease the demands on over-scheduled adolescents or increase the number of coping resources

INTRODUCTION

In modern society, young and old experience the emotion of being stressed. During adolescence, 11-19 years of age, the levels of stress increase significantly (Hampel, Meier, & Klimmel, 2008). Teens today face many challenges that parents and traditional educators may not have had to experience when they were growing up. Sexting, online bullying, guns in schools, terrorism, kidnapping, and assaults are just a few of the stressors providing headlines in news stories. Adolescents may face multiple stressful challenges that may include parents who divorce, same sex parents, blended step and half-sibling families, dating violence, technology use to harass or threaten others, social isolation, and the impact of a failing economy. Teen stress is often difficult to recognize and parents and educators need to know the impact of stress on adolescents in order to provide the necessary support and open communication to help them deal with multiple issues. Due to numerous pressures of the 21st century, adolescents are having difficulty coping and are requesting educational programs in schools to help teach them how to cope with such stressors (Bugalski, Cotta, Frydenberg, Lewis, Luscombe-Smith, McCarthy, & Poole, 2004). Being able to manage responsibilities, problems, or difficulties in a calm and thoughtful manner is one way of coping. Stress

is the feeling of mental, physical, or emotional strain or tension. Students are being pressured frequently by a variety of factors which cause them to have stress in one or more ways (Strong, De Vault & Cohen, 2008). Educational programs emphasizing positive coping strategies may not only help promote a healthy lifestyle for adolescents, but also encourage a healthy and productive future. Adolescents who have completed programs designed for coping with stress have less perceived stress, and higher implementation of coping skills. Because of the current stress level of students, there have been many adolescents who have requested ideas for dealing with stress in positive ways in their everyday lives. A major stressor that some students are faced with on a daily basis is bullying. According to a Bullying Statistics website containing bullying statistics, 23% of elementary students have reported being bullied ranging from one to three times a month. Not only are parents worried about their child's safety and wellbeing while at school, but students are also reporting that violence in their schools has increased. There have been numerous occasions in the past five years where students have even taken their own lives because the bullying had become so severe. If the bullied victims knew how to speak up, react in a positive manner, and have the skills to cope with the stress caused by bullying, then maybe

communities could help decrease the frequency and severity of bullying (Bullying Statistics, 2007). 7 Several studies indicated a need for coping programs in schools for adolescents. This is something that can be done either during classes such as health, psychology, or physical education, or through after school programs at the middle and high school level. Adolescents who did not develop healthy coping strategies were more likely to experience a higher risk of health problems and anti-social behaviors. For example, students can begin having issues with depression, anxiety, stress overload, and social conflicts. Depending on the psychological health of the individual, each adolescent needs different ways of understanding and managing stress and conflicts; therefore, school-based programs may be needed to teach these strategies to students to help the outcomes of their future. One option to provide this service is through student support groups, mentoring programs, and counseling services. These outreach programs for adolescents may provide resources and specialized programs that teach coping strategies for a healthy lifestyle. School faculty may wish to attend specific training and conferences regarding adolescents and stress management to help students manage their stress in an effective way. Along with this, parents could attend programs and workshops to gain knowledge about how to teach their children positive coping strategies and stress management. It is essential for school counselors to consider the importance of providing classroom guidance and activities regarding stress management to help raise adolescent's awareness of stress. Also, school counselors, parents, and teachers may wish to take action together to help adolescents learn ways to handle stress and identify the kinds of stressors so that the proper management tools can be used.

#### **STATEMENT OF THE PROBLEM:**

Teens often have a lot of outside pressure from multiple combinations of stress related to school, athletics, clubs, work, church, friends, and family. Some teens choose unhealthy options to deal with stress and may smoke or use drugs, self-harm, become depressed, or give up on life altogether. Therefore, the problem becomes how can adolescents recognize what is causing them stress, and how can they manage their stress loads in a healthy and productive manner? Students need to be aware that there

are positive ways to cope with the stressors in their lives. Being able to help students manage their stress and cope with stressors may not only benefit the students, but may also help their academic performance too. Teachers, who have more interaction with students, are more likely to build trust and rapport. Reducing stress may eventually improve student achievement as well. School counselors would need the resources to promote and present stress related programs to students. The primary concern is the student's safety and physical and emotional well-being. Providing adolescents with a positive role model to help them with other areas besides academics may have a positive impact on adolescents' behavior. Teaching stress management and coping programs in schools may improve the school as a whole, and help prepare students with the tools needed to recognize and manage stress in an effective and positive manner.

#### **PURPOSE OF THE STUDY:**

The purpose of this study is to review the literature pertaining to identifying major stressors and effective coping strategies that school counselors and parents may wish to implement when working with adolescents. With so much pressure in their young lives, teens are looking for ways to cope with the mounting impacts of stress. It is hoped that the literature review will provide ideas to help adolescents identify signs of stress, develop healthy coping strategies, and manage stress levels to create a balanced life and healthy lifestyles.

#### **ASSUMPTIONS OF THE STUDY:**

It is assumed that students who were taught positive coping strategies through school based programs would have a stronger resilience, a higher self-esteem, and a healthier lifestyle. It is further assumed that the literature provides sources of stress as well as strategies that have proved successful in coping with the pressures that adolescents face. A final assumption is that school counselors are willing to develop guidance lessons that include ways to manage stress and will share that information with students in the classroom to help improve school climate, and add to a students' ability to focus on academic, personal, and social issues.

#### **LIMITATIONS:**

One limitation is that the writer has limited time and resources and that the literature may have been overlooked or not accessible during the

time of the literature review. Another limitation is even with ways to identify and manage stress; some students may still choose unhealthy options to deal with stress. A final limitation is that not all ideas work for all students and each individual may have to choose what is best to fit the needs of that student

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## ABSTRACT

*Dr. Ambedkar was a great social reformer and an eminent Economist. He was a many sided genius : a distinguished economist, a learned professor, a brilliant lawyer, reputed author and a great political leader, but above all he left the mark as to how one could attain the heights of glory through self help respect. Acting on these principles, he rose to international eminence and exhorted untouchables to follow these principles as the only effective way of removing their disabilities. This paper attempts to discuss Dr. B. R. Ambedkar ideas on water policy*

**Key words:** Water Policy, Damodar Valley Project, Multipurpose Projects, Hirakund and Sone River Project, Inter-state River, Indian Constitution

## INTRODUCTION:

His natural intelligence and acquired knowledge made him a great authority on current economic and political issues of India. It is to be noted that Dr. Ambedkar was essentially an economist by academic training and a recognized researcher in problems pertaining to public finance and political economy. He studied thoroughly the economic problems facing British-India and provided bold solutions to them, which are relevant even today.

The development of infrastructures such as electric power, irrigation, roads, communication and transport services and technical manpower were treated as prerequisites for agriculture and industrial development and therefore received top priority in the plan. It was believed that development of infrastructure would bring a relatively higher growth in industrial output and employment than the growth in rural labour force and help to absorb the surplus labour from agriculture. In a policy Committee on public work and electric power, Dr. Ambedkar emphasised that the country needed, "cheap and abundant electricity" without it, no effort for industrialization could succeed. Development of irrigation and electric power were long-term projects involving large capital expenditure. The development of electric power (an transport, road and communication) was crucial for industrial and agricultural development. Improvement in irrigation facilities was expected to raise agricultural productivity. The

main features of the new water policy, mentioned in an earlier section, constitute,

1. Adoption of a multipurpose approach for water resources development on the basis of river valley basin.
2. Introduction of the concept of river valley authority.
3. Creation of technical expert bodies at the Centre to undertake planned development of water and power resources.

On each of the above issue, Dr. Ambedkar had views of his own. In the period 1943-46, when the new policy was evolved, he actively participated in all discussions and expressed his views through presidential addresses and lectures. Between November 15, 1943 and November 8, 1945 Dr. Ambedkar addressed five conferences, of which two were on the Damodar Valley project, both held at Calcutta, on Mahanadi Valley project and two on Electric power. Besides the records of the Labour Department, these five addresses contain his thinking on the issue of water resource development in the country. Dr. Ambedkar was a President of Policy Committee on Irrigation and Electric Power. He was also closely associated with "official Committee" in the Labour Department. The main task of the Committee was to formulate the water and power policy. Dr. Ambedkar had influenced the nature of water and power policy and strategy for their planned development.

In conference on the development on Orissa rivers, Dr. Ambedkar expressed his views about conservation and use of water resources. He

referred to the recommendations made by the various committees, while pointing out the limitation of the remedies suggested by these committees, he observed; "with all respect to the members of these Committees, I am sorry to say that they did not bring the right approach to bear on the problem. They were influenced by the idea that water in excessive quantity was an evil, that when water comes in excessive quantity, what needs to be done is to let it run into the sea in an orderly flow. Both these views are now regarded as grave misconceptions, as positively dangerous from the point of view of the good of the people."

Man suffers more from lack of water than from excess of it, Dr. Ambedkar said, not only was nature niggardly in the amount of water it gave, it was also erratic in its distribution, altering between drought and storm. But this could not alter the fact that water was wealth. Water being the wealth of the people and its distribution being uncertain, the correct approach was not to complain against nature but to conserve water. Dr. Ambedkar thus looked at the problem of flood or excess of water in a different manner and focused more on the brighter and the positive aspects of the water problem.

## **EVOLUTION OF CENTRAL WATER COMMISSION:**

A major achievement of Dr. Ambedkar while he was the Labour Member of the Viceroy's Executive Council was the creation of two powerful technical organisations, namely the Central Waterways, Irrigation and Navigation Commission (CWINC), which were forerunners of the present day Central Water Commission and Central Electricity Authority. The efforts made by Dr. Ambedkar to have the concept accepted, the sense of urgency which he brought to the project and the promptness with which he accomplished the task within a very short period, have laid the foundation for the integrated approach for the development in the country.

Irrigation planning had a chequered history in India. During the British rule, the first major initiative as regards water resources management was taken by the Military Board, which was also in charge of irrigation. In 1810, the Board surveyed the status of old canals constructed on both sides of the river Yamuna. When the Military Board was recognised in December 1830, a Canal and Embankment Department was created, and the Military

Board was abolished in 1855, a new Department of Public Works came into existence, and the irrigation works were transferred to the Public Works Department.

The early twentieth century brought about two major developments in respect of water resource management. These were the setting up of the Central Water and Power Research Station in (CWPRS) at Pune in 1916 and the introduction of the Government of India Act, 1919, which placed irrigation under the purview of the provinces of British India.

However, not much work was done to promote the water resource management till Dr. Ambedkar assumed the charge as Member, Labour Irrigation and Power in the Executive Council of Viceroy in 1942. When he took over charge of the Labour, Irrigation and Power portfolios, three main administrative units existed at the Centre to look after the development of irrigation and hydro power of the provinces. These were the Central Board of Irrigation, the Irrigation Advisor and the Electrical Commissioner. It was felt that the structure of these establishments was very inadequate to meet the growing demands for accelerated irrigation and power development of the country. In order to overcome these inadequacies, it was proposed to create the Central Waterways, Irrigation and Navigation Commission and also the Central Technical Power Board, which would provide the Centre a more positive and active role in irrigation and electric power development in the provinces and states. It goes to the credit of Dr. Ambedkar, who recognised the need for technical organisation both for Irrigation and Power development. The roots of this initiative, however, were to be found in the new water policy under the post war plan.

Dr. Ambedkar approved the draft on the proposed Central Waterways, Irrigation and Navigation Commission and the letters to the provinces on December 7, 1944. In the letter, the Labour Department explained that post war development was a vital matter before the Government's of the country. The broadening of the electrical industry and the development of hydro electric power were inextricably connected with development of industries and food production. Expansion of irrigation, conservation of soil, and control of floods had a direct bearing on food supply and people's general content and prosperity.

Navigation would also play an important part in alleviating transport difficulties. The response from the provinces was overwhelming. The result was that a resolution to set up the CWINC was approved by Dr. Ambedkar in March 1944 and the draft of CWINC was adopted on December 7, 1944.

While addressing the first conference on the Damodar Valley Scheme (Calcutta, January 3, 1945), Dr. Ambedkar had observed :

"The objects which have led to the setting up of two organisations – viz. Central Technical Power Board and Central Waterways Irrigation and Navigation Commission ..... are to advise on how the water resources can be best utilised and how a project can be made to serve purposes other than irrigation..... I hope we shall be guided by the right spirit, leaving aside all sectional points of view, and proceed to open a way to the inauguration of a new policy in regard to our waterways and lay the foundation for a regime of prosperity of the poverty stricken millions of this country."

In May 1945, when Dr. Ambedkar argued for a suitable size for the CWINC, Dr. Ambedkar had said prophetically :

"I visualise that the growth of this body in course of time, into a very big organisation with its activities spread over the entire length and breadth of India, and its assistance and advice eagerly sought by all provinces and states, to the end that the natural resources of any region may be exploited for maximum benefit and unified development."

At about the same time, the Central Technical Power Board (CTPB) was set up. There was certain amount of overlapping in work. Functions of CWINC, CTPB, Electrical Commissioner and that of Consulting Engineer for Waterways and Irrigation were reviewed and Central Electricity Commission (CEC) and Central Water, Power, Irrigation and Navigation Commission were created in 1948. In the year 1951, all were merged as Central Water and Power Commission (CWPC). During October 1974, the Ministry of Irrigation and Power was bifurcated resulting in creation of Ministry of Agriculture & Irrigation and Ministry of Power. The CWPC was accordingly bifurcated, one unit has assumed the name of Central Water Commission, and the other is called as Central Electricity Authority.

**DR. AMBEDKAR'S VIEWS ON DAMODAR VALLEY PROJECT:**

The water resource policy evolved under Dr. Ambedkar's direction was a far-reaching framework and a multi dimensional achievement. It led to the creation of two premier technical organisations at the Centre, namely the Central Waterways, Irrigation and Navigation Commission and the Central Technical Power Board. It was accepted by all concerned that the best way of developing inter-state rivers was by adopting the concepts of comprehensive planning with multipurpose projects through a multi disciplinary River Valley Development Authority. It was the beginning of an important present day river valley project in the country, namely the Damodar Valley Project. The river valley projects which were under the active consideration of the Labour Department during 1944-46 were Damodar River Valley Projects, the Sone River Valley Projects, the Mahanadi and the Kosi and others on river Chambal and rivers of the Deccan. These projects were conceived essentially for multipurpose development with flood control, irrigation, navigation, domestic water supply, hydropower and other purposes.

The multipurpose projects which were initiated during 1943-46 were the Damodar, the Mahanadi, the Sone and Kosi while substantial work relating to the Damodar Valley Projects was completed during 1943-47, a beginning was made with others and progress in various magnitudes achieved. Dr. Ambedkar was instrumental in ushering in the coordinated development of the Damodar basin by the Central Government. As a member in the pre-independence Cabinet, he pursued vigorously the development proposal for Damodar Valley. With this kind of groundwork, the Damodar Valley Scheme became the first river valley development scheme in post-independence India, with the Damodar Valley Corporation getting established by an Act of Parliament, in July 1948. Damodar Valley Corporation (DVC) was established in July 1948 with the primary objectives of flood control, irrigation and water supply, and electricity generation, transmission & distribution. Damodar Valley Corporation's (DVC's) command area extends over 24235 sq. kms. spread across Bihar and West Bengal.

The Damodar river rises in West Bihar and after travelling for about 540 km. in Bihar and 250 km. in West Bengal joins the river Hooghly about 50 km. below Calcutta. Its destructive



characteristics have earned the Damodar river the notorious name of 'the river of sorrows.' It erodes soils in Bihar and floods Bengal and causes much distress and loss in both Bihar and West Bengal. Floods have been occurring at regular frequency causing untold misery and damage and adhoc measures were being taken to repair the damage and relieve the distress. A devastating flood in 1943 totally disrupted the rail and road communication and Calcutta was totally cut off, disrupting the movement of troops, which made the Government to realise the importance of controlling the floods on Damodar River. The Government of Bengal appointed a Committee, the Damodar Flood Enquiry Committee in 1944 to suggest permanent measures to control floods in the Damodar Valley.

The Committee, inter alia, recommended after detailed surveys, construction of storage dams on Damodar River and its tributaries. It also felt, measures should be taken not only for controlling floods, but also for irrigation and electricity generation. In one of its recommendations, the Damodar Flood Enquiry Committee had stated that it would be an advantage in the solution of flood control and soil conservation problems if forests and rivers of India were made the concern of the Central Government. Dr. Ambedkar approved this approach on September 18, 1944. This would also enable the Central Government to fund the project to some extent. The Central Government, under the leadership of Dr. Ambedkar suggested the involvement of Bihar Government and also preparation of comprehensive schemes by a committee of experts involving the Central Technical Power Board and Central Waterways of Irrigation Board, covering not only flood control but also hydroelectric and thermal power from the coal fields, irrigation and development of agriculture, navigation and development of port, afforestation etc.

Dr. Ambedkar convened the meeting with the representatives of Bengal, Bihar and the Central Provinces as participants on January 3, 1945 to pursue the matter further and to debate about:

- (i) the possibility of exploiting Damodar river for multipurpose use,
- (ii) to collect necessary data for analysis.

Dr. Ambedkar wanted to evolve a policy which would utilise the water resources of the country

to the best advantage of everybody and the Tennessee Valley Scheme of USA would be an ideal model to emulate. Dr. Ambedkar clearly emphasised that this would be possible only if the provinces offered their fullest co-operation and agreed to override the provincial barriers which had held up their progress and prosperity for so long. The Damodar river would be the first along this line. Dr. Ambedkar argued that the constitutional problem could be overcome by establishing a cooperative undertaking in which the Centre and the Provinces of Bihar and Bengal would be partners. Both the Governments after detailed deliberation agreed to have a coordinated scheme for the multipurpose development of the project with flood control as a priority and to also undertake detailed surveys for establishing a multipurpose project.

**Dr. Ambedkar stated that;**

"The project (harnessing the waters of the Damodar River) is a welcome one to the Government of India. It very clearly shows a fine prospect of the control of the river, a prospect of controlling floods, of securing a fine area for perennial irrigation with resultant insurance against famine and a much needed supply of power. I am sure it will be more than welcome to the Governments of Bengal and Bihar if they realise what the project will mean to them and their people."

**In the first conference on Damodar Valley Project (Calcutta, January 3, 1944), Dr. Ambedkar asserted:**

"The Damodar project must be multipurpose project. It should not only deal with problem caused by floods, it should also provide for irrigation, electricity and navigation. There has not been enough realisation that our policy for water resources development must be multipurpose policy so as to include all possible uses of water."

The consensus of opinion at that conference was that we should go in for the latter. Accordingly, the conference decided to take the next step, namely to create machinery for collecting the necessary data to draw up a multipurpose scheme. On the part of Government of India, Dr. Ambedkar offered the fullest assistance of technical experts in carrying out preliminary work.

**In the second conference held on 23rd August 1945, Dr. Ambedkar stated that:**

"Flood control is a matter of policy and there

can hardly be any other opinion, as the flood protection will ensure full safety to the vulnerable area of the Damodar basin against even the most adverse combination of foreseeable natural circumstances and scheme drawn up in the preliminary Memorandum does provide for that full measure of safety. Another matter of policy is the collective responsibility of the three Governments assembled here to put their shoulders to the task. The three Governments are proceeding energetically with the development of the Damodar River Valley and the project is fully endorsed by the Government of India, and would undoubtedly be welcomed by the Governments of Bengal and Bihar."

Dr. Ambedkar also stressed about the need to take decisions on priority about the selection of dam sites, agency to carry out preliminary investigations; the agency for designing and construction of dams; the creation of administrative machinery; and surveys to the best utilisation of water and power. Dr. Ambedkar also emphasised that in addition to being a multipurpose project, the project was a post war employment project, with the sudden reduction of war employment and expenditure. Dr. Ambedkar exhorted the participants and sought their co-operation to take decisions on these issues during the conference itself. While both Bengal and Bihar had agreed to have this project as a multipurpose project, there was serious difference of opinions regarding the location of dams. Dr. Ambedkar persuaded both the Governments to accept the recommendations of the Experts Committee on the basis of economic benefits of the region, after taking into consideration the mutual interest of both Bihar and Bengal. Dr. Ambedkar, while reiterating the commitment of the Central Government, promised to assume the direct responsibility for securing the staff and organisation necessary to carry out all further preliminary investigations to expedite construction. He also assured for mobilisation of necessary engineering manpower including from Army, in view of shortage of staff in Bengal to expedite implementation of the project. The conference decided to proceed rapidly with further investigation and progress in regard to the Unified and multipurpose Damodar Valley Development Project. It was decided that the Central Government would try to secure staff, at the earliest possible

opportunity, for the further detailed investigations required for such project reports. Meanwhile, however, investigations should be carried on by such staff as was immediately available. The conference agreed that the entire staff engaged on further investigation of dam sites should work under the technical direction of the Central Technical Power Board so that unified control of the preliminary operations could be ensured. It was further decided to invite four engineers from the USA to advise on the design and construction of the first two dams to be built under the proposed unified scheme. The engineers would constitute a Technical Mission and should arrive, if possible, in India early next year. It was hoped that by that time the required data would be collected and available.

While the ultimate intention was to constitute a Damodar Valley Authority for the administration and carrying out of the scheme, the conference decided that, as an interim measure, the Central Government should appoint a high ranking Administrative Officer to coordinate all preliminary action and rapidly to push through investigations connected with the proposed project.

Dr. Ambedkar went to the extent of providing initial funds, to be charged to the project, if it materialised or shared equally between the Centre and the Province if it did not materialise, Dr. Ambedkar, however, expected the states to ensure that the benefits of the project should go ultimately right down to the grass roots, i. e. everyone living in the valley and some of those in the vicinity and all had their share in the prosperity which the project should bring.

Multipurpose use of water resources for the regional development of the entire river valley basin was the key element of the new water policy. The adoption of the concept of River Valley Authority and the creation of two technical expert bodies, at the Centre were means to achieve this objective. Dr. Ambedkar also emphasised a need for proper rehabilitation and resettlement plan for the project affected regions. While summing up these points, Dr. Ambedkar reminded the provinces of their collective responsibility and need to put their shoulders together to the task and urged upon them. "The Damodar Valley Project is a matter of grave urgency, and it would be criminal folly not to come to any decision, without which it is not possible for us to proceed further in the

matter. I, therefore, hope and trust that with your cooperation, we should be able today to return with our decisions fully and firmly made."

Dr. Ambedkar pointed out that all multipurpose projects, great and small, had to clear a lot of hurdles before they materialised. The Bhakra Nangal Project, before it was given a working shape, was on the anvil for forty years. Work on the Krishnarajasagar dam was suspended for ten years after part construction. Dr. Ambedkar emphasised that Damodar Valley Project would be the first in a series of multi reservoir and multipurpose projects in the country. The country thanks to the concentrated efforts made by Dr. Ambedkar, to implement the project speedily by the middle of August 1947 all conflicts of interests were sorted out, financial commitments were settled and the constitution of an autonomous Corporation agreed upon. The Damodar Valley Corporation Bill was presented to the Constituent Assembly in December 1947 and was passed on February 1948 and with a nucleus of energetic and enthusiastic engineers, the gigantic adventure had made its beginning. It becomes difficult to believe that the entire complicated process was accomplished in less than four years under the able leadership of Dr. Ambedkar.

### **DR. AMBEDKAR'S VIEWS ON HIRAKUND AND SONE RIVER PROJECTS:**

Mahanadi is the biggest river in Orissa. The flood and destruction of July-August 1943 were the worst ever. Many temporary expedients had been tried in earlier decades to tame the fury of the river, without much success. In 1858, Sir Arthur Cotton visited the Orissa Province with the specific object of giving advice on controlling the flood water of Mahanadi. He recommended the construction of a complete system of irrigation and navigation canals, on lines of the schemes for the Godavari and Krishna River. From 1928 down to 1945, a series of Committee studied the problem. The Orissa Flood Enquiry Committee (1928) was the first of these. In 1937, the enquiry was entrusted to M. Visveswarayya, the renowned engineer, who submitted two reports. Then followed the Orissa Flood Advisory Committee, which submitted a preliminary report in 1938, three interim reports, and the last report in March 1945.

At this time, the Government of Orissa

approached Dr. Ambedkar to consider the taming of the Mahanadi on lines of the Damodar Valley project. H. K. Mahtab, a nationalist leader from Orissa, also suggested him to pay special attention to the problem.

### **VIEWS ON HIRAKUND PROJECT:**

In response to Orissa's request, the Labour Department arranged a conference on November 8, 1945 between representatives of the Government of India and the Governments of Orissa, the Central Provinces and Eastern States to discuss the possibilities of developing Orissa rivers. Referring first to the economic problems of Orissa. Dr. Ambedkar, who chaired the session, he observed that, water problem of Orissa was of flood is both over simplification and understatement of the problem. People in Orissa are faced to many afflictions such as flood, draught and famine. Deterioration in health and of internal communication and problem of under development and high poverty. Much effort had undoubtedly been spent in inquiring into the question of flood by several committees, Dr. Ambedkar observed, with all respect to the members of these committees, I am sorry to say they did not bring the right approach to bear on the problem. If water resources were to be conserved, embankments were a wrong solution. Orissa delta was not the only area with abundant water. The Missouri, Miami and Tennessee rivers posed the same problem in the USA, which had evolved the solution of damming the rivers at various points to conserve water permanently in reservoirs and put it to multipurpose. Orissa needed to follow that method. Dr. Ambedkar stated the agenda for the meeting was to consider the desirability of :

1. Undertaking, forthwith, surveys and investigation of Orissa rivers with a view to preparing schemes of unified and multipurpose development comprising flood control, navigation, irrigation and drainage, soil conservation and power development.
2. Concentrating, first, on surveys and investigation on the Mahanadi river towards its control and development.
3. Carrying out surveys and investigations by the provincial Governments in conjunction with, and under the general direction of, the

Central Waterways, Irrigation and Navigation Commission. A thorough survey and investigation of the natural resources and physical feature of the region was necessary, Dr. Ambedkar said to prepare a comprehensive scheme for its development.

The conference agreed that, first; the possibilities of controlling and developing the Mahanadi river were to be surveyed. The surveying would be done by the Provincial Governments in conjunctions with and under the general direction and supervision of the CWINC. The Commission would commence with a preliminary reconnaissance over the entire length of the Mahanadi with the help of the Orissa River Division of the Provincial Government and full cooperation of the Central Provinces Government and the Eastern States. Only at this stage would the parties concerned need to participate fully both administratively and financially. In line with the decisions of the Cuttack conference, A. N. Khosla, Chairman of CWINC made a preliminary survey of the Mahanadi river to identify the site for the dam. The preliminary survey would be completed by February 1946, he said, and construction of the first dam commenced by October, 1946. A tentative scheme worked out by the CWINC after the survey with the help of the Government of Orissa and the state comprised.

1. The construction of three dams across the mainstream of the Mahanadi to store the surplus monsoon supplies with a view to flood control and their release during the dry weather for purpose of irrigation, navigation and power generation.
2. The construction of navigation locks at these dams and possibly at intermediate sites for making the Mahanadi navigable for a distance of over 500 km. from its mouth at the seam.
3. A system of canals for perennial irrigation.
4. Power plants at the three dams to provide cheap power for use in agriculture, industry and in exploiting the large mineral wealth of the area.
5. Drainage and anti-malaria works.
6. The provision of facilities for fish culture and recreation. The three dams identified were Hirakund 15 km. above Sambalpur, Tikarapara some 210 km.

downstream and Naraj near Cuttack. 24 The Hirakund dam was a comparatively straight forward, as the dam site and submerged area were entirely in Orissa. The dam could provide irrigation to, 3,24,000 ha. and could generate about 50 MW of energy and the dam was financially viable. The project was given further impetus due to the interest shown by the Viceroy Wavell, who felt that Orissa was a very poor and backward province and if it was technically sound to construct the dam at Hirakund. We should go ahead with the project immediately. Dr. Ambedkar immediately responded that the project was technically feasible and assured all support to the Orissa Government from the Central Government in speedy implementation of the project. Hirakund Dam is the longest dam of the world, which drains an area of 1,33,090 sq. km. more than twice the area of Ceylon. As the largest multipurpose river valley project of the world, it is a real gift to the nation "all for happiness and prosperity." The upshot of Viceroy Wavell's efforts was that the foundation stone for the Hirakund dam was laid by the Governor on March 15, 1946, before the Governor retired a fortnight later. By coincidence or by design, the foundation, work on Hirakund was also completed before Dr. Ambedkar laid down office in the Central Cabinet three months later. The initiative taken by Dr. Ambedkar was thus given a definite shape in the shortest possible time of six months to Hirakund project. The Government of Orissa, immediately after independence on 28th August, 1947 resolved to implement the project for economic and industrial prosperity of Orissa. The Hirakund dam was finally completed in 1957 by ushering a new era of development for Orissa. The timely action taken by Dr. Ambedkar substantially contributed for the development of the State of Orissa.

#### **VIEWS ON SONE RIVER PROJECT:**

The Sone River Valley Project was another multipurpose scheme, which the Labour Department initiated during 1944-45. River Sone rises in Madhya Pradesh and flows onward to Uttar Pradesh before merging with the Ganga. On November, 1944 the Government of the United Provinces drew the attention of the Labour Department to the potentialities of development of Sone river. The Department responded favourably. In its letter dated December 8, 1944, it observed that the

potentialities for multipurpose development and management scheme on the river Sone were immense. These included possibilities relating to increase supplies of water for irrigation, perennial hydel-power plant, provision of hydel power for pumping from tubewell or from rivers and for industrial development, supplies of water for navigation on the Ganga and improved flood control. And direct benefit from this project would accrue not only to the United Provinces and Bihar but also to the Central Provinces and Chandbhar, Korla, Sarguja, Jeshpur and Mahir States. The Central Government was willing to consider participating in the project, but subject to the provision that all the details about the financial and technical prospect of the scheme were worked out by an expert body.

Dr. Ambedkar emphasised in the conference on River Sone that if Sone river's possibilities were to be fully exploited, it was necessary to make a regional rather than a local approach to the problem. He urged all parties to realise that ultimately there must be an agreement to set up an appropriate organisation to which they would give certain powers relating to the subjects which would be handled by this organisation, the principle of which would be to supply the bulk of electricity and water for irrigation and navigation. It was during the time of Dr. Ambedkar, the Sone Valley Project was treated as a multipurpose river management scheme covering not only the potentialities for irrigation by canals and perennial hydel power for the area but also for increased utilisation of such power for agricultural development such as for pumping from the tube wells and increased fertility by dewatering in water logged area, provision of cheap power for industrial development, improved supply of water for irrigation on the Ganga and improved flood control. Opening the inter-provisional conference on Sone River Valley in March, 1945. Dr. Ambedkar highlighted the importance of the scheme to the economic development of Uttar Pradesh, Bihar and some of the Central Provinces and States. He emphasised that if the possibilities of the scheme were to be fully exploited it was necessary to make a regional rather than local approach to the problem. It was indeed during this conference that Dr. Ambedkar laid considering stress on the concepts of regional multipurpose development of river valley for

the management of inter-state rivers. The Memorandum prepared for the meeting explained the essential features of the Authority.

1. Such Authority must be given by Provinces and States full authority over the waters of the Sone and its tributaries.
2. Provinces and States must agree that such Authority should have the sole right to generate electricity in the area covered by the Authority.
3. Provinces and States must agree not to abstract water without the approval of the Authority.
4. Those Provinces and States in which dam sites are situated must agree to the submergence of lands on which terms as may be arranged.

The Memorandum also explained the essential elements of the concept of regional and multipurpose development of river valley. The water reservoirs of the rivers were to be used for multipurpose use including irrigation, hydro electric power, navigation, water for domestic, industrial and urban use, and power for pump irrigation and industrial use. The concept of multipurpose use was to be linked with the regional development of the entire valley basin and called for regional planning of the basin as a whole.

Such matters as plans for industrialisation, social well being, reforestation, relocation of population, roads and schools, provision of extra irrigation whether gravity or by pumping, co-operative development, fertilizer and farm demonstration programme, and the setting up of provincial and municipal planning boards was to be necessarily the responsibility of the provinces and state concerned, but the Authority was to have a clear interest in such development and might be allowed to assist with its advice the co-ordination and development of plans. There had to be the fullest co-operation between the Authority and the provinces, states, local bodies and with the people in the areas to be developed if the Authority was to be able to achieve the maximum good of which it was capable.

Thus, the Labour Department not only recommended multipurpose development of water resources but also wanted its planned development and utilisation for the regional and overall socio-economic development of the

entire river basin to be carried out in close coordination with the Provincial Governments and local bodies. All the participating provinces of Uttar Pradesh, Bihar, Central Provinces and the States of Rewa approved the proposal for regional development of Sone basin, the establishment of a regional authority and to take steps for preliminary investigation and survey. However, development of Sone basin took a different course after Dr. Ambedkar laid down his office.

Sone canal system is one of the oldest canal system in the country. It is in operation since 1874. Catchment area of Sone river at the Barrage 69,000 sq. km. water conductor system (a) power channel – 580 M, (b) Tailrace channel – 160 M. etc.

### **WATER AND INDIAN CONSTITUTION:**

The question of provincial jurisdiction had become a major obstacle in promoting multipurpose projects on inter-state river, which needed to be overcome. While the Labour Department in the Central Government had an all-India outlook both as regards the costs and benefits of the inter-state river project, the Provincial and State Governments needed much convincing to have similar outlook. Compromises had to be made and delays were inevitable. It was fortunate that Dr. Ambedkar expert on constitutional matters, which knowledge helped the Labour Department to evolve alternative ways within the framework of the provisions of the 1935 Act when he was made the chairman of the Drafting Committee of the Indian Constitution, the country had the benefit of his knowledge and experience. This was especially useful in making provisions about water resources in the Indian Constitution. In this content we examine the role played by Dr. Ambedkar in the light of his experience in evolving solutions agreeable to all concerned in the case of multipurpose projects.

In 1919, the first comprehensive constitutional reform was introduced as a part of "The Montague-Chelmsford Reform Act." Under it, "irrigation, canal, drainage, embankment and water storage including famine relief and agriculture and forest" became a provincial but reserve subject. Upto to March 1937, the Government of India and the Secretary of State in London exercised powers of Superintendence, direction and control on all

large-scale consumptive use of water by the provinces of British India from the rivers in the country. Under the 1935 Act, which introduced another set of constitutional reforms, provincial autonomy was enhanced and the provincial Governments got exclusive powers over "water, that is to say, water supplies, irrigation and canals, drainage and embankments, water storage and water power." The only items reserved for the central list were "shipping and navigation on tidal waters", and for the concurrent Legislative List, "shipping and navigation on inland waterways as regards mechanically propelled vessels, and the rule of the road on such waterways, carriage of passengers and goods on inland waterways.

### **INDIAN CONSTITUTION, INTER-STATE RIVERS AND DR. AMBEDKAR'S ROLE:**

The 1935 Act gave exclusive power to the provinces to control the water of all rivers and the Central Government was not concerned with the development of irrigation, there was no office at the Centre to look after the development of electricity in India and there was hardly any data on the production, distribution and administration of irrigation and electricity in India. This was the state of affairs when Dr. Ambedkar took charge of the Irrigation and Electric Power Department in July 1942. Under the existing arrangement, under which the Central Government had no say in the matter of India's water policy and referring to the Act of 1935, he observed that, "we have not taken sufficient account of the fact that there is no difference between railways and waterways, at any rate those that flow from province to province. On the contrary we have allowed our constitution to make a distinction between railway and waterways. With the result that railways are treated as Central, but waterways are treated as Provincial."

Dr. Ambedkar argued, therefore needed the reversion of the Constitution, treating waterways on the same footing as the railways. Till such time, he suggested as an alternative, an independent Authority giving the Central Government a leading role and participation for development of water resources on inter-state rivers. A similar alternative was also recommended for the development of electric power on inter-state rivers for integrated and regional development of the entire river basin. For Electricity as for waterways, he said,

suitable schemes could be limited by provincial boundaries and though clearly there had to be the closest co-operation and coordination between the Centre and the Provinces, it did seem advisable that the Centre should be able to step in where Central control was found necessary for regional development and where a province did not itself wish to bring an undertaking under state control.

Dr. Ambedkar's this line of thinking, which led to the creation of river valley Authority, was also reflected in the framing of the new constitution for implement India. When the draft constitution was submitted on February 21, 1948, it was obvious that it had benefited from the influence of Dr. Ambedkar, who was chairman of its Drafting Committee, especially as regards independent India's water policy. The Draft Constitution included Articles 239-242 corresponding closely to Sections 130-134 of the Government of India Act, 1935, as adapted in 1947. These articles used the earlier phrase "water from any natural source of supply." List I of the Seventh Schedule (viz. Union List) to the Draft Constitution, however, made a major departure from the 1935 Act and placed the development of "inter-state waterways" under the Union List, the relevant item being : "74. The development of inter-state waterways for purposes of flood control, irrigation, navigation and hydroelectric power." On September 1, 1949, Dr. Ambedkar moved an amendment to entry 74 in the Constituent Assembly as follows – 74. The regulation and development of inter-state rivers and river valleys to the extent to which such regulation or development under the control of the Union is declared by Parliament by law to be expedient in the public interest. On September 9, 1949, Dr. Ambedkar another amendment to insert article 242A as follows, in place of draft Articles 239-242 : "Adjudication of disputes relating to waters of inter-state rivers or river valleys." In proposing this amendment, Dr. Ambedkar referred to various corporations being created (like the Damodar Valley Corporation set by Act No. XIV of 1948) and the need, therefore, of a body to deal with such disputes as might arise from the activities of such corporations. He said that, "the original draft or proposal was too hide-bound or too stereotyped to allow any elastic action that may be necessary.... Consequently I am now

proposing this new article which leaves it to Parliament to make laws for the settlement of these disputes." This draft article came to be adopted as Article 262. In accordance with this provision, Parliament enacted the Inter-State Water Disputes Act, 1956 and the River Boards Act, 1956. The former provides, in the words of its preamble, "for the adjudication of disputes relating to the waters of inter-state rivers and river valley." The River Boards for the regulation and development of Inter-State rivers and river valleys, in terms of entry 56.

### CONCLUSION:

Dr. Ambedkar with his political status, immense concerns and high Scholarship was successful in persuading the provinces to have an all India policy, to develop the instrument of River Valley Authority to manage the project on inter-state rivers for multipurpose development and with active participation of the Central Government. In the establishment of the Central Waterways, Irrigation and Navigation Commission (CWINC) on April, 1945 Dr. Ambedkar and his Department laid down the foundation for a new water policy on the eve of independence preparing the ground for the prosperity of the emerged nation.

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### ABSTRACT

*The E-Commerce market is thriving and poised for robust growth in Asia. There are players who made a good beginning. Their success depends on their understanding of the market and offering various types of features. This paper gives an overview of the future of E-Commerce in India and discusses the future growth segments in India's E-Commerce. Also find out various factors that would be essential for future growth of Indian E-commerce. And represent the various opportunities for retailers, wholesalers, producers and for people. In this paper we found that the Overall E-Commerce will increase exponentially in coming years in the emerging market of India.*

### INTRODUCTION

E-commerce has so many advantages in our life because it makes convenient in daily life of the people. Several explanations have been proposed for e-commerce that most of them are based on past experiences in the use of e-commerce. As with e-commerce, e-business also has a number of different definitions and is used in a number of different contexts. One of the first to use the term was IBM, in October 1997, when it launched a campaign built around e-business. Today, major corporations are rethinking their businesses in terms of the Internet and its new culture and capabilities and this is what some see as e-business. There is no one commonly agreed definition of e-commerce or e-business. Thus, there is a need to clarify terms being used and explain the context in which they are being applied. E-commerce has an impact on three major stakeholders, namely society, organizations and customers. There are a number of advantages, which include cost savings, increased efficiency, customization and global marketplaces. There are also limitations arising from e-commerce which apply to each of the stakeholders. In order to understand electronic commerce it is important to identify the different terms that are used, and to assess their origin and usage. These include information overload, reliability and security issues, and cost of access, social divisions and difficulties in policing the Internet. Successful e-commerce involves understanding the limitations and minimizing the negative impact while at the same time maximizing the benefits-commerce businesses usually employ some or all of the

following practices:

- Provide detail of virtual storefront on websites with online catalogs, sometimes gathered into a "virtual mall"
- Buy or sell on online marketplaces.
- Gather and use demographic data through web contacts and social media.
- Use electronic data interchange, the business-to-business exchange of data.
- Reach prospective and established customers by e-mail or fax (for example, with newsletters).
- Use business-to-business buying and selling.
- Provide secure business transactions.
- Engage in retail for launching new products and services

### WHAT IS THE E-COMMERCE?

Electronic commerce, commonly known as E-commerce, is trading in products or services using computer networks, such as the Internet. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web for at least one part of the transaction's life cycle, although it may also use other technologies such as e-mail.

E-commerce based on data processing, including text, sound, image. The business includes various activities such as the electronic exchange of goods and services, instant



delivery of digital content, business plans, collaborative design and engineering, electronic stock exchange, government procurement, direct marketing, services after the sales. E-commerce is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the Internet. These business transactions occurs business-to-business, business-to-consumer, consumer-to-consumer or consumer-to-business. The terms e-commerce and e-business are often used interchangeably. The term e-tail is also sometimes used in reference to transactional processes around online retail. E-commerce is conducted using a variety of applications, such as email, fax, online catalogs and shopping carts, Electronic Data Interchange (EDI), File Transfer Protocol, and Web services. Most of this is business-to-business, with some companies attempting to use email and fax for unsolicited ads (usually viewed as spam) to consumers and other business prospects, as well as to send out e-newsletters to subscribers.<sup>1</sup>

### **INDIA'S PROSPECTS IN E-COMMERCE OPPORTUNITY FOR RETAILERS:**

A retailer can save his existence by linking his business with the on-line distribution. By doing so, they can make available much additional information about various things to the consumers, meet electronic orders and be in touch with the consumers all the time. Therefore, E-Commerce is a good opportunity.

### **OPPORTUNITY FOR WHOLE**

**SALERS/DISTRIBUTER:** In the world of Ecommerce the existence of the wholesalers is at the greatest risk because the producer can easily ignore them and sell their goods to the retailers and the consumers. In such a situation those wholesalers can take advantage of E-Commerce who are capable of establishing contractors with reputed producers and linking their business with the on- line.

### **OPPORTUNITY FOR PRODUCERS:**

Producers can take advantages of e-commerce by linking themselves with on-line, by giving better information about their products to the other links in the business chain and by a having a brand identity.

**OPPORTUNITY FOR PEOPLE:** As more people are getting linked with E-commerce, the demand for centre providing internet facility or cyber cafe is also increasing. Hence, the people

who wish to take advantage of it can establish cyber and have their benefits.<sup>2</sup>

### **ESSENTIAL FACTORS FOR GROWTH OF E-COMMERCE IN INDIA:**

- Customer convenience: By providing Cash on delivery payment option service to customers.
- Replacement guarantee: Should be Offers 30 day replacement guarantee to their customers.
- Reach: Enabling mobile-capable sites and supporting M-Commerce services.
- Location based services: Since customers these days are always on the move, promoting the right product at the right time and location becomes an integral aspect
- Multiple payment option: standard credit cards, debit cards and bank payments option should be there.
- Right content: Getting the right content and targeting customers with crisp and relevant information is of utmost importance to users on the move.
- Price comparison: Providers offering instant price comparison are highly popular amongst the price conscious customers.
- Shipment option: Low cost shipment should be there. The convenience of collecting orders post work while returning home should be there.
- Logistical challenges: In India, the geographical spread throws logistical challenges. The kind of products being offered by providers should determine the logistics planning.
- Legal challenges: There should be legal requirement of generating invoices for online transactions.
- Quick Service: Timely service provided by the company.
- Terms and condition: T & C should be clear & realistic.
- Quality: The product quality should be same as shown on the portal.
- Customer care centre: A dedicated 24/7 customer care centre should be there.

### **CHALLENGES FACED BY E-COMMERCE**

Some of the challenges faced by e-commerce in India are: 1. Infrastructural Problems, 2. Absence of Cyber Laws, 3. Privacy and Security Concern, 4. Payment and Tax Related

Issues, 5. Digital Illiteracy and Consumer Psyche, 6. Virus Problem and 7. English Specific.

E-commerce in spite of opportunities, hoopla and hype, also bears the connotations of challenges as well at the same time. We, therefore, enumerate the major challenges e-commerce in small enterprises is facing and also submit the remedial measures to meet these challenges.

**Infrastructural Problems:**Internet is the backbone of e-commerce. Unfortunately, internet penetration in India is so far dismally low at 0.5 per cent of the population against 50 per cent in Singapore. Similarly, penetration of personal computer (PC) in India is as low as 3.5 per thousand of population compared to 6 per thousand in China and 500 per thousand in US. Internet is still accessible through PCs with the help of telephone lines.

Given the penetration of telephone only 2.1 per cent of population, e-commerce remains far away from the common man. It is difficult for e-commerce to reach to 1,000 million population spread over 37 million households in 6, 04,374 odd villages and 5,000 towns and cities. Besides, both cost of PCs and internet access in India are quite high.

**Absence of Cyber Laws:** Other big challenge associated with e-commerce market is the near absence of cyber laws to regulate transactions on the Net. WTO is expected to enact cyber laws soon. The India's Information Technology (IT) Bill passed by the Indian Parliament on May 17, 2000 intends to tackle legislatively the growing areas in e-commerce. The Bill also intends to facilitate e-commerce by removing legal uncertainties created by the new technology. As it stand today, the Bill deals with only commercial and criminal areas of law. However, it does not take care of issues such as individual property rights, content regulation to privacy and data protection specific legislation.

**Privacy and Security Concern:** As of to-day, quite vulnerable issues related to e-commerce are privacy and security. So far, there is no protection offered either by Website or outside watchdogs against hazard created by exploiting one's privacy.

**Payment and Tax Related Issues:** Issues related to payment and tax is yet another problem

continuously hinting e-traders. The electronic payment is made through credit card or plastic money which could, however, not become popular so far in India mainly due to two reasons. First, the penetration of credit card in India is very low (2 per cent of the population). Similarly, tax administration is yet another complex problem in this seamless worldwide e-commerce. As establishing incidence of tax in case of e-commerce transactions becomes difficult, this, thus, provides ample scope for tax evasion. How to get rid of this? Some suggest total tax holiday till 2010 for e-commerce in the country. There are others who support zero duty on e-commerce to flourish it in the country. It has already been decided in US that there will be no tax on anything sold on the internet in digital form. Should India not follow US, at least for the time being? We have to ponder over it.

**Digital Illiteracy and Consumer Psyche:**

At present, digital illiteracy is one of the formidable problems e-commerce is facing in India. On the other hand, the continuous exodus of skilled computer engineers to other countries has denuded India of software engineers. This has posed a real threat to the Indian IT industry. Obviously, solution to this problem lies in curbing the computer brain – drain and uses the same in the country. The Indian consumer is also characterised by his unique psyche. Usually, the Indian consumer does not go long distances for having any good of his choice when a neighbourhood store provides him whatever he wants. That is why the consumer does not browse the Net knowing the consequent hassles of connectivity and other botherations. Added to this is that building trust on the electronic media also takes long time more especially when the vendor is situated at a very far off place.

**Virus Problem:**That computer virus is also a formidable problem in the execution of e-transactions is confirmed by the computer virus originated in Manila. A computer virus lagged' I Love You' originated in Manila, Philippines on May 5. 2000 rippling across world, inflicted millions of computer files causing colossal loss of US \$7 billion to the governments and the businesses. The offenders causing 'virus' must be awarded deterrent punishment, otherwise similar assaults in future can cause lasting blows to the quite young e-commerce in India as well.

**English Specific:**Last but not the least, the software so far in the country is English specific. But, in order to make e-commerce reach to the small enterprises, it needs to be available in the languages (regional) of the owners of the small enterprises to enable them to adapt e-commerce processes in their operations. Sooner it is done, better will be it for small enterprises to adapt e-commerce.<sup>3</sup>

#### **Opportunities of E-commerce in India**

With a population of 1.25 billion that includes a large young, mobile-first generation—many of whom share English as a common language—plus an emerging middle class, India presents significant growth opportunities for retailers from across the globe. Following the recent news that the Indian government's Department of Industrial Policy and Promotion would officially allow up to 100% foreign ownership of e-commerce marketplaces, both web and brick-and-mortar retailers operating there have garnered some decisive new advantages. That "marketplace" aspect is important, however. Indian officials have also decided that e-commerce companies capitalizing on the new rules must be in the business of providing technology platforms that facilitate trade between buyers and sellers, as opposed to an old-fashioned, "inventory-led model" where a retailer owns the goods it sells. (This, by the way, will hold back Apple, which has worked hard to persuade the Indian government to relax foreign investment rules that would make it easier to run its own stores, rather than rely on Indian retailers, as it does now.)<sup>4</sup>

"The policy provides a much overdue clarity on [foreign direct investment] in B2C e-commerce," Mihir Kittur, co-Founder and chief innovation officer at Ugam, a managed analytics company, explained in an email to Retail Dive. "This should pave the way for speedier and hassle-free foreign investments into the e-commerce sector, which should be good for the e-commerce players. The policy

also defines the marketplace format that B2C e-commerce companies need to follow and permits manufacturers to undertake wholesale and/or retail including e-commerce without approval. Another positive for the retail industry at large.<sup>5</sup>

#### **CONCLUSION**

E-commerce has undeniably become an important part of our society. The World Wide Web is and will have a large part in our daily lives. It is therefore critical that small businesses have their own to keep in competition with the larger websites. Since web developers have lowered down the prices for their services, it has become more affordable for small businesses to use the World Wide Web to sell their products.

Advantages of e-commerce are cost savings, increased efficiency, and customization. In order to understand electronic commerce it is important to identify the different terms that are used, and to assess their origin and usage. These include information overload, reliability and security issues, and cost of access, social divisions and difficulties in policing the Internet. Successful e-commerce involves understanding the limitations and minimizing the negative impact.

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VIOLATION OF HUMAN RIGHTS OF WOMEN IN INDIA

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**ABSTRACT**

*Human Rights are basic right to which every individual is entitled as a human being. They are the minimum rights, which are compulsorily obtainable by every individual. The constitution of India also guarantees the equality of rights of men and women. However, in the sphere of women's human rights in India, there exists a wide gulf between theory and practice. Indian society is a male dominated society where men are always considered to be superior. The women in India very often have to face discrimination, injustice and dishonor. Though women in India have been given more rights as compared to men, even then the condition of women in India is miserable. This paper will throw light on the human rights of women in India and also on how all the fundamental rights given to the women are being violated in India, by focusing on the various crimes done against them.*

**INTRODUCTION**

There may not have been as many cases of rape and utilization of public space for the atrocities committed on them as in India. The evidence is everywhere; the voice of women is increasingly heard in Parliament, courts and in the streets. While women in the West had to fight for over a century to get some of their basic rights, like the right to vote, the Constitution of India gave women equal rights with men from the beginning.

Unfortunately, women in this country are mostly unaware of their rights because of illiteracy and the oppressive tradition in the name of patriarchy. Names like Kalpana Chawla: The Indian born, who fought her way up into NASA and was the first women in space, and Indira Gandhi: The Iron Woman of India was the Prime Minister of the Nation and Mother Teresa are not seen as representatives of the Indian women. The Patriarchal attitude of men seems to dominate and make their rationality blind when it comes to their equal partner the women.

In the contemporary world voice of women is increasingly being heard in the streets, in the courts and in Parliament. Yet issues concerning women are not given priority in society. While women in the West fought for a century to get back basic rights as that of right to vote, women in India were at an advantage where the constitution of India has granted equal rights to the men and women. The State shall not deny to any person equality before law or the equal

protection of laws within the territory of India; and State shall not discriminate against any citizen on grounds only of religion, race, caste, sex, and place of birth or any of them. But today, it seems that there is a wide gulf between theory and practice. The women in India have always been considered subordinate to men. Though the provisions contained in the Indian constitution mandates equality and non – discrimination on the grounds of sex, women is always discriminated and dishonored. Although various efforts have been taken to improve the status of women in India, the notion of gender equality as under the constitution is miles away from becoming a reality.<sup>1</sup>

**VIOLATION OF HUMAN RIGHTS OF WOMEN**

Very often it is said that women in India are enjoying the rights equal to that of men. But in reality, the women in India have been the sufferers from past. Not only in earlier times but even today women have to face discrimination, injustice and dishonor. The violations of women human rights are evident in the past customary practices, which often proved to be against the notion of gender equality.

**VIOLATION OF HUMAN RIGHTS OF WOMEN IN PAST**

The following crimes were done against the women in the past times.

**Devadasis-** Devadasis was a religious practice in some parts of southern India, in which women were married to a deity or temple. In the later period, the illegitimate sexual exploitation

of the devadasis became a norm in some part of the country.

**Jauhar-** Jauhar refers to practice of the voluntary immolation of all wives and daughters of defeated warriors in order to avoid capture and consequent molestation by the enemy. The wives of Rajput rulers, who were known to place a high premium on honour, followed this practice.

**Purdah-** Purdah is a practice requiring women to cover their bodies so as to cover their skin and conceal their form. It curtails their right to interact freely and it is a symbol of the subordination of women.

**Sati-** Sati is an old custom in Indian society, in which widows were immolated alive on her husband's funeral pyre. Although the act was supposed to be voluntary on the widow's part, it is believed to have been sometimes forced on the widow.<sup>2</sup>

## STATUS OF WOMEN UNDER THE INDIAN CONSTITUTION

The Constitution of India guarantees equality of sexes and in fact grants special favours to women. These can be found in three articles of the Constitution. Article 14 says that the government shall not deny to any person equality before law or the equal protection of the laws. Article 15 declares that government shall not discriminate against any citizen on the ground of sex. A special provision is made under.

Article 15 (3) which enables the State to make affirmative discriminations in favour of women. Moreover, the government can pass special laws in favour of women.

Article 16 guarantees that no citizen shall be discriminated against in matters of public employment on the grounds of sex.

Article 42 directs the State to make provision for ensuring just and humane conditions of work and maternity relief. Above all, the Constitution imposes a fundamental duty on every citizen.

Articles 15 (A) (e) to renounce the practices derogatory to the dignity of women. All these are fundamental rights. Therefore, a woman can go to the court if one is subjected to any discrimination. When we talk about constitutional rights of women in India, we mainly pertain to those areas where discrimination is done against women and special laws formulated to fight those bigotries.

The most important issues stand as those pertaining to marriage, children, abortion,

crimes against women, and inheritance. Before modern Hindu laws were passed, child marriages were the norms, inter-caste marriages were banned, the girl became a part of the husband's family, and polygamy was common. After the incidents that surfaced in the recent past, including the rape and suicide of a young Punjab girl, critics began scrutinizing aspects of Indian society that many claim have perpetuated violence and discrimination against women. The high-profile cases called attention to the broader issue of women's rights in India, a nation that ranks eighty-fourth out of 113 countries on the Economist's rankings of women's economic opportunity, has now come down to be heavily criticized. Media too has played a negative role in bringing down the Indian status in this respect. However, that can be a part of another research subject though debatable.

Under the Indian Penal Code, crimes against women include rape, kidnapping and abduction, molestation, sexual harassment, torture, homicide for dowry, and the importation of girls. However, critics have voiced concern over the vagueness of their definitions, particularly that of rape. Often, perpetrators of severe sexual attacks are charged with criminal assault on a woman with "intent to outrage her modesty," an offense that carries a light penalty and is rarely enforced. "Eve-teasing," a common euphemism for sexual harassment or molestation in public places, goes mostly unreported. Many analysts attribute this to a culture of complicity and the government's weak prosecution of such assault crimes. A study by the Hindustan Times found that in the last five years, fifty-one cases related to eve-teasing in the city of Jalandhar in Punjab were taken to court, and only five people were convicted, while thirty others were acquitted due to lack of evidence.<sup>3</sup>

## VIOLATION OF HUMAN RIGHTS OF WOMEN IN GENERAL

The Indian Constitution guarantees certain basic rights to women, which are often being violated by the traditional practices or by the system prevailing in the present society. These rights include Right to equality, Right to education, Right to live with dignity, Right to liberty, Right to politics, Right to property, Right to equal opportunity for employment, Right to free choice of profession, Right to livelihood, Right to work in equitable

condition, Right to get equal wages for equal work, Right to protection from gender discrimination, Right to social protection in the eventuality of retirement, old age and sickness, Right to protection from inhuman treatment, Right to protection of health, Right to privacy in terms of personal life, family, residence, correspondence etc. and Right to protection from society, state and family system.

### **VIOLATION OF RIGHT TO EQUALITY**

Discrimination against the girl child starts from the mother's womb. The child is exposed to gender differences since birth and in recent times even before birth, in the form of sex – determination tests leading to foeticide and female infanticide. The home, which is supposed to be the most secured place, is where a woman is often exposed to violence. In India, men are always assumed to be superior to women and are given more preference. The World Human Rights Conference in Vienna first recognized gender – based violence as a human rights violation in 1993. United Nations Declaration declared the same in 1993. The recognition of women's rights as human rights became international law when UN General Assembly adopted the Convention on the Elimination of All forms of Discrimination Against Women.

### **VIOLATION OF RIGHT TO EDUCATION**

Education is considered as a means of development of personality and awareness. Basic education is crucial to alleviating poverty, reducing inequality and driving economic growth. Education is one of the most important human rights but the position of women's education in India is not at all satisfactory. Young girls are denied even to have basic education. Despite the improvement in the literacy rate after independence, there continues to be large gap between the literacy levels of men and women. Almost half the women population is even unable to recognize language characters. At least 60 million girls lack access to primary education in India and the gender gap in literacy persists. More than two thirds of the world's 960 million illiterates are women. The exclusivist state policy of control over curriculum choices, misappropriation of funds, non - implementation of education incentives and ideologically driven reforms and pedagogy are significant contributive factors. Due to large percentage of uneducated women in India, they

are not even aware of their basic human rights and can never fight for them.<sup>4</sup>

### **VIOLATION OF POLITICAL RIGHT**

The political status of women in India is very unsatisfactory, particularly their representation in higher political institutions, Parliament and provincial Legislation. India ranks 109 in the world classification of Women in National Parliaments, with 11 per cent in the Lower House and 10.6 in the Upper House.<sup>10</sup> Thus it is clear that there is male domination in Indian politics and almost all the parties give very little support to women in election despite their vocal support for 33% reservation of seats for women in Parliament and Provincial Legislation. The Women's reservation Bill that was drafted in 1996 and introduced in Parliament in 2010 is forgotten text.

### **VIOLATION OF RIGHT TO PROPERTY**

The general law relating to the inheritance and succession can easily be referred to The Indian Succession Act, 1925. Under this Act every Indian is entitled to equal shares on inheriting the property on the death of a person. The exceptions are Hindus, Sikhs, Jains, Buddhists and Muslims as they are governed under separate laws of succession. In most of the Indian families, women do not own property in their own names and do not get share of parental property. The personal laws govern them. Due to weak enforcement of laws protecting them, women continue to have little access to land and property. In fact, some of the laws discriminate against women, when it comes to land and property rights. Though, women have been given rights to inheritance, but the sons had an independent share in the ancestral property, while the daughter's shares were based on the share received by the father. Hence, father could anytime disinherit daughter by renouncing his share but the son will continue to have a share in his own right. The married daughters facing harassment have no rights in ancestral home.<sup>5</sup>

### **VIOLATION OF RIGHT TO HEALTH**

Malnutrition is the major cause of female infertility. The World Bank estimates that India is ranked second in the world of the number of children suffering from malnutrition. The UN estimates that 2.1 million Indian children die before reaching the age of 5 every year, mostly from preventable illnesses such as diarrhea, typhoid, malaria, measles and pneumonia. The presence of excessive malnutrition among

female children as compared to male children is basically due to differences in the intra – family allocation of food between the male and female children. Normally, the male members are fed before the female members of the family. The prevalence of malnutrition varies across states, with Madhya Pradesh recording the highest rate of 55 %. Sometimes due to economic distress and natural calamities like floods, droughts or earthquakes, the discrimination against the female child increases. Moreover it has been confirmed by various studies that the girls' diet is inferior to the boys' diet both in quality and quantity. Boys are given more nutritive foods like milk, eggs, butter, ghee, fruits, and vegetables as compared to girls. Due to this inferior quality diet, girls are more vulnerable to infections and diseases. The reason again is that families spend less on medication for girls than for boys.

#### **VIOLATION OF RIGHT TO EQUAL OPPORTUNITY FOR EMPLOYMENT AND RIGHT TO GET EQUAL WAGES FOR EQUAL WORK**

The employment of the women in agriculture, traditional industries and in sizeable section of new industries is declining at a very fast rate. The reason is that the adoption of new technological changes requires new skill, knowledge and training where women in India, who constitute a large share of world, are illiterate lacks such skills and knowledge. The studies have also showed that for the same task, women are paid less than the males. Technological changes in agriculture and industry are throwing out women from the production process. The women workers are concentrated only for certain jobs, which require so – called female skills. Thus, Indian labour market is adverse to women workers. It shows that, the role of women in large-scale industries and technology-based businesses is very limited. But even in the small- scale industries their participation is very low. Women own only 10.11% of the micro and small enterprises today. Statistics show that the women hold only 15% of the senior management posts. In agriculture where women comprise of the majority of agricultural labourers, the average wage of women is 30 – 50 % less than that of men.

#### **VIOLATION OF RIGHT TO LIVE WITH DIGNITY**

Right to Life as under Article 21 of the Constitution includes Right to live with dignity, which is equally available to women. Eve teasing is an act of terror that violates a woman's body, space and self – respect. It is one of the many ways through which a woman is systematically made to feel inferior, weak and afraid. Whether it is an obscene word whispered into a woman's ear; offensive remarks on her appearance; any intrusive way of touching any part of women's body; a gesture which is perceived and intended to be vulgar: all these acts represent a violation of woman's person and her bodily integrity. Thus, eve teasing denies a woman's fundamental right to move freely and carry herself with dignity, solely on the basis of her sex.<sup>6</sup>

#### **CONCLUSION**

Thus though India has made strides in equality gain for women, many patriarchal and outdated laws have yet to be adjusted to reflect the changing attitudes in India. Now its time to think beyond ideology, a world of greater hardship for women, who sacrifice their identity, communication and hopes, in a society dominated by male values, Question always arises whether the laws and society's standards ensures that women get their rights? And that their human rights are protected? What is needed at present is the recognition of women's equal humanity and a continuing response to the persistent realities of the contemporary world. The right of every individual is to do what he/she values and becoming and being human is always more difficult for a women in the present world.

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DETERIORATION OF AGRICULTURAL PRODUCTIVITY  
DUE TO CLIMATE CHANGE IN HARYANA

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**ABSTRACT**

*Climate change is a global issue. Climate Change is affecting earth by increasing its overall temperature. Increase in the temperature of earth accelerates the melting of Glaciers which causes rise in sea level that leads to submerging of more farmland area into sea water. On the other hand increase in temperature also causes reduction in rainfall in the arid plains. Less Rainfall results into reduction in agricultural production. The impact of climate change is being studied in many forms in different locations in various countries by many researchers and various national agencies. All they have a common finding that there is high impact of climate change on agriculture as in comparison to any other sector.*

*A study revealed that the climatic variation such as occurrences of drought have high level of impact on the yield of rain fed crops. A study projected that with short periods of exposure of wheat crops to temperatures of 28°C to 32°C results in significant decrease in its yield by 20% or more. Unpredictable moisture deficits during crop growth are a major constraint to productivity. Furthermore, a study claims that climate change will reduce the major crop yields by 4.5 to 9 percent over the period of 2010-2039. Therefore, change in climate is reducing the agricultural productivity and thus posing a threat to long term food security. This factor motivates to study the impact of climate change on the agriculture production in Haryana.*

**Key Words:** *Agricultural production, Deterioration, Climate change, Rainfall, Temperature, Haryana.*

**INTRODUCTION**

Climate change is one of the most important global environmental challenges we are facing at present times. Climate Change is affecting food production, natural ecosystems, freshwater supply, health, etc. Agriculture production depends heavily on Climate. Throughout the world there is significant concern about the effects of climate change on agricultural production. Researchers and administrators are much concerned with the potential damages of climate change that may arise in future on agriculture productions. Impact of Climate Change on agriculture will affect domestic and international policies, trading patterns, use of resources and food security. The Climate change over time and time is attributed directly or indirectly to human activity that alters the composition of the global atmosphere (IPCC, 2007). Since climatic factors serve as direct inputs to agriculture, any change in climatic factors is bound to have a significant impact on crop yields and production. Climate change scenarios include higher temperatures, changes in precipitation, and higher atmospheric CO<sub>2</sub> concentrations.

The greenhouse effect is a natural process that plays a major part in shaping the earth's climate. It produces the relatively warm and hospitable environment near the earth's surface where humans and other life-forms have been able to develop and prosper. However, the increased level of greenhouse gases (GHGs) which includes carbon dioxide (CO<sub>2</sub>), water vapor (H<sub>2</sub>O), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydro fluorocarbons (HFCs), per fluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>), etc. has contributed to an overall increase of the earth's temperature which is driving earth towards global warming. The average global surface temperature has increased by 0.74°C since the late 19th Century and is expected to increase by 1.4°C To 5.8°C by 2100 AD with significant regional variations (IPCC, 2007). The atmospheric CO<sub>2</sub> gas has increased from 280 ppm To 395 ppm, CH<sub>4</sub> Methane gas has increased from 715 ppb To 1882 ppb and N<sub>2</sub>O concentration has increased from 227 ppb To 323 ppb in previous years. The Global Warming Potential (GWP) of these gases i.e., CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O are 1, 25 and 310 respectively. Projected scenario of global



warming indicates that the global average surface temperature could rise by 1.4°C to 5.8°C by 2100. The projected rate of warming is unprecedented during last 10,000 years.

**AGRICULTURE IN HARYANA**

If in present climate scenario we take note of Haryana which is very hot in summer and cold in winters. The hottest months of year are May and June and the coldest being December and January. The temperature falls to the lowest in January and reaches up to 50°C during the months of May and June. Winter months have average temperatures in the range 3°C to 9°C and the summer months temperatures are higher in the range of 35°C to 48°C. Haryana have two agro climatic zones. The north western part is suitable for Rice, Wheat, Vegetable and temperate fruits and the south western part are suitable for high quality agricultural produce, tropical fruits, exotic vegetables and herbal and medicinal plants. Major land use in Haryana is Agriculture (85%), Forest (2.4 %), about 7.2 % Fallow and 5% Waste Land. Agriculture contributes 17% of the state’s GDP and employs 65% of the total workforce. The net sown area is 85% of the total geographic area as compared to the national average of 46%. The gross cropped area is about 65 lakh Hac with a cropping intensity of 180%.

**REVIEW OF LITERATURE**

S.K. Sinha and M. S. Swaminthan (1991) analyzed that a 2°C increase in mean air temperature could decrease rice yield by about

2015	436.0	45.5	0.75
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ton/hectare in the high yield areas and by about 0.06 ton/hectare in the low yield coastal regions. Further, a 0.5°C increase in winter temperature would reduce wheat crop duration by seven days and reduce yield by 0.45 ton/hectare. An increase in winter temperature of 0.5°C would thereby translate into a 10 percent reduction in wheat production in the high yield states of Punjab, Haryana and Uttar Pradesh.

The study of Gosain A. K. S., S. Rao (2006), it has been revealed that under the GHG scenario the conditions may deteriorate in terms of droughts in some parts of the country and enhanced intensity of floods in other parts of the country. However, there is a general overall reduction in the quantity of the available runoff under the GHG scenario. Luni with the west

flowing rivers Kutch and Saurashtra which occupies about ¼ of the area of Gujarat and 60 % of the area of Rajasthan shall face acute water scarce conditions. River basins of Mahi, Pennar, Sabarmati and Tapi shall also face water shortage conditions.

Tata.N. Rao (2011), emphasise the role of human adoptions in responding to climate change. The study reveled that by 2080, agriculture output in developing countries may decline by 20 percent due to climate change, while output in industrial countries is expected to decrease 6 percent and yields in developing countries is expected to decrease by 15 percent on an average. The study states that the united nations framework convention on climate change (UNFCC) cities maintenance of our societal ability for food production in face of climate change as one of the key motivations for its existence and for its efforts in reducing greenhouse gas emission.

**DATABASE SOURCE AND METHODOLOGY ADOPTED**

The study is based on the secondary data that has been collected from the records of Directorate of Agriculture, Directorate of Economics and Statistics, Government of Haryana, Indian Ministry of Agriculture, FAO (Food and Agriculture organization), CMIE (Central Monitoring of Indian Economy) and other official sources who maintain yearly agriculture production output, planted and cultivated area of Haryana. The data related to climate change had been collected from Indian Agriculture and climate Data Set by World Bank Research Group. The temperature and rainfall Data of the Haryana has been taken from Haryana Economic Survey Report released on yearly basis.

**CLIMATE CHANGE IN HARYANA**

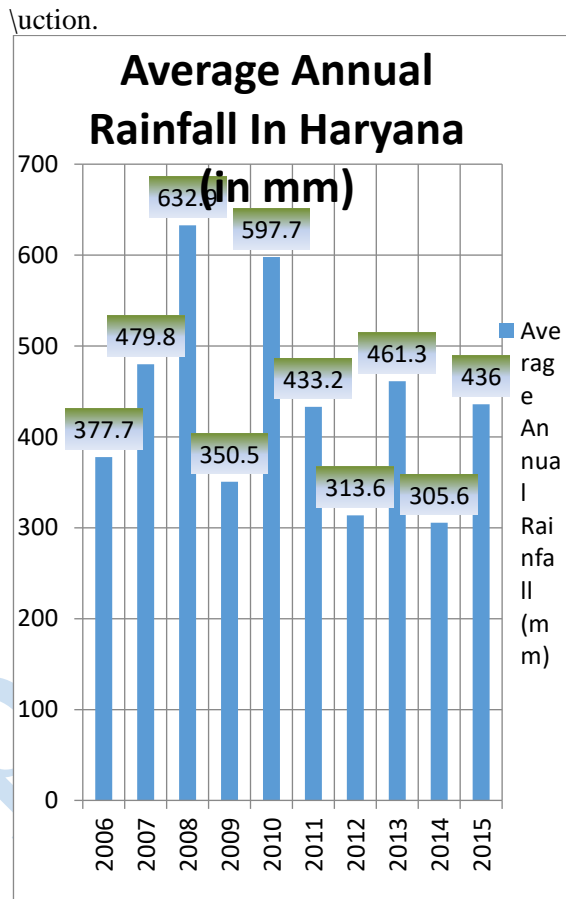
Due to Industrial Revolution, Human activities have led to increase green house gases in the composition of earth’s atmosphere. Haryana also falls within the area of greatest climate sensitivity. In an era of climate change, Haryana is likely to suffer further water shortage due to overall reduction in rainfall. Haryana has limited rainfall ranging from 300 mm in the southwest to 1,100 mm in the northeast in the state. The state lies in the basins of the Indus and the Yamuna Rivers and receives water from Sutlej and Yamuna Rivers and its share from the surplus water of rivers Ravi and Beas, as per various inter-state

agreements. There are no perennial rivers in Haryana. Ghaggar is the only seasonal river, which flows through the northern fringes of the state. The Ghaggar rises in the outer Himalayas, between the Yamuna and the Sutlej and enters Haryana near Pinjore, Panchkula district. Passing through Ambala and Hissar, it reaches Bikaner in Rajasthan and runs a course of 467 km before disappearing into the deserts of Rajasthan. In Haryana temperature varies from 31.4°C To 17.4°C. There is no significant trend in the mean maximum temperature. The minimum temperature shows an increase of about 1.0°C To 1.2°C in 37 years. The Districts of Fatehabad, Jhajjar and Karnal shows higher increase in the minimum temperature (1.1°C To 1.3°C). The seasonal average maximum temperature is higher during pre-monsoon and monsoon season.

**Table-1** Rainfall and Temperature variation in Haryana

Table-1 is showing both Avg. Rainfall as well as Avg. Temperature Variation in Haryana. Graph 1 is showing that Maximum Annual Rainfall was 632.9 mm in year 2008 when the temperature was lowest and after that there is a decline in rainfall and minimum Rainfall was at 305.0 mm in the year 2014 when the temperature was highest. The Average Rainfall in all these years was 438.83 mm. Now if we observe the Trends and patterns of Rainfall in all these Ten years the above Data is reflecting

how the climate change or we can say rise in temperature is reducing the rainfall. We can say that reduction in rainfall will bring reduction in agricultural prod



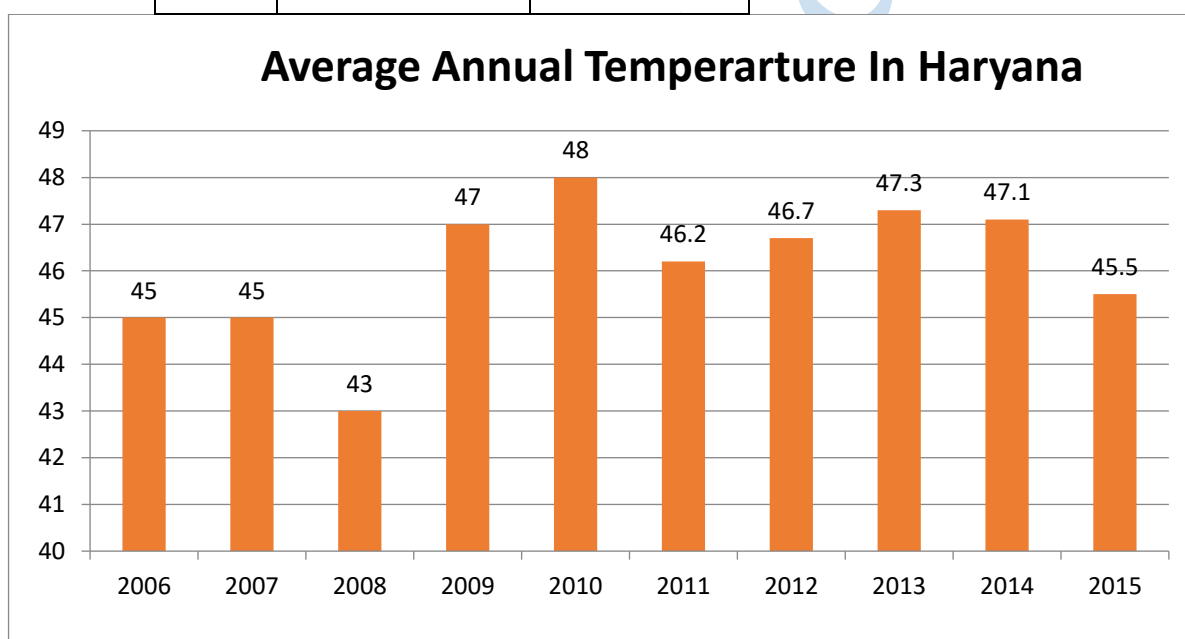
**GRAPH-1** Source : Indian Meteorological Department

Year	Average Annual Rainfall (mm)	Maximum Annual Temperature Variation
2006	377.7	45.0
2007	479.8	45.0
2008	632.9	43.0
2009	350.5	47.0
2010	597.7	48.0
2011	433.2	46.2
2012	313.6	46.7
2013	461.3	47.3
2014	305.6	47.1

Graph-2 shows that maximum variation in

Year	Area Under Wheat Production (Hectare)	Total Wheat Production (Tonnes)
2006	2250	9450
2007	2376	10059
2008	2461	10232
2009	2462	11360
2010	2488	10629
2011	2504	11509
2012	2531	13119
2013	2497	11117
2014	2499	11800
2015	2601	10354

temperature was in 2008 and after that it shows an increasing and decreasing trend continuously till 2015 and due to the climate change variation the temperature starts increasing from 43°C To above 47°C which is an alarming sign for agriculture due to the continuously increase in temperature.



**GRAPH-2** Source : Indian Meteorological Department

**TREND OF WHEAT PRODUCTION IN HARYANA**

Wheat is the most important food grain in the world. It is the staple food of millions of people. Despite recent industrial development, Haryana is primarily an agricultural state. About 70% of residents are engaged in agriculture. Wheat and rice are the major crops. Haryana is self sufficient in food production and the second largest contributor to India's central pool of food grains. The main crops of Haryana are wheat, rice, sugarcane, cotton, oilseeds, gram,

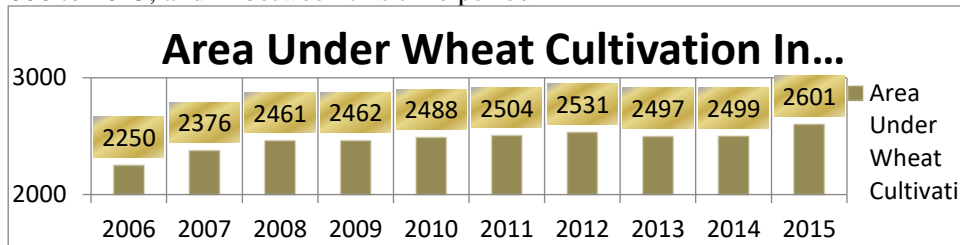
barley, corn, millet etc. About 86% of the area is arable, and of that 96% is cultivated. About 75% of the area is irrigated, through tube wells and an extensive system of canals. Haryana contributed significantly to the Green Revolution in India in the 1970s that made the country self-sufficient in food production.

*Table-2 Wheat Cultivation Area & Wheat Production*

Table 2 is showing Area under Wheat Cultivation and Total Wheat Production in that Area. While

Graph-3 is showing the area under which wheat cultivation is done. The Graph is reflecting an increased trend from the year 2006 to 2015, and in between this time period

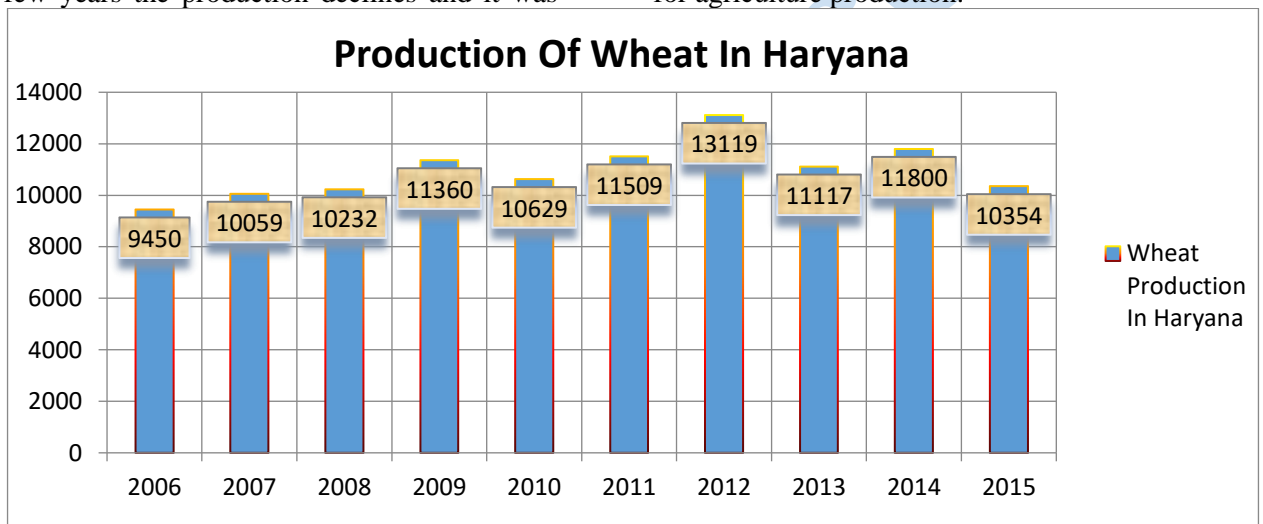
the area under wheat production decrease and sometimes increases but overall it shows increasing trend



Graph-3 Source : Statistical Abstract Haryana

Graph-4 shows that maximum wheat production in Haryana was in 2012 and after that it is showing an increasing and decreasing trend continuously till 2015 and it also indicate that the wheat production in Haryana is also increasing from year 2006 onwards. But after few years the production declines and it was

then again lowest in the year 2010 and then again it shows an increasing trend in wheat production in Haryana. Meanwhile the Table 1 is showing that due to the climate change variation the temperature starts increasing from 43°C To above 47°C which is an alarming sign for agriculture production.



Graph-4 Source : Statistical Abstract Haryana

**ANALYSIS OF RESULT OF STUDY**

The global warming effects have not even kept Haryana untouched. The earlier data comparative study reflects that the temperature and rainfall has changed during past few decades. The variation in Maximum and Minimum temperature has increased and the number of rainy days has also decreased. Agriculture is the only sector which is highly influenced by the changing climatic conditions. Multiple regression models find to what extent

climatic changes have affected wheat production of Haryana.

**The Following Model is build:-**

$$Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \mu$$

Y = Wheat Production

X1 = Variation in Temperature

X2 = Average Annual Rainfall

$\mu$  = Disturbance Term

**Results of the Model**

WHEAT PRODUCTION	Coef.	Std. Err.	t	R x R	Obs
Rainfall	-1.257727	.2119222	-0.59	0.85	13
Temperature	1.94977	6.693371	2.91	0.57	13

Above table shows the results of Multi regression between Rainfall, Temperature and agricultural production of Haryana from the year 2006-2015 in which Wheat production is regressed on temperature and rainfall. It is assumed that the climate variation measure in term of Variation in rainfall and temperature. The result of model reveals that the climate change (increase in Temp and Decrease in Rainfall) has a negative impact on agricultural production of Haryana. The model does not show any significant impact of temperature on the wheat production of Haryana. This is because that the wheat production is cultivated in winters and in winters the temperature is below the 10°C which will not affect the production of wheat in Haryana. On the other hand the rainfall have significant impact on wheat production, the results of model show if there is 1 % decrease in rainfall will lead to - 1.25 % decrease in production.

## CONCLUSIONS AND SUGGESTIONS

So after the analysis of the above result we can say that climate change is adversely impacting the productivity in agriculture in Haryana because agriculture production in Haryana mainly depends upon rainfall. Due to change in climate there is increase in Maximum and Minimum temperature, the length period of each season is also changed. Climate change is increasing uncertainties in raining season period and frequency of rainfall, heavy rainfall or inappropriate timely rainfall and lack of rainfall when there is need of rainfall in agriculture, increasing frequency of droughts etc. But there is no separate policy and agenda for sustainable development of agriculture. To overcome the impact of climate change on agriculture some suggestion are to be introduced. The suggestions are divided into two categories.

- Adaption
- Mitigation.

All Adaption and Mitigation for climate change are as following.

- Crop insurance for climate variability is necessary to overcome the loss of climate change on agriculture.
- Use of new varieties and certified seeds that cannot be much affected by the change in climate change.
- Early warning must be given to the farmers so that they can use alternative

techniques to protect themselves from these types of change.

- More emphasize on those crops which are not climatic sensitive and crop diversification should be adopted as the solutions of this problem.
- Insure farmer's crops against climate related weather changes.
- Water conservation and increase in efficiency of water use.

So there is need to reduce the impact on climate by Agriculture Sector adopting some methods. Farmers must use less fertilizer and adopt organic farming, etc.

As global citizens are getting aware with the term Climate Change which will result in increased temperatures and decrease in rainfall. This initiative is gathering momentum in 21st century. Various economic researches have attempted to quantify the possible effects of climate change on society and agriculture. The vulnerability to climate change may be greater in developing countries such as India, where agriculture typically plays a larger economic role. The available evidence indicates a decrease in production of crops in Haryana with a decrease in Rainfall. Our study finds that climate change is likely to reduce agricultural yields significantly and the damage could be severe unless the adaptation to higher temperatures is rapid and complete. This study suggests that as the impact of climate change is intensifying day by day it should be addressed through proper policy at the earliest.

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DALIT MOVEMENTS IN INDIA: ROLE OF SOCIAL REFORMERS AND ITS EFFECTS

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**ABSTRACT**

*The human rights violation in India country is one of the major problems since centuries. The socioeconomic milieu of Indian society is inherently hostile towards protection of human rights of Dalits. It is the caste and Varna system of social stratification which promotes the societal violation of Dalit human rights. The rule laid down by the Hindu law giver, Manu, is that there are only four Varna's of Hindus and there is not to be fifth Varna. The four Varna's are Brahmins, Kshatriyas, Vaishyas and Sudras. Gandhiji and others in their campaign against untouchability contended that untouchables and scheduled Tribes fall under the fourth Varna namely Sudras on the basis of Manu's law of stratification. Dr.Ambedkar has pointed out that this theory is not acceptable because Manu speaks of untouchables as varn-baya which means those outside the Varna system. The four classes of Hindus are called Savarnas while those outside the four classes like the untouchables are called Avarnas. Manu has stated in his smiriti that the develling's of the Chandals shall be outside the village, that they must be made 'apapratras' and their wealth shall be dogs and donkeys, their dress shall be the garments of the dead, they shall eat their food in broken dishes and black iron shall be their ornaments, they must wander from place to place and they shall not sleep in villages and towns at nights. It is well known that in villages the untouchables live in separate localities, while other castes live in the main village. It cannot, thus be denied that untouchables are not part of Hindu society and they must remain separate and segregated.*

**INTRODUCTION**

The human rights violation in this country is one of the major problems. The socio-economic milieu of Indian society is inherently hostile towards protection of human rights of Dalits. It is the cast and Varna system of social stratification which promotes the societal violation of Dalit human rights. The rule laid down by the Hindu law giver, Manu, is that there are only four Varna's of Hindus and there is not to be fifth Varna. The four Varna's are Brahmins, Kshatriyas, Vaishyas and untouchables and scheduled Tribes fall under the fourth Varna namely Sudras on the basis of Manu's law of stratification. Dr.Ambedkar has pointed out that this theory is not acceptable because Manu speaks of untouchables as varn-baya which means those outside the Varna system. The four classes of Hindus are called Savarnas while those outside the four classes like the untouchables are called Avarnas. Manu has stated in his smiriti that the develling's of the Chandals shall be outside the village, that they must be made „apapratras“ and their wealth shall be dogs and donkeys, their dress shall be the garments of the dead, they shall eat their food in broken dishes and black iron shall be their ornaments, they must wander from place

to place and they shall not sleep in villages and towns at nights. It is well known that in villages the untouchables live in separate localities, while other castes live in the main village. It cannot, thus be denied that untouchables are not part of Hindu society and they must remain separate and segregated.

**WHO IS A DALIT?**

Dalit (oppressed or broken) is not a new word. Apparently it was used in 1930's as a Hindi and Marathi translation of „Depressed Classes“, the term the British used for what are now called the scheduled castes. Dr.Ambedkar choose the term „Broken man“ as English translation of Dalits in his paper- “The Untouchables” in 1948. The Dalit Panthers revived the term „Dalit“ and include in it the scheduled tribes in 1973 in their manifesto. Buta Singh (ex- Chairman National Commission for Scheduled Castes) said the word Dalit is an unconstitutional.

**FACTORS THAT LED TO DALIT MOVEMENTS**

Since immemorial the Hindu society is based on 4-Varnas. Later on innumerable castes and sub-castes came into existence, obviously because of violation of caste rules and various other reasons. The so called untouchables who

were originally outside the caste system came to be known as outcaste and formed the lower caste whose touch, even sight was treated as despicable to the caste Hindus. They were the worst exploited and oppressed people in India. However, „Broken men“ (Dalits) who were deliberately degraded as untouchables by the Brahmanic forces had never accepted their position. They had begun protesting against it from the beginning itself. At the first, their response to un-touch ability came to the fore in the shape of Bhakti Cult. Of all the saints, Ramanujacharya, Madhavacharya, Ramananda, Vallabacharya, Kabir, Tukaram, Meerabai and Chaitanya were prominent. The untouchable saints like Ravidas, Chokhamela, Nandana and several others were attracted towards Bhakti Cult.

#### **DALIT MOVEMENTS IN MODERN INDIA**

The modern Dalit Movements finds its origin in 19th century when Dalit began to change their lives and Dalit aspirations began to be taken seriously. Most of the sources materials for the background of the movements were written not by the Dalits themselves but by those foreigners who became interested in them.

#### **CONTRIBUTION OF SOCIAL REFORMERS**

Some of the social reformers who had contributed for the upliftment of Dalits are as follows:-

Jyotirao Govindrao Phule (1827-1890):- First leader of Dalits. He occupies a unique position among the social reformers of Maharashtra in 19th century. He concentrated his energies against the unjust caste system under which millions of people had suffered for many centuries. He founded organization (movement) called Satya Sodhak Samaj (society of seekers of truth) with himself as its president and treasurer. The main objective of the organisation was to work of liberation of Sudras and to prevent their exploitation by the Brahmins. All the members of the samaj were supposed to treat all human beings as children of God and worship the creator without the help of any mediator. In his book *sarvajani satya Dharma Pustak*, published in 1881, his views on religious and social issues are given in the shape of dialogue. In his opinion both men and women enjoy equal rights and it was sinful to discriminate between human beings on the

basis of sex. In his another book called „Satsara“ (the essence of truth) published in June 1885, he criticised the Brahmo Samaj and Prathana samaj. Addressing their leaders he declared “we don’t need the help of your organizations. Don’t worry about us”

Rajrshi Chhatra Pati Shahuji Maharaj:- He was the founder of reservations. He was the first person who made provisions for reservations for Dalits in government Jobs. He was keen to give respect to Dalits. He helped much in the study of Dr. Ambedkar by sending him abroad. Narayan Guru:- Born in Kerala in Ezhava caste (untouchable caste) established the SNDP (Shree Narayan Dharma Paripalana Yogam) in Kerala and outside also. He was born in 1854. He openly criticised the congress and Mahatma Gandhi for their lip-sympathy towards the lower castes. He criticised Gandhi ji for his faith in Chaturvarna, which he maintained is parent of the caste system and untouchability. He pointed out that the difference in castes is only superficial. He gave a new slogan “one religion, one caste and one God for mankind”. He also built temples which are open for all castes.

Gandhi ji:- The idea of social discrimination was experienced by Gandhiji in South Africa when he engaged himself against the discriminatory attitude of South African Government against Indian. The problem was similar to that of untouchability as the migrants were treated as inferior to the local population which enjoyed numerous basic rights legally not available to Indians. For Gandhiji construction of the life of the Nation was of utmost importance. This could be achieved by alleviating the social status of the untouchables. He always constructed untouchability as a cruel and inhuman institution. During his discussions with Harijans at Ahmedabad, he observed, “this is a movement for the purification of Hinduism.....” According to Gandhiji, “If we are the children of the same God how can be any rank among us.”<sup>11</sup> Through his speeches in public and writings in *Young India* and *Harijan*, he stressed the problem of untouchability and its removal from its roots. The Mahatma had the feeling that in Hinduism there was no sanction for treating any single human being as untouchable. The Bhagavad-Gita has never taught that a chandala was in any way inferior to Brahmana. To boost up the work for the upliftment of Harijans, Gandhiji laid the foundation of the Harijan Sevak Sangh in 1932



when he was in jail. This organisation is not a part of congress. It was the outcome of the fast Gandhiji undertook in 1932 in jail.

Dr.BhimraoRamjiAmbedkar:- Ambedkar was born on 14 April 1891 of Mahar (Hindu Untouchable) parents, RamjiMalojiSankpal (father) and Bhimbai (mother). His father was a military subedar and was a kabirpanthi devotee. In 1923 (at the age of 32 years) he was the most qualified man in India having acquired the degrees of M.A, Ph. D, M. Sc, D. Sc and Barrister at law from the university of America and England.<sup>14</sup> He started legal practice at Bombay High Court in June 1924 and from that time started his active public career as a social worker, a politician, a writer, and educationist. From December 1920 he had brought out a Marathi fortnightly, „the MookNayak“ (leader of the Dumb). In January 1919 he had also given evidence before the South Borough Reforms (Franchise) Committee, claiming political rights for the depressed classes of India. In July 1924 he started an organisation in Bombay named the „BahiskritHitkaniSabha“ for the moral and material progress of the untouchable students. For propagating the same cause and improving the conditions of untouchables he started a Marathi fortnightly, the „Bahiskrit Bharat“, in April 1927 and a weekly, the „Janta“ in November 1930. In September 1927 he started the „SamajSamta Sang“ for preaching social equality among the untouchables and the caste Hindus. Inter-cast dinner and inter-cast marriage formed important parts of the programme of the organisation. As the organ of this body he started another paper, the „Samata“ in March 1929. In December 1927 he led a Satyagraho establish the civic rights of the untouchable to draw water from a public tank, „chavadarTalen“, at mahad district Kolaba. Hindu claimed the tank as a private property and a prolonged litigation followed. Ambedkar won the case in the Bombay high Court in March 1937.

He led another Satyagrah in March 1930 to establish the rights of the untouchables to enter the famous temple of Kalaram at Nasik. The Satyagrah was withdrawn in 1934. In 1928 he was appointed a professor in the Government Law College, Bombay, and subsequently the principle of the College. In 1935 he was made (Perry) Professor of Jurisprudence, a coveted distinction.

In politics he early established his position as leader of the depressed cases. He was nominated member of the Bombay Legislative Assembly from 1926 to 1934. During this period he introduced several Bills for the welfare of the peasants, workers and untouchables. They were, however, not passed because of opposition of the orthodox sections. In recognition of his claim as a leader of depressed classes Ambedkar was nominated a delegate to the three round table Conferences in London (1930-1933) and served on some of the Committees till 1934. His demand for separate Electorate for untouchables was opposed by Gandhiji at the meeting of the Minorities committee of the Second Round table Conference (November 1931), as Gandhi felt that it would permanently divide the Hindu society. Gandhi declared that he would resist such a move with his life. The communal award was announced on 17 August 1932, conceded separate Electorate for untouchables. Gandhi went on fast unto death on 20 September 1932 and finally Poona Pact was made in Yervada Jail which provided for reservation of seats for the untouchables in the general constituencies. Ambedkar could not reconcile himself to this political compromise which did not eliminate the social stigma attached to the Harijans. On October , 13, 1935 he made an announcement in public meeting at Yeola, District Nasik that untouchables should leave the Hindu fold altogether and accept some other religion, as he felt that within the Hindu fold they would never get recognition of social equality. He first turned to Shikhism during 1938-40, but his effects proved fruitless. Finally he embraced Buddhism and advised his followers to accept new faith. He himself gave „Deeksha“ to lakhs of followers in Nagpur. It must be noted that this sudden mass conversion was only superficial. It did not alter the real condition of Harijans and many of them reverted to their earlier faith in course of time. He founded „Independent Labour Party“ in India in October 1936<sup>15</sup> which captured all theseats in the legislature in the Bombay Presidency reserved for scheduled castes. In April 1942 to 1946 he cast his net wider and formed the „Scheduled Castes Federation“ as an all India political party. From 1942 to 1946 he was a member of the Governor General“s Executive Council and took advantage of this opportunity to promote the interest of

scheduled castes and scheduled tribes. He secured funds from the central Government for their education and reservation in posts in the central and provincial services for them. He joined Nehru's cabinet as Law Minister. He was the chairman of the drafting committee to frame the Constitution of India. He also drafted the Hindu Code Bill so well that he was called the Modern Manu. However, orthodoxy prevailed and the Bill was opposed by some of the cabinet Ministers. His health also deteriorated and he resigned from the cabinet in September 1951. He lost his election to the parliament in February 1952, but was nominated by the Bombay Legislature to the council of states in May 1952.

#### **DR.AMBEDKAR'S STRUGGLE FOR LAND REFORMS**

Ambedkar propagated the idea that the urgent problem of landless labourers could be solved only by taking over the uncultivated lands for cultivation and giving it to landless labourers. He emphasised that consolidation of holdings and the tenancy legislations cannot help untouchables who are landless labourers. He advocated collective forms, as they could help them to some extent. He wanted the key and the basic industries to be owned and run by the state. According to Ambedkar, it shall be considered as the key industry and it should be organised on collective basis.

#### **CONCLUSION**

Though the efforts made by our social reformers and provisions made in law or praiseworthy but still the forces of status quo and discrimination is going on. It is shame on us that in the 21st century (where India is going

to be world super power), we are facing the practice of untouchability and hatred among high castes and low castes. It needs to mention here that it is due to lack of political will and unawareness among Dalits the laws are not properly followed. The matter does not end here but I must want to conclude here with the message of Swami Vivekananda ji "Arise awake and rest not till the goal is reached" So it is our duty to respect each other equally and try our best to abolish the untouchability and hatred among us, so that we can proudly say "merabharatmahan"

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PHYSICAL EDUCATION AND ROLE OF TEACHERS IN LUDHIANA  
GIRLS SCHOOL SPORTS ACTIVITIES



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Physical education class is just one avenue during school day that provides the opportunity for physical activity. During the allotted class time it is recommended that the children be moderately or vigorously active for at least half of the class period. Several factors can contribute in making this happen effectively organize space, equipment, and students provide adequate equipment that allows all children to be active at the same time (e.g., one ball per child), restrict teacher talk or instruction time, plan practice opportunities that are structured for maximum participation (e.g., individual, partner, and small-group activities; no elimination activities that require no waiting time) structure the class show that learning occurs while students are physically active with maximum and quality activity time, children become more skilled, knowledgeable and physically fit and teach skills and activity that transfer into physical activity outside the physical education class.

Physical education programme have the responsibility to teach the skills that students will need to participate in physical activity outside of the physical education class and skills they will need for a life time of physical activity. Skills learned in physical education class transfer to skills used in academic play. From kindergarten-age child play tag, to the second grade child jumping rope, to the older child playing a game kickball, the skilled child is more likely to participate in physical activity. If child is confident in his or her skills, there is typically no hesitation to play however, the low-skilled child especially in the upper grades, is less inclined to take part in group activities for fear of failure and peer ridicule. Students need skills to be participants in physical activities. Good physical education programme take the time to teach children activities they may do on their own. Examples of these are jump rope chants, no elimination tag games, hopscotch, four square, tetherball and basketball activities such as Horse and around the world. Including these activities briefly in physical education class and encouraging

children to play them on their own is likely to promote more physical activity on the playground and in their neighbourhoods. Motivate children to be active

THE UTILITY OF PHYSICAL EDUCATION  
Because man is an animal, movement is most important for him. And because he is a rational animal, his movements must have a reason. But why is movement deserving of esteem? Why is rational movement deserving of esteem? To say that movement helps in earning in living is trivial. To say that movement protects the nation is lofty. Yet neither is basic reason. The object of movement is simply to preserve our life and gladden our hearts. Lao Tzu said that immobility was the ultimate goal; the Buddha sought and methods of contemplation. The art of contemplation is esteemed by the disciples of the Chu and Lu. Recently there have been those who, following these masters, have spoken of methods of contemplation, biased about effectiveness of their methods, and expressed contempt for those who exercise, their by running their bodies. This is perhaps one way, but I would not venture to imitate it. In my humble opinion there is only movement in heaven on earth.....

One often hears it said that the mind and the body cannot both be perfect at the same time, that those who use their minds are deficient in physical health and those with a robust body are generally deficient in mental capacities. This kind of talk is also absurd and applies only to those who are weak in will and feeble in action, which is generally not the case of superior man. Confucius died at the age of seventy two and I have not heard that his body was not healthy. The Buddha travelled continually preaching his doctrine, and he died at an old age. Jesus had the misfortune to die unjustly. As for Mohammed, he subjugated the world holding the Koran in his left hand and sword in his right; All the men were called sages and are among the greatest thinkers.....

PHYSICAL ACTIVITIES :

The development of physical fitness in children and youth is the responsibility of education. It

cannot be left to chance in the modern complicated mechanized society. Thus we need for increased attention to the physical fitness of all and particularly the youth and adults is very essential. It is of great importance that we take immediate step to ensure that every child be given the opportunity to keep himself physically fit. The second section of the data analysis deals with physical facilities, education and services provided by the sports dept. of Ludhiana District schools in Punjab State. The most of school provided these facilities of their girls student, but some students are not aware services and facilities provided by the girl's school.

The ministry of education set up central Advisory board for physical education (1976) which formulated and framed the national policy of physical education. The CABPE recommended large scale programs on status of physical education, outlines of diploma and certificate coursed in physical education, syllabi of physical education for girls and test in physical education. Under its advice national policies and the programs physical education and sports were formulated in different states and implemented and suitable provision was made in the five year plans for physical education and sports.

The increase in the number of over weight children and the decrease in physical activity time is school make for a national problem. Curtailing this national epidemic can be addressed at a local level and the physical education teacher must be the "go-to" person to promote change in the schools. The physical education teacher is the physical activity experts in the building and should take on the role of physical activity. The responsibilities should include the following:

- Being an active member of school wellness committee.
- Helping in the evaluation and planning process for the school
- Actively learning about and promoting opportunities for physical activity in the community
- Serving as a resource person for class room teachers
- Informing class room teaches about the need for and benefits of adding small bouts of physical activity during the school day

- Providing resources and training to the class room teachers
- Aiding teachers in understanding and implementing appropriate practices for physical activity
- Providing opportunities for the teachers to engage in physical activity before or after school time
- Organizing wide physical activity experiences in the school
- Planning school wide activities such as field day, fun runs, a walking program and morning exercise breaks
- Encouraging fund – raisers that promote physical activity( e.g. Jump Rope for heart, walk for diabetes, St. Jude's walk)
- Organizing before and after school clubs for activities such as Jump rope, walking, dance, gymnastics and intramural sports

## POLICIES FOR PHYSICAL EDUCATION AND SPORTS

Between 1950 and 1977, a period of two decades India ushered in four different schemes to ensure the physical fitness of Indian boys and girls. These schemes are as under:

- National Discipline scheme
- National Cadet corps and Auxiliary cadet corps
- National Fitness Corps
- National Physical efficiency drive

## OBJECTIVES OF THE STUDY

The specific research issues addressed in this study are as follows:

To know the physical facilities in school given by the Govt. in Punjab State

To know the fitness and physical education of the girls students in Punjab State

To know the awareness of physical education of the girls in Ludhiana District.

To understanding appreciation of one's own local environment

## ANALYSIS OF DATA:

In the present study an attempt has been made to study the difference in height, weight, physical fitness and age of 18-28 between the urban and rural girls. The differences observed between the rural and rural girls. The differences observed between the two groups of girls will be discussed separately for each parameter

Respondents	6-7	7-8	8-9	9-10	10-11	11-12	Total
<b>Urban</b>	28 46.7%	72 51.4%	94 48.9%	110 48.8%	225 53.1%	93 50.6%	602 50%
<b>Rural</b>	32 53.3%	68 48.6%	98 51.1%	115 51.2%	198 46.9%	91 49.4%	602 50%
	60 100%	140 100%	192 100%	225 110%	423 100%	184 100%	1204 100%

This table clearly shows that the respondents frequently highest in the class of 10<sup>th</sup> and 11<sup>th</sup> in the urban area school. The same practice in the rural area with 198 (46.9%) highest percentage of class 10<sup>th</sup> and 11<sup>th</sup>. In the second class of 9<sup>th</sup> and 10<sup>th</sup> both rural and urban areas school with 48.8% and 51.2%. In third figure of the table class 8<sup>th</sup> and 9<sup>th</sup> with 48.9% in urban area and

51.1% in rural area. In fourth highest respondents of class 12<sup>th</sup> with 50.6% urban area and 49.4% rural area school girls participated in the sports activities. The class 7<sup>th</sup> and 6<sup>th</sup> girls students with 51.4% and 46.7% in the urban and 46.6%, 53.3% in the rural area. In the graphical figure clearly shows that the maximum participated of class 10<sup>th</sup>

**Table:Age-wise respondents of girl in physical education**

Respondents	12-13	13-14	14-15	15-16	16-17	17-18	18-19	Total
<b>Urban</b>	15 65.2%	92 54.1%	70 38.9%	94 54.9%	125 61.2%	137 55.9%	69 32.8%	602 50%
<b>Rural</b>	08 34.8%	78 45.9%	110 61.1%	77 45.1%	79 38.8%	108 44.1%	142 67.2%	602 50%
<b>Total</b>	23 100%	170 100%	180 100%	171 100%	204 100%	245 100%	211 100%	1204 100%

Table described age wise respondents of the girls in physical education urban and rural areas. The table shows that age group of 17<sup>th</sup> and 18<sup>th</sup> in urban school girls and age group of 18<sup>th</sup> and 19<sup>th</sup> rural areas highest involvements in rural girls students. In the table the lowest involvement of age group 12<sup>th</sup> and 14<sup>th</sup> urban school girls students and the same practice follows by the age group of 12 and 13 in rural school girls students with 65.2% and 34.8% in rural areas

In the graphical figure clearly shows the highest, medium and lowest respondents of the girls students urban and rural area. The rural area girls in the age group of 17<sup>th</sup> to 19<sup>th</sup> highly participated comparatively urban girls students. But, in the age group of 15<sup>th</sup> to 17<sup>th</sup> highly participated comparatively rural girls students, because the facilities provided the by the school authority good and effectively.

**Table: Sports facilities given by the school ( Outdoor Games)**

	Urban	Rural	Total
Playground	22 (14.1%)	22 (16.7%)	44 (15.2%)
Sport Dress	20 (12.7%)	10 (7.6%)	30 (10.3%)
Sport Kit	21 (13.3%)	19 (14.3%)	40 (13.9%)
Sport Coach	22 (14.1%)	18 (13.6%)	40 (13.9%)

Refreshment	22 (14.1%)	22 (16.7%)	44 (15.2%)
Accommodation	19 (12.1%)	14 (10.7%)	33 (11.4%)
Transport Facilities	9 (5.8%)	5 (3.8%)	14 (4.9%)
Appreciation	22 (14.1%)	22 (16.7%)	44 (15.2%)
Total	157	132	289

The Table presents the sports facilities given by the school in outdoor games. The table shows the respondents of urban school facilities 22 school have playgrounds, 20 school provided school dress, 21 provided sports kit, 22 have sports coach facilities, 22 have refreshment and appreciation, 19 schools provided transport facilities to their girls students in the urban schools.

But, in rural area school facilities provided by the authority for the better future of the sports students. 22 school provided playgrounds

refreshment and appreciation to their girls students 10 school have sport dress 19 school have sport kit, 18 school have sports coach facilities, 14 school provided accommodation during the sports activities and 5 school provided transport facilities their girls student. So, we conclude that the facilities provided the school authority for the better future of the sports girls are playgrounds, sports Coach, refreshment and apparition are highly motivated services to the girls of their schools

	Urban	Rural	Total
Tennis Court	32 5.2%	10 6.7%	42 11.1%
Badminton Court	28 12.2%	12 8%	40 10.6%
Lighting System	27 11.9%	15 10%	42 11.1%
Refreshment	22 9.6%	22 14.7%	44 11.7%
Transport Facilities	20 8.8%	10 6.7%	30 7.9%
Accommodation	18 7.9%	9 6%	27 7.1%
Appreciation	22 9.6%	22 14.7%	44 11.7%
Sports coach	15 6.5%	10 6.6%	25 6.7%
Sports Kit	22 9.6%	22 14.7%	44 11.7%
Sports Dress	22 9.6%	18 12%	40 10.6%
Total	228 100%	150 100%	378 100%

Table highlighted the indoor games in urban and rural schools have 32 tennis court, 28 badminton court, 27 lighting system, 22 refreshment, 20 transport facilities, 18 have provided accommodation, 22 Students with a probability of 0.101. This table also indicates that the rural

female young students do not have statistical significantly higher values of predicted maximum aerobic capacity (VO<sub>2</sub>max) than the

urban female young students with a probability of 2.121.

#### RECOMMENDATIONS:

- In the same case, similar study may also be conducted on female fitness.
- The results of present study will help physical education teachers in selecting the boys for different games or athletics events.
- The result of these study will help the physical education teacher`s to prepare a systematic conditioning program for the sportsman.

Have appreciation, sports kit and sport dress. In the same rural area school provided the indoor games facilities like tennis court, badminton court, Lighting system, Transport facility, refreshment, accommodation, sport kit and coach of their girls students.

- The very important significance may also be conducted by involving sociological and psychological variables
- An awareness programme shall be conducted for the athletic community to understand the importance of creating and maintaining growth fostering relationships as a powerful influence as personal and athlete satisfaction as a powerful influence as personal and athlete satisfaction as an indicator of perceived stress and athlete satisfaction.
- Training should be given to the coaches and administrators to take the specific ways to create and nurture growth- fostering relationships which include active listening and engagement or attunement to the athlete`s concerns, questions or sharing daily experience of female athletes.
- Coaches and administrators should also understand that relational issues are of primary concern for college students; female college athletes reported that the quality of their relationships with members of the athletic community, teammates and coach significantly imparted their athletic experience.
- Administrators, Counsellors, and sport practitioners communicate the

potentiality of the beneficial effects of relational health on perceived stress and athlete satisfaction among female college athletes to all members of the athletic campus community.

- Outreach services should be educational in nature to transcend the obstacles that inhibit the flow of information from a counsellor to athletes, coaches and all members of the athletic community.
- Effects must be made to educate, and provide psychological support to athletes who use potentially destructive coping strategies.
- Studies may also be conducted to examine the development of coping skills among adolescent athletes and the development of mental skills and mental toughness will provide an area of comparison.
- Future research should also examine the relationship between athlete`s episodic coping and long term outcomes of their coping behaviour.
- Future research also required to find the effectiveness of the coping responses were considered adaptive or Meta adaptive. In this area is warranted as often coping is misinterpreted to mean that the athlete is responding appropriately to stress.
- Future research is also needed to determine how and under what conditions avoidance coping can help athletes to overcome stress.
- Future research is also necessary to identify the ways in which peer, mentor, and community relationships can most effectively be fostered in college women
- **CONCLUSION:**

In conclusion the results of the present study confirm that female rural students are comparatively better than urban female students of Punjabi University, Patiala. Rural female students are superior to urban female students in Strength, Endurance and Speed where as urban female students are superior to rural female students in Agility and Flexibility. This shows that regular

energetic activity produces physical fitness improvements. Village life style is more active in nature than the life in urban area which produced high level of physical and physiological functioning in rural residents.

- There is no significant difference of speed component between urban and rural primary school children. There is no significant difference of explosive strength component between urban and rural primary school children.
- There is significant difference of static strength between urban and rural primary school children. The static strength of rural children's was significantly higher than the urban school children.
- There is no significant difference of flexibility component between urban and rural primary school children.
- There is no significant difference of cardiovascular endurance between urban and rural primary school children.

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**ABSTRACT**

*we have estimated the control term for the Hamiltonian System of an Artificial Earth Satellite. On addition of this control term the perturbed system become more regular than the previous one. Plotting of Poincare Surface of Section and Poincare Map ensures complete agreement the analytical and numerical result.*

**AMS Subject Classification:** 70F15

**Keyword:** Hamiltonian, Chaos, Poincare Map

**INTRODUCTION**

In Common usage, "Chaos" means "a state of disorder". It is lawlessness and irregular behaviour ruled by exact and unbreakable laws. Order and disorder, harmony and chaos represents a deep perception of the Universe. Chaos has already had a lasting effect on science, yes there is much left to be discovered. Many scientists believe that the twentieth century mechanics will be known for only three theories, quantum mechanics and chaos. Aspects of chaos appears everywhere around the world. from the currents of the ocean and the flow of blood through fractal blood vessels to the branches of the trees and effects of turbulence. Chaotic behaviour has been observed in the laboratory in a variety of systems including electrical circuits, lasers, oscillating chemical reactions, fluid dynamics, mechanical and magneto-mechanical devices. Observations of chaotic behaviour in nature include the dynamics of satellites in the solar system, the time evolution of the magnetic field of celestial bodies, population growth in ecology, the dynamics of the action potentials in neurons and molecular vibrations. Over the past few decades, since chaos can be harmful in several contexts therefore much attention has been paid to the studies of chaos control. The meaning of control here is to reduce or suppress chaos so that the original structure of the system under investigation is kept unaltered. To suppress chaos is a long standing and extremely interesting problem in several branches of Physics and other disciplines. The Hamiltonians are difficult to control due to their special geometry. In this paper we study the chaotic suppression for the Hamiltonian

system of an Artificial earth satellite. The Hamiltonian is written in the form of  $H = H_0 + V$  and by using the control theory of Hamiltonian system [2,3] we have obtained a control term. The inclusion of this term in the Hamiltonian gives us the more regular dynamics than the uncontrolled one.

**Control theory of Hamiltonian system**

Let  $\mathbf{A}$  be the algebra of real functions defined on phase space. for  $H \in \mathbf{A}$ , let  $\{H\}$  be the linear operator action on  $\mathbf{A}$  such that

$$\{H\} H' = \{H, H'\},$$

for any  $H' \in \mathbf{A}$  where (...) is the Poisson bracket. The time-evaluating of a function  $V \in \mathbf{A}$  following the flow of  $H$  is given by

$$\frac{dV}{dt} = \{H\}V,$$

which is formally solved as

$$V(t) = e^{t\{H\}}V(0),$$

if  $H$  is time independent, and where

$$e^{t\{H\}} = \sum_{n=0}^{\infty} \frac{t^n}{n!} \{H\}^n.$$

Any element  $V \in \mathbf{A}$  such that  $\{H\}V=0$ , is constant under the flow of  $H$ , i.e.

$$\forall t \in \mathbb{R}, e^{t\{H\}} V = V.$$

Let us now fix a Hamiltonian  $H_0 \in \mathbf{A}$ . The

vector space  $\text{Ker} \{H\}$  is the set of constants of motion and it is a sub-algebra of  $\mathbf{A}$ .

The operator  $\{H_0\}$  is not invertible since a derivation has always a non-trivial kernel. For instant  $\{H_0\} \{H_0^\alpha\} = 0$  for any  $\alpha$  such that  $\{H_0^\alpha \in A\}$ . Hence we consider a pseudo-inverse of  $\{H_0\}$ . We define a linear operator  $\Gamma$  on  $A$  such that

$$\{H_0\}^2 \Gamma = \{H_0\},$$

(1)

i.e.

$$\forall V \in A, \{H_0, \{H_0, \Gamma V\}\} = \{H_0, V\}.$$

if the operator  $\Gamma$  exists, it is not unique in general.

any other choice  $\Gamma'$  satisfies

$$\text{Rg}(\Gamma' - \Gamma) \in \text{Ker}(\{H_0\}^2).$$

We define the non-resonant operator  $N$  and the resonant operator  $R$  as

$$N = \{H_0\} \Gamma$$

$$R = 1 - N,$$

where the operator 1 is the identity in the algebra of liner operators acting on  $A$ . we notice that Equation (1) becomes

$$\{H_0\} R = 0$$

which means that the range  $\text{Rg } R$  of the operator  $R$  is included in  $\text{Ker} \{H_0\}$ . A consequence is that any element  $R V$  is constant under the flow of  $H_0$ , i.e.  $e^{t\{H_0\}} R V = R V$ . we notice that when  $\{H_0\}$  and  $\Gamma$  commute,  $R$  and  $N$  are projectors i.e.  $R^2=R$  and  $N^2=N$ . Moreover, in this we have  $\text{Rg } R = \text{Ker} \{H_0\}$ , i.e. the constant of motion are the elements  $R V$  where  $V \in A$ .

Let us now assume that  $H_0$  is integral with action-angle variables  $(A, \Phi) \in B \times T^n$  where  $B$  is an open set of  $R^n$  and  $T^n$  is the  $n$ -dimensional torus, so that  $H_0 = H_0(A)$  and the Poisson bracket  $\{H, H'\}$  between two Hamiltonians is

$$\{H, H'\} = \frac{\partial H}{\partial A} \cdot \frac{\partial H'}{\partial \Phi} - \frac{\partial H}{\partial A} \cdot \frac{\partial H'}{\partial A}$$

The operator  $\{H_0\}$  acts on  $V$  given by

$$V = \sum_{k \in \mathbb{Z}^n} V_k(A) C^{ik, \Phi}$$

as

$$\{H_0\} V(A, \Phi) = \sum_k i\omega(A) \cdot k V_k(A) e^{ik, \Phi}$$

where the frequency vector is given by

$$\omega(A) = \frac{\partial H_0}{\partial A}.$$

A possible choice of  $\Gamma$  is

$$\Gamma V(A, \Phi) = \sum_{k \in \mathbb{Z}^n} \frac{V_k(A)}{i\omega(A) \cdot k} e^{ik, \Phi}$$

$$\omega(A) \cdot k \neq 0$$

we notice that the choice of  $\Gamma$  commutes with  $\{H_0\}$ .

For a given  $V \in A$ ,  $R V$  is the resonant part of  $V$  and  $N V$  is the non-resonant part:

$$R V =$$

$$\sum_k V_k(A) \xi(\omega(A) \cdot k = 0) e^{ik, \Phi}$$

(2)

$$N V =$$

$$\sum_k V_k(A) \chi(\omega(A) \cdot k \neq 0) e^{ik, \Phi}$$

(3)

where  $\chi(\alpha)$  vanishes when proposition  $\alpha$  is wrong and it is equal to 1 when  $\alpha$  is true.

From these operators defined for the integral part  $H_0$ , we construct a control term for the perturbed Hamiltonian  $H_0 + V$  where  $V \in A$ , i.e. we construct  $f$  such that

$H_0 + V + f$  is canonically conjugate to  $H_0 + R V$ .

if  $H_0$  is resonant and  $R V = 0$ , the controlled Hamiltonian  $H = H_0 + V + f$  is conjugate to  $H_0$ .

In the case  $R V = 0$ , the series which gives the expansion of the control term  $f$ , can be written as

$$f(V) = \sum_{s=0}^{\infty} f_s,$$

(4)

where  $f_s$  is of order  $\epsilon^s$  and given by the recursion formula

$$f_s = -\frac{1}{s} \{ \Gamma V, f_{s-1} \}$$

(5)

where  $f_1 = V$ .

**Application**

The mathematical model under consideration [1] is

$$\frac{d^2 q}{d\alpha^2} + a \sqrt{1 + 3 \sin^2 \alpha} \sin q = \frac{6 \sin 2 \alpha}{(1 + 3 \sin^2 \alpha)^2} \tag{6}$$

where 'q' is the angle between the magnetic moment vector *M* of the Satellite and the geomagnetic field *B*, 'α' is the angle between the plane of the Earth's equator and the radius vector of the satellite and 'α' is the dimensionless constant that depends on the magnetic moment of the satellite relative to the principal axis that is perpendicular to the plan of the orbit.

Taking

$$e = \frac{1}{(1 + 3 \sin^2 \alpha)^2}, \alpha = \beta e^{5/4}$$

Equation (1) becomes

$$\frac{d^2 q}{d\alpha^2} + \beta e \sin q = 6 e \sin 2\alpha$$

(7)

for which the Hamiltonian is

$$H = \frac{p^2}{2} - 3 e p \cos 2\alpha + \beta e \cos q$$

(8)

In order to apply the control theory, we need to put Hamiltonian (in eq.6) in an autonomous form. We consider α as an additional angle whose conjugate action is *E*. Then in autonomous form Hamiltonian can be perceived as :

$$H(p, q, E, \alpha) = \frac{1}{2} p^2 + E + e[\beta \cos q - 3 p \cos 2 \alpha]$$

where the action are *A* = (*p*, *E*) and the angles are  $\phi = (q, \alpha)$

The unperturbed Hamiltonian to be used for constructing the operator  $\Gamma$  is

$$H_0(p, E) = \frac{1}{2} p^2 + E.$$

We have  $\omega(A) = \left\{ \frac{\partial H_0}{\partial E}, \frac{\partial H_0}{\partial p} = (1, p) \right\}$ .

In order to construct the operator  $\Gamma$  we consider

$$\frac{\partial}{\partial \phi} = \left( \frac{\partial}{\partial \alpha}, \frac{\partial}{\partial q} \right)$$

so

$$\{H_0\} = \omega(A) \cdot \frac{\partial}{\partial \phi}$$

$$= \left( \frac{\partial}{\partial \alpha} + p \frac{\partial}{\partial q} \right)$$

For  $p \neq 0, V = e [\beta \cos q - 3 p \cos 2 \alpha], V \in A$  and

$$\{H\}V = e p [6 \sin^2 \alpha - \beta \sin q]$$

$$\Gamma V = \frac{e}{p} [-6 \sin 2\alpha + \beta \sin q]$$

The control term  $f_2$  given by

$$f_2 = -\frac{1}{2} \{ \Gamma V, V \}$$

in the present model is expressed as

$$f_2 = -\frac{1}{2} e^2 \beta \left( \frac{3}{p} \cos 2\alpha \cos q + \frac{\beta \sin^2 q - 6 \sin 2\alpha \sin q}{p^2} \right)$$

On developing the approximate control term around  $p=1$ , we get

$$-\frac{1}{2} e^2 \beta \left\{ \frac{\beta}{2} - \frac{\beta}{2} \cos 2q - 6 \sin 2\alpha \sin q + 3 \cos q \right\}$$

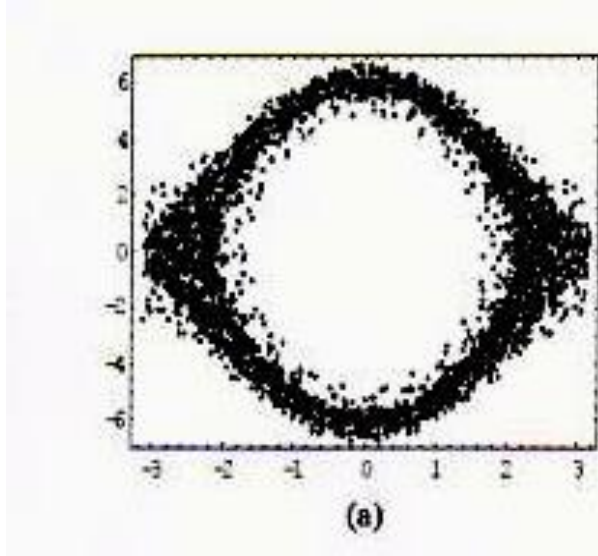
Further during numerical investigations we have observed the shear affectivity of the term  $-\frac{1}{4} e^2 \beta^2$  to control the chaotic motion of the satellite.

**RESULT AND DISCUSSIONS**

The control is effective for  $\beta = 115$  when  $e = 0.009$ , Figure 1 depicts the Poincare surface of section and Poincare map for the Hamiltonian excluding the control term.

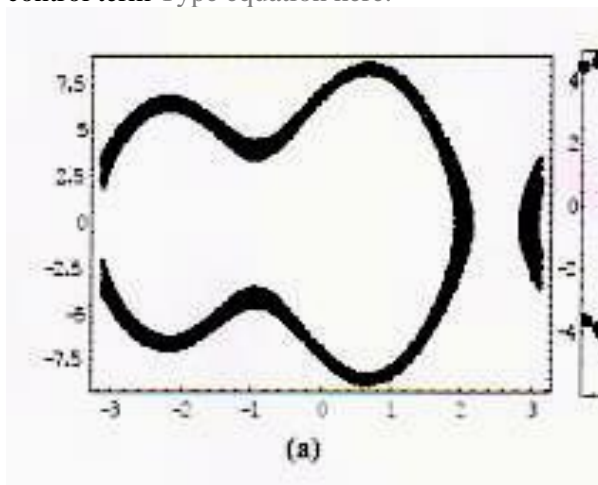
When the above numerical investigation being repeated with the inclusion of the control term, we obtain figure 2.

During the analysis of computational estimations we observe that figure 2 indicates more regular behaviour than Figure 1. It enables us to conclude that our numerical and analytical result are in good agreement.



**Figure 1**  
 (a) Poincare surface of section for  $e = 0.09$  with the control term.

(b) Poincare Map for  $e = 0.09$  with the control term Type equation here.



**Figure 2**  
 (a) Poincare surface of section for  $e = 0.09$  with the control term.

(b) Poincare Map for  $e = 0.09$  with the control term Type equation here.

**Conclusion**

we have estimated an effective control term which is remarkably efficient in the suppression of Chaos. The pictorial representation of the system is represented with and without the inclusion of the control term which clearly indicates our analytical and computational studies are in good agreement.

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## स्त्री-अस्मिता अथवा स्त्री-चेतना



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बीजशब्द - दासता, अस्मिता-स्त्री, आत्म सम्मान, सम्मान-आत्मनिर्भर,

आधुनिक भारतीय नारी शिक्षित होने के कारण अपनी समस्याओं को व्यक्तिगत ही समझकर उन्हें सुलझाने के लिए जीवन-संघर्षों में भले ही उलझ गई हो, परन्तु वह अपने विचारों में अब स्वतंत्र होती जा रही है।

डॉ. दंगल झाल्टे ने आधुनिक नारी के सजग रूप का चित्रण किया है -

“स्वतंत्रता के बाद भारतीय नारी जवजागरण तथा आधुनिक शिक्षा के फलस्वरूप अपने अधिकारों के लिए सजग हुई है। उसने पर्दा प्रथा, सती प्रथा, विधवा विवाह, दयनीयता आदि अनेक कुरीतियों को तोड़कर आधुनिक शिक्षा द्वारा आर्थिक तथा सामाजिक स्वतंत्रता हासिल की है। समस्याओं, संकटों एवं जटिलताओं से संघर्ष करके उसने स्वयं अपना मार्ग ढूँढ निकाला।”

सामाजिक परम्पराओं और नैतिकताओं के फेर में पड़कर पुरुष की दसता स्वीकार कर भी अवस्था में घिरने और जकड़ने के लिए तैयार नहीं है। अब अपनी सम-विषम दोनों परिस्थितियों को समझकर व्यक्ति और समाज के अत्याचारों का सामना करने वाली शक्तिशाली नारी है। ऐसी ही शक्तिशाली नारी मंजुली जी के उपन्यास ‘अनारो’ की अनारो है। वह ऐसे मजदूर वर्ग से है, जो अधिक परिश्रम करके अभावपूर्ण जीवन में भी बहुत ही स्वाभिमान के साथ रहती है।

कर्मबल के सहारे विषम परिस्थितियों से टकराकर उनसे जूझते हुए अनारो की कथा एक श्रमिक नारी की कथा है। अजोड़े? उत्तरदायित्वहीन पति के आत्मसम्मान में डूबी ऐसी हर पत्नी की कहानी है, जो सारा जीवन काम में खपती रहती है, लेकिन स्वयं के आत्मसम्मान पर कभी भी आँच नहीं आने देती है।

मंजुली जी ने चेतना के उन दो संवेदनात्मक रूपों को भी रेखांकित किया है जिनमें अपने पति के पर-स्त्री से संबंध को तो वह स्वीकार नहीं कर सकती, लेकिन दूसरी जगह पर-स्त्री से उत्पन्न संतान को अपनाने में संकोच भी नहीं करती है। आत्मसम्मान के कारण अनारो अपनी मौत छबीली को नन्दलाल के सामने पीटती है और वह खड़ा-खड़ा देखता रह जाता है। जब किसी भी स्त्री के आत्मसम्मान पर हाथ डाला जाता है, तो वह सहन नहीं कर पाती है। यही स्त्री चेतना का संवेदनात्मक रूप अनारो में है। आत्मसम्मान को जरा सी चोट लगते ही उसकी तीखी और तुर्रुर्ष जबान चाकू के समान पैनी और बेधक हो जाती है। फिर चाहे ऐसा करने में उसकी नौकरी चली जाए या बनिए की उधारी। वह सबको खरी-खरी सुनाकर ही दम लेती है।

‘अनारो’ उपन्यास में अनारों में ममत्व से पूर्ण संवेदना भी सर्वोपरि रूप में देखने को मिलती है। वह अपने कर्तव्य को भली-भाँति समझती है। अपने दोनों बच्चों की सभी आवश्यकताओं को करने का प्रयत्न करती है। उसकी ईमानदारी और काम से सब मालकिनें प्रसन्न रहती हैं। इसीलिए उसके कहे का बुरा नहीं मानती हैं। अनारो के लिए प्रायः खाने-पीने का कुछ जुगाड़ भी इन्हीं घरों से हो जाता है और वह भी बिना नाक-भौं सिकोड़े सब कुछ ले लेती है।

इन्हीं विषम परिस्थितियों से गुजरते हुए भी वह आत्मसम्मान के साथ जीती है। अपने कामों का बड़ा हौसला है अनारो में। इसी कार्य के सहारे वह बड़े से बड़े कार्य को समेटती है। चाहे घर सँवारना हो, या अपने बेटे को चपरासी बनाना या घर छोड़े पति को लाना या अपनी बेटी शांति का विवाह करना। वह सारा कार्यों को बहुत ही सहजता एवं हिम्मत से साकार करती है।

स्त्री अस्मिता की पहचान इसी अहं स्वाभिमान और आत्मसम्मान से होती है। इसी भावना की रक्षा के लिए आधुनिक नारी बड़ी कीमत चुकाने को तैयार हो जाती है।

डॉ. पारुकान्त देसाई ने स्त्री-परीक्षा के बहाने स्त्री पर होते हुए अत्याचारों पर टिप्पणी करते हुए कहा -

“सीता का अपहरण ‘दो व्यक्तियों के अहं और वैर-वृत्ति का परिणाम था। एक ने एकाकी बहन की नाक काटी, तो दूसरे ने कुल की नाक काटी, पर दोनों ही घटनाओं में नारी ही अपमानित और लांछित हुई।’ सीता की अप्रि परीक्षा लेने का कोई नैतिक अधिकार राम को न था। अन्ततः वह धरती में समा जाती है। ‘महाभारत’ की द्रौपदी। उसका पति उसे जुए में हार जाता

है। वह दहाड़ती है, चिल्लाती है, भीष्म द्रोणाचार्य जैसे लोगों के पुंसत्व को ललकारती है और अन्ततः उसका प्रतिशोध भी लेती है।”<sup>1</sup>

आज हमारे समक्ष यह प्रश्न उठता है कि सीता को ही धरती में समाना पड़ा, क्यों? उसके सतीत्व पर अंगुली उठाई गई, क्यों? पाण्डवों को जुए में बाजी खेलने के लिए क्या अपनी ही ब्याहता दिखाई? स्त्री की इतनी दयनीय स्थिति इस युग में स्वीकार नहीं की जा सकती। सतीत्व सिर्फ स्त्री का होता है, पुरुष का नहीं? पुरुष परस्त्री से सम्बन्ध बनाए रखे और उसकी ब्याहता कुछ न कहे। इसी विकराल संवेदना को मंजुली जी ने अपने उपन्यासों में रेखांकित किया है, जो खुद की अस्मिता कभी भी किसी के पैरों के नीचे दबी स्वीकार नहीं कर सकती।

आपके उपन्यास ‘अनारो’ की नायिका अनारो भी स्त्री के दबू रूप को स्वीकार नहीं कर सकती। वह पुरुष के पैर की जूती बने रहना नहीं चाहती। अनारो के हृदय की यही संवेदना उसे अपनी मालकिन टीचर से यह कहलवाती है कि जिस तरह इम्तिहान होते हैं, वैसे ही शादी के पाठ पर्व होने चाहिए-

“टीचर को सुझाऊँगी कि जैसे होर-होर बातों के इम्तिहान होते हैं, वैसे ही ब्याह-शादी के भी पाठ पर्व होने चाहिए कि नहीं” जो लडका सारे सवालों के जवाब पास करके डिग्री ले ले, उसी को माँ-बाप अपनी कुँआरी लौंडिया का हाथ सौंपे। होर छोरी की परीक्षा में पर्व हों कि मरद को नशाखोरी, अड्डेबाजी, आवारागर्दी, औरतबाजी, पत्तेबाजी क्योंकर बस में हो? कन्या कुछ तो मरद को समझे-बुझे।<sup>1</sup>

आज स्त्री पूर्णतः सजग सतर्क हो गई हैं। पुरुष प्रधान संस्कृति को वह स्वयं पर हावी होने देना नहीं चाहती। हर सवाल के जवाब देने के लिए वह पूर्णतः सतर्क रहती है। पुरुष अपराध करे तो दण्ड स्त्री भोगे। परीक्षा हो तो वह भी स्त्री की। वह इन सभी शोषण मूलक प्रवृत्तियों का विरोध करती है।

‘तिरछी बीछार’ उपन्यास की नायिका विस्मिता के बीमार होने पर बुंदेलखण्डी स्त्री रोजी उसकी मसाज करने आती है। उसकी बातचीत और आचार-विचार से विस्मिता को एक नई शक्ति मिलती है -

‘जी, बीबी, जब भोर का आसरा न हो कि रात जो पड़ी है, जान सूरज देखे न देखे, तब खूब जी लगता है, पुरवैया सूँघकर जी खुश हो जाता है और डाल पर बैठा तोता भी जी लगाता है। जीत की सौ-सौ बहारें, बीबी!’ मैं अपनी मेहनत-मजूरी की खा रही हूँ, तूझे क्या दुःख दे रही हूँ? बाजुओं में दम है अभी, कहे तो आसमान में पैबंद लगा दें।<sup>1</sup>

आज नारी-मानसिकता की गहरी पहचान और अभिव्यक्ति सक्षमता से की गई है। मंजुली जी के उपन्यासों में स्त्री स्वतंत्र प्रवृत्तियों से अपनी समस्याओं से जूझकर आत्मसम्मान और गौरव प्राप्त करना चाहती है। अपनी चेतना का स्वच्छन्द बहाव चाहती है। इसलिए आत्मनिर्भर रहना चाहती है, और आत्मनिर्भर बनने के लिए हर कार्य करने में सक्षम है। चाहे वह जूँठन साफ करनी हो या सिलाई मशीन में कपड़े सिलना या किसी समचार पत्र में कॉपी राईटर का काम हो। प्रत्येक कार्य को बहुत हिम्मत से करती हुई सफलता की ओर अग्रसर होती है जैसे -

‘महीने की दूसरी तारीख को गंजी बही खाते लेके बैठती..... किनारी-बाँकड़ी, पोत-दाने, सबका दाम चुकाके, खा-पीके भी मोटी रकम की बचत। गंजी ने एक खाता मौहल्ले के बैंक में भी खोल लिया।..... बची पँजूजी से एक दोपहिया स्कूटर खरीद लाई।..... लेसेंस तक मिल गया।’<sup>2</sup>

अब भारतीय नारी केवल भोग्या के अर्थ में नहीं जीना चाहती। उसका सर्वप्रथम और आदर्श रूप एक माता का है। जिससे उसका वजूद बनता है। वह ममता, त्याग, सतीत्व, धैर्य, शौर्य, तेज एवं विशुद्ध जीवन की प्रतीक है। वह अत्यन्त उदार एवं ममतामयी है। मंजुली जी के स्त्री पात्रों में पूर्णतः ममत्व भाव है।

'अनारो' नन्दलाल से झगड़ती है तो सौत की पीटती भी है, परन्तु उसकी उदारता देखते ही बनती है जब वह सौत से कहती है -'इसके साथ रहना है, तो यह भी यहीं रहेगा और तू भी यहीं मर'।<sup>1</sup>

अनारो के ममत्व की चरम सीमा तो तब दिखायी पड़ती है, जब वह छबीली से उत्पन्न अपने पति की संतान को अपने पास लाने के लिए नन्दलाल से कहती है-

'मैं तो यही सोचूँ कि उसे भी यही ले आते। जहाँ चार परानी खाने वाले हैं, वहाँ वह भी सही।' <sup>2</sup>

मंजुल जी ने अपने उपन्यासों में नारी के उस सक्रिय रूप को प्रस्तुत किया है जहाँ वह बिना विवाह किए प्रेमी से संतान उत्पन्न करने का हक माँगती है, (टूटा हुआ इन्द्रधनुष) तो कहीं पराई स्त्री से उत्पन्न संतान पर अपना समस्त ममत्व उड़ेल देती है।

'टूटा हुआ इन्द्रधनुष' की अर्चना संध्या पर संपूर्ण ममत्व उड़ेलती रहती है। यह जानते हुए भी कि उसका पति शोभना का प्रेमी भी है -

'पाँच साल की संध्या, माँ का प्रतिरूप-सी आकर खड़ी हो गई। अर्चना ने लाड़ से उमड़कर उसे सीने से लगा लिया।' 'शोभा, इसे हमें दे दो। अर्चना के स्वर में भावना की छुआन थी।' <sup>3</sup>

बच्चों के प्रति उदासीनता होने पर उन बच्चों की मानसिकता में जकड़न उत्पन्न होती है। इसी संवेदना को एक स्त्री, एक माँ महसूस कर सकती है। इसी कुण्ठा को दूर करने के लिए वह कुछ भी कर सकती है। आपके उपन्यास 'लेडीज क्लब' की श्रीमती खण्डेलवाल अपने परिवार को समय नहीं दे पा रही थीं। जिसके परिणामस्वरूप उनकी बेटी बिल्कुल अकेली हो जाती है। अपनी बेटी की उदासी दूर करने के लिए वह क्लब छोड़ने के लिए तैयार हो जाती है, और अपनी ममता से 'बबली' की काया पलट कर देती है -

'बबली की मोहक प्रसन्न छवि और खण्डेलवाल दंपती का सिग्ध, उष्णता से सगर्व उसके इर्द-गिर्द लिपटा रहना एक नई कहानी कह रहा था। नवकिशोरी बबली में उल्लास और लालित्य छलक पड़ रहा था।' <sup>1</sup>

आधुनिक नारी वैवाहिक संस्कार के साथ सामाजिक तथा धार्मिक बन्धनों को नकारते हुए स्वतंत्र रूप से अपना रास्ता चुनना अपना अधिकार समझती है। नारी ने अपने जीवन में स्वतंत्रता की माँग की है, स्वच्छन्दता की माँग नहीं की है। सदियों से उपेक्षित नारी समाज से सुविधाएँ पाने के लिए संघर्षरत है। वह राजनीतिक और प्रशासनिक सभी क्षेत्रों में पुरुष के शोषण का शिकार हुई भारतीय नारी आज अपनी स्वतंत्र पहचान बनाना चाहती है, और आज के युग में उसने अपनी स्वतंत्र सत्ता स्थापित भी कर ली है। आज वह राष्ट्रपति के पद पर आसीन है, तो चन्द्रमा पर भी जा चुका है। निम्नवर्गीय स्त्री 'अनारो' हो या उच्च वर्गीय स्त्री 'विस्मिता' आज उसने प्रत्येक क्षेत्र में अपनी स्वतंत्र सत्ता स्थापित की है।

महादेवी वर्मा ने नारी की पहचान बताते हुए कहा है - 'नारी की अपनी सत्ता महत्ता रही है। नारी केवल मांस पिण्ड नहीं है। आदिकाल से आज तक विकास पथ पर पुरुष का साथ देकर उसकी यात्रा को झेलकर और अपने वरदानों से जीवन में सक्षम शील भर कर मानवी ने जिस व्यक्तित्व चेतना और हृदय का विकास किया है, उसी का पर्याय नारी है।' <sup>1</sup>

नारी के जीवन में विभिन्न मनोविका, संस्कार, आधुनिक जीवन बोध, क्लेशों, संघर्षशीलता, अभिशप्तता, जीवन के विभिन्न परिवेश में परिवर्तनशीलता में गहरी संवेदना देखने को मिलती है। इन परिस्थितियों को झेलते हुए वह अपना मार्ग प्रशस्त करती है। 'तिरछी बौछार' उपन्यास की नायिका 'विष्णु' विभिन्न परिस्थितियों, आशा-निराशा व कुण्ठा, दबाव से निकलकर अपनी पहचान बनाती है।

'निज अस्तित्व की भाँति समय का मूल्य भी बढ़ गया था। यश और मान का छोटा सा दायरा विष्णु के चारों ओर बन गया था। उस सम्मान से उसके भीतर का व्यक्तित्व कैसा जी उठा था।' 'इंसान के पास यदि कोई भी संपत्ति न हो, न कोई ताला न चाबी, बस एक मुक्त सा अस्तित्व हो, कभी न मर-मिटने वाला, तभी वह भाग्यशाली है।' <sup>2</sup>

आज भारतीय नारी आधुनिक बोध के संघर्ष का मार्ग अपनाकर निरर्थक सामाजिक और नैतिक वर्जनाओं को रौंदती हुई आगे बढ़ने की चेष्टा निरर्थक सामाजिक और नैतिक वर्जनाओं को रौंदती हुई आगे बढ़ने की चेष्टा करती है, परन्तु अपने संस्कारों को रौंदती नहीं है, उसके भीतर की आदिमनारी और उसकी अदम्य जिजीविषा उसे अपनी सत्ता, अपनी पहचान बनाने के लिए उकसाते हैं, और समता और अधिकार की याद दिलाते हैं। जिससे वह अपने व्यक्तित्व का विकास करती है।

मंजुल जी के उपन्यास की नायिका विस्मिता की छटपटाहट के उपरान्त वह अपनी संपूर्ण सत्ता, अपनी पहचान बनाती है। अपने जीवन की विषम

परिस्थितियाँ जिनसे विस्मिता के जीवन में भटकाव और तनाव आता है। उन सभी से जूझती हुई, कुछ कर दिखाती है। श्री निशीथ राय के सम्पर्क में आती है। उनके प्रति आकर्षित होती है। विस्मिता का श्री निशीथ राय के प्रति आकर्षण शारीरिक नहीं था वह आकर्षण उनकी पद, प्रतिष्ठा का था। वहीं पद-प्रतिष्ठा विस्मिता अपने जीवन में लाना चाहती थी।

शब्दों में -

'कितना करीब है आज निशीथ विष्णु के ..... अगर आज उसके पास अपना कहने को होने की पहचान न होती तो मन का शून्य उसे निगल जाता। बढ़ी चलो विष्णु मुस्ठियों में राख लिए इसी पथ पर। आगे, और आगे, चाहे तुम्हारा मन अन्य सभी अनुभूतियों से खाली ही क्यों न हो जाए। यह कर्म की दुनिया है और कर्मकांडी भावनाओं में कैद नहीं रहता।' <sup>1</sup>

नारी की शिक्षा और आत्मनिर्भरता बढ़ने से स्वतंत्र चेतना का विकास हुआ है। पारस्परिक मूल्यों के प्रति विद्रोह की प्रवृत्ति भी काफी बढ़ी है। इस बदलाव के दौर में स्त्री अपने नए सिरे से तलाश कर रही है।

डॉ. ज्योति किरण ने स्त्री के संघर्षधर्म चेतना से बनते-बिगड़ते मूल्य और हाशिये से मुख्यधारा में आने के लिए प्रेरित किया है, आपके अनुसार -

'स्त्री अस्मिता को लेकर बाहरी और भीतरी मोर्चे का संघर्ष लम्बे अरसे तक चला और सामाजिक, साहित्यिक विमर्श का यही कारण है कि समकालीन हिन्दी साहित्य की केन्द्रीय संवेदना कमोबेश स्त्री चेतना ही है। खासतौर में समकालीन हिन्दी उपन्यासों में स्त्री चेतना एवं संघर्ष के कई रूप और हमें दिखते हैं। इसलिए उसका कोई भी सपना और संघर्ष एकाकी और निरर्थक नहीं हो सकता।' <sup>1</sup>

प्राचीन काल की नारी जब सब तरफ से सताई जाकर दुखाभिभूत हो जाती थी तब, सिर्फ उसकी आँखों में आँसू छलकते थे। उन आँसुओं को बहाकर वह अपना मन हल्का करती थी। आज की सदी में नारी को रोना तो दूर, झुकने और हार मानने से भी चिढ़ है। वह निडर होकर बड़ी से बड़ी चुनौती का डटकर सामना करती है। हार नहीं मानती, आशा छोड़कर निराशा के कदमों में नहीं गिरना चाहती। कर्म के सहारे नियति को भी बदल देने का साहस उसमें है। मंजुल जी के उपन्यास में आज की ऐसी ही अद्भूत और जीवन्त नारी है। वह लिखती है, टूटती है, फिर स्वयं को नए सिरे से बटोरकर नए सिरे से संघर्षरत हो जाती है।

परिवर्तित होते स्त्री-पुरुष संबंध :

वर्तमान समाज में नवमूल्यों का निर्माण और मूल्यविघटन दोनों प्रकार की स्थितियाँ एक साथ ही पाई जाती हैं। मंजुल भगत ने अपने उपन्यासों में स्त्री-पुरुष के संबंधों को अलग-अलग दृष्टिकोण से देखा है। साहित्य में एक ओर स्त्री के स्वतंत्र व्यक्तित्व को स्वीकार करके समानता का दर्जा देकर नवीन मूल्य की स्थापना का प्रयास किया जा रहा है तो दूसरी तरफ नारी को भोग्या या उपयोग की दृष्टि से देखते हुए स्त्री-पुरुष सम्बन्धों हासात्मक स्थिति का चित्रण हो रहा है।

पूर्व युग में भी एक पुरुष का अनेक नारियों से सम्बन्ध था और एक नारी अनेक पुरुषों से सम्बन्ध रखती थी। आज भी समाज में यही उदाहरण मिलते हैं, किन्तु रूप, रंग और ढंग बदल चुका है। स्त्री-पुरुष के संबंध के कई रूप देखने को मिलते हैं।

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G. Parthasarathy was the Indian Ambassador to Pakistan. He is a renowned analyst. The terrorist attacks of September 11, 2001 in New York and Washington have had profound implications on developments in India-Pakistan relations. The American led offensive against the Taliban resulted in an end to Taliban rule and the installation of a democratically elected Government headed by President Hamid Karzai in Afghanistan. But, the Taliban, the Al Qaeda and their allies affiliated to the "International Islamic Front" formed by Osama bin Laden in February 1998, retreated into safe havens across the Afghanistan-Pakistan border. They set up base in Baluchistan and the tribal areas (North and South Waziristan) of Pakistan's Northwest Frontier Province. While Pakistan assisted the US and its western allies in tracking down some Al Qaeda leaders, the Taliban leadership was not touched. It has now regrouped and commenced attacking American led NATO forces in Afghanistan's Southern and Eastern Provinces, adjacent to Afghanistan's borders with Pakistan.

One major impact of the removal of the Taliban from power and the passage of UN Security Council Resolution 1363 was the decision by western powers to ban all those organizations affiliated with Osama bin Laden's "International Islamic Front". The organizations that were thus banned included four extremist Islamist groups backed by Pakistan's Inter Services Intelligence (ISI) that were playing a leading role in terrorist violence in Jammu and Kashmir (J&K). The terrorist organizations banned internationally included the Lashkar-e-Taiba, the Harkat-ul-Mujahideen, the Harkat-ul-Jihad ul-Islami and the Jaish-e-Mohammed. While these organizations continue to operate under new names, the Pakistan Government came to realize that mere resort to terrorist violence in an attempt to force India out of J&K was proving counterproductive and that political initiatives had to be undertaken, if the international community was to be persuaded of Pakistan's commitment to ending terrorist violence and normalizing relations with India.

These developments have resulted in a sustained dialogue between India and Pakistan over the past three years, to enhance cooperation and promote confidence. An agreement has been signed on prior notification of missile tests and measures to avoid incidents at sea between the two navies are being finalized. New border routes have been opened for travel between the two countries and travel between the two sides of Jammu and Kashmir between Srinagar and Muzaffarabad has resumed after lapse of nearly half a century. It has been agreed for the first time to promote trade across the LOC in J&K.

Similar travel arrangements are envisaged between Poonch in the Jammu Region and Rawalkot across the LOC. India has proposed further easing of restrictions for travel between the two sides of Jammu and Kashmir by opening bus routes between Kargil and Skardu in the isolated "Northern Areas" of the State. Most importantly, a cease fire across the Line of Control has been observed by both sides since November 2003.

It was in this background that President Musharraf stated that progress could be made in resolving the issue of J&K only if both sides explore mutually acceptable proposals. He has proposed that J&K should be divided into seven different regions, followed by the "demilitarization" of identified regions. He has specifically demanded that Indian forces should be withdrawn from the urban centres of Baramulla, Kupwara and Srinagar. President Musharraf has also advocated "self governance" in J&K without clarifying whether such "self governance" would be equally applicable to areas under Pakistan's control. Finally, he has proposed that there should be a system of "Joint Management" of Jammu and Kashmir by India and Pakistan. While welcoming "new ideas" from President Musharraf, India's Prime Minister Dr. Manmohan Singh has proposed that while borders cannot be changed they can be made "irrelevant" or just "mere lines on a map". He has said that people of both sides of the Line of Control (LOC) in J&K should be allowed to move and trade freely across the LOC.



Responding to General Musharraf's proposal of "Joint Management", Dr. Manmohan Singh has suggested that India and Pakistan should devise "cooperative and consultative mechanisms" to promote cooperation across Jammu and Kashmir.

Discussions between India and Pakistan on these proposals have been taking place in recent months. Measures to resolve the issue of J&K figured prominently for the first time when the Foreign Secretaries of India and Pakistan met in New Delhi in November 2006. New Delhi appears to be ready to discuss General Musharraf's proposal for "selfgovernance" and would be quite prepared to discuss greater devolution of powers and autonomy in a manner under which there is harmonization in the nature and extent of self-governance and devolution of powers on both sides of the LOC in J&K. At the present moment, the State of J&K under Indian Administration enjoys far greater autonomy than the regions of "Azad Kashmir" and the "Northern Areas" under Pakistan's control. Both "Azad Kashmir" and the "Northern Areas" are directly administered by governing "Councils" presided over by the Prime Minister of Pakistan who wields his authority through the Federal Ministry of Kashmir Affairs. Local representatives of these areas have virtually no powers, even in the appointment of Government functionaries.

Given Pakistan's continuing assistance to armed terrorist groups functioning out of Muzzafarabad in "Azad Kashmir" under the banner of a "United Jihad Council" India cannot obviously agree to any proposal for the "demilitarization" of areas it presently governs in J&K.

Moreover, J&K lies on the vital lines of communications to India's western borders with China. Free movement and deployment of India's forces in J&K is, therefore, essential for the security of its frontiers with China. But, should Pakistan effectively ban and disarm groups waging "Jihad" in Jammu and Kashmir from territory under its control, India could consider redeployment and reduction of its forces in J&K, provided Pakistan takes corresponding measures on its side of the LOC, both in "Azad Kashmir" and the "Northern Areas". These are issues that appear to have figured in both formal and informal discussions between India and Pakistan in recent months.

While these "new ideas" for resolving Jammu and Kashmir have figured prominently in

discussions and have been the focus of extensive media attention, one has to inject a sense of caution and realism on the path ahead. President Karzai has made no secret of his conviction that the Musharraf Government is actively aiding, arming, training and providing safe haven for the Taliban on Pakistani territory.

There are, similarly, strong sentiments in India that the Pakistan Government continues to use terrorism as an instrument of State policy to promote its interests and territorial ambitions. The revival of the Taliban has encouraged Pakistan based terrorist groups like the Lashkar e Taiba that the climate is ripe to promote Jihad not merely in Jammu and Kashmir, but in other parts of India also. Further, if borders are indeed to be made "irrelevant" as proposed by Dr. Manmohan Singh then Pakistan will have to remove existing trade and economic restrictions on relations with India and join with other South Asian countries in SAARC to make South Asia and Economic Community for the free movement of goods, services and investment within the next fifteen years. Pakistan appears to be totally averse to moving in this direction.

There is thus a climate of continuing uncertainty about the directions Pakistan's policies will take in coming months. Much will depend on political developments within Pakistan in coming months. Both India and Afghanistan will have to wait and see whether the post-election political scenario in 2007 in Pakistan results in moderate elements opposed to religious extremism taking over the reins of Government, or whether the Islamist elements in the army and in the political set up will retain their hold over the conduct of Pakistan's policies.

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## DEEPIKA

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The scattering of light occurs whenever a beam of light encounters matter. The nuclei and electrons undergo induced vibrations in phase with the incident light wave and act as sources of light which is propagated in all directions, aside from a polarization effect, with the same wavelength as the exciting beam. Light scattering accounts for many natural phenomena, including the colours of the sky and the rainbow, and of most white materials.

**Light Scattering in Gases and Liquids**

Lord Rayleigh applied classical electromagnetic theory to the problem of the scattering of light by the molecules of a gas. He showed that the molecules act as sources of light whose intensity per unit volume of scattering material is  $I$  when observed at a distance  $r$  and at an angle  $\theta$  with respect to the incident beam:

$$\frac{I_{\theta} r^2}{I_0} = R_{\theta} = \frac{2\pi^2 (n-1)^2 I}{\lambda^4 \nu} (1 + \cos^2 \theta) \quad \dots(1.1)$$

Where  $I_0$  is the intensity of the primary beam, and  $n$ ,  $\nu$ , and  $\lambda$  are the refractive index of the gas, the number of scattering particles per cubic centimeter, and the wavelength of the light respectively.

The quantity  $R_{\theta}$ , called the Rayleigh ratio, is often replaced by the turbidity  $\tau$ , the total scattering integrated over all angles:

$$\tau = \int_{\theta} i \theta d\theta. \text{ In the absence of absorption, } \tau$$

is related to the primary beam intensities before and after passing through the scattering medium. If the incident intensity  $I_0$  is reduced to  $I$  in a length  $l$  of sample, then

$$\frac{I}{I_0} = e^{-\tau l} \quad \dots (1.2)$$

For particles small compared to  $\lambda$ ,  $\tau = (8\pi/3)R$  ( $\theta=0$ ),

where

$$\tau = \frac{32\pi^3 (n-1)^2}{3 \lambda^4 \nu} \quad \dots(1.3)$$

The term  $(1 + \cos^2 \theta)$  in Eq. 1.4.1 arises from the fact that light can be propagated only at right angles to the direction of oscillation of the electric moment.

From the number of scattering particles per cubic centimeter,  $\nu$ , either the molecular weight of the gas or Avogadro's number,  $N_0$ , may be calculated if the other is known.

In Rayleigh's treatment it was assumed that each particle scattered as a point source is independent of all others. This is equivalent to assuming that the relative positions of the particles are random. In liquids this is not the case, and the scattered light intensity is reduced about fifty fold because of destructive interference of the light scattered from different particles. In the calculation of scattered intensity in liquids, the scattering is considered due to local thermal fluctuation in density which make the liquid optically

inhomogeneous. The fluctuations in the density can be related to the compressibility 'k' of the liquid by comparing the thermal energy per mole RT with the work required to cause a change in density through the application of a hydrostatic pressure:

$$\tau = \frac{8}{3} \frac{\pi^3}{\lambda^4} (n^2 - 1)^2 RT k \dots (1.4)$$

**Light Scattering from Solution of Particles**

**Small Compared to the Wavelength**

In solutions and in mixtures of liquids, additional light scattering arises from irregular changes in density and refractive index due to fluctuations in composition. Debye [60,61] calculated the effect of these fluctuations, relating them to the change in concentration 'c' associated with the osmotic pressure per mole

of solute: 
$$\tau = \frac{32}{3} \frac{\pi^3}{\lambda^4} \frac{RT_c}{N_o} \left( n \frac{dn}{dc} \right)^2 \bigg/ \left( \frac{d\pi}{dc} \right)$$
  
 ....(1.5)

Inserting the relation between osmotic pressure and molecular weight yields the Debye equation:

$$K \frac{c}{R_{90}} = H \frac{c}{\tau} = \frac{1}{M} + 2A_2c + \dots \dots \dots (1.6)$$

where

$$K = \frac{2\pi^2 n^2}{N_o \lambda^4} \left( \frac{dn}{dc} \right)^2$$

and 
$$H = \frac{32\pi^3 n^2}{3N_o \lambda^4} \left( \frac{dn}{dc} \right)^2$$

Eqn. 1.6 forms the basis of the determination of polymer molecular weights by light scattering. Beyond the measurement of  $\tau$  or  $R_{90}$ , only the refractive index 'n' and the specific refractive increment  $dn/dc$  require experimental determination. The latter quantity is a constant for a given polymer solvent, and temperature, and is measured with an interferometer or a differential refractometer or in the analytical ultracentrifuge.

Eqn. 1.6 is correct only for vertically polarized incident light and for optically isotropic particles. The use of unpolarized requires that  $\tau$  be multiplied by  $1+\cos^2\theta$ , whether polarized or unpolarized light is used, the scattered intensity is symmetrical about the angle of observation  $90^\circ$ . If the scattering particles are anisotropic, a correction for depolarization is required.

**WEIGHT-AVERAGE MOLECULAR WEIGHT**

In the derivation of Eqn. 1.6 it is shown that the amplitude of scattered light is proportional to the polarizability and hence to the mass of the scattering particle. Thus the intensity of scattering is proportional to the square of the particle mass. If the solute is polydisperse, the heavier molecules contribute more to the scattering than the light ones. The total scattering at zero concentration is

$$\tau = \sum_{i=1}^{\infty} \tau_i = H \sum_{i=1}^{\infty} C_i M_i = Hc \overline{M}_w \dots \dots (1.7)$$

Defining the weight average molecular weight according to any of the relationships

$$\overline{M}_w = \frac{\sum_{i=1}^{\infty} C_i M_i}{C} = \frac{\sum_{i=1}^{\infty} W_i M_i}{\sum_{i=1}^{\infty} N_i M_i} \dots \dots (1.8)$$

Here  $w_i$  is the weight fraction, and

$$C = \sum_{i=1}^{\infty} C_i$$

As in the corresponding definition of number-average molecular weight.

The significance of the weight and number average molecular weights is noteworthy.  $\bar{M}_w$  is always greater than  $\bar{M}_n$  except for a monodisperse system. The ratio  $\bar{M}_w/\bar{M}_n$  is a measure of the polydispersity of the system.  $\bar{M}_w$  is particularly sensitive to the presence of high-molecular weight species, whereas  $\bar{M}_n$  is influenced more by species at the lower end of the molecular weight distribution: if equal weights of molecules with  $\bar{M}=10,000$  and  $\bar{M}=100,000$  are mixed,  $\bar{M}_w=55,000$  and  $\bar{M}_n=18,200$ ; if equal numbers of each kind of molecule are mixed,  $\bar{M}_w=92,000$  and  $\bar{M}_n=55,000$ .

### LIGHT SCATTERING IN SOLUTIONS OF LARGER PARTICLES

When the size of a scattering particle exceeds about  $\lambda/20$ , different parts of the particle are exposed to incident light of different amplitude and phase. The scattered light is made up of waves coming from different parts of the particle and interfering with one another. The general solution describing the distribution of scattered light for large particles is complex and has been solved only for the case of a homogeneous sphere. However, an approximate solution applies to most polymer systems. In this treatment, the intensity of light scattered from the elements making up the particle is shown to be proportional to

$$\sum \sum \left[ \sin \left( \frac{4\pi r}{\lambda_s} \sin \frac{\theta}{2} \right) / \left( \frac{4\pi r}{\lambda_s} \sin \frac{\theta}{2} \right) \right]$$

Where  $\lambda_s = \lambda/n$  is the wavelength of light in the medium of refractive index 'n', and the double summation is carried out over all pairs of

scattering elements separated by a distance 'r'. For spherical particles, the scattering elements are symmetrically distributed, and the radial density function of Eqn. 1.9 is a constant. Solution of the integral from Eqn. 1.9 leads to the following equation for the intensity of scattered light  $P(\theta)$ .

$$p(\theta) = \left[ \left( \frac{3}{u^3} \right) (\sin u - u \cos u) \right]^2$$

...(1.10)

where

$$u = 2\pi \left( \frac{d}{\lambda_s} \right) \sin \theta / 2$$

and 'd' is the diameter of the spheres.

for an monodisperse system of randomly colling polymers the radial density function is the Gaussian distribution and the intensity of Scattering is given (Debye) by

$$p(\theta) = \left( \frac{2}{v^2} \right) (e^{-v} - (1-v))^2$$

$$\text{where } v = (16\pi^2) \left( \frac{\bar{S}^2}{\lambda_s^2} \right) \sin^2 \frac{\theta}{2}$$

And  $\bar{S}^2$  is the mean square radius of gyration of the molecule. Similar functions can be derived for other models, such as rods and discs. It can be seen from the curves that the scattered intensity is greater in the forward than in the backward direction, falling off smoothly with angle except for rather large spheres. It is sometimes convenient to characterize the size of the scattering particles by the dissymmetry of light scattering,  $z = I_{45}^0 / I_{135}^0$  measured at two angles symmetrical about  $90^\circ$ . The dissymmetry increases rapidly with increasing particle size.

**MOLECULAR WEIGHT DETERMINATION FROM LIGHT SCATTERING IN SOLUTIONS OF LARGER PARTICLES.**

Eqn. 1.6 is derived with the assumption that the scattering particles are small compared to  $\lambda$ . If this is not true, dissymmetry of scattering exists, and the turbidity of the solution is reduced by the interference between waves from different parts of the same particle. This effect is taken into account by modifying Eqn. 1.6 to read

$$K \frac{c}{R_{90}} = H \frac{c}{\tau} = \frac{1}{M_w P(\theta)} + 2A_2c + \dots \dots \dots$$

.....(1.12)

where M is replaced by  $\overline{M}_w$  for application to polydisperse systems. It has been shown that a z-average dimension is obtained from  $p(\theta)$  for polydisperse systems. In more common current use is zimm's method [68,69] in which the left hand side of Eqn. 1.12 is plotted (zimm plot) against  $\sin^2\theta/2+kc$ , where 'k' is an arbitrary constant. A rectilinear grid results allowing extrapolation to both  $c=0$  and  $\theta=0$  where  $P(\theta)=1$ .

**PARTICLE SIZE MEASUREMENTS**

One obtains the value of  $Z=I_{45}^0/I_{135}^0$  or  $I_{60}^0/I_{120}^0$  by determining the excess scattered intensity of light at  $45^0$  and  $135^0$  or any two angles symmetrical about  $90^0$ .

The experimental values of  $[Z]_c \rightarrow Z=I_{45}/I_{135}$  are used to obtain the corresponding values of  $\langle \overline{r}^2 \rangle^{1/2} / \lambda$ , vs.  $[Z]_c \rightarrow 0$  where  $\lambda$  is the wavelength of the incident light in the medium is graphical one. The plots (Fig. A.1 and A.2) are obviously different for monodisperse and polydisperse systems. Since  $\lambda$  is known, it is easy to determine the value of  $\langle \overline{r}^2 \rangle^{1/2}$ . To obtain the experimental value of  $\langle \overline{r}_0^2 \rangle^{1/2}$  the usual method in vogue is to obtain the value of  $\langle \overline{r}_0^2 \rangle^{1/2}$  by the following methods:

**DETERMINATION OF  $\langle \overline{r}^2 \rangle^{1/2}$  AT T =  $\theta$**

It is possible in several cases to obtain the value of  $\langle \overline{r}_0^2 \rangle^{1/2}$  by determining the dissymmetry  $[z]_c \rightarrow 0$  at the  $\theta$  temperature.

**DETERMINATION OF  $\langle \overline{r}^2 \rangle^{1/2}$  IN MOLTEN STATE**

In some systems which are comparatively stable in molten state, it is possible in principle the value of  $\langle \overline{r}^2 \rangle^{1/2}$  from the light scattering data. However, it may be mentioned, that the technique often yields the dimensions of the unmolten microcrystalline structures which

contribute significantly towards the dissymmetry of the scattered envelope.

Polydisperse Coils Z (I(45)/I(135) Vs.  $1/P_{\theta}$

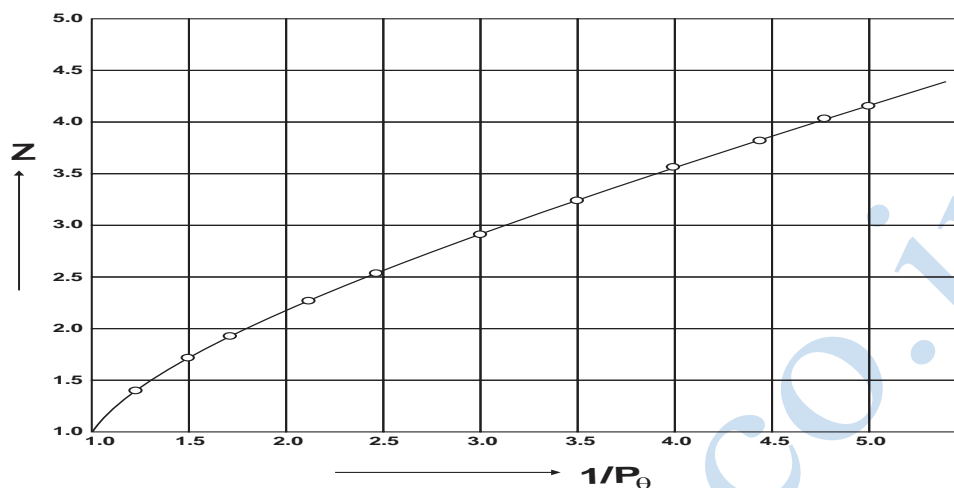


Fig. A.1

Polydisperse Coils Plot of  $D/\lambda$  Vs Z (I<sub>45</sub>/I<sub>135</sub>)

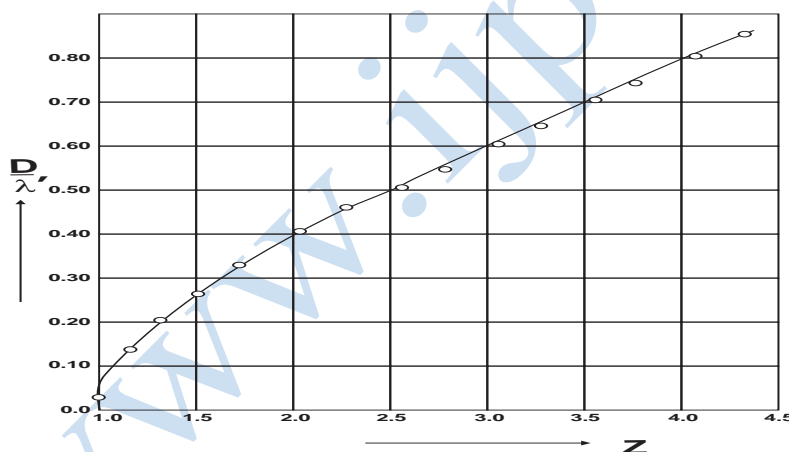


Fig. A.2

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## PRESERVATION OF DOCUMENTS IN DIGITAL ENVIRONMENT: ISSUES AND STRATEGIES

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### ABSTRACT:

*Information Technology has given new measurement to the advanced society .It has given new methods of studies, coordinating getting to, spreading and imparting data to the clients of the equivalent. Anyway the extraordinary effect appears to have been made on present day library. Computerized libraries have been assembled everywhere on the world. Libraries are occupied with making and keeping up advanced libraries. One of the principle challenges in keeping up computerized libraries is the advanced safeguarding viewpoint. The point of advanced protection is to guarantee that computerized records are documented and are made accessible through time. Advanced data conservation is consistently the considering library and data society. Protection of advanced record has now become more self-evident and vital due to delicacy of computerized information and programming and equipment stages getting soon outdated. The issue of safeguarding is additionally convoluted by the quick oldness of the equipment and programming needed to decipher and introduce computerized reports. The paper features on need in safeguarding the computerized structure, techniques identified with conservation, innovations and rules for advanced protections..*

*Keywords: Digital preservation, Preservation issues, Preservation strategies*

### INTRODUCTION:

Library assume vital part in any foundation .These aides in enhancing. Libraries are to procure, put together, stockpiling and recovery of data absent a lot of loss of season of the clients and the library staff. What's more, keep harmony with information blast, we need to utilize electronic frameworks, for example, PCs diminishing the hour of nanosecond s .All the while; it additionally benefits the motivation behind proficiency and exactness. It's anything but over-accentuating that utilization of data innovation in the field of library and data science had its own and extraordinary importance and significance and can assume a crucial part delivering administrations all the more effectively, precisely and deliberately. Further to meet monetary emergencies which pretty much every library is confronting nowadays, systems administration of libraries can doubtlessly be seen has asset sharing through these strategies. Library mechanization what began in late 70s in barely any uncommon libraries .It is yet to take off in various school libraries in India attributable to different issues. There have been numerous improvements in libraries in a nearly brief timeframe because of utilizing PC framework. Furthermore, this may just be the beginning of a revolution..Time spent on preparing proposal slip was diminished by 30% utilizing robotized framework. Significant information and printout can be delivered which should prompt a decrease in administrative time and empower as per be done consequently. Library mechanization

started in the late 1970 in a couple of exceptional libraries and has now reached the greater part of the college libraries. It has yet additionally taken off in arrangement and organization in India inferable from different issues.

Numerous examinations on library mechanization have been embraced in India. pace of progress in PC innovation shows that data can be difficult to reach inside 10 years, Safeguarding is thusly a quick issue for computerized assets than for conventional. Computerized assets will require Favorable to dynamic Conservation. Advanced Protection is characterized as Long haul, mistake free stockpiling of Computerized data, with implies for recovery and understanding for the whole interval of time that the data is needed for Digitization alludes to the change of non-advanced material to advanced structure (for example a structure which utilizes a double mathematical code to address factors). As per a new assertion from the gathering on library and data assets "Advanced Conservation alludes to the different techniques for keeping computerized materials alive into what's to come". Advanced protection regularly focuses on the decision of between time stockpiling media the future of a computerized imaging framework, and the assumption to relocate the computerized documents to future frameworks while keeping up both the full usefulness and the trustworthiness of the first advanced framework. The objective of computerized conservation is to keep up the capacity to show, recover and utilize

advanced assortments even with quickly changing innovative hierarchical infra constructions and components. In the advanced period, Protection is the formation of computerized items worth keeping up over the long run.

Reference book of Information Technology characterizes the term advanced safeguarding as "The way toward keeping up, in a condition appropriate for use, materials created in computerized designs. Issues of actual safeguarding are compounded by the out of date quality of PC hardware. Programming and capacity media additionally alludes to the act of advanced configurations (print, film and so on) to for stall lasting misfortune because of weakening of the two actual medium.

As per the TDR (Trusted Digital Repository) it is the exercises into those that advance the drawn out support of a piece stream (the 0s and 1s) and those that give proceeded with openness of its substance.

### Meaning of Digital Library

The term digital library is presently generally acknowledged to mean the utilization of advanced innovation in the arrangement of library administrations and activities, which incorporate obtaining, association, stockpiling, preservation and dispersal of data to clients. Digital libraries are as yet advancing and coming to fruition. On occasion the term computerized is utilized conversely with electronic and virtual. The Advanced Library League characterizes a digital library as: Associations that give the assets, including the specific staff, to choose, structure, offer scholarly admittance to, decipher, disseminate, safeguard the trustworthiness of, and guarantee the tirelessness over the long haul of assortments of digital works so they are promptly and financially accessible for use by a characterized local area or set of networks

The word 'Digital Library' is presently often utilized by the school libraries and data focuses. Various expressions like electronic library, virtual library, library without dividers and computerized library have been utilized conversely to portray this expansive idea. Digital Library' is the most current and generally acknowledged term, which is presently utilized only at meetings, on the web and in the writing. Cleveland has gives the accompanying working meaning of advanced library. "Computerized libraries will be libraries with same purposes, capacities and objectives as customary libraries-assortment advancement and the executives, subject investigation, list creation,

arrangement of access, reference work, and protection. A limited spotlight on computerized designs alone conceals the broad in the background work that libraries do to create and put together assortments and to help clients discover data."

The establishments engaged with the American Digital Library' alliance concocted a comparable idea of computerized library.

**Digital Collection:** The accomplishment of computerized library relies to a great extent upon the nature, substance and nature of its computerized assortments. The fundamental necessity in making computerized library will be the structure of advanced assortments. The computerized assortment of data incorporates different assets like electronic diaries, books, full content, CDROM information bases and so on The advantages of data assortments in computerized structure for protection, access and overseeing enormous amounts of advanced structure for conservation, access and overseeing huge amounts of data have been perceived by both library experts just as clients.

**Change of Information:** The essential strategy for building advanced assortments is digitization. Digitization implies change of any fixed or simple media-like books, diaries articles, photographs, painting, microforms-into electronic structure through checking, examining or taint in any event, rekeying. It is the formation of computerized assortment of data with media highlights and subsequently offering quicker and simple admittance to huge number of clients. Elevating admittance to data assets is a significant main thrust for digitization of records. Digitization gives answers for conventional library issues like protection, conservation, extra room, sight and sound reports and distant admittance to data assortments.

**New Dimensions and Scope:** Computerized libraries offer new elements of simple admittance to their assets when data materials are in advanced structure and put away electronically on computerized media, they can be utilized and re-utilized for any reasonable reason. They can be recovered effectively to answer a data enquiry used to make mixed media applications, or utilized for asset partaking in either an organization climate or for electronic distributing on the web, or the Internet. However long the assets are in advanced structure whether or not they are still pictures, video or sound-and are on a web worker, one can utilization of media and the information on the pilot grant the conveyance

of public and global data to clients at their work area. In this sort of climate, printed data sources like books, diaries, documented material can't meet an exceptionally aggressive innovation. The computerized data sources become fundamental. Advanced libraries can store enormous volume of data in computerized structure for documented administration. It furnishes clients with quick admittance to the quickly developing data put away in advanced structure. It gives clients quick admittance to mixed media data rapidly and intuitively through the incorporation of advances. It offers far off admittance to costly and unique assortment of data from numerous areas by numerous concurrent clients. Assurance of old, uncommon and exceptional records for any kind of future family is a significant capacity of any library. Paper crumbling and life outcomes are significant danger to report held in libraries. The objective of dispersed advanced library's (Bunzel 1997) review digitization is "to make research material accessible in computerized structure, which from one viewpoint is earnestly required by explores and then again is uncommon, important or difficult to get their customary paper based structure." A considerable lot of the books distributed in the nineteenth century and in the main decade of the twentieth century are presented to annihilation through corrosive segments of paper. The digitization of those assortments is the saving answer for battle against the corrosive paper rot.

## **DIGITAL LIBRARY FEATURES:**

Computerized libraries give admittance to different sorts of data assets that may live on various workers all throughout the planet, and thus foundation, interoperability, etc, are extremely basic issues in advanced library improvement and the executives.

- Digital libraries may contain an assortment of advanced data assets going from text to picture, sound and video.
- Ability to oblige multi-lingual substance. Cross-language data recovery is conceivable.
- It is an Omni present library. Client can get to the library even from uttermost regions.
- Information in an electronic/digitized design: Numerous clients can access at a time and at any time.

- Digital library has the ability to catch impressive measure of data in a significantly more modest space.
- It diminishes the delay in recovering the reports.
- Digital libraries break times space and language obstructions. Preferably, clients from anyplace on the planet ought to have the option to utilize a computerized library whenever and perhaps in any language.
- Digital data can be seen and utilized by various individuals as indicated by their individual requirements.
- Digital libraries ought to take into consideration better looking and recovery offices.
- Digital libraries to a great extent diminish the requirement for the actual space needed for building and keeping up conventional libraries.
- Digital libraries surmise the shortfall of human delegates, and consequently proper systems ought to be set up to help clients with every one of its various degrees, subject and etymological abilities.
- Digital libraries ought to take into account better looking and recovery offices.
- Digital data can be seen and utilized by various individuals as indicated by their individual necessities.

## **DIGITAL PRESERVATION:**

Preservation itself is essentially worried about the endurance of data in a usable structure however long it is required. Safeguarding isn't simply worried about the protection or rebuilding of actual curios, however incorporates the entirety of the key and association contemplations that identify with the endurance of data after some time. Preservation anything past information implies that we likewise need to save different things: the correspondence of the data, the setting of the report, the uprightness of the record, and the worth of the documents. Protection incorporates a wide assortment of interrelated exercises, like strategies, standard, methods, measure, and so on intended to draw out the usable existence of human curios. Preservation will not occur normally. Basically, safeguarding is expensive and takes a ton of time and exertion. Conservation is a consistent commitment. While

data generally accessible on paper has been put away for millennia there is a dread that advanced data is at risk for being lost inside many years. Computerized Preservation can be viewed as the arrangement of cycles and exercises that guarantee data which presently exists in advanced organizations is supported up and dispersed to guarantee proceeded with access as long as possible. Progressively the data that help learning, grant and exploration—its crude materials and items—is made in and provisioned by computerized frameworks in advanced structure. The computerized protection field is worried about keeping up the availability of that data over the long run and advanced safeguarding administrations endeavor to bring down the danger of that data getting essentially difficult to reach. "Advanced conservation is a cycle of guaranteeing that a computerized object is open over the long haul" As per

**According to Glossary of LIFE**“ Digital preservation encompasses a broad range of activities designed to extend the usable life of machine—readable computer files and protect them from media failure, physical loss and obsolescence”.

## ISSUES OF DIGITAL LIBRARY PRESERVATION:

**Digital Obsolescence:** It's anything but a circumstance where an advanced asset is not, at this point coherent in light of the fact that the physical media, the peruser needed to peruse the media, the equipment or the product and document design that sudden spikes in demand for it, is not, at this point accessible. The quick development of various types of equipment, methods of computerized encoding, working frameworks, general or concentrated programming and document design guarantees that advanced oldness will turn into an issue later on. Here a portion of the central issues with respect to computerized out of date quality are given roar:

**File formats and software :** Decide the record design status of your computerized property. What arrangements and adaptations are addressed, in what amounts? Such a stock is a significant advance towards overseeing record design hazard. The scope of configurations being used ought to be solidified to limit duplication and dispose of issue designs. This cycle is known as standardization.

**Hardware::** New registering equipment makes the way for better than ever programming, prompting programming and record design

oldness. The new programming won't run on old equipment, further fueling equipment oldness. Simultaneously, the new equipment presents other new advances like fringe associations and capacity gadgets (e.g., USB keys, pen drives and Compact disc drives supplant floppy circles). These progressions power more seasoned peripherals into retirements alongside their viable PCs.

**Media design:** There are three regularly utilized classes of advanced stockpiling media: circle, tape and strong state. The idea of the physical media on which advanced information is put away presents a significant test to the conservation of computerized content. The extraordinary assortment of media types, their regularly fast outdated nature from innovation from innovation change, and their weakness to Actual debasement all add to issues.

**Physical Degradation:** Other than the issues around out of date quality of record designs, applications, working frameworks and equipment, there is the more fundamental inquiry of how to manage the way that media genuinely corrupt or get out of date. How long will different media types last. Proposal impressive contention around the issues with Kodak claiming in one report that its writable Disc's would most recent 217 years under specific conditions while others see that such media begin to debase a few years. Rothenberg gauges that optical media have a viable lifetime of 5 to 59 years, computerized tape 2 to 30 yrs and attractive plate 5 to 10 yrs. There is only one issue with such gauges however they're all scholarly, on the grounds that, with the high speed of progress in the IT business, some random medium will be old in around five years. Regardless of whether it proceeds to capacities, present day equipment will be unable to peruse its substance or even interface with it.

"Computerized data keeps going forever or even five years, which at any point starts things out," Rothenberg joked. That implies any association that needs to keep its information open should anticipate a whole chain of movements inside a period cycle adequately short to forestall the media from getting genuinely incoherent or out of date before they are replicated. "A solitary break in this chain can deliver advanced data blocked off shy of gallant exertion," Rothenberg composed.

**Physical threats:** Computerized stockpiling media and equipment are dependent upon various inward and outside powers that can harm or annihilate their meaningfulness.

- Material unsteadiness
- Improper stockpiling climate (temperature, dampness, light, dust)
- Overuse (mainly for actual contact media)
- Natural catastrophe (fire, flood, tremor)
- Infrastructure disappointment (Plumbing, electrical, environment control)
- Inadequate equipment support
- Hardware glitch,
- Human mistake (counting inappropriate taking care of)
- Sabotage (robbery, defacing)

**Storage issues:** Inappropriate capacity might be the most widely recognized justification untimely media disappointment. Balance of temperature and dampness are notable to expand the usable existence of most stockpiling media, yet numerous different components can help, as well.

**Handling issues:** Another significant danger to capacity media come structure inappropriate taking care of. In spite of the fact that numerous advanced media give the impression of toughness and sturdiness, they can be harmed by too relaxed a way to deal with use.

## DIGITAL STRATEGIES:

Preservation strategies in scholarly and research libraries are not new ideas. Nonetheless, with an expanding measure of advanced substance, associations need to adapt to another arrangement of protection issues.

Computerized protection is in its earliest stages worldwide and presents some troublesome mechanical issues. Since the formation of advanced media, over various capacity mediums have been concocted going from attractive tape to Cd Rom. Every one of these mediums presents their very own assortment safeguarding issues and furthermore requires a different scope of innovation which much of the time is not, at this point made. Moreover, there are a great many various configurations wherein information can be put away on every medium; and each sort of capacity arrangement may likewise require a particular piece of programming to decipher the information's significance.

- There are a few methodologies for safeguarding as referenced underneath:
- Technological protection (with the first equipment and programming on which it depends)

- Refreshing
- Intellectual Safeguarding: Printing of computerized materials into a printed version. In any case, this methodology doesn't appear to be a suitable arrangement.
- Data Movement: information is moved discount from one equipment/programming arrangement to another, without endeavoring to emulate the first.
- Simulation: (the first/programming climate).

In the advanced world, then, at that point, the main errand is to recognize the different parts of a work that should be safeguarded. Then, to prevail in the conservation of advanced items, protection measures should guarantee that whatever number of these viewpoints as could be expected under the circumstances continue additional time. In safeguarding computerized objects, we intend to:

Numerous advanced safeguarding procedures have been proposed, however nobody system is suitable for all information types, circumstances, or establishments.

**Bit stream copying:** Bit stream copying is more commonly known as "backing up your data," and refers to the process of making an exact duplicate of a digital object.

**Refreshing:** Refreshing means copying information without changing it, offers a short-term solution for preserving access to digital material by ensuring that information is stored on newer media before the old media deteriorates beyond the point at which the information can be retrieved.

**Durable/ Persistent Media:** It may reduce the need for refreshing, and help diminish losses from media deterioration, as do careful handling, controlled temperature and humidity, and proper storage. Durable media has the potential for endangering content by providing a false sense of security. (i.e., Gold CDs).

**Technology Preservation:** technology preservation is based on preserving the technical environment that runs the systems. Including operating systems, original application software and media drives. It is sometimes called the "computer museum" solution maintaining obsolete technology in usable form requires a considerable investment in equipment and personnel.

**Digital Archaeology:** Includes methods and procedure to rescue content from damaged

media or from obsolete or damaged hardware and software environments. Given enough money, readable bit streams can be often be recovered even from heavily damaged media (especially Magnetic media), but if the content is old enough, it may not be possible to make it render able and/ or understandable.

**Analog Backups:** Analog backup combines the conversion of digital objects into analog form with the use of durable analog media, e.g. HD Rosetta or the creation of silver halide microfilm from digital images. Text and monochromatic still images are the most amenable to this kind of transfer. Given the cost and limitations of analog backups, and their relevance to only certain classes of documents, the technique only makes sense for documents whose contents merit the highest level of redundancy and protection from loss.

**Migration:** Migration means to copy data, or convert data, from one technology to another, whether hardware or software, preserving the essential characteristics of the data, the purpose of migration is to preserve the integrity of digital objects and to retain the ability for clients to retrieve, display, and otherwise use them in the face of constantly changing technology.

**Replication:** The term is used to mean multiple things. Bit stream copying is a form of replication. OAS (Open Access System) considers replication to be a form of migration.

**Reliance on standards:** Reliance on standard may lessen the immediate threat to a digital document from obsolescence, but it is no more a permanent preservation solution than the use of Gold CD or stone tablets.

**Normalization:** Normalization converted into a single chosen file format that is thought to embody the best overall compromise amongst characteristics such as functionality, longevity, and resolvability. The advantages and disadvantages of reliance on standards also apply to normalization.

**Canonicalization:** Canonicalization is a technique designed to allow determination of whether the essential characteristics of a document have remained intact through a conversion form one format to another.

**Emulation:** Combines software and hardware to reproduce in all essential characteristics the performance of another computer of a different design, allowing programs or media designed for a particular environment to operate in a different, usually newer environment. Emulation requires the creation of emulators, programs that translate

code and instructions form one computing environment so it can be properly executed in another.

**Encapsulation:** Encapsulation may be seen as a technique of grouping together a digital object and metadata necessary to provide access to that object appropriate types of metadata to encapsulate with a digital object include reference, representation, provenance, fixity and context information. Encapsulation is considered a key element of emulation.

**Universal Virtual Computer (UVC):** The concept of Universal Virtual computer was developed by Raymond Lorie. It uses elements of both migration and emulation which allows digital objects to be reconstituted in their original form. The UVC concept consists of the UVC itself, a logical data scheme with type description, the UVC program (format decoder) and the logical data viewer.

**Authenticity:** The quality of being reliable or trust worthy.

**Fixity:** The state or quality of being fixed or unchanged.

**Compression:** Compression can be applied to many different kinds of digital objects, and can be either lossless. Lossless compression is fully reversible, so when a file is decompressed, it is bit for bit identical to its original. Lossless compression is always used for encoded text and may be used for images sound, video, etc., depending on considerations such as bandwidth, quality, and storage requirements.

**Integrity of Objects:** A book is a book, or it exists in a set, but what are the boundaries of a document in a hypertext environment. The boundaries of digital objects are less clear, especially if they are compound objects created by assembling different media or by linking to resources from around a network.

**Physical Preservation:** The physical presence in this case refers to the computer file, the series of "1's and "0" that are the basis of digital objects.

**Content Preservation:** This aspect refers to maintaining the ability to access the content at its lowest level, such as ASCII text, without the embellishments of font's variations and layout features.

**Presentation Format:** Content is typically rendered in some presentation format or layout that includes different font faces and sizes, the use of white space, columns, marginalia, headers, footers, pagination, and so on. In many types of digital documents (e.g., SGML, XML, and some forms of PDF), the layout specifications are

separate from the content. To retain the original look of a document, these layout specifications must also be preserved, especially when they contribute significantly to the understanding and interpretation of the content.

**Functionality:** Digital objects have a functionality that goes far beyond traditional paper documents. They can contain multimedia components (i.e., text, graphics, audio, and video), exist in hypertext format.

**Authenticity:** An individual accessing the object must be able to verify that it is the one s/he wants, and that the transformations to keep it accessible have preserved its original form. Thus, activities to guard authenticity include securing digital objects against unauthorized changes and monitoring digital objects through multiple “copying” cycles to ensure that each copy is an acceptable re edition on the original Establishing authoritative depositories would also help achieve this goal.

**Location and Reference:** Digital objects can be readily altered, copied or moved. An individual must be able to match a citation to a digital object, and to distinguish it from other versions or editions.

**Provenance:** Provenance is an archival concept that asserts the origin and chain of custody of an object and contributes to defining it as a whole. Imprint statements and bookplates, for example, partly fill this role for formally published items. Establishing an object’s origin and history help confirm that the work is authentic and its content are intact.

**Preserve context:** Digital objects are partly defined by their hardware and software dependencies, their mode of distribution and linkages to other digital objects. Preserving digital objects may mean weaning them from some technical dependencies, changing the mode of distribution, and deactivating links. In these circumstances, preserving context is a particular challenge.

#### CONCLUSION:

Preservation of digital material has become a major challenge for the library and information profession these days. Although libraries have been concerned with preserving cultural and intellectual heritage for centuries, it is only in recent years that preservation conservation has become activities in their own right. Academic Libraries and archival information’s have a unique opportunity in the area of digital preservation. In ensuring persistent access to digital heritage, the complementary processes of

archiving and preservation are intertwined. The dynamic and ephemeral nature of digital publications presents a special challenge for archiving. In addition, rapid changes in technology means that documents created in current formats, may be obsolete and inaccessible within a decade the facility with which electronic documents may be reproduced means that intellectual property rights issues also need to be addressed before materials can be copied. Once electronic records have been collected, archival repositories also require appropriate infrastructures to enable storage, maintenance and access over the long term.

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IMPLIED CONDITIONS OF THE MERCHANTABLE QUALITY OF  
GOODS



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The Act does not define the word 'merchantable'. Yet the word has, by long use, become a term of art in commercial law. "Seller who deals in goods of that description" like Clause (1) of section 16, clause (2) also applies to the goods sold by description. It will not be out of place to mention that for the goods to be sold by description, it is not essential that they may be unseen by the buyer. A sale across the counter may amount to that. Ram Chandra Iyer J. in National Traders Vs. Hindustan Soap Works observed that the provisions of section 16 (2) do not only apply to unascertained or future goods but they equally extend to specific goods for the reason that this sub-section contemplates possibility of the goods being examined before sale. Which regard to construing sale of goods by description, a discussion has already taken place and it has been observed that the Court of Appeal in Ashington Piggeries Vs. Christopher Hill placed a narrow construction.

It may be noticed that although Section 15 refers to goods sold by description, section 16 (2) deals with the situation arising out of goods being bought by description. There is hardly any difference between two differently phrased provisions, as will be seen in the light of a number of cases decided in India.

**MEANING AND DEFINITION OF MERCHANTABLE QUALITY**

"Merchantable Quality" is a significant term under the Sale of Goods Act, 1893, and The Indian Sale of Goods Act 1930, but have not been defined by the both acts before the Supply of Goods (Implied Terms) Act, 1973, as a result there of it was subject to a number of puzzling and perplexing interpretations as will be discerned while through a number of decisions. The interpretations given to the term are not satisfactory. Prof. L. Lewelly has said that there is no more puzzling question that what "Merchantable" means under, the Sale Act. Certainly, it has meant a variety of things; but an array of several hundred cases reasonably consistent in this approach.

Though the supra Act of 1973 has provided a definition of the term 'Merchantable Quality' yet is so general that no tangible results are likely to be achieved out of it. This heading makes an attempt to high light this unsatisfactory state of affairs and offers a suggestion to adopt the definition provided by the Uniform Commercial Code with certain modifications.

Quality includes the state or condition of the goods Merchantable extends to the labels or package in which the goods are contained

The meaning of the term was subject to comprehensive review in the case of Summer Permain Co. Vs. Webb & C The Court of Appeal ultimately come to the conclusion that it simply meant that the goods comply with the description. it was also held that the merchantability does not mean that there is a legal right to sell in any particular country.

Outer appearance is not sufficient to make the goods. Merchantable, if they suffer from some latent defect, not apparent on ordinary examination. Merchantable quality does not mean, in absence of notice that the goods will be alright for an abnormally sensitive or allergic man. If these goods have defect affecting its appearance, rather than working, the goods may still be unmerchantable. A purchaser was justified in rejecting an article for want of merchantability even something very small was required to put it alright repairable, unless the rule of "*de minimis non curat lex*" applies

Lord Wright in Cammel Laird Vs. Manganese Bronzo and Brass Co. Ltd. observed that the goods were merchantable unless they were "Of no use" for any purpose for which such goods would normally be used. Havers J. in Hardwick Game Farm Vs. Suffolk Agricultural & Poultry Producer's Association Ltd. followed this test of merchantability and said :

"I cannot find that the meal in the form in which it was tendered was of no use for any purpose for which the meal would normally be used and hence was unsaleable under that description."



Lord Wright had Similar views in Canada Atlantic Grain Export Co. Vs. Eilers and Grant Vs. Australian Knitting Mills Ltd.

In Kendall Vs. Lillico the members of the House of Lords were all agreed that the term "Merchantable quality" means commercially salable under that description, but what they were not agreed about was the test that should be applied to determine whether particular goods are commercially salable under their description. Three tests have been propounded.

First there is the approach of Farewell L.J. in Bristol Tramways, Carriage Co. Ltd. Vs. Fiat Motors Ltd He said :

"The phrase in section 14 (2) is, in my opinion, used as meaning that the article is of such quality and in such condition that a reasonable man acting reasonably would, after a full examination, accept it under the circumstances of the case in performance of his offer to buy that article, whether he buys for his own use or to sell again."

Secondly there is the approach of Lord Wright in Canada Atlantic Grain Export Co. Vs. Eilers He defined it thus :

"If goods are sold under a description which they fulfill, and if goods under that description are reasonably capable in ordinary user of several purposes, they are of merchantable quality within section 14 (2) of the Act if they are reasonable capable of being used for any one or more of such purposes even if unfit for use for that one of those purpose which the particular buyer intended."

Thirdly there is the approach of Dixon J. in Grant Vs. Australian Knitting Mills Ltd. when that case was before the High Court of Australia Dixon J. expressed the test in this way :

"The condition that goods are of merchantable quality requires that they should be in such an actual state that a buyer fully acquainted with the facts and therefore, knowing what hidden defects exist and not being limited to their apparent condition, would buy them without abatement of the price of tenable for such goods if in reasonably sound order and condition and without special terms."

In Henry Kendall Vs. William Lillico & Sons, Lord Reid corrected the remarks of Haverss J. at Lower Court and said that Lord Wringhter's remarks "were of no use for any purpose." must mean Lord Reid, after amending the definition of Lord Wright, lays down separate tests of merchantable quality of goods in cases where the goods are used only for one purpose and in others where they are used for many purpose.

Where the goods demanded are used for only one purpose, they are merchantable, if not fit for that purpose.

It may be stated the finding of the learned judge and the court of Appeal in Henry Kendali's case were to the effect that the purpose of the compounders of meal was "particular purpose" as Grimsde's purpose was "to resell in smaller quantities to be compounded into food for cattle and poultry. A particular purpose means a specific purpose or communicated purpose A purpose may 'be put in wide or narro terms and it will still be a particular purpose. Hence, it is submitted that his lordship erred in interpreting the "particular purpose" under section 14 (1) and therefore remarked that food for "cattle and poultry" was a general purpose and as the ground nut extractions were still fit for food for cattle they were of merchantable quality, kin accordance with the definition of Lord Wright. Lord Reid further examined the Definition of Dixen J. in Grant Case and amended the word "A buyer" to read as "some buyer", accepted the definition with approval and observed that price factor is relevant for ascertaining whether goods were merchantable.

However, the other three members of the House of Lords considered that Havers J. had applied the wrong test. Lord Pearce said :

"The suggestion, without more, that goods are merchantable unless they are of no use for any purpose for which they would normally be used and hence would be unsaleable under that description may be misleading, if it conditions no reference to price. One could not Say that a new Carpet which happens to have a hole in it or a car with wings buckled are of no use for their normal purposes and hence would be unsaleable under that description. They would no doubt, if their price was reduced, find a ready market. In return for a substantial abatement of price a purchaser is ready to put up with serious defects or use part of the price reduction in having the defects remedied. In several classes of goods there is a regular retail market for "seconds", that is, goods that are not good enough in the manufacturer's or retailer's view to fulfil an order and are therefore sold off at a cheaper price. It would be wrong to say that 'seconds' are necessarily merchantable."

On the grounds that lord Wright's ten omits all reference to price, Lord Guest Preferred the approach of Dixon J. in Grant Vs. Australian Knitting Mills Ltd.

Lord Pearce, with whose judgement on this point Lora Wilberforce concurred, for the same reason considered Lord Wright's test to be inadequate and preferred Farewell L.J.'s test as amplified by Dixon J. unlike Lord Guest, however, Lord Pearce and Lord Wilbforce concluded that the goods were unmerchantable.

Farewell L.J.'s approach was criticised by Lord Reid in the following terms ;

"I think what is meant is that a reasonable man in the shoes of the actual buyer would accept the goods as fulfilling the contract which was in fact made. But if the description was so wide that goods required for different purposes were commonly bought under it, and if these goods were suitable for some of those purposes, but not for the purpose for which the buyer bought them, it would have to be a very reasonable buyer indeed who admitted that the goods were merchantable, and that it was his own fault for not realising that goods might be merchantable under that description although unsuitable for his Particular purpose".

This criticism seems to be justified. The "reasonable man test" is indeed a nebulous one. Even Lord Pearce who approved Farwell L.J.'s test, said. "Merchantability is concerned not with purpose but with quality". It is submitted that the better test of merchantability is that of Lord Wright as amplified by Dixon J. :

"Merchantable quality means that the goods in the form in which they were tendered were of no use for any purpose for which goods which sold at that price and which complied with the description under which the goods were sold would normally be used, and hence were not saleable under that description or at that price". It will be noticed that there is no uniformity in the decisions of the House of Lords. The judges have endeavored to evolve a formula of merchantable quality in a particular case, foieing the line of old precedents which have added and brought confusion in their wake. This has led to lack of coherence in the interpretation of the word "Merchantable quality".

A new definition of merchantable quality has been given by the supply of Goods (Implied terms) Act, 1973 under clause (IA) of Section 62 which reads as follows :

Goods of any kind are of merchantable Quality, within the meaning of this Act. If they are as fit for the purpose or purposes for which goods of that "Kind are" commonly fought as it is reasonable to expect, having regard to any description applied to them, all the other

circumstances; and any reference in this set to unmerchantable goods shall be constructed accordingly.

This definition is also not suitable as it (1) contains the word "description" which is subject to controversies (2) though the price is an important factor, still no sound rule with regard to it has been evolved by the courts which could bring certainty in this. (3) Multipurpose goods may still be held to be merchantable if they are fit for any one of many purposes, though not necessarily the one for which they have been bought. (4) Though the words "all other circumstances" are very comprehensive, yet no one can predict with certainty as to what could be course of future decisions in this regard. Atiyah, while commenting on this definition remarked that :

"This is not much of a "definition" since it seems to say a little more than the goods must be of a quality which is reasonable in all the circumstances. It seems unlikely therefore, that this section will have much effect either on the existing case law or on the future development of law".

Lord Denning M.R. in *Cehave WN. Vs. Bremer Handlesgesells Chaft* had the chance to comment upon this new definition of merchantable quality. He said that the definition of merchantable quality in the latest Act is best which has yet been devised. He further says that "The Act itself applies to contracts made after 18th May, 1973. Even if goods of particular description are sold under patent or trade by a seller who deals in goods of that description, there is an implied condition as to merchantability

To Prof. Williston the requirement of merchantable quality carries with it no implication that the goods shall be saleable in a particular market. This views has found a place in UCC. There are six different requirements, any one or more of which may be applicable in a given fact situation. The definition is as follows : Goods to be merchantable must he atleast such as :

- may pass without objection in the trade under the contract description; and
- in the case of fungible goods, are of fair average quality within the description; and
- are fit for the ordinary purposes for which such goods are used; and

- run, it within the variation permitted by the agreement of even kind, quality and quantity within each unit involved; and
- are adequately contained, package and labelled as : the agreement may require; and
- confirm to the promises or affirmations of fact made on the container or label of any; and
- must fetch that price, on which bought, if sold under that description.

Under UCC, one of the requirements of merchantable quality is that the goods must correspond with description, unlike England where conformity with description is an independent condition. This may cover the cases like *Niblett Vs. Confectioner's Material Co*, *Jones Vs. Just*; *Australian Knitting Mills Vs. Grant*, *Shivlingappa Shankarappa Vs. Balakrishna Chettiar Sons and Nendse Vs. Balakrishna Chettiar*.

Clause (g) of the proposed definition is not part of UCC but is based on the recommendations of Law Commission's First Report on Exemption clauses, and decision in *Shivalingappa Shankarappa Vs. Balakrishna Chettiar and Sons* where it was held that merchantability does not mean that goods should fetch price, but should fetch that price, which they would, had they been sold as per the description.

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KNOWLEDGE MANAGEMENT AND LIBRARIES IN DIGITAL ERA: AN OVERVIEW



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ABSTRACT

This article focuses on knowledge management and how libraries manage knowledge in present scenario. Knowledge Management manages huge data systematically and therefore it will be a powerful tool to enhance productivity and reduce cost in the collection of a huge volume of data in academic libraries and information centres.

Keywords: Knowledge management, Knowledge Management System, Library and information centres, Knowledge management and digital libraries, Information Management.

INTRODUCTION

Knowledge is generated, classified and modified. It may be indexed and shared. Knowledge management may be defined as a process of creating, storing, sharing and reusing organizational knowledge to enable an organization to achieve its goals and objectives.

Leading factor for development of KM is library and information centre and librarians and information experts who can handle and categories the implicit or tacit knowledge generating in an organization and record it properly using standard methods.

In digital environment, the role of knowledge has become even more significant. Moreover, Digital Libraries perform many knowledge-based activities, and by nature, Knowledge Management process is embedded in Digital Library systems.

Libraries are social place responsible for discovery of existing knowledge, acquisition of knowledge, creation of new knowledge, storage and organization of knowledge, sharing of knowledge, use and application of knowledge.

KNOWLEDGE

Kidwel (2000) discussed Knowledge, which starts from the basic facts called data, which covers only raw data or facts or numbers, based on these facts information is generated. The information generated is captured in various documents and databases and libraries and information centres made it available to use which gets searched by researchers using information technology systems, and information retrieval systems.

TYPES OF KNOWLEDGE

There are two types of knowledge viz. explicit knowledge and Tacit Knowledge

Table with 2 columns: Explicit Knowledge, Tacit knowledge. Row 1: Is recorded and well documented, is knowledge that people carry around in their head. It is

<p>in taking action and also expressed in formal language. It is published and made available for use like primary, secondary information sources and also covers packaged, communicable, transferable, and also easily available. It can be articulated, captured, presented and codified in various forms like words, numbers, specifications, facts, rules, reports, blog post, email or other sort of printed (books and journals) and digital asset, policies and shared without need for discussion.</p>	<p>embedded within the head/minds of researchers of the institution or organization etc. It covers insights, perceptions, expertise views, techniques and skills, which is unique to the person. Tacit knowledge is not communicated in written form as it is purely personal, specific to any field, and even very difficult to capture, share verbally and transfer in the society. Tacit knowledge is personal, context-specific and therefore hard to formalize and communicate.</p>	<p>Duffy, J (2000) mentioned KM as a discipline of enabling individuals in an organization to collectively acquire, share and leverage knowledge to achieve business objectives. It is formal process that engages an organization's people, processes and technology in a solution that captures knowledge and delivers it to the right people at the right time. Knowledge Management for libraries consists of its ability to acquire knowledge from its own experience and sources and from experiences of others and to judiciously apply that knowledge in fulfilling the mission of the parent organization. In libraries, knowledge often becomes embedded not only in documents or repositories, but also in organizational routines, processes, practices and norms.</p> <p>Nonaka and Takeuchi (1995) define KM as the capability of an organization to create new knowledge, disseminate it throughout the organization, and embody it in products, services and systems.</p> <p><b>OBJECTIVES OF KNOWLEDGE MANAGEMENT</b></p> <p>The main objective of knowledge management in libraries is to promote knowledge innovation. The purpose of knowledge management is to deliver the right information to the right person at the right time. Other objectives are;</p> <ul style="list-style-type: none"> <li>✓ To create knowledge repositories;</li> <li>✓ To promote scientific research;</li> <li>✓ To promote relationship between library and users;</li> <li>✓ To enhance the knowledge environment and</li> </ul> <p><b>Following steps help to libraries managing knowledge</b></p> <ul style="list-style-type: none"> <li>✓ The assessment of existing knowledge resources and services;</li> <li>✓ Identification of knowledge needs;</li> <li>✓ Integration of new knowledge and services;</li> <li>✓ Modification of existing system;</li> <li>✓ Replacing out dated knowledge;</li> <li>✓ Evaluation of knowledge;</li> <li>✓ Continuous improvement; and</li> <li>✓ Providing knowledge digitally in a best possible way to satisfy community/readers.</li> </ul> <p><b>Role of LIS Professionals in Knowledge Management</b></p> <p>According to Abel and Oxbro (2001) Library and information professionals have to identify, acquire and evaluate internal and external sources of knowledge and integrate, organize and make</p>
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**KNOWLEDGE MANAGEMENT (KM)**

Knowledge Management is an ongoing process in libraries and information centres which starts with acquiring relevant knowledge resources and continues through its proper utilization. Knowledge Management by libraries is a dynamic and continuous social process that involves acquisition, organization, storage and retrieval and dissemination of knowledge resources to user group with relevant feedback to achieve institutional goals, which is also supported by existing literature.

Acquisition of knowledge in libraries involves locating and capturing existing knowledge and creating new knowledge. The acquired knowledge is organized by libraries using taxonomies, codification, indexing, filtering etc. The processed knowledge is preserved for permanent storage, and a retrieval mechanism is used for its easy access. Then knowledge is disseminated to readers/users for sharing, applying, utilizing and use effectively.

Ramanujan and Kesh (2004) described Knowledge Management as “an organization’s ability to gather, organize, share and analyze the knowledge of individuals and groups across the institution in ways that directly impact performance”. It is a process through which organizations generate value based on their intellectual capital.

relevant knowledge available to the right person at the right time.

Guns has laid down following role and responsibilities for the library and information professionals in KM Programme.

- ✓ Warehouse and track information and maintain a knowledge inventory.
- ✓ Ensure the right kind of technology is in place such as internet, intranet, database and library software's, OPAC and so on.
- ✓ Identify valued skills, knowledge and expertise in the organization

Librarians provide a base to research by collection, processing, storage and distribution of knowledge and information. Libraries make a link between information and the information seeker. Knowledge dissemination is another area where libraries work. The libraries take initiatives to obtain knowledge from the creator and make it accessible to the users. Librarians can play the following an effective role as a member of the knowledge management system.

- ✓ Analysis of documents, organization, classification and sorting, and their archiving for easy retrieval and faster dissemination.
- ✓ Creating knowledge maps to find out when: and what is available.
- ✓ Generation of knowledge vocabulary for standardization of terms and retrieval.
- ✓ Acquisition of documents from external sources.
- ✓ Categorize the knowledge located inside or outside the organization for easy retrieval.
- ✓ Importing information literacy instruction to the users
- ✓ Training of users to maximize use of the knowledge repository

### Importance of knowledge management in libraries

Dawson (2000) expressed term as "KM is especially important for organizations, comprised of experts where success depends upon generation, utilization and uniqueness of knowledge base. It would seem to be appropriate to consider libraries as organizations comprised of experts who contribute to knowledge base. Internationalization of higher education, lifelong learning, and paradigm shift from teaching to learning, new technologies and globalization are the key factors in developing knowledge management.

Barbara Friehs (2002) mentioned following assignments for effective KM.

- ✓ Mobilize the hidden implicit/tacit knowledge
- ✓ Integrate knowledge from organization and make it accessible to all
- ✓ Identify the missing knowledge
- ✓ Create new knowledge
- ✓ Make knowledge more accessible and usable
- ✓ Create knowledge sharing culture to experiment and learn
- ✓ Evaluate and reflect learning processes
- ✓ Codify new knowledge.

KM helps educational institutes to improve their capacity of gathering and sharing information and knowledge and apply these to problem solving and support the research and continual improvement of their work. KM of the educational system must reflect and comprise information at all levels starting from management level to student level in order to improve professional knowledge of employees, to achieve quality of lecturers and students.

KM in libraries gives most effective way to transfer efficient methods, models, ideas, practice is creating network as field of interaction that will provide circulation of them, as well as underpin innovation and development. For underdeveloped countries exchange of material resource can be useful. Faculties can mutually invest into resources they share. The exchange of information and knowledge in network like mutual newsletters, meetings, conferences, seminars and symposiums can serve as an instrument for knowledge and idea transfer and good practice. Libraries, information centres like NISCAIR, NASSDOC, INFLIBNET and library consortium provide to exchange of material, resources of information.

In 12th comprehensive plan of Rashtriya Uchcharat Sikhsha Abhiyan for the development of state higher education system for ensuring access, equity and quality. Among the many objectives of RUSA following are very much related to knowledge management and sharing.

- ✓ Ensure governance, academic and examination (and evaluation) reforms and establish backward and forward linkages between school education, higher education and the job market.
- ✓ Expand the institutional base by creating additional capacity in existing institutions and establishing new institutions in un-

served and underserved areas by way of up gradation and consolidation.

- ✓ Ensure adequate availability of quality faculty in all higher educational institutions and ensure capacity building at all levels.
- ✓ Create an enabling atmosphere in institutions to facilitate research and innovation.
- ✓ Integrate the skill development efforts of the government through optimum interventions.
- ✓ Promote healthy competition amongst states and institutions to address various concerns regarding quality, research and innovation.

The development of KM in libraries needs factors like information, domain experts from library and technology, collaborations with departments, team of staff, and concepts of data mapping. These are basic factors required for development of effective databases, knowledge bases as well as repositories, portals, gateways, websites etc. Various skills are also required like data capture, data analysis, data categorization, data mining, data mapping, knowledge mapping, concept mapping, indexing, linking and repackaging are only reared by library professionals hence every academic organization shoulder this task to library professionals for effective use of tacit knowledge. But proper support from management, administration, technical advisors, computer experts, software developers should coordinate with library professionals in this activity.

Award and Ghaziri (2004) encapsulated a KM model consisting of four steps as capturing, organizing, refining and transferring. The captured knowledge should be organized using indexing, cataloguing, filtering, codifying etc. for its easy access and retrieval. Then knowledge should be refined, and disseminated or transferred to the concerned people for effective use.

### **Factors affecting the KM in libraries**

#### **Objectives of libraries**

The main objective of both Libraries and KM is as same as to provide users with access to knowledge resources in digital environment. Being concentrated on information management function, Digital Library system is largely technical, and service-oriented, while KM is mostly people-centred. Besides human approach, KM possesses information, technology and management perspectives that can also be the basis for DL system.

### **RESOURCES OF LIBRARIES**

Data, information and knowledge are the main resources in Digital Libraries, information centres as well as in KM. Digital Libraries emphasizes on digitally coded articulated or explicit knowledge

while KM focuses on both tacit and explicit knowledge either in digital or in physical form. The tacit dimension of KM can contribute to Digital Library in developing mechanism for converting, storing and sharing knowledge of internal staff of Libraries.

#### **People**

People are the key actors in the organizational processes and the main users of information and/or knowledge systems. People with the proper blend of technical, managerial, behavioral, cognitive and interpersonal skills can play significant role in designing, operating, and maintaining Library system and a KM system in electronic era. End users need to be trained and skilled in both the cases.

#### **Process**

KM encompasses a number of sub-processes like knowledge creation process, knowledge collection and storage process, content management process, knowledge update process etc. Both KM and Digital Libraries can share almost same mechanism of life cycle process of information/knowledge. They follow the same procedure of acquisition, processing, organization, storage, retrieval and dissemination of information and/or knowledge for its proper utilization.

#### **Technology**

Digital Library system integrates a wide range of computing and communication technologies including more advanced and fast processing digital technologies, digital repositories, information retrieval engines, document management system, electronic publishing system, web-based technologies like internet, intranets, extranets etc. These technologies are more or less concerned to KM system along with groupware, collaborative tools, knowledge portals, knowledge creation technologies etc. Some important tools and techniques like indexing, taxonomies, codification, metadata, data mining, database management, knowledge mapping techniques etc. are being used in DL and in KM for the management of contents and their retrieval.

#### **Storage and retrieval of knowledge in digital environment**

In libraries the organized knowledge is stored in repositories for preservation as well as multiple uses. For the purpose of knowledge distribution and sharing, a number of tools and techniques are used by libraries to facilitating the retrieval process. Taxonomies, knowledge mapping, data mining, metadata, browsing, searching etc. are some of the popular tools used in managing knowledge. These tools are also familiar in Digital

Libraries for structuring and retrieval of digital information, mainly explicit in nature. Therefore, the application of KM in Digital Libraries can support the storage and retrieval process not only for explicit knowledge but also tacit knowledge. KM may share various computational techniques including linguistics analysis, machine learning, knowledge repositories, and human-computer interaction with digital libraries to support digital libraries' people with access to digital knowledge resources.

### Dissemination of knowledge in libraries

The next step of KM process in Digital Library is to disseminate right knowledge to the right people at right time. The dissemination of knowledge refers to those activities and processes associated with the flow of knowledge from one agent to another. The transferred knowledge is then practiced, shared, applied, utilized and used to attain library's ultimate goals of satisfying users' needs, developing research activities, creating new knowledge, promoting library functions, and building up a knowledge culture. The organizations do not just build knowledge for their sake but they ensure that it is utilized. Libraries and information centres' success, quality, and competitiveness largely depend on the dissemination or transfer of knowledge by means different approaches and services. In a digital environment, knowledge can be transferred by libraries in the form of a number knowledge-based services and products including e-mail, electronic publications, presentations, websites, online discussion forums, video-conferencing and collaboration tools

Digital libraries play a crucial role as "standalone" systems in mediating between the information requirements of a user community and the available content. In addition, they may also play an important role as integral parts of larger systems, supporting content and knowledge management processes.

New types of library content may not only impose additional requirements on content pre-selection, structuring, enrichment, and access services supported by the library but may also profit from integrated support for the other phases of the content life cycle like content provision and content consumption.

### Conclusion

Knowledge Management occupies very outstanding position in the creation of knowledge innovation systems of a country. As it is very essential to focus on knowledge management systems in academic libraries and knowledge

resource centres by which the timely information service can be provided to the online user society. Modern libraries are dependent on technology which is highly diversified in their product and services they offer. Academic libraries should work together with information technology professionals and others to develop the appropriate knowledge management systems. Knowledge Management process in libraries will become more important along with the development of knowledge economy. Library and information professionals can play a significant role while managing knowledge. To realize and achieve this, they need to be prepared and equipped with certain additional skills together with the conventional skills as the new role of knowledge professionals is full of challenges to meet the new areas in the electronic environment.

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## TIME MANAGEMENT SKILLS: ESSENTIAL IN IMPLEMENTING ALL JOB DUTIES ON TIME

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### **ABSTRACT:**

*The individuals inside associations have different sorts of occupation obligations to place into activity. These are to be focused towards in both individual and expert lives. Some work obligations are less tedious, while, some are additional tedious. Time is important which should be taken out for all work obligations. From the phase of youth, the people are prepared as far as placing into activity these abilities in a successful way. To finish all task obligations on schedule, the individuals need to perceive the importance and meaning of time usage abilities. The execution of these abilities in a powerful way will work with in finishing all task obligations on schedule. Besides, they will make a harmony among individual and expert lives. The time usage abilities will empower the people to cause the sensations of delight and happiness. At the point when the people can invest in some opportunity for all work obligations in their own and proficient lives, they will feel fulfilled. Subsequently, over the lifetimes of the people in both individual and expert circles, they need to place accentuation on support of these abilities. In this way, it tends to be expressed, time usage abilities are fundamental in carrying out all work obligations on schedule. The principle ideas that are considered in this examination paper are, understanding the four Ds of time usage abilities, factors featuring the importance and meaning of time usage abilities and proportions of achieving upgrades in time usage abilities.*

**Keywords:** *Development, Important, Job Duties, Members, Organizations, Responsibilities, Time Management Skills*

In a wide range of associations, every one of the individuals, independent of their work positions in the progressive system are overpowered by number of occupation obligations and obligations. Some are less tedious, while, others are additional tedious. The individuals are expected to be knowledgeable as far as time usage abilities. These abilities empower the individuals to invest in some opportunity for all errands and exercises. The people relegate needs to the errands. The work obligations, which are more significant are done first, while, the work obligations, which are less significant are done after the consummation of the more significant ones. The businesses and managers ordinarily guarantee that adequate measure of time is accessible for the representatives to finish muddled and additional tedious task obligations (Kos, 2020). Then again, when assignments can be finished in less measure of time, the time given is generally less. Every one of the individuals should be knowledgeable as far as techniques and methodologies to finish jobs and occupation obligations. Yet, aside from mindfulness with respect to strategies and approaches, the time usage abilities should be built up all through the gig obligations of the people.

Whenever the people are overpowered with number of occupation obligations and obligations, it is clearly perceived that they will feel worried. The execution of time usage abilities will empower the people to beat pressure. The encountering of different sorts of mental issues

of pressure, tension, outrage and disappointment are normal inside the working environment. However, when the people perceive the importance and meaning of time usage abilities, they will actually want to defeat the mental issues in a successful way (Kukreja, 2021). These abilities work with the execution of occupation obligations inside the predefined timeframe. The bosses and businesses feel satisfied and pleasurable, when the workers do their work obligations inside the predetermined timeframe. At the point when the workers are sincerely committed towards taking care of well in their responsibilities, accomplishing authoritative objectives and prompting up-degree of the general construction of the associations, they should be useful as far as time usage abilities. Subsequently, it tends to be expressed, these abilities have shown to advance and ideal for every one of the individuals from the associations.

The individuals are expected to make a harmony among expert and individual lives. Whenever a representative is expected to stay in his office for eight to ten hours on everyday schedule and is expected to deal with his older guardians, he might need to withdraw from office. In such cases, he might need to place in additional hours to finish his task obligation. By and large, the individuals are expected to guarantee, they spend it is possible that a couple of hours on everyday schedule or complete the work obligations inside homes. The execution of these abilities will

empower the individuals to make a harmony among expert and individual lives. In the current presence, with progressions occurring, the individuals are expected to portray innovativeness in their work obligations. They need to focus towards support of inventive abilities. Whenever the people perceive the importance and meaning of time usage abilities, they will actually want to focus towards up-degree of inventive abilities. All in all, time usage abilities work with in improvement of innovative abilities. Thusly, it is surely known, when individuals will invest in some opportunity for all assignments and exercises, they will support inventive abilities.

### **Getting the Four Ds of Time Management**

**Skills:** Inside the associations, in placing into activity work obligations and obligations, the individuals should be enlightening as far as four Ds of time usage abilities. In securing a proficient comprehension of time usage abilities, it is important to be useful as far as the four Ds. The four Ds make arrangement of data as far as ways, how the time usage abilities are expected to be placed into activity in a productive way. In the execution of these abilities, the individuals might chip away at their own or they get backing and help from different individuals from the associations. These incorporate, bosses, subordinates and associates. The four Ds of time usage abilities are, do, concede, delegate and erase. These are expressed as follows:

**Do:** Do is alluded to doing, carrying out and incorporating different kinds of occupation obligations, errands and exercises. To take care of well in one's business obligations and accomplish the ideal objectives, it is of most extreme importance to be instructive as far as techniques, approaches and methodologies. Whenever there are event of different kinds of issues also, these should be kept from bringing about deterrents. Moreover, arrangements should be given to them in an agreeable way. Henceforth, there are number of assignments and exercises that are expected to be placed into activity by the people all through their positions.

**Concede:** The people need to work in joint effort and combination with one another in trying different assignments and exercises. They ordinarily need help and help from one another, especially when the work obligations are confounded and they are overpowered by hardships. Concede is alluded to submit, acquiesce and go along. At the point when the people are working in co-appointment with one

another, they are expected to submit, consent and follow others. At the point when the thoughts and ideas of the people are viewed as significant, they are acknowledged. Then again, when they are not viewed as beneficial, they are declined in an amiable way.

**Delegate:** The errand of appointment is alluded to portion, assignment and task. The individuals from the association are overpowered by number of occupation obligations and obligations. At the point when they feel that they can not require some investment for all errands and exercises, they will assign the work obligations to different individuals. The bosses ordinarily delegate the undertakings to their subordinates, especially when they structure the perspective that they can not require some investment to do those assignments. Consequently, appointment is viewed as one of the significant Ds of time usage abilities. The execution of designation normally works with the execution of occupation obligations inside the necessary time span.

**Erase:** Erase is alluded to eradicating, eliminating and dropping off the assignments. The people appoint needs to the assignments. The work obligations, which are more significant are done first, while, the work obligations, which are less significant are done after the culmination of the ones, which are considered as more critical. At the point when they feel that they can not require some investment for all errands and exercises, they will erase them. At the end of the day, they won't invest in some opportunity for them. Along these lines, erase is likewise viewed as one of the key Ds of time usage abilities.

### **Factors featuring the Meaning and Significance of Time Management Skills:**

In a wide range of associations, for example creation, assembling, administrations, etc, the individuals are expected to consider different elements to take care of well in their responsibilities, accomplish hierarchical objectives and lead to up-degree of the general construction of the associations. These variables are connected with execution of occupation obligations and advancing the general working of the associations in a solid way. Whenever the individuals are to settle on astute and useful choices, they need to guarantee, they invest in some opportunity for leading the investigation of the options accessible. The time should be taken out for all errands and capacities (How to Improve Time Management, 2021). These abilities are respected to be of most extreme importance. Inside the work environment, it is

essential for the people to cause the sensation of occupation fulfillment. Henceforth, when the work obligations will be done on schedule, the individuals will cause the sensations of joy and happiness. Accordingly, the individuals should be educational as far as elements featuring the importance and meaning of time usage abilities. These are expressed as follows:

**Finishing all Task Duties inside the Required Time Frame:**

The work obligations can be finished inside the expected time period, when these abilities are carried out in an efficient and good way. The individuals are expected to recognize the significance of time usage abilities, all through their positions. These abilities empower the individuals to invest in some opportunity for all assignments and exercises. The people appoint needs to the undertakings. The work obligations, which are more significant are done first, while, the work obligations, which are less significant are done after the fulfillment of the ones, which are viewed as more significant. The businesses and bosses typically guarantee that adequate measure of time is accessible for the representatives to follow through with confounded and additional tedious task obligations. Then again, when assignments can be finished in less measure of time, the time that will be given is normally less. Subsequently, finishing all task obligations inside the expected time span is viewed as one of the critical elements featuring the importance and meaning of time usage abilities.

**Adapting to Psychological Problems:**

Whenever the people are overpowered with number of occupation obligations and obligations, it is obviously perceived that they will feel anxious. Whenever the work obligations and strategies are convoluted, this prompts expansion of feelings of anxiety among individuals. The execution of time usage abilities will empower the people to defeat pressure. Moreover, they will build up the capacities to work under pressure. The encountering of different sorts of mental issues of pressure, nervousness, outrage and dissatisfaction are normal inside the working environment. These can be knowledgeable about a significant or in a minor structure. These can lead to obstructions inside the course of placing into activity errands and exercises and accomplishment of hierarchical objectives. Be that as it may, when the people perceive the importance and meaning of time usage abilities, they will actually want to beat the mental issues in a successful way. Moreover, the individuals will

actually want to focus well on their work obligations and accomplish the ideal objectives. Along these lines, adapting to mental issues is one of the significant elements featuring the importance and meaning of time usage abilities.

**Measuring up to the Assumptions of Supervisors and Employers:**

The time usage abilities work with the execution of occupation obligations inside the distinct timeframe. At the point when bosses and managers appoint work obligations to the representatives and they complete them inside the predetermined period, as such they live up to the assumptions of the bosses and businesses. As a result, they secure appreciation. One of the significant variables that should be considered is, fitting strategies, methodology and approaches should be used. The bosses and businesses feel satisfied and pleasurable, when the representatives complete their work obligations inside the predetermined timeframe. Whenever the workers are sincerely dedicated towards taking care of well in their responsibilities, measuring up to the assumptions of bosses and businesses, and accomplishing authoritative objectives, they need to concentrate after sharpening of time usage abilities. Henceforth, it very well may be expressed, these abilities have shown to be rousing and helpful to every one of the individuals from the associations. In this way, living up to the assumptions of bosses and businesses is an irreplaceable variable featuring the importance and meaning of time usage abilities.

**Making a Balance among Professional and Personal Lives:**

The individuals in all occupation positions are expected to make a harmony among expert and individual lives. In the execution of this assignment, the individuals are expected to invest in some opportunity for expert and individual work obligations and exercises. Whenever a representative is occupied with regular work and is expected to stay in his office for eight to ten hours on everyday schedule and is additionally vested with the gig obligations and obligations in private lives, he might need to withdraw from office. In such cases, he might need to place in additional hours to follow through with his task obligation. As a rule, the individuals are expected to guarantee, they spend it is possible that a couple of hours on regular schedule or complete the work obligations inside homes. The execution of these abilities will empower the individuals to make a harmony among expert and individual lives. All in all, the time should be taken out for assignments and

exercises in private and expert lives. Along these lines, making a harmony among expert and individual lives is an imperative component featuring the importance and meaning of time usage abilities. Leading to Up-gradation of Creative Skills

With the coming of advances, the individuals are expected to portray innovativeness in incorporating their work obligations. Consequently, they need to focus towards support of inventive abilities. For abilities are the abilities, which set accentuation on presenting creative, innovative and brilliant viewpoints in assignments and exercises. The principle objective of utilizing these abilities is to make the work ingenious. At the point when the people perceive the importance and meaning of time usage abilities, they will actually want to focus towards up-degree of imaginative abilities. As such, time usage abilities work with in improvement of imaginative abilities. Henceforth, it is surely known, when individuals will invest in some opportunity for all undertakings and exercises, they will support inventive abilities. The bosses and managers make arrangement of data among representatives as far as approaches to sharpening inventive abilities. Whenever adequate measure of time is taken out, these abilities will be up-reviewed and there will be an increment in usefulness and benefit. In this manner, prompting up-degree of innovative abilities is an essential variable featuring the importance and meaning of time usage abilities.

#### **Working with in Development of Motivation:**

The individuals from the association are expected to foster inspiration towards the execution of occupation obligations. Now and again, the work obligations are sensible, though, in different cases, they are muddled. In any case, the advancement of inspiration will work with in age of wanted results. The execution of time usage abilities will work with being developed of inspiration. The explanation being, the people will actually want to invest in some opportunity for all errands and exercises (Time Management Skills, 2021). Whenever the people structure the perspective that they can commit time for all work obligations and complete them on schedule, they will foster inspiration. The advancement of inspiration will invigorate the mentalities of the people and empower them to frame positive perspectives in regards to different parts of the associations. Moreover, productive perspectives should be fortified as far as

occupation obligations and strategies used in them. As an outcome, time usage abilities will likewise be up-evaluated. In this way, working with being developed of inspiration is a significant variable featuring the importance and meaning of time usage abilities.

#### **Working with in sharpening of Self-Awareness:**

The individuals from the association are expected to zero in on mindfulness. Mindfulness will empower the people to create data as far as their assets and shortcomings. The qualities should be built up, though, shortcomings should be checked. In the expert existences of the people, when not entirely set in stone towards improving their profession possibilities, they need to zero in on sharpening mindfulness. The execution of time usage abilities will work with in sharpening of mindfulness. The explanation being, the people will actually want to invest in some opportunity for all errands and exercises. Aside from execution of occupation obligations, the people need to try time usage abilities to distinguish the qualities and shortcomings. All in all, in working with sharpening of mindfulness, the people need to perceive the importance and meaning of time usage abilities. Whenever the people structure the perspective that they can commit time for all work obligations and complete them on schedule, they will deliver a significant commitment in sharpening mindfulness. In this manner, working with in sharpening of mindfulness is a helpful element featuring the importance and meaning of time usage abilities.

#### **Empowering the Individuals to settle on Wise and Productive Decisions:**

Dynamic cycles are viewed as an indispensable piece of the expert existences of the people. The people in administrative roles are typically vested with the power of settling on insightful and useful choices. The choices are expected to be made as far as different parts of the associations. Sometimes, the dynamic cycles are additional tedious, though, in different cases, they are less tedious. The individuals need to invest in some opportunity for placing into activity the dynamic cycles. Whenever the individuals are to settle on astute and useful choices, they need to guarantee, they invest in some opportunity for leading the examination of the options accessible. After the investigation is led, the choice is made of the other option, which is viewed as generally appropriate and positive. Subsequently, it is surely known in the execution of the dynamic cycles also, it is of most extreme importance to

take out adequate measure of time. Hence, empowering the people to settle on insightful and useful choices is a beneficial component featuring the importance and meaning of time usage abilities.

**Working with in adapting to Problems and Challenges:** Issues and difficulties are viewed as a vital piece of the expert existences of the people. Every one of the individuals from the association, regardless of their work positions in the ordered progression should be enlightening as far as techniques and systems to adapt to issues and difficulties. The execution of time usage abilities will work with in sharpening of capabilities among people to adapt to different sorts of issues and difficulties. The explanation being, the point at which the people will actually want to invest in some opportunity for all errands and exercises, they will give answers for the issues also. Moreover, they will be kept from accepting a significant structure. Issues and provokes should be kept from leading to obstacles inside the course of execution of occupation obligations. Aside from execution of occupation obligations, the people need to incorporate time usage abilities to prompt support of capability, aptitude and impressive skill. In this manner, working with in adapting to issues and difficulties is an element featuring the importance and meaning of time usage abilities, which has been recognized by every one of the individuals from the association on an exhaustive premise.

**Advancing Development of Mutual Understanding with Others:** The sharpening of time usage abilities work with the execution of occupation obligations inside the unequivocal timeframe. Whenever bosses and businesses relegate work obligations to the representatives and they complete them inside the predetermined period, thusly they render a significant commitment in satisfying them. As an outcome, they get appreciation and foster shared understanding with others. The significant variables that should be considered are, correspondence processes need to occur in a successful way, one necessities to approach each other with deference and kindness, give real data, structure positive perspectives as far as all people and instill the qualities of profound quality, morals, determination, and good faith. The bosses and businesses feel satisfied and pleasurable, when the workers complete their work obligations inside the predefined timeframe. Consequently, when the workers are sincerely dedicated towards advancing

advancement of shared understanding with others, they need to concentrate after sharpening of time usage abilities. Thusly, advancing improvement of shared understanding with others is a component featuring the importance and meaning of time usage abilities, which should be supported all through the gig obligations of the individuals.

**Proportions of achieving Improvements in Time Management Skills:** The individuals from the associations know that they need to finish the task obligations inside the necessary time span. To place into activity all errands and exercises inside the particular timeframe, they should be proficient in their direct. At the point when the individuals can invest in some opportunity for all work obligations, they need to focus towards support of incredible skill (Time Management Skills, 2021). In a wide range of associations, individuals should be knowledgeable as far as proportions of achieving enhancements in time usage abilities. The data as far as these actions is obtained by leading exploration through different sources. On the web, satisfactory data is found as far as importance and meaning of time usage abilities and approaches to further developing them. Besides, speaking with different individuals is working with in up-degree of information and understanding. Proportions of achieving enhancements in time usage abilities are, relegating needs to work obligations and obligations; setting present moment and long haul objectives; framing welcoming and pleasant terms and associations with one another; shaping helpful perspectives as far as different elements; forestalling wastage of time and assets and building up responsibility towards the execution of occupation obligations. These are expressed as follows:

**Doling out Priorities to Job Duties and Responsibilities:** The execution of time usage abilities has the essential goal of empowering the people to invest in some opportunity for all errands and exercises. The people dole out needs to the undertakings. The work obligations, which are more significant are done first, though, the work obligations, which are less significant are done after the fulfillment of the more significant ones. However, the people guarantee, they invest in some opportunity for all work obligations and complete them on schedule. Whenever needs are allocated, the individuals know that they are expected to invest in some opportunity for all work obligations. As a result, they don't leave any

errands and exercises unattended. Thusly, if there should be an occurrence of all work obligations, doling out needs to work obligations and obligations is a significant proportion of achieving enhancements in time usage abilities.

**Setting Short-Term and Long-Term Goals:** In achieving enhancements in time usage abilities, setting present moment and long haul objectives is respected to be of most extreme importance. The individuals generally work in cooperation and mix with one another in the laying out of objectives. Whenever the individuals from the association are placing into activity work obligations and obligations, they are expected to lay out objectives, which can be accomplished in brief timeframe or extensive stretch of time. The execution of time usage abilities will work with in sharpening of skills among people to accomplish the ideal objectives and goals. The explanation being, the point at which the people will actually want to invest in some opportunity for all undertakings and exercises, they will give answers for the issues too. In this way, setting present moment and long haul objectives is a vital proportion of achieving upgrades in time usage abilities.

**Framing Cordial and Amiable Terms and Relationships with one another:** As a result of sharpening time usage abilities, the individuals will frame genial and pleasant terms and associations with one another. At the point when managers and businesses appoint work obligations to the representatives and they complete them inside the predefined period, as such they render a significant commitment in satisfying them. As a result, they secure appreciation and structure genial and affable terms and associations with them. Moreover, the significant variables that should be considered are, correspondence processes need to occur in a compelling way, people need to approach each other with deference and civility, give authentic data, give equivalent privileges and potential open doors to all and teach the attributes of profound quality and morals. In this way, framing genial and agreeable terms and associations with one another is a crucial proportion of achieving enhancements in time usage abilities.

**Shaping Constructive Viewpoints as far as different Factors:** The people need to shape helpful perspectives as far as different elements. The elements are connected with different highlights of the associations, for example work obligations, obligations, techniques, methods, approaches, methodologies, measures,

foundation, conveniences, offices, regulations, rules, strategies, bosses, subordinates, advancements, materials and the general working natural circumstances. The execution of time usage abilities will bring about the sensation of happiness among people that they will follow through with all task obligations on schedule. Besides, when work obligations are to be completed, the people will reinforce valuable perspectives as far as all attributes, connected with them. Subsequently, the people won't have any pessimistic inclination as far as different factors and support helpful perspectives. Along these lines, shaping helpful perspectives as far as different elements is an essential proportion of achieving upgrades in time usage abilities.

**Forestalling Wastage of Time and Resources:** Every one of the individuals should be knowledgeable as far as their work obligations and obligations. Moreover, they should be instructive as far as techniques, systems and approaches. At the point when work obligations are to be done, the people are expected to design monetary, specialized and material assets. They should be useful as far as techniques for using these assets and forestalling wastage. The execution of time usage abilities will bring about the sensation of satisfaction among people that they will follow through with all task obligations on schedule. In trying these abilities, the people utilize assets in a satisfactory way. They know that they need to forestall wastage of time and assets. Consequently, forestalling wastage of time and assets is a crucial proportion of achieving upgrades in time usage abilities.

**Reinforcing Commitment towards the implementation of Job Duties:** The individuals need to focus towards support of responsibility expected in the execution of occupation obligations. At the end of the day, they need to focus towards up-degree of energy and zing required in the execution of different kinds of occupation obligations and obligations. The execution of time usage abilities will cause the sensation of fulfillment among people that they will follow through with all task obligations on schedule. In trying these abilities, the people guarantee, they are sincerely dedicated towards the execution of occupation obligations. For instance, when the time is restricted and the work pressure is more, the people guarantee, not entirely set in stone towards the execution of occupation obligations. Along these lines, building up responsibility towards the execution of occupation obligations is a prominent

proportion of achieving upgrades in time usage abilities.

## Conclusion

Inside associations, individuals should be knowledgeable in regards to time usage abilities. These abilities work with in investing in some opportunity for all work obligations. The four Ds of time usage abilities are, do, concede, delegate and erase. Factors featuring the importance and meaning of time usage abilities are, finishing all task obligations inside the necessary time period, adapting to mental issues, living up to the assumptions of bosses and managers, making a harmony among expert and individual lives, prompting up-degree of inventive abilities, working with being developed of inspiration, working with in sharpening of mindfulness, empowering the people to settle on shrewd and useful choices, working with in adapting to issues and difficulties and advancing improvement of common comprehension with others. Proportions of achieving upgrades in time usage abilities are, allocating needs to work obligations and obligations; setting present moment and long haul objectives; shaping cheerful and friendly terms and associations with one another; framing

valuable perspectives as far as different elements; forestalling wastage of time and assets and supporting responsibility towards the execution of occupation obligations. At long last, it tends to be expressed, time usage abilities will empower the people to finish all task obligations inside the necessary time span.

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## ABSTRACT:

*Libraries are vaults for mankind's information; they are our past, our present, and our future. They are significantly more than storage facilities for books, and incorporate numerous different types of information. The data accessible in libraries should be open to all individuals, paying little mind to training, age, or monetary status. Recovery of specific kinds of data requires specific information and data set look through that are past the capacities of numerous clients, and especially of students beginning their college professions. Bookkeepers need to impart that information to clients, educating them on the best way to utilize electronic assets and the Internet so they can do explore all alone, while bringing up the cutoff points and issues related with electronic examination. Jonas states in "The Imperative of Responsibility," current innovation has presented activities of such original scale, items, and results, that the structure of previous morals can never again contain them, This exposition will give an outline of a couple of moral situations confronting libraries and administrators, and attempt to see whether Lee Finks' interests are as yet legitimate today. Since privacy is so significant and essential in any conversation of morals, and its advancement, support, and protection the custodial obligation of each library representative, it will be viewed as a fundamental and assumed practice.*

## INTRODUCTION

Morals in this way gives us a system for us to screen the fundamental elements of experts, lay out approaches and foster assistance techniques. Libraries and other data habitats take an interest in a specific social mission and act in agreement to a given arrangement of values. All in all, the most common way of accomplishing their objectives has a lot to do with following a moral lead, which perceives data experts as moral specialists capable before themselves, others and society at large. Morals in this manner furnishes us with a structure for us to screen the fundamental elements of experts, lay out approaches and foster help techniques.

Today, there is an exceptional need to teach, create or increment in bookkeepers and data experts an attention to the moral component of their work. There is additionally the further necessity that the standards overseeing proficient practice be delivered rational and ammonized.

## UTILIZATION OF ETHICS IN MANY FIELDS:

Most times, experts are not completely aware of the moral ramifications of their activities. Their conduct is frequently formed most fundamentally by customs and propensities.

## SOCIAL UTILITY

This is the situation with most of libraries and data focuses. For instance, Public libraries are made to answer to the enlightening, instructive and sporting requirements of residents, etc. An association's social utility is characterized by the

degree to which in accomplishes its social objectives.

## ENDURANCE:

Libraries regularly need to deal with issues connected with their endurance. Maybe the most Evident one emerges when individuals from the local area object to at least one things having a place with the library's property. It might even happen that this strain to rebuff comes from those subsidizing the library. In these conditions, administrators should surrender to the tension assuming that the library's very endurance is jeopardized, for the library's presence is substantially more significant than a specific holding.

## SOCIAL RESPONSIBILITY:

This is particularly the situation with public ones, who get immediate monetary help from a similar society. There are various occurrences that can fill in as a sign of the association's social obligation; a couple of models are the decision of a more environmental or less contaminating material, or approaches that advance work among oppressed citizenry.

## REGARD FOR THE INDIVIDUAL:

Libraries and other data places attempt to oblige to this component in an assortment of ways. They are available to a wide range of individuals; they foster their assortments answering to the requirements of people as well as masses; they safeguard client protection; their workers are dealt with reasonably, etc. Obviously, clashes are not unfamiliar in keeping this worry. For

instance, a library assortment might be extended or created by taking care of an incredible mass of clients (endurance factor) or to a specific gathering (regard for the person).

## **AREAS WITH ETHICAL IMPLICATIONS:**

A lot of the trouble of talking about moral issues in our field is that the center should be (at any rate) twofold. From one viewpoint, we have what could be marked as "data morals", which frets about the utilization and abuse of data (licensed innovation, open or limited admittance to data, restriction, and utilization of government information, security and privacy, information respectability, worldwide data stream).

## **MORALS IN LIBRARY:**

Whenever we have characterized objectives for our calling, we want to ensure that we meet these objectives in moral ways. Library and Information laborers are relied upon to keep specific moral guidelines, normally systematized in archives called Codes of Ethics. These codes offer a reason for settling on moral choices and applying moral answers for issues in LIS.

In the United States, proficient bookkeeper morals are arranged in the ALA's Code of Ethics, which are talked about beneath. In any case, there are different sets of principles that are critical to the LIS people group. Bookkeepers have frequently accepted a politically impartial position as a method for acquiring proficient status. In this writing survey, the writer contends that by not characterizing their political qualities, custodians will be affected by those with monetary and political power. This will undermine the free's to data while enterprises benefit. They accept the calling can remain alive assuming curators center around "effectiveness, efficiency, and quality control" and rival the private area. Custodians should lose their nonpartisan perspectives and openly battle for equivalent admittance to data.

## **ETHICS AND LIBRARIANS :**

Values are essential to the success and future of librarianship: they highlight what is "important and worthy in the long run," and help to define our profession. In a literature review on professional values in LIS, Lee Finks argues that these values fall into four categories:

- Professional values are inherent in librarianship and include recognizing the importance of service and stewardship; maintaining philosophical values that reflect wisdom, truth, and neutrality;

preserving democratic values; and being passionate about reading and books.

- General values are "commonly shared by normal, healthy people, whatever their field." Librarians' work, social, and satisfaction values express a commitment to lifelong learning, the importance of tolerance and cooperation, and the need to feel accepted.
- Personal values specifically belong to librarians and include humanistic, idealistic, conservative, and aesthetic values.
- Rival values threaten the mission of libraries with bureaucratic, anti-intellectual, and nihilistic ideas. Librarians must have faith in the profession's ability to do well.

The study of ethics in the information professions is a subset of the study of ethics in general. Thus, a definition of *ethics* may be helpful in clarifying this concept. There is no agreement on the exact definition of the term ethics. Some use it to refer to the art of determining what is right or good. collection. Stage two adds responsibility for employees. Stage three includes responsibility to library users-those individuals who have made a conscious decision to use the library's information resources. Stage four expands responsibility furthest by proposing that information professionals are responsible to society in general and includes users and nonusers alike

## **Evaluation of Ethical Concerns library professionals**

Tracing the development of ethics as an area of concern for information professionals will help in identifying the factors that are responsible for and that influenced the evolution of ethical behavior. Although ethical issues in librarianship were of some concern prior to the 1960s

Historically, librarians saw that their major responsibility was to the collection; caring for the materials within the library building was their primary concern. Many modern information professionals now acknowledge that they are responsible to any individual or group (i.e., stakeholder) with an information need. These stakeholders can be any constituency in the library's environment-users, nonusers, employees, suppliers, government agencies, public interest groups, and host communities. Illustrates a four-stage model of a social

responsibility continuum. Stage one encompasses responsibility for the library collection. Stage two adds responsibility for employees. Stage three includes responsibility to library users-those individuals who have made a conscious decision to use the library's information resources. Stage four expands responsibility furthest by proposing that information professionals are responsible to society in general and includes users and nonusers alike

Another example can be taken from the hiring process for librarians. Many libraries make an ALA-accredited degree an entry-level qualification for a professional librarian. Applicants for professional positions lacking this qualification are rejected. The ALA-accredited degree thus becomes a standard by which libraries hope to assure the recruitment of a high quality staff.

Ethics enters into a decision to hire at the individual level in borderline or exceptional cases where applying the policy in a mechanical fashion does not seem just or equitable. For example, if an applicant does not have an ALA-accredited degree, should he or she be automatically rejected without looking at other information such as previous work experience or other academic credentials? Such a decision may not seem fair given the subjective nature of the hiring process in general. Suppose a candidate with previous work experience, but without an ALA degree, is narrowly rejected for an academic library position and another candidate with an ALA-accredited degree, but no work experience, is accepted for a position. Is that fair considering that the work experience and academic credentials are not really comparable? And what about exceptional cases in which applicants may have other credentials, including doctorates? Should they be mechanically rejected without some special consideration?

At the organizational level, ethical considerations come into play when one considers justice and rights in relation to the hiring policy itself. Does a hiring policy discriminate unjustly on the basis of race or sex, or can it be defended as fair and equitable? Are written employment tests biased in favor of white middle class applicants?

**ETHICS IN LIBRARIANSHIP** due to the concepts and language used in examinations: Is an applicant's right to equal treatment violated by the use of ethics.

**Ethical Consideration in Librarians:** Librarians as managers are constantly making ethical decisions whether they know it or not.

They are constantly directing people toward or away from information resources that may directly impact their ability to enhance their lives or the life of their community. They are creating the future for their organizations, for their employees, for their users, for those who fund the service, and for society as a whole.

Decisions about information access can affect human well being and social welfare, having ethical impacts that are significant for all those touched by the decisions.

As the ability to access information across the globe becomes possible through the use of technology, librarians will have more and more opportunity to influence decision making on a worldwide scale through appropriate information provision. This is an awesome responsibility and one that calls for ethical reflection of the highest order.

Librarians must be encouraged to think more broadly and highly of their task. They must recognize that libraries are multiple purpose institutions that have many impacts besides cultural enrichment or recreation. Moral leadership of such institutions means recognizing information agencies as part of an ethical system having various values that are important to human welfare. The challenge to librarians is to incorporate these values into routine decision making and develop methods of analysis that are applicable to identifying appropriate goals for themselves and their organizations.

### **AN ACTION PLAN:**

The implementation of an ethical vision in librarianship requires action in several areas. An ethical perspective must be incorporated into the workplace as well as into the curriculum through which future librarians are being educated. The following areas constitute what could be called an ethical agenda for librarians in both of these settings.

In the educational setting, such a plan calls for a thorough integration of moral and ethical concerns into the library/ information science curriculum. Although separate courses in ethics may also be offered, integration of ethical concerns into basic courses such as Management or Reference is essential to make ethics more directly related to the roles and responsibilities of information professionals.

- Continuing education programs need to develop parallel efforts to maintain the work begun in the academic setting.

- Questions about ethics and moral aspects of librarianship must continue to be addressed as professionals move through their careers.
- Library boards of trustees and/or advisory boards must demonstrate a concern about ethics by raising ethical questions when aDDroDriate. The moral indications of decisions and actions must.
- Boards can acknowledge the significance of ethical issues by raising them in relation to goal setting and long-range planning.

## CONCLUSION

Librarians and information professionals face numerous ethical dilemmas. Recent years have seen a growing interest in workplace ethics because the evolution of modern technology has changed the manner in which humans interact with each other and their environment. Ethical behavior in librarianship does not mean that one should take no action, that is, avoid certain actions or books or ideas in an effort to keep out of trouble. On the contrary, the notion of ethics suggests that librarians take actions that are socially just. Only by actively pursuing social aims can librarians be ethically responsive. There is evidence to suggest that librarians choose not to choose, to “play it safe” with services and collections. Instead, librarians ought to exercise ethical judgment in their duties. Only by demonstrating the highest standards of ethical decision making will librarians inspire confidence and respect in the information arena.

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## कथा साहित्य व नई कविता में पारिवारिक जीवन के मूल्यों का बदलता स्वरूप



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फिरोजाबाद

जब हम जीवन मूल्यों की बात करते हैं तो जीवन में मानव द्वारा स्थापित धार्मिक, सामाजिक, सांस्कृतिक आदर्श जीवन मूल्य कहलाते हैं। ये जीवन मूल्य ही हैं जो मनुष्य को शेष जीवों से अलग व विषिष्ट पहचान दिलाते हैं। भारतीय संस्कृति की पहचान उस के सत्य, अहिंसा, श्रद्धा, समाज सेवा आदि जीवन मूल्यों से होती है। जीवन मूल्यों के उद्भव व विकास में कथा साहित्य व नई कविता उस युग की सामाजिक, राजनैतिक, आर्थिक परिस्थिति महत्वपूर्ण होती है और साहित्यकार जब रचना करता है तो तदनुगुण परिस्थिति से प्रभावित होकर नवीन मूल्यों की अभिव्यक्ति साहित्य में करता है।

साहित्य मूलतः अपने समय का साक्षात्कार करता हुआ, समाज के मूल्यों में परिवर्तन की कोशिश करता है, जो मंगलकारी हो, शुभ हो और समाज को गति प्रदान करने वाला हो। मूल्य समाज सापेक्ष होते हैं। मूल्यों की उत्पत्ति किसी घटना या चमत्कार का परिणाम नहीं है। चिंतन-मनन के परिणामस्वरूप जो धारणाएं निर्धारित की जाती हैं, उन्हीं से मूल्यों का जन्म होता है। अंततः 'मूल्य' वह वैचारिक इकाई है जिनके आधार पर जीवन-यापन किया जा सकता है।

जब कथा साहित्य व नई कविता में अस्तित्व में आई तो देश आज़ाद हो चुका था लेकिन जनमानस ने आज़ादी के बाद सुखी, स्वतन्त्र व समृद्ध जीवन के जो सपने बुने थे, वे टूट चुके थे और पूँजीवादी अर्थव्यवस्था, राजनैतिक अकुशलता, बेरोजगारी, भ्रष्टाचार जैसी युगीन समस्याओं ने मनुष्य को कुण्ठा, संत्रास, व्यर्थता, आत्मबोध जैसी मनोवृत्ति प्रदान की और यही कारण है कि नई कविता में कुण्ठा, नैराश्य, विद्रोह अनास्था की अभिव्यक्ति हुई जिन्होंने क्षणबोध, अस्तित्ववाद, मानवमुक्ति, व्यक्ति स्वतन्त्रता जैसे जीवन मूल्यों का निर्माण किया। तारसप्तक में भारत भूषण अग्रवाल लिखते हैं -

**“वर्ग और समाज पूँजी का  
और मेरे विकल मन की सभी  
सीमाएँ**

**वहीं से निस्सृत हुई है।”**

कथा साहित्य व नई कविता के पूर्वकालीन साहित्य में सामूहिक जीवन, समाज सेवा को आदर्श जीवन मूल्यों के रूप में स्थापित किया गया था वहीं नई कविता सामूहिकता के नाम पर वैयक्तिक स्वतंत्रता और विचार स्वतन्त्रता को तिलांजलि नहीं देना चाहती और नया कवि व्यक्ति स्वातन्त्र्य का प्रबल समर्थक के रूप में अवतरित होता है। नई कविता का उदय जिन विद्यटित सामाजिक विसंगतियों में हुआ वहाँ टूटे हुए व्यक्ति को फिर से सम्मानित, प्रतिष्ठित होने के लिए वैयक्तिक स्वतन्त्रता प्रमुख है। इस लिए नई कविता के बदलते जीवन मूल्यों

में व्यक्ति स्वातन्त्र्य प्रमुख है, उन का मानना है कि यदि व्यक्ति को स्वतन्त्र निर्णय लेने व जीने का अधिकार नहीं मिलेगा तो उस में अजनबीपन, निरर्थकता, आत्मकुण्ठा की प्रवृत्तियाँ पैदा हो जाएँगी। नया कवि सामाजिक समानता का विरोधी नहीं है बल्कि वैयक्तिक स्वतन्त्रता को अक्षुण्ण रखते हुए सामाजिक समानता को स्थापित करना चाहता है। नया कवि परलोक, इहलोक, स्वर्ग, नरक की परम्परागत मान्यताओं को छोड़ते हुए जीवन के आनन्द को वर्तमान में अनुभूत करता है और उसके लिए आनन्द की अनुभूति देने वाला क्षण, सम्पूर्ण जीवन से ज्यादा महत्वपूर्ण है और क्षण में जीवन का आनन्द ही क्षणबोध है।

परतंत्रता की बेड़ियों से मुक्त होकर जनता को आजादी के उन्मुक्त वातावरण में सांस लेने का सुअवसर मिला। लोग बूढ़े मां-बाप और खेतीबाड़ी को छोड़कर नौकरी की तलाश में शहरों में आकर बसने लगे। इसका भारतीय समाज पर प्रभाव पड़ना अनिवार्य था। फलतः सामाजिक पारिवारिक मर्यादाओं के बंधन चटककर टूटने लगे। इस प्रकार इतनी तीव्र गति से समाज परिवर्तित हुआ कि इस परिवर्तन ने हमारी जीवनशैली को ही नहीं अपितु मूल्यों और आस्थाओं को भी प्रभावित किया। कथा-साहित्य समय सापेक्ष है। अतः समय में हो रहे परिवर्तन को स्वीकार करता चलता है।

कथा साहित्य व नई कविता जिस में व्यक्ति, समाज व राष्ट्र वैज्ञानिक तकनीकी के अधीन व बौद्धिकता से नियंत्रित है जिस के फलस्वरूप नई कविता में भावात्मक, आध्यात्मिक आदर्शों का स्थान बौद्धिक यथार्थ ने ले लिया और उस के साहित्य में नवीनता, विद्रोह, मृत्युबोध, यौन विकृति, आत्महत्या, व्यक्तिवाद से युक्त युगबोध दृष्टित होता है। कथा साहित्य व नई कविता में व्यक्त परम्पराविरोध, अतिषय बौद्धिकता के कारण उस पर अनास्थावादी होने का आरोप लगाया जाता है। लेकिन नई कविता के कवियों की आस्था किसी अदृश्य परमसत्ता की अपेक्षा तर्क व बुद्धि पर आधारित जीवन के प्रति, मनुष्य की शक्ति के प्रति आस्था है। वह जीवन को उसके समस्त गुण-दोषों के साथ स्वीकार करता है। नई कविता का वस्तु विषय भी कोई विषिष्ट समुदाय नहीं है बल्कि आम मध्यमवर्गीय व्यक्ति है जिस का उदय औद्योगिक व आर्थिक विकास के कारण हुआ है। यह संवेदनशील, बुद्धिजीवी वर्ग परिस्थितियों के कारण पीड़ित, विवश है, जिस के जीवन में असंतोष, अनिच्छय व दुविधा व्याप्त है। ऐसे मध्यम वर्गीय व्यक्ति को देख नये कवि की संवेदना सजग हो उठती है। यही कारण है कि नई कविता की काव्य धारा पूर्ववर्ती काव्यधाराओं की तरह आदर्शों व जीवन मूल्यों की अभिव्यक्ति की परम्परा

का अनुकरण नहीं बल्कि व्यक्ति की घृणाः, असुन्दरता, यौन कुण्ठा, मानसिक विकृति, यौन विकृति, को काव्य में प्रश्रय देती है और पश्चिम के फ्रायडवादी मूल्यों का समर्थन करती है।

कथा साहित्य व नई कविता के परिवर्तित होते साहित्यिक मूल्यों में आदर्शों के गुणगान के स्थान पर अनुभूत यथार्थ महत्वपूर्ण है। उस में वर्णित यथार्थ वैयक्तिक, पारिवारिक, सामाजिक, राष्ट्रीय तथा विष्वव्यापी यथार्थ है। नये कवि ने व्यक्ति के जीवन के प्रत्येक कोने से यथार्थ को उकेरा है, चाहे वह उस का व्यक्तिगत जीवन है या पारिवारिक या कार्यालयी या राजनीतिक आडम्बर या नौकरशाही का आतंक और या फिर औद्योगिकीकरण का दुर्प्रभाव, सभी नए कवि की गहन अनुभूति के परिचायक है। उदाहरण के तौर पर महानगरों के फ्लेटों का चित्रण करती अज्ञेय की ये पंक्तियाँ आधुनिक भौगोलिक यथार्थ का सटीक चित्र प्रस्तुत करती हैं

**“उस कन्थे में सताईस सौ थिगलियाँ है  
सताइसों दरबे है  
हर थिगली में एक घर है, घरवाली है—  
सताइसों कुनबे है—  
कोई कैसे पहचान देगा ।**

कथा साहित्य व नई कविता पर ये आरोप लगाया जाता है कि वह व्यक्तित्व की तलाश में सामाजिकता व मानवता से किनारा कर चुकी है लेकिन नई कविता का केन्द्र बिन्दु व्यक्ति ही समाज का, मानवता का प्रतिनिधि है। उस ने समाज की इकाई मानव की स्वतन्त्रता, दायित्व, अधिकार व उपयोगिता का प्रतिपादन किया है जो नई कविता के मानवतावादी दृष्टि कोण के परिचायक हैं। नया कवि बुद्धिवादी होने से सजग व चेतना युक्त है जो परम्परागत रीतियों, आदर्शों, जीवन मूल्यों को ज्यों का त्यों नहीं स्वीकारता बल्कि युगीन सन्दर्भों में उन का औचित्य देखते हुए, जीर्ण-शीर्ण परम्पराओं को त्यागता है, कुछ का परिषोधन करके, अभिव्यक्ति करता है और नवीन मूल्यों को उदभूत भी करता है। नई कविता में विषय वस्तु के क्षेत्र में ही नवीन मूल्यों स्थापित नहीं किए बल्कि अभिव्यक्ति के क्षेत्र में भी नवीन आयाम प्रस्तुत किए और छंद, लय, प्रतीकों के तन्त्र में फँसी कविता को सहज व स्वाभाविक बनाते हुए, युग सापेक्ष नवीन प्रतीकों की संरचना की और काव्य को साहित्यिक रूढ़ियों से मुक्त कराया।

इस तरह हम देखते हैं कि कथा साहित्य व नई कविता में बदलते जीवन मूल्य युगानुरूप है व परिवर्तित युगीन परिस्थितियों की देन हैं। नए कवि ने आधुनिकता के नाम पर, परम्परागत जीवन मूल्य व साहित्यिक मूल्यों का पूर्ण परित्याग नहीं किया बल्कि ग्राह्य योग्य मूल्यों का शोधन / परिषोधन कर के स्वीकार भी किया है और प्रगतिमूलक जीवन मूल्यों का निर्माण किया है। क्षण बोध, अस्तित्व बोध, वैयक्तिकता, युगबोध जैसे नवीन मूल्यों की स्थापना के साथ, मानवता, राष्ट्रीयता, आस्था, परम्पराबोध आदि को युगीन सन्दर्भों में परिवर्तित किया है। इस तरह कथा साहित्य व नई कविता ने साहित्य में नवीनमूल्यों के निर्माण के दायित्व को बखूबी निभाया है।

इस परिवर्तन के दौर में कथाकारों में कथा साहित्य व कथा साहित्य व नई कविता पारिवारिक जीवन में मूल्यों के बदलाव को प्रमुखता से रेखांकित किया है ‘परिवार’ साधारणतः पति-पत्नी और उनके बच्चों के समूह को कहते हैं। स्वतंत्रता के बाद एक ऐसी मोहभंग की स्थिति पैदा हुई कि परिवार बिखर गए। माता-पिता के बीच झगड़े बढ़ गए और बच्चे त्रिशंकु की भांति हो गए। कहीं पिता दूसरा विवाह कर लेता है तो मां अकेली बोज़ संभालती है और प्रत्येक क्षण बच्चों को अपना अस्तित्व अनावश्यक प्रतीत होने लगा। कहीं पर तलाक की स्थिति में संतान को समाज में अपमान सहना पड़ता है। संबंधों के विघटन की गति, आर्थिक, नैतिक मान्यताओं के परिवर्तन के कारण तीव्र हो गई है। व्यक्ति संबंधों और संदर्भों से कटकर अकेला तथा स्वार्थी हो गया है। सर्वाधिक कहानियाँ इस दौर के इन टूटते मानवीय संबंधों को रेखांकित करती हैं। महीप सिंह की ‘गंध’, कृष्ण बलदेव वैद्य की ‘त्रिकोण’, ‘अजनबी’ तथा महेन्द्र भल्ला की ‘आग’ आदि कहानियों में परिवर्तित पारिवारिक मूल्यों को गंध दिखाई देती है।

आधुनिक कथा साहित्य व नई कविता की चकाचौंध, अर्थ के दबाव आदि के कारण अस्तित्व का संकट इतना गहरा हो गया है कि व्यक्ति प्रेम तक की अवहेलना कर बैठा है। फलतः प्रेम का शुद्ध रूप उसकी समझ से बाहर हो गया है। समकालीन कथा-साहित्य में स्त्री-पुरुष के इन विश्रृंखलित मूल्यों की झलक मिलती है। मृदुला गर्ग की कहानी ‘कितनी कैदें’ कहानी में आधुनिक जीवन की यात्रिकता को सैक्स के माध्यम से उजागर किया है। शशि प्रभा की कहानी ‘गंध’ में विवाहित पर नारी-पुरुष के संबंध का खुला चित्रण किया गया है। इसी प्रकार मधुमालती की ‘अंतर्कथा’ में आधुनिक अविवाहित किरण और बिल के संभोग का चित्रण है। इन मूल्यों के विघटन ने ‘परिवार’ जैसी संस्था के अस्तित्व को ही संकट में डाल दिया। ‘परिवार’ की धुरी बच्चे होते हैं, जो सार्थक जीवन मूल्यों के संस्थापक होते हैं। परन्तु परिवर्तन के इस दौर में नई और पुरानी पीढ़ी में टकराव परिलक्षित होता है। पारिवारिक स्तर पर बनते बिगड़ते आत्मीय संबंधों में अर्थतत्त्व की महत्त्वपूर्ण भूमिका रही है। माता-पिता और बेटे-बेटियों के बीच बढ़ती खाई इस बात का प्रमाण है। जगदंबा प्रसाद दीक्षित की ‘शुरुआत’ कहानी में मूल्यों के इसी परिवर्तित स्वरूप को दिखाया गया है। नयी पीढ़ी अब आंख मूंदकर सब कुछ स्वीकार कर लेने के पक्ष में नहीं है। पुराने मूल्यों, जिनका आज कोई अर्थ नहीं, को लादने पर युवा पीढ़ी विद्रोही हो जाती है। नयी पीढ़ी का मूल्य बोध पुरानी पीढ़ी से नितान्त भिन्न है। यह सब बदलती परिस्थितियों की उपज है।

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### **ABSTRACT**

*The present library and data focus are received incorporated library the board framework (ILMS) for compelling and productivity administrations. RFID make ready to libraries for giving books return office outside the library through book drop stations and make staff opening up to communicate with other client for additional administrations. This paper gives an outline of RFID based library the executives framework and shows that RFID can be utilized in libraries and data focuses to guarantee security and work with creative administrations.*

**Keyword:** RFID, Radio Frequency Identification, Library the board framework

### **INTRODUCTION**

RFID is a contraction of Radio Frequency Identification that is a mix of radio-recurrence and micro processor. It works with to remote recognizable proof of individuals, books or resources by radio waves. RFID innovation has existed from quite a while. In (Stockman, 1948) examined the fundamental hypothesis for reflected force correspondence and execution of RFID in distributed paper named "Correspondence through reflected force". (Vernon, 1952) distributed paper named "Utilization of the microwave homodyne" and (Harris, 1960) paper named "Radio transmission frameworks with modulatable uninvolvement responder", individually. From that point forward, the advancement of RFID proceeded. It has arisen quickly as a vital component to use as a security and access control framework in library. "The data contained on central processor in the labels joined to library materials is perused utilizing radio recurrence innovation paying little heed to thing direction or arrangement (i.e., the innovation doesn't need view or a fixed plane to peruse labels as do customary burglary discovery frameworks) and distance from the thing is certainly not a basic factor with the exception of extra-wide leave entryways. The passages at the structure exit(s) can be really wide perused a ways off of up to two feet by every one of two equal leave sensors" (Boss, 2003). In this paper, consciousness of RFID has been proposed. RFID

### **RFID COMPONENT**

**Tag :** Now and again is additionally called RFID Chip, it's anything but an electronic label that stuck on the library reports for trades information with peruser by means of radio

waves. Nearly RFID labels have two fundamental parts to be specific Antenna and IC (coordinated circuit). Where receiving wire is fill in as channel between the peruser and chip to get the radio waves. There the IC is utilized for information stockpiling and handling. RFID labels are come in four fundamental sorts; dynamic, latent, semi-alooof and Semi-dynamic. "Semi-dynamic labels utilize the battery for driving the receiving wire yet the chip depends on the RF energy from the peruser and a functioning label utilizes a battery for both the chip and the transmission of information on the radio wire. Semi-detached labels utilize a little installed battery to control the chip, however depend on the energy from the peruser for fueling the label's receiving wire for transmission Passive RFID labels accept their energy from a distant RFID peruser" (Potter, 2005). This tag doesn't need any of their own fuel sources, so it tends to be tiny. These highlights of inactive labels draw in library and data focus to utilize it.

**Reader:** A RFID Reader is a radio recurrence transmitter and beneficiary gadget. At the point when the label comes in the peruser's compelling understanding reach, it's anything but a transponder and recovers information from a RFID tag, which is utilized to follow individuals, books or resources. Two kinds of peruser are utilized on the libraries leave entryway, first sort that who "speaks with the Integrated Library System (ILS) to confirm that all material leaving the library has been looked at and another sort depends on a "robbery" byte in the label that is killing at season of charge and on at season of release" (Ranawella, 2006). RFID peruser have three fundamental segments; receiving wire, handset and decoder. Receiving wire is a channel



between the RFID labels and perusers that produces radio waves and actuates the label when they arrive in a compelling reach. Handsets can interchange twofold; it can send data to the peruser and get it's anything but a tag, or it can get data from the peruser and communicate it's anything but a tag. "At the point when the peruser gets any sign from a tag, it gives that data to the disentangling programming and cycles it for sending to the data framework" (Wyld, 2006).

**Server:** Worker is a center component of the RFID frameworks which oversees admittance to an incorporated help and fills in as a correspondence entryway between the different parts. Perusers are coordinated with the RFID worker. Worker can get the data from labels through each or more perusers in turn, checks these data inside the dissemination data set of library coordinated administration framework and send data again to labels through perusers that the things are legitimate looked at or not; which going external the library.

Library work stream in RFID Environment The library work process in the RFID climate is compelling and proficient way. "The fate of the library will be not the same as what we have today. It will be mostly made conceivable with the guide of previously existing advances and RFID-based frameworks" (Mehrerdi, 2009). The uses of RFID in libraries can be summed up as follow;

**Self Checkout Station:** Self checkout station gives the adaptability to clients to assume responsibility for the registration interaction themselves. RFID self-administrations are not difficult to work and execute registration quick and dependable to filter different things on the double. Self checkout station have three primary parts; UI, peruser and printer. UI coordinated with peruser, when the clients put thing on the peruser, UI shows the subtleties of thing and simply single touch client can registration and take print of those looked at things. These frameworks work with the easy to use climate without staff impedance and make staff opening up to communicate with other client for additional administrations.

**Hostile to Theft Detection:** RFID hostile to robbery doors are introduced at the passage and the leave entryways of the library. These entryways are introduced that the sensor range is covering, to give extra assurance and these platforms are autonomous of one another, at whatever point a thing goes through the platforms without looking at then the caution

sound and lights on the door streak alarm to the library representative.

**Book Drop Box/Station:** RFID make ready to libraries for offer an unmistakable assistance that is valuable for clients, for example, the books return office outside the library through book drop stations. "The library has consistently been at the front line in carrying out arising data advances (IT) to improve the conveyance of administrations to benefactors" (Kajewski, 2006). These book drop stations work with to the client to returning the library things with adaptability of time, in any event, when the library is shut. Book drop framework has likewise same three parts of self checkout stations. Clients just drops the things in these stations and take print receipt that the thing are returned.

**Stock Management:** RFID framework can makes capacity of stock administration is basic and simple. It very well may be finished utilizing hand-held perusers to clear the racks which can be followed quickly to every one of the assortments inside its reach. It additionally distinguishes books that are put on wrong rack.

#### RFID BASED LIBRARY MANAGEMENT SYSTEM IN INDIAN LIBRARIES

The present library and data focus are embraced incorporated library the executives framework (ILMS) for viable and proficiency administrations. RFID likewise broadly acknowledged by these library the board frameworks. It ought to be associated with this product utilizing standard convention like NCIP or SIP2 which doesn't need sharing the chairman secret key. (Koneru, 2004) characterize as an incorporated library robotized framework which is utilized for ID and following of library material naturally and now its reach past from the global positioning framework, to burglary discovery and programmed book arranging. This innovation furnishes an open climate with security, where the clients are profited with administrations like charging/releasing with no human intercession. RFID innovation have effectively executed in numerous Indian libraries, some of them recorded beneath;

- Vivekananda Library, M.D. College Rohtak - Indian Law Institute Library, New Delhi
- National Social Science Documentation Center Library, New Delhi
- National Center for Biological Sciences, Bangalore - National Institute of Technology, Rourkela

- JRD Tata Memorial Library, Indian Institute of Science, Bangalore - Parliament Library ,New Delhi
- Indian Institute of Management, Lucknow
- Anna University, Chennai

## SUMMARIZING

Dr. S.R Ranganathan gives an assertion as the fifth law of library science; “library is a developing life form” and it fills in assets, administrations and clients. The issue related with the upkeep and security of the library things likewise develop with this. RFID-based coordinated library the board framework has in part tackled the issue and just as given a great deal of offices such as self registration/out, looking through help and stock administration. RFID innovation can assist bookkeepers with productively dealing with their assets and improve their administrations. There is no uncertainty; RFID can expand the functioning capacities of administrators and libraries.

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विश्व में भारत अपनी संस्कृति और परंपरा के लिये विश्व भर में प्रसिद्ध है। ये विभिन्न संस्कृति और परंपरा की भूमि है। भारत विश्व की सबसे पुरानी सभ्यता का देश है। भारतीय संस्कृति का महत्वपूर्ण तत्व अच्छे शिष्टाचार, तहजीब, सभ्य संवाद, धार्मिक संस्कार, मान्यताएँ और मूल्य आदि हैं। अब जबकि प्रत्येक की जीवन शैली आधुनिक हो रही है, भारतीय लोग आज भी अपनी परंपरा और मूल्यों को बनाए हुए हैं। विभिन्न संस्कृति और परंपरा के लोगों के बीच की घनिष्ठता ने एक अनोखा देश, 'भारत' बनाया है। अपनी खुद की संस्कृति और परंपरा का अनुसरण करने के द्वारा भारत में लोग शांतिपूर्ण तरीके से रहते हैं। निम्नलिखित पंक्तियों कहा गया है कि संसार का आदि सभ्य देश भारत ही है, जिसका विस्तार उत्तर में हिमालय और दक्षिण में समुद्र तक उल्लिखित है।

उत्तरं यत् समुद्रस्य हिमाद्रेश्चैव दक्षिणम्  
वर्षं तत् भारतं नाम भारती यत्र संततिः।।<sup>1</sup>

अर्थात् भारत देश समुद्र के उत्तर में और बर्फीले पर्वतों के दक्षिण में स्थित है। यहाँ भारत के वंशज निवास करते हैं। राजा भरत के नाम पर इसे भारतवर्ष और सिंधु के नाम पर हिंदू भूमि या हिन्दुस्तान कहा गया। सिंधु को अंग्रेजी में इंडस कहते हैं। जिसके कारण भारत का अंग्रेजी नाम इंडिया पड़ा। 'भा' का अर्थ प्रकाश, ज्ञान या विद्या से है और रत का अर्थ है लीन रहना।<sup>2</sup> ज्ञान, सभ्यता और संस्कृति को विश्व में विस्तृत करना, सबको सुखी, समृद्ध तथा सुसंस्कृत बनाना इस भूमि के पावन लक्ष्य रहे हैं। सारे विश्व में यहाँ का सांस्कृतिक साम्राज्य था इसका अनुमान इस बात से लगाया जा सकता है कि आर्य संस्कृति के सूक्ष्म और स्थूल चिह्न आज भी विश्व में सर्वत्र विद्यमान हैं।

**भारतीय-ज्ञान भौगोलिक सीमाओं से दूर**

भारतीय श्रेष्ठ ज्ञान, संस्कार और उच्च परंपराएँ जाति, धर्म और भौगोलिक सीमाओं से परे हैं। यही कारण है कि मंसूर, समृद्ध फौजी बुल्लाशाह और दारा शिकोह जैसे इस्लाम धर्मावलंबियों ने वेदांत ज्ञान का अवलंब किया। मैक्समुलर, शॉपेनहर और गोल्डस्टकर आदि ने उपनिषदों की महत्ता को मुक्त कंठ से स्वीकारा और उच्चतम बुद्धि की उपज करार दिया। मानव सभ्यता के आदि ग्रंथ वेद भारत में ही गूँजे। उपनिषद इन्हीं वेदों के ज्ञान कांड हैं। वेदों में विमान और नौकायन के उल्लेख यह स्पष्ट करते हैं कि जल, थल और नभ मार्ग से हमारे पूर्वज यातायात करने में सक्षम थे। देश-देशांतर में गमन करते थे। यजुर्वेद में लिखा है-अयं वेनश्चोदयत् पृथ्विगर्भा ज्योतिर्जायू रजसो विमाने। इम मपासंगमें सूर्यस्य शिशुं न विप्रामतिभीरिहतिं। उपयामगृहीतो सिकर्यत्वा<sup>3</sup>। बाज पक्षी की भांति देशांतर में जा जाकर ऐश्वर्य युक्त होने और दूसरों को ऐश्वर्य युक्त बनाने का वर्णन आया है जो विश्व एकीकरण की ओर संकेत करता है- श्येनो भूत्वापरां पत यज्ञमानस्य गह्वान गच्छ तन्नौ संस्कृतम्<sup>4</sup>। रामायणकालीन पुष्पक और महाभारत में उल्लिखित शाल्व का सौभ विमान प्रसिद्ध ही है।

**भारतीय संस्कृति का अनेक भाषाओं पर प्रभाव**

विश्व की अनेक भाषाओं में संस्कृत शब्दों तथा आराध्य देवी देवताओं में भारतीय देवी देवताओं के नामों तथा चरित्रों का मिलना झुलना यह स्पष्ट करता है कि यह भारतीय संस्कृति ही देन है। संस्कृत ही सब भाषाओं की जननी है और यह भाषा भारत में ही समृद्ध हुई। संस्कृत के ह्रस्व शब्द का अर्थ रनवास या रानियों के निवास से है। अंग्रेजी का हैरम और उर्दू का हरमसरा इसी अर्थ को प्रकट करते हैं। हंस पक्षी को अफगानिस्तान की पुश्तो भाषा में जंस जर्मनी में ज्यूस और अंग्रेजी में गूज कहते हैं। ये शब्द स्थान परिवर्तन के कारण बदलते चले गए हैं। हमारे यहाँ ईश्वर को यहवन अर्थात् जो आवाहन के योग्य है कहते हैं। यहूदियों और यूरोप वासियों द्वारा इसे यहोवा या जेहोवा कहा जाता है। भारतीयों का कोद्धा इस्लाम का खुदा बन जाता है। कोद्धा का अभिप्राय है प्रश्नवाचक अर्थात् अनिर्वचनीय तथा श्रद्धा सत्यवाचक

अर्थात् शिव, ब्रह्म या सृजक। हिंदू विवाह रीतियों में कंगन खोलने की परंपरा है। कंगन को हस्तबंध कहा जाता है। अंग्रेजी का हज्बैंड शब्द इसी आधार पर बना।

### अन्य धर्म और भारतीय देवता

ऐसे प्रकट चिह्नों और अवशेषों की कमी नहीं है, जिनसे भारतीय संस्कृति के विश्व के कोने कोने में फैले होने के प्रमाण मिलते हैं। दक्षिण अमरीका के पेरू देश में इंका नामक प्राचीन सभ्यता थी। ये लोग शिव के उपासक और अपने को सूर्य का वंशज मानने वाले थे। कंबोजिया के अंगकोरवाट के मंदिर वहाँ भारतीय संस्कृति का होना प्रमाणित करते हैं। दक्षिण भारत के राजेन्द्र चोल ने यहाँ विजय पायी थी। जावा बारबोडर नामक स्थान से ऐसे ही प्रमाण मिले हैं। सन १६०७ में प्राचीन हिंड्राइट राज्य की राजधानी बोगाजकोई में पाई गयी मिट्टी की पट्टिकाओं में वैदिक देवता मित्र वरुण इंद्र नासत्यस का उल्लेख है।

### हिंदू राज्यों का विस्तार

टैल अर्मना में पाये गये पत्रों में संस्कृत की रूपरेखावाले नाम पाए गए हैं। कैस्साइट जाति के कुछ नाम संस्कृत के हैं। शूर्य और मारितस नाम के राजा सन १७४६ और ११८० में बेबीलोनिया में थे। इनके नाम सूर्य और मारुत से बिगड़कर ही बने थे। ऐतिहासिक उपन्यासकार अमृतलाल नागर के अनुसार रघु ने ईरान और राम ने ईराक जीता था। रघु ने अफगानिस्तान पर भी विजय पाई और हेते या हिट्टी असुर उनके डर से लंका चले गए। इन्हें बाद में राम ने मारा। वे कहते हैं ईराक में स्थित राजा सगर या सार्गेन महान की अयोध्या भी राम ने अपने अधिकार में कर ली थी। हुफरात की अजुत से सरयू स्थित अयोध्या तक और लंका से कश्मीर तक प्रतापी सम्राट रामचंद्र ने प्रजा को अत्याचारी दुष्टों के निर्मम पंजे से छुड़ाया। जावा में हिंदू राज्य थे। सुमात्रा में सबसे पुराना हिंदू राज्य श्रीविजय (पेलंबग) था। बोर्नियो के राजा मूलवर्मा ने बहु सुवर्णकम नामक यज्ञ किया और ब्राह्मणों को बीस हजार गायें दान दीं। यह राजा अश्ववर्मा के पुत्र और कुंडुंग के पौत्र थे। कुंडुंग ही कौंडिन्य थे। इस नाम का एक भारतीय ब्राह्मण चौथी शती में 'फू-नान' का राजा चुना गया। इसे कंबुज या कंबोज भी कहते हैं। वहाँ उसने हिंदू राज्य और संस्कृति स्थापित की। स्याम या थाईलैंड के पर्व त्यौहार आज भी ब्राह्मण प्रणाली पर हैं। बर्मा के मान राज्य का नाम द्वारवती था। जापान में बौद्ध धर्म के अतिरिक्त गणेश और विष्णु की प्रतिमाएँ मिली हैं। युधिष्ठिर की दिग्विजय में अर्जुन ने प्राग् ज्योतिषपुर के राजा भगदत्त से युद्ध किया और कर वसूला। भगदत्त की सेना में चीनी सिपाही भी थे अर्थात् भगदत्त का राज्य विस्तार चीन तक था। महाभारत के अनुसार देवों ने समुद्रतल वासी कालेयों और अर्जुन ने निवातकवचों का दमन किया। भौगोलिक दृष्टि से यह स्थान कैलीफोर्निया और अमरीका है जहाँ भारत का ध्वज फहराया। देवताओं के राजा इंद्र या इनदर या इनथोर मध्य एशिया के आर्य शासक थे, जो हमारे ही साथी मित्र हितैषी और पूज्य थे। वे भारतीय मनीषी ही थे, जिन्होंने पृथ्वी की अन्य ग्रहों से सापेक्षिक गति का अध्ययन कर कालगणना के सिद्धांत निकाले। जो कार्य आर्यभट्ट ने किया उसका श्रेय कोपरनिकस (पोलैंड) को दिया गया। गुरुत्वाकर्षण के सिद्धांत की खोज न्यूटन से पहले महाभारत के समय में भी विद्यमान थी। शांति पर्व में भीष्म कहते हैं—

**भूपैः स्थैर्यं गुरुत्वं च काठिन्यं प्रसवात्मता**

**गंधो भारश्च शक्तिश्च संघातः स्थापनी धृतिः<sup>5</sup>**

भारत ने विश्व को सभ्य और सुसंस्कृत बनाकर आर्य अथवा वैदिक संस्कृति विस्तीर्ण एवं प्रसारित की। लेकिन तीन सौ वर्षों की पराधीनता में भारत ने बहुत कुछ खोया है और आक्रमणकारियों द्वारा उसकी महान संस्कृति की विनाश किया जाता रहा है। अब वह समय है कि हम जागें और जो कुछ खोया है उसका पुनः संरक्षण करें।

### सन्दर्भ ग्रन्थ

- 1.विष्णु पुराण
- 2.संस्कृत शब्दकोश
- 3.यजुर्वेद अध्याय 7 मंत्र 16
- 4.यजुर्वेद अध्याय 4 मंत्र 34
- 5.महाभारत—शांति पर्व

## AN ANALYSIS OF DICKENS' NOVELS WITH REFERENCE TO CHILD LABOUR AND EXPLOITATION



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### ABSTRACT

*Literature is made out of the lore of life. It is a reflection of society is a fact that has been widely acknowledged. It indeed reflects the society, its strength as its weakness. In Literature one can witness the stories designed to present human life and action through some characters who, by their words, action and reaction, convey certain meaningful messages for the purpose of education, information and entertainment. The influence of literature on society is felt directly or indirectly. Thus no writer can escape the influence of his age. In the present paper an attempt has been made to discuss the novels of Charles Dickens with reference to child labour and exploitation. Dickens had a unique perspective on the subject of child labour. His sympathetic treatment of working and abandoned children can be observed in many of his novels such as Oliver Twist, David Copperfield, Hard Times, and Great Expectations etc. He was a man of very liberal sentiments – an assailer of constituted wrongs and authorities, one of the advocates in the plea of poor children versus rich, to the progress of which he had lent no small aid in his day. The present paper highlights that the issues mentioned by Dickens about 170 years ago, are still relevant.*

**Keywords:** Literature, Perspective, Exploitation, Plea, Progress.

Literature is made out of the lore of life. It is a reflection of the society is a fact that has been widely acknowledged. Literature indeed reflects the society, its strength as well as its weakness. In literature we find stories designed to present human life and action through some characters who, by their words, action and reaction, convey certain meaningful messages for the purpose of education, information and entertainment. It is in fact, impossible to find a work of literature that excludes the attitudes, morale and values of the society. A writer is not an isolated fact but the product of the age in which he lives and works. His picture of life is pervaded with the influence of his age. Therefore no writer can escape the influence of his age. Thus literature has a national as well as a personal character and interest. The influence of literature on society is felt directly or indirectly. The novels of Charles Dickens had an indirect influence in creating in society a feeling for regulating and removing social wrongs, calling for necessary reforms.

Child labour did not begin with the advent of the industrial revolution. The young had always worked alongside their parents in the home, in the field, and as apprentices in skilled and semi-skilled trades, but the late 18<sup>th</sup> century and early 19<sup>th</sup> centuries saw a drastic change in the type of labor children performed. Increasingly employed in factories and mines, children were thrust into dangerous and unhealthy situations within the adult working world, prompting reformers to call for legislative change and romantic and Victorian

writers to offer sympathetic representations of working children in their poetry and fiction.

Dicken had a unique perspective on the subject of child labor, reflecting upon his own experience working at Warren's Blacking Factory at the age of twelve when his father was held in debtor's prison. Completely on his own, working long hours in rat-infested quarters, young Dicken felt abandoned by his family and his bitterness over this period of his childhood continued to influence his life and writings. Numerous critics and biographers have studied the details of the Warren's Blacking episode and note that it informed the author's sympathetic treatment of working and abandoned children in many of his novels, particularly *Olives Twist* and the largely autobiographical *David Copperfield*. Like Dickens, David lates recalled feeling utterly broken, "I know enough the world now to have lost the capacity of being much surprised by anything; but it is a matter of some surprise to me, even now, that I can have been so easily thrown away to such an age". Dickens made the incident even more poignant in the novel than it had been in his own life.

The novelist habitually chooses children and distressed members of the working class to awaken moral outrage by society on its defenseless members. And this oppression is most destructive of human dignity when it assumes an institutional form, for then it operates with complete impersonality, treating its victims like soulless objects. Thus, Jo, the crossing –

Sweeper of Bleak House, is always being “moved on” by authorities who do not know what to do with him except when he is being treated as a pawn for self interested ends which are unintelligible to him. He is used by Tulkinghorn, by Chadband, by Lady Dedlock, by Buckle, by Skimpole. In the same way Stephen Blackpool in *Hard Time*, having successively served his purposes as a butt for the Labour-agitator Slackbridge and for his employer Bounderby, is cast off by both to become Tom Gradgrind's Toot.

Stephen's dying prayer “that awth' world may only coom together more, an'get a better unnerstan' in o' one another,” is, under the circumstances, a charitable arraignment of the appalling inhumanity under which so many individuals suffer in Dicken's novels. From the disintegration of all traditions making for social cohesiveness in an age so given over to self aggrandizement not even the family is immune. Dicken's portraits of hard hearted parents, it has been suggested, are a reflection of his own bitterness against his father and mother for abandoning him during a crucial period in his boyhood. However this may be the neglected children in his novels are perhaps less to be pitied than those who are callously exploited to further their parents own selfish ends. Among those who traffic in the love of sons and daughters, sometimes but by no means always under the pretext of altruism, are Mr. Dombey and Mrs. Skewton in *Dombey and Son*, Turveydrop, Mrs. Jellyby and Skimpole in *Break House*, Gradgrind in *Hard Times*, William Dorrit in *Little Dorrit*, and Gaffert Hexam and Mr. Dolls in *Our Mutual Friend*.

In terms of societal influences on the children's literature of the nineteenth century it should be noted here that class distinctions in Britain had been quite rigid until the late eighteenth century with the onset of more widespread reading materials and skills among the population, the upper classes recognized that they had a vested interest in maintaining the restricted nature of children's literature.

Dickens had in some small way been fortunate in his early years, though he did not realize how lucky he had been until much later in life. As a child of nine Dickens wrote a play entitled *Misnar*, the Sultan of India based on his reading of *Tales of the Genii*. In *Great Expectations*, we could trace what Dickens thought about his life and the people around him because it contains so many autobiographical elements. His father John

Dickens, was imprisoned in Marshalsea Prison for debt in 1824, and Dicken was forced to labour at Warren's Blacking Factory, which was a damaging psychological experience in itself. In *Great Expectations*, Pip is left an orphan while his older sister and his husband serve as his substitute parents. Pip does not have a high opinion of his elder sister, Mrs. Joe, Gargery, as he recounts:

“She was not a good-backing woman, my sister; and I had a general impression that she must have made Joe Gargery marry her by hand.

When Charles Dickens was a small boy perhaps eight or nine years old, he got lost in the city, the teeming financial and commercial center of the great metropolis of London. A friend of the family had taken him to look at the outside of St. Giles's Church with the hope of him: young Dickens was convinced that on Sundays, the beggars of London, having cast off their week day pretenses to blindness, lameness and other physical maladies, and freshly attired in their holiday best, were to be seen marching into the temple of their patron saint, where they would then partake of divine service.

St Giles's was viewed with sentiments of satisfaction and one infers edification all around, but shortly afterwards on the strand, Dickens somehow became separated from his companion. At first he was horrified; but he soon rallied and determined to set off to seek his fortune. “Thus I wandered about the city, like a child in a dream,” he reminisced in “Gone Astray” an elegiac essay written more than thirty years later, “Staring at the British merchants and inspired by a mighty faith in the marvellousness of everything”.

In Dickens presentation his dog-eat-dog philosophy has extinguished the way principle of communal concern, leaving the weak perpetually at the mercy of the strong. Oliver Twist's words, while he is being led to Sowerberry's undertaking establishment, so poignantly dramatize the helplessness of the unprotected that even Bumble is momentarily abashed:

“I will be good indeed, indeed I will, Sir! I am a very little boy, Sir; and it is so so — ... So lonely Sir; so very lonely”.

The hardships afflicting so large a part of the populace in the Victorian era produced, in reaction, an extensive and eloquent body of social criticism. Dicken's denunciation of filth and

ignorance, as well as of the lack of responsible attention to those conditions and the degradation resulting there from, adds nothing substantially to the preachments of Carlyle and Ruskin, and the other great reformers who were his contemporaries.

Despite his advocacy of mass education, Dickens found that too many systems of education whether sponsored by the State or the Church, operated on the same killjoy principles. At a dinner for the Warehousemen and Clerks school in 1857 he denounced all schools:

“Where the bright childish imagination is utterly discouraged and where those bright childish faces, which it is so very good for the wisest among us to remember in after life, when the world is too much with us early and late, are gloomily and grimly scared out of the countenance; where I have never seen among the pupils, where boys or girls, anything but little parrots and small calculating machines.”

In another address the following year he developed his educational ideals with reference to Christ’s manner of teaching”

“ knowledge has a very limited power when it informs the heart as well, it has a power over life and death and body and the soul, and dominates the universe.”

To sum the present discussion it can be said that Charles Dickens was the first who made working class children his main characters and criticize the extreme poverty in the cities, child labour, the injustice of the social system and the conditions inside work houses in his novels. By doing so he raised the public’s attention to this particular problem and dared to write about social taboos. While reading novels like *Great Expectations*, *Oliver Twist*, and *David Copperfield* today it gets very clear that the issues mentioned by Dickens about one seventy years ago, are still relevant. Child labour and exploitation are still prevailing problems in poor and developing countries these days. It is worth to end the discussion with the words of Dickens on this burning issue:

“Child labour and poverty are inevitably bound together and if

you continue to use the labour of children as the treatment for the social disease of poverty, you will have both poverty and child labour to the end of time.”

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## ABSTRACT

*The information innovation world figures out security, while the activities innovation world is generally wellbeing centered. The fruitful execution of computerized stages is reliant upon the Web of Things, a virtual relationship that carries with it the test of making and keeping up with complete security to store and share information securely. The library or information Center assumes a significant part in the existence of specialists, researchers, and other clinical experts. Important and convenient accessibility of information is a fundamental prerequisite as the life of somebody might be in question. The goal was to know the condition of the data administrations of the organizations, the essential data administration prerequisites of the researchers, and clinical experts, and the readiness of the data places for meeting the data administration necessities of the clinical specialists, grasp the familiarity with the library innovations toward the end clients*

## INTRODUCTION

Any goal can't be accomplished except if and until it spans to its decision. The same is the situation with this study where researchers and clinical experts were approached to respond to the library administrations which are intended for them. In prior days libraries buy print duplicates of records for their assortments. However, presently in libraries, an upset in data is gained, processed, put away, and got to through electronic media. In the present Libraries go about as information focus which expects to make an educated society. In this sense, one of the significant changes in the membership of electronic substances, rather than a print diary, is that as a rule, associations currently pay for content they never genuinely gain. For example, a library pays for a web-based diary, books, e-data set, and online talk which it might never find in a print structure. In the computerized climate, the custodian is as a rule expected to purchase admittance to the electronic duplicate for a particular timeframe and under specific states of purpose. Access is for the most part purchased through a permit. A permit is a conventional position to accomplish something which would somehow be unlawful. Licenses are for the most part directed by contract regulation. The level of admittance to and utilization allowed of an electronic diary relies vigorously upon the agreements haggled in the permit for that particular item. At the point when a copyright holder (as a rule, the distributor) sends a permit arrangement, it ought to be remembered that this is, as a matter

of fact, a challenge to arrange the agreements under which the product(s) might be utilized. Generally, their model permit is sent, which ought to be perused cautiously, changed as required, and gotten back to show the terms on which the library is ready to close an agreement. The vast majority of the licenses are composed by attorneys and are in many cases in English. The specialized language utilized may not be recognizable to bookkeepers, is obnoxious to peruse, and can be hard to comprehend. Notwithstanding, with library assets progressively being made accessible in electronic configuration, it is essential to comprehend what is being consented to. Neglecting to sign or disregarding the agreements doesn't nullify the terms nor does it prevent them from applying. To be sure, utilizing the item or administration following warning of the agreements, will frequently be understood as an acknowledgment of those agreements and the library might be limited by them. This permitting guide has been gathered to assist you with understanding the importance of normal statements contained in a permit. In this situation most importantly we really want to realize what is advanced licenses and their understanding. In short words the advanced licenses and arrangements are; Permit - Permit is a legitimate strategy for the deliberate exchange of responsibility for protected innovation over a clear period. In basic words, this is the consent by the proprietor of an IP to someone else's or lawful element to perform or partake in the selective freedoms of the



proprietor according to the commonly concurred agreements during a commonly concurred timeframe

**Strategy** - A typical insight of terms and condition between any Affiliation and Distributer. Legitimization behind Understanding The MOU is placed into to set the terms for joint execution of the Distributer and Master for redesigning really the robotized substance.

### **Award Development**

In general, an award understanding includes clarifications that arrangement with; Get-togethers, Presentations, Translation of the Perception, Praises, Use and Obstructions, Terms and Terminations, Development and Consent to the Supported Materials, Permit Charge, Licensee's (Library) Attempts, Confirmations and Reimbursements, Power Majeure, Undertaking, Conversation Settlement, Timetables and Checks, Coordinating Rules and Locale.

### **Limitation Condition Clarification**

#### **Parties**

Parties mean Licensor and Licensee.

#### **Introductions**

A lot of sections called introductions. The introductions give a short chart of what is generally anticipated to be achieved by the perception. Genuinely talking, introductions are not piece of the authentic game-plan. Their commitment is to shape a short record of the objectives of the parties and to give the guaranteed setting in which the understanding was at first made.

#### **Seeing Clearly of action**

A chief arrangement in this part is the public rule picked for the understanding of the honor and the court picked for presenting a social event of verification against the Distributer or the Library. Most licenses pick the public rule generally speaking around fitting for the Distributer. As shown by an expense viewpoint, it is fitting that you right this breaking point to the law and the court which is overall obliging for you or for the two players. Shockingly, you could wind up utilizing U.S. rule, for instance, for the translation of your award and going out to a U.S. court to advocate your case. The Course of action should see unequivocally the thing is being bought at the cost being paid. Anything which **is** pardoned won't be given in the value and may ought to be struggled for an additional expense.

### **Regards surrendered under the Grant**

The demands under this header figure out how you are permitted to manage the Upheld Materials. Ensure that you list here every movement you wish to do or you would like your clients to have the decision to do with the Maintained Materials. Anything which isn't implied here won't be permitted, except for if you either re-coordinate the honor or purchase additional entrances later under a further permit. The structure of exercises can be as expanded or as short as you pick and essentially rely unequivocally on the total you can traverse paying. Grasp that you shouldn't bargain over the authentic entrances really allowed to you by your public endorsed improvement rule or by generally settlements. Sign of truth, these potential doorways should not be kept in the award, yet rather different watchmen like to remember them for the distinction as an "embellishment mémoire" for comfort. The significance of kept up with clients and the spots from where the Maintained Materials can be gotten to is of pre-perceptible significance under this piece.

#### **Embraced**

clients are for the most part reliably removed by distributors into "Kept up with Clients" and "Stroll around Clients". Regardless, what these terms cover can move basically beginning with one honor then onto the going with. 'Stroll around Clients' are furthermore kept up with to utilize the Maintained Materials, yet, if all else fails, not correspondingly as Embraced Clients. A more careful division consolidates "Individuals" of the establishment and "Non-Individuals". "Non-Individuals" can be segregated into "Picked Stroll around Clients", "Unregistered Stroll around Clients" (like guests to a public library) and "Picked Far off Clients". Eventually, it has no impact what the clients are called, relative length as the definitions cover the client social affairs to whom you wish to give access. Individuals, Picked Stroll around Clients, Enlisted Far away Clients and Site could be depicted as follows:

People from the Establishment: people from staff used by or generally speaking confirmation to the foundation and students of that foundation, who are permitted to get to solid areas for the and who have been given with a mystery key or other insistence.

Picked Walk around Clients: people who are enrolled by open assurance as permitted clients

of the library affiliation and who are permitted to serve to the defended relationship through work stations coordinated at the library office and who have been given with a mystery word or other insistence. Unregistered Stroll around Clients: individuals who are not enrolled as clients of the library association and who are allowed to serve to the safeguarded relationship through work stations organized at the library office for express purposes as depicted in the Perception.

Selected Distant Clients: a connection or distinctive individuals from the public enrolled as allowed client of the library association and who are allowed to get to the safeguarded relationship from places other than the library office Supported Site(s) recommends an Endorser site produced using (I) single or different Foundations/geographic districts or (ii) a mix of the as of late referred to for which Partner demands task.

The going with outline will give the sort and level of chances related with current, business site-licenses.

The right : -

- Access the distributor's server
- Store the Endorsed Materials locally
- Coordinate the Endorsed Materials into the nearby construction foundations and data associations
- Record the Endorsed Materials
- To make the Endorsed Materials open to Individuals from the relationship on the spot for their evaluation, preparing and confidential review purposes
- Grant Individuals from the establishment to print and also download individual articles for their evaluation, instructing and confidential review purposes
- Allow to and license replicating by Enrolled Stroll around Clients for their examination, educating and secret study purposes
- License the age and considered duplicates (printed copy or electronic plan) in course packs

Requirements of Direction

- These game plans depict how you are not permitted to manage the Endorsed Materials. The most eminent use limitations are:
  - basic or determined extension
  - reallocation, exchanging, credit or sub-permitting

- purposeful store or stream in any plan to anybody other than to Individuals from the foundation.

Plans

The term of the grant is the period during which the distributor ought to give access and the library ought to pay. The honor should be "dropped" before the climax of the term in case there is a primary break of the grant or there is another system considering earlier end, (for instance, on the event of a particular event for instance responsibility, or by one party giving the other a period of notice). Licenses can be as widened or as short as the social gatherings pick and can tirelessly be restored. Considering a genuine worry for exactness, express the date of end unequivocally as opposed to the length of the term. It is possible to have a grant which will carry on for a constant period and ought to be conceivable by due notice.

End A license should reliably contain terms which set out an instrument or conditions whereupon the honor ought to end. This is to get the library far from being gotten into an arrangement where it is obliged to pay for things or affiliations the distributor no longer gives properly or which the library requires not any more broadened. Under the general rule, an arrangement may be finished all of a sudden by notice if the other party defaults by failing to have out any liabilities on its impact.

This applies given that there has been a serious break of understanding. A sensible diagram is to give a segment to offer the attacking party an opportunity to fix the default. A common period is thirty days after receipt of a made early notification with this effect. If the default is aided this stretch of time, the end will not go out to with being strong. If the default isn't helped inside the time span given, then, the arrangement is finished. Upon end on a default by the Distributer, it would be fair for the Distributer to repay the Library a level of the honor charge which watches out for the paid, yet unexpired term. This methodology should be coordinated into the break of getting a handle on condition. It very well may be common that particular approaches stay in force after the fulfillment of the comprehension.

A fundamental arrangement is interminable consent to the Endorsed Material. This really should apply expecting the permit closes by prudence of end or, under unambiguous

circumstances, break of course of action. Ceaseless access isn't normally surrendered and a specific game plan for this ought to be associated with the license. In the two events, the Library should demand that the Distributer give continuing with permission to the Approved Material under that license either from the Distributer's server or through an outcast, or by giving electronic records to the Library. Whether the license closes on the default of the Distributer or the Library, ceaseless access should be surrendered to that piece of the Approved Material to which the Library was authentically entitled until the break occurred. Typically, endless access might be permitted by the Distributer relying upon the essential that the Library continues to see the responsibilities as wrangled under the grant concerning impediments on use, alterations and security.

#### **Conveyance AND Admittance TO THE Authorized MATERIALS**

It is vital to be pretty much as exact as conceivable about the date of conveyance of the Authorized Materials, their recurrence, the arrangement and media. It maybe should be obvious that the media should be in a structure which the Library can both access and use; to keep away from the gamble of later question the permit ought to determine plainly what these are. Should the materials not show up in time; the Distributer will ordinarily have 30 days to cure the break. It is prudent to remember the subtleties for a Timetable, rather than in the primary statements of the permit. Would it be a good idea for you wish to get the electronic duplicate previously or simultaneously as the print duplicate, a proviso to this end can be consolidated in the permit. If portions of the Authorized Material are removed or ceased, it would be fair for arrangement to be made that the Library can request the Distributer to repay it for that extent from the expense addressing the cost of that Authorized Material that has been removed or suspended.

#### **Licenses Ought to be Debatable**

Permit arrangements might be debatable. A debatable understanding is one where the gatherings to the arrangement examine and concur upon what agreements ought to be remembered for the arrangement. While permitting computerized data for use in your library, you will actually want to haggle with the proprietor different agreements in the

understanding, like cost for the material, and who might utilize that material.

#### **Permit Expenses and Charges**

The permit expense can be remembered for the primary proviso or in a different timetable. Ensure that the permit charge is comprehensive expense, for example, comprehensive of all administrations and items given by the distributor and comprehensive, everything being equal, use, or comparable assessments. This is to keep away from stowed-away expenses being charged at a later stage. Arrangements for when the permit expense ought to be paid and, where it is paid in stages, the recurrence and worth of every installment ought to likewise be incorporated.

#### **Library Endeavors**

This part is fundamental to distributors. You will find here courses of action where the Library embraces that neither it nor its clients will infringe copyright or a few other selective opportunities by for example, evolving, changing, changing, interpreting and making auxiliary works of the Approved Materials or parts of it. The Library in like manner embraces that it will use or allow its clients to include the Approved Materials according to the arrangements as put down in the license. Libraries should look out for arrangements that put a ludicrous commitment on the Library for acts not went about according to the grant for instance for acts which are not inside its nearby control. In the event of an infringement, it should be seen reasonable to demand that the Library tell the Distributer of any infringement that comes to the Library's notice and that the Library will collaborate with the Distributer to prevent further abuse. Anyway the Library should not be made responsible for an infringement by an endorsed client, it is genuine that the Library should be in danger in case it disregarded or encouraged a break to happen directly following being educated regarding the infringement by the distributor.

#### **Guarantees and Reimbursements**

A guarantee is an assertion or portrayal that specific realities are valid. Significant guarantees include that the products or potentially administered services will proceed as guaranteed in the arrangement. The guarantee that is essential to the library is that the distributor is the proprietor of the protected innovation privileges in the authorized material and has the power to grant the permit. In the

event that a permit has no guarantee proviso or a guarantee condition that is vague, the library could wind up paying twice: once to the distributor and once to the individual who professes to possess the protected innovation privileges. Most regularly, this is the creator. The library acquires an affirmation that the distributor will hold and keep the protected innovation freedoms, however long the permit lasts.

The library has to realize that the distributor conceding the permit will have the power to do as such all through the term of the understanding. If not, it might wind up purchasing a new permit from another proprietor. Force Majeure A power majeure is a condition past the control of the gatherings like conflict, strikes, floods, power disappointments, obliteration of organization offices, and so on not predicted by the gatherings and which forestalled execution under the agreement. Most licenses work in arrangements that inability to play out any term or condition by any party under the permit because of a power majeure will be pardoned and that inability to act in these conditions won't be considered a break of the Understanding.

### **Task and Sub-Contracting**

A task empowers involved with discharge himself from all commitments under the agreement and to give them to the chosen one. In many wards, business contracts are not effectively assignable. The case regulation on task is perplexing and unsure all of the time.

Furthermore sub-contracting is much of the time allowed under broad regulation since the first party to the agreement stays at risk for the presentation of his sub-worker for hire. Where libraries need to set up a consortium with a middle person (whether a new or a current element) to whom certain undertakings will be sub-contracted, care should be taken to guarantee that the Distributer really does for sure give composed assent. Consolidating a reference to that "assent" in the body of the license is least demanding."

### **Question Settlement**

There are multiple ways of resolving a question; in the courts, by discretion and by specialists.

**Prosecution** : Determining the general set of laws that will oversee the agreement and its presentation and translation, and for a statement

concluding which court will have locale on account of legitimate debates. Prosecution through the public courts is appropriate for questions both over reality and regulation. The appointed authority is paid for by the state. Case might be initiated by one or the other party and doesn't need the understanding of the other. The choice of the court is restricting in all cases and there is generally a laid out requests system.

**Intervention** : Discretion is a question settlement through a mediator delegated by the gatherings by contract and not by the state. The mediator's charges are typically shared by the two players. It is more private and less formal than court procedures despite the fact that it is turning out to be more formalized. Grants made by a referee are restricting on the gatherings and can be authorized by the court. Requests are conceivable.

**Master** : Master Assurance is a casual technique where the gatherings concur by agreement to allude a question of reality to a specialist delegated by the gatherings for his goal. It isn't exactly appropriate for any debate where issues of regulation are probably going to be campaigned. The master's expenses are normally shared by the two players. It is restricting on the two players and conclusions might be implemented by the court. There is no chance of allure, save maybe on account of altogether extortion or manifest mistake.

### **Plans**

There ought to continuously be a particular arrangement in the principal provisions about the situation with the Timetables. As a rule, in licenses, the Timetables will incorporate a rundown of the Authorized Materials, the dates of conveyance, the configuration and media of conveyance and a rundown of where the Authorized Materials can be utilized. You will ordinarily track down the Timetables after the primary arrangements yet before the mark of the Library and the Distributer.

### **Administering Regulations and Ward**

The agreement/permit arrangement will be administered by the laws of India and dispute(s) assuming that any emerges regarding/or regarding the understanding, will be managed in the proper court of New Delhi, India. Ward and continuing will be done in English language.

Statements TO Stay away from

Sensible and best exertion statements: In the European Relationship, there are countries with

normal guideline (Roman guideline) and specially based guideline (case guideline) customs. The separation between normal guideline and specially based guideline thoughts is even found among the states of the USA. For example, the law of the Domain of Louisiana is overpowered by normal guideline however the law of the Domain of Washington is constrained by perspective based rule. This capacity is central for the translation of express conditions of a permit, particularly the inferred "sensible exertion" or "best exertion" game plans.

The words "reasonable effort" and "best effort" are unclear. As an overall suggestion, vulnerability in regards to the significance of an essential term in an understanding will make that arrangement unenforceable. Point of reference based guideline courts, especially in the UK, are reluctant to partake in guessing rehearses over what is "reasonable". Costs, sums, time, responsibilities and execution are among the terms where conviction is fundamental. Clear assumption and sureness about the significance of terms are similarly requirements under normal guideline, yet of less significance. The courts will give effect on the importance the get-togethers could and should have credited to what they have agreed, and to what they could reasonably expect from each other in this affiliation.

General advice is to avoid truly described or questionable terms like 'reasonable' or 'best effort'. These should be changed and superseded by clear, unambiguous arrangements. It is more brilliant to be absolutely clear all along what the responsibilities are than to make costs to get a delegated power to unravel in case a specific execution was reasonable or not.

**Non-abrogation provisos:** An ever increasing number of administrators will generally give need to the securing of assets in computerized design. Noncancellation provisions in licenses plan to deny libraries from dropping their ongoing print memberships, taking out a membership to the electronic duplicate just or to draw a base line for the quantity of diaries bought into or authorized. This qualifies as abuse of a predominant position and ought not be acknowledged and ought to be erased from the permit.

**Non-exposure provisions:** These mystery articulations deny libraries from sharing

assessing, use information and other colossal arrangements of the license with others. Especially by virtue of a consortium, this is an irrational requesting. Distributers should offer overseers the opportunity to screen use, collect the significant organization information expected for variety improvement and to grant this information to others. Clearly, aggregation of use data ought to be solid with the fitting insurance guidelines. In any case, it should be borne as a main concern that there are events where sharing unequivocal information could hurt the distributors' activities fundamentally. To that end it is fundamental to portray in a license what information is dependent upon the responsibilities of mystery and what information can be shared uninhibitedly.

**Provisions with equivocal timeframes:**

Illuminating every timeframe in a contract is significant. Free references to days, long stretches of time in arrangements are to be stayed away from. Seven days might be 7 days or 5 working days. A year can mean any sequential time of a year or the rest of a particular year. A simple method for getting around this is to characterize a day, week, month and a year in the rundown of definitions.

**CHECKLIST BEFORE SIGN THE MOU:**

Try not to sign a permit that:

- ✓ isn't represented by the law and courts of the nation where your establishment is found
- ✓ doesn't perceive the legal freedoms for utilization under copyright
- ✓ doesn't concede interminable admittance to the Authorized Material
- ✓ does exclude a guarantee for IP freedoms and a reimbursement condition against claims
- ✓ expects the Library to take responsibility for every single encroachment by an approved client
- ✓ has a non-wiping out provision
- ✓ has a non-revelation provision
- ✓ has sensible and best exertion provisions
- ✓ has provisions with questionable timeframes
- ✓ doesn't take into account sub-contracting to a Specialist
- ✓ hasn't got a permit expense that is comprehensive

**CONCLUSION**

This article is for just information reason and ought not to be depended upon as legitimate prompt counsel a legal counselor would it be a

good idea for you really want lawful exhort. This permitting guide has been gathered to assist you with understanding the significance and results of normal conditions contained in a permit. The computerized upset has come about in a significant, change in the method of libraries and different associations acquire, access and store data accessible for inner use and for use by specialists. In the pre-electronic days, libraries consistently bought and claimed print duplicates of materials for their assortments. Bookkeepers have become moderators and mediators of lawful arrangements. Permitting becomes possibly the most important factor when you need to utilize electronic or advanced content like information base or periodical, or when somebody needs to utilize such satisfied claimed by their association. As a buyer of content, Foundations need a permit understanding at whatever point they need to utilize another person's photo on your Site or blog, or they need to get to an internet based data set or periodical. Use in this challenge incorporates a wide range of ideas or freedoms that are set out in intellectual property regulations and deals. Among these privileges to duplicate or distribute in advanced or print from, communicate over the Web, and play out the work out in the open. It additionally alludes to content that is safeguarded by copyright and not in the public space.

As a buyer of copyrightsafeguarded materials, foundations might be engaged with various circumstances in which they need to permit content. For instance; 'Online membership to a diary/data set'. By and large, libraries consider themselves to be buyers or licensees, utilizing the substance of others. Nonetheless, more libraries are permitting the substance they own, and are hence additionally licensors. This is

particularly obvious as web based business is developing and libraries are turning out to be more associated with online business is computerized property on the web.

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## Philosophy of Bhagat Singh in the Present Scenario of India



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### ABSTRACT

*No other martyr like Bhagat Singh the nation could ever produce whose sphere of activities during his entire life was to bring socialism. Bhagat Singh felt convinced that political freedom alone would not improve the lot of Indian masses but economic freedom is also necessary for the prosperity of the common people. He had fully understood the exploitation of the proletariat by the capitalists. The rule of the peasants and labourers had become his goal.*

*In this research paper an attempt has been made to analyse the Philosophy of Bhagat Singh in the Present Scenario of India. Much has been written and discussed on Bhagat Singh and his ideas but no specific work dealing with the philosophy of him in the present relevance because we are free from the shackles of foreign bondage but we are still entrapped under the saga of hypocrite social, economical and political laws. Without undermining the achievements of our Republic over the last six decades, it can be observed that socio-political and economic disparities continue in our country and have increased to a great extent. Finding this gap in our historical knowledge an attempt has been made to analyze this aspect in the present paper and appeal the masses to follow his ideas and make our country of his dream as we owe our independence to these patriots.*

Bhagat Singh (27 September 1907-23 March 1931) is considered to be one of the most influential revolutionaries of the Indian Freedom Struggle. The name is itself an insignia of devotee (Bhagat) of his mother nation, his pride and his devotion. He became involved in numerous revolutionary organizations. He quickly rose through the ranks of the Hindustan Republican Association (HRA) and became one of its leaders, converting it to the Hindustan Socialist Republican Association (HSRA). He gained support when he underwent a 64 day fast in jail, demanding equal rights for Indian political prisoners. He was hanged for shooting a police officer J.P. Saunders in retaliation to the killing of veteran freedom fighter Lala Lajpat Rai. His legacy prompted youth in India to begin fighting for India's Independence and also to bring socialism. The economic experiments in Russia under the Bolshevik regime had greatly impressed him.

The significance of Bhagat Singh in the anti-colonial struggle was not because of his choice of violence as a method of resistance; his real contribution lay in trying to formulate a revolutionary philosophy and course of action, taking into account the traits of colonial subjection, on the one hand and the character of internal exploitation, on the other. Bhagat Singh's intervention came at a time when the masses were turning restless and were gearing up to join the struggle. Bhagat Singh draws the attention of the Indian people, especially the youth, the peasantry, the toiling and oppressed masses, the intelligentsia and the political sections to the realities of the existing capitalist system in India. For example, in one of the messages sent out from the jail, Bhagat Singh says that 'the peasantry has to free

itself from the clutches of not only the foreign rule but also from the rule of the landlords and capitalists.' In the letter written to the Governor of Punjab, he had written — "... that the war is going on and will continue so long as the powerful persons perpetuate their monopoly over wealth-generating resources of the Indian people and the toiling masses; it makes no difference whether the powerful persons are only British capitalists, or British and Indian capitalists collaborating with each other to continue the exploitation, or whether they are purely Indian capitalists sucking the blood of the poor people..." . He emphasized that 'for revolution the struggle against the external forces like imperialist - capitalists and colonialists as well as against the internal forces like the Indian capitalists, feudal landlords, moneylenders and traders was essential.' He was able to galvanize the masses as he was embedded with clarity of vision and fired by a revolutionary philosophy. He endowed revolutionary movement with three slogans:-

1) Long live revolution 2) Long live Proletariat 3) Down with Imperialism. He summed his entire programme through these slogans very nicely.

The first slogan represented the outlook i.e. it demanded that the revolutionary movement will not stop at the achievement of freedom. It will continue till the system which permits the exploitation of man and of a nation by nation is abolished and a basic change in socio-economic structure is brought about.

The second slogan declared that the future belongs to the toiling millions and the proletariat is the driving force of the revolution.

The third slogan indicated the immediate task at hand. A slave nation cannot establish a classless

society, abolish exploitation and bring about equality among men. For such a nation, the first and foremost task is to bring the chains of imperialist domination that bind it. In other words revolution in a slave country has to be anti-imperialist and anti-colonial.

Bhagat Singh had read *Das Capital* in or around 1926. Bhagat Singh's jail diary gives us deep insight into his rapidly growing maturity as a Marxist. It contains elaborate quotations from the work of Marx, Engels, Lenin, Trotsky, Bakunin, Prince Kropotkin and even Darwin, Bertrand Russell and several others. From this literature, he imbibed the ideas of democracy, socialism and rationalism which eventually become the guiding principles of his political and social philosophy. He envisioned a system in which there was "no exploitation of man by man and nation by nation".

Although an admirer of Gandhi for the manner in which he managed to mobilize the masses, he did not believe that Gandhian philosophy and programme would lead to the fundamental transformation of the society. Gandhian politics, he observed, would only result in the replacement of one set of exploiters by the others. The alternative he found in the socialism. His ideologies and philosophy find great acceptance even today because though we are free from the foreign bondage but we are still entrapped under the saga of hypocrite social, economic and political laws. The position of Indian proletariat is today extremely critical. It has double danger to face. It has to bear the onslaught of foreign capitalism on the one hand and the treacherous attack of Indian capital on the other.

Present scenario of political awareness in India present a grim picture regarding the concerns and apprehensions that Bhagat Singh had in his mind when he ascended the gallows. Survey conducted from time to time by the UNESCO shows that 35 million people in India are surviving under below poverty line. Why this happened that after six decades of independence. The difference between the 'have's' and 'have not' has increased. Treasures of political parties are brimful worth millions of rupees, meant to be used for acquiring the power at centre and state level. Political and economic corruption is widespread. A very few slogans talk of the salvation of people, like Garibi Hatao, "India Shining" or Bhart Nirman, Aam Admi ki Sarkar, Sarkar Apke Duar are possible on time of election. These too are promises without touching the cause of the poverty and injustice. New forms of colonies are permitted by our government in form of SEZ. Multinational companies are collecting huge accumulation of Indian wealth and increasing the dependency factor in every sector like Agriculture, Industries and educational process. New process of slavery is beginning because of expansion and

domination of multinational companies in every nook and corner of India.

Every sector is infected with the virus of corruption. India remains a failed society. It remained a failed society because it was fearful of powerful ideas, as it did not want to debate openly those ideas. Bhagat Singh like Ambedkar and other humanist, rationalists are not just national icons because of their sacrifices or drafting of constitution of India. Yes, much bigger than the said 'nationalism' are their 'ideas'. The ideas which shook the Indian ruling elite as well as the British empire and since their fight was not only against the British regime but also for an equitable society, a society based on modernity and science rejecting caste system, India unfortunately did not embrace their ideas. We went to the same elite class which enjoyed the fruits of power whether political or social and in return got superstition and rituals in the name of culture. Today, the market has ridiculously been using this 'Indian' culture for its own purposes therefore completely destroying our thinking capabilities and our sense of responsibility for the nation and other human beings.

The problems faced by the youth today are also very different. The frustrated youth of our country is getting detracted from the path of success because he/she is not getting the ample support from the society. Corruption, favoritism and reservations etc. everywhere has taken a toll on the ever deserving candidates for jobs, education and policy making, Bhagat Singh was of the view that if we cut youth from politics it would be denying democracy in true meaning. As people continue to fight for their legitimate rights which the Indian state has failed to provide them despite a working democracy. The democracy has turned to be a sham democracy as it turned out to be a representative democracy rather than a participatory one, youth of the country, the farmers, the Dalits, the tribal continue to live in utter marginalisation.

Bhagat Singh's ideas and sacrifice have the strength to bring hope in the lives of millions of struggling masses. Let us salute to this towering icon of our freedom movement for his indomitable spirit. Bhagat Singh will always remain a hope for all those who believe in secular socialist values and reject the caste based hierarchical system. His legacy continue to inspire all of us who are still waiting for a modern India, an India with modern ideas and not what the crony corporate would make us believe. Yes, an India where 2% of the rogues are not smiling and shining at the cost of crying 98% oppressed who have lost their houses, forest, water, and land and whose tears do not reach the India shining media. Therefore, Bhagat Singh and his ideas have become more relevant today for the youths to stand up and challenge an entire system, which has become corrupted, dysfunctional and captive to parochial religious thugs.



Secularism also in its true sense in Indian politics just refers to the vote bank. The politicians take advantage of the misinterpretation of the ideologies of Bhagat Singh. His concepts were constructive violence, however today the concept of extremist is the destructive interpretation of his ideologies. Killing innocent people in the name of religion and terrorism are high decrees of extremism e.g. Gujrat Bandh, Kolkata Maoists, Mumbai Attacks and soon. There is actual need to conceptualize the ideas of him in Indian politics. We can no longer remain ignorant of our potential, our duties and responsibilities. There is a need of new revolution based on the ideology of Bhagat Singh who had aimed to establish a scientific socialism. Every aspect of life is crushed by the money oriented political power. Corrupted tottering fabric of society should be rejuvenated through the philosophy of Bhagat Singh.

**In conclusion**, I would say that Bhagat Singh philosophy taught us not to be suppressed under unlawful acts, to speak for yourself, to speak for others, to sacrifice your life not only for your country but for your passion and your integrity. Though he is not among us today but his ideas are still cherished in our mind. He died before he could succeed in achieving the larger objective of socialism but the legacy of his ideas i.e. 'socialism', 'anti-imperialism' and 'secularism' stand out. Now is the time when we need the ideologies of communism or socialism, following which the social strata's, the divide in the society and concept of poor and rich can be halted. Independence will not be complete until we build a nation where standards of living are raised among the common people and the benefits of modern science enable the construction of a truly humane and equitable social milieu offering genuinely equal opportunities for all. We need new social reformers, dynamic policy maker to interpret the ideas of Bhagat Singh in true sense and make India of his dreams.

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## FACTORS AFFECTING THE DEVELOPMENT OF INTERNATIONAL ACCOUNTING



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### ABSTRACT

*This paper explores the factors that have influenced the development of international accounting over time. As businesses expand their operations across borders, there is a growing need for consistent and comparable accounting standards that can be used by companies operating in different countries. This has been driven by globalization, differences in national accounting systems, multinational corporations, international financial institutions, government regulations, and professional accounting bodies. Understanding these factors is essential to appreciating the challenges faced by companies in today's globalized business environment and the efforts of various stakeholders to promote the adoption of common accounting standards. The aims to provide a comprehensive overview of the development of international accounting and identify key trends and challenges that are likely to shape the future of this field.*

### INTRODUCTION

International accounting has been evolving over the years due to various factors that influence its development. This paper aims to discuss some of the significant factors affecting the development of international accounting.

One of the primary factors is globalization. With the emergence of global markets and cross-border transactions, the need for a common set of accounting standards and principles became apparent. This led to the development of International Financial Reporting Standards (IFRS), which aim to promote consistency and comparability in financial reporting across the world.

Another factor is the increasing complexity of business transactions. As businesses become more complex, so do their accounting requirements. Therefore, international accounting standards need to be flexible enough to accommodate these changes and ensure that financial reporting remains accurate and relevant. The legal and regulatory environment also plays a critical role in the development of international accounting. Differences in accounting regulations and standards across countries can create significant obstacles for international businesses. Harmonization of accounting standards, therefore, becomes essential to facilitate cross-border transactions.

The development of technology has also had a significant impact on international accounting. Advances in information technology have made it easier to share financial information and collaborate on accounting issues across borders. This has led to the emergence of cloud-based

accounting software, making it possible for businesses to access real-time financial data from anywhere in the world.

The development of international accounting has been influenced by various factors, including globalization, the increasing complexity of business transactions, the legal and regulatory environment, and advances in technology. These factors will continue to shape the future of international accounting, making it more flexible, accurate, and relevant to the global business community.

International accounting is an important area of study that has gained increasing attention over the years due to the rapid globalization of business and commerce. As businesses expand their operations across borders, there is a need for consistent and comparable accounting standards that can be used by companies operating in different countries. The development of international accounting standards has been influenced by a variety of factors, including globalization, differences in national accounting systems, multinational corporations, international financial institutions, government regulations, and professional accounting bodies.

In this context, this topic aims to explore and discuss the factors that have affected the development of international accounting over the years. Understanding these factors is essential to gaining a deeper appreciation of the challenges faced by companies in today's globalized business environment, as well as the efforts of various stakeholders to promote the adoption of common accounting standards. By examining

these factors in detail, this topic seeks to provide a comprehensive overview of the development of international accounting, and to identify the key trends and challenges that are likely to shape the future of this important field of study.

The development of international accounting has been influenced by a variety of factors, including:

1. **Globalization:** As the world has become more interconnected and businesses have expanded their operations across borders, the need for consistent and comparable accounting standards has become more important.
2. **Differences in national accounting systems:** Different countries have different accounting standards, which can make it difficult for companies to compare financial information across borders. This has led to a push for convergence and harmonization of accounting standards.
3. **Multinational corporations:** Large multinational corporations have played a significant role in promoting the development of international accounting standards, as they have a vested interest in having consistent accounting standards across the countries in which they operate.
4. **International financial institutions:** Organizations such as the International Monetary Fund (IMF) and the World Bank have promoted the development of international accounting standards as a way to facilitate cross-border financial transactions and promote economic stability.
5. **Government regulations:** Governments around the world have implemented regulations that require companies to follow certain accounting standards. This has created a demand for internationally recognized accounting standards that can be used by companies operating in multiple countries.
6. **Professional accounting bodies:** Professional accounting bodies, such as the International Federation of Accountants (IFAC), have played a key role in promoting the development of international accounting standards and providing guidance to their members.

The development of international accounting has been driven by the need for consistency and comparability in financial reporting across

borders, as well as by the efforts of various stakeholders to promote the adoption of common accounting standards.

## REVIEW OF LITERATURE

International accounting is a complex field that has been influenced by a range of factors, including globalization, differences in national accounting systems, multinational corporations, international financial institutions, government regulations, and professional accounting bodies. These factors have been extensively studied in the literature, and the following provides a brief review of some of the key findings from this research.

One of the main drivers of international accounting has been globalization, which has led to an increasing demand for consistent and comparable accounting standards. According to Choi and Meek (2011), globalization has created a need for international accounting standards that can be used by companies operating in different countries, as well as a push for convergence and harmonization of accounting standards.

Differences in national accounting systems have also played a significant role in shaping international accounting. According to Nobes and Parker (2010), these differences can create challenges for companies operating in multiple countries, as they may need to use different accounting standards and methods in different jurisdictions. As a result, there has been a push for convergence and harmonization of accounting standards, in order to promote consistency and comparability in financial reporting.

Multinational corporations have also played a key role in promoting the development of international accounting standards. According to Zeff (2012), large multinational corporations have a vested interest in having consistent accounting standards across the countries in which they operate, as this can facilitate cross-border financial transactions and improve their ability to manage risk.

International financial institutions, such as the International Monetary Fund (IMF) and the World Bank, have also played a significant role in promoting the development of international accounting standards. According to Beattie and Pratt (2010), these organizations have promoted the adoption of common accounting standards as a way to facilitate cross-border financial transactions and promote economic stability.

Government regulations have also played a role in shaping international accounting. According to

Street and Gray (2002), many governments around the world have implemented regulations that require companies to follow certain accounting standards, which has created a demand for internationally recognized accounting standards that can be used by companies operating in multiple countries.

Finally, professional accounting bodies, such as the International Federation of Accountants (IFAC), have played a key role in promoting the development of international accounting standards and providing guidance to their members. According to Hoogervorst (2013), these bodies have been instrumental in promoting the adoption of common accounting standards and in providing guidance to their members on how to comply with these standards. Overall, the literature highlights the importance of consistent and comparable accounting standards in today's globalized business environment. The factors influencing the development of international accounting are varied and complex, and require ongoing attention and research in order to promote the continued development of this important field.

**IMPACT OF E-BUSINESS**

E-business, or electronic business, refers to the use of electronic technologies to conduct business processes and transactions. The impact of e-business has been significant, transforming the way that companies interact with customers, suppliers, and partners. Some of the key impacts of e-business are outlined below:

1. **Increased Efficiency:** E-business has enabled companies to automate and streamline many of their business processes, reducing the time and resources needed to complete them. This has led to increased efficiency and productivity, as well as cost savings.
2. **Greater Access to Markets:** E-business has opened up new markets for companies, as it enables them to reach customers and partners from around the world. This has led to increased competition and opportunities for growth.
3. **Improved Customer Experience:** E-business has enabled companies to provide a more personalized and efficient experience for their customers, through the use of technologies such as online ordering, customer service portals, and social media.

4. **Improved Supply Chain Management:** E-business has enabled companies to better manage their supply chains, through the use of technologies such as electronic data interchange (EDI), supplier portals, and automated inventory management systems.
5. **Increased Data Analytics:** E-business has generated a vast amount of data, which companies can use to gain insights into customer behavior, market trends, and other key business metrics. This has led to improved decision-making and strategic planning.
6. **Increased Security Risks:** E-business has also introduced new security risks, such as data breaches, hacking, and identity theft. Companies must invest in cybersecurity measures to protect their systems and data from these threats.

In summary, the impact of e-business has been significant, transforming the way that companies operate and interact with customers, suppliers, and partners. While it has brought many benefits, it has also introduced new challenges and risks that companies must address in order to succeed in today's digital economy.

**IMPACT OF ECONOMIC FACTOR**

Economic factors can have a significant impact on businesses and industries, affecting everything from consumer demand to production costs. Some of the key impacts of economic factors on businesses are outlined below:

1. **Consumer Demand:** Economic factors, such as inflation, unemployment, and consumer confidence, can affect consumer demand for goods and services. When the economy is strong, consumers are more likely to have money to spend, leading to increased demand for products and services. Conversely, during economic downturns, consumers may be more cautious with their spending, leading to decreased demand.
2. **Production Costs:** Economic factors, such as raw material prices, exchange rates, and labor costs, can impact production costs for businesses. Increases in these costs can eat into profit margins and make it more difficult for companies to compete.
3. **Government Policies:** Economic policies set by governments, such as tax rates, trade agreements, and regulations,

can have a significant impact on businesses. Favorable policies can create opportunities for growth, while unfavorable policies can create challenges and barriers to entry.

4. **Competition:** Economic factors can impact the level of competition in an industry, as well as the pricing strategies of companies. In a strong economy, businesses may be more willing to engage in price competition, while in a weak economy, companies may focus more on cost-cutting measures to maintain profitability.
5. **Investment Opportunities:** Economic factors can impact the availability of investment capital and the cost of financing. A strong economy can make it easier for businesses to secure financing and access capital, while a weak economy may make it more difficult.

In summary, economic factors can have a significant impact on businesses, affecting everything from consumer demand to production costs to government policies. Understanding these factors and how they impact businesses is critical to success in today's constantly changing economic landscape.

## CONCLUSION

In conclusion, the development of international accounting has been influenced by a variety of factors, including globalization, advances in technology, and changes in business practices and regulations. These factors have led to a greater need for international accounting standards and practices, as companies operate in increasingly complex and diverse environments. Additionally, the impact of e-business and economic factors have played a significant role in shaping the way that businesses operate and compete in today's global economy. E-business has transformed the way that companies interact with customers, suppliers, and partners, while economic factors such as consumer demand and production costs can have a major impact on the success of a business.

As the world becomes increasingly interconnected and businesses continue to expand globally, it is more important than ever to understand the factors that influence international accounting and the broader economic environment. By adapting to these changes and embracing new technologies and best practices, businesses can position

themselves for success in a rapidly changing and highly competitive marketplace.

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IMPACT OF TECHNOLOGICAL ENVIRONMENT ON INTERNATIONAL BUSINESS

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ABSTRACT

*The technological environment has had a profound impact on international business, transforming the way businesses operate and compete in the global marketplace. This paper examines the various trends and advancements in technology, such as the globalization of markets, e-commerce, communication technology, data analytics, and automation, and their impact on international business.*

*The globalization of markets has enabled businesses to operate on a global scale, breaking down geographic barriers and expanding their customer base. E-commerce has enabled businesses to sell their products and services online, opening up new revenue streams and reducing the costs associated with traditional brick-and-mortar operations. Advances in communication technology have made it easier for businesses to communicate with customers, partners, and employees across borders. Data analytics has enabled businesses to better understand their customers and to tailor their products and services to meet their needs. Automation has transformed international business by enabling businesses to automate processes such as order processing, inventory management, and shipping.*

*While technology has created new opportunities for growth and expansion, it has also created new challenges, such as increased competition, the need to navigate complex legal and regulatory environments, and the need to adapt and innovate in order to stay competitive.*

*Overall, it is clear that technology has had a profound impact on international business, transforming the way businesses operate, compete, and succeed in the global marketplace. As technology continues to evolve, businesses will need to continue to adapt and innovate in order to stay competitive and succeed in this rapidly changing environment.*

INTRODUCTION

International business refers to the commercial activities that take place between businesses or individuals in different countries. In today's interconnected world, technology has played a vital role in shaping the international business landscape. Technological advancements have made it possible for businesses to connect with customers and suppliers globally, reduce costs, and improve efficiency. At the same time, technology has also created new challenges, such as cybersecurity threats and the need to protect intellectual property. This detailed study will explore the impact of the technological environment on international business, examining how technology has changed the way businesses operate and compete in the global market.

The technological environment is one of the critical factors that affect international business. Technological advancements have made it possible for companies to reach customers and suppliers globally, reduce costs, improve efficiency, and develop new products and services. In this detailed study, we will examine the impact of the technological environment on international business in more detail.

**Global Connectivity:** The rise of the internet and other digital communication technologies

has made it easier for companies to connect with customers and suppliers worldwide. This has resulted in increased competition and more opportunities for businesses to expand into new markets. As a result, companies can now reach customers in different countries without having to establish a physical presence in those locations.

**Increased Efficiency:** Technology has also improved the efficiency of international business operations. For example, the use of online collaboration tools and cloud-based storage has made it possible for companies to work on projects together, regardless of their location. Similarly, automated manufacturing processes have enabled companies to produce goods faster and at a lower cost.

**Improved Logistics and Supply Chain Management:** Technology has also had a significant impact on logistics and supply chain management. Real-time tracking systems, for example, enable companies to monitor the movement of goods throughout the supply chain and make necessary adjustments to ensure timely delivery. This has led to increased efficiency, reduced costs, and improved customer satisfaction.

**Increased Competition:** The internet has made it easier for small and medium-sized enterprises (SMEs) to enter the global market. As a result,

companies must now compete with businesses from all over the world, many of which are smaller and more agile than traditional multinational corporations. This has led to increased competition and the need for companies to innovate constantly.

**Data Analytics:** The availability of big data and data analytics tools has enabled companies to gain insights into customer behavior, market trends, and other critical factors that impact international business. This has allowed businesses to develop more targeted marketing campaigns, improve supply chain management, and make better-informed business decisions.

**Cybersecurity:** The increased reliance on technology has also created new security threats for businesses. Cyberattacks can disrupt business operations, compromise sensitive information, and damage a company's reputation. As a result, businesses must invest in cybersecurity measures to protect themselves and their customers from these threats.

**Intellectual Property Protection:** The ease with which information can be shared and copied online has made it more challenging for companies to protect their intellectual property (IP) rights. This includes patents, trademarks, and copyrights. As a result, companies must be vigilant in protecting their IP and take appropriate legal action when necessary.

In conclusion, the technological environment has had a profound impact on international business. From global connectivity to data analytics and cybersecurity, technology has changed the way businesses operate and compete in the global market. To remain competitive, companies must embrace these technological advancements and adapt their strategies accordingly.

## TRENDS IN TECHNOLOGICAL ENVIRONMENT

The technological environment is constantly evolving, with new trends and innovations emerging all the time. The following are some of the significant trends in the technological environment that are impacting international business:

**Artificial Intelligence (AI):** AI involves the use of computer algorithms to perform tasks that typically require human intelligence, such as speech recognition and decision-making. In international business, AI is being used to automate tasks and processes, improve supply chain management, and enhance customer service.

**Internet of Things (IoT):** IoT refers to the interconnectivity of physical devices, such as smartphones, cars, and home appliances, that are connected to the internet. In international business, IoT is being used to improve logistics and supply chain management, enable remote monitoring and control of equipment, and enhance the customer experience.

**Blockchain:** Blockchain is a decentralized digital ledger that records transactions securely and transparently. In international business, blockchain is being used to streamline international payments, improve supply chain management, and reduce the risk of fraud and counterfeit products.

**Cloud Computing:** Cloud computing involves the delivery of computing services, such as storage, processing power, and software, over the internet. In international business, cloud computing is being used to improve collaboration and communication among global teams, reduce IT costs, and enhance data security.

**Augmented and Virtual Reality:** Augmented and virtual reality technologies involve the use of computer-generated images to enhance the real-world environment or create a completely immersive experience. In international business, these technologies are being used to enhance customer experiences, provide virtual training and simulations, and facilitate remote collaboration.

**5G Networks:** 5G networks are the next generation of mobile networks, offering faster download and upload speeds, lower latency, and greater capacity. In international business, 5G networks are being used to improve connectivity, enable real-time communication and collaboration, and enhance the customer experience.

These trends in the technological environment are rapidly transforming the way international business is conducted, creating new opportunities and challenges for businesses operating in the global market.

## TRENDS IN TECHNOLOGICAL ADVANCEMENTS

Technological advancements have played a significant role in shaping the international business landscape. Here are some of the key trends in technological advancements that are impacting international business:

**Mobile Technologies:** Mobile technologies, such as smartphones and tablets, have revolutionized the way people communicate, access information, and conduct business. In

international business, mobile technologies are being used to improve collaboration and communication among global teams, enable remote work, and enhance the customer experience.

**Artificial Intelligence (AI):** AI involves the use of computer algorithms to perform tasks that typically require human intelligence, such as speech recognition and decision-making. In international business, AI is being used to automate tasks and processes, improve supply chain management, and enhance customer service.

**Cloud Computing:** Cloud computing involves the delivery of computing services, such as storage, processing power, and software, over the internet. In international business, cloud computing is being used to improve collaboration and communication among global teams, reduce IT costs, and enhance data security.

**Internet of Things (IoT):** IoT refers to the interconnectivity of physical devices, such as smartphones, cars, and home appliances, that are connected to the internet. In international business, IoT is being used to improve logistics and supply chain management, enable remote monitoring and control of equipment, and enhance the customer experience.

**Big Data Analytics:** Big data analytics involves the use of advanced analytics tools and techniques to analyze large sets of data. In international business, big data analytics is being used to gain insights into customer behavior, market trends, and other critical factors that impact business operations.

**Cybersecurity:** The increased reliance on technology has also created new security threats for businesses. Cyberattacks can disrupt business operations, compromise sensitive information, and damage a company's reputation. As a result, businesses must invest in cybersecurity measures to protect themselves and their customers from these threats.

These trends in technological advancements are rapidly transforming the way international business is conducted, creating new opportunities and challenges for businesses operating in the global market.

## ROLE OF E-COMMERCE

E-commerce, which refers to the buying and selling of goods and services online, has had a significant impact on international business. Here are some of the roles that e-commerce plays in international business:

**Global Reach:** E-commerce has enabled businesses to reach customers all over the world, breaking down geographic barriers and expanding their customer base. Businesses can now sell their products and services to customers in different countries, opening up new markets and revenue streams.

**Cost Reduction:** E-commerce has also helped businesses reduce costs by eliminating the need for physical storefronts and reducing the costs associated with traditional brick-and-mortar operations. Online sales platforms and digital marketing campaigns can be more cost-effective than traditional advertising methods.

**Improved Efficiency:** E-commerce has also improved efficiency in international business by automating processes such as order processing, inventory management, and shipping. This has reduced the time and resources needed to complete transactions, making it easier for businesses to manage their operations globally.

**Data Analytics:** E-commerce has also enabled businesses to collect and analyze data on customer behavior, preferences, and buying patterns. This data can be used to improve marketing strategies, product development, and customer service, leading to better business outcomes.

**Customer Experience:** E-commerce has also revolutionized the customer experience, providing customers with convenient, personalized, and 24/7 access to products and services. Online reviews and ratings provide customers with valuable information about products and services, helping them make more informed purchasing decisions.

Overall, e-commerce has played a significant role in enabling businesses to operate globally, improving efficiency, reducing costs, and enhancing the customer experience. As technology continues to evolve, e-commerce is likely to become an even more essential part of international business operations.

## GLOBALIZATION OF MARKETS

Globalization of markets refers to the process of businesses expanding their operations and selling their products and services on a global scale. It has been made possible by advances in technology, transportation, and communication, which have made it easier and faster for businesses to operate in multiple countries.

Here are some of the key factors driving the globalization of markets:

**Trade Liberalization:** Trade liberalization refers to the reduction or elimination of trade barriers,



such as tariffs and quotas, which can make it easier for businesses to sell their products and services in foreign markets. The growth of free trade agreements and regional economic blocs has made it easier for businesses to operate globally.

**Technology:** Advances in technology, such as the internet and e-commerce, have enabled businesses to reach customers all over the world, breaking down geographic barriers and expanding their customer base. Technology has also made it easier and faster to communicate, collaborate, and conduct business across borders.

**Transportation:** Improvements in transportation, such as air travel and shipping, have made it easier and more cost-effective for businesses to transport goods and people across borders. This has made it easier for businesses to operate globally and has enabled them to reach customers in remote locations.

**Consumer Behavior:** Changes in consumer behavior, such as increased demand for global brands and products, have also driven the globalization of markets. Customers are increasingly seeking out products and services from different countries, creating new opportunities for businesses to expand their operations globally.

The globalization of markets has created new opportunities for businesses to expand their operations and reach customers all over the world. However, it has also created new challenges, such as increased competition and the need to navigate complex legal and regulatory environments. As businesses continue to operate in the global market, it is important for them to adapt and innovate in order to succeed in this increasingly interconnected world.

## IMPACT OF TECHNOLOGICAL ENVIRONMENT ON INTERNATIONAL BUSINESS

The technological environment has had a profound impact on international business, transforming the way businesses operate and compete in the global marketplace. Here are some of the ways that technology has impacted international business:

**Globalization:** Technology has enabled businesses to operate on a global scale, breaking down geographic barriers and expanding their customer base. This has enabled businesses to reach customers in remote locations and has created new opportunities for growth and expansion.

**E-commerce:** E-commerce has enabled businesses to sell their products and services online, opening up new revenue streams and reducing the costs associated with traditional brick-and-mortar operations. E-commerce has also made it easier for businesses to reach customers all over the world, breaking down barriers to entry in new markets.

**Communication:** Advances in communication technology, such as video conferencing and instant messaging, have made it easier for businesses to communicate with customers, partners, and employees across borders. This has facilitated collaboration and has made it easier for businesses to manage their global operations.

**Data Analytics:** Data analytics has enabled businesses to collect and analyze data on customer behavior, preferences, and buying patterns. This has helped businesses to better understand their customers and to tailor their products and services to meet their needs. Data analytics has also enabled businesses to identify new opportunities for growth and expansion.

**Automation:** Automation has transformed international business by enabling businesses to automate processes such as order processing, inventory management, and shipping. This has reduced the time and resources needed to complete transactions, making it easier for businesses to manage their operations globally.

The technology has had a profound impact on international business, transforming the way businesses operate, compete, and succeed in the global marketplace. As technology continues to evolve, businesses will need to continue to adapt and innovate in order to stay competitive and succeed in this rapidly changing environment.

## CONCLUSION

In conclusion, the technological environment has had a significant impact on international business, transforming the way businesses operate, compete, and succeed in the global marketplace. The globalization of markets, e-commerce, communication technology, data analytics, and automation are just some of the ways that technology has impacted international business.

While technology has created new opportunities for growth and expansion, it has also created new challenges, such as increased competition, the need to navigate complex legal and regulatory environments, and the need to adapt and innovate in order to stay competitive.

As businesses continue to operate in the global market, it is important for them to embrace

technology and to stay ahead of the curve in order to succeed in this rapidly changing environment. By leveraging technology to improve efficiency, reduce costs, and enhance the customer experience, businesses can position themselves for success in the global marketplace.

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**ABSTRACT**

*This paper is aimed at studying the modes of cashless economy and their benefits in Indian context. How to take care of major challenges is another objective of this paper, so that India can move ahead at a faster pace to transform itself into a cashless economy. This paper is also focused on discovering new modes of digital payments and making people aware of using these digital methods successfully.*

**Keywords:** Cashless Economy, RTGS (Real Time Gross Settlement), IMPS (Immediate Payment Services), NEFT (National Electronic Funds Transfer), Net Banking etc.

**Introduction**

Cashless economy refers to making transactions digitally instead of using cash. It is a situation where all transactions must be executed through debit cards, credit cards, electronic clearing and payment systems such as Immediate Payment Services (IMPS), National Electronic Fund Transfer (NEFT) and Real -Time Gross Settlement (RTGS) in India. A cashless society describes an economic state where financial transactions are not conducted with money in the form of physical banknotes or coins, but rather through the transfer of digital information between the transacting parties. A cashless economy is a system where any type of money transactions is done through digital means like debit cards, electronic fund transfer, mobile payments, internet banking, mobile wallets, and other newly evolved payment channels, this will leave very little scope for flow of hard cash in economy. There is a rule called Pareto 80-20, which says 80 percent of problems come from 20 percent of causes, seems like Govt. is also going by this rule. By just making the economy. cashless nation's many problems like black money, corruption, high taxes, unemployment can be solved.

**Modes of Cashless Transactions**

**Net banking:** It allows any user to use banking services provided by their bank from any place across the country. All anyone needs is an internet connection, a username and a password to log in to their net banking website. With the help of net banking, you can check your account balance, statements, you can pay your credit cards bills, electricity bills, do a Wi-fi recharge. You can even recharge a mobile or any prepaid connections. It allows you to do third party payment transfer. From net banking,

you can also apply for a loan. Purchase of mutual funds, insurance can also be executed through net banking. It is a very secure mode of carrying out multiple transactions. It comes with a range of transaction options such as IMPS, NEFT, RTGS.

**Immediate Payment Service (IMPS):** It is an instant interbank electronic fund transfer service available 24x7, throughout the year including Sundays and any bank holiday. Customers can transfer and receive funds via IMPS using their registered Mobile number and Mobile Money Identifier (MMID) or Account number and IFSC code. Use IMPS service to transfer funds anytime, from anywhere using: Internet banking, mobile. The beneficiary account is credited immediately when a fund transfer request is made from your side.

**National Electronic Funds Transfer (NEFT):** It is a nation-wide payment system of One-to-one funds transfer. Electronically transfer funds from any bank branch to any individual having an account with any other bank branch in the country.

**Real Time Gross Settlement (RTGS):** Requirements for RTGS Both the bank branches of sender and beneficiary must be part of RTGS network, amount to be transferred, account number to be debited, account number and name to be credited, beneficiary account name and number, bank name and IFSC code (Indian Financial System Code) of beneficiary bank branch.

**Credit Cards:** Suppose you went to a shop and purchased grocery for Rs 6000 and on an agreed future date of payment in good faith, you made the payment on that particular day. Extending the same logic, why should you carry cash when you can simply use a credit card which serves the same purpose? The credit

card saves your time as there is no need to go to banks or ATMs. You only need to swipe your card through a machine which shopkeepers and grocery stores normally keep these days. On every purchase made through credit cards, you get reward points which again can be used for the purchase of other products.

**Debit Cards:** They are just like credit cards, without the 'credit' element. Whenever you are in need of money, this card will provide you cash 24x7 through any ATM machine. There is no need to worry about bank timings, stand in queues for withdrawing cash leaving out special circumstances like the one we are seeing right now. These are bank account-linked ATM cards, that are mainly used for withdrawing cash. As soon as the cash is taken out from an ATM machine, by swiping your card, the amount gets deducted from your bank account. An instant message is sent to your registered mobile phone providing you the details of cash withdrawal. These are widely accepted cards. Debit cards can be used for online transactions and at merchant outlets.

**Digital Wallets:** Instead of keeping money in your pocket, purse or physical wallet, you can keep money in e-wallets. These e-wallets are similar to your physical wallets which you keep in your pocket. It is a mobile based application which can be downloaded from any app store and can be accessed through your mobile phone. Transaction or transfer of funds through these wallets can be done across the country between person to person (usage of e-wallet app should be same between the end users). The only thing you need to do is to reload your wallet easy time by transferring money into it through your bank account. These wallets are highly encrypted, so, there is no need to worry about security. Currently, e-wallets are offered by PayTm, Mobi Kwik, Freecharge, Oxigen, Reliance Money, etc. Even banks like SBI, HDFC Bank, AXIS, ICICI Bank, etc. have launched their e-wallets app viz a viz Buddy, Pay Zapp, Lime, Pocket respectively.

**UPI (Unified Payment Interface):** Simply put, it enables you to transfer money from one bank account to another. It is an infrastructure provided by NPCI's (National payment Corporation of India) to all the public, private & cooperative banks where they can build their own interface and help the common man easily make micropayments with a maximum cap of Rs 1 lakh through various modes like virtual

address (a single identifier code), account no with IFSC code, mobile number or Aadhaar number. It will ease the e-commerce payment gateway where we do not have to share account number or any sensitive information between person to person. Moreover, UPI works 24x7 on real-time fund transfer system.

**E-Coupons:** These electronic coupons are offered by various online mega stores. They are very helpful in taking discounts on purchase done through online shopping. We only need to enter the e-code and get the discount automatically. They do not require any printing or clipping. They carry unique identification code which can be accessed through the internet at particular sites. Some of the coupons which are available online are grouping, nearby coupons, shopping site coupons, etc.

**Physical coupons:** These are paper coupons which come in small denominations of Rs 10 to Rs 50 with a validity of 6 months to 18 months. These are used by corporates to reward their employees. The best use of these coupons can be done in buying meals from places such as Pizza Hut, Dominoes, KFC, Big Bazaar, etc. Out of many, two big giants that are providing these coupons are Sodexo and Ticket Restaurants.

**AEPS (Aadhaar Enabled Payment System):** Going ahead, you can use Aadhaar cards as a debit card in various merchant stores. These cards have been already linked to your bank accounts. You will be provided with a finger scanner at the merchant's store to do your payments. Aadhaar-cum debit cards will allow you to do micro-payments for not more than Rs 4000. However, there are several questions like which bank account will be taken into consideration for making payments.

### **Advantages of Going Cashless**

**Convenience:** The ease of conducting financial transactions is probably the biggest motivator to go digital. You will no longer need to carry wads of cash, plastic cards, or even queue up for ATM withdrawals. It's also a safer and easier spending option when you are travelling.

**Tracking spends:** If all transactions are on record, it will be very easy for people to keep track of their spending. It will also help while filling income tax returns and, in case of a scrutiny, people will find it easy to explain their spends. Besides the tax, it will have a good impact on budgeting.

**Higher Revenue to the Government:** A derivative advantage of transparent transactions is collection of tax will increase. Thus, generating higher revenue for the government, which in turn will be converted into public welfare policies and schemes.

**Low Risk:** If stolen, it is easy to block a credit card or mobile wallet remotely, but it's impossible to get your cash back. In that sense, the digital option offers limited security. This is especially true while travelling abroad where loss of cash can cause great inconvenience.

**No fear of counterfeit currency:** Just like stolen cash never comes back same is with the counterfeit ones. Every economy in this world faces the problem of counterfeit currencies. While the government is taking stringent actions against the counterfeiters, once the counterfeit currency comes into circulation, it is the general public that faces the loss once the counterfeit is identified. If you decide to adopt financial digitization, then you need not worry about the counterfeit currency at all. The debit cards and credit cards cannot be counterfeited and thus going cashless keeps you away from the hassles of handling counterfeit currency.

**No hassles of odd change:** Many times, all of us face a problem of change and willingly or unwillingly we have to leave the remaining money. Well, as an Indian, a major benefit of going cashless would be to not worry about the odd change. The beauty of cashless transactions is that you can make the exact payment to the last paisa.

**Easy Trap of black money:** Another benefit of cashless economy is that it is easier to track the black money and illegal transactions because if cash is used directly for doing transactions than it is not easy to track the transactions as the money does not come into the banking system however in case of digital transactions it is easy to track the transaction as all records are there with the banks which result in more transparent transactions which in turn leads to fall in corruption in the economy of the country.

**Reduction of Printing cost:** The expenditure incurred by the RBI in printing notes would be considerably reduced. In the year 2015, the RBI spent Rs 27 billion in issuing and managing currency notes.

**Termination of unhygienic currency:** Circulation of unhygienic currency notes responsible for spreading many diseases can be stopped.

## Challenges of Cashless India

**Higher risk of identity theft:** The biggest fear is the risk of identity theft. Since we are culturally not attuned to digital transactions, even well-educated people run the risk of falling into phishing traps. With the biggest disadvantage of the cashless economy is that not everybody has the knowledge of doing digital transactions and hence its reach is limited to urban and semi-urban centers only and therefore it is very difficult to implement cashless economy in the big country where many sections of the society in rural areas is illiterate and poor. Hence the lack of proper infrastructure and education among citizens is disadvantageous as far as the cashless economy is concerned

**Hoarding:** One of the major drawbacks is that if less cash will be in circulation, then people will start hoarding of currency.

**High Cash Dependency:** India has a high cash penetration in almost all of its transactions that happen as B2C transactions. Total cash flow in the market accounts for 12.04% of the GDP, which is among the highest in developing countries. This goes to show our dependence on cash is acute and it requires time to tackle it.

**Lack of Digital Infrastructure:** The first and foremost requirement of a digital economy is the penetration of internet and smartphone. Although a billion mobile subscriptions (not users), only 30% of subscribers use smartphones. With 370 million mobile internet users, over 70% of them are in cities while 70% of Indian population lives in villages.

**Digital Illiteracy:** Small time merchants as well as users have high amount of suspicion over plastic money, and they need to be educated over the potential benefits of using it. One cannot expect an overnight change in the perception of a majority of Indians over the use of plastic money. Government needs to come out with awareness and incentive schemes to promote digital economy.

**Secret savings:** It is very common feature of Indian females to keep money secretly for emergencies but due to cashless economy these socially acceptable old practices will be abolished.

## Conclusion and Suggestions

After looking into available advantages and challenges It can be concluded that it is the need of hour to become more and more cashless and India has huge capacity of for moving towards

cashless. We need to make people aware about the convenience of becoming cashless. Once they will become familiar of cashless modes, they will not only start using these modes but gradually they will start preferring use of these modes up to maximum possible extent. It is strongly recommended here that Banks, Business Organisations, whole Government machinery, NGOs, Self-help groups, should come together to find and implement more methods of becoming cashless. Government should make the payment mode digital at places like government offices, petrol pumps, toll points, railway stations, banks, state buses and their bus stop mandatory. Proper infrastructure should be developed and digital education among citizens should be spread at a high pace. Development of user-friendly modes of digital money transfer for the less educated illiterate or primitive citizens who are far apart from the use of computers and smart phones.

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The atomic structure of molecules and compounds is a cornerstone of chemistry, elucidating how atoms collaborate to create distinct substances with unique attributes. Atoms, comprising protons, neutrons, and electrons, form the elemental basis. Molecules manifest as atoms combine, through electron sharing or transfer, resulting in varied molecular structures that govern compound properties.

Exemplified by water (H<sub>2</sub>O), covalent bonding is showcased where hydrogen atoms share electrons with an oxygen atom, shaping its bent geometry. Conversely, sodium chloride (NaCl) demonstrates ionic bonding, as sodium donates an electron to chlorine, yielding oppositely charged ions held together in a crystalline lattice.

Covalent compounds such as methane (CH<sub>4</sub>) exhibit electron sharing, while complex molecules like proteins unveil intricate amino acid arrangements through covalent bonds, dictating biological function.

While ASCII diagrams offer basic visualizations, the complexity of molecules often necessitates advanced representations. Ethanol (C<sub>2</sub>H<sub>5</sub>OH) exemplifies this intricacy, with multiple atoms linked by covalent bonds and a hydroxyl group influencing its unique properties.

These structures is vital across scientific disciplines and practical applications, from materials science to pharmaceuticals, driving innovation and discovery.

**Keywords:** Atomic structure, Molecules and Compounds

**Introduction**

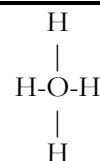
The atomic structure of molecules and compounds is a fundamental concept in chemistry that helps us understand how different elements come together to form substances with distinct properties. Let's delve into this topic with an introduction and examples.

Atoms are the building blocks of matter. They consist of a central nucleus composed of protons (positively charged) and neutrons (uncharged), surrounded by a cloud of electrons (negatively charged) in energy levels or shells. Molecules and compounds are formed when atoms chemically combine, either by sharing electrons or by transferring them from one atom to another.

**Examples:**

**Water (H<sub>2</sub>O):** Water is a molecule formed by the chemical combination of two hydrogen atoms and one oxygen atom. The atomic structure of water can be broken down as follows:

- **Hydrogen Atom:** Each hydrogen atom consists of a single proton in the nucleus and one electron in its electron shell.
- **Oxygen Atom:** An oxygen atom has eight protons in the nucleus and electrons distributed in multiple energy levels. The first energy level contains two electrons, and the second contains six electrons.



Type equation here. In the water molecule, the oxygen atom shares electrons with two hydrogen atoms. This sharing of electrons creates covalent bonds between the atoms, resulting in the formation of a water molecule with a bent molecular geometry.

**Carbon Dioxide (CO<sub>2</sub>):** Carbon dioxide is a compound composed of one carbon atom and two oxygen atoms. Let's look at the atomic structure of carbon dioxide:

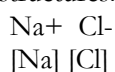


- **Carbon Atom:** A carbon atom has six protons in the nucleus and electrons distributed in energy levels. The first energy level contains two electrons, and the second contains four.
- **Oxygen Atom:** Each oxygen atom has eight protons in the nucleus and electrons distributed across energy levels.

In the carbon dioxide molecule, each oxygen atom shares electrons with the

central carbon atom. This sharing forms two double covalent bonds between carbon and oxygen, resulting in a linear molecular geometry for carbon dioxide.

**Sodium Chloride (NaCl):** Sodium chloride, commonly known as table salt, is a compound formed by the ionic bonding between a sodium atom and a chlorine atom. Let's examine their atomic structures:



- **Sodium Atom:** A sodium atom has 11 protons in the nucleus and electrons distributed in energy levels. The first energy level contains two electrons, the second contains eight, and the third contains one.
- **Chlorine Atom:** A chlorine atom has 17 protons in the nucleus and electrons distributed in energy levels. The first energy level contains two electrons, the second contains eight, and the third contains seven.

In sodium chloride, the sodium atom loses one electron to achieve a stable electron configuration similar to that of noble gases, while the chlorine atom gains this electron. This transfer of electrons leads to the formation of an ionic bond, creating a sodium cation (Na<sup>+</sup>) and a chloride anion (Cl<sup>-</sup>), which attract each other due to their opposite charges and form an orderly arrangement in a crystal lattice.

These examples illustrate how atoms come together to form molecules and compounds, showcasing different types of chemical bonding – covalent and ionic – and the resulting structures and properties of the substances formed.

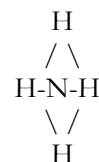
**Methane (CH<sub>4</sub>):** Methane is a simple hydrocarbon consisting of one carbon atom and four hydrogen atoms. Here's the breakdown of its atomic structure:



- **Carbon Atom:** A carbon atom has six protons in the nucleus and electrons distributed in energy levels. The first energy level contains two electrons, and the second contains four.
- **Hydrogen Atom:** Each hydrogen atom has one proton in the nucleus and one electron in its electron shell.

In the methane molecule, the carbon atom shares electrons with four hydrogen atoms, resulting in four single covalent bonds. This arrangement forms a tetrahedral molecular geometry.

**Ammonia (NH<sub>3</sub>):** Ammonia is a compound composed of one nitrogen atom and three hydrogen atoms. Here's a breakdown of its atomic structure:



- **Nitrogen Atom:** A nitrogen atom has seven protons in the nucleus and electrons distributed in energy levels. The first energy level contains two electrons, and the second contains five.
- **Hydrogen Atom:** Each hydrogen atom has one proton in the nucleus and one electron in its electron shell.

In this diagram, the nitrogen atom (N) is at the center, surrounded by three hydrogen atoms (H) bonded to it. The lines represent covalent bonds between the atoms. This arrangement results in a trigonal pyramidal molecular geometry for ammonia.

**Oxygen Molecule (O<sub>2</sub>):** The oxygen molecule consists of two oxygen atoms bonded together. Let's look at the atomic structure:

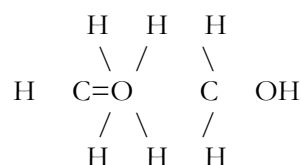


In this diagram, the two oxygen atoms (O) are connected by a double covalent bond, represented by the '=' symbol. This bond involves the sharing of two pairs of electrons between the two oxygen atoms, resulting in the stable oxygen molecule (O<sub>2</sub>).

- **Oxygen Atom:** Each oxygen atom has eight protons in the nucleus and electrons distributed in energy levels.

In the oxygen molecule, two oxygen atoms share electrons to form a double covalent bond. This bond is formed by the sharing of two pairs of electrons, resulting in a stable oxygen molecule.

**Glucose (C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>):** Glucose is a carbohydrate molecule that plays a vital role in energy storage in living organisms. It consists of six carbon atoms, twelve hydrogen atoms, and six oxygen atoms. Here's an overview of its atomic structure:





In this diagram, the carbon atoms (C) are arranged in a hexagonal ring, representing the six carbon atoms in glucose. The hydrogen atoms (H) are bonded to some of the carbon atoms, and the oxygen atoms (O) are attached to the carbons as well. This representation is simplified and does not capture the three-dimensional structure of glucose, but it gives a basic idea of the arrangement of atoms in the molecule.

- **Carbon Atom:** A carbon atom has six protons in the nucleus and electrons distributed in energy levels.
- **Hydrogen Atom:** Each hydrogen atom has one proton in the nucleus and one electron in its electron shell.
- **Oxygen Atom:** Each oxygen atom has eight protons in the nucleus and electrons distributed in energy levels.

In the glucose molecule, carbon, hydrogen, and oxygen atoms are bonded together through various single covalent bonds. The arrangement of atoms in glucose contributes to its complex molecular structure and the energy it stores.

**Hydrochloric Acid (HCl):** Hydrochloric acid is a compound formed when a hydrogen atom bonds with a chlorine atom. Here's a look at its atomic structure:



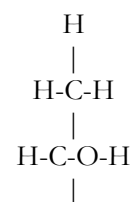
In this diagram, the hydrogen atom (H) is bonded to the chlorine atom (Cl) through a single covalent bond. The line represents the bond between the two atoms, and the arrangement is linear due to the nature of the single bond.

- **Hydrogen Atom:** Each hydrogen atom has one proton in the nucleus and one electron in its electron shell.
- **Chlorine Atom:** A chlorine atom has 17 protons in the nucleus and electrons distributed in energy levels. The first energy level contains two electrons, the second contains eight, and the third contains seven.

In the hydrochloric acid molecule, the hydrogen atom shares an electron with the chlorine atom, creating a single covalent bond. This bond results in the formation of hydrochloric acid, which is a strong acid when dissolved in water.

- **Ethanol (C<sub>2</sub>H<sub>5</sub>OH):** Ethanol, also known as alcohol, is a compound commonly found in beverages and used as a fuel. It consists of two carbon atoms, six hydrogen atoms, and one oxygen

atom. Here's a breakdown of its atomic structure:



In this diagram, the carbon atoms (C) are connected by single covalent bonds, forming the backbone of the molecule. The hydrogen atoms (H) are bonded to the carbons, and the oxygen atom (O) is also attached to one of the carbons through a single bond. The OH group is called a hydroxyl group and is characteristic of alcohols like ethanol. This representation provides a basic illustration of the arrangement of atoms in the ethanol molecule.

- **Carbon Atom:** A carbon atom has six protons in the nucleus and electrons distributed in energy levels.
- **Hydrogen Atom:** Each hydrogen atom has one proton in the nucleus and one electron in its electron shell.
- **Oxygen Atom:** An oxygen atom has eight protons in the nucleus and electrons distributed in energy levels.

In the ethanol molecule, carbon, hydrogen, and oxygen atoms are bonded together through a combination of single covalent bonds and a single oxygen-hydrogen (OH) bond known as a hydroxyl group. The arrangement of these atoms contributes to the properties and uses of ethanol.

- **Protein Molecule:** Proteins are complex macromolecules essential for various biological processes. They are composed of amino acid units linked together. Each amino acid consists of a central carbon atom, an amino group, a carboxyl group, a hydrogen atom, and a variable side chain. Here's an overview:
- **Carbon Atom:** A carbon atom has six protons in the nucleus and electrons distributed in energy levels.
- **Amino Group:** The amino group consists of nitrogen and hydrogen atoms.
- **Carboxyl Group:** The carboxyl group consists of carbon, oxygen, and hydrogen atoms.
- **Hydrogen Atom:** Each hydrogen atom has one proton in the nucleus and one electron in its electron shell.

The atomic arrangement within amino acids and the way they link together through peptide bonds forms the basis for the diverse structures and functions of proteins in living organisms.

These additional examples highlight the wide range of molecules and compounds found in the natural world and human-made substances. Understanding the atomic structure of these entities is crucial for comprehending their behavior, reactivity, and contributions to various fields, including chemistry, biology, medicine, and industry.

#### Conclusion

In conclusion, delving into the atomic structure of molecules and compounds unveils a fundamental understanding of the intricate world of matter. The interplay of atoms through bonds, whether covalent or ionic, intricately defines the properties, behaviors, and functions of diverse substances.

From the simplicity of water's bent geometry to the complexity of proteins' three-dimensional arrangements, these structures govern the foundation of chemistry and its applications in various fields. While ASCII diagrams offer a glimpse, the actual configurations are often more intricate, requiring advanced representations.

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## **ABSTRACT**

*Grammatical mistakes wield a substantial influence on English writing skills, adversely affecting communication clarity and overall effectiveness. This abstract delves into the impact of such errors. Poor grammar hampers the conveyance of ideas, leading to misunderstandings and confusion among readers. It erodes the writer's credibility, as it implies a lack of attention to detail and a disregard for proper language usage.*

*Furthermore, grammatical mistakes impede the flow of writing, disrupting the reader's engagement and comprehension. They can alter the intended meaning of a sentence, distorting the writer's message. In academic and professional contexts, errors in grammar can tarnish the writer's reputation and undermine the validity of their arguments. Language precision is crucial, particularly when expressing complex concepts or information.*

*In conclusion, mastering grammatical accuracy is indispensable for fostering effective English writing skills. Writers must recognize the significance of proper grammar in facilitating clear communication, maintaining credibility, and enhancing the overall quality of their written work.*

**Keywords:** *grammatical mistakes, impact, English writing skills, communication, clarity, credibility, misunderstandings, flow, meaning, language precision*

## **INTRODUCTION**

The role of proper grammar in English writing cannot be understated. Grammatical accuracy is the cornerstone of effective communication, ensuring that ideas are conveyed with precision and clarity. Writing riddled with grammatical mistakes not only hampers comprehension but also erodes the writer's credibility. It creates room for misunderstandings, disrupting the intended message. Additionally, errors in grammar disrupt the natural flow of writing, hindering reader engagement. This introduction highlights the vital importance of mastering grammar for enhancing writing skills and emphasizes its influence on conveying ideas accurately while maintaining the writer's reputation.

Furthermore, the impact of grammatical mistakes extends beyond mere communication barriers. In academic and professional spheres, where precision is paramount, such errors can cast doubt on the writer's expertise and undermine the validity of their work. Inaccurate grammar can alter the meaning of a sentence or paragraph, leading to misinterpretations and unintended implications.

Language evolves alongside its users, reflecting a shared understanding of its rules. A writer's commitment to grammatical correctness exhibits not only their respect for linguistic norms but also their dedication to effective self-expression. Fortunately, resources abound for honing these skills, from style guides to grammar-checking

tools. By investing time in learning and practicing proper grammar, writers empower themselves to articulate ideas coherently, bolstering their impact and fostering a deeper connection with their audience.

In conclusion, recognizing the profound influence of grammatical precision on English writing skills is crucial. It molds communication, safeguards credibility, and influences interpretation. As writers strive for excellence, mastering grammar remains a fundamental pillar of success, enriching both their craft and their ability to convey thoughts articulately.

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impact and fostering a deeper connection with their audience.

Grammatical errors take various forms, ranging from subject-verb agreement and tense inconsistency to incorrect word usage and punctuation mishaps. Such mistakes can derail the trajectory of a sentence, leading to confusion for the reader. For instance, a sentence like "The team is working together to achieve their goals" is marred by a disagreement between the singular subject "team" and the plural possessive pronoun "their." This discord disrupts the sentence's fluidity and renders the intended meaning less precise.

The consequences of these mistakes are far-reaching. In educational contexts, students grappling with grammatical errors might find their grades adversely affected, as teachers assess not only the content but also the clarity and coherence of their writing. Similarly, in professional settings, employees who consistently produce documents replete with grammatical errors could hinder effective communication within teams, impacting project outcomes and client interactions.

The intricate relationship between grammar and meaning is exemplified by the placement of modifiers. Misplacing a modifier can lead to unintentional humor or confusion. Consider the sentence "I saw a man on the hill with a telescope," which could be interpreted as the man having the telescope. Correcting this ambiguity through proper placement, "On the hill, I saw a man with a telescope," illustrates how grammatical precision directly affects the conveyed message.

The impact of grammatical errors on credibility is substantial. Writing replete with mistakes suggests a lack of attention to detail and a disregard for the conventions of effective communication. In academia, researchers striving to publish papers in esteemed journals may face rejection if their work is compromised by grammatical blunders. Similarly, professionals drafting reports or business communications may struggle to gain the trust and respect of colleagues and superiors if their writing lacks grammatical finesse.

Moreover, the digital age has magnified the consequences of grammatical errors. Social media platforms, where information is disseminated rapidly, amplify the potential for errors to be widely noticed. A single viral post containing grammatical mistakes can subject the writer to ridicule and diminish the message's

credibility. In this era of constant online interaction, effective communication is vital, and grammatical errors can impede the resonance of one's voice.

Notwithstanding the repercussions, the ubiquity of grammatical mistakes is not surprising. Language learning is a dynamic process influenced by factors like education, exposure, and cultural context. English, with its complex structure and myriad exceptions, poses challenges even for native speakers. The rapid pace of modern communication, often characterized by informal text messages and social media posts, can contribute to the erosion of grammatical precision.

Yet, the case for striving for grammatical excellence remains compelling. Language serves as a conduit for expressing thoughts and sharing ideas. Precise language facilitates a smoother flow of thoughts from the writer's mind to the reader's comprehension. When errors disrupt this flow, the writer's intended impact can be diluted or lost entirely.

Furthermore, the ability to communicate effectively in writing is a cornerstone of success in various professions. Whether crafting persuasive arguments, drafting legal documents, or conveying medical instructions, grammatical precision is non-negotiable. Employers value employees who can articulate ideas clearly, as it enhances internal collaboration, client relationships, and the overall brand image.

Additionally, international communication has become increasingly essential in our interconnected world. English, as a global lingua franca, facilitates interactions between people of diverse linguistic backgrounds. To ensure successful cross-cultural communication, adhering to grammatical norms is imperative. Proper grammar helps bridge potential gaps in understanding, allowing information to transcend linguistic and cultural barriers.

Language is not static; it evolves alongside societal changes. This evolution is exemplified by shifts in language usage, with some grammatical rules becoming more flexible over time. However, this should not be misconstrued as a license for outright neglect of grammar. Adapting to linguistic changes while maintaining fundamental grammatical accuracy strikes a balance between staying relevant and upholding effective communication.

Fortunately, numerous resources are available to aid writers in enhancing their grammatical prowess. Style guides, such as The Chicago

Manual of Style and the Associated Press Stylebook, offer comprehensive insights into grammatical rules and conventions. Online grammar-checking tools, often integrated into word processing software, assist in identifying errors and suggesting corrections. Language-learning platforms and writing workshops can provide targeted guidance for overcoming specific challenges.

In conclusion, the impact of grammatical mistakes on English writing skills is profound and wide-ranging. These errors hinder effective communication, disrupt the flow of ideas, and erode the writer's credibility. Nevertheless, the pursuit of grammatical excellence is not an unattainable endeavor. Writers who invest time in honing their grammatical skills stand to benefit from clearer communication, heightened credibility, and enhanced professional prospects. As language continues to evolve, maintaining a strong foundation in grammar remains integral to successful self-expression and meaningful connection.

## **IMPACT OF GRAMMATICAL MISTAKES ON WRITING AND SPEAKING**

Grammatical mistakes exert a substantial impact on both writing and speaking, significantly affecting the clarity, credibility, and effectiveness of communication. In writing, such errors undermine the coherence and precision of the message. Mistakes disrupt the natural flow of sentences, causing confusion for readers. Whether it's a misplaced modifier altering the intended meaning or subject-verb disagreement leading to ambiguity, grammatical inaccuracies hinder the writer's ability to convey ideas accurately.

Moreover, the credibility of written content diminishes when it's marred by grammatical errors. Readers associate polished grammar with competence and attention to detail. Errors, on the other hand, suggest a lack of professionalism and care, eroding the writer's authority on the subject matter. This is especially crucial in academic, professional, and business contexts, where accurate communication is imperative for conveying expertise and building trust.

In spoken communication, grammatical mistakes can impede effective expression and hinder the conveyance of thoughts. The spontaneity of speech makes it more prone to errors, yet these mistakes can negatively impact the listener's perception. Frequent grammatical slip-ups might lead others to question the speaker's level of education or language proficiency. Such

misunderstandings can hinder effective interaction, particularly in formal or professional settings.

Furthermore, in both writing and speaking, grammatical mistakes can alter the intended message, leading to confusion or misinterpretation. These errors force the audience to decipher the intended meaning, diverting their attention from the core content. Whether in writing emails, delivering presentations, or participating in discussions, accurate grammar is pivotal for ensuring that ideas are communicated clearly and effectively.

Language is a powerful tool for shaping perceptions and building connections. When grammar is disregarded, the potential impact of a message is diluted. However, rectifying these errors enhances the overall quality of communication. In writing, precise grammar allows ideas to flow seamlessly, enabling readers to engage with the content without distractions. In speaking, accurate grammar facilitates smooth conversations, enabling speakers to articulate thoughts confidently and listeners to comprehend effortlessly.

In today's digital landscape, where communication happens at a rapid pace, the significance of proper grammar remains paramount. Social media, for instance, amplifies errors, with posts spreading quickly and potentially reaching a vast audience. This magnifies the repercussions of mistakes, as they become more visible and enduring.

To mitigate the impact of grammatical mistakes, individuals can invest in improving their language skills. Reading extensively exposes them to correct grammar usage, while language learning resources and courses offer structured guidance. Additionally, editing tools and software aid in identifying and rectifying errors, bolstering the quality of written work. For spoken communication, practicing articulation and enunciation, as well as seeking feedback from peers, can help refine language skills.

In conclusion, the impact of grammatical mistakes on writing and speaking is substantial. These errors hinder clarity, disrupt credibility, and impede effective communication. However, with dedication and effort, individuals can enhance their language skills, ensuring that their messages are conveyed accurately and authentically in both written and spoken forms.

## **Conclusion**

In essence, the far-reaching impact of grammatical mistakes on both writing and

speaking is undeniable. From disrupting the coherence of sentences to eroding the credibility of the communicator, these errors hinder effective communication. Whether in the realm of professional endeavors, academic pursuits, or everyday interactions, accurate grammar serves as a linchpin for conveying ideas precisely and building meaningful connections.

The consequences of such mistakes are not limited to immediate misunderstandings. They can cast doubt on the communicator's expertise, influence perceptions, and impede the intended impact of a message. However, this is not a reason for discouragement; rather, it underscores the importance of striving for grammatical excellence.

In today's interconnected world, where information travels swiftly through various mediums, the scrutiny on language use is heightened. Grammatical mistakes can gain unwanted attention and tarnish reputations. Therefore, the investment in refining language skills, be it through learning resources, practice, or technology, is an investment in effective self-expression and successful communication.

As language continues to evolve and adapt to changing contexts, the significance of grammatical accuracy remains steadfast. Recognizing the impact of these errors empowers individuals to be more mindful of their language use, whether they are putting thoughts into writing or articulating them through speech. Ultimately, mastering grammar not only enhances communication but also contributes to personal growth, professional success, and the art of fostering genuine connections in an increasingly complex linguistic landscape.

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