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### Message from Secretary



Comp feeders group of institutions is a promising, Innovative, Aspiring and making a difference in the field of education. We have received Madhya Pradesh Gaurav Award in the field of Excellence Education by the Chief Minister of M.P. for consecutive 2 years.

Again, it's a matter of pride and pleasure to inform you that our institute has organized 2nd National Conference on "FRUITFULNESS OF MULTIDISCIPLINARY APPROACH IN RESEARCH" (FMAR) on 11th and 12th January 2020.

Management, Arts, Science, Education, Pharmacy and Nursing experts and students of all discipline participated in the conference. I appreciate their presence, heartily support in making the conference a grand success.

We are confident of organizing International conference with mega participation in future at our institution.



Awdhesh dave

**Secretary**  
**Comp feeders Group of Institutions,**  
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## CEO Message



It's my pleasure to convey this message with deep satisfaction to the proceedings of 2<sup>nd</sup> National Conference on "FRUITFULNESS OF MULTIDISCIPLINARY APPROACH IN RESEARCH" (FMAR) organized by Comp feeders Group Of Institution, Indore (M.P.) on Saturday and Sunday i.e. 11<sup>th</sup> and 12<sup>th</sup> January 2020.

The motive of this Conference was to enlighten the hidden Problems and issues related with research in context of fruitfulness of multidisciplinary approach and it was a Challenging task for whole CGOI team to make this Conference a benchmark. The contribution of faculty and staff of CGOI, to make the conference a success is outstanding.

I want to convey my regards to the Participants, Dignitaries, Industrialist, Research Scholars, and Students who came from different parts of the country and again I appreciate the untiring efforts of Organizing team and editorial Board. I wish them all success in life.

**Puspraj Mishra**  
**CEO, Comp feeders Group of Institutions,**  
**Indore (M.P.)**

## Convener Message



It's the moment of pride being the Convener of 2<sup>nd</sup> National Conference on "FRUITFULNESS OF MULTIDISCIPLINARY APPROACH IN RESEARCH" was organized by Comp feeder group of institution, Indore (M.P.) on 11<sup>th</sup> and 12<sup>th</sup> January 2020.

Being a Convener of Conference implementing and considering every aspect of the topic was of utmost important. Seeing the Success of Conference we succeed in attaining them.

The Conference was being successful with all the participants and in house efforts done by everyone. I congratulate all for attending the conference. Thank you for being supportive and making the event fruitful.

**Convener**  
**HOD, Arts**  
**Comp feeders Group of Institutions,**  
**Indore (M.P.)**

# Importance of Social Work in Sustainable Development

Dr. Prakshini Tiwari\*

**Abstract** - According to Farley and Smith (2006:7), “social work is an art, a science, a profession that helps people to solve personal, group (especially family), and community problems and to attain satisfying personal, group, and community relationships through social work practice” The global community at the United Nations on September 25, 2015 agreed to the 2030 Global Agenda entitled ‘Transforming our world: The 2030 Agenda for sustainable Development’. The global agenda of Sustainable Development Goals (SDGs) provides Social Workers an opportunity to redefine their role pertaining to people empowerment, socio-economic development, human rights and the environment. The Global Agenda enhances these possibilities for Social Workers as the SDG goals and values have parallels relevance and application with Social Work practice.

**Keywords** - Social work, Sustainable development Goals, Social Workers

**Introduction** - The global community at the United Nations on September 25, 2015 agreed to the 2030 Global Agenda entitled ‘Transforming our world: The 2030 Agenda for sustainable Development’. This action plan which replaces the Millennium Development Goals (MDGs) is universal in nature and comprehensive in the range of issues and concerns addressed pertaining to development, economy, human rights and the environment. The theme of ‘no one will be left behind’ is most critical so as to ensure that inclusive development is within the reach of all people groups and communities.

It is in this global context that in this article, Sustainable Development Goals (SDGs) are discussed from a social work practice point of view and with a strong commitment to human rights issues in Malaysia. It is argued that the SDGs provide social workers a good and holistic intervention framework for practice as there are both new opportunities and challenges for social workers. Lessons learned in this context have implications for social work practice in Malaysia and elsewhere. Adopting a human rights approach to social work practice is of utmost importance as it is founded on the inalienable rights of the human person. The SDG global agenda enables social workers to utilise this approach based on the global commitment through the 2030 agenda which is focused on development, human rights and environment.

## What is sustainable development?

The concept of sustainable development emerged as a response to a growing concern about human society’s impact on the natural environment. The concept of sustainable development was defined in 1987 by the Brundtland Commission (formally the World Commission on Environment and Development) as ‘development that meets the needs of the present without compromising the

ability of future generations to meet their own needs’ (Brundtland, 1987). This definition acknowledges that while development may be necessary to meet human needs and improve the quality of life, it must happen without depleting the capacity of the natural environment to meet present and future needs. The sustainable development movement has grown and campaigned on the basis that sustainability protects both the interests of future generations and the earth’s capacity to regenerate. At first it emphasised the environment in development policies but, since 2002, has evolved to encompass social justice and the fight against poverty as key principles of sustainable development.

**Social Work and SDG** - Social workers can relate to this Agenda 2030 at the national, regional and global levels. The SDGs bring an interconnected understanding of human needs and concerns that are economic, social and environmental. Reference is made in the 2030 Agenda to terms such as ‘deep interconnection & many cross-cutting elements across the goals and targets’ (United Nations 2015). Furthermore, a more holistic and sustainable way of addressing human need is promoted through tackling poverty, education, health, economy and employment which are all human development concerns.

## Comparison of normative principles

Sustainable development	Social work
Satisfaction of human needs	Enhancement of human well-being: This implies the satisfaction of needs but has a broader focus.
Accepts ecological limits – the Earth’s finite resources	Concern and respect for the Earth’s finite resources is not yet a core concern in social

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	work discourse and depends on how notions of human well-being are understood across locations
Common but differentiated responsibilities in the first place between nations - results from general principles of fairness	In the ethics of empowerment, -social work holds people accountable for their actions, but fairness implies attention to the different possibilities and limits of people, both individuals and groups. Social work believes the state has a role in providing for its citizens.
Global justice though there are divergent conceptions of exactly what this entails	Social work is aligned with the goal of global justice
Intragenerational equity and solidarity	Social work extols social solidarity, diversity and empowerment, especially with disadvantaged & marginalised populations
Intergenerational equity and solidarity: responsibility for future generations is an innovative principle	This principle is compatible with social work's concern with people's futures
Active participation of citizens is seen as crucial to sustainable development	Active participation of service users is highly valued in social work
Gender equality and respect for diversity	Social work promotes gender equality and respect for diversity

**The Importance of Social Work** - In a world filled with injustices and incredibly complex, pressing challenges, we need people who are committed to making a difference in the lives of people within their communities more than ever before, and that's precisely where social workers come in, which will ultimately help in sustainable development.

Through their commitment to bringing about positive social change, helping individuals of all ages thrive in their

local environment and being an advocate for those who have lost their voice, social workers play a prominent role in improving the lives of those who need it most.

Though they work with both children and adults in vulnerable or disadvantaged populations, the benefits of a social worker's service is especially evident in children. Without the help of a passionate social worker, countless children would have gone without the support and guidance they needed in order to lead the healthy, fulfilling life they deserve.

**Conclusion** - In this article, we explored the thrust of the SDGs and relate these to social work practice and human rights concerns with relevance to the Malaysian context. In doing these, we reviewed the parallel SDG ethos with that of social work values as well as the intervention charted as being holistic and integrated. The global social work community through its proactive initiative and documents on social work and social development is facilitating a positive social workers response.

We recognise many challenges for social work practice in Malaysia as well as potential possibilities over the next 15 years. There is now an opportunity especially as Malaysia is defining the framework for implementation. There is a vacuum among social sector delivery staff, agencies and organisations to adopt a SDG framework as Malaysia is committed to meet the goals, targets and indicators in the short term by 2020 and in the long term by 2030. Over the next 15 years, social workers can refine their roles based on the SDG 2030 agenda for holistic development taking both human rights and the environment at the heart of both human services and social justice through social work practice.

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# Changing Dimension In Entrepreneurship

Puspraj Mishra\*

**Abstract** - This Paper sets out to develop a model of entrepreneurial action that takes its point of departure in entrepreneurs' experiences of risk-taking, opportunity identification and the role of self. By focusing on what entrepreneurs experience as relevant aspects of their life worlds the goal is to attain a better understanding of the drivers and motivations of venture creation and development, it is also important that how much entrepreneurs think about the welfare of the society and do work for them and not for the profit earning.

We can also discuss the problems, opportunity and there cure for the entrepreneurs, because education system and the cultural trends is not supportive to develop entrepreneurs skill in the youth of the country. The proportion between the male and female entrepreneurs also and important aspect so, role of women entrepreneurs not to be taken at lighten, and opportunity to these people so that they can enhance their talent and make a good business plan for the country and also for the company.

Based on the individual studies, the discussion section outlines the contours of a general model of entrepreneurial action that centers around the questions: Who am I?, What do I see?, What do I do?, and What are the effects? By taking the experiences of the acting entrepreneur as the point of departure, it is also possible to re-examine many questions and assumptions in the study of entrepreneurship. Theoretically the salience of individual experiences suggests a new understanding of who the entrepreneur is. It also indicates that personal and often conflicting perceptions of risks and opportunities, regardless of their realism, constitute important drivers of entrepreneurial action. Practically the results may allow entrepreneurs, managers, educators, venture capitalists and others to take more informed actions. For entrepreneurs the results may increase awareness of their own role, problematize risks and opportunities, and also suggest new and creative ways for developing the venture. More specifically the results can be used as an analytical template in the evaluation of, e.g. financial and technological risks. The thesis also contributes methodologically by demonstrating how phenomenological methodologies may advance understanding of entrepreneurship and entrepreneurial action.

**Keywords** - entrepreneurial , conflicting perceptions, phenomenological methodologies.

**Introduction** - An entrepreneur is a person who develops a new idea and takes the risk of setting up an enterprise to produce a product or service which satisfies customer needs. All entrepreneurs are business persons, but not all business persons are entrepreneurs. Let us now think of why all business persons are not entrepreneurs. Think of a woman who sits by the roadside leading to your home and who has been selling the same type of food, from the same size of saucepan or pot, from the same table top, and may not have been able to change her standard of living to any appreciable extent. Such a woman may be a business person but not an entrepreneur. The entrepreneur on the other hand is the business person who is not satisfied with his/her performance and therefore always finds ways to improve and grow. Rather than all these thing it is also important that how much an entrepreneurs thinks about the welfare of the society, it plays an important role for the development of the country but also for the new idea or firm establishes by the entrepreneurs.

The words entrepreneurs, entrepreneurs and entrepreneurship have acquired special significance In the context of economic growth in rapidly changing socio-economic and socio-cultural Climates, particularly in industry , both in developed and developing countries. Entrepreneurial development is a complex phenomenon. Entrepreneurship is the lifeblood of any Economy, more so in the developing economy. In India entrepreneurship is in its cultural ethos. Entrepreneurship and enterprises are a continuous process and it is growing from centuries to Centuries .Entrepreneurship is a dynamic activity which helps the entrepreneur to bring Changes in the process of production, innovation in production, new usage of materials. Creator of market etc. It is a mental attitude to foresee risk and uncertainty with a view.

To achieve certain strong motive. It also means doing something in a new and effective Manner.

**Objectives** - Entrepreneurship has gained greater significance at global level under changing economic

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Scenario. Objectives of the present paper are:

1. To understand the concept of Entrepreneurship and related terms.
2. To know the motivating factors and skills for entrepreneurs.
3. To see the support sources and opportunities for entrepreneurs.
4. To understand the relationship of entrepreneurship and management through various Profiles of entrepreneurs

**Opportunity for entrepreneurs in India, in different sectors.**

**Agriculture and other activities:** Crop production, Plantation, Forestry, Livestock, Fishing, Mining and Quarrying.

**Trading services:** Wholesale and retail trade; Hotels and restaurants Old economy or traditional sectors: Manufacturing, Electricity, Gas and Water Supply

**Emerging sectors (including knowledge intensive sectors):** IT, Finance, Insurance and Business services, Construction, Community, Social & Personal Services Supply Chain, and Transport- Storage-Communications etc.

**Problems face by the entrepreneurs**

1. Implementation of the project:
2. Recruitment of manpower:
3. Determination of form of enterprise:
4. Implementation of the plan without Market research by a small scale industry.
5. Procurement of machinery.
6. Procurement of raw materials.
7. Rising of funds.
8. Access to capital.

High personal and tax rates can significantly reduce/discourage risk taking ability Of entrepreneurs.

In India the failure of and the development of entrepreneurs is comes to the end because they have target towards the individual careers.

**Scope for entrepreneurship development in Agriculture:**

1. Technologies those reduce the cost of production and increase the benefit of the
2. Farmers will open new opportunities for Agri-entrepreneurship.
3. New technologies that are simple and time saving and keep away farmers from
4. Drudgery of lab our will also provide opportunity for entrepreneurship in
5. Agriculture Technologies that provide social and psychological benefits to farmers will also Provide opportunity for entrepreneurship in agriculture.

**Problems for the entrepreneurs in agriculture sector in India-**

- a. Domination of seed market by multinational companies (MNCS) and adverse effect on farmers' traditional

rights to save and sell seeds.

- b. Reduction/elimination of input subsidy, resulting in their rising cost and less use by Small and marginal farmers.
- c. Import and dumping of low cost agriculture and industrial products from outside
- d. Countries, adversely affecting indigenous production.
- e. Benefits mostly accrue to large and rich farmers, as small farmers cannot go in for
- f. Export oriented production.
- g. Resource poor farmers may be further marginalized.
- h. Rise in the price of food grains.

**How to overcome to the problems face by the entrepreneurs in India**

- a. Proper management for all the activity performs in the implementation of business plan made by the entrepreneurs.
- b. Change the education system in India, which target to the subjective knowledge but not on the practical knowledge, especially in case of business.
- c. Proper implementation of policy made by the government for promoting people to establishes there business plan.
- d. Reduce the tax liability on the income earn by the business.
- e. Easily availability of capital by the bank, less documentation work.
- f. Government can make organization which teach good entrepreneurship skill with in people and change their mind set up towards doing the job.

**Research Methodology :**

1. The present paper is based upon conceptual knowledge of entrepreneurship and step towards.
2. Collection of data is from secondary sources. Various books, journals, research papers and
3. Reports based on entrepreneurship have been utilized for this paper.

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# A Research On Database Management System: SQL And PL/SQL Analysis

Parag Mudgal\*

**Abstract** - In present scenario people are working on computer and using different technologies. In any field if we work then we should store our worked data somewhere and the data should be easily accessible, permanently stored, secured, robust etc. From the past when the computer was not developed we store our data into files, and we use the File Management System (FMS) for saving and arranging the file. The files have so many backlogs like redundancy, data lose, so many copies etc. For overcome from all this things Edger F. Codd developed an application called Database Management System (DBMS). This helps people to create, update, store, organize, and manage the data. Database management systems are important to businesses and organizations because they provide a highly efficient method for handling different type of data. Some of the data that are easily managed with Database Management System (DBMS) include: employee records, student information, payroll, accounting, inventory and library books. These systems are built to be versatile. Structured Query Language (SQL) is very simple but effective database programming language, who helps Database Management System (DBMS) to store, retrieve and manage the data and Procedural Language/Structured Query Language (PL/SQL) is just an extension of SQL.

**Keywords** - Database Management System (DBMS), File Management System (FMS), Edger F. Codd, Structured Query Language (SQL), Procedural Language/Structured Query Language (PL/SQL)

**Introduction - A Database Management System (DBMS)** is a collection of interrelated data and a set of programs to access those data. The collection of data, usually referred to as the **database**, contains information relevant to an organization. The primary goal of a DBMS is to provide a way to store, retrieve and manage data and information that is effective, convenient and efficient. By **DATA**, we mean known facts that can be recorded and that have a specific meaning. For example, we can consider the names, mobile numbers, e-mail addresses and addresses of the peoples. We may have recorded this data in an indexed address book, or may have stored it on a hard drive, using a computer and software such as Microsoft ACCESS, or EXCEL. The relationship between symbols and what they represent is the essence of what we mean by **Information** and **Knowledge** necessarily involves a personal experience.

**SQL** is a very simple, and powerful, database language. SQL is a non-procedural language; users describe in SQL what they want to do, and the SQL language compiler automatically generates a procedure to navigate the database and perform the desired task.

**PL/SQL** is Oracle's procedural language extension to the SQL. PL/SQL allows you to mix SQL statements with procedural constructs. PL/SQL provides the capability to define and execute PL/SQL program units such as procedures, functions, and packages. PL/SQL program

units generally are categorized as anonymous blocks and stored procedures.

**File Management System** -A File Management System is a type of software that manages data files in a computer system. It has limited capabilities and this was designed to manage single or multiple files, like office documents and records. It may display report details, owner name, creation date, state of completion and similar features useful in an office environment.

In a File Management System, each department has its own file, designed specifically for those applications. The department working with the data processing sets standards for the format and maintenance of its files.

Programs are also dependent on the files and vice-versa; that is, when the physical format of the file is changed, the program has also to be changed. Although the traditional file oriented approach to information processing is still widely used, it does have some disadvantages.

**Disadvantages Of File Management System:**

- **Data Redundancy And Inconsistency** - Since different programmers created different files and application programs over a long time period, the files are likely to have different formats and the programs may be written in several different programming languages. Moreover, the same information may be duplicated in so many files. For example, the address and mobile number of a specific customer may appear in a file that consists of current account

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records of a bank and in a file that consists of checking accounts record. This redundancy leads to higher storage and access and cost. In addition, it may lead to data inconsistency; that is, the various copies of the same data may exist there. For example, a change in customer's address may be reflected in current account records but not in other location in the system.

- **Data isolation** - Data are stored in various files and locations, and files may be in different formats, writing new application program to retrieve the appropriate data is difficult.

- **Integrity problems** - The data values stored in the database must satisfy some special types of consistency constraints. For example, the balance of a bank account may never fall below a prescribed amount (say, 1000 Rs.). Developers enforce these constraints in the system by adding appropriate code in the various application programs. When new constraints are added, it is difficult to change the program code to enforce them. The problem will occur when constraints involve several data items from different files.

- **Atomicity problems** - A computer system, like any other mechanical or electrical device, is subject to failure. In many applications, it is crucial that, if a failure occurs, the data be restored to the last state that existed prior to the failure. Consider a program to transfer 1000 Rs. from account X to account Y. If a system failure occurs during the execution of the program, it is possible that the 1000 Rs. was removed from account X but was not credited to account Y, resulting in an inconsistent database state.

**By Using Database Management System We Overcome All The Above Problems.**

**Structured Query Language(Sql):**

**Structured Query Language (SQL)** is a database programming language which is used to communicate to the oracle server; we can communicate to the oracle server by sending commands and instruction called **Query**.

A Query is a command or instruction submitted to the oracle server to perform some operations over Database.

It is introduced by IBM and its initial name is SEQUEL later it is changed to SQL, SQL is standardized by ANSI (American National Standards Institute) and ISO(International Organization for Standardization), SQL is common to all Relational Database Management System (RDBMS) like-

ORACLE, SQLSERVER, DB2, MYSQL, TERADATA Depends on operations over the Database the Structured Query Language categorized into sub languages-

- 1) Data Definition Language(DDL)
- 2) Data Manipulation Language(DML)
- 3) Data Query Language(DQL)
- 4) Data Control Language(DCL)
- 5) Transaction Control Language(TCL)

**1. Data Definition Language** - Data definition can also be called meta-data(data about data), DDL is a set of commands to perform operations over the data definition like

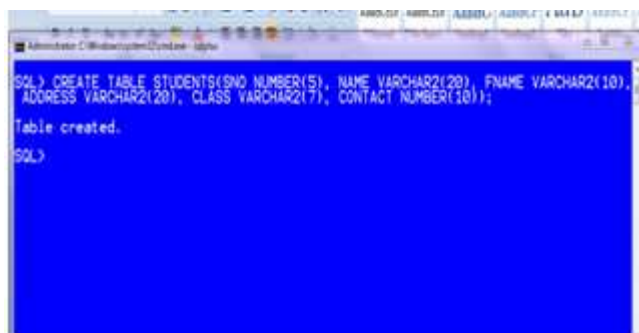
create database objects, alter the structure of the database objects and delete database objects from database.

DDL commands-

- CREATE
- ALTER
- DROP
- TRUNCATE
- RENAME
- FLASHBACK
- PURGE

All DDL commands are auto commit.

Create command is used to create the database in Database Management System.

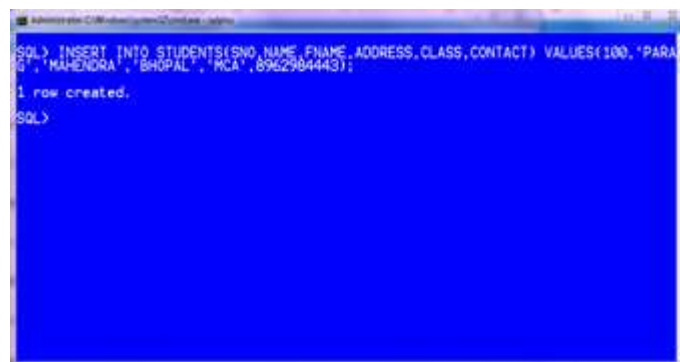


**2. Data Manipulation Language** - The set of commands to perform operations over the data of SQL that are used to insert data into the database, modify the data of the database and to delete data from the database are called as DML.

DML commands-

- INSERT
- UPDATE
- DELETE
- MERGE
- INSERTALL

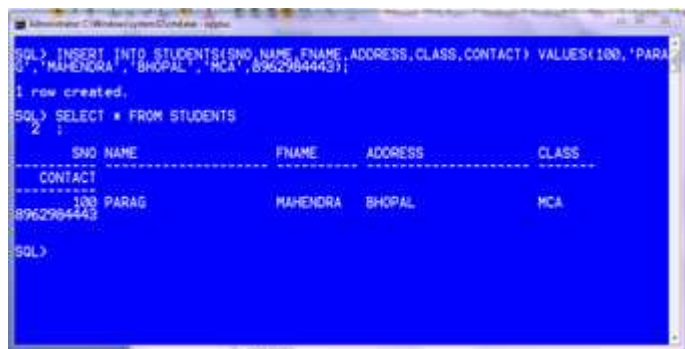
Insert command is used to insert the data into the table of DBMS:



**3. Data Query Language** - The commands of SQL that are used to query the data or fetch the data from the database.

DQL command-

- **SELECT** - Select command is used to display the data from the database



**4. Data Control Language** - The set of commands to control over the database for giving the permission to create retrieve the data etc. are called DCL commands.

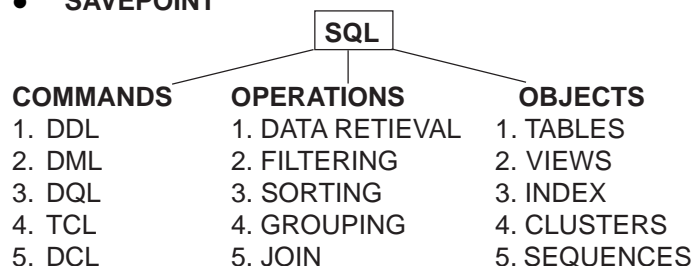
DCL commands-

- GRANT
- REVOKE

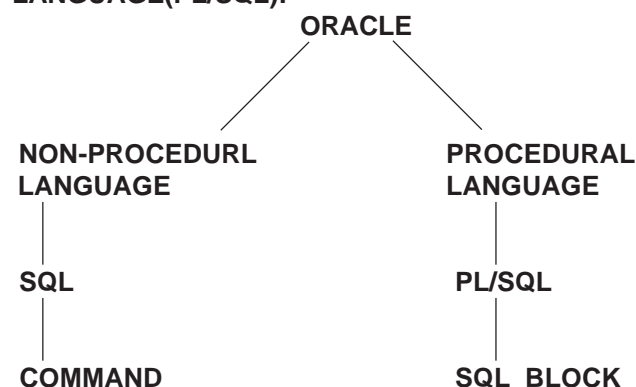
**5. Transaction Control Language** - The set of commands to control over the transaction of data like saving and undo the transactions are called the TCL command.

TCL commands-

- COMMIT
- ROLLBACK
- SAVEPOINT



**PROCEDURAL LANGUAGE/STRUCTURED QUERY LANGUAGE(PL/SQL):**



In PL/SQL SQL commands can be grouped into one block and we can submit that block oracle server, in PLSQL number of request response between user in oracle server are reduced and performance improved.

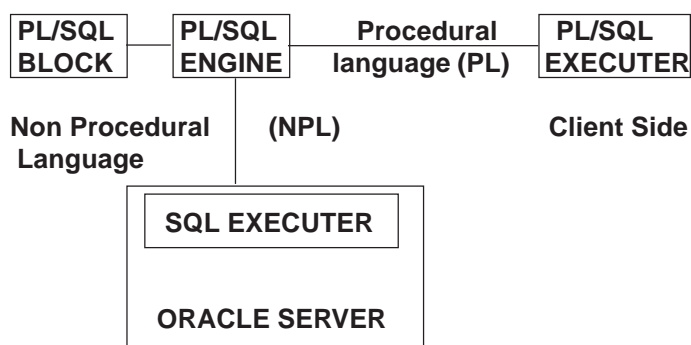
- PL/SQL support conditional statement.
- PL/SQL support loops.
- PL/SQL supports exception handling.
- PL/SQL supports reusability

- PL/SQL support security
- PL/SQL support modularity
- PL/SQL support portability

PL/SQL blocks are 2 types:

- Anonymous Block - A block without name is called anonymous block.
- Named Block - PL/SQL blocks which having header are known as Named blocks. These blocks can either be subprograms like Procedure, Function, Package or Triggers.

### EXECUTION OF PL/SQL PROGRAM



After executing PL/SQL program the program is send to PL/SQL engine and then PL/SQL engine separate the Procedural Language (PL) statement and Non Procedural Language (NPL) statements and PL statements are send to PL executer and NPL statement are send to SQL executer.

**CONCLUSION** - In this research paper I showed how a database was originated and what the disadvantages of File management System, how SQL and PL/SQL will work. DBMS are system software to create and manage databases. These database management systems let programmer or user store, retrieve, update and manage data. Today, we collect data for everything from weather, clients, user's behavior, inventory to everything that can be measured or gathered. Most companies have their own sets of data. You just name it, and they collect data to predict the market, research, sales to everything, the future of DBMS, the demand for DBMS will always be there in 100 years from now. We need to capture data for everything for research, prediction or analytical purpose.

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# A Research On Analyzing The Effect Of Swarm Marketing in Building Influential Brands

Arnika Kabra\*

**Abstract** - As we have read earlier that the world is moving ahead to **Blue ocean** strategy from **Red**. The same could be sensed in the field of the marketing. Marketing has originated as a concept to reach to the customers, but since then, a lot of paradigm changes have been seen.

One of them is **SWARM** marketing, whereby in the research paper, we are talking about understanding the behavior activities of **School of fishes** and applying the same to the today's practical world. In nutshell the study talks and focuses about developing and testing the **SWARM** towards the marketing activity and understanding its impact on customer's Perception, Brand Image, Sales, Motivation of employees etc.

**Keywords** - Blue ocean, swarm, school of fishes.

**Introduction** - Consumers today are smarter, more media-savvy, and wise to the marketing profession's usual bag of tricks than ever. However, buzz marketers like bloggers and podcasters are inventing new ways to reach consumers using measurable and targeted toolkits.

**Swarm Marketing** is a method of interactive marketing that creates and manages a literal **swarm** of thousands—or tens of thousands.

Creating and managing **THE PERFECT SWARM** for your organization requires a combination of creativity, technology, and continuous improvement.

As with other forms of marketing, creating **THE PERFECT SWARM** is dependent on marketing professionals and the effective messages they craft. The powerful management behind **Swarm** Marketing accelerates and reduces the cost of **swarm** creation. Now you can afford to create the *perfect swarm* and start making more sales.

Creating and managing a **swarm** of hundreds or thousands of persons magnifies the importance of tracking and reporting meaningful **analytics** to help you understand the who, what, how, and why of your **Swarm** Marketing program.

**Engaging the swarm: The 3 C's** - Not that long ago, people would create products and services and then talk with people like us to create advertising for them. Today, your brand has to engage consumers and become a community so that the swarm flocks toward you. Notably, the traits that create a strong brand for the herd are even more important for marketing to the swarm.

What we call the '3 C's':

**Conviction** - I believe that behind every brand is a great idea. All brands start in the same place, with the personal vision and conviction of the marketers behind them: like

people, the best ones have always stood for something. They are authentic, consistent, and true to themselves, and people follow them.

**Collaboration** - Product marketing is increasingly being replaced by interactive brand communities. Customers now tell **Dell Computer** what the next system was on their production line. Communities sit down with **McDonalds** to co-create what the architecture of their next restaurant will look like. Today swarm members want you to link them with your brand and demand meaningful interaction with each other.

**Creativity** - Creativity has always been a constant in advertising and marketing, but its nature must change in an era of distributed mass consumer communities. Today we must learn to think like the swarm, and the creative process must evolve to engage communities and not just consumers. Content, message and channel are all part of the same strategy and conversation that is then delivered as creatively as possible.

## Objectives of the study

- To analyze the effect of **SWARM** marketing in building influential brands.
- To study the impact of **SWARM** marketing in leverage conviction, collaboration, creativity.
- To study the effect of **SWARM** marketing in brand recalls by customers.
- To study the impact of **SWARM** marketing in increasing the sales.
- Discover answer by scientific procedures
- To gain familiarity with phenomenon or to achieve new insights into it
- To understand particular individual, situation or a group

## DATA COLLECTION

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## 1. PRIMARY DATA SOURCES

- Through interaction with customers
- Through questionnaires filled from the consumer.

## 2. SECONDARY DATA SOURCES:

- Through internet, various official sites of the companies.
- Online Journals
- Google Books

**Area of study: Indore**

**Sample size: 50**

**DATA COLLECTION METHODS** - There are several methods of collecting primary data, particularly in surveys and descriptive researches. Important are:

- Observation method**
- Through questionnaires**
- Through schedules**
- Interview method**

To know the response. I have used **the questionnaire method** in sample survey. If one wishes to find what people think or know, the logical procedure is to ask them. This has led marketing researchers to use the questionnaire technique for collecting data more than any other method.

In this method questionnaire were distributed to the respondents and they were asked to answer questions in the questionnaire. The questionnaires were structured non-disguised questionnaire because the questions, which the questionnaire contained, were arranged in a specific order besides every question asked were logical for the study, no question can be termed as irrelevant.

The questionnaire, were non-disguised because the questionnaire were constructed so that the objective is clear to the respondent. The respondents were aware of the objective. They knew why they were asked to fill the questionnaire.

**Hypothesis** - To achieve the objectives of my study and testing of the hypothesis applicable test was applied to come down to a suitable conclusion.

H01: There is a positive effect of SWARM marketing in building influential brands.

H11: There is no effect of SWARM marketing in building influential brands.

H02: There is a positive effect of SWARM marketing in leverage, conviction, collaboration, creativity.

H12: There is a no effect of SWARM marketing in leverage, conviction, collaboration, creativity.

H03: There is a positive effect of SWARM marketing in

brand recalls by customers.

H13: There is a no effect of SWARM marketing in brand recalls by customers.

H04: There is a positive effect of SWARM marketing in increasing the sales.

H14: There is a no effect of SWARM marketing in increasing the sales.

**Conclusion** - As per research conducted by me at Indore city Swarm Marketing is a Successful concept and it can be adopted by the companies as there marketing tool for Indore city as per the opinion of marketing managers of Indore.

It will also be useful in the Customer satisfaction because if employee will be motivated then they will work in most efficient manner that's why customer will get good service and they will feel satisfied.

This concept will give an Competitive edge among the competitors because of its innovativeness and newness because our competitors will not follow the same it will give us an advantage over others.

**Review of Literature** - The human swarm phenomenon is fundamentally changing marketing, because instead of just relying on authority figures, 'expert sources,' mainstream media and mass advertising, people are relying on members of their own swarm – such as friends, family, peers, and fellow online community members – to guide their decisions.

This means that we control our brands, but we no longer completely control our brand message. Today what a mother in Minneapolis or a businessman in Bangladesh thinks of your brand now carries equal weight with the best-crafted marketing strategy. We are entering an age of reference, not deference.

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# A Pre - Experimental Study To Assess The effectiveness Of Planned Teaching Programme On The Knowledge Of Primary School Teachers Regarding First Aid Management In Selected Rural School Of Indore (M.P.)

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**Abstract** - A Pre – Experimental Study To Assess The effectiveness Of Planned Teaching Programme On The Knowledge Of Primary School Teachers Regarding First Aid Management In Selected Rural School Of Indore (M.P.) was undertaken by Ms. Sunaina Nishad toward partial fulfillment of the requirement for the award of the degree of M.Sc Nursing at SDPS College of Nursing, DAVV Indore M.P.

## OBJECTIVES:

- To assess the pre test knowledge score regarding first aid management among primary school teachers.
- To assess the post test knowledge score regarding first aid management among primary school teachers.
- To determine the effectiveness of planned teaching programme regarding first aid management among primary school teachers by comparing pre test and post test score.
- To find out the association between knowledge programme regarding first aid management among primary school teachers with selected socio demographic variables.

## HYPOTHESIS

- There will be significant difference between pre test and post test knowledge score regarding first aid management among primary school teachers
- There will be significant association between pre test and post test knowledge score regarding first aid management among primary school teachers and selected demographic variables.
- A pre experimental one group pre test, post test approach was adopted in the study the population consisted of 30 primary school teachers in selected rural school of Hatod, indore .the sample was selected through a non probability purposive technique. A structured knowledge questionnaire (30 items) was developed by the investigator for the data collection. A planned teaching programme was done about knowledge regarding first aid management among primary school teachers. A structured knowledge questionnaire and planned teaching programme was validated by experts. The reliability of tools was calculated by using

by Karl- pearson product moment correlation formula. The reliability coffecient of structured knowledge questionnaire was  $r = 0.83$  which showed that the tool was reliable. after conducting the pilot study the final study was carried out. The planned teaching programme was conducted after pre test and post test was taken after 7 days.

## MAJOR FINDING OF THE STUDY

- The computed chi – square value depict that there was no significant association between pretest knowledge score and demographic variables i.e. age, religion, education status, experience, income of teachers, place of institution, type of occupation, previous information.
- The main post test knowledge score (mean = 9.14) was higher than the mean pre test knowledge score (mean = 4.34) the computed t value for the knowledge score ( $t = 20.002$  and  $p = 0.000$ ) shows significance increase in the knowledge score of primary school teachers regarding first aid management. Since  $p < 0.05$  (in fact  $p = 0.000$ )  $H_1$  was accepted. There was strong evidence ( $p = 20.002, p = 0.000$ ) shows that the planned teaching programme was effective in increasing knowledge score of primary school teachers regarding management.

**Conclusion** - The data were analyzed by applying descriptive and inferential statistics. The finding of the study supports the need for the community health nurses to conduct health education programme to increase the knowledge of primary school teachers on benefits of first aid management. The finding of the study shows that primary school teachers had Good knowledge regarding first aid management. The finding of the present study showed that, the

post test knowledge score was higher than the pre test knowledge score range. The hypothesis H1 was accepted.

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# To Study The Impact Of Microfinance On Women Empowerment Of Indore City

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**Abstract - Purpose** - The research has been conducted with the objective to study the role of micro finance in women empowerment.

**Methodology** - For the purpose of research the data has been collected from 100 respondent and statistical tool Anova and Chi-square has been applied.

**Findings** - Statistical result has revealed that micro finance has helped women to become financial independent and also increased their income.

**Implications** - The finding can be applied by MFI with special concentration to divorcee women.

**Key words** - Micro finance, women, Micro credit. SHG's.

**Introduction** - Micro finance is the term which includes the range of financial services such as credit, insurance, savings etc to down trodden people. Micro finance is another type of banking and financial services provided to low-income individuals or unemployed people or to the group otherwise would no access to such kind of services. The idea behind micro finance is to increase the reach of formal financial sector to unbanked people. There is a huge disparity in financial services offered to the variety of people. Historically the micro finance was introduced with the objective of poverty alleviation. The objective is to offer financial services to the people those who have no access to such services but the most important objective or large dream behind such microfinance initiatives is to create a strong and sustainable development by bringing the people into main stream of life. Micro finance helps un employed or poor people by offering small credits, with the help of such credits or financial assistance they starts their own small venture may be in the form of street vendor or vegetable seller etc. Hence microfinance not only build the national strong by sustainable growth but also provides more hands which can contribute the GDP and the economy of the country.

It is not very new concept. Some small history is available in 18<sup>th</sup> century. Irish Loan Fund System is one of the example of micro credit or micro finance which was introduced by Jonathan Swift, which sought to improve conditions for impoverished Irish citizens. In its modern form, microfinancing became popular on a large scale in the 1970s.

The first movement which attracted people towards the concept of micro finance was Grameen Bank further this movement was spread by Mr. Muhammad Yunus in

Bangladesh in 1976. Apart from providing loans to its customer, the Grameen Bank also suggests that its customers subscribe to its "16 Decisions," a basic list of ways that the poor can improve their lives.

The "16 Decisions" touch upon a wide variety of subjects ranging from a request to stop the practice of issuing dowries upon a couple's marriage, to keeping drinking water sanitary. In 2006, the Nobel Peace Prize was awarded to both Yunus and the Grameen Bank for their efforts in developing the microfinance system.

As per the World Bank estimate more than 500 million people were benefited directly or indirectly from micro finance operations. International Finance Corporation part of World Bank Group estimated that as of 2014 more than 130 million people have directly benefited from micro finance.

Some of the product or services offered currently by the Micro finance Institutions are Microloans, Micro savings and Micro-Insurance.

With the help of micro finance loan large amount of poor people were getting benefitted special women earlier to those these kind of facility in terms micro credit or saving was not available. Micro finance and SHG's self help group there are two modes of micro credit. Specially SHG's were very useful for the women. The study has been conducted with two objective, to study the role of micro finance in women empowerment

**Literature Review** - Micro finance facility is the type of credit provided by either commercial banks or Micro finance institutions in the form of small amount of loans to its borrower. Normally it is the very small amount ranging from Rs. 5000 to maximum of Rs 50000 in aggregate to down trodden people like street vendors, vegetable or fruit



vendors, it is also a type of daily collection which a repayment method. Micro finance lending is considered as priority sector lending by the banks because the objective behind this lending is to increase the reach of the formal banking system and increase employed generation. It is also provided in the form of SHG ( self help groups) which empower the women those who want to earn money for their house hold expenditures. This has empowered the women in terms of money and lively hood. Kabeer (2001) defined empowerment as "the expansion in people's ability to make strategic life choices in a context where this ability was previously denied to them." Sara Noreen (2011) studied the women empowerment by considering five factors child health , education, purchase of basic goods, decision about loan use and selection of spouse. Micro finance has positive role in women empowerment but not up to expected level. Ranjula Bali Swain (2006), the result reveals that there is positive impact of SHG such as control, self confidence, management, decision making and behaviour. Lakshmi R and Vadivalagan G (2010), has revealed that socially and economically women become empowered after joining SHG's. Sarumathi S and Mohan K (2011) concluded that after joining the SHG's mean salary is considerably higher and age group 20-30 has benefited by micro finance. Chatterjee S. et al (2018) there is a casual relationship between empowerment through SHD and small business. Helen Todd (2001) she has formed a poverty index which consisted of 4 components: "sources of income; productive assets; housing quality; and household dependency burden (the number of household members divided by the number of income earners)". Todd study observed 76.8 percent of the poverty reduction among members of which 38.4% have moved from very poor to moderate poor. While 17.6% of members went from very poor to non-poor. Hossain (1988) The study made a comparison between the members and non-participants of Grameen Bank. The study found that Grameen bank had made a positive contribution in borrower's standard of living. Aruna and Jyothirmayi (2011) the study covered 300 respondents in the sample of 150 women participants in the self-help group, who have taken advantage of the microfinance loan and 150 other women in the self-help group, who did not take advantage of any microfinance loans. The study found that the participation of the self-help group increased the level of income of the participant. Asghar (2012) The study found that borrowers' incomes have improved as a result of microcredit. The study explained that the 79% increase in borrowers' incomes will occur due to the 1% increase in credit. Mohammad A et al (2007) it was observed that there is a noticeable and positive impact of microfinance activities on the living standards, empowerment and poverty alleviation among the poor people in the society. . Mallappa bhimrayya (2014) the study shows that there are no economic activities which generate the returns of more that 36% annually and hence even the SHG members are vulnerable to debt traps. Mayoux (1997)

is of the opinion that the impact of microfinance programmes on women is not always positive. Women that have set up enterprises benefit not only from small increases in income at the cost of heavier workloads and repayment pressures. In some cases their loans were used by men in the family to set up enterprises, or sometimes women end up being employed as unpaid family workers with little benefit. She further points that in some cases women's increased autonomy has been temporary and has led to the withdrawal of male support. Om Raj Singh (2003)50 analyzed the role of NGOs in fostering Self Help Groups and stated that Self Help Groups are necessary to overcome exploration, create confidence for the economic self-reliance of rural poor, particularly among women who are mostly invisible in the social structure. Mcmillan C. et al (2011) women tea house owner/ manager livelihood has increased due to involvement in hospitality industry, it also has potential to facilitate sustainable empowerment for future generations.

**Research Methodology** - The research was exploratory and empirical in nature. The scope of the research was limited to the geographical limit of Indore city.

The data collected for the purpose of research was primary and collected through the structure self administered questionnaire. The data has been collected from 100 women who have obtained any kind of support from either SHG , Banks or MFI. The sampling type was convenient random sampling.

For the purpose of data analysis statistical tools such as Anova and chi-square has been applied , pie chart and bar diagram is also used to present the data.

#### Results :

$H_{01}$  There is no significant difference in the mean value of amount of loan and monthly income.

$H_{01a}$  There is a significant difference in the mean value of amount of loan and monthly income.

#### ANOVA

Table 1 - MonthlyIncome

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	12.250	1	12.250	41.757	.000
Within Groups	28.750	98	.293		
Total	41.000	99			

Statistical analysis of this relationship has been checked with statistical tool Anova. Statistical result rejected ( $p=0.000$ ) the null hypothesis and accepted the alternate hypothesis i.e. there is a significant difference in the mean value of amount of loan and monthly income.

$H_{02}$  There is no significant difference in the mean value Income and marital status.

$H_{02a}$  There is a significant difference in the mean value Income and marital status.

#### ANOVA

Table 2 - MonthlyIncome

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	33.783	3	11.261	149.801	.000
Within Groups	7.217	96	.075		
Total	41.000	99			

Statistical result rejected the null hypothesis and accepts alternate hypothesis ( $p=0.00$ ), there is a significant difference in the mean value of Income and marital status. Hence the income is different of all the different marital status.

For further analysis post-hoc has been applied to know which income and marital status group differs.

**Table 3 (see in next page)**

From the table 3 of post-hoc test the statistical results revealed that there is no significant difference in the mean value of income of divorcee and widow women rest among rest there is a significant difference.

For further analysis we used descriptive statistics which show the mean income of all the four groups.

**Table 4 (see in next page)**

From the table 4 statistic we can conclude about the monthly income of all the group ( 1= Rs<4000, 2= 4000-8000, 3=8000-12000, 4=12000-16000). Mean value of the single women is 2.3750 which comes under category 2, means the average monthly income of single women ranges from Rs.4000-8000 pm. The mean value of married group is 3 which come in the range of 3 i.e. 8000-12000 pm. The mean value for widow is 3.8667 close to group four hence the average monthly income of widow women comes nearly Rs.11000 pm and for the last group which is reported highest average income is divorcee, the mean value for such group is 4 which belongs to category 4 having range of 12000-16000 pm.

$H_{03}$  There is no relationship exit between Marital status and obtaining loan.

$H_{03a}$  There is a relationship exit between Marital status and obtaining loan.

**Table 5 - Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	70.000 <sup>a</sup>	3	.000
Likelihood Ratio	70.056	3	.000
Linear-by-Linear Association	48.068	1	.000
N of Valid Cases	100		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.80.

The null hypothesis has been rejected and alternate hypothesis is accepted ( $p=0.000$ ) says that there is a relationship exit between Marital status and obtaining loan.

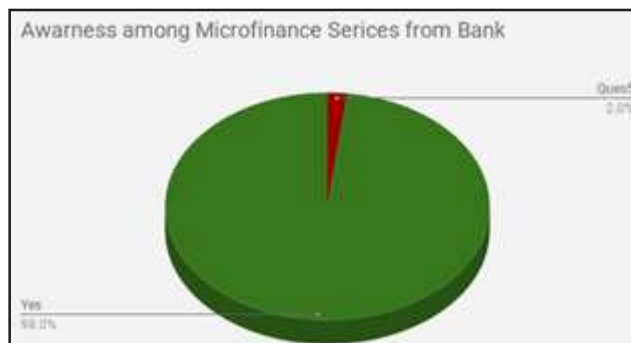
**Table 6 (see in next page)**

From the table 6 cross tabulation it is very clear that 25% ( i.e. 6) widow women and non of divorcee women have taken or obtained any kind of loan.

DO YOU KNOW THAT BANKS ARE PROVIDING

**MICROFINANCE SERVICES ?**

ARE YOU AWARE	
YES	98%
NO	2%



**Limitations** - The major limitations of the study are as follows:

- The Criteria taken by me is mainly for less Educated Women which created a problem to make them understand.
- The study needs to be completed within a specified time of one week and in certain restricted areas. So the findings cannot be generalized as a whole.
- Some of the women having busy schedule so they are unable to give appropriate response
- The respondent was unwilling to fill the questionnaire.
- Sometimes respondent took it as a fun and did not provide correct information

**Implications**

- The study can be used by any micro financial institute working in the area of micro credit for women or self help group & can more focused on the divorcee women because they have not used the micro credit or finance facility.

**Conclusion** - Micro finance or micro credit has helped the women they women with different marital status were obtaining loan particularly single, married and widow women were obtaining loan from the organization and this helped them to increase their monthly income , though divorcee women have not taken any type of loan but the average income is highest for this group may that they have repaid the loan earlier taken. 98% women were aware about the micro finance facility provided by the banks. Hence it can be said that micro finance has increase the income of women and this is another kind of financial independence and empowerment.

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**Table 3 - Multiple Comparisons**

Dependent Variable: Monthly Income  
Tukey HSD

(I) Marstatus	(J) Marstatus	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Single	Married	-.62500*	.08110	.000	-.8371	-.4129
	Widow	-1.49167*	.08488	.000	-1.7136	-1.2697
	Divorcee	-1.62500*	.10034	.000	-1.8873	-1.3627
Married	Single	.62500*	.08110	.000	.4129	.8371
	Widow	-.86667*	.06622	.000	-1.0398	-.6935
	Divorcee	-1.00000*	.08514	.000	-1.2226	-.7774
Widow	Single	1.49167*	.08488	.000	1.2697	1.7136
	Married	.86667*	.06622	.000	.6935	1.0398
	Divorcee	-.13333	.08874	.440	-.3654	.0987
Divorcee	Single	1.62500*	.10034	.000	1.3627	1.8873
	Married	1.00000*	.08514	.000	.7774	1.2226
	Widow	.13333	.08874	.440	-.0987	.3654

\* The mean difference is significant at the 0.05 level.

**Table 4 - Descriptives**

MonthlyIncome

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Single	16	2.3750	.50000	.12500	2.1086	2.6414	2.00	3.00
Married	40	3.0000	.00000	.00000	3.0000	3.0000	3.00	3.00
Widow	30	3.8667	.34575	.06312	3.7376	3.9958	3.00	4.00
Divorcee	14	4.0000	.00000	.00000	4.0000	4.0000	4.00	4.00
Total	100	3.3000	.64354	.06435	3.1723	3.4277	2.00	4.00

**Table 6 - Anytypeofloan \* Marstatus Crosstabulation**

Count

		Marstatus				Total
		Single	Married	Widow	Divorcee	
Anytypeofloan	Yes	16	40	24	0	80
	No	0	0	6	14	20
Total		16	40	30	14	100

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## Role Of Wild Plants In Human Life

Babita Sengwar \*

**Abstract** - In present days, we are facing environment pollution problems and climate change. In this reference, it is a subject of research to find out chemical constituents of wild plants, against these day-by-day increasing problems. There are several members of Malvaceae family as *Abutilon indicum* (Linn.), *Hibiscus penduriformis* (Burm.), *Malachra capitata* (Linn.) plant have specific pharmacological properties for solving several health related problems. These plants are having significant medicinal and pharmacological properties including antioxidant, antibacterial, antiinflammatory, wound healing, anti-diabetic, cancer preventive properties. These are wild plants which are generally found nearby road side. It has been used as remedy to treat jaundice, piles, ulcer and leprosy etc. It is possible only through the various biologically actives; secondary metabolites found in different parts of plant parts as leaves, stem, root, fruit and seed in different proportions. Secondary metabolites are important for both human beings and plants and play specific role in life of plant as well as in human beings with preventive and defense mechanism.

**Key words** - Wild plants, secondary metabolites, Pharmacological properties.

**Introduction** - Deteriorating Human health with environmental problems has become global issue. In this reference, phytoconstituents play vital role to protect our health against several diseases. Plants are utmost valuable source to maintain human health with better environment. The main aim of this paper is to focus on naturally occurring chemicals of plant extract which shows high levels of phenolic compound, flavonoids, alkaloids which exhibited several antimicrobial, antibacterial, antioxidant and antiinflammatory activities against disease causing pathogens.

The research is going on the plants from many years to obtain a raw material for pharmaceutical & cosmetic industries to develop new medicines. Many scientists & researchers are interested towards in wild herbal raw materials for use, due to their efficiency of curing almost all type of diseases for sustaining human life as well as environment.

Losing wild diversity means missing opportunities for medicines, food, raw materials and employment opportunities and welfare (FAO). There is a global interest in using herbal plant based raw material for production of drugs, pharmaceutical, perfumery products, cosmetics and aroma compounds used in food flavors and fragrances. The demand for traditional herbal products is also increasing rapidly because of the harmful effects of synthetic chemical medicines and drugs.

Modern nutrition are reducing considerations rate of carbohydrates, amino acids, vitamins and protein quality and lipid composition fatty acid. As Plants are one of the most important sources of medicines and most of the drug plants are wild; these occur in the wild state in nature without giving specific treatment especially tropical and sub tropical

areas.

From a nutritional aspect, it is only natural diet that contains the nutrients human need and that helps prevent long term chronic diseases, promoting health into old age. From the safety aspect, it is foodstuff that is free not only from toxins, pesticides, and physical and chemical contaminants but also from microbiological pathogens that can cause illness or responsible to develop free radicals in the body.

As the roles of fresh fruits and vegetables in a nutritious diet have become evident, people are including them in their diet more. The basic processes of stress have influenced both plant and human evolution. Plants contain large number of phytochemicals as ascorbic acid, antioxidants and humans have developed endogenous enzyme systems as well as produced endogenously antioxidants those are relevant to the nutritional environment.

**Findings** - Plants have curative properties due to presence of various complex chemical substances of different composition which are found as secondary metabolites in different parts of plants. A large number of medicinal plants and their purified chemical constituents have shown beneficial therapeutic potentials. It is reported that various wild herbs and spices exhibit useful properties. The majority of useful properties due to the presence of different types of flavonoids, phenolic compounds, anthocyanin, carotenoids, cinnamic acids, benzoic acids, folic acids, ascorbic acids, tocopherol, lignin, coumarin, catechins, isocatechins etc. These are produced by the plants for their protection and sustenance which is analyzed for human welfare.



These selected plants showed alkaloids, phenolic compounds etc. Butylated Hydroxytoluene has found as antioxidant; inhibit bacterial, fungal, protozoan and parasite growth; Acetic acid as antioxidant, Hexadecanoic acid methyl ester as antioxidant, hypocholesterolemic, anti androgenic, 9, 12-octadecadienoic acid (Z, Z)-methyl ester as hypocholesterolemic, alpha reductase inhibitor, anti histamic, anti acne, cancer preventive and 9, 12, 15-octadecadienoic acid, methyl ester as hypocholesterolemic, nematocide, anti arthritic, hepatoprotective, anti coronary, insectifuge, anti histamic, anticancer and ascorbic acid as anti oxidant, immune modulator.

The high cost of modern medicines and their unavailability in remote areas at the time and their side effect of some drugs or medicines. So resulting in a significant return to traditional indigenous wild herbal medicines is subject of World Health Organization, and re includes the use of known and tested plants derivatives in rural areas as an alternative of unavailable modern medicines.

This is the alarming that the total forest area is reducing which include total depletion of natural wild plants in India. If this kind of damage continues we may lose the wealth of medicinal plants, which will affect the growth our economy and human health. Therefore, it is essential to cultivate at large scale and to conserve heritage of natural wild plants. Every year millions of people become ill from foodstuff whatever they eat. Failure of nutrition is responsible for most of our diseases and rotten health. Diets are the wide field of incomprehensible efforts to correct misleads nutrition.

In order to reduce their degradation of food products and pharmaceuticals by oxidation a large number of synthetic antioxidants are using at large scale. But increasing reports of health hazards and toxicity of synthetic dyes are driving the food industry towards application of natural colorants in processed food product and pharmaceuticals purposes.

Population of developing countries has lack of awareness about nature. However, large increase in environmental pressure groups and public opinion surveys shows that only research on plants can help to them aware that how the plants are important for their sustain life.

**Conclusion** - There are large numbers of plants available to improve health related problems. This paper shows higher biological activities of chemical constituents of selected wild plants of Malvaceae family and how they can use for better environment and life in future. It is obvious that natural occurring phytochemicals cure the human health without any side effects. Though, many evidences have collected to show immense potential of natural plants in various traditional systems.

**Suggestions** - The present effort by the researchers is an important step towards achieving the goal of identify, classify and provide importance of wild life plants how they are important to us. Plants have their value in those substances present in their various plant parts. These substances interact with specific physiological actions in the human

body. Natural plants are considerable useful and inexpensively essential for human survival. Several plants have been crucial in sustaining the health and well being of mankind. Many plants are known for their various medicinal value and properties. Plants are the natural gift to human beings to provide disease free healthy life. Plants play a significant role to protect our daily health.

The supply base of approximately 90% herbal raw material, used in the manufacture pharmaceutical drugs and Homoeopathy systems of medicines, is largely came from the wild but this wild sources are destroying day by day for fulfillment of need of people. There is need to preserve for protection, conservation and sustainable use of these wild plants. The wild plants sector at present is not well organized and they need special attention. This is our responsibility by researching to bring awareness about an importance of wild life plants how they influence our life day by day. Use of plant or any part of plant for curing various ailments can be attributed to the chemical compounds synthesized during their life cycle. Thus, rich botanical wealth is available that needs to be identified, analyzed and utilized for pharmaceutical drug industries.

Scientific research and awareness are two different aspects; fundamentally without scientific approach we cannot understand nature as well as without awareness among the people we cannot sustain nature. Though progress has been made in many areas in controlling diseases, population stabilization etc. Plants show direct correlation between nature and human health. It is apparent that society is becoming increasingly aware of some of potential problems associated certain additives. As this trend continues, there will probably be more pressure placed on members of the food industry those that are not absolutely necessary. However people need more information for healthy nutrition. All these efforts resulted in better quality and safety. In societies where wild herbal use is steeped in tradition, knowledge about the benefits and dangers of herbals remedies passes from generation to generation.

In response to the increased population, pollution a greater demand for medicinal plants, a number of conservation groups are recommending that wild plants be brought into cultivation. The motivation for to modify their eating habits and accept these diet is therefore very low. For this reason modern diet recommends the use of several aromatic herbs to improve and enhance the flavor and aroma of diet.

There are many more specific ways in which we use and relate to plant as food plant in our gardens, houses and as sources active medicines and materials. In several part of world many plant species of plant are collected by the people and used as highly valued medicinal remedies. Little is known of active ingredients but it is likely that many compounds will be active medicinally. There is now a concern effort worldwide to examine the effect of as many species as possible. There is some urgency since so many

species face extinction as their habitat are lost or change irrevocably

This is the alarming that the total forest area is reducing which has been reduced the total cultivation or collection of natural plants in India. If this kind of damage continues we may lose the wealth of medicinal plants, which will affect the growth our economy and human health. Therefore it is essential to cultivate at large scale and to conserve heritage of natural wild plants.

Wild plants are not needed to be preserved but also their cultivation practices must be developed in order to meet the entire demand of pharma industry.

In cosmetics, natural and herbal raw material should be used.

Area wise campaign should be conducted to aware local people and students for wild plants.

Research Scholars or students can be given this task as a project and assignment to solve these problems.

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# Smartphone Usage and Increased Risk of Mobile Phone

Ravindra Shukla\*

**Abstract** - The smartphones, being a very new invention of humanity, became an inherent part of human's life. The smartphone combines different sophisticated features. It allows users to keep pictures, memories, personal info, correspondence, health and financial data in one place. Smartphones also became an integral part of modern telecommunications facilities. In some regions of the world, they are the most reliable or only of available phones. The phones allow people to maintain continuous communication without interruption of their movements and distances.

**Key words** - Smart phones, cyber bullying, nomophobia, internet addiction.

**Introduction** - Mobile/hand phones are powerful communication devices, first demonstrated by Motorola in 1973, and made commercially available from 1984. In the last few years, hand phones have become an integral part of our lives. The number of people around the world who use a mobile phone increased by 100 million in 2018, with the global total reaching more than 5.1 billion users by January 2019. This figure brings worldwide mobile penetration to 67 percent – more than two-thirds of the total global population. The number of mobile cellular subscriptions is constantly increasing every year. The recent studies also reported the increase of mobile phone dependence, and this could increase internet addiction.

**Positive impacts** - There's no denying the potential for phones as an educational tool. One of the most important ways is actually reflective of the current educational milieu. Many major curricula such as the International Baccalaureate are moving away from rote memorization and textbook learning, to education that more involves analysis and critical thinking, because of the widespread availability of information at one's fingertips. Smartphones enable access to encyclopedias, videos, and entire libraries of knowledge, right in one's pocket.

Another advantage is the potential for collaborative learning, especially for group projects. Students are able to organize, share notes and information, and connect at a deeper level than ever before. The same collaborative and teleconferencing tools that businesses once could only dream of, are now available to every student thanks to their smartphone.

**Negative impacts** - As mentioned above, smartphones absolutely can be a distraction. A recently released, and wildly popular video game has made it to the news as a significant distraction for smartphone-equipped students. Teachers would even catch students playing the game during class.

Another issue is social media addiction and

cyberbullying. There have been many cases of this throughout the years as social media proliferated, though the problem is a very complex one and may point to a combination of technology and perhaps mental health awareness and upbringing.

Finally, when taking notes, students sometimes just capture photos of notes with their phones rather than writing them down or typing them up. Studies have shown that taking notes, especially handwritten ones, are vastly better for retention and understanding.

## Other Effects

**Health Implications** - Over usage of mobile phones may cause psychological illness such as dry eyes, computer vision syndrome, weakness of thumb and wrist, neck pain and rigidity, increased frequency of De Quervain's tenosynovitis, tactile hallucinations, nomophobia, insecurity, delusions, auditory sleep disturbances, insomnia, hallucinations, lower self-confidence, and mobile phone addiction disorders. In animals, chronic exposure to Wi-Fi radiation caused behavioral alterations, liver enzyme impairment, pyknotic nucleus, and apoptosis in brain cortex. Kesari *et al.* concluded that the mobile phone radiation may increase the reactive oxygen species, which plays an important role in the development of metabolic and neurodegenerative diseases.

Mobile phone is becoming an integral part to students with regard to managing critical situations and maintaining social relationships. This behavior may reduce thinking capabilities, affect cognitive functions, and induce dependency. The signs of smart phone addiction are constantly checking the phone for no reason, feeling anxious or restless without the phone, waking up in the middle of night to check the mobile and communication updates, delay in professional performance as a result of prolonged phone activities, and distracted with smart phone applications.

Mobile phone is the most dominant portal of information

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and communication technology. A mental impairment resulting from modern technology has come to the attention of sociologists, psychologists, and scholars of education on mobile addiction. Mobile phone addiction and withdrawal from mobile network may increase anger, tension, depression, irritability, and restlessness which may alter the physiological behavior and reduce work efficacy.

#### **Cell phones cause many vehicular accidents each year**

- Take any point in the day in the United States, and you'll find over 660,000 drivers attempting to use their cell phone while driving. Even with strict laws about hands-free use, including Washington State's driving under the influence of electronics statutes, the distraction of a cell phone creates alarming dangers on the roads. More than 1.6 million vehicular crashes occur because of cell phones. 94% of teen drivers recognize the danger of using a cell phone while driving, but one-third of them still use it anyway. 1 in 5 accidents involving a teen driver and a fatality include cell phone use.

#### **The batteries on cell phones can overheat and potentially explode**

- There is also the issue of the lithium-ion batteries to consider. The Samsung Galaxy Note 7 is the most recent example of this issue with cell phones. After two recalls of the phone and \$5 billion in costs, an irregularly-sized battery caused overheating. Combined with manufacturing issues with the device, even the replacement batteries became problematic for the manufacturer. From missing insulation tape to sharp edges protruding on the battery, the phone would eventually be banned on airplanes.

#### **Cell phones create distraction points for children and adults**

- Because smart phones are treated more as entertainment devices than communication or learning tools, they tend to distract people. You'll see this almost every day in each community, as people look at their phones instead of watching where they walk or drive. The statistics on cell phone addiction can be quite terrifying. The average person will check their cell phone 110 times during the day. 40% of people use their smart phones while going to the bathroom. 61% leave their phones turned on next to their bed – or even under a pillow. 75% of cell phone users admit to texting at least once while driving. Most importantly, half

of all cell phone users say that they feel uneasy when they leave home without their phone.

#### **Cell phones can become addictive to people of all ages**

- The average American adult spends almost 3 hours on their smart phone every day. People spend 36% more time on their cell phones than they do eating or drinking. There is a cell phone addiction test developed by the Center for Internet and Technology Addiction that communicates to you if this disadvantage might be an issue for you. There are 15 questions in total, with a "yes" answer to five of them indicating the possibility of addiction.

#### **Sexual exploitation is a real threat with cell phones**

- Outside of the assumption that everyone who uses a cell phone will access pornography, there are some real threats about sexual exploitation to consider. Although only 11% of teens admit sending sexting images to strangers, 80% who have done so were under the age of 18. 57% of teens say that they were asked to send an image, while 12% of girls say they feel pressured to do so. 2 out of every 5 teens say they've received sexually suggestive messages meant for someone else.

Should they be banned or embraced?

For all their advantages and disadvantages, there is no denying that smartphones are here to stay, and here to flourish. For many schools, therefore, the solution is to educate on how to use this technology responsibly, rather than prohibit its use.

**Conclusion** - The advantages and disadvantages of cell phones make one point very clear. When responsible use is the top priority for this technology, for children and adults, the advantages become more prevalent. It is when cell phones are misused that the disadvantages tend to make themselves known. That is why it is up to parents, students, educators, mentors, family, and friends to encourage healthy relationships with technology. That support system will drive home the many benefits cell phones offer.

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## Role of women in India's freedom struggle

Harshal Dev\*

**Abstract** - The role played by women in the War of Independence (the Great Revolt) of 1857 was creditable and invited the admiration even leaders of the Revolt. Rani Laxmi Bai of Jhansi, Ahilyabai Holkar of Indore, Rani Avantibai of Ramgarh whose heroism and superb leadership laid an outstanding example of real patriotism. Indian women who joined the national movement belonged to educated and liberal families, as well as those from the rural areas and from all walk of life, all castes, religions and communities. Sarojini Naidu, Kasturba Gandhi, Vijayalaxmi Pandit and Annie Besant in the 20th century are the names which are remembered even today for their singular contribution both in battlefield and in political field. These all women participated in Indian freedom struggle with very high enthusiasm, during Bengal partition in swedeshi movement women participated in mass scale.

**Key words** - Freedom Struggle, Role of Women, 1857 revolt, non-cooperation movement, dandi salt march, Quit India Movement.

**Introduction** - The history of Indian Freedom Struggle would be incomplete without mentioning the contributions of women. This article deals with the contribution of Indian women in the war of Independence. When most of the freedom fighters were in prison the women came forward and took charge of the struggle. They fought with true spirit and undaunted courage and faced various tortures, exploitations and hardships to earn us freedom. Let us elucidate the role of Indian women who participated in the freedom struggle against British East India Company and British Empire and made great and rich contributions in various ways.

**The First War of Independence (1857-58)** - The First War of Independence (1857-58) It was the first general agitation against the rule of the British East India Company. The Doctrine of Lapse, issue of cartridges greased with cow and pig fat to Indian soldiers at Meerut 'triggered the fire'. Further, the introduction of British system of education and a number of social reforms had infuriated a very wide section of the Indian people, soon became a widespread agitation and posed a grave challenge to the British rule.

As a result of this agitation the East India Company was brought under the direct rule of the British Crown. Even though the British succeeded in crushing it within a year, it was certainly a popular revolt in which the Indian rulers, the masses and the militia participated so enthusiastically that it came to be regarded as the First War of Indian Independence. Rani Lakshmibai was the great heroine of the First war of India Freedom. She showed the embodiment of patriotism, self-respect and heroism. She was the queen of a small state, but the empress of a limitless empire of glory.

In the words of Makhmoor Jallundhari:

*Laxmibai tere hathon mein tegh o sipar  
Husn ki sari riwayat ki thi silk-e-gauhar*  
[Laxmibai the sword and shield in your hands  
Is your jewelry, your string of pearls]

Jhalkari Bai was part of the Durga Dal, or women's brigade, of Jhansi. Her husband was a soldier in the Jhansi army, and Jhalkari too was trained in archery and swordplay. Her striking similarity to Lakshmibai helped the Jhansi army evolve a military strategy to deceive the British. ( To elude the British, Jhalkari dressed up like her queen and took command of the Jhansi army, allowing Lakshmibai to escape unnoticed.

In Awadh, Begum Hazrat, wife of the deposed Nawab Wajid Ali Shah, took on the might of the East India Company and almost succeeded. The longest resistance to the British was offered by the begum and her trusted band of followers. William Howard Russell writes in his memoir *My Indian Mutiny Diary*: "This Begam exhibits great energy and ability. She has excited all Oudh to take up the interests of her son, and the chiefs have sworn to be faithful to him. The Begum declares undying war against us."

**Other valiant women during 1857** - The Muzaffarnagar area in western UP saw the active participation of women. Some of the names of the women rebels are Asha Devi, Bakhtavari, Habiba, Bhagwati Devi Tyagi, Indra Kaur, Jamila Khan, Man Kaur, Rahimi, Raj Kaur, Shobha Devi and Umda, all of whom sacrificed their lives in active fighting. There were two other queens whose kingdoms were the victims of the Doctrine of Lapse and who rose against the British. They were Avantibai Lodhi of Raigarh and Rani Draupadi of Dhar.

**Non-cooperation movement launched (1920)** - Mohandas Karamchand Gandhi returned to India from

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South Africa in 1915 and took up the demand for self-rule and non-cooperation movement. Sarla Devi, Muthulaxmi Reddy, Susheela Nair, Rajkumari Amrit Kaur, Sucheta Kripalani and Aruna Asaf Ali are some the women who participated in the non-violent movement. Kasturba Gandhi, the wife of Mahatma Gandhi, and the women of the Nehru family, Kamla Nehru, Vijaya Lakshmi Pandit and Swarup Rani, also participated in the National Movement. Lado Rani Zutshi and her daughters Manmohini, Shyama and Janak led the movement in Lahore.

**Civil Disobedience the Dandi Salt March (1930) -** Gandhiji inaugurated the Civil Disobedience Movement by conducting the historic Dandi Salt March, where he broke the Salt Laws imposed by the British Government. Followed by an entourage of seventy nine ashram inmates, Gandhi embarked on his march from his Sabarmati Ashram on a 200 mile trek to the remote village Dandi that is located on the shores of the Arabian Sea. Salt movement of 1930 led to an unprecedented movement of middleclass women out of their homes in the cause of the nation's struggle. It was chosen as an opportunity for women to be part of the movement in a visible and prominent manner. Once the salt satyagrahas began, women started pouring out on to the streets. Sarojini Naidu led the protest at the Dharasana Salt Works, but there was another glorious group of marching women who made its way to Chowpatty Beach on the same day that Gandhi made salt at Dandi. It was led by Kamala devi Chattopadhyay. They carried makeshift stoves and chulhas and after a few hours of making salt, were raided by the police. More housewives joined in, armed with pots and pans. Later, the salt was sold outside the Bombay Stock Exchange and Bombay high court.

Although many of these women had never participated in public life before they started organizing prabhatpheris, or morning processions, on the streets of Bombay and Ahmadabad, where they sang songs about the bounty of the motherland.

**The Quit India Movement (1942) -** In August 1942, the Quit India movement was launched. "I want freedom immediately, this very night before dawn if it can be had. We shall free India or die in the attempt, we shall not live to see the perpetuation of our slavery", declared the Mahatma, as the British resorted to brutal repression against non-

violent satyagrahis. The Quit India resolution, taken against British, directly addressed women "as disciplined soldiers of Indian freedom", required to sustain the flame of war.

Usha Mehta, a committed patriot set up a radio transmitter, called The "Voice of Freedom" to disseminate the "mantra" of freedom-war. News of protest and arrests, deeds of young nationalists, and Gandhi's famous "Do or Die" message for the Quit India movement were circulated amongst the masses. Usha Mehta and her brother persisted with their task of broadcasting until their arrest. These acts proved that the British could maintain the empire only at enormous cost due to wide spread agitation.

**Some other revolutionary activists -** The organization of the revolutionaries was very active in Dhaka, Comilla and Chittagong and young college girls came into its fold. The famous group of the women revolutionaries consisted of Samiti and Suniti, Bina Das, Kalpana Dutta and Preetilata Waddedar.

**Conclusion -** Women shouldered critical responsibilities in India's struggle for freedom. They held public meetings, organized picketing of shops selling foreign alcohol and articles, sold Khadi and actively participated in National Movements. They bravely faced the baton of the police and went to jails. Hundreds and thousands of Indian women dedicated their lives for obtaining freedom of their motherland. India was one of the earliest states in the world that saw female head of the state. Currently also females occupy important positions in cabinet in defense and foreign portfolio. They were allowed to vote right from the first general elections after the independence of India in 1947. Equality in all aspects including voting rights, employment, wages, education etc. has been granted. This is a major feat especially because many developed economies like USA, France and England granted it only after prolonged struggle.

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# A Study Of Effectiveness Of Computer Education Towards Achievements Of Students

Taruna Sharma\* Parag Mudgal\*\*

**Abstract** - Computer science was made so many fundamental changes and is reshaping students understanding. An important aspect of this change is the theory and applications dealing with the gathering and analyzing of large real-world data sets. In this paper, we study about how computer science is helpful for the students to achieve their goals, how this will help them towards success. Computer education for students plays important role in student's career development. Computer with the internet is the most powerful device that students can use to learn new skills and gain some new knowledge about any topic.

**Keywords** - Computer Science, Internet, Students, Education.

**Introduction** - The uses of computers and internet are growing day by day at high speed. In almost all business, companies, schools, colleges are using computers for various official operations and for studies. New tech tools are coming that helping students to learn better.

Computers help students to draw the creativity on the computer such as by using Microsoft Windows Paint program.

Computers and the internet not only help students to explore creativity and imagination but also help to understand technologies. Students are future leaders for any nation. Current school students are future doctors, engineers, entrepreneurs. So, for the education development, it is really important to teach students in schools about computers, the internet and its benefits.

**Improving Student Performance** - Students who use computers have been shown to attend schools and colleges more steadily and perform better than students who do not use computers. Along with getting higher grades on exams, students also stated they felt more involved with their lessons and work if they used a computer. Using computers gets students to become more focused on their work at home, in collaborative projects with other students and on their own.

**Efficiency** - Computers make the learning process a lot more simple and efficient, giving students access to tools and methods of communication unavailable offline. For example, students can check their grades or lesson plans online, and also communicate directly with their teachers via email or educational platforms such as Blackboard. Students can also send work to their teachers from home or anywhere else, letting them finish work outside the constraints of school hours and teaching them

about procrastination and personal responsibility.

**Research** - Technology has made research far easier than in the past. Decades ago, students learned history by going to the library and thumbing through history books and encyclopedias. Today, many of those same books are available in digital format and can be accessed online. As the Internet has grown, so too has the available research options. Students can research topics in minutes rather than the hours it used to take.

**Modernizing Education** - Education has benefited from the inclusion of technology and computers by making it easier for students to keep up while helping teachers by improving the way lessons can be planned and taught. Students who use computers learn to use word processors for work, and subsequently they learn computer jargon and strengthen grammatical skills. Students can also look up lessons on websites or through email rather than lugging heavy textbooks with them every day.

**Learning Job Skills** - Computers play a vital role in the modern business world, and many of even the most basic jobs involve technology and computers. Teaching students how to use computers helps them prepare for any number of possible careers, and classes based on computer education can get even more specific. Many classes teach students to use office suite programs, create presentations and data sheets, and learn any number of programming languages such as C++ or Java.

**Effectiveness of Computer Education** - Among the many impacts of computers on education are the ability of students to access the Internet to facilitate research, the globalization effect of the interaction between students in different countries, access to educational materials from museums and other institutions, and the option of distance

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education for those unable to attend physical schools. Computers also offer graphics, simulations, model building, games and other programs to reinforce classroom instruction.

With computers in classrooms, teachers can present and demonstrate new material, provide illustrations and guide students to supplementary websites. Class websites can provide details of homework, grades, schedules and calendars. Students have the ability to create blogs and wikis as research projects. Online videos and other media can be integrated into classroom instruction. Since computers are already so much a part of student's lives, using them in classrooms offers relevancy as a motivation for learning.

#### **Advantages of Computer Education for Students -**

Computer skills not only as a subject but it are also helpful in other subjects and extracurricular activities. Students can make projects, presentations, art and crafts, or join social media groups to enhance computer skills or learn new skills like application, programming etc. By mastering these skills students will be able to use it for benefit of their studies and their regular life. They can make their projects, homework, assignments or even study notes using a computer. Also, students can make a career in this stream where these

computer skills are used.

#### **Disadvantages of Computer Education for Students -**

Now a day's Students, are using the computer and it is a multitasking device and besides, studies there is a lot more to do with it such as computer games, Internet browsing, social media, creativity skills developing applications, e-learning material other than school work. Students end up spending hours on these applications and waste their study time. Students have adapted themselves to a relaxed approach towards their studies. With computer skills, they think they can complete any task without putting many efforts.

**Conclusion -** It is essential for every other student to learn basic computer and also awareness about cyber crimes. However, students should understand the correct and ethical use of these skills. Read this article to enhance your knowledge about advantages and disadvantages of computer skills for school students and as well as for college going students.

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# Formulation And Evaluation Of Microspheres Of An Antihypertensive Drug Using Natural Polymers (Sodium Carboxy Methyl Cellulose)

Sunita Patidar\* Laxmi Vishwakarma\*\*

**Abstract** - In the present study formulation and characterization of microspheres of Losartan potassium using sodium carboxymethyl cellulose and sodium alginate (prescribed extensively in solid dosage forms) in a controlled release form to overcome drug resistance, and dosing non-compliance in patients. Losartan potassium is used as an antihypertensive belonging to angiotensin antagonist and it was successfully encapsulated into sodium carboxy methyl cellulose and sodium alginate. So, the purpose of this research was to formulate controlled release microspheres of Losartan potassium using sodium carboxy methyl cellulose and sodium alginate as a carrier polymer. Drug entrapment efficiency for Losartan potassium reached to highest level of 95.50% and percentage yield to 94.0%. Formulated microspheres gave drug release for the initial dosing and maintenance dosing in a controlled manner for 7 hours. This gave a hope to the possibility of single dose treatment for patients. Losartan potassium is an effective antihypertensive drug but is extensively bound to plasma proteins and also causes gastrointestinal disorders, neutropenia, acute hepatotoxicity, migraine and pancreatitis. The formulated microspheres show pharmacotechnical properties in the acceptable range.

**Keywords** - Losartan potassium, sodium carboxy methyl cellulose, sodium alginate, microspheres.

**Introduction** - Sustained release systems include any drug delivery system that achieves slow release of drug over an extended period of time. More precisely, sustained drug delivery can be defined as "Sustained drug action at a predetermined rate by maintaining a relatively constant, effective drug level in the body with concomitant minimization of undesirable side effects. The efficiency of any drug therapy can be described by achieving desired concentration of the drug in blood or tissue, which is therapeutically effective and non toxic for a prolonged period. This goal can be achieved on the basis of proper design of the dosage regimen. Microspheres have potential to deliver drug in a controlled fashion. Losartan potassium is an effective antihypertensive drug but is extensively bound to plasma proteins and also causes gastrointestinal disorders, neutropenia, acute hepatotoxicity, migraine and pancreatitis. It may therefore be more desirable to deliver this drug in a sustained release dosage form. The present study was focused on development of sustained release Losartan microspheres using solvent evaporation method and to study the effect of method of preparation on physical properties and drug release profile of Losartan Potassium microspheres.<sup>1</sup> Biodegradable natural polymers offer certain advantages over synthetic one in respect to toxicity, availability and cost. Biodegradable natural polymers remain attractive primarily because they are biodegradable natural

products of living organisms, and capable of a multitude of chemical modifications. Various natural gums like agar, guar gum, gelatin, carboxy methyl cellulose, xanthan gum, sodium alginate and lotus bean gum etc., for potential pharmaceutical and biomedical applications. The present research work was carried out with the aim to try to reduce Losartan potassium dosing frequency, as it is an antihypertensive producing a resistance if given in high frequency. So, if we can reduce the dosage frequency it will be more beneficial to all patients and treat then up to older age. At the same time a single dosing for a treatment would lead to patient compliance, and complete treatment with appropriate dosing.<sup>(1)</sup>

The present study was focused on development of Losartan potassium microspheres by using biodegradable natural polymers and to study the effect of method of preparation on physical properties and drug release profile of Losartan potassium microspheres.

**MATERIALS AND METHODS** - Losartan potassium was collected as gift sample from Astron research PVT. LTD. Ahmedabad, Gujarat, India. Sodium carboxy methyl cellulose was collected as a gift sample from shreeji chemical PVT. LTD., Mumbai. Sodium alginate was collected as a gift from Loba chemicals PVT. LTD., Kolkata. Acetic acid (Glacial 100%GR) was purchased from S d Fine chemical PVT. LTD., Mumbai. All other reagents used were

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of analytical grade.

**Preparation of Losartan potassium microspheres by using sodium carboxy methyl cellulose polymer by emulsification method**

The microspheres were prepared by emulsification technique reported by Thanoo et al 9 with some modifications. A 4% w/v solution of sodium carboxy methyl cellulose was prepared in 5% aqueous acetic acid. Losartan potassium is dispersed in above solution. This solution was dispersed in 200 ml of liquid paraffin (1:1 mixture of light and heavy) containing 0.15 g of span 80 in a 250 ml beaker. The dispersion was stirred using a mechanical stirrer at 1000 rpm for 2 min, glutaraldehyde saturated toluene solution 1 ml was added, stirring was continued for 3 h, the microspheres were centrifuged, washed several times with hexane and finally with acetone. The microspheres were then dried at 50°C and stored in desiccator at room temperature. Three different formulations with drug: polymer ratios removed by evaporation. The light mineral oil was decanted and collected microspheres were washed three times with 100 ml aliquots of n-hexane, filtered through Whatman filter paper, dried in an oven at 50°C for 2 h and stored in desiccator at room temperature. Three different formulations with drug: polymer ratios (1:1, 1:2, 1:3) are prepared and coded as Y1, Y2, and Y3.<sup>(2)</sup>

**Preparation of microspheres of Losartan potassium using natural polymers** - Method used: Solvent evaporation method sodium carboxy methyl cellulose and Sodium alginate microspheres were prepared by solvent evaporation method reported by sahu et al 5 with some modifications. A 1% w/v solution of sodium carboxy methyl cellulose and Sodium alginate was prepared in distilled water. LP is dispersed in above solution. This solution was dispersed in 100 ml of liquid paraffin light containing 0.5ml Span 80 in a 250 ml beaker. The dispersion was stirred at 1000 rpm for 30 min. After the stirring time, microspheres were centrifuged, washed several times with n-hexane ether and finally with acetone. The microspheres were dried at 50°C and stored in desiccator.

**Drug Entrapment Efficiency** The entrapment efficiency was calculated from the ratio of actual to theoretical drug content and expressed as percentage. The formula applied is Drug Encapsulation efficiency = Actual Drug Content / Theoretical Drug Content X100

**In-Vitro drug release** - Dissolution studies were carried out by using USPXXIII dissolution test apparatus by rotating basket method in stimulated gastric fluid pH 1.2 for 2 h and in phosphate buffer pH 7.4 for remaining 10 h. The dissolution media were maintained at a temperature of 37 ± 0.5°C. The speed of rotation of basket maintained was 50 rpm. The samples were withdrawn at 30 min intervals.

**Procedure:** losartan potassium microspheres were placed in basket in each dissolution vessel to prevent floating. 5 ml of dissolution media was withdrawn at predetermined time intervals and fresh dissolution media was replaced. The withdrawn samples were analyzed and the amount of

losartan potassium released was determined by UV absorption spectroscopy at 269 nm.

**Percentage yield** - Percentage practical yield is calculated to know about percentage yield or efficiency of any method, thus it helps in selection of appropriate method of production. Practical yield was calculated as the weight of losartan potassium microspheres recovered from each batch in relation to the sum of starting material [Sinha VR, 2003]. The percentage yield of prepared losartan potassium microspheres was determined by using the formula:

$$\text{Percentage Yield} = \frac{\text{Practical Yield}}{\text{Theoretical Yield}} \times 100$$

Determination of percentage drug entrapment efficiency (PDE) [Wang J, 2004] Efficiency of drug entrapment for each batch was calculated in terms of percentage drug entrapment as per the following formula:

$$\text{PDE} = \frac{\text{Practical drug content}}{\text{Theoretical drug content}} \times 100$$

Theoretical drug content was determined by calculation assuming that the entire losartan potassium present in the polymer solution used gets entrapped in losartan potassium microspheres, and no loss occurs at any stage of preparation of losartan potassium microspheres [Carmen RL, 1996]. Practical drug content was analyzed by using the following procedure, Weighed amount of losartan potassium microspheres equivalent to 100 mg of losartan potassium was dissolved in 100 ml of distilled water. This solution was kept overnight for the complete dissolution of the losartan potassium in water. This solution was filtered and further diluted to make a conc. of 10 µg/solution. The absorbance of the solutions was measured at 269 nm using double beam UV-Visible spectrophotometer against distilled water as blank and calculated for the percentage of drug present in the sample.<sup>(3)(4)</sup>

**RESULT AND DISCUSSION:**

**Percentage Drug entrapment efficiency:** Entrapment efficiency increase with increase in the polymer concentration from the results it can be inferred that there is a proper distribution of Losartan potassium in the microspheres and the deviation is within the acceptable limits. The percent of drug content in the formulations was found to be in the range of 20.35% to 12.45%. The percentage entrapment efficiency was found to be 35.00% to 96.50%. The results obtained are given in Table 1. A maximum of 68.00% and 97.50% drug entrapment efficiency was obtained in the Losartan potassium microspheres which were prepared by using sodium carboxy methyl cellulose and sodium alginate respectively. It was further observed that the drug entrapment was proportional to the Losartan potassium: polymer ratio and size of the Losartan potassium microspheres. By increasing the polymer conc., the encapsulation efficiency was increased. The study helped in the ease to know the requirement of raw material and effect of the formulation parameters. The percentage drug entrapment efficiency of all batches varied. The idea of percentage of loading and dosage calculation is obtained from the percentage drug

entrapment efficiency data. As the drug entrapment efficiency is nearer to 100% for any batch it shows best drug loading and required less amount of formulation dosage to be administered, compared to the less percentage drug entrapment batch.

**Table no.1 Drug entrapment efficiency of Losartan potassium microspheres**

S.	Formulation code	Percentage yield %	Drug content %	Entrapment Efficiency %
1	X1	52.5	20.35	35.00
2	X2	76.0	20.84	45.60
3	X3	77.5	16.31	68.00
4	Y1	83.0	15.00	73.00
5	Y2	92.6	14.05	85.20
6	Y3	95.0	12.45	96.50

**In vitro dissolution studies:** The in vitro performance of LP microspheres showed prolonged and sustained release of LP. The results of the in vitro dissolution studies of formulations F1 to F6 are shown in Table 2. The study indicated that the amount of drug release decreases with an increase in the polymer concentration. The formulations F1 showed a maximum of 93.64% and F6 showed a minimum of 58.50% cumulative drug release.

**Table 2 (see below)**

**CONCLUSION -** Formulated Losartan potassium microspheres gave drug release for the initial dosing and maintenance dosing in a controlled manner for 7 hours. This gave a hope to the possibility of single dose treatment for patients. The formulated Losartan potassium microspheres show pharmacotechnical properties in the

acceptable range. This study clearly demonstrated that one could develop a controlled dosage form of a drug having a long biological half-life as a single dose treatment and thus reduce the drug resistance in patients.

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**Table 2: In vitro release data of Losartan potassium microspheres with sodium carboxy methyl cellulose and Sodium alginate**

Time(h)	% Cum drug release( $\pm$ SD)					
	F1	F2	F3	F4	F5	F6
1	24.15 $\pm$ 0.62	20.97 $\pm$ 0.1	12.23 $\pm$ 0.60	17.47 $\pm$ 0.09	7.68 $\pm$ 0.50	7.33 $\pm$ 0.59
2	31.64 $\pm$ 0.49	27.44 $\pm$ 0.20	18.35 $\pm$ 0.49	22.52 $\pm$ 0.14	13.98 $\pm$ 0.54	7.86 $\pm$ 0.55
3	38.65 $\pm$ 0.69	32.53 $\pm$ 0.10	24.30 $\pm$ 0.60	27.45 $\pm$ 0.06	17.48 $\pm$ 0.60	10.66 $\pm$ 0.66
4	44.44 $\pm$ 0.68	38.49 $\pm$ 0.04	31.48 $\pm$ 0.61	33.24 $\pm$ 0.12	28.34 $\pm$ 0.60	15.39 $\pm$ 0.57
5	56.17 $\pm$ 0.67	44.62 $\pm$ 0.26	36.74 $\pm$ 0.56	36.75 $\pm$ 0.10	34.30 $\pm$ 0.58	17.49 $\pm$ 0.66
6	64.59 $\pm$ 0.60	52.51 $\pm$ 0.41	46.01 $\pm$ 0.59	42.01 $\pm$ 0.24	38.16 $\pm$ 0.60	21.00 $\pm$ 0.58
7	71.96 $\pm$ 0.67	59.18 $\pm$ 0.16	49.02 $\pm$ 0.56	47.28 $\pm$ 0.09	42.12 $\pm$ 0.61	26.25 $\pm$ 0.57
8	78.65 $\pm$ 0.52	66.38 $\pm$ 0.07	54.29 $\pm$ 0.61	52.55 $\pm$ 0.27	44.12 $\pm$ 0.69	28.02 $\pm$ 0.66
9	83.76 $\pm$ 0.68	74.63 $\pm$ 0.16	61.31 $\pm$ 0.63	57.82 $\pm$ 0.14	49.04 $\pm$ 0.73	31.53 $\pm$ 0.58
10	86.42 $\pm$ 0.56	79.39 $\pm$ 0.16	66.41 $\pm$ 0.61	63.09 $\pm$ 0.14	54.84 $\pm$ 0.66	45.52 $\pm$ 0.66
11	91.08 $\pm$ 0.59	83.41 $\pm$ 0.36	72.35 $\pm$ 0.62	67.46 $\pm$ 0.06	59.56 $\pm$ 0.56	52.51 $\pm$ 0.69
12	93.64 $\pm$ 0.53	87.43 $\pm$ 0.15	78.47 $\pm$ 0.59	72.53 $\pm$ 0.09	62.35 $\pm$ 0.66	58.50 $\pm$ 0.62

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# The Impact Of Flexible Working Hours On The Employees Performance

Pooja Choudhary\*

**Abstract** - Nowadays, flexible working hours are becoming important to the workplaces. A lot of organizations offer flexible working hours to employees due to the benefits that flexibility gives to both employee and employer. Greater employee productivity and higher organization profitability are the most common benefits. Also, flexible work-ing hours promote and facilitate work-life balance. Reduced stress and increased employee wellbeing are out-comes of the work-life balance. In this paper, the relationship between flexible working hours and work-life bal-ance is investigated.

**Introduction** - Flexitime has been described by human resources manager today as one of the earliest essential introductions of employees; it has its origins in Germany with the aerospace company Messerschmitt-Bolkow-Blom. The concept was first introduced in 1967 for 3,000 white collar workers in administration and also those in Research and Development at the main headquarters near Munich as a means to reduce lines for clocking on and off, and the resultant traffic jamming of everyone being required to start and finish at the same time. People were certainly leaving early to avoid the lines, and morale and productivity were suffering. Then the personnel manager, Herr Hillert, realizing the problem and found a solution of variable hours, adjustment between variable and rigid hours. It was termed "Gleitzeit" – gliding/ sliding time, or Flexible Working Time (FWT). By 1972 6,000 of the 20,000 workers were using flexi time, and the company reported an estimated saving of around 40,000 dollars a month, it increased productivity, lower absenteeism and it also reported fewer recruiting difficulties and fewer travel problems. The idea spread quickly and by 1973 was in use by most of companies of the labor force in Germany, and by thousands of companies across Europe. In Germany its use had been fuelled by labor shortages, and it was found that the scheme enabled women to return to work and also care for families. It increases the size of labor pool available. By the late 1970s the use of flexitime had spread all over Europe. In the UK too it was prevalent in insurance, local government, public service and white collar groups in industry. Across Europe, the UK has had the lowest increase in new organizations taking up flexi time along with Denmark and Greece. In the Netherlands, most of the organizations have widened their use of flexi time, and there has been growth in its use in Austria, Belgium and Germany - all countries with already high use. The first U.S Company who implemented the flexible working hours in 1973 was the HP at Boblingen Germany,

which allow the employees to come early or late at work and worked a standard number of hours every day.

**Problem Statement** - The purpose of the research is to study the impact of the flexible working hours on the employee's performance in the organization. Specifically:

1. Why the flexible working hours of employees in the organization is needed?
2. What will be the impact of flexible working hours of employees in the organization?

**Research Objective:**

1. Determine those aspects that influence the flexible working hours.
2. To know the insights of both staffs and managers regarding the flexible working hours.

**Scope of the study** - Flexibility defines that when and where work gets done and how careers are anned. As far as advancement in the technologies is concern it demands that we altered the ways to how we connect with people through different means, arrange teams and measure their work performance when people work from home. Flexibility in work timing is cost-effective and efficient way which also helps in savings on overheads cost and reduces the expenses, gain competitiveness and also improve the business performance.

1. To increase the creativity
2. To increase employees retention
3. To raise employees confidence and job satisfaction
4. To improve productivity
5. To reduce anxiety

**Literature Review** - It has been seen from the past decade that the technology has transformed the world. Many employees thought that FWA is an opportunity and a comfort. Most of the employees when they gain their manager's confidence then only they are able to utilize flexible work arrangements. Pruchno, Litchfield and Fried (1997), conducted a research to find out impacts

of workplace flexibility which shows that “the most workplace flexibility turns into win situation for both the company and the employee, the research also concluded that flexible working hours increases the employee productivity and allow him to do proper scheduling to move with official and personal life”. Employees who are using alternative work schedule are conscious that all the other staff has not been able to utilize it. It is the responsibility of the managers to recognize the staff that will be more productive for opting flex schedule.

**Research Methodology** - The research design of study will be descriptive research. In the research the methodology used is the mixture of both quantitative and qualitative research. The secondary information has been used to gather the essential data that answer the objective of the study of the flexible working hours.

#### **Population**

The population for the research study will be the employees from the telecommunication/call centers.

**Sampling Design** - Convenient sampling method will be adopted to collect the data from the employees. The sample size of 200 employees of telecommunication/call centres has been selected for this research.

**Measurement/ Instrument Selection** - Both primary and secondary data will be collected. Primary data will be collected through interviews and questionnaires. While, secondary data will be collected through internet, research papers and articles.

**Research Variables** - Following the variables that are to be considered in the survey research:

1. Employee designation
2. Balancing in professional and personal life
3. Absenteeism

4. Promotion recommendations
5. Work pressure

#### **Hypothesis**

**H0:** There is a relationship between flexible working hours and the employee's performance.

**H1:** There is no relationship between flexible working hours and the employee's performance.

#### **Research Assumptions**

1. It is assumed that workers must contribute in solving the conflicts between the professional and personal time requirements.
2. Employees and the supervisors should also be involved in a flex time program planning and organization.
3. It is assumed that in selecting the days off the employees should be asked about their preferences.

**Conclusions** - This paper examined flexible working hours from its positive point of view. The investigation showed that introduction of flexible working hours brought some benefits for both employee and employer. Also, flexibility in the workplace gives employees time to perform outside of the work roles and it helps balance employees' work and life. Trust between employer and employee is an important issue when it comes to flexible working hours. If not monitored by manager, flexible working hours might create some difficulties in the workplace. Further study on flexible working hours need to be taken to understand the drawbacks of such practices. Only after investigating flexible working practices from both positive and negative sides, organizations might consider applying flexibility to the workplace.

#### **Reference :-**

1. Personal research.

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# Importance of Teaching Social Skills of special Needs Students in the School Environments

Dr. Ramendra Nath Varisth\* Dr. Rajiv Ranjan\*\*

**Abstract** - The social study is defined the integrated study of the social science and humanities to promote civic competence. the general social study established a foundation for all of the subsequent more specific classes that students will take in history ,civic, and geography .typically students take general social studies in elementary school then move to more specific area of study in middle school ,and even more in depth subjecting high school and college. Students with disabilities who demonstrate appropriate social behavior are likely to experience positive peer and teacher relationships, increased participation and achievement in inclusive educational settings, and success in post-school work, educational, and social environments. In order for students to learn, practice, and maintain expected social behavior, educators must teach social skills within the context of the various school settings that students encounter each day. The purpose of elementary school social studies is to enables students to understand ,participate in and make informed decision about their world .

**Key Word** - social study, Disability, Students, Elementary education, peer relation.

**Introduction** - Social skills are critical for long-term success. Sometimes referred to as Emotional Intelligence, it is a combination of the ability to understand and manage one's own emotional state (Intra-personal Intelligence in Howard Gardner's "Frames of Mind: The Theory of Multiple Intelligences") and the ability to understand and respond to other people. Although social skills include understanding and using social conventions, it also includes the ability to understand the "Hidden Curriculum," the ways in which peers communicate and interact reciprocity, and the ability to build interpersonal relationships. Difficulty with social skills and deficits in social skills are found to different degrees across abilities as well as special needs . Both children with special needs and children from low socio-economic groups may not have an extensive understanding of social conventions and may need instruction in conventions such as: Appropriate greetings depending on relationships: i.e. peer to peer or child to adult, Appropriate and polite ways to make requests ("please") and express gratitude ("thank you"), Addressing adults, Shaking hands, Taking turns, Sharing, Giving positive feedback (praise) to peers, no put-downs, Cooperation etc.

Difficulty managing one's own emotional state, especially tantrums or aggression in response to frustration, is common in children with special needs. Children for whom this is the primary disabling condition are often diagnosed with an emotional or behavioral disorder, which may be designated as "emotional support," "severely emotionally challenged," or "conduct disorder." Many

children with disabilities may be less mature than their typical peers and may reflect less understanding of how to manage their own emotions. Behavioral contracts are often useful tools for students with poor self-regulation skills, both to teach and self-monitor difficulty with self-regulation as well as teach and reward appropriate or "replacement" behavior. The ability to understand others' emotional states, wants, and needs are critical not only for success in school but also success in life. It is also a "quality of life" issue, which will help students with and without disabilities to build relationships, find happiness, and succeed economically. It can also contribute to a positive classroom environment.

**Appropriate interactions:** Children with disabilities, especially Autism Spectrum Disorders, often need to be taught appropriate social interactions, such as making requests, initiating interactions, sharing, exercising reciprocity (give and take), and turn taking. Teaching appropriate interactions can involve modeling, role-playing, scripting, and social narratives. Successfully learning and generalizing of appropriate interactions requires lots of practice.

**Understanding and building relationships:** Children with disabilities often do not have the skills to initiate and sustain mutual relationships. In cases with students with Autism Spectrum Disorders, they need to be explicitly taught the components of friendship or relationships. Students with disabilities have problems both with acquiring and applying social skills. They need lots of practice. Successful ways to learn and generalize social skills include:

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**Modeling:** The teacher and an aide or another teacher enact the social interactions you want students to learn.

**Video self-modeling:** You videotape the student performing the social skill with lots of prompting, and edit out the prompting to create a more seamless digital recording. This video, paired with rehearsal, will support the student's effort to generalize the social skill.

**Cartoon strip social interactions:** Introduced by Carol Gray as Comic Strip Conversations, these cartoons let your students fill in the thought and speech bubbles before they role-play a conversation. Research has shown that these are effective ways to help students build social interaction skills.

**Role-playing:** Practice is essential for maintaining social skills. Role-playing is a great way to give students an opportunity not only to practice the skills they are learning but also to teach students to evaluate each other's or their own performance of skills.

**Steps of teachings social skills -** Once I have identified the social skills that will benefit the student, you can employ the steps identified in this instructional sequence as a guide to facilitate learning.

**Step 1: Provide a rationale** – Help the student understand “what” the skill is and “why” it is useful. You might invite an adult who is legally blind or has low vision to act as a role model by discussing and demonstrating effective social skills and answering student questions.

**Step 2: Provide modeling** – Give verbal descriptions of the people involved in the situation, their actions and reactions. Encourage the student to consider social cues. For example, a wealth of information can be gained about how someone is feeling by listening to the variations in voice volume, pitch and rhythm. Through having such a dialogue, the student is not only listening and viewing the content, but also responding to questions, sharing observations, expressing ideas and opinions.

**Step 3: Provide guided practice** – Provide the student with opportunities to practice or rehearse skills in arranged situations that simulate the actual situation. Provide the student with multiple opportunities to practice the skill in small, structured groups with same-age peers in a comfortable, fun, and supportive environment. Initially you may have the student with vision impairment practicing these skills with an adult and then proceed to practicing with peers. Through role playing and videoing practice scenarios you can provide positive and constructive feedback to shape the student's behaviour.

**Step 4: Teach self-regulation** – Self-regulation is the ability to evaluate one's own behaviour and emotions in terms of their appropriateness so as to regulate them accordingly. Self-regulation includes skills such as monitoring, evaluating, managing, and reinforcing oneself.

**Step 5: Promote generalization** – Generalization is a form of a critical yardstick by which the effectiveness of the skills and strategies can be informally gauged in terms of how well students can adapt the skills taught into their everyday life settings. Generalization programming should be considered from the start and become a part of the social skills instruction program.

**Conclusion** – Social skills training is important to incorporate into the classroom. Teachers need to model appropriate social skills. Students look up to their teachers and if their teachers have good social skills, the students are more likely to imitate those skills. Students with learning disabilities need to be taught appropriate social skills as soon as something socially inappropriate occurs. Social skills training is beneficial for students with learning disabilities. This population of students will have more self-control over their behavior and actions, which will help them, improve in academic areas and in their relationships with others. These students will learn how to cooperate better and empathize with others. Their communication skills will also increase, which will help them interact with others better. The biggest factor is that students with learning disabilities will have better relationships with others and have more friends, which will increase their self-esteem and confidence. Friendships are very important for all students, especially students with learning disabilities. A study found that children with friends had higher measures of self-concept and self-worth than did children without friend's. Therefore, obtaining appropriate social skills helps students with special needs

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# Cinematic Adaptation of Literary Texts: A Historical Study in Context with Indian Cinema

Ms. Rachana Bairagi\*

**Abstract** - The History of entertainment is as vibrant and rich as cinema itself. Earlier arts form such as Dance, Drama, Painting, Architecture, and Sculpture plays a vital role in community of the time. People of the time were in great demand of innovative idea and invention in the field of arts and entertainment. To enhance varied faced of entertainment industry advancement in information technology proved to be a boon for it. 21<sup>st</sup> Century and its development in the field of Indian film history and its Cinematic adaptation is an outcome of this advancement.

Film directors always keen to take source material from stories of the time as epic; The Mahabharata, The Ramayana, Novels, Plays and Short Stories. Present paper is an attempt to highlight how advancement in technology enhances Indian cinema and cinematic adaptation. The paper also tries to explore history of Indian cinema with its literary adaptation.

**Key Words** - Innovative, Cinematic Adaptation, Ancient, Modern, Historical.

**Introduction** - Art is the backbone of any nation and it's Social – political and cultural aspects are the pillars of it. Growth and development of a nation is based on these basic traits. Since beginning of civilization human being has keen urge for entertainment. Earlier the mode of entertainment was storytelling, art and literature. But later on it has been replaced by cinema and its advancement in terms of technology such as 2D, 3D, animation, VFX etc. Before understanding the development of the Cinema and Cinematic Adaptation in India, we must look at socio-political and cultural scenario in the country when Cinema arrived in India in 1896. At the political level, the British were ruling India and administrative systems were being created.

In the cultural scenario various forms of entertainment were folk theater, nautanki, swang, Tamasha, Lavni, Jatra, koodiyattam, therukoothu, yakshagaana and many others. There were also shows of Parsi Theatre in Bombay regularly. The Parsi Theatre had its own set of Playwrights, professionals who had been writing great plays and adaptations of Shakespeare's works. Before the arrival Cinema in India, these playwrights were writing plays like Aftab – e- Muhabat, Murid e Shak, Shabeed – e- Naaz (an adaptation of Shakespeare's Measure for Measure). A look at these plays will convince you that an average Indian film even today borrow its structure from Parsi theatre. Thus, beginning of cinema itself marked the beginning of cinematic adaptation.

History of Indian Cinema based on its development has been classified into categories as- Silent Era, Talkie Era, Golden Era, Parallel Cinema, Contemporary Cinema or Modern Cinema.

**Silent Era and Literary Adaptation** - The history of Indian cinema is as rich and vibrant as the history of India as a country. The efforts of extraordinary men later on changed the face of Indian cinema in a global sense. In India the film came into existence with Dhundiraj Govind Phalke's 'Raja Harishchandra' (1913) based on the legend of king Harishchandra from epic Ramayana and Mahabharata.

It marked the beginning of Indian film industry. Following the silent era as the era of Phalke too, many movies were produced taking the Indian mythology as a prime subject like 'Lanka Dahan' (1917), 'Mohini Bhasmasur' (1913), 'Satyavan Savitri' (1914). But Lanka Dahan was the one that went on to become India's first big box office hit.

The films of the silent era did not talk but they were never watched in silence. Dialogue was presented through inter titles, which were often in English and two or three Indian Languages. Almost every film had a background score, which was live and helped to dramatize the narrative. Sometimes there was only a piano accompaniment, but there were several films where a violin, a harmonium, tablas and other musical instruments could be added.

The Silen era of Indian Cinema was then brought to an end with Ardeshir Irani 1931 release Alam Ara which was the first Indian talking film and H.M. Reddy's 1931 produced and directed Bhakta Prahlada (Telagu), and Kalidas (Tamil).

**Talkie Era and Literary Adaptation** - The first India talkie came out on March 14, 1931. It was 'Alam Ara' (The Light of the World), made by Ardeshir Irani, admitted that the idea of making an Indian Talkie came from universal

pictures production of 'Show Boat', which was a 40% talkie. Early Indian cinema in the 1920s was founded on specific genres, such as the mythological or the devotional film. The sum and substance of the mythological theme is the fight between good and evil and the importance of sacrifice in the name of truth. The retelling of stories known through an oral tradition was an important element in the success of the mythological film: The Ram Leela (celebration) and re-enactment of the exploits and adventures of Ram) and the Ras Leela (Episodes from Krishna's life) are said to be of particular influence in Indian Cinema.

Such reconfirmation has always been an element of Indian culture. As Arundhati Roy says in her novel, *The God of Small Things*, "The great stories are the ones you have heard and want to hear again. Roy was speaking of the Kathakali dance form, but the argument holds good for cinema too. This trend was visible not only in the silent era. It continued in the talkie era".

The cinema also turned for inspiration to the modern Indian theatre which had grown up, under European influence, at the turn of the Twentieth century.

Gradually, many directors came to realize that social films of a creative kind should supersede "mythological". Even Dr. Radhakrishnan, in 1942, declared: "We are getting too much of this mythology. We should retain all our ancient ideals, but they must find out parallels in the life of modern people and modern conditions".(1)

Apart from the theatre, Literature too had its share in exaggerating the artificiality of films. "When Bankim Chandra Chatterjee's works, were made into silent films, only the story had been borrowed, now the florid style, language, was taken over as well, and uninterruptedly kept at emotional boiling – point"(2)

After Ardeshir Irani's successful 'Alam Ara (1913), the next Mahabharata adaptation starting with Duryodhana's scheme to appropriate the kingdom of Hastinapur by eliminating his Pandava, Draupadi (1931) portrays the real Mahabharata on screen.

One of the first realistic treatments of industrial working class conditions and the only engagement with cinema of the best – known Urdu and Hindi novelist, Munshi Premchand's story adaptation in *Majdoor* 1934 (The Mill), has proved a new shift in the tone of Indian Cinematic theme and its expression in the year 1935 P.C. Barua directed the famous film. "During this period, *Devdas*" based on Sarat Chandra Chatterjee's novel earned a great name and fame. Vijay Bhatt's *Bharat Milap* based on the Ramayana tried to be the biggest and the most faithful adaptation of the epic to date.

**Golden Age of Cinema** - Another anthropologically significant turn in the history of cinema was its gradual shift, The Golden Age of Indian Cinema.

The beginning of Golden Era was just the beginning of a new taste of liberty to people. It was a time of divide between Nehruvian modernity and Gandhian simple living. It was a time of so many possibilities and a hope for a

better future. The common element in every kind of movie in this era was optimistic view towards life or beginning of a new day. The films of the late 1940s, 1950s, and early 1960s were lyrical and powerful. Films of the time dealt with realistic themes including- Exploitation of the Poor by Aristocratic (*Do Bigha Zameen*, 1953), The Significance of Endure and Adoration (*Mother India*), Survival in the Big City (*Boot Polish*, 1954), Imperceptibility (*Sujata*, 1959), the Changing Role of the Woman (*Mr. and Mrs. 55*, 1955), Non-rural Vs Pastoral Morality (*Shree 420*, 1955), Attributes Vs Discipline (*Awaara*, 1951), Perplexity faced by Modern Indians (*Andaj*, 1949), Materialism Vs Spiritualism (*Pyaasa*, 1957) and the significance of Foreordination (*Chaudhvin ka Chand*, 1960).

During this period adaptations were a new innovative idea and technique both. Taking the same, many directors tried for adaptation from Hindi and English literature both. The best example of adaptation and multiple adaptation is Bimal Roy directed *Parineeta* (1953) adapted from a novel by Sarat Chandra Chattopadhyay. The same name *Parineeta* (1914) and *Biraj Bahu* (1954) based on *Biraj Bou* (1914). This film continued *Parineeta's* (1953) effort to transplant themes from Bengali reform literature into the Hindi Cinema, influencing the later films of Mukherjee and Sen.

Although the golden period of Indian cinema is filled with creative talents and innovative achievements, some rust can still be found on the gold. Everything was not a piece of cake for the filmmakers during the period, they had to face various challenges and oppositions to get their work recognized and appreciated which leads to a new wave in Indian Cinema i.e. Parallel Cinema.

**New wave or Parallel Cinema** - From the late 1960s to the mid-1980s an alternative to the mainstream Hindi entertainment films and the regional mainstream cinemas, often referred to as '**New Wave**' or '**Parallel**' Cinema, thrived in India. The parallel Cinema was characterized by its serious content, realism and depiction of social issues. New wave films tended to exhibit many issues and characters like social and political issues, status of women, caste and poverty, social – realism, in India. The 1960s was a time of political and social change. There was a conflict between various leftwing political factions including the powerful official communist party. These political differences took a concrete form. The most famous example was the Naxalite movement of the 1960s. Filmmakers of these time influenced by these movements inscribed their films actively, like *The Naxalites* directed by K.A. Abbas.

While portraying real life to reel life, filmmakers did not forgot to take sources from real life literature as well. By the time director producers have taken real life, first hand experiences movies like – "*Sahib, Bibi Aur Ghulam*" – Bimal Mitra's novel of the same name, *Kohraa* (1964) an adaptation from Daphne du Maurier's (1938) novel, *Rebecca*, which was previously adapted by Alfred

Hitchcock, Rebecca singer Hemant Kumar, who had a fondness for making suspense films, was the producer of Kohraa. His first endeavor, Bees Saal Baad (1962), partly inspired by Arthur Connan Doyle's classic, (The Hound of the Baskerville, hit the bull's eye). Director like Vijay Anand's romantic blockbuster stars Dev Anand and Waheeda Rehman as the leading role is based on the critically acclaimed novel 'The Guide' (1958), by the Padma Vibhushan honoured, R. K. Narayan.

"In Indian cinema is to grow to adulthood, it has to come out of the cloying, cliché ridden commercial films. This requires the springing up of a whole movement, many directors making their films the way they like, in their own individual styles. It is necessary that there should be many new directors, many new styles of filmmaking and possibility of these directors making more and more films. Only then can the real Indian cinema be active, living and progressing." (Basker Chandavarkar)

Furthermore, this decade marked the entry of new performers in art house and independent films, some of which succeeded commercially, the most influential example being Satya (1998), directed by Ram Gopal Verma and written by Anurag Kashyap. The critical and commercial success of Satya led to the emergence of a distinct genre known as Mumbai noir, urban films reflecting social problems in the city of Mumbai. This led to a resurgence of Parallel Cinema by the end of the decade.

**Modern Cinema and Literary Adaptation** - The 21<sup>st</sup> Century also tried innovative production of sequels. The continuation of the previous released films was based on their critical appreciation and box office response. This was a time of experimentation with various subjects and

innovation. People no longer wanted to watch movies with the same story line. And the taste of audience challenged a lot to Indian filmmakers, thus the filmmakers produced diverse movies such as social films like Baghban (2003), love stories like Veer Zaara (2004), patriotic films such as Rang de Basanti (2006), Mangal Pandey (2005), Swades (2004), thrillers such as Murder (2004) and Comedy like Bunty aur Bubbly (2005), Krishh (2006), Phir Hera Pheri (2006), Lagey Raho Munna Bhai (2006), Don (2006), and Umrao Jaan (2006).

For decades, filmmakers all over the world have got influenced from great literature and transcribed it into movies. Adaptation of books into Cinema is nothing new for the Indian film industry too and the impact of literature on films is almost as old as filmmaking itself. From Shakespeare to Ruskin Bond, Indian Cinema has been inspired and adapted from many literary works.

**Conclusion** - Over the years, film production houses have realized the potential of eminent literary creations and acquired the rights for various bestsellers. Adaptation of a literary work for cinema is not synonymous with a betrayal of the original work that motivated the adaptation in the first place. An adaptation can be 'bad' if the film itself is 'bad' in terms of its quality as film and not because it has been adapted from a literary source.

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# The study of Child Malnutrition in Tribal Areas of Madhya Pradesh

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**Abstract** - Malnourishment paves the way for a number of diseases like fever, vomiting, measles, diarrhoea, etc. Under ordinary circumstances these diseases are curable and not deadly; but when a malnourished child is caught up with any such disease, it becomes a death trap. Thus, tribals are confronted with poverty, food insecurity, unemployment, poor health and nutrition conditions that result in severe malnutrition and deaths of children. Every death of a child leads to a controversy as the government departments disown the responsibility of such deaths. This study assesses child malnutrition, its causal analysis and also reviews the Integrated Child Development Services (ICDS) scheme which is aimed at the reduction of child malnutrition in tribal areas. The ICDS programme is a major intervention directed towards providing supplementary nutrition to children (six months–six years) and growth monitoring of children through AWCs for reduction of malnutrition. There are food security programmes like Mid-day Meal (MDM), Antyodaya Anna Yojana, Supplementary Nutrition Programme, etc, but even then hundreds of children die due to malnutrition and diseases every year.

**Keywords** - Malnutrition, child, tribals.

**Introduction** - Tribals in Madhya Pradesh constitute a sizeable population. As per the Census 2011, out of the 7.26 crore of total population of the state, tribal population constitutes 1.53 crore (21.1%). There are 46 recognised Scheduled Tribes (STs) and three of them—Bharia, Baiga and Sahariya—have been identified as “Special Primitive Tribal Groups.” Bhil is the most populous tribe in Madhya Pradesh with a population share of 39.1% of the total ST population. Gond is the second largest tribe, with a population share of 33.3%. The next four populous tribes are: Kol, Korku, Sahariya and Baiga. These six tribes constitute 91.5% of the total ST population of the state (Census 2011). Bhils have the highest population in Jhabua district followed by Dhar, Barwani and Kargone districts. Gonds have major concentration in Dindori district, Chhindwara, Mandla, Betul, Seoni and Shahdol districts. Other four major groups—Kol, Korku, Sahariya and Baiga—have registered the highest population in Rewa, Khandwa, Shivpuri and Shahdol districts, respectively.

**Infant and Young Child Feeding Practices:** Infant and Young Child Feeding (IYCF) practices play a vital role in survival, growth and development of children. It helps in reducing infant and child mortality and morbidity. There are several factors like timely initiation of breastfeeding, administering first milk of mother (colostrums), exclusive breastfeeding up to six months, timely initiation of complementary feeding, etc, which affect the nutrition and health condition of children. Colostrums is considered as

the best vaccine which protects child from infection and disease. This shows that though there is a practice of giving first milk of mother to children after birth, mothers are not aware about its benefits to children's health. Early initiation of breastfeeding is considered essential for better health and nutrition of a newborn child. The guidelines of IYCF suggest initiation of breastfeeding within an hour of the child's birth. About 56.8% women respondents accepted to have initiated breastfeeding to their children within one hour of their birth. There is a need to further strengthen the IYCF practices by propagating the importance of an early initiation of breastfeeding among mothers of the tribal areas. As per the mandate of the Ministry of Women and Child Development, Government of India, exclusive breastfeeding for six months is being promoted nationwide through ICDS programme. Almost every woman agreed to have exclusively breastfed their child for six months. This shows an encouraging practice by mothers in tribal areas. As far as the duration of breastfeeding is concerned, it was found that only fewer of women continued breastfeeding up to a period of two years. The IYCF guidelines recommend for an extended breastfeeding period up to two years. This is attributed to the fact that most of the tribal women are engaged as wage workers or agriculture workers which causes discontinuation of breastfeeding after one year or even less. As per the guidelines under ICDS programme, complementary feeding should be initiated to the child on completion of six months of age. Either early or late initiation

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of complementary feeding causes obstructed growth of the child. This needs further strengthening through education and counseling of tribal mothers. Infant and young child-feeding practices like giving mother's first milk and early initiation of breastfeeding were found to be traditionally very strong in the area, but duration of breastfeeding is not satisfactory. Similarly, timely initiation of supplementary nutrition is also a weak area. These two problematic areas are largely associated with the fact that a large number of tribal mothers work in the fields having no time for care of children. The standard timing of *anganwadi* centres (AWCs) is not suitable for tribal areas where majority of women are in fields/forest for whole day for collection of forest produce or working in agriculture field for their livelihood. Opening crèches in such areas could be more effective in dealing with the child malnutrition.

**Review of Growth Monitoring and Promotion:** Regular growth monitoring and promotion is an important component of the ICDS programme directed towards reduction of malnutrition among children. It includes recording of birth weight, date of birth, regular monthly weighing and plotting the growth charts as per the New World Health Organization (WHO) Child Growth Standards.<sup>1</sup> It is followed by necessary interventions like home visits, mothers' counseling and nutrition care at the level of AWCs.

**Nutrition and Health Status of Women Affecting Children:** Poor nutrition and health conditions of women have a direct bearing on nutrition and health conditions of children in any community. There is an association between malnutrition in women during adolescence and pregnancy on the one hand and low birth weight babies and malnourished children on the other. It is also recommended that women should take additional food during pregnancy to cater to the nutritional needs of growing fetus in the womb. It was found that women had additional food during pregnancy. There is need to strengthen awareness and counseling interventions to promote healthy nutritional intake among pregnant women in tribal areas. Institutional delivery helps in preventing infant and maternal mortality. Janani Suraksha Yojana under the NRHM is one of the flagship programmes of health department.

**Role of ICDS in Reduction of Child Malnutrition:** Mothers of normal children along with malnourished children were also covered to have a control group analysis during this study. Major aspects covered under this section are profile of AWWs, low birth weight, malnutrition among children, distribution of supplementary nutrition, utilization of AWC service, etc.

**Coverage of supplementary nutrition under ICDS:** Under the ICDS programme, children of age group six months–three years are provided *bal ahar* (take-home ration [THR]) to supplement their nutritional needs. Children of age-group three– six years are provided breakfast and lunch (hot-cooked meal) at AWCs. Hot-cooked meal (breakfast and lunch) is being prepared by self-help groups (SHGs) under the Sanjha Chulha programme. Sanjha Chulha is

combined kitchen preparing food for ICDS as well as MDM for schoolchildren. Low coverage of hot-cooked meals may be attributed to the fact that substantial proportion of children (three–six years) enrolled at AWCs are going to nursery/ private schools. Apart from this, poor Early Childhood Care and Education (ECCE) activities at AWCs are also responsible for low attendance at AWCs, and hence, low coverage and utilization of ICDS. It was also observed during the data collection that there were several AWCs in these tribal districts which were not receiving breakfast for AWC children from designated SHGs. Pregnant women and lactating mothers are provided THR under the ICDS programme. Supplementary nutrition provided to pregnant/ lactating women is directed towards meeting the additional requirement of nutrition of women during pregnancy and lactation.

**Supplementary nutrition and reduction of child malnutrition:** The study tried to analyze the nutrition category of children who were not receiving supplementary nutrition from AWCs under the ICDS programme. This clearly indicates that the utilization of supplementary nutrition has no significant impact on nutrition category of children.

**Conversion of underweight children to normal:** The major thrust of the ICDS provided through the AWCs is to reduce malnutrition among children by providing supplementary nutrition, health and nutrition education, health check-ups and referral to nutrition rehabilitation centre (NRC). Under this study, an attempt was made to assess and analyze the conversion of underweight children into normal category as per the new WHO Child Growth Standards.

**Malnutrition and child deaths:** According to WHO, the major causes of child deaths in the area was attributed to fever (37.5%) followed by pneumonia (25%), diarrhoea (12.5%) and malnutrition (12.5%).

**Analysis of nutrition rehabilitation centre:** NRCs have been established in every district of Madhya Pradesh in joint collaboration of the Department of Women and Child Development, and Department of Health. ICDS functionaries mobilise malnourished children from villages to NRC. The children are screened at NRC as per the criteria of severely acute malnourished (SAM) laid down by the Department of Health and UNICEF. Only SAM children are admitted in NRC for a period of 14 days. There are three criteria for SAM children, namely, mid upper arm circumference (MUAC) measurement < 11.5 cm, bilateral oedema and weight for height < - 3Z score. Children satisfying any one of the three criteria are considered for NRC admission. Rest of the children would be sent back for care at the AWC level. There is a norm of admitting children in NRC for a period of 14 days. If required, it is extended for a further period, but initially it is mandatory to admit SAM children for a period of 14 days. This is a major challenge before ICDS and NRC functionaries to hold children in NRC for the stipulated time period of 14 days.

There is a strong reluctance of community for keeping their children in NRC for a period of 14 days. The above findings suggest that there is a need to increase the utilization of NRCs through a clear policy and mobilization and sensitization of community about possible implications of malnutrition among children.

**Causal Analysis of Child Malnutrition:** This analyses malnutrition (underweight) in light of its association with several causal factors like low birth weight of children, mother's first milk given to child, early initiation of breastfeeding, exclusive breastfeeding, low BMI of mothers, etc.

**Nutrition category of children by birth weight:** It is quite obvious from the analysis that low birth weight of children is an important factor contributing towards high malnutrition among children under the age of five years.

**Nutrition category by children given first milk of mother (Colostrums):** Mother's first milk is considered as the first vaccination of child and it influences health, nutrition and growth of children. This categorically states that, mother's first milk has a significant and long-lasting effect on nutritional status of children.

**Nutrition category of children by exclusive breastfeeding:** This section focuses on the effect of exclusive breastfeeding upto six months on nutrition condition of children up to the age of five years. This clearly indicates that exclusive breastfeeding up to six months of birth is better than mix feeding for growth of the child as also propounded by WHO under the new WHO Child Growth Standards.

**Nutrition category of children by early initiation of breastfeeding:** Early initiation of breastfeeding after birth is essential for healthy growth and development of children. The cross-tabulation clearly indicates the effect of early initiation of breastfeeding on nutritional status of children up to the age of five years.

**Nutrition category of children with health problems during last one year:** Poor health conditions cause malnutrition among children. This clearly indicates that poor health conditions adversely affect the nutrition condition of children in tribal areas.

**Nutrition category of children by BMI of mothers:** This clearly indicates a positive association between nutritional status of mother and child. Therefore, it is essential to improve nutritional status of mother so as to reduce malnutrition among children.

**Present nutrition category of children by age of mothers' marriage:** It was interesting to note that mothers' age of marriage has a significant impact on the malnutrition level of the children (six months–five years). clearly indicates a strong negative correlation between malnutrition among children and their mothers' age at marriage. This is attributed to the fact that low age of marriage adversely affects the condition of women's health and nutrition, and in turn, causes poor nutrition and health of children.

**Present nutrition category of children by schooling of**

**their mothers:** The education of mother largely influences the health and nutrition of their children. As analyzed earlier, the education level of women was found very low in the study area. Therefore, schooling of mothers was considered under cross-tabulation to understand its association with malnutrition of children.

Though it does not depict a very strong association, but significantly justifies the role of mother's education in reducing malnutrition among children.

**Present nutrition category of children by their birth order:** The high birth rate with low birth spacing in tribal community is a common phenomenon. The number of children and the family size in tribal areas is much higher than the other social groups. Children are deprived of proper nutrition and healthcare in larger families. We have seen a systematic increase in malnutrition level for higher order births. This clearly indicates the need for popularising small family norms in tribal community in way to reduce malnutrition among children.

**Summary -** Infant and young child feeding practices like giving mother's first milk (colostrums) and early initiation of breastfeeding were found to be traditionally strong in the tribal area, but duration of breastfeeding and timely initiation of supplementary nutrition were found to be weak in the area. These two problematic areas are largely associated with the fact that a large number of tribal mothers work in agricultural fields having no time for proper care of their children. Weighing and plotting of children were found to be erroneous. Children registered in growth registers were generally not found in villages and children available in villages had no place in growth registers of AWCs. The proportion of malnourished children as per the AWC data was found highly underestimated. There seems to be virtually no impact of AWC services in reducing malnutrition of children even after two years. There was no significant difference between malnutrition level of children availing supplementary nutrition and children who were not availing the same from AWCs. This also indicates that there is no significant bearing of supplementary nutrition of ICDS in reduction of child malnutrition.

There was high level of malnutrition in tribal areas observed under the study. Malnutrition has been found as one of the important causes of child death in the area. It was also observed that NRCs were not being optimally utilized in tribal areas of Madhya Pradesh. The updating and maintenance of vaccination/mother– child protection cards (MCP) was also found to be poor in the area. The MCP card which is considered as a good counseling tool for mothers had been adopted with no interest of ICDS as well as health functionaries. Fever, diarrhoea and pneumonia were major health problems faced by tribal children. They were largely dependent on private doctors and faith healers for treatment. The nutrition and health status of women largely affects children. Slightly less than half of women were found underweight. The dietary intake by women during pregnancy was found far from satisfactory.

The study also observed poor awareness and counselling in the tribal community on malnutrition, safe delivery practices and maternal care during pregnancy. It can be concluded that despite certain IYCF practices (colostrum feeding and early initiation of breastfeeding) being traditionally strong among tribals, there was a high level of child malnutrition in the tribal area due to short period of breastfeeding, delayed initiation of supplementary nutrition, and most importantly, poor growth monitoring and poor implementation of malnutrition reduction interventions, including information, education and health services for women were not satisfactory. The malnutrition level has shown a strong association with the mothers' marriage age and the birth order of children showing the need for promoting legal age of marriage and small family norm in tribal areas. Low BMI of women and low birth weight of children had also shown a strong association with high child

malnutrition stating the need for more emphasis on nutrition care of women in a way to reduce child malnutrition. Poor health condition had registered a positive association with child malnutrition, and moreover, malnutrition was found to be one of the important factors responsible for child deaths in tribal areas.

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# Impact Of Information Technology On Education System

Prof. Anshu Mishra\*

**Abstract** - Information Technology is a gift of God and to be treated as mother of civilizations .information technology has certainly changed the way we live. It has made an impact on different factors of life and promotes redefined living. Undoubtedly, technology plays an important role in every sphere of life. Most complex and critical processes can be carried out with ease and greater efficiency with the help of modern information technology in every field business and specially now days in education system.. Technology has revolutionized the field of education. The importance of technology in schools and colleges cannot be ignored. In fact, with the onset of computers in education, it has become easier for teachers to impart knowledge and for students to acquire it. The use of technology has made the process of teaching and learning all the more enjoyable. UGC also added some aids in new higher education system.

**Keywords** - Education, modern technology, teaching.

**Introduction** - The era of the 21st century is often regarded as an era of advanced technology. Technology plays a very vital role in today's modern education system. Education in India has an ancient tradition from VEDIC PERIOD (1500 to 500 BC.) Undoubtedly, the British has shaped education in India but they left country with unequal system as estimated up to 70 to 80 percent of the population was illiterate at the time of independence. As each 5 year plan grows with developed fragrance Indian education system also grown up till today. Now newly added information technology in today's education plays a very vital role and there is also an increase in institution with government approvals are as under. Information technology is an application of computers and telecommunication technology to get learning easily and efficiently. Information technology revolution makes remarkable changes in various fields like Education, Entertainment, Business, Medical and Lifestyle etc.

**ROLE OF INFORMATION TECHNOLOGY IN EDUCATION** - To access a variety of learning resources, anytime, anywhere learning, up to date information, Access to online libraries, teaching of different subjects it made interesting.

**Need and importance** - Education is a lifelong process Education should meet the needs of variety of learners and therefore IT is important in meeting this need. We need to increase access and bring down the cost of education to meet the challenges of illiteracy and poverty. Information Technology in Education, effects of the continuing developments in information technology.

**USES OF INFORMATION TECHNOLOGY** - IT Access to a variety of learning resources. IT aids plenty of resources to enhance the teaching skills and learning ability. With the

help of IT now it is easy to provide audio visual education. Any time learning is provided through computers and web networks the pace of imparting knowledge is very fast and one can be educated.

Audio-Visual Education, planning, preparation, and use of devices and materials that involve sight, sound, or both, for educational purposes. Among the devices used are still and motion pictures, filmstrips, television, transparencies, audiotapes, records, teaching machines, computers, and videodiscs. The growth of audio-visual education has reflected developments in both technology and learning theory. Online library is the integration of information technology in teaching. It is a central matter in ensuring quality in the educational system. There are two equally important reasons for integrating information technology in teaching . It Access to variety of learning resources in the era of technology. IT aids plenty of resources to enhance the teaching skills and learning ability. With the help of IT now it is easy to provide audio visual education.

UGC and the AICTE decided in 2014 to make accreditation mandatory for all technical institutions in "Engineering and Technology, Pharmacy, Architecture, Planning, Applied Arts and Crafts, Hotel Management and Catering Technology and Management." Technical credentials not approved by the AICTE, nor issued by institutions with degree-granting authority, are generally not recognized as official academic qualifications in India. All new technical institutions in the country need to seek approval from the AICTE before beginning operations.

**Impact of information technology** - Enhanced Teaching and Learning- Technological developments like digital cameras, projectors, mind training software, computers,

PowerPoint presentations, 3D visualization tools; all these have become great sources for teachers to help students grasp a concept easily. When schools in different parts of the state, students can "meet" their counterparts through video conferencing without leaving the classroom. No Geographical Limitations- With the introduction of online degree programs there is hardly any need of being present physically in the classroom. Distance learning and online education has become a very important part of the education system nowadays.

**Advantages** - It makes students more excited to learn, help students with busy schedules, freedom to work at home on their own time, train students to learn new technology skills they can use later in the workplace, Decrease paper and photocopying costs, promoting the concept of "green revolution"

**Disadvantages** - Many experts and experienced people say that, due to such technology in education, students' imagination is affected, their thinking ability is reduced. Also, it's sometime time-consuming from the teacher's point of view. It is costly to install such technology. There can be health issues too when used over limit. Some students can't

afford modern computer technologies.

**Conclusion** - Technology has a very positive impact on education and at the same time may also pose negative effects. Teachers, and students should take advantage of this in the good light and eliminate the drawbacks which are pulling back many of students as well as schools from achieving excellence in each field. Thus time for every country to introduce a more technologically equipped education sector in the future. Technology has a positive impact on education.

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# Prime Minister Rozgar Yojana

Sachin M. Pathak\*

**Abstract - Prime Minister's Rozgar Yojana** was launched on 2nd October 1993 to assist educated unemployed youth to set up self-employment ventures. The purpose PMRY is for providing occupation to more than a million unemployed youths who are cultured and knowledgeable. Basically this scheme offers loans for the youngsters at lower interests to establish their own business or self employment. It relates to the setting up of the self employment ventures in all economically viable projects (except direct agricultural operations). The Scheme also seeks to associate reputed non-governmental organizations in implementation of PMRY Scheme especially in the selection, training of entrepreneurs and preparation of project profiles. Government, therefore, has decided to modify some of these parameters of the Scheme.

**Introduction - Prime Minister's Rozgar Yojana** was launched on 2nd October 1993 to assist educated unemployed youth to set up self-employment ventures. The scheme targeted for setting up of nearly 7 lakh enterprises and consequent employment generation to more than one million educated unemployed youth in the last four years of the 8th Five Year Plan. Initially, the scheme was implemented only in the urban areas of the country. Since 1994-95, it is in operation in both urban as well as rural areas. The scheme continued in the 9th Five Year Plan with the plan target of 11.00 lakh beneficiaries with annual target of 2.20 lakh beneficiaries. The PMRY is continuing in the 10th Five Year Plan also with the plan target of 11.00 lakh beneficiaries. With the gradual increase of unemployment, this scheme is definitely going to resist the rate of unemployment in our nation.

**Objective -** It relates to the setting up of the self employment ventures in all economically viable projects (except direct agricultural operations). The Scheme also seeks to associate reputed non-governmental organisations in implementation of PMRY Scheme especially in the selection, training of entrepreneurs and preparation of project profiles. It cannot be denied that there are a lot of beneficial schemes and interests, which have been implemented by the Central government for helping the unemployed or self-employed individuals of our country. And "Pradhan Mantri Rozgar Yojana" is one of the most important schemes among them. Before we delve deep into the discussion of facts within the schemes taken up by the government, it needs to be mentioned that that this scheme was primarily created for granting the self employment to unemployed youths of our country.

The purpose PMRY is for providing occupation to more than a million unemployed youths who are cultured and knowledgeable. Basically this scheme offers loans for the

youngsters at lower interests to establish their own business or self employment.

## Target Group/Eligibility

### 1. Age:

- i) 18 to 35 years for all educated unemployed.
- ii) 18 to 40 for all educated unemployed in North-East States, Himachal Pradesh, Uttaranchal and J&K.
- iii) 18 to 45 years for Scheduled Castes/Scheduled Tribes, Ex-servicemen, Physically Disabled and Women.

**2. Educational Qualification:** VIII pass. Preference will be given to those who have been trained for any trade in Government recognised/approved institutions for duration of at least six months.

**3. Family Income:** Neither the income of the beneficiary along with the spouse nor the income of parents of the beneficiaries shall exceed Rs.40,000/- per annum.

**4. Residence:** Permanent resident of the area for atleast 3 years. (Relaxed for married men in Meghalaya and for married women in rest of the country. For married men in Meghalaya and for married women in rest of the country, the residency criteria applies to the spouse or in-laws.

**5. Defaulter:** Should not be a defaulter to any nationalized bank/financial institution/co-operative bank. Further, a person already assisted under other subsidy, linked Government schemes would not be eligible under this scheme.

**6. Activities Covered:** All economically viable activities including agriculture and allied activities but excluding direct agricultural operations like raising Crop, purchase of manure etc.

**7. Project Cost:** Rs.1.00 lakh for business sector. Rs.2.00 lakh for other activities, loan to be of composite nature. If two or more eligible persons join together in a partnership, project upto Rs.10.00 lakh are covered. Assistance shall be limited to individual admissibility. **Self Help Groups can**

**be considered for assistance under the Scheme provided:**

**Modifications** - Government, therefore, has decided to modify some of these parameters of the Scheme. The upper age limit has been relaxed beyond 35 years by 10 years for SCs/STs and women and the educational qualifications for eligibility under the Scheme has been relaxed from matric (passed or failed) to VIIIth passed. Similarly, the upper limit of project cost has been increased from Rs. 1 lakh to Rs. 2 lakhs (Rs. 1 lakh for business sector and Rs. 2 lakhs for other activities). The PMRY scheme would now cover all economically viable activities including agriculture and allied activities but excluding direct agricultural operations like raising crop, purchase of manure etc.

The details of the changes made in the parameters of the PMRY Scheme are given below.

The modified financial parameter of increase in the upper limit of the project cost from Rs. 1 lakh to Rs. 2 lakhs has been effective from 1.4.1999.

#### **Importance**

**Unemployment will be reduced** - With the gradual increase of unemployment, this scheme is definitely going to resist the rate of unemployment in our nation. It is a fact that a lot of families in our country are not able to continue earning their living even after being qualified with certain degrees and academic certifications. The youths are forced to either look for jobs or start up some business to earn the living for their families. The PMRY is targeted towards the age group of individuals between 18-35 whose overall family income is Rs 24000 and who have attained the minimum educational qualification of 10<sup>th</sup> pass.

**Helpful for both uneducated and educated** - Another important factor of this scheme is this is going to help the individuals in both the government and non government sectors. A lot of people in our country are willing to start their own business due to the lack of availability of jobs or services. At the same time due to intense competition in both the government and nongovernmental sections different people want to start up their own business for their living. In such circumstances, this scheme has been very much effective for these people. The scheme is not only for the uneducated youths but also for the uneducated and

inexperienced youths who are interested in starting up a business to make a proper living. In any field or expertise, this program offers a financial startup for the Indian citizens.

One of the important factors that needs to be mentioned is, the person willing to take up the loan for PMRY, must be a resident of that region for a minimum of 3 years. And for the documentation of this residency, a ration card shall be sufficient. Any other additional document shall also be valid for attaining the loan from PMRY. The scheme officially started in the year 1993 through seven lakh micro ventures. The proposal also seeks to link up the nongovernmental organizations for executing the PMRY scheme specifically in the planning the overall services, guidance for entrepreneurs, and also creating the report. The Central Government has also considered the condition of scheduled castes, scheduled tribes, OBC and certain reservation limitations have been offered to them as well.

**Key to develop economy** - This is one of the most important steps in helping the Indian economy to develop. Helping the small entrepreneurs might make slow improvements in the economic conditions, but if the gradual process is continued for a long period of time, it shall definitely prove to be effective. Helping the people to start up their own business is also going to increase the number of employed individuals in our country. It has been reported that the large business enterprises employ around 1 crore 25 lakh individuals while the small business companies recruit 12 crore individuals. It is essential to focus on small business which in turn shall create a stable economic condition in our nation.

**Conclusion** - To maintain an economic balance in a country is really important for a nation to make progress. This scheme is going to provide chances to those individuals who are do not have any kind of financial support. This scheme is about creating the right balance within a nation and enhance the economic stability. With a little help a small business can have the potential to grow manifold. It cannot be denied that the biggest asset of a poor is integrity and by offering a path to their integrity through the loans and capital amounts, it can definitely become a success.

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# A Study on Shift of HRM Practices to E-HRM Practices

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**Abstract** - Human capital is considered as main resource of any working organization not only in India but in whole of the world. Managing the important resource of any organization is a tedious work and must be managed with great care and well equipped planning. In the era of IT where robots are doing lots of work replacing human in many aspects, HRM cannot be untouched. Proliferation of internet and computer has pushed the organizations to become IT enabled organizations. This aspects give rise to a new human resource management system where employees are being managed with the help of IT enabled technologies and helping the organization in dealing with such important resource of the organization. This paper through light on the challenges and opportunity which organizations may face while managing employees through E-HRM.

**Key Words**- HRM, E-HRM and IT enabled HRM Techniques.

**Introduction** - Humans has always been the most important resource of any growing organization and it has been observed by many management philosophers that organization who care for their employees are doing far better than those organizations which do not care for their employees or which do not keep employees welfare at their top priority. In such a scenario E-HRM can be a key of new horizon which makes employee welfare easier as well as helps organizations to control this resources more efficiently. E-HRM not only helps in employee control but also helps in better employee planning and more efficiently works in providing training and development to employees.

E-HRM in simple words can be defined as managing human resources of the organizations with the help of Information Technology based tools and also by using computers, DBMS softwares, social media sites for hiring, Technology based employee performance appraisal and technology based training & Development Programmes etc. E-HRM is being utilized by organizations in all the aspects of employee management like recruitment, selection, training, development, transfer, employee performance appraisal, employee control and employee planning etc.

Source- Docplayer<sup>3</sup>

**Literature Review** - A study done by Deshwal P. (2015), suggests that organizations are shifting to paperless organizations. This study also has view that E HRM gives more self service to its employees and it has more advantages than its disadvantages which makes it better tool to be used and necessary for the sustainability of the organizations. Author is also of the view that it enhances the competence of the employees. This study also through light over the challenges faced by the organizations while using E-HRM.

Shilpa V. & Gopal R. (2011), have opined that regular monitoring and feedback by the employee is necessary for the better development of E-HRM. The study also pay attention over the challenges faced by the organization in the implementation of the E-HRM like loss of human touch, Return on investment, training for employees and continuous monitoring and so on. Authors also suggest that before the implementation of E HRM, planning is necessary, along with that flexibility must be the crucial part of the E-HRM.

Sareen, P. (2015) has tried to identify employee satisfaction towards E-HRM processes. Study has considered many variable to see the relationship between the employee satisfaction and E-HRM. Result of the study shows that tenure of employee, tenure of experience and age has significant relationship with level of satisfaction for E HRM practices.

Mishra, M. & Sinha, B. (2014) has tried to assess the use difference of E- HRM among organizations. Study finds that Organization of India have not fully utilized the opportunity of E-HRM, also private organization are much ahead of public organization in adoption of the E-HRM



practices. Authors have also opined that E HRM may have many flaws but it is the duty of HR manager to make it successful for the organization and if he fails to do so, it will not be a failure of E-HRM but will be failure of the HR manager.

Narayanappa, G. & Oswal, N. (2014) had found that organizations can enhance their functions by increase efficiency of employees and by employee participation. This paper has also focused on evolution of HRM to present scenario.

A study by Paul, P., Bag, M., Chatterjee, S. & Giri, A. (2019) tried to access the acceptability of E HRM practices by organizations. Authors also suggests that HR professionals are ready to use E HRM practices if their following demand is generally fulfilled by E-HRM like perceived usefulness, ease of use, norms of use, behavioral control and perceived enjoyment

#### Objectives of the Study :

- 1) To study the E-HRM practices in the organizations.
- 2) To study the positive aspects of E-HRM.
- 3) To Study the challenges faced by organization in implementations of E-HRM.
- 4) To provide suggestions to make E-HRM more effective.

**Research Methodology** - This study is based on secondary data which has been collected from various sources like online websites, journals, magazines, news papers and by using different other sources.

**E-HRM practices** - Organizations are becoming more IT technology enabled and trying to be more effective and trying to manage employee with easy and simple process. India is also developing economically and Indian organizations are also using E-HRM upto large extent which shows a bright future for HR managers. Following are the different aspects in which electronic practices of HR are being used.

**a) E- Recruitment** - Recruitment is the first step which brings employer and employee together. Email is being utilized as a big source for this process, along with that new strategies are also being used nowadays like social media platform, to attract chunk of skilled employees.

**b) E- Selection** - Selection is the second step which is helpful in selection of best employee from recruitment applications. In 21<sup>st</sup> century, interview through Internet via Video Calling is very common. For written exam also there are n numbers of software which can help organizations. There are also apps available which helps organization in psychometric analysis of the employees.

**c) E- Records** - Organizations are getting global and for such bigger organization, this is not possible to store employee information manually. Organization are also focusing on paperless organization. This strategy is not only helpful in hassle free record system while also useful in reducing cost of employee records management.

**d) E- Performance Appraisal** - Performance appraisal is very useful technique in assessing employee productiv-

ity and its overall worth in an organization. This can become a base for employee salary hike, transfer, deployment in other department or promotion. E-HRM helps in making this process more easy and transparent and also very useful in performing continues employee appraisal.

**e) E- Training & Development** - Training and development is the integral part of any business organizations to develop its employees and make them more productive at the workplace which will ultimately help the organizations in growing more efficiently. Online training and development programme helps the organization in providing global knowledge asses to their employees at very affordable prices.

**f) Work from home concept is gaining popularity** - This is a new concept in emerging economies which can only be possible with the help of IT enabled technology. In this concept an employee can perform his work from home without coming to organizations. Here the focus of organizations is on work/assignment completion and not on presence of employees.

#### Opportunities for the Organizations

**a) Go green with digital records** - Organizations need to maintain the records of employees for fulfilling many internal as well as external requirements. Organizations are nowadays taking help of many available softwares for doing this particular activity which help in reducing time for finding the data, also provides easy global access, arrange the data in lucid way which makes comparison very easy. This strategy is not only user friendly but also helps in reducing paper uses which also helps in environment safety and development

**b) World wide data access** - Employee data may be required at any stage of the work and that is why data need to store at so many places but with the advent of E HRM, it has become very easy to store that data. After storing of the data once, it can be accessed from anywhere in the world by just clicking few buttons.

**c) Efficient time management** - Without the IT enabled techniques, work need to be done physically and for every work person need to go here and there again and again but with the help of IT enabled techniques, time may be reduced to very large extent. This time may be utilized for the some more productive work and can be utilized for the benefit of the employees.

**d) Enhances accuracy** - Humans may do errors and may get tired after some time but when we talk about technology it never gets tired and works with more accuracy than humans. Accuracy is the key to success in business world which can be brought through the use of technology in human resource management.

**e) Reduces Redundancy of work** - Employee records need to be stored once and it can be assessed by any other authorized person whenever required. Along with that once work performed need not to be done again and again as completed work can be stored for future references.

**Challenges for the Organizations** - E-HRM has many



positive aspects which are benefitting the organizations in many ways but every positive aspect also has some negative aspects. Security of employee data can be concern for many organizations as the confidential data of employees can be hacked by hackers. Organization in the initial phase of implementation may incur large amount for installation and employee training. Along with this it is less suitable for smaller organizations as it has huge cost for installation and it is generally less effective for small number of employees. Personal interaction between employee and employer has been a bigger motivational factor for employee retention in every aspects of management but with the use of E-HRM technique this interaction becomes less frequent and employee may feel less emotional attachment with the organization. Employees who are less educated or have less knowledge of IT enabled technique may face problem in dealing with such new phenomena.

**Conclusion of the Study** - This study through a light on the very crucial and important aspect of employee management which is a need of 21<sup>st</sup> century and also necessary for organizations to become more competitive in this technosavvy world where competition is so high. E-HRM is being utilized by almost all the organizations upto some extent while some organizations are using this technique extensively. If we look at the present scenario, everyone is becoming technosavvy and want a world which is just a single click away. Employees are also the part of this society and organization too so it can be said that to become IT enabled organization is the need of the hour. Although it has some drawbacks as well but these drawbacks can be controlled with some little efforts and definitely this employee management technique will spread

more in near future and will reach to all the organizations.

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## Going Green : An Effective Approach for Sustainable Development

Dr. Richa Darshan\*

**Abstract** - Human activities are affecting the environment in which we all are living. At the same time environmental activities are also influencing human life. Environment pollution, deforestation, global warming, etc. are results of human activities. Society has become more concerned for the protection of natural environment, businesses have also started showing concern for the same as part of their social responsibility. In the modern era of globalization, liberalization and privatization, it has become a challenge to keep the customers as well as consumers in fold and even keep our natural environment safe and that is the biggest need of the time. Green marketing is a phenomenon which has developed particular important in the modern market and has emerged as an important concept in India as in other parts of the developing and developed world, and is seen as an important strategy of facilitating sustainable development. In this research paper, main emphasis has been made on the need and importance of green marketing. Data has to be collected from multiple sources of evidence, in addition to books, journals, websites, and news papers. It explores the main issues in adoption of green marketing practices. The paper describes the current Scenario of Indian market and explores the challenges and opportunities businesses have with green marketing. Why companies are adopting it and future of green marketing and concludes that green marketing is something that will continuously grow in both practice and demand.

**Keywords** - Sustainable development, Green marketing, CSR

**Conceptual Framework** - According to the scientists' the world is moving towards a environmental turmoil. The only way to save our planet is to go green on a full swing as quick as possible. For this cause economists have also been doing their parts. There is growing interest among the consumers all over the world regarding the protection of the environment. Worldwide evidence indicates people are concerned about the environment and are changing their behaviour. As a result of this, green marketing has emerged which speaks for the growing market for sustainable and socially responsible products and services.

Degradation of mother earth is happening rapidly and our land is turning into a concrete jungle. We all are facing severe environmental damage which affects one and all deeply. Efforts are being made globally to mitigate this phenomenon so that our future generations can thrive on. Since ecological issues influence all human activities, societies today have become more concerned with environmental management. It is in this regard that we confront terms such as "green marketing", "green banking", "go green" etc. This paper seeks to understand the concept and origin of green marketing and why it is important to implement it especially in today's era, keeping in mind the needs of the future generations as well. The significance of green marketing relies on the very basic principle of economics: how to use the limited natural resources in order

to maximize utility. Owing to scarcity of natural resources, firms must develop alternative ways of satisfying the unlimited wants of consumers. Many firms are beginning to realize that they are members of the wider community and therefore must behave in an environmentally responsible fashion. Green marketing looks at how marketing activities utilize these limited resources, while satisfying the wants of individuals and industry, as well as achieving the selling organization's goals.

Green marketing comprises all activities designed to satisfy human needs or wants, such that the satisfaction of those wants occurs, with minimal detrimental impact on the natural environment with growing awareness about the implications of global warming, non-biodegradable solid waste, harmful impact of pollutants etc. According to the American Marketing Association, green marketing is the marketing of products that are presumed to be environmentally safe. It is essentially a way to brand your marketing message in order to capture more of the market by appealing to people's desire to choose products and services that are better for the environment.

Green marketing covers more than a firm's marketing claims. While firms must bear much of the responsibility for environment degradation, ultimately it is consumers who demand goods, and thus create environment problems. One example of this is where McDonald's is often blamed

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for polluting the environment because much of their packaging finishes up as roadside waste. It must be remembered that it is the uncaring consumer who chooses to dispose of their waste in an inappropriate fashion. Ultimately green marketing requires the consumers want a cleaner environment and are willing to "pay" for it, possibly through higher priced goods, modified individual lifestyles, or even governmental intervention.



Meaning of Going Green

### Review of Literature

Studies refer to the different ways in which marketers have responded to the green agenda. Mostly, at the beginning of green marketing, companies adopted a reactive attitude toward customers who were more aware of sustainability issues and toward social pressures, while, more recently, studies have pledged for a proactive role of businesses in approaching sustainability.

Manju (2012), Green Marketing refers to a holistic marketing concept wherein the production, marketing, consumption and disposal of product and services happen in a manner that is less detrimental to the environment. There are three reasons why we must rethink the idea of green Marketing. (1) After-life of these green products is always not very environmental -friendly. (2) The impact of the products on environment, and (3) The hardest of all, is the question whether they are really green or not.

Mishra (2010), Green marketing is a phenomenon which has developed particular importance in the modern market. This concept has enabled for the remarketing and packaging of existing products which already adhere to such guidelines. Additionally, the development of green marketing has opened the door of opportunity for companies to co-brand their products into separate lines, lauding the green-friendliness of some while ignoring that of others.

Brahma, M. & Dande, R. (2008), The Economic Times, Mumbai, had an article which stated that, Green Ventures India is a subsidiary of New York based asset management firm Green Ventures International. The latter recently

announced a \$300 million India focused fund aimed at renewable energy products and supporting trading in carbon credits.

Alsmadi (2007) investigated the consumer behaviour of Jordanian consumers' reveals environment consciousness. But positive tendency in "Green Products" does not show have positive impact on buying decisions.

Oyewole, P. (2001). In his paper presents a conceptual link among green marketing, environmental justice, and industrial ecology. It argues for greater awareness of environmental justice in the practice for green marketing. A research agenda is finally suggested to determine consumers' awareness of environmental justice, and their willingness to bear the costs associated with it.

Prothero, A. & Fitchett, J.A. (2000) argue that greater ecological enlightenment can be secured through capitalism by using the characteristics of commodity culture to further progress environmental goals. Marketing not only has the potential to contribute to the establishment of more sustainable forms of society but, as a principle agent in the operation and proliferation of commodity discourse, also has a considerable responsibility to do so.

**Objective of the Study** - One of the biggest problems with the green marketing area is that there has been little attempt to academically examine environmental or green marketing. While some literature does exist, it comes from divergent perspectives. This paper attempts to throw light on the conceptual issues associated with the need of going green and using Green Marketing technique as one of the tool for sustainable development.

**Research Methodology of the Study** - The present study is exploratory in nature to provide a clear guidance for empirical research. It is also descriptive where the focus is on fact finding investigation with adequate interpretation. For this purpose secondary data were collected. The secondary data were collected through newspapers, magazines, books, journals, conference proceedings, Government reports and websites. This paper attempts to throw light on the conceptual issues associated with the need of going green and using Green Marketing technique as one of the tool for sustainable development.

**Discussion** - According to American Marketing Association- Green Marketing refers to the marketing of products that are presumed to be environmentally safe. Thus green marketing includes many activities like product modification, changes to the production process, packaging changes, and many more. Yet defining the term Green Marketing is not a simpler task because several meanings intersect. An example of this will be existence of varying social, environmental, and retail definitions. Thus "Green Marketing" refers to holistic marketing concept where in procurement, production, Marketing, Distribution, Consumption, and disposal of products and services happens in a way that is less harmful to environment.

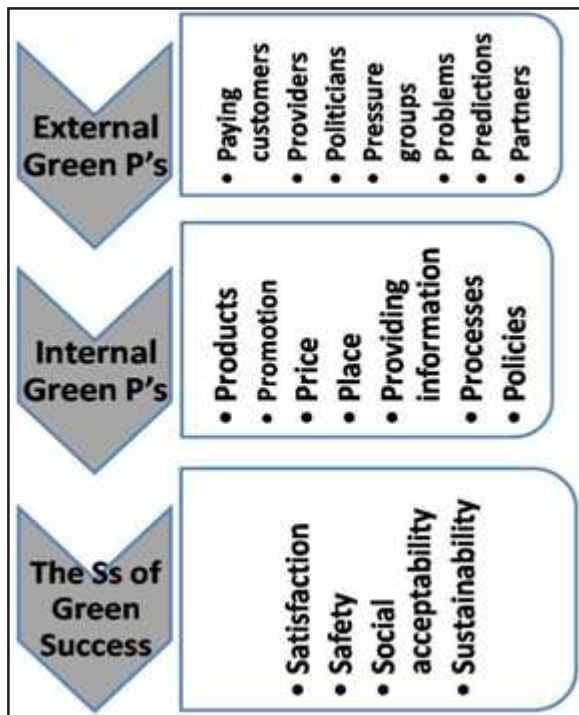
### Need for Going Green

**1. Corporate Social Responsibility:** An environmentally

responsible firm will always try to achieve environmental objectives as well as profit related goals. This can happen only when the board-room decisions progressively incorporate environmental issues into their own.

2. **Government Regulations:** Government across the globe has established regulations and regulatory authorities designed to control the amount of hazardous wastes produced by firms. Their inherent objective is to reduce the overall carbon-footprint. Not only firms, Government try to sensitize their citizens also to become more responsible towards environment
3. **Competition:** Competitors' environmental activities pressure firms to change their environmental marketing activities.
4. **Opportunities:** Cost factors associated with waste disposal, or reductions in material usage forces firms to modify their behavior. As resources are limited and human wants are unlimited, it is important for the marketers to utilize the resources efficiently without waste as well as to achieve the organization's objective. So green marketing is inevitable.

The Process of Green Marketing



#### Advantages of Going Green :

1. It ensures sustained long-term growth along with profitability.
2. It saves money in the long run, though initially the cost is more.
3. It helps companies market their products and services keeping the environment aspects in mind.
4. It helps in accessing the new markets and enjoying competitive advantage.
5. Most of the employees also feel proud and respon-

sible to be working for an environmentally responsible company.

6. A strong commitment to environmental sustainability in product design and manufacturing can yield significant opportunities to grow your business, to innovate, and to build brand equity.

**Challenges in Going Green - New Concept:** Indian consumer is getting more aware about the advantages of using green products. But it is still new for masses in India. The consumers need to be educated and made aware about environmental threats and how green marketing activities can help in saving our environment.

**Lack of Standardization:** It is found that very few marketing campaigns are green in true sense whereas others are merely commitment to society. Hence, there is lack of standardization to authentication of these claims. A standard quality control need to be implemented for such labeling and incensing.

**Long Term Investment:** The investors as well as corporate need to view this initiative as long term investment which surely will become source of return in future but it will take time.

**Avoiding Green Myopia:** All activities which company will plan under green marketing must be customer centric. Ultimately result of green marketing must be turned into benefit for the customer, why customer should buy product. Do this and motivate them, switch over them from other brands to our brands. This is surely going to happen but for that consumer must perceive their benefits more against their cost of opting our alternative.

**Opportunities in Going Green - Eco-friendly Behavior:** In India consumers have started preferring environment friendly products in their daily life. They have accepted herbal care products, recyclable products, eco-friendly packaging in products, energy saving products, non-toxic products, etc... even though they are costly in nature. This resulted an opportunity for companies to offer products which are environment friendly becomes popular brand for their stakeholders.

**Social Responsibility -** Many successful organizations have realized that it is important in today's era to become socially responsible organization by fulfilling its social responsibility. Financial Performance is important in evaluating company's performance along with that social performance is also added into scorecard of the organization. This results in environmental issues being integrated into the firm's corporate culture.

**Competitive Advantage:** It is important for company to maintain its competitive position in this dynamic competitive world. Innovative products, competitive prices, research and development, differentiated distribution strategy, packaging, procurement, promotion strategies have become conventional way to develop competitive strategy. Among this green marketing has given Lifeblood for many organizations as it turned into competitive advantage.

**Cost Reduction:** Reduction of harmful waste, reuse of water



in industrial manufacturing, reusable packaging, recyclable products, etc. has resulted into substantial cost saving for company. Certain firms use green marketing to address cost/profit related issues.

**Conclusion** - Both markets and consumers are becoming increasingly sensitive to the need to switch to green products and services. Therefore, firms are taking action to develop potential ecological approaches in the green market industry. The global emphasis on Green Marketing is primarily due to environmental concerns, climate change, global warming, water management issues, deforestation, etc. As the ecological issues are getting worse, the consumers' concerns about the environmental protection have led to the diversification in consumer buying approach towards a green lifestyle. While the shift to "green" may appear to be expensive in the short term, it will definitely prove to be indispensable and advantageous, cost-wise too, in the long run. Green marketing should not neglect the economic aspect of marketing. Marketers need to understand the implications of green marketing. Green marketing and green product development are useful techniques that are used by firms to increase competitive advantages and gain the satisfaction of consumers in order to achieve the firms' objectives. A good green marketing program is one that has strong linkages to local environmental groups and that achieves broad support from regional and national groups. In sum, companies should be ethical, meaning thereby that green washing should be avoided and they should strive to incorporate green strategies as far as possible, while creating awareness for the consumers also.

The study, by its integrative vision and novelty, can become a landmark with major implications for:

**Managers and ecopreneurs**, to acknowledge the positive impact of green marketing and to use the green marketing mix with the aim of reaching business profitability objectives, but also to inform, raise awareness, educate, and change consumer behavior, especially in countries that, similarly to Romania, have recently become preoccupied with sustainability;

**Educators**, to acknowledge the importance of education on environmental responsibility, and to adapt the educational system to the new requirements by introducing into the curriculum at all levels aspects regarding sustainability and environmental responsibility, both as related subjects and new subjects, and by developing educational projects in partnership with businesses and civil society (particularly, we consider important the implications for educators in marketing subjects); and

**Researchers**, to continue to deepen and widen the theoretical and applicative research directions that were

opened by the present research by diversifying and extending the research tools for, and the different perspectives and approaches to, such a complex subject.

This paper concludes that environment in today's era is one of the burning issue for government, academicians, society, and business at large. Everyone is addressing challenges posed by environment differently. Businesses have also responded to environment problems in many ways whereas the concept of green marketing emerged as solutions for many firms. This study also concludes that green marketing and specifically green marketing strategies are addressing the challenge with positive outcomes of improved organizational performance, better physical environment which will lead to sustainable development.

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# The Study of Antecedents of Brand Loyalty in FMCG Segments

Dr. Unmesh Mandloi \*

**Abstract** - True brand loyalty implies that the consumers are willing at least on occasion to put aside their own desires in the interest of the brand. The loyalty concept has been defined in a myriad of ways and measured in different ways. Service loyalty and customer loyalty appeared to be used interchangeably in the marketing literature resulting confusion about the most appropriate method of measurement. Loyalty includes both behavior and attitude. When both attitude and behavior are weak, no loyalty exists. Weak behavior means purchase of the brand is sporadic i.e. the same brand is not purchased consistently. When behavior is high but attitude is low, the customer has spurious loyalty. The main objective of this paper is to discuss and identify the antecedents of brand loyalty especially in FMCG segments. It uses primary as well as secondary data from the existing literature to describe the significance of each of these antecedents. In this study, the antecedents and relationships between brand loyalty and perceived switching cost, trust and corporate image is investigated. The data was analyzed by path analysis.

**Keywords** - Behavior, Brand Loyalty, Corporate image.

**Introduction** - Globalization and worldwide competitions have led corporates and industries to deal with many challenges. New development in technology and consumer behaviors has fetched many businesses to deal with advantages which last less than before. It becomes increasingly difficult for a company to differentiate its products as they are perceived as easily imitable and fairly standard and thus Brand Loyalty comes as a solution for creating a strong and long term competitive advantage for any business. Brand loyalty has been proclaimed by some to be the ultimate goal of 'Marketing'. In marketing brand loyalty consists of a consumer's commitment to repurchase the brand and can be demonstrated by repeated buying of a product or service or other positive behaviors such as word of mouth advocacy.

True brand loyalty implies that the consumers are willing at least on occasion to put aside their own desires in the interest of the brand. The loyalty concept has been defined in a myriad of ways and measured in different ways. Service loyalty and customer loyalty appeared to be used interchangeably in the marketing literature resulting confusion about the most appropriate method of measurement. Loyalty includes both behavior and attitude. When both attitude and behavior are weak, no loyalty exists. Weak behavior means purchase of the brand is sporadic i.e. the same brand is not purchased consistently. When behavior is high but attitude is low, the customer has spurious loyalty. When customer's attitude is high but behavior is low than it is called latent loyalty. False loyalty occurs when the customer has a limited choice of products.

Customers appear to be loyal because they continue to buy from a single seller but their apparent loyalty is due to a lack of good substitutes and they are actually unhappy with the product.

The main objective of this paper is to discuss and identify the antecedents of brand loyalty especially in FMCG segments. It uses primary as well as secondary data from the existing literature to describe the significance of each of these antecedents. In this study, the antecedents and relationships between brand loyalty and perceived switching cost, trust and corporate image is investigated. The data was analyzed by path analysis.

## Literature Review

The combination of the behavioral and attitudinal loyalty is a more valid and reliable method to measure customer loyalty [Jones and Taylor, (2007); Russell-Bennet et al., (2009); Oliver, (1999)]. The use of both behavioral and attitudinal components of loyalty was first proposed by Day (1969) and since then many other studies have proposed the use of behavioral and attitudinal elements in the conceptualization of brand loyalty [Baloglu, (2002); Day, (1969); Dick and Basu, (1994); Jones and Taylor, (2007)] because neither behavioral loyalty nor attitudinal loyalty alone cannot assess and analyze thoroughly the construct of brand loyalty [Baloglu, (2002)]. Despite the number of studies dedicated to it [Baloglu, (2002); Kumar and Shah, (2004)] there is no agreement between the researchers about the dimensions of customer loyalty [Jones and Taylor, (2007)] and only a few studies are focused on both dimensions simultaneously.



The literature has proposed the relationship that may exist between both dimensions of loyalty [Li and Petrick, (2008b)] indicating that the understanding of attitudinal loyalty can be a better predictor of future behavior than past one. There are different dimensions of brand loyalty in the literature and the result of different brand loyalty studies are not the same. The early studies have conceptualized customer loyalty as composed of one dimension, the behavioral one. From a behavioral view, customer loyalty is defined as patronage, the proportion of times a purchaser chooses the same product or service in a specific category compared to the total number of purchases made by the purchaser in that category [Rundle-Thiele and Bennett, (2001)]. Referring to this approach, customer loyalty is interpreted as repeated purchases that result in the extension of the purchases and expenditures with the same provider [Russell-Bennett et al., (2009)]. Only the customers who buy continuously from the same provider could be considered loyal ones. But, only the behavior indicators of loyalty do not represent an accurate framework of the reasons why these customers buy, the way customer loyalty is developed and the factors that cause it [Jacoby and Chesnut, (1978; Dick and Basu, (1994); Pritchard et al., (1999); Zeithaml et al., (1996)]. Different researchers [Dick and Basu, (1994); Jones and Taylor, (2007)]; [Reichheldt et al., (1990)] have criticized the use of the behavior approach of customer loyalty. They have emphasized that the conceptualization of customer loyalty must be done through the inclusion of attitudinal loyalty.

**Antecedents of Brand loyalty** - Consumer antecedents are Antecedents which relate to an individual consumer's behaviour, attitude or situation have been classified as consumer antecedents. This consists of different terms used by authors in different studies, such as nostalgia, emotions, and brand commitment and consumer attitude. Brand antecedents include all antecedents that are equated to the elements of the brand that determine value for individuals. Social antecedents include five different terms that authors have used to describe social influence on loyalty. The most discussed of these is the influence of peer groups or reference groups. Given the influence of online social networks on communication patterns, and the constant exchange of information, consumers' purchase decisions are increasingly guided by peer norms. In this light, consumers define their self-identity by being loyal to brands which reflect their social attachment to similar consumers in a group. Consumers may hold multiple cognitive associations about a company, such as its corporate ability, corporate evaluation, and corporate social responsibility. These factors in combination with consumer, brand, and social antecedents may influence brand preference, and thereby loyalty and profitability. However, there remain contradicting views about the effect of these antecedents. For example, research shows that firm ethicality only indirectly influences loyalty in the US market mediated by

product beliefs.

**Trust** - Trust occurs when one party believes that the other party's actions would result in positive outcomes for itself. Consequently, in order to trust a brand, customers should perceive quality as being positive. Trust has been recognized as an important role in affecting relationship commitment and so customer loyalty. It appears that if one party trusts another, it is likely to develop some form of positive behavioral intention towards the other party.

**Corporate image** - Corporate image is described as the overall impression made on the minds of the public about a firm. Corporate image is related to the physical and behavioral attributes of the firm, such as business name, architecture, variety of products/services, and to the impression of quality communicated by each person interacting with the firm's clients.

**Switching costs** - Switching costs as one-time costs facing the buyer when switching from one supplier's product to another's. In addition to objectively measurable monetary costs, switching costs may also pertain to the time and psychological effort involved in facing the uncertainty of dealing with a new service provider. Hence, switching costs are partly consumer-specific. For this reason, a switching cost can be seen as a cost that deters customers from demanding a rival firm's brand.

### Methodology and Research Design

**Measures** - All of the constructs in the model were measured using a multiple-item measurement scale. All measures used a five-point Likert-type response format, with "strongly disagree" and "strongly agree" as the anchors. A list of measurement items was developed using input from the review of the literature related to our study. All of the measures were translated from English into Hindi for better understanding of the respondents. In this study, the antecedents and relationships between brand loyalty and perceived switching cost, trust and corporate image is investigated. The data was analyzed by path analysis.

**Sample and data** - Data was collected from FMCG (Fast Moving Consumer Goods) consumers in the cities of Madhya Pradesh in India (Indore, Jabalpur, Bhopal and Gwalior). A total of 662 consumers were contacted over a six-week period via a structured questionnaire.

### Hypothesis for the study

**H1:** There will be a positive relationship between trust in the Brand and perceived switching cost.

**H2:** There will be a positive relationship between trust in the Brand and customer loyalty.

**Result and Discussion** - In this study, the antecedents and relationships between brand loyalty and perceived switching cost, trust and corporate image is investigated. To this end, the data was analyzed by path analysis. The results of the path analysis show that all of the factors have positive effects on customer loyalty. The analysis results reveal that trust is the most important determinant of customer loyalty. Even though perceived switching cost seemed to have the same level of effect on brand loyalty,

the switching cost should be considered as a more important factor due to its indirect effect. To measure customer loyalty (CL), the five-item scale was developed. Perceived switching cost (SC) was assessed by seven items. Regarding the measure of trust (TR), a five-item scale was developed by using different but complementary definitions. Structural equation modeling (SEM) was used to test the hypothesized relationships in this study. The structural equation modeling technique enables the simultaneous estimation of multiple regression equations in a single framework.

The data was analyzed via the maximum likelihood estimator of LISREL 8.3 by using the covariance matrix of the measured variables as input. Analysis reports goodness of fit indices, standardized parameter estimates and their t-values for the structural model. The overall chi-square statistic is significant (Chi square = 2759.99,  $p < 0.001$ ).

The findings indicate that trust in the Brand relates positively and significantly with perceived switching cost (H1:  $\beta_1 = 0.30$ ,  $p < 0.01$ ). This result supports H1. In the same way, as proposed in H4, trust has a positive and significant effect on customer loyalty (H2:  $\beta_2 = 0.59$ ,  $p < 0.01$ ). This result supports H2.

Path	Hypothesis	Estimate	t-Value
Trust perceived switching cost	H1	0.31	7.43
Trust Brand loyalty	H2	0.58	13.79

**Conclusion** - The constructs analyzed on this paper are considered important antecedents of brand loyalty and they have gained much attention in the marketing literature, in the last decades. The critical analysis of the literature suggests such antecedents are significant elements of the everyday focus of marketers. The analysis results reveal that trust is the most important determinant of brand loyalty. The switching cost should be considered as a more important factor due to its indirect effect. The general experience of marketing professionals also verifies that such an effect is valid. Perceived switching cost is influenced by trust and perceived service quality, whereas perceived service quality affects both perceived switching cost and trust. For this reason, perceived service quality relates both directly (0.09) and indirectly (0.18) to perceived switching cost. As regards trust, it has a direct effect (0.30) on perceived switching cost. These findings indicate that trust is a more crucial factor for perceived switching costs.

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# A Study about E-Marketing Practices towards Its Various Concepts

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**Abstract** - E-Marketing is the process of marketing a brand using the Internet. E-marketing means using digital technologies to help sell your goods or services. These technologies are a valuable complement to traditional marketing methods whatever the size of your company or your business model. The basics of marketing remain the same – creating a strategy to deliver the right messages to the right people. What has changed is the number of options you have. Though businesses will continue to make use of traditional marketing methods, such as advertising, direct mail and PR, e-marketing adds a whole new element to the marketing mix. Many businesses are producing great results with e-marketing and its flexible and cost-effective nature makes it particularly suitable for small businesses. Very simply put, e - Marketing or electronic marketing refers to the application of marketing principles and techniques via electronic media and more specifically the Internet. The terms e -Marketing, Internet marketing and online marketing, are frequently interchanged, and can often be considered synonyms.

**Key words** - Online Marketing, E-Marketing, Internet Marketing.

**Introduction** - E-commerce began to grow very quickly once methods to securely provide your credit card number became available. Consumers could now order products right from their home. Companies could reach customers all over the world. Online auction sites became very popular as people could sell their items to each other for a small fee. There also was an increased use of the internet as a source of advertising. Companies began to place ads on other websites to promote their products. Today pay per click advertisements benefit both the publishers of the websites and the company which has goods to sell. Affiliate programs are also very popular. They allow website owners to advertise products on their website and if a customer purchases the item, then the website owner gets a percentage of the sale. Internet has even been used as a primary source of advertising. Companies have created innovative advertising programs, sometimes referred to as viral marketing. Viral marketing seeks to create a buzz about a product through word of mouth. Some viral marketing plans even use alternate reality games in order to promote a particular product. The Internet changing the way we do business, the way we market, sell, service, distribute, communicate, and work. Businesses are already beginning to communicate with customers, distributors, suppliers, shareholders, and employees in a way that is truly one-to-one and real-time.

'Personalized' web sites are delivering tailored messages to an infinite number of target markets. These sites can change based on the user's buying and surfing habits, past usage of the site, demographics, relationship

to the company, and a multitude of the attributes which could be collected from the users online or culled from corporate legacy databases. The Internet has also become the most economical distribution system of information available. Companies can ship "bits" weightless electrons around the world at the speed of light, for a fraction of what it costs to ship heavy "atoms" at the speed of freight. In just a few years the Internet will be as essential of a business tool as the phone as what the phone and FAX are today. Intranets, real time transactions processing, and "customer self-service" are just the beginning. We are transitioning from static sites to dynamic and personalized sites, from broadcasting to narrow casting, from information dissemination to actual commerce.

**Objectives of the Study:** This study helps to understand about the concept of E – marketing. The study will help the management of Hikepar League in forming the future policies regarding sales promotion strategy. This is like descriptive method of understanding about how to promote your products or services while using internet. It will also describe what are the methods and strategies of E – marketing with advantages and disadvantages also.

**E-Marketing Mix:** The e-marketing mix is normally based and built upon the principles that govern the traditional offline marketing the well known 4 P's (Product, Price, promotion, Positioning) that form the classic marketing mix. Add extra 3 P's (People, Process, Proof) and you got the whole extended marketing mix. Until here, there are no much aspects to differentiate e-marketing from traditional marketing performed offline, the extended marketing mix

(4 P's + 3 P's) is built around the concept of "transactional" and its elements perform transactional functions defined by the exchange paradigm.

E-marketing uniqueness is a series of specific functions, relational functions, which can be synthesized in the formula: 2P + 2C + 3S (Personalization, Privacy, Customer Service, Community, Site, Security, and Sales Promotion). These 7 functions of the e-marketing stay at the base of any e-marketing strategy and they have a moderating character, unlike the classic marketing mix that comprises situational functions only. Moderating functions of e-marketing have the quality of moderate operate upon all situational functions of the mix (the classic 4 P's: product, price, promotion, and positioning) and upon each other.

The fundamental concept of personalization as a part of the e-marketing mix lie in the need of recognizing, identifying a certain customer in order to establish relations (Establishing relations is a fundamental objective of marketing). It is crucial to be able to identify our customers on individual level and gather all possible information about them, with the purpose of knowing our market and be able to develop customized, personalized products and services. For example, a cookie strategically placed on the website visitor's computer can let us know vital information concerning the access speed available: in consequence, if we know the visitor is using a slow connection (e.g. dial – up) we will offer a low volume variation of our website, with reduced graphic content and no multimedia or flash applications. This will ease our costumer's experience on our website and he will be prevented from leaving the website on the reason that it takes too long to load its pages. Personalization can be applied to any component of the marketing mix; therefore, it is a moderating function.

**E-Marketing Usage:** The point from where the visitors access the website (work or home) shapes customer needs and therefore the product usage. Thus, a list of the most popular parent companies can offer more insight into their website's usage. E-Marketing strategies can use such information to target their website offerings. Strategies might include special products, languages used, and the amount of interactivity and multimedia possible for work users (Strauss, El - Ansari, & Frost, 2003, p.223). Nielsen/Net Ratings findings on the Top 10 Parent Companies show the differences between work and home Internet usage ratings. Nonetheless, most of the top companies are in both categories. This proves that one website can offer different usages for various customers. See the table below for details:

#### Top 10 Parent Companies

Rating	Parent Name (Work)	Parent Name (Home)
1	Microsoft	Microsoft
2	Yahoo!	Time Warner
3	Time Warner	Yahoo!
4	Google	Google
5	United States Government	eBay

6	eBay	United States Government
7	InterActiveCorp	Ask Jeeves
8	Amazon	Walt Disney Internet Group
9	Landmark Communications	Amazon
10	Walt Disney Internet Group	InterActiveCorp

**Simple Steps to Start E-Marketing:** Starting e-marketing is easy but walking on the right path is not so easy. There are just too many options you can consider! However, typically I would recommend my clients to follow 6 simple steps to plan and start doing E – marketing and they are:

- Building an Effective Website – Firstly design an effective website for E – marketing to be successful. It is not only design and layout but also the real business strategy behind. We have to consciously to make our website effective for our business and engaging our customers interactively. A website will well perform 24 hour when it is being revised and updated according to the environmental changes with Compelling Messaging.
- Designing Compelling Messaging – It is really back to marketing basics about communications. We have to high play our products/services benefits rather than functionally in order to distinguish our differential advantages over competition. A lot of time, customers buying decisions are based on trust that builds on the success references. Before you get this right, E – marketing will never be a success.
- Sending Strategic E - Newsletters – E -Newsletters are so easy to send out if we have any emails of our suppliers, partners, customers and prospects. However, our compelling messaging must be ready before our E – Newsletters can be successful. In additional, we need to send out useful information or knowledge occasionally other than sales promotion in order to attract our target audience to keep subscribing your newsletter.
- Online Advertising – The most basic online advertising option I recommend is Search Engine Marketing. It is becoming mandatory for any companies nowadays to make sure companies information/advertisements are shown on the first page of search result. Without doing this, our website will just never be found in a very long while; other online advertising options can be Web Banner Ad on our target customers, populated website or contextual advertising, etc.
- Managing Customer Databases – When we start E – marketing, the next important thing is to keep up with our customer databases. This is very crucial because your customer database will grow throughout your E – marketing activities. The most basic way to do this is to use Excel or Outlook or any other mail clients but as we grow our customer database, it is better to adopt Customer Relationship Management software or an E – marketing campaign software.
- Building Alliances – No one can be successful by use



of only E – marketing and this is the fact! Hence, building alliances and letting our alliances to promote our products/ services in their websites and other channels are the key to success with E – marketing. Our potential return on investment (ROI) will grow even better than we can imagine.

#### **Advantages of E-Marketing:**

- The evolution of technology: Improvements in website design and the display of luxury products online allow consumers to more easily search through hundreds of brands and zoom in with amazing clarity to see the specific features of a product, which is significant when you're making more expensive purchases.
- Consumer trust: Over time, luxury consumers have become more comfortable shopping online as the overall site experiences continue to improve. These consumers expect the luxury experience to translate from offline to online to the degree that it can, and demand great customer service and flexible return policies.
- Shopping Anytime, Anywhere: The ubiquity of electronic devices has put more demands on retailers. Consumers now expect to be able to connect with their favorite luxury brands wherever and whenever they want. Luxury retailers and publishers need to work together to make sure the end-to-end shopping experience is optimized for conversion on desktop, i-pad and smart phones. If you are not at least measuring the traffic from each of these devices, you are already behind the curve.
- The right luxury product at the right price at the right time: "Discounting, coupons, and deals," are right price, at the right time. This makes a publisher's ability to curate products even more important. It's right up there with understanding luxury trends, hot brands, and seasonal patterns. Publishers that fully understand these elements stand to earn the most commissions. not typically in the lexicon of luxury online retailing, at least not with advertisers. That's not to say that luxury shoppers don't want great value because they do. For them it's about finding the right products, at the
- Luxury consumers are citizens of the world: When you consider the luxury audience of consumers, keep in mind that they live and travel all over the world. When you realize this, you quickly see how luxury online retailing will propel global affiliate marketing. Advertisers with advanced e-commerce capabilities to support multiple currencies and

languages, combined with the most flexible shipping and customer service policies, will endear themselves to the luxury shopper. On a related note, publishers also need to consider the geographic source of their traffic when curating products and developing promotional strategies.

**Conclusion** - As generations evolve and technology develops, the advancement in the field of marketing and advertisements has been immense. No longer are business bound by the limitations of traditional marketing techniques. The old has been heavily replaced by the new. One of the newest and most effective strategies has been of online marketing, which is the topic that this whole e – book was centered on. Online marketing utilizes the internet and its wealth of resources for promotional, profile – raising purposes.

After covering some types of online of online marketing, which included email marketing and social media marketing, we reviewed some of the common trends and shifts that resulted from this advancement. The main point that was highlighted was how unique internet advertising is, as compared to its traditional counterparts. Internet marketing is all about being available whenever and wherever customers may need you, rather than just popping up once in a while for attention.

Modern market has transferred to the online world where companies can now reach customers worldwide, using different forms of online marketing. Not only this increases the potential customers, but also provides companies with the chances of establishing the position on global market and thus reaching for greater success and achievement of long – term goals.

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# A Study On Consumer Perception Towards Green FMCG Products

Nafees uddin Siddiqui\*

**Abstract** - The study of this research aims to create an immense level of awareness among the youth on Consumer perception Green FMCG Products and findings will not only bear results as to how adversely and positively is the youth affected by the usage of these Product but also will help the youth to understand the usage of these Green FMCG Product, , are a few such sites that attract maximum of the youth to tune in to them and thereby embodies their own merits and demerits that desperately need to create an actual usage among the youth .

**Keywords** – Social networking sites, Facebook, Twitter, Internet.

**Introduction** - A consumer is a person or group of people, such as a household, who are the final users of products or services. The consumer's use is final in the sense that the product is usually not improved by the use. In order to function effectively in a complex human society, we need to perceive the behaviour, current moods and traits of the persons around us. This is known as social perception. It is also called as interpersonal perception. It is concerned with how one individual perceives other individuals.

The consumer is the one who pays to consume the goods and services produced. As such, consumers play a vital role in the economic system of a nation. In the absence of effective consumer demand, producers would lack one of the key motivations to produce to sell to consumers.

Typically , when business people and economists talk of consumers, they are talking about the person as consumer, an aggregated commodity item with little individuality other than that expressed in the decision to buy to not to buy . However, there is a trend in marketing to individualize the concept. Instead of generating broad demographic profiles and psycho - graphic profiles of market segments, marketers have started to engage in personalized marketing, permission marketing, and mass customization.

**FMCG companies are behind the biggest brands in the world.** FMCG is all about names, the products which everyone recognizes from trips to the supermarket or from ads on television. The brands that make up this sector are the high profile ones, the ones everybody knows and loves. Think Coca-Cola, Dettol and Dove. This is an industry that puts you in living rooms, kitchens and bathrooms across the globe.

Green is the flavor of the season and people from all over the world are trying to find methods to go green. The eco-consciousness of the people is slowly increasing and

this is the right time that we take up the cudgels in our hand to save our dear earth from getting destroyed by our silly deeds. If you are not trying to get yourself something green then here is a list of the top 3 green products that can help you to achieve what we all green lovers are also striving for.

**a) Green Energy-** This is the most important and placed at the top of the list and you are not going to get extra marks for guessing that we meant the solar powered or electric powered cars. You can easily add the conversion kits to get yourself a green car that is both environment friendly as well as a big time money saver.

**b) Green Financial Products:** You may also help the green movement of the world by buying the shares or other financial products from the companies that are somewhere directly related to the green movement. This is for all those who feel that they are part of the green movement but in a passive way.

**c) Green FMCG Products:** The FMCG products that are using the herbal ingredients instead of the synthetic chemicals can provide you the chance to provide the real impetus to the green movement.

**OBJECTIVES OF THE STUDY** - The following are the objectives of this study:-

1. To study the consumer attractiveness towards green products in FMCG sector.
2. To know the factors responsible for creating consumer attraction

## LIMITATIONS OF THE STUDY

- Many respondents were looking for their own benefits and were not interested in filling the questionnaire.
- The sample size of the research is however 100 but many a times the intellect of respondents were of the same level (especially when the questionnaire was distributed in group of friends) which later showed that

their responses were mostly similar.

- Time period is a limitation as the research had to be completed in just a period of few busy months.
- The study was conducted in a limited geographical area i.e. Indore and cannot be generalized.

## REVIEW OF LITERATURE

**Brandweek (2009)** in their study found consumers to be very willing to go green. But the product must not compromise the lifestyle of her family. As long as the green product is of high quality and is reasonably priced this consumer is very reachable.

**Manget (2009)** BCG's study looked at ingestible products, products applied to the body, wearable products, plug in products and disposable products. Although results did vary between products almost half of the respondents in the countries surveyed indicated that green products offer comparable or superior quality over conventional alternatives.

**Ridgely (2008)** found that the consumer seems to be in favor of green but whether or not the consumer is willing to pay for green remains unanswered.

**Mintel (2008)** found that consumers claim to care about the environment but seem to only make green purchasing decisions when there are immediate and tangible benefits other than being more environmentally friendly.

**Ottman (2002)** states that 42% of people think that green products don't work as well as conventional ones. Green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising.

**(Hackett, 2000)** Green marketing has not lived up to the hopes and dreams of many managers and activists. Although public opinion polls consistently show that consumers would prefer to choose a green product over one that is less friendly to the environment when all other things are the equal, those "other things" are rarely equal in the minds of consumers.

**Hawken (Ecology of Commerce, 1995)** business has three issues to face. These are what it takes, what it makes and what it wastes. What it takes is materials from the environment, (its ecosystem) through extracting, mining, cutting, hunting and other means. What it makes is the products of commerce, goods and services that are derived from the natural environment through the process of conversion and transformation. What it wastes represents eco-costs arising from garbage, pollution and destruction of natural systems, which are the consequences of taking and making processes.

**(Polonsky, 1994).** World-wide evidence indicates people are concerned about the environment and are changing their behavior accordingly. As a result there is a growing market for sustainable and socially responsible products and services. (Environmental protection agency -2000)

**Neff (2007)** in their study found that, Hispanic and Asian populations are more likely to be green consumers than African Americans. Consumers with higher education levels

are more inclined to buy green.

**Sridhar and Mishra (2010)** analyzed that the rationale and method for studying product adaptation in rural markets and concluded that the findings of the study are contrary to the general understanding that rural is perceived very differently and hence operationalized differently by different organization. However, the results show that contingency theory holds true in case of product adaptation in rural markets also. With the increase in executives representation of rurality, product adaptation degree also increased.

**Vaishnani (2012)** examined and measured brand equity perception with reference to sales promotion schemes for selected FMCG products and it is concluded that there is no significant difference between of brand equity perception among gender as one of the demographic variables. Apart from it, it is concluded that there is significant difference between brand equity perceptions among various employment status. Adding to it, it is clear that self employed consumers compare to not employed consumers perceive sales promotion schemes less favorably. Furthermore, it is concluded that there is no significant difference between brand equity perception and educational qualification.

**Franco, et al. (2012)** analyzed and focused on use of modern portfolio theory in price promotions, which have become a key component in the marketing mix of stimulating sales, particularly in the FMCG environment. The hypothesis of this study is that previous limitation of modern portfolio theory in marketing can be overcome through use of brackets of price promotion. This is proven through study of FMCG data and it is shown that price promotions can be optimized to improve return without increased risk.

**Purpose of the study -** The purpose of study was to investigate the consumer attitudes and perceptions towards eco-friendly products in FMCG sector and their willingness to pay on green products. This study was based on both primary and secondary data. The primary data were collected from the sample survey that was conducted in the three districts in western province such as Colombo, Kalutara, and Gampaha. 160 respondents were selected for the survey and respondents were asked to answer the prepared questionnaire. The questionnaire was designed to obtain the consumers attitudes and perception regarding eco-friendly FMCG products under four value added areas such as product designing, packaging, place and promotion that lead towards the motivation of consumption. The secondary data were collected from relevant journals, books and other published data.

The study revealed that the green products have substantial awareness among Sri Lankan customers and they are willing to pay something more on green products. The majority of customers considered that package is most important element of such products. The researchers have recommended some marketing strategies to meet changing mind set of customers towards the green products.

**RESEARCH METHODOLOGY** - Research is a process in which the researcher wishes to find out the end result for a given problem and thus the solution helps in future course of action. The research has been defined as "A careful investigation and enquiry especially through for new fact in any branch of knowledge."

**Research Type** - My research is exploratory research based on the relationship between selected variables. It also includes Descriptive Research which helps to describe the characteristics/profiles of a certain group, test hypothesis generated by exploratory research.

#### **RESEARCH OBJECTIVE:**

**(a) Primary objective** - To study the consumer perception towards Green FMCG Products.

**(b) Secondary objective** - To study the consumers Perception towards green products in FMCG sector and their impact on purchasing decision.

- To evaluate consumer attitudes and perception regarding green products in FMCG sector under five value added areas such as product, price, place, promotion and package that lead towards the motivation of consumption.

#### **RESEARCH SAMPLE:**

**(a) Sample Method:-** Random sampling will be done to get response of different consumers.

**(b) Sample Size:-** The sample size chosen for this study is 100 respondents.

**Tool for DATA COLLECTION** - Data will be collected using Questionnaire. This method is quite popular in case of big enquires. Private individuals, research workers, private and public organizations and even government are adopting it. A questionnaire consists of a number of question involves both specific and general question related to customer perception towards Green FMCG products.

- **Sources of data** - The two sources of data collection are namely **primary & secondary**.

- **Primary Data** - The primary data collected through questionnaires administered to a sample of 100 consumers selected from Indore district, the Questionnaire will pre-Designed and pre-tested before it was administered.

**Secondary Data** - Secondary data was collected through various publications of newspapers, magazines, books and magazines, websites, literature available related to our research, journals, books, and many like this.

In our research Secondary data is collected from the following sources:

1. FMCG Industry Research Reports
2. Reports of Various FMCG Companies
3. Government of India- Sectoral Reports
4. Other Publications.
5. Journals available in the college.
6. Internet through websites.
7. Information available on Wikipedia and different-different research online journals.

**Population:** All the customers of Indore city.

**Sample selection:** The subset of the population is called sample which contains some elements selected from the

population. The process of selecting a sufficient number of elements from the population is known as sampling. The sampling enables the researcher to discover patterns or characteristics of the population. The following sample was selected for this study.

**The sampling unit:** Sample size of 100 consumers of the Indore city in Madhya Pradesh is taken in study. The respondents are selected by convenience sampling method. Respondents were selected from those peoples who were willing to fill the questionnaire and at the same time were competent enough according to my criteria. The sampling procedure applied by me is convenient sampling method. This facilitates getting answers aligned with the objectives of my research.

#### **Findings:-**

##### **Section1:demographical**

- The study shows that maximum number of respondents is p.g.
- Maximum number of respondents is from 18 -25 age group.
- Monthly income of maximum respondents is below 10000 rs.
- Maximum numbers of respondents are male i.e.; 63 Percent.

##### **Section2:Preference measures**

- 34 Percent of respondents use cosmetic and 66 percent of respondents uses non cosmetics products.
- 50 percent of total respondents know about green FMCG product. that means more customers are know about green FMCG products.
- 41 Percent of respondents use green FMCG Products regularly.
- 41 Percent of respondents says that advertisements of green FMCG Products attract them to purchase the products.
- 40 Percents of respondents says that ingredients of the products attract them to purchase the green FMCG products.

##### **Section3: Perception measure**

- 32 percent of respondents believes that green FMCG Product are good for the environment.
- 48 Percent of respondents says that green FMCG products are also healthy and the green FMCG products have no side effect after using the products.
- Maximum respondents believes that green FMCG product have better quality performance than conventional products.
- Maximum numbers of respondents says that green FMCG products have more affordable prices.

##### **Section4: Attitude measures**

- Maximum number of respondents pays attention on green FMCG Products.
- 38 percent of respondents understand the information about green FMCG Products.
- 32 Percent of respondents are willing to pay a premium price to purchase green FMCG products.



### Section 5: Consumer Intention Measures

- 45 percent of want to show there positive image of their personality (healthy and eco-friendly)
- 49 percent of respondents was satisfied with the green FMCG Products.
- Mostly respondents don't purchase products on unplanned decision.

**Conclusion** - The research shows that most of the customer's are aware about Green FMCG product's. It shows that consumers have a strong positive attitude towards Green FMCG Products and they have more awareness about environmental issues. "In future more and more consumers will prefer Green products." Consumers have some knowledge toward green FMCG products and more customers are using green FMCG products on the regular basis. They believe that ingredients of products attract them to purchase products. All over the behaviour of consumer toward green FMCG products were positive. Customers want to use the green FMCG Products.

In research founded that because of the demand of green FMCG Products are increasing customers are aware about green FMCG products and want to purchase green FMCG Product and company should also focus on that. Mostly people believes that if company will work and conduct some research and development programmes they can grow up there self. In today because of unhealthy environment consumer are more conscious about their health and in future most of the consumers will prefer green FMCG products.

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# Ethical Values of Holistic Dimensions in Professionalism: A New Spectrum in Modern Era

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**Abstract** - The current century has referred to 'The age of professionalism' and this study indicates a necessity of ethical approach towards the working atmosphere with holistic approach in any profession. The study is further trying to emphasize on the moral values and ethics in various practical working stages. The efforts to understand the real root cause and the condition of companies and professional entities loop holes or dilemma. In today's era, holistic dimensions and ethical approach have parallel foot prints with acquiring an array of scientific as well as holistic foundation of development. This study is seeking for the factual reality and necessity of ethical platforms for the heights of professionalism. Through this study the professionals of industries and organizations should be able to recognize their own basic values, ethical morality for introspection and evaluations to analyze the intellect and emotional components of beliefs and instincts. This new spectra of rainbow with the colors of ethical values helps the professionals to acquire skills to recognize their own assumptions or evaluations. This study further helps to develop understanding of ideological premises of working era to develop a defensible rationale of resolving professional conflicts based on the key factors of ideological and holistic approach towards science.

**Key words** - Ethics, Value, Professionalism, Spectra, Dimension

**Introduction** - "Examines our most common decision-making failings with engaging eloquence and describes how to counter them with instructive good sense" - By ROBERT CIALDINI

The purpose of this study is not to talk about ethics but try to insist on the foundation of moral values to analyze business issues followed by a variety of perspectives on difficult ethical dilemmas. Professional ethics is the art and discipline of applying ethical principles to examine and solve complex moral dilemmas of what is right and what is wrong? Good and bad? In professional transcends. There are ethics and principles guidelines that can help individual screen the rightness and wrongness of decision and behaviour before an impulsive or random act causes unforeseen negative consequences. In an international survey of almost 300 companies worldwide, more than 80 % of chief executives and senior managers listed the following as top ethical issues facing business employee conflict of interests (91%); inappropriate gifts (91%); sexual harassment (91%); unauthorized payment (85%) and affirmative action issues (84%). Additionally, a national survey of 1,400 working women showed that the most frequently occurring unethical practices in business include managers leg pulling employees; expense account abuses at high levels; nepotism and favoritism; and taking credit of others' work.

The main theme of the organizations and the professionals in the 21<sup>st</sup> century is the creation, integration

and management of change and adaptability on the concrete platforms of ethics and value. To understand and manage a wide range of concepts like behavioral interventions, diversity in ethics and value and technological advancement are the driving forces of performance and integrated development. Professionalism due to industrial revolution changes the shape of interrelationships in an increasingly today's diverse atmosphere in workplace. In the industries and companies, these era of professionalism have created the competitive, survival environment that emphasizes increased productivity but on other side the decreased the values and morality.

"Profession @ speed of work" without thinking over the values or morality as a result the era of the boundary less or seamless corporation has arrived in managing organization wide diversity illustrates through : Framework for guiding organizational change for managing and valuing cultural diversity

## Leadership

- Top management commitment and support
- Steering and advisory groups
- Communications strategy

## Changes in culture and management systems

- Recruitment
- Orientation
- Performance appraisal
- Compensation and benefits
- Promotion



- Training and development

#### Follow-up

- Evaluation process
- Accountability
- Ensuring continuous improvement

#### Education

- Awareness training
- Development of in-house expertise
- Orientation programs
- Advanced training

#### Research/ Measurement

- Comprehensive organizational assessment
- Baseline data
- Benchmarking

**SOURCE:** Adopted from cultural diversity in organizations, theory, research & practice (San Francisco: Barrett-Koehler, 1993)

Managing diversity means “managing in such a way as to get from a heterogeneous workforce the same productivity, commitment, quality, and the profit that we got from the old homogeneous workforce.” It is important to point out that diversity includes not only ethical or cultural diversities but also age, gender, education, work experience, income, marital status, religious beliefs, physical and mental abilities and behavioural aspects. Managing ethically starts with the leaders of any organization who direct and frame the authorize policies, directives and procedures and interactions. If professionalism is based on cultural values and ethical approaches in any organization it creates an issueless working atmosphere and that is long lasting and fruitful for successes and growth of any organization.

The success or effectiveness of any Organization or any professional organization is relay on the core values, mission and quality of professionals both individual and group in organization

The following timeline was developed by Jerry O'Brien at the Ethics Resource Centre and is included to provide some perspective on the ethics and values implications of major business developments from Ethics Resource Center,” Business ethics timeline “www.ethics.org.

**1) 1960s Ethical climate:** Social unrest Anti-war sentiment. Employee have an adversarial relationship with management, Values shift away from loyalty to an employer to loyalty ideals. Old values are cast aside.

**Major ethical dilemmas:** Environmental issues, increased employee-employer tension, civil rights issues dominate, Honesty the work ethics changes, Drug use escalates.

Ethical development in professionalism: Companies begin establishing codes of conduct and values statements, Birth of social responsibility movement, Corporations address ethics issues through legal or personnel departments.

**2) 1970s Ethical climate:** Defense contractors and other major industries riddled by scandal. The economy suffers through recession Unemployment escalates. There are heightened environmental concerns the public pushes to

make business accountable for ethical short coming.

**Major ethical dilemmas:** Employee militancy( employee verses management mentality ), Human right issues surface (forced labor, sub-standard wages, unsafe practices), some firm use to cover rather than correct the dilemmas.

Ethical development in professionalism: ERC founded (1977), Compliance with laws high lightened, Federal Corrupt practices Act passed in 1977, Values movement begins to move ethics from compliance orientation to being 'value centered'.

**3) 1980s Ethical climate:** The social contract between employers and employees is redefined Defense contractors are required to conform to stringent rules. Corporations downsize and employees 'attitudes about loyalty to the employer are eroded Health care ethics emphasized'.

**Major Ethical dilemmas:** Bribes and other illegal practices contracting, Influence peddling Deceptive advertising financial fraud (savings and loan scandal). Transparency issues arises.

Ethical development in professionalism: ERC develops the U.S Code of Ethics for Government Services(1980), ERC forms first business ethics office at G ENERAL Dynamics (1985), Defense Industry Initiative established (1986), Some company create ombudsman positions in addition to ethics officer roles False claims Act ( government contracting )

**4) 1990s Ethical climate:** Global expansion brings new ethical challenges. There are major concerns about child labor, facilitation payments (bribes) and environmental issues. The emergences of the internet challenges cultural borders. What was forbidden become common?

**Major Ethical dilemmas:** Unsafe work practices in Third World countries, Increased corporate liability for personal damage (cigarette companies etc ), Financial mismanagement and fraud.

Ethical development in professionalism: Federal Sentencing Guidelines(1991), Class action law suits, Global Sullivan Principal (1999), In re Caremark (Delaware Chancery Court ruling re Board responsibility for ethics), IG requiring voluntary disclosers, ERC establishes international business ethics canter, Royal Dutch/Shell International begin issuing annual reports on its ethical performance.

**5) 2000s Ethical climate:** Unprecedented economic growth is followed by financial failures. Ethics issues destroys some high profile firms. Personal data is collected and sold openly. Hackers and data thieves plague business and government agencies. Acts of terror and aggression occur internationally.

**Major Ethical dilemmas:** Cybercrime, Privacy issues (data mining), Financial mismanagement, International corruption, Loss of privacy – employee's verses employer's, intellectual property theft.

Ethical development in professionalism: Business regulations mandate stronger ethical safeguards(Federal Sentencing Guidelines for Organizations; Sarbanes Oxley

Act of 2002), Anticorruption efforts grow, Shift to emphasis on Corporate Social Responsibility and Integrity Management, Formation of international ethics centers to serve the need of global business, OECD Convention on Bribery (1997-2000).

Through this Analytical report the study arises the discussion that in business working it's not like Robert to follow only instructions, but it is the matter of survivalist.

Workplace did not work of their own working strategies, procedures policies rules and regulations are for the employees for the issue less working atmosphere indirectly for overall development and growth of organizations. Based on core values of organization to support the implementation of the values which appear to be. Finally, near to conclusion this study suggested that using a reflective approach before acting impulsively generally based on practical approaches which drives illegal or unethical consequences. There are examples of some introspection questions like Have I asked how this happened? Have I used Who, What, When, Where, How, Why or trying to find reasons how others would be affected? Moreover, There are several test, concept and question tags like write an ethical dilemma you are now facing or have experienced over the past year?

**Exposure Test Public** - "What action should I take if I knew it would be tomorrow's headline in my city's newspaper?"

**Harm Test:** "Will the action I take hurt anyone?" **Regret Test:** "Will I regret having taken this action tomorrow, in a week or in a year?" and **Motive Test:** "What is my motivation and intention in taking this action?" These type of ethical test and introspection question and self-talk are commonly generates in working atmosphere in everyday organization in professional life as answers of these questions are self-motivating and enhances the personality that is indirectly related to organizational growth.

**Conclusion** - Last but not the least, through this study it reflects that the morality and values are the root on which the fruit of success lies so, professional should always behold these values in their heart of commitment for excellence, law abiding, honesty, respect for others, loyalty

, Reputation & morale, fair dealings Concerns for others, mark words and at last integrity. The core values of any organization has to be formulated clearly based on values, ethics, principle according to profession which are the part of internal compasses that influences not only their personal ethics but also their skills and attitudes. The ethical values in professionalism requires socialization & internalization. For the effectiveness of internalization organization need to encourage its members to make follow the value system, conviction, realization, trust in day to day working. Values are the main constituent in individual professional that motivates human resources. Major nine prevailing work related values are

1. Recognition for competence and accomplishments,
2. Respect and dignity
3. Personal choice and freedom
4. Involvement at work
5. Pride in one's work
6. lifestyle quality
7. Financial security
8. Self-development and
9. Health and wellness.

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# A study on impact of performance management on the organizational performance

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**Abstract** - In the current business world humans are considered as the success factor for any business. For this reason reputed business firms are trying to hire the best human resource that is available in the market so that the firms can maintain its image and goodwill in the future as well. The main objective of this is to find that PM is helpful to improve the productivity of the employees and how PM is linked with the training needs of the employees. Another aim is to find out that how this is helpful to increase the revenue and profitability of the firm for the current research study qualitative research is used because it gives the brief information and understanding of theories. In order to get the broader view of respondents, qualitative research will help a lot. Training and the development in the organization leads to greater benefit.

**Keywords** - Performance management, PA process.

**Introduction** - This study focuses on analyzing and exploring the impact of performance management system on employee performance. According to Chan and Lynn (1991), the organizational performance criteria should include profitability, productivity, marketing effectiveness, customer satisfaction, but also employee morale. In this perspective, employee performance is tightly related to organizational performance, effective and efficient employee performance will positively influence organizational performance. On the other view, Millar (2007) built a framework of talent management which consists of planning, recruiting, performance, learning, career development, succession planning, compensation, and measuring and reporting

The reason why I chose this research topic is that nowadays there are many organizations that are relying on employees for success and competitiveness. According to the resource-based view, employees are the resources and assets of an organization. Consequently, organizations need to figure out strategies for identifying, encouraging, measuring, evaluating, improving and rewarding employees' performance at work. According to this respect, performance management and appraisal systems have come to play an indispensable role in helping organizations to reach their goals of productivity. In fact, human resource management practices could influence the behaviors of individual employees. The impact of Human Resources (HR) practices on employees' commitment and performance depends on employees' perception and evaluation of these practices.

Performance management is a process for ensuring employees focus on their work in ways that contribute to

achieving the organization's mission is indispensable for a business organization. Actually, performance management includes various types or system. Performance management system is a kind of performance management forms. Supervisors and managers are responsible for managing the performance of their employees. Each organization's policy should specify how the performance management system will be carried out. Organizations should adopt performance management practices that are consistent with the requirements of this policy and that best fit the nature of the work performed and the mission of the organization.

To conclude, this topic would be interesting and meaningful for any organization because the performances of employees have a significant relationship with organizational performance. Also, understanding how HRM practices influence employee performance could help organizations setting up a better management system, and finally improve employee performance and organizational performance

## LITERATURE REVIEW

In order to answer these questions, I need to do a literature review which is a body of text that aims to review the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic.

According to Otley (1999), a general performance management considers such problems: "What are the key objectives that are central to the organization's overall future success, and how does it go about evaluating its achievement for each of these objectives? What strategies and plans has the organization adopted and what are the

processes and activities that it has decided will be required for it to successfully implement these? How does it assess and measure the performance of these activities? What level of performance does the organization need to achieve in each of the areas defined in the above two questions) and how does it go about setting appropriate performance targets for them? What rewards will managers (and other employees) gain by achieving these performance targets (or, conversely, what penalties will they suffer by failing to achieve them)? What are the information flows (feedback and feed-forward loops) that are necessary to enable the organization to learn from its experience) and to adapt its current behavior in the light of that experience?"(Otley, 1999:365,366)

According to Fletcher (2001), who gave a completed and comprehensive HR related performance management definition which is "an approach to creating a shared vision of the purpose and aims of the organization, helping each individual employee understand and recognize their part in contributing to them, and in so doing manage and enhance the performance of both the individual and the organization". Similarly, performance management is a management process for ensuring employees is focusing on their work efforts in ways that contribute to achieving the organization's mission. It consists of three phases: (a) setting expectations for employee performance, (b) maintaining a dialogue between supervisor and employee to keep performance on track, and (c) measuring actual performance relative to performance expectations. Armstrong (2004) defined performance management as a means of getting better results from the whole organization by understanding and managing within an agreed framework, performance of planned goals, standards and competence requirements. "Performance management is a process of designing and executing motivational strategies, interventions and drivers with on objective to transform the raw potential of human resource into performance. All human beings possess potential within themselves in a few or more functional areas. However, utilization and conversion of this potential into deliverable performances is often sub optimal due to a variety of reasons. Performance management acts as an agent in converting the potential into performance by removing the intermediate barriers as well as motivating the human resource".

Developing a performance management system is essential for an organization. Developing a performance management system, according to Schneier, Beatty and Baird (1987), is classified into a development, planning, managing, reviewing and rewarding phase. In 2000, Macky and Johnson suggested that a typical performance management system would include: the organization communicates its mission/strategies to its employees; the setting of individual performance targets to meet the employees' individual team and ultimately the organization's mission/strategies; the regular appraisal of these individuals against the agreed set targets; use of the results for

identification of development and/or for administrative decisions; and the continual review of the performance management system to ensure it continues to contribute to the organizational performance, ideally through consultation with employees.

Fletcher (1996) suggested that the main building blocks of a performance management system approach include: development of the organization's mission and objectives; enhancing communication within the organization so that employees are not only aware of the objectives and the business plan, but can contribute to their formulation; clarifying individual responsibilities and accountabilities; defining and measuring individual performance; implementing appropriate reward strategies, and developing staff to improve performance, and their career progression further in the future.

**PERCEPTION OF PERFORMANCE APPRAISAL IN ORGANIZATION** - It revolves if PA gives a positive impact or a negative impact to the employees. It shows whether the employees get motivated to perform better, if they receive a good feedback or do they get de-motivated and loose interest in their job. So far, we have come across the purpose, uses of PA in the organization, but the perception i.e. the understanding of PA is not taken into consideration in most cases which is important for the employee as well as the organization. If the employees don't recognize this, then they would suffer unnecessarily in the organization the reason being that, an employee has a certain level of expectation from his company when he joins it; he expects some kind of growth from it, also the organization expects a lot from him. But, a negative feedback of performance would largely hamper him mentally and make him loose his interest in his job. There would be change in his attitude, which would be problematic for him as well as the organization. He would be de motivated to achieve the organizational objectives.

**OBJECTIVES OF THE RESEARCH** - The main objectives of this study are as follows

- To find that PM is helpful to improve the productivity of the employees
- To find that PM is linked with the training needs of the employees
- To find that PM is helpful to increase the revenue and profitability of the firm

## **RESEARCH METHODOLOGY -**

### **Research Design**

**What is the study about?** Study is about defining Performance management system.

**Why is the study being made?** : Performance management system is critical for talent management. PMS is critical in strengthening employer expectations. Study being made to identify how strong PMS impacts key HR processes viz compensation and benefits, training and development, recruitment and selection..

**What type of data is required?** : This study will require primary data and secondary data. Data collection will do by



designing appropriate questionnaire and conducting semi structured interviews.

#### **TYPES OF DATA COLLECTION:-**

**Primary Data :** "Primary data is that which is collected fresh and for the first time primary data is also called basic data or Original data." –

- Through Questionnaire
- Through Interaction with Employee.

**Secondary Data :** "Secondary data means data that which has been used previously for any research & now is use or the second time."

- Through Magazines
- Through Industrial Documents
- Through Website Of Industry
- Analysis Technique: - Random Sampling and Questionnaire technique selected by researcher to collect the data from the respondent
- Data Presentation: - PIE CHART

**APPLICATION** - The research method was done keeping the research objective in mind. The research method adopted for this research was qualitative and quantitative research method. Qualitative research method helps to understand multi-dimensional, dynamic picture of a subject of study. Quantitative data will help to know about the profitability of the company. The research tactics adopted for the research were done in the form of primary data source and secondary data source. Primary data was obtained in the form of structured interviews. The questions designed for these interviews were open ended. The secondary data was obtained in the form of reports, books, journals etc. A theoretical sampling method of Bryman and Bell (2003) was adopted for data analysis method.

**CONCLUSION** - Under the rapid development of organizations, performance appraisal is considered as an important tool which is necessary in order to provide the correct output i.e. performance to the company. With performance appraisal in the organization, the employee is in a position to know his strengths and weaknesses and can consolidate his strong areas and improve his weaknesses. The appraisal system should be wide-ranging in nature. It should provide a thorough developmental process to the employees.

The research mainly was focused on exploring the effectiveness of performance appraisal. The literature

review provided an overview on the evolution of the performance appraisal and the other purposes and perception of performance appraisal system. The research method chapter provided a detailed explanation in the research process.

This research is based up on the performance management system. The main purpose of the research was to describe and analyze the implementation of performance management system. This was done in detail in Methodology and Analysis chapter, which included a thorough review of documentary evidence, interview and questionnaire information and participant observation to provide a detailed description and analysis of the implementation of the performance management system from its inception.

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# A Study on Consumer Preference for Fast Food in Indore City

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**Abstract** - The study of consumer preferences on fast food items is so much important as it investigates the trend and pattern of fast food consumption and the importance of various factors affecting the choice of fast food among the consumers. In today's world, the habit of taking fast food is changing very fast. People who are living in the city have high tendency to consume fast food compared to the people living in the rural areas. The reason for the change is the time factor. They do not have much time to prepare food at their home. As society develops, the economic activities also expand. Therefore, people become busy and that discourages them to prepare food at their home. As such, the only alternative is to consume food that is prepared by others and preferably light in nature. While people select fast food, a number of factors are considered by them. The main purpose of this study is to understand and evaluate the factors affecting consumer's preference of fast food items in Indore city. Taste, price, ambience and location have been taken as independent variables and brand preference has been taken as dependent variable in the study. The study has been adopted the descriptive and causal research design.

**Keywords** - Consumer Preference, taste, consumption pattern.

**Conceptual Framework** - Consumers' preferences on fast food are very strong in some societies. This is because of the parallel changes in working and social life and habits of dining out. In social context, gradually the numbers of working families are increasing worldwide. Consumer Preference is the term in which consumer like one thing over another. The earlier researches examine that consumer prefer mainly to select an option that is the most likely among the number of options by consumer have to satisfy his/her need or desire. The result of their behavior that consumer prefer by showing while purchasing or searching the product. The study of consumer preferences on fast food items is so much important as it investigates the trend and pattern of fast food consumption and the importance of various factors affecting the choice of fast food among the consumers. In today's world, the habit of taking fast food is changing very fast. People who are living in the city have high tendency to consume fast food compared to the people living in the rural areas. The reason for the change is the time factor. They do not have much time to prepare food at their home. As society develops, the economic activities also expand. Therefore, people become busy and that discourages them to prepare food at their home. As such, the only alternative is to consume food that is prepared by others and preferably light in nature. While people select fast food, a number of factors are considered by them.

In recent years, the major food consumption trend in urban parts of developing countries is that more consumers are eating increasingly more meals outside of their homes and most of the growth in away-from-home eating has been

in the fast food sector. The interest shown at the national and international levels concerning the fast foods is derived from the scarcity of time in a competitive, dynamic and urban fast life. Normally job holders and students tend to have a busy schedule. Students away from their home have to cook themselves which not only affects their studies. They are often conscious about how to save as much time as possible. In this regard fast food has helped them manage their time and at least provide time for leisure.

The emergence of the fast food industry has, transformed urban food culture in India to some extent. In India, fast food culture emerged after independence. Eating at home used to be a significant aspect of Indian culture. However, over a period of time, with a growth in the number of nuclear families, economic growth and increasing per capita income as well as globalization, fast food culture gained prominence. Similarly, children also resorted to fast food due to their exposure to global urban culture and western cuisine which accelerated their desire for cheap and delicious fast food. Moreover, fast food costs less than traditional meals commencing with appetizer and concluding with dessert. With the liberalization of the economy in 1992, new multinational fast food giants targeted India as a huge potential market with their outlets. Burger King, Pizza Hut, Domino's Pizza, McDonald's and KFC outlets are functioning in shopping malls and other public areas. Changing consumer behaviour and favourable demographics led India to witness a tremendous growth in fast food restaurant industry.

The powerful fragmentation of consumers nowadays,

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represents a tendency that should be taken into consideration, in order to identify and improve the quality dimensions of the products which are important for each category of consumers. Young people are not concerned with food preparation and that is why, they prefer to go out for their meals. They usually go to fast-food restaurants, especially when there is nobody to cook for them (while they study away from home) and also when they want to socialize. Although they have the necessary knowledge about the nutritional value of food and its effects on their body, they don't act accordingly. Fast – food restaurants are famous because they serve the food very fast, they are cheap and they easily replace homemade food. Although people, who are usually very busy working, find fast-foods advantageous, we should all be aware of the fact that fast-food products are high in calories, fats, sugar and salt. Even so, young people admit that it is very difficult for them to change their food habits - especially because they don't have time and discipline to do it. The accessibility of the location is another motive for young people to prefer fastfoods. Unlike the restaurants, which are located in less accessible areas for the young people, fast-foods are located in their way towards their home or downtown, and they are more numerous. Easiness of finding a fast-food could be associated with the lack of time or the hurry. Choosing one particular fast-food depends on its flexibility and capacity to adapt to young people's needs. These needs are in fact young people's desires to easily find a place to eat, opened at any time, with a products display, to be able to order fast, to eat the food ordered rapidly, to have a place to socialize with their friends and to take away the food or order at home when they do not want or do not have time to have the meal at fast-food.

### Review of Literature

Customer Perception and Satisfaction on Ordering Food via Internet, a Case on Foodzoned.Com, in Manipal (2016) - The study found that the emergence of online food ordering services is high. The student users of these services are well seasoned with the information available on these websites and they feel more comfortable using help services available online

Deivanai (2016) concluded that the Quality of product, Service quality, Environment internal and external, staff cooperation, Price, Taste of the product, convenient, place factors are responsible for satisfying nature.

Phan & Nguyen (2016) examined the impacts, which are both direct and indirect, of the four cores such Service quality and Food quality, Price and Environment elements on customer satisfaction as well as loyalty in the Vietnam fast-food restaurant segment nowadays. Furthermore, these findings also provide useful strategies and understandable knowledge to improve and develop in Vietnamese fast-food restaurants as well as the satisfaction level from customers.

Kumar and Radhika (2013) found that most of the consumers are satisfied with their choice of fast food outlets and would like to visit them often. From the study it can be

concluded that the overall level of satisfaction of the respondents with regard to the service rendered at the fast food outlets is satisfactory. The study has brought out the customer preference of fast food and fast food outlets and also the factors that need to be improved.

Khan, Hussain &Yaqoob (2013) made a study and found that the service quality and brand are the key factors for satisfaction in fast food industry in Peshawar Pakistan. However there is a significant positive relationship between the Promotion, Service quality, Customer expectations, Brand, Physical Environment, Price, and Taste of the product to customer satisfaction.

Rezende and Avelar (2012) attempted to describe the eating out habits of consumers in Brazil. The study revealed that a 'search for variety' was a motivator for eating outside the home. The desire for 'convenience' was an important element on many occasions of consumption. The younger people and people with higher incomes possessed more intensive consumption and more favourable attitudes towards eating out. The study also revealed that although eating out was a very popular trend, many of the consumers did not voice any intention of eating out more frequently. An attitude towards eating out was not all so positive, with certain levels of suspicion or mistrust on the part of the consumers' frequency of buying.

Anand (2011) explored the impact of demographics and psychographics on young consumer's food choice towards fast food in Delhi, India. The key determinants impacting consumers food choice were found out to be passion for eating out, socialize, ambience and taste of fast food and convenience for dual-income families in urban India. Findings indicated that fast food companies can no longer rely on convenience as USP in India, unless the implication of same on consumer's health is given equal importance in the years to come.

**Objective of the Study** - There is an increasing trend of customer attraction towards the fast food restaurants and their items. The fast food industry is booming and it is very important to find out the reason behind people preferring to eat and the overall customer satisfaction from having fast food items. There are certain factors that people look for while eating out at fast food items, which needed to be highlighted. There are fast food items in Indore city such as, momo, pizza, burger, chowmein, fries, sausage, roll, sandwich etc., which are gaining a huge popularity in the Indore Fast food industry. Therefore, this research will find the answers to these questions:

- What are the determinants for choosing any fast food items?
- Is there relationship between Independent variables (taste, price, ambience and location) and Dependent Variable (Consumer Preference)?

**Research Methodology of the Study** - Descriptive research design has been used to describe the situation and causal research design has been used to explore the cause and effect relationships. In this study, the questionnaire has been designed to assess the consumer

preference of fast food items in Indore City. The total populations of the study are the consumers who consume the fast food items within Indore City who have different taste for the fast food items, price of the fast food, location and ambience of the fast food. The sample size selected for the survey is 226 respondents. The sampling has been done using non probability convenient sampling technique. Mean, standard deviation has been used to describe the collected data and correlation has been used to explore the relationship between independent variables (taste, price, ambience and location) and dependent variable (consumer's preference), regression analysis has been used to identify the impact of four independent variables (taste, price, ambience and location) on dependent variable (consumer's preference) as well.

**Data Analysis** - The data characteristics have been analyzed in terms of mean value and standard deviation of each of the variable taste, price, ambience, and location.

#### Descriptive Statistics

Factors	Mean	S.D
Taste	3.79	0.42
Price	3.75	0.505
Ambience	3.8	0.55
Location	3.65	0.45

All variables were rated on the brand preference scale with a score of indicating 1=strongly disagree, 2=disagree, 3= neutral 4=agree and 5=strongly agree. The above table indicates that the descriptive statistics of brand preference in fast food items. The result has shown the mean score of taste, price, ambience and location are 3.79, 3.75, 3.8 and 3.65, respectively, which are more than average value, it indicates that the respondents are positively inclined towards the statement and agreed to brand preference. It shows that all respondents are agreed or strongly agreed towards the brand preference for fast food items consumption.

Likewise, the standard deviations have been recorded to be ranging from 0.42 to 0.55 which are consistent. It shows that the variability of data collected is significant to be used for the purpose of study. Thus, it can be concluded that the consumers are agree with the statements that taste, price, ambience and location have significant influence on consumer brand preference while consuming the fast food items in Indore. So, taste, price, ambience and location influence in the consumer purchasing of fast food items.

**Implications** - This study has evidenced that taste has been one of the important factors to influence the consumer preference of fast food items. Ambience is another factor that has influence the consumer preference of fast food items. Accessible location is the last factor that has a positive relationship with consumer preferences. In this context of Indore, there has not been much research conducted in this area. Hence, more in-depth study should be conducted related to this topic. Fast food market in Indore is constantly evolving which means new consumer are emerging. Therefore, future research can be conducted with a larger sample that can bring more accuracy in data analysis. This study provides some significant knowledge

and information to the fast food restaurant business people and distributors to focus more on taste of the fast food, ambience and accessible location of the fast food in Indore. The study unveils that fast food producer and manufacturer should be carefully re-think its strategy when producing and distributing fast food items and focuses more on taste of the fast food, proper ambience and accessible location to consume the fast food.

**Conclusion** - The main objective of this research is to investigate the underlying factors that determine the consumer preference of fast food items. The primary focus was to analyze the relationship and the impact of four dependent variables under the study with the consumer preference of fast food items in the Indore city which is the dependent variable under the study. The collected information 226 respondents by using structured questionnaire were analyzed through frequency distribution and descriptive analysis using SPSS 20 software. The analysis of the primary data displays that among taste, price, ambience and location. Taste has the dominant impact on consumer preference for the fast food they consume. In addition, consumers are more cautious about the taste of fast food while consuming the fast food.

The leading factor is taste, followed by ambience and location of the fast food. However, in this study, price factor do not have significant influence on consumer's preference. The conclusion drawn by the researchers is the study has major opinions of the consumers and the consumer preference is greatly influenced by the taste of the fast food items, attractive and comfortable ambience to consumer the fast food and accessible location to consume the fast food. The remaining factor i.e. price of the fast food tends to have less influence on consumer preference.

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# Impact of Social Media Marketing on Consumer's Perception

MS. Shumaila khan\*

**Abstract** - Patients with celiac disease (CD) are increasingly interconnected through social media, exchanging patient experiences and health-tracking information between individuals through various web-based platforms. Social media represents potentially unique communication interface between gastroenterologists and active social media users – especially young adults and adolescents with celiac disease-regarding adherence to the strict gluten-free diet, gastrointestinal symptoms, and meaningful discussion about disease management. Yet, various social media platforms may be underutilized for research purposes to collect patient-reported outcomes data. In this commentary, we summarize the scientific rationale and potential for future growth of social media in patient-reported outcomes research, focusing on college freshmen with celiac disease as a case study and provide overview of the methodological approach. Finally, we discuss how social media may impact patient care in the future through increasing mobile technology use.

**Keywords** - Social media, Social networking, Facebook, Patient-reported outcomes, Healthcare, Mobile technology, Quality-of-life.

**Introduction** - Buyers used to shop at physical stores like vast shopping centres and numerous others applying the comparable strategy however purchasing. Shopping on social networking can come in various names, for example, web shopping, web purchasing and Internet shopping, all allude to the same method of acquiring or purchasing items through Internet utilizing Social Media and distinctive web shopping sites. Online networking are electronic administrations which are otherwise called “Long range informal communication Sites” indicate to network of connections and associations among disparate clients (gatherings or individuals). Online networking have assumed essential part in spreading this marvel snapper. By the start of 21st century, the use of internet and social media has become a part of business strategies. Social media marketing is the modern tool for marketing in 21st century. Almost many firms using social media marketing as the use of social media increased. With the revolution of internet/IT, the way of doing business has changed and it's necessary for every firm to adopt the new technology. So, nowadays firms are using internet/IT to market their product and these tools used by researchers, practitioners and policy makers. Now almost every person has the access on internet. Through smart phones they stay connected with social networking sites (Facebook, tweeter, LinkedIn) on daily basis. On social media user-generated content are produced on daily basis in the form of product reviews in customer. Social media, especially social networking sites, provide a virtual space for people to communicate through the Internet, which also might be an

important agent of consumer socialization. Interacting activities users engage with on a virtual platform, which are interesting for both academics and online marketing practitioners.

**SOCIAL MEDIA** -Kaplan and Haenlein (2010) define social media as “a group of Internet based applications that build on the ideological and technological foundations of Web 2.0, and allow the creation and exchange of user generated content.” According to Kaplan and Haenlein (2010) web 2.0 is a platform where content is continuously altered by all operators in a sharing and collaborative way. Web 2.0 is a web based technology which helps to create highly interactive platforms through which individuals and communities share, co-create, discuss and modify user – generated content. Social media are the websites which are build upon the technological foundations of web 2.0 that help a user to create user generated contents that can be shared. This technology allows a user to create and publish the content on the social media networks.

**CONSUMER BEHAVIOUR** Consumers are the ones that purchase the products or services that companies offer. They are very important in the business world and economy. Without them, companies would cease to exist and the economy will suffer without the consumption of the people. Consumer behavior is defined as the patterns or attitudes of consumers when trying to purchase a product. It is their approach or process on how to arrive at a decision when thinking about the purchase of a product.

**CONSUMER BEHAVIOUR**- Consumer awareness refers to the awareness of the consumption of goods formed by



consumers in the long-term shopping environment and purchasing activities. The change of life concept is the subjective factor of the change of consumer awareness. As people's living standards continue to increase and incomes continue to increase, people's life concepts are constantly changing.<sup>1</sup> Differences in consumer personality are the internal motivations for changes in consumer awareness.

## REVIEW OF LITERATURE

In recent years, social networking sites and social media have increased in popularity, at a global level. For instance, Facebook is said to have more than a billion active users (as of 2012) since its beginning in 2004. Social networking sites can be described as networks of friends for social or professional interactions. Indeed, online social networks have profoundly changed the propagation of information by making it incredibly easy to share and digest information on the internet. The unique aspects of social media and its immense popularity have revolutionized marketing practices such as advertising and promotion. Social media has also influenced consumer behavior from information acquisition to post-purchase behaviour such as dissatisfaction statements or behaviors and patterns of Internet usage. Social media is "a group of internet based applications that builds on the ideological and technological foundations of Web 2.0, and it allows the creation and exchange of user-generated content". Social media has many advantages as it helps connect businesses to consumers, develop relationships and substitute those relationships in a timely manner and at a low cost as Kaplan and Haenlein discovered (2010). Other functions of social media involve affecting and influencing perceptions, attitudes and end behavior, while bringing together different like-minded people.

- Amalia Triantafyllidou and George Siomkos, The impact of Facebook experience on consumers' behavioural Brand engagement, *Journal of Research in Interactive Marketing*, (2018).
- Anuragini Shirish, Shadow Side of Social Media Marketing: A User's Perspective, *Social Media Marketing*, 10.1007/978-981-10-5323-8\_5, (63-79), (2018).

**Bajpai and Pandey (2012)** examines how viral marketing as a concept marks its place through social networking sites. They have taken Facebook for their analysis. They have clearly put forward that those direct marketers with intelligent strategies for Facebook environment will definitely taste success. They also highlight upon the offers provided by Facebook for brand marketers and conclude that there are many things left to learn and marketers are still in the early stages.

In another study by **Bajpai et al. (2012)** social media marketing: strategies and its impact highlights on the various social media marketing strategies for small businesses that can take this viral marketing form beyond the present social media to build the community powerful enough to make an initiative buying and marketing effective. They also compare

it with the implications of traditional means of marketing.

**Castronovo and Huang (2012)** in their study had described the role of social media as an alternative marketing communication model. The main purpose of their paper was to outline WOM Marketing, social media and alternative marketing communications as possible components of integrated marketing communications. Additionally, they have also developed an integrated alternative marketing communication conceptual model that can be used by industrial practitioners to assist them in realizing their marketing objectives.

**Edosomwan et al. (2011)** depict social media as a fact that has transformed the interface and communication of individuals all over the world. They have done a qualitative study by describing the features and how social media has evolved over time. They have also discussed about CyWorld, Facebook, Lunar Storm, YouTube, Twitter and MySpace.

**Moise (2011)** makes his point that, many marketers believe that the organizations should aggressively promote only one advantage in the market concerned and social networks in the online environment allows them to appear more attractive to consumers. The organization can analyze the way in which the target market has answered to previous communication and recognize the channels to which the stakeholder groups had the most effective response.

**Asur and Huberman (2010)** in their study on predicting the future with social media has brought out how social media content is used for predicting the real-world outcomes. They used the chatter from Twitter.com to predict box-office revenues for movies. They then focussed on the means of viral marketing and also the pre-release excitement on Twitter where they analysed the part that attention plays in predicting real-world box office outcomes. Finally they also viewed on the sentiments created due to dissemination of positive and negative opinions.

**Kaplan et al. (2010)** discusses the idea of social media being the top of the plan for business executives. To make a firm profitable decision makers, as well as consultants are trying to identify modes for it through use of various social media. They also put forward a clear understanding of what the term "Social Media" exactly means. At last, they have provided with 10 pieces of guidance for organisations which have decided to use Social Media. **Berthon et al. (2003)** has tried to explore the role of Business-to-business (B2B) marketing on the Internet. They also tried to study the notion between the two and the linkage value to exhibit why business to business marketing phenomena on the Internet are so important. They also explored how Web can trim down the transaction costs, thereby facilitating more resourceful market exchanges.

**McIntyre (2009)** studied the role of twitter as a marketing tool for many companies. Twitter is another social media tool used by almost all nowadays like Myspace and Facebook. He describes it as one of the largest platforms in the world for sharing real-time data and further states

that Twitter has become a place where companies conduct e-commerce.

**RATIONALE OF STUDY** - The research aims at finding the impact of social media marketing on consumer perception in particular region.

How an affective social media marketing plans attains customer's loyalty and in addition how it brings satisfaction which ultimately effect on consumers perception.

### OBJECTIVES OF STUDY

1. To study the consumer perception on social media marketing.
2. To study customer awareness towards social media marketing.
3. To study the consumer perception who are using social media more than the offline marketing.
4. To explore hoe agencies are engaging their target audience.
5. To measure the degree of reliability of social media marketing messages.

### RESEARCH METHODOLOGY

**Definition of research**-the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions. **Research** comprises "creative and systematic work undertaken to increase the stock of knowledge, including knowledge of humans, culture and society, and the use of this stock of knowledge to devise new applications."<sup>[1]</sup> It is used to establish or confirm facts, reaffirm the results of previous work, solve new or existing problems, support theorems, or develop new theories. A research project may also be an expansion on past work in the field. Research projects can be used to develop further knowledge on a topic, or in the example of a school research project, they can be used to further a student's research prowess to prepare them for future jobs or reports. To test the validity of instruments, procedures, or experiments, research may replicate elements of prior projects or the project as a whole. The primary purposes of basic research (as opposed to applied research) are documentation, discovery, interpretation, or the research and development (R&D) of methods and systems for the advancement of human knowledge. Approaches to research depend on epistemologies, which vary considerably both within and between humanities and sciences. There are several forms of research: scientific, humanities, artistic, economic, social, business, marketing, practitioner research, life, technological, etc.

**Research Methodology** - The goal of the research process is to produce new knowledge or deepen understanding of a topic or issue. This process takes three main forms (although, as previously discussed, the boundaries between them may be obscure):

- Exploratory research, which helps to identify and define a problem or question.
- Constructive research, which tests theories and proposes solutions to a problem or question.

**Tools for data collection**—

**Primary data** – Self administered Questionnaire was designed to collect primary data.

**Secondary data** – Secondary data was collected through Social Networking Sites, Books, and Journals & Magazines etc.

**Tools for data analysis** – Analyzing the role of Youth in Social Media Sites with the help of Bar graphs & Pie charts.

### Hypothesis –

- Social Networking sites are given maximum demerits comparing to merit if both the parameters are evaluated.
- The youth is more inclined towards fields of entertainment other than relevant information derived sources.
- The participation of youth is invisible in social gatherings due to over utilization of social networking sites.

### Data Analysis and Interpretation –

#### On basis of age distribution –

- 18 % are below the age of 16yrs who surf social networking sites.
- 54 % are in the age group of 24 -30 yrs who surf social networking sites
- 22 % are in the age group of 24 -30 yrs who surf social networking sites.
- 6 % are above the age of 30 yrs who surf social networking sites
- A majority sample of 16 -24 age group who surf social networking sites

**On basis of occupation** – majorities of 64 % of people surveyed were from the students.

**On basis of awareness about social networking sites** as majority of people 84 % of age group 16 to 24 yrs are aware of social networking sites

**On basis of know social networking Sites as product promotion tool** – a majority of 47 % strongly believe that social networking sites. are the effective medium for product promotions.

**On basis of visits on social networking sites** – majority people frequently or very often visits social networking sites.

**On basis of visiting advertising links** – majority of 40 % people sometimes visit the links of advertising on social networking sites.

**On basis of advertising impact** – a majority of youth finds the advertisements on social networking sites interesting.

**On basis of product purchase** – a majority of 48 % youth sometimes purchase the product through social networking sites links.

### SUGGESTIONS :

- It is suggested that offline and online marketing strategies be brought into alignment to prevent mixed messages and to promote the availability of the online forums for interaction. Offline advertising should be used to complement the online media. Adding "visit us on Facebook" and other such texts to promotional material will help to raise awareness.
- The social networking strategy should sufficiently flexible to allow it to adapt to new developments and to

determine what works and what does not work.

- The promotional offers during season on should be displayed on the regular basis, so that large number of customers is captured

#### CONCLUSION :

- Social media has become an integral part of the algorithms that decide where a particular website is placed in the search rankings. The higher the ranking the more visible it is to the consumer. One of the core questions behind this research was to find out what impact social networking sites is having on the hotel sector
- The ability to interact with the guests of the hotel should be viewed as a very positive aspect by Hotel business. It offers very real insight into how the hotels are viewed.
- The feedback shared on the review social networking sites such as Facebook, LinkedIn, Twitter, Google+, holidayiq.com & TripAdvisor is an opportunity to improve the service offering.

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# Bio- diversity of taxa *Ipomoea* in the flora of Harda district of Madhya Pradesh, India

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**Abstract** - Harda district is located in south western part of Madhya Pradesh, with highly rich floristic biodiversity of plant and well enmarked in Mughal dynasty. It has some hilly tracks covered with luxuriant vegetation along with the forest area is represented by mixed deciduous forest. Floral diversity of higher plants was undertaken in the Harda district of Madhya Pradesh during 2011-2016. The area was found to be rich in plant species belonging to Convolvulaceae family. *Ipomoea* is a genus under Convolvulaceae family. 10 types of species variety of *Ipomoea* genera have been recorded e.g. *Ipomoea pes-tigridis*, *Ipomoea cairica*, *Ipomoea hederifolia*, *Ipomoea aquatic*, *Ipomoea eriocarpa*, *Ipomoea calophylla*, *Ipomoea. nil*, *Ipomoea carnea*, *Ipomoea obscura*, *Ipomoea sepiria*. Correct and updated citation, a short description, along with status, habitat and flowering and fruiting time is provided for future work.

**Keywords** - Harda, *Ipomoea*, biodiversity, Convolvulaceae, Narmada River, Satpura ranges, Malwa plateau.

**Introduction** - Harda district is situated in the eastern part of Madhya Pradesh. Harda has been declared as a separate district by Government of Madhya Pradesh on 6th July, 1998. Earlier it was a part of Hoshangabad district. It lies in 21° 53' to 22° 36' longitude and 76° 47' to 77° 20' latitude. Total area of the district is 3,334 Km<sup>2</sup>. of which forest covers 780.92 Sq. Km. It is bounded by Satpura ranges in the north and southern part of the district is covered by Satpura and extension of Malwa plateau. Population of the Harda district is 570465. The study area is mainly drained by Narmada River and its tributaries are Ganjal, Anjal, Sukni, Midkul, Dedra Machak, Syani, and Kalimachak rivers. The normal rainfall of Harda district is 1124.2 mm. The normal annual mean maximum temperature 32.8°C and minimum temperature is 19.8°C.

**Material and methods** - Intensive floristic survey has been carried out in different seasons from 2011 to 2016 by well planned schedule, covering various vegetation types, altitudinal ranges, wastelands, and weeds of cultivated fields, road side, river banks, streams beds and all other conceivable ecological niches. For plant collection and preservation of voucher specimens standard methodology has been followed (Jain and Rao, 1977). Voucher specimen were collected in polybag and identified in the laboratory with the help of flora (Hooker, 1892-1897; Cook, 1903; Gamble et al., 1915; Haines, 1921-1924; Duthie, 1960; Verma et.al., 1994; Mudgal et. al., 1997; Naik et al., 1998; Singh et.al., 2001; Singh and Kartikeyan, 2000; ) and other available literature were also consulted for identification of plants. Photographs have been taken using digital camera. Recent up-to-date nomenclature of ICBN was followed. For changed name of families or botanical names latest

classification of APG-III has been followed. Herbarium specimens were deposited in PMB Gujarati Science College, Indore.

**Result and discussion** - *Ipomoea* L. comprises of the largest genus in number of species under family Convolvulaceae. More than one third of the species are included in to major genera *Ipomoea* (650) and *Convolvulus* (250) under Convolvulaceae. It is distributed all over the world having about 650 species. In India over 60 species of *Ipomoea* are reported. Eminent botanists and naturalists have done various research works on the genus *Ipomoea* L. Notable among them are Hooker, 1892-1897; Cook, 1903; Gamble et al., 1915; Haines, 1921-1924; Duthie, 1960; Verma et.al., 1994; Mudgal et. al., 1997; Naik et al., 1998; Singh et.al., 2001; Singh and Kartikeyan, 2000. Based on these works, different Floras have been compiled, the number of species *Ipomoea* in the world varies from 600 to 700 species (Austin 1996). Members of Family Convolvulaceae are distributed in tropical, subtropical and temperate regions of the state. Austin (1986) made the study of *Ipomoea nil* (Convolvulaceae). The genus is almost unrepresented in these area. All species propagate by seeds and some of them reproduce vegetative parts. Most of the species of *Ipomoea* are climbers and trailers. This genus is exceptionally divers, containing over 600 species of vines and shrubs widely distributed throughout the tropic and sub-tropics (Austin 1975, Standley & Williams 1970, Van 1953). *Ipomoea* species vary widely in habit, and vegetative and reproductive character making the genus a prime candidate for studies of character evolution. Particular species of *Ipomoea* have been the focus of a broad range of evolutionary studies including maintenance of floral



polymorphisms (Epperson 1987, Van 1953, Brown & Clegg 1984) 650 species through worldwide, 60 species in India and 10 species in Harda district under *Ipomoea* genera have been recorded. These relative numbers of species have been tabulated in table-1. In the flora Harda district 10 species of *Ipomoea* genera have been identified. These are *Ipomoea pes-tigridis*, *Ipomoea cairica*, *Ipomoea hederifolia*, *Ipomoea aquatica*, *Ipomoea eriocarpa*, *Ipomoea calophylla*, *Ipomoea nil*, *Ipomoea carnea*, *Ipomoea obscura*, *Ipomoea sepiria*.

**Table-1: Relative numbers of species**

Name of the genus	Ipomoea Jacq.
numbers of species in world	650
numbers of species in India	60
numbers of species in Harda	10

### Description

#### *Ipomoea aquatica* Forssk.

Annual, herbs. Leaves glabrous, ovate-lanceolate, oblong, 3-17 × 1-8 cm, cordate, entire, acute, petiole 3-14 cm. Flowers 1-3, minute, pubescent. Sepals subequal, glabrous. Corolla white, funnel form, glabrous. Stamens unequal, included. Pistil included, ovary conical, glabrous. Stigma 2-lobed. Capsule ovoid. Seeds pubescent, 2-4, trigonous. Common, in ditches and waste areas at Handia. Fl. and Frts.: Throughout the year.

#### *Ipomoea cairica* (L.) Sweet.

Herbs, perennial, twining. Leaves petiole 2-8 cm, palmate, entire, acute, ovate, ovate-lanceolate, 4-5 × 2-2.5 cm. Flowers in axillary cymes. Sepals unequal. Corolla pink-purple. Capsule globose, 4-valve, ovoid. Seeds black, hairy. Frequent, in hedeges at Alanpur. Fl. and Frts.: Oct.-April.

#### *Ipomoea calophylla* Wright ex Griseb.

Annual, climbers, covered with rigid trichomes. Leaves deeply 3-lobed, entire, 6-11 × 4-9 cm, long, acute. Flowers in lax or dense cymes. Sepals lanceolate, glandular. Corolla pink. Fruit capsules. Seeds velvety-white pubescent, glabrous, black, ovoid.

Common, in waste lands at Alanpur. Fl. and Frts.: Aug.-Nov.

#### *Ipomoea carnea* Jacq.

Shrubs. Leaves ovate-lanceolate, acuminate, 11-24 × 4-12 cm. Flowers cymes. Sepals orbicular, pubescent, coriaceous. Corolla white, 5-8 cm long. Stamens included, filament hairy. Fruit capsular, ovoid-globose. Seeds 2-4, black.

Common, along roadside at Khardana. Fl. and Frts.: Almost throughout the year.

#### *Ipomoea eriocarpa* R. Br.

Twinner, 30-120 cm long. Leaves linear-lanceolate, 3-8 × 0.5-3 cm, cordate. Flowers 2-6, in axillary, acute, linear-lanceolate. Sepals ovate - acuminate, pilose. Corolla tubular, pilose. Fruits capsular, ovoid to globular, pubescent. Seeds glabrous, 4, ovoid, black, minutely reticulate.

Common, in open wastelands at Handia. Fl. and Frts.: Sept.-Jan.

#### *Ipomoea hederifolia* L.

Extensive, woody twiners, terete. Leaves ovate, suborbicular, entire, dentate, trilobed, cordate, 3-6 × 2-5 cm, glabrous. Flowers in terminal lax, umbellate cymes. Sepals oblong. Corolla red. Fruit capsular, glabrous. Seeds pyriform, ellipsoidal, black.

Common, on bushes at Khirkia. Fl. and Frts.: Sept.-March

#### *Ipomoea nil* (L.) Roth

Annual climbers, hairy. Leaves ovate - suborbicular, entire, cordate, acute-acuminate, pubescent. Flowers in 1-6 flowered cymes. Sepals long-lanceolate, linear-lanceolate, hirsute. Corolla blue, hairy. Capsules globose, 1 cm long. Seeds pyriform, pubescent, smooth.

Common, on hedges at Bhunnash. Fl. and Frts.: Sept.-March

#### *Ipomoea obscura* (L.) Ker

Twining. Leaves ovate-cordate, acuminate, glabrous, 1-4 × 2-5 cm, orbicular, sparsely hairy. Flowers axillary, solitary pedunculate. Sepals ovate-lanceolate. Corolla pale yellow, campanulate. Capsule globose, ovoid, apiculate. Seeds ovoid, deep-brown, oblong.

Common, on hedges in Sodalpur. Fl. and Frts.: July-Feb.

#### *Ipomoea pes-tigridis* L.

Annual, twinner. Leaves orbicular, elliptic, palmately, 5-9 lobed, oblong, elliptic, attenuate, acute, obtuse, 2-8 × 3-12 cm. Flowers involucre-cymose. Sepals lanceolate. Corolla funnel-shaped, white. Fruits capsular, ovoid. Seeds pubescent, tomentose.

Frequently, in hedges around fields at Makrai. Fl. and Frts.: Aug.-Dec.

#### *Ipomoea sepiria* Koeng. ex Roxb.

Twining, perennial, stem slender, glabrous. Leaves ovate - cordate 4-8 2-6 cm, acute, rounded, glabrous. Flowers cymes. Sepals elliptic-oblong, obtuse. Corolla white, pink or pale purple, infundibuliform. Capsules globose. Seeds densely tomentose.

Common, in waste areas at Sodalpur. Fl. and Frts.: Aug.-Dec.

**Conclusion** - In the flora of Harda district of M.P. 10 types of *Ipomoea* species have been identified. Some morphological characters have been discussed to identify these species. On this topic it is the pioneer research article. Some species are restricted in some particular areas due to favorable micro-climate. But some species are distributed throughout whole area. The adaptation capacity of these species is better than other four species. But more research is needed on the ecological and economical aspect of view. The palynological study and DNA bar-coding study may be done to construct the phylogenetic relationship among these species and their origin may be studied.

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Preservation of plant into laboratory *Ipomoea aquatica* Forssk. *Ipomoea nil* (L.) Roth

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# Diversity of Some less-known economic species of sorghum in tribal region of Western M. P., India

Dawar Suwalal\* Satya Veena\*\*

**Abstract** - This paper informs about diversity and traditional utility in view of food security in tribal tehsils of western Madhya Pradesh region of India. In all 21 species belonging to Poaceae family are utilized as food security. Apart from dietary uses, other miscellaneous and traditional use reports are also studied. Overall subsistence throughout the year is highlighted. Utilization, apart from the classic purposes, adapted by the tribals is noteworthy. The study showed that about 21 sorghum landraces were in active cultivation in the four sub regions, though there is a possible duplication in the naming of landraces. Among of landraces was based on maturity dates, grain color, plant height and uses. Sorghum Grain was used for home consumption in the form of roti (90%), Ghat (50%) papad (30%) and local alcoholic beverages (5%). And maturation time of different species are 2 species are 3 months duration, 2 species are 3.5 months, 7 species are 4 months, 3 species are 4.5 months, 6 species are 5 months, and 1 species are 6 months duration. Western Madhya Pradesh region of India has remained hitherto unstudied. The present authors carried out in-depth study especially in the tribal region of western Madhya Pradesh (India). Fruit security a segment of their study, are being communicated in this paper. The utilization and cultivation of these species should be promoted to maintain the dietary needs of the household in Western Madhya Pradesh region of India. The study can provide a baseline data that may be helpful for prioritization of conservation through sustainable use and management of the resources.

**Key words** - *Sorghum*, Western Madhya Pradesh, landraces, less-known economic species.

**Introduction** - Agriculture is the lifeline of economic system. India is the region of diversity of many major cultivated crop plants like rice, wheat, millets, sorghum etc. The traditional crop varieties are important element of genetic resources (FAO 1997). Agro biodiversity is confluence of the past, present and future and both a tangible and intangible resource critical for both rural and urban food and nation security (Kumar et al. 2015). The diversity in the wild species not only gives variation in diet but also provides nutritional diversity. It contributes to the house hold food security in this region. Western Madhya Pradesh is one the most ancient, religious and visited region of the Madhya Pradesh in India. Major tribes inhabiting of this area are Bhils, Bhilala, Barela, and other diverse groups. their inhabitation is located around the areas of Alirajpur, Barwani, Dhar, Jhabua and Khargone. Majority of the tribes practice agriculture and also depend on wild/natural resources for their subsistence. Various studies have found that wild edible species are potential source of nutrition while in many cases they are more nutritious than conventionally eaten crops. Western Madhya Pradesh region of India has remained hitherto unstudied. The present authors carried out in-depth study especially in the tribal region of western Madhya Pradesh (India).

**Material and method** - The present study was conducted in some important districts i.e. Alirajpur, Barwani, Dhar, Jhabua and Khargone of Western Madhya Pradesh during 2015-2018. A village wise study was conducted of tribal families residing in different villages was prepared with the help of local tribals. We are selected tribal families residing in selected village, owning large number of traditional sorghum species. These are selected randomly from each village. Information was obtained through personal observation, consultation with tribal family members having detailed discussion with key informants, aged persons and housewives etc. During the period of study the farmers and agriculturists of each districts were interviewed about seasonal crops and their flowering and fruiting season. Plant collection and herbarium preparation was carried out by standard method (Jain and Rao, 1977). Plant specimens were preserved by dipping the whole specimens in saturated solution of Mercuric chloride and alcohol. Dry and preserved plants mounted on herbarium sheets by fevicol. Identification of plants done with the help of flora (Verma et al., 1993; Mudgal et al., 1997; Khanna et al., 2001; Shah, 1978; Duthi, 1960; Hains, 1921-1924; Cook, 1903; Hooker, 1872-1897) and other taxonomic literature. The entire plant specimen was deposited in herbarium of SBN Govt. PG



College Barwani, M.P.

**Result and Discussion** - The investigation of diversity of the wild species in forest of Western Madhya Pradesh region of India has been carried out in the year 2015-2018. The variation in this region the heavy rainfall, humid climate and red lateritic soil is helpful for the new regenerated vegetation variety of resources wild plant rich diversity which is nutritional value and edible by farmers and people in this region. Wild Edible Plant Diversity- During the field survey 21 species was documented in the Poaceae family (**Table 1**). The present report on the use of wild vegetable plant for food purposes draws support from earlier studies in different parts of India (Arinathan et al 2007, Reddy et al 2007; Sharma and Savant, 2012). *Sorghum* is the most important staple food crop in India. A study conducted in western Madhya Pradesh of India to determine farmers' perceptions on sorghum diversity and utilization. sorghum are used extensively in this region and this species are used during festival of "Gauri & Ganpati" as a food offering to the Goddess. In the plants nutritional value means, out of the 21 recorded species some are good source of protein some are carbohydrate and some are variable minerals (Shore, 2000) indicated that uncultivated foods constituted nearly 40 per cent of food requirement of the communities in India. Amongst the very poor, landless members of these communities dependence on such sources of food and fodder is nearly 100 per cent. The study highlighted that most of the tribal preferred to make use of sorghum plant for staple food. Sorghum Grain was uses showed in **table-2**(Fig.2) and maturation time of different species are showed in **table-3**(Fig.3).

**Conclusions** - The present investigators obtained information about food resources, and result is being presented in the research paper. Utilization of plant resources needs the survey and exploration of factual data. Our data of Sorghum species diversity is offer critical knowledge of food plants. Results from the study showed that about 21 sorghum landraces were in active cultivation in the four sub regions, though there is a possible duplication in the naming of landraces. Among of landraces was based on maturity dates, grain color, plant height and uses. Sorghum is the second most important cereal after wheat with followed by millets. *Sorghum* is the most important staple food crop in India. A study conducted in western Madhya Pradesh of India to determine farmers' perceptions on sorghum diversity, utilization. Resources of food are always in great demand all over the world. Assessment of the Food wealth and the resulting inventory of plant resources of potentially economic value would not only help plant based industries but also encourage rural people to utilize the food products in Western Madhya Pradesh.

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**Table-1: characteristics of sorghum species**

Local name	Hight (inch)	No of node	Leaf (Inch) LxW	Ear in (Inch) LxW	Grain (mm) LxW	Shape of grain	Colour of grain	Color of glume	Covered grain %
Mavdi Juwar	75	9	30x3	10x4	6x3	Ovate	white	black	20
kantholi (Kalikiray)	82	10	31x3	8x3	4x3	Ovate	white	black	50
Aadam	131	15	33x4	15x5	5x3	ecoit round	gerua	white	75
Safed dhani	93	11	23x3	11x4	5x3	Ovate	white	white	25
Chari juwar	133	11	33x3	14x4	5x4	Ovate	orange	orange	80
watadi dhni	131		31x3	13x4	6x3	Ovate	white	white	80
Chikani lal	120	12	30x3	11x6	4x3	Rounded	Red	Broun red	20
Chikani safed	104	12	30x4	11x6	5x4	Plated round	white	black	20
Bajri kanthali	52	13	24x3	6.5x2	4x2	rounded	white	black	20
Haldiya ghati juwar	77	10	26x3	7x3	5x3	Plated round	white	black	40
Gorunawad	82	15	33x3	9x5	6x4	Ovate	white	grey	10
Aagiyu juwar	100	12	30x3	10x6	5x4	Round	white	Broun	40
Bhaliya juwar	93	12	27x3	8.5x3	4x2	Ovate	white	Broun red	60
Bhuyda juwar	91	12	24x3	13x10	5x4	Plated round	milky white	Broun white	20
Nanbay juwar	54	9	14x2	5x2	4x2	Hearted	white	black	20
Ratlitusali mogari	118	10	36x3	9x5	5x4	Round	white spotted	red	30
Kalatusa kantoli	58	8	28x3	7x3	4x3	long Ovate	poor white	poor black	20
Laltusa kantoli	60	5	26x3	8x4	4x3	long Ovate	poor white	poor red	20
Bani juwar	94	10	24x3	12x3	4x4	plated round	white	white	50
Fikali juwar	106	15	30x3	6x3	4x3	white	white	white	30
Mandavi juwar	45	11	27x3	10x4	3x3	white	white	white	20

**Table-2: Sorghum Grain uses**

S.	USES	PERCENTAGES (%)
1	Roti	90
2	Ghat	50
3	Papad	30
4	Alcoholic beverages	5

**Table-3: maturation time of different no. of species**

S.	No. of species	Maturation time in months
1.	Bajri kanthali	3
2.	Mandavi juwar	
3.	kantholi (Kalikiray)	3.5
4.	Nanbay juwar	
5.	Chikani lal	4
6.	Chikani safed	
7.	Haldiya ghati juwar	
8.	Aagiyu juwar	
9.	Bhaliya juwar	
10.	Ratlitusali mogari	
11.	Kalatusa kantoli	
12.	Safed dhani	4.5
13.	Chari juwar	
14.	Mavdi Juwar	
15.	Aadam	5
16.	watadi dhni	
17.	Gorunawad	
18.	Bhuyda juwar	
19.	Laltusa kantoli	
20.	Bani juwar	6
21.	Fikali juwar	

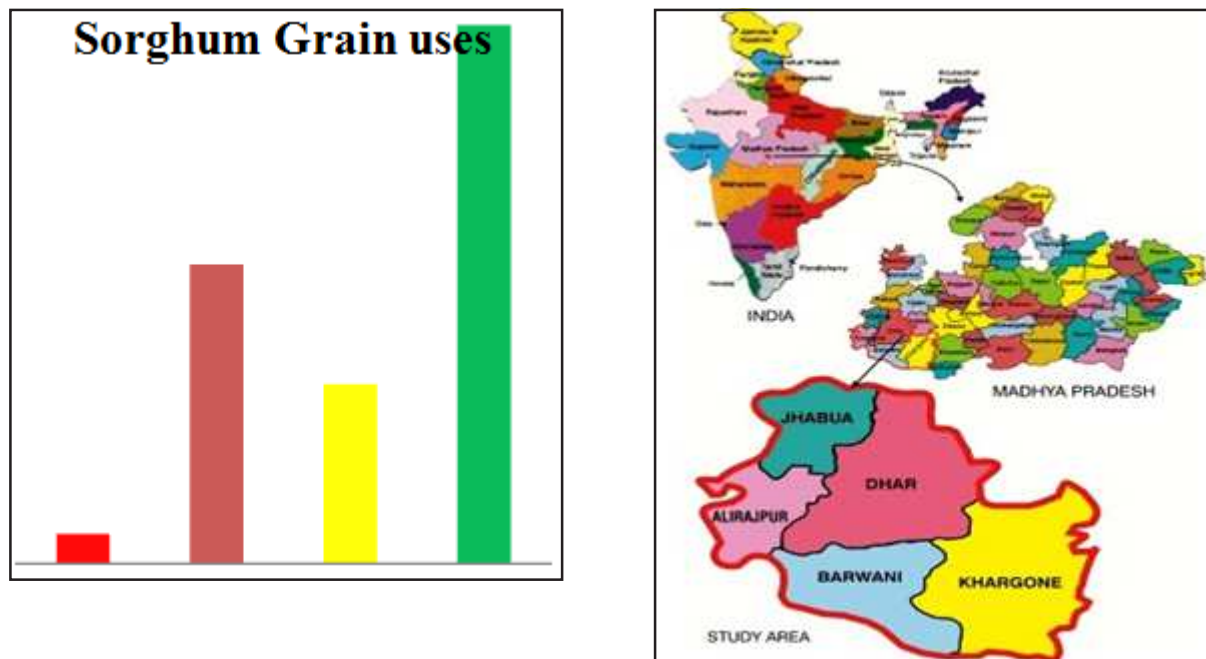


Fig.1study area & Fig.2 Sorghum Grain uses

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# Measurement of foliar parameters of broad leaves trees in Alirajpur districts of Madhya Pradesh, India

Jamra Rajkumar\* Mehta Suresh Chandra\*\*

**Abstract** - An all-embracing study assessed oxidative stress of selected broad leaved trees in the environs of a quarry site at Alirajpur block of Madhya Pradesh, India by assessing some physiological and biochemical properties of their leaves. Three trees *Anogeissus latifolia*, *Diospyros melanoxylon*, and *Madhuca indica*, growing in the excavation site were randomly selected for this study. The result of quantitative analysis of foliar parameters shows that the epidermal cells were completely malformed and the guard cells became plasmolysed. The pore length, width and area had higher values at control samples and were significantly different when compared with those from the study area. Significant differences were observed in pH and total chlorophyll content of the evaluated plants.

**Key words:** Alirajpur, oxidative stress, *Diospyros melanoxylon*, pollution tolerance.

**Introduction** - Vegetation is the most precious gift, nature has provided to us as meeting all kinds of essential requirements of the humans in the form of food, fodder, fuel, Medicine, timber, resins, and oil, etc. Plant communities play a pivotal role in sustainable management by maintaining biodiversity and conserving the environment (Farooque &, Sexena 1996). Industrialization had increased requirement of more energy with mining for more minerals resultant pollution. Vegetation in and around quarry sites suffer from air pollution stress largely due to ambient particulate load which causes physiological and biochemical damage in plants. Since plants are immobile, they are continually exposed to and are therefore important sinks and monitors of air pollutants. (Beckett et al. 1998), Soil pollution due to different mining dust has become problem in Alirajpur district of Madhya Pradesh, India beside that dust deposition on the surface of vegetation affects photosynthesis and growth of common plants nearby the mining areas. Mining for dolomite, is transportation and crushing releases dust. Suspended particulate matter from quarry sites is a major source of air pollution, the severity of which depends on local climate, particle load in the ambient air and the size and chemistry of the dust particles are all important determinants of the level of particulate pollution (Lameed, and Ayodele 2010). The aim of this study was to assess the response of broad leaved trees to air pollution from quarrying activities at Alirajpur districts of Madhya Pradesh, India by examining the foliar microstructure, and evaluating air pollution tolerance of selected trees.

**Study area** - Alirajpur District was carved out of Jhabua District on 17<sup>th</sup> May 2008. The distance of Alirajpur from

Indore is 220 km. whereas Vadodara is only 150 km. away. Dahod is the nearest railway station, which is connected by road by 70km. A village called Amkhut is considered as Switzerland of M.P. and another village named "Kathiwada" is called 'Cherapunji' of M.P. Alirajpur district lying between 22°18'N latitude and 74°20'E longitude, covers an area of 3182 square kilometers. Mahee and Narmada rivers make its Eastern and Southern border. According to census 2011, Alirajpur population is 728,999. Alirajpur District average Rainfall is 850 mm. Alirajpur District temperatures ranges between 23°- 30°C. Bhagoriya is a special cultural public festival of Alirajpur district.

## Methodology

**Plant Selection and Sample Collection** - The study population consisted of all identified broad leaf trees growing within the quarry site. Out of the ten identified *Anogeissus latifolia*, *Diospyros melanoxylon*, and *Madhuca indica*, was randomly selected, using sampling without replacement. Control samples were collected 6 kilometers from the study from trees of equal girth with those of the study area. Leaf samples were taken from the lowest branch of each selected tree facing the pollution source. Freshly collected samples were labelled, and placed in sealed poly packs and immediately sent to the laboratory for analysis.

**Micromorphological Study** of the Foliar Epidermis Foliar epidermis of the adaxial (upper surface) and abaxial (lower surface) surfaces of the leaves were prepared by clearing method. The leaf samples were cleared by soaking in petri dishes containing commercial bleach (3.5% sodium hypochlorite) for 18 hrs. Then, the epidermal strips of the leaf samples were scrapped gently with the aid of forceps and placed on a clean slide, stained with Safranin and

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covered with a cover slip. The slides were viewed under light Olympus Tokyo (Japan No.271961) microscope at X400 magnification and photomicrographs were taken with Motic Camera 2.0. The following parameters were observed and assessed: 1. Epidermal cells: the type of epidermal cells were observed and recorded.

**Stomata type:** the stomatal complex types were observed and recorded following the terminologies of Evert. (Evert, 2006)

**Stomata size** (length and width): the stomata length and width were measured using Motic microscope software in four replicates for each sample.

**Stomatal density:** the stomatal density was determined as the number of stomata per square millimetre.

#### Determination of Biochemical Parameters of Leaf Extracts

**Determination of Ascorbic Acid Content (AA)** - This was determined according to Bajaj and Kaur (1981) method, using spectrophotometer. One gram of the leaf sample was treated with 4ml of oxalic acid – EDTA extracting solution in a test tube. Then 1 ml of orthophosphoric acid was added followed by 1 ml of 5% H<sub>2</sub>SO<sub>4</sub> and 2 ml of ammonium molybdate, and then 3 ml of water. The solution was allowed to stand for 15 minutes after which the absorbance at 760 nm was measured. The concentration of ascorbic acid was extrapolated from a standard ascorbic acid curve.

**Determination of Chlorophyll Content (TCH)** - This was determined using the method of Arnon (1949). Exactly 3g of the leaf sample was blended and then extracted with 10 ml of 80% acetone, left for 15 minutes and the liquid portion decanted and centrifuged at 2,500 rpm for 3 minutes. The supernatant was collected and its absorbance measured at 663 nm using spectrophotometer.

**Determination of Leaf pH** Leaf pH was determined by "direct reading engineering method" (DREM) using a digital pH meter. The leaf extract was made by cold maceration of the leaf with de-ionised water, filtered through an ashless filter and the filtrate used for pH determination. The pH meter was precalibrated before it was used with buffer solution of pH 4 and 9. The pH electrode was carefully dipped into the filtrate in a 10ml beaker. The value displayed on the Crystal Liquid Panel (CLD) was taken as the true pH value. The exercise was done in triplicate and the average of the three readings was used.

**Determination of Percentage Relative Water Content (RWC)** - This was determined using the method described by Singh (1977) Fresh leaf sample was weighed and recorded as Fresh Mass (FM). It was floated in distilled water inside a closed petri dish at room temperature for 24 hours. At the end of the incubation period, the leaf sample was wiped dry gently with blotted paper and re weighed to obtain the Turgid Mass (TM). It was then placed in a pre-heated oven at 80°C for 48 hours. Thereafter the leaf was weighed to obtain the Dry Mass (DM). The relative water content was calculated using the formula:

$$Rwc = \frac{FM - DM}{TM - DM} .100$$

Where,

FM = Fresh Mass

DM = Dry Mass

TM = Turgid Mass

**Statistical Analyses** : Analysis of variance (ANOVA) was done using statistical package for social sciences (SPSS) version 20 to check for significance (at p d" 0.05) among the three samples and Duncan multiple test range was used for mean separation. Students' Independent t-test was used to check for significance (at p d" 0.05) between the samples obtained from the control and study area.

#### Result & discussion

##### Qualitative Leaf Study

The result of the qualitative leaf study of the three species used in this study is summarized in Table 1. Some differences were observed in the leaf morphology, as well as in leaf epidermal parameters.

##### Table 1 (See in next page)

**Foliar Parameters** - Analysis of variance showed that at least one of the stomata parameters tested for the three plants was significantly different at p d" 0.05 for the abaxial(lower) surface. T-test showed that significant differences existed in some stomatal parameters (number per field of view, density, length, width and area). Quantitative analysis of stomata patterns showed that samples from the study site had higher number of stomata per unit area than those from control site while samples from control site had higher values for stomata size and pore size.

##### Table 2 (See in next page)

**Foliar Micrograph** - Analysis Examination of the foliar micrographs of the three plants indicated that those at the study site showed signs of damage and alterations as a result of environmental stress. The most significant changes observed were distorted epidermal cell, plasmolysed guard cells, and reduction in stomata sizes.

Changes in plant anatomy and biochemistry are used as an indicator of air pollution profile since major organs of plants such as leaves are constantly exposed to the atmosphere. The physio-chemical parameters used in the computation of APTI are; ascorbic acid content, total chlorophyll content, pH and relative water content of leaf extracts. Results from the foliar epidermal study showed differences in their stomatal variables. Quantitative analysis of stomata parameters showed that samples from the study site had higher number of stomata per unit area than those from control site while samples from control site had higher values for stomata size and pore size.

**Acknowledgement** - I am very much thankful to Principal Govt. BSPG College Jaora, M.P for providing research and library facilities.

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**Table 1. Qualitative leaf parameters of the samples**

Parameter / Plants	Leaf	Epidermal cell	Stomata type
<i>Anogeissus latifolia</i> .	Leaves simple, opposite to alternate, estipulate; petiole 5-15 mm, slender, grooved above, glabrous; lamina 2.5-18 x 1.7-9 cm, elliptic, elliptic-oblong, suborbicular, or oblong-obovate, base obtuse, round, cuneate or acute, apex obtuse, emarginate or mucronate, margin entire, glabrous, subcoriaceous; lateral nerves 4-11 paired, pinnate, prominent beneath, arched towards the margin, intercostae scalariform, prominent	The presence of starch in the epithelial cells	amphistomatic
<i>Diospyros melanoxylon</i>	Bark black or dark brown, very thick, corky, deeply fissured vertically, flakes rectangular, leaves thick, pale green, with soft hair, fruit, yellowish and fleshy with enlarged calyx like brinjal.	The leaf was divided into Upper epidermis & Lower epidermis. Upper epidermis: Upper epidermis was single layer of thin walled closely arranged cells and covered externally by a layer of cuticle. The upper epidermis is a continuous layer. Lower epidermis: Lower epidermis was single layer of parenchymatous cells	hypostomatic
<i>Madhuca indica</i>	Leaf Apices are Apiculate, and base is Rounded. Leaf Margin is Entire and Shapes Elliptic. Leaf is Simple type.	Upper epidermis was single layer of thin walled and: Lower epidermis was multilayer of parenchymatous cells.	anomocytic stomata were present.

**Table 2. Qualitative stomata parameters of lower leaf surface of the samples (control)**

Parameter	<i>Anogeissus latifolia</i> .	<i>Diospyros melanoxylon</i>	<i>Madhuca indica</i>
Stomata number per field of view	17.0 ± 0.24c	26.27 ± 0.50 a	20.1 ± 0.30b
Stomata density (mm <sup>-2</sup> )	97.23 ± 1.23c	159.01 ± 3.02a	115.02 ± 2.010b
Stomata length (µm)	19.40 ± 1.10b	25.98 ± 2.01a	23.01 ± 0.70b
Stomata width (µm)	13.04 ± 0.50b	16.98 ± 1.01a	16.99 ± 1.02a
Stomata area (µm <sup>2</sup> )	264.01 ± 13.09c	457.01 ± 19.89a	386.2 ± 29.2b
Pore length (µm)	13.2 ± 0.30c	18.98 ± 0.81a	15.02 ± 0.23b
Pore width (µm)	3.99 ± 0.60b	6.01 ± 0.50ab	7.012 ± 0.23a

Mean values with different letters as superscript across the row are significantly different at p < 0.05. Mean values with same letters as superscript along the column are not significantly different at p < 0.05.

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# Regression Analysis of Ground Water Quality Data of Jaipur District, Rajasthan

Vasundhara Magroliya\*

**Abstract** - The present study deals with statistical analysis of Physico-chemical parameters of ground water quality in Jaipur District, Rajasthan. For this ground water samples from 60 sampling sites of 15 villages of study area were collected from tube wells and hand pumps of varying depths in summer, winter and rainy seasons and analyzed for eleven physico-chemical parameters namely pH, Temperature, Turbidity, Dissolved oxygen, Chemical Oxygen Demand, Total Alkalinity, Chloride, Sulphate, Fluoride, Total Dissolved Solid and Electrical Conductivity. Analysis of results showed that almost all parameters were exceeding the permissible limits prescribed by WHO. The regression analysis provides an easy and rapid way to estimate as well as to monitor the water quality.

**Key Words** - Water Quality, Groundwater, Physico-chemical parameters, Regression Analysis.

**Introduction** - Water is the elixir for life. It is the most vital resource for the existence of life on earth. No other natural resource has had such an overwhelming influence on human history. In early time's habitation used to be near rivers, lakes and springs, without water there would have been no life. But at present this most precious resource is getting deteriorated. Potable safe water is absolutely essential and is the basic need of all human beings on the earth. Due to modern civilization, rapid urbanization, and industrialization, subsequent contamination of surface and ground water sources, water conservation and water quality management has now a day's assumed a very complex shape. Attention on contamination and its management has become a need of the hour, because of its far reaching impact on human health. Statistical investigation offers more attractive options in environment science, though the result may deviate more from real situations [1]. The correlation provides an excellent tool for the prediction of parametric values within a reasonable degree of accuracy [2]. The quality of water is described by its physical, chemical and microbial characteristics. But, if some correlations are possible among these parameters, then the more significant ones would be useful to indicate fairly the quality of water [3]. A systematic study of correlation and regression coefficients of the water quality parameters not only helps to assess the overall water quality but also to quantify relative concentration of various pollutants in water and provide necessary cue for implementation of rapid water quality management programmes. The developed regression equations for the parameters having significant correlation coefficients can be successfully used to estimate the concentration of other constituents [4, 5, 6, 7 and 8].

**Study Area** - Rajasthan is known as "the land of king" and

it is the largest state of the republic of India in terms of geographical spread. It is situated in the North- Western part of India having total area is around 3,42,239 Sq. Km. which represents 10.41 % of total area of the country and population of 6.86 Crores spread over in 44,672 villages, which is 5.67 % of nations population but being just available 1% of the total water resources of the country. The state has extreme climatic and geographical condition and it suffers both the problems of quantity and quality of water [9, 10]. Jaipur, the capital of Rajasthan, has a total area of 11,117 Sq. Km. covering the 3.23% of the total area of the state, administered by 13 tehsils or sub-divisions.

The present study aims to analyse correlation and regression study of various physico-chemical parameters in most rural habitations of Jaipur District, Rajasthan in order to assess the suitability of ground water for human uses.

**MATERIALS AND METHODS - Sample Collection:** The water samples were collected from hand pump, bore well source of rural areas of jaipur District, Rajasthan. The totals of 60 water samples were collected from selected sampling sites in the year of 2016-2017.

**Physico-chemical Analysis:** All the samples were analyzed for the following Physico-chemical parameters; pH, Total Alkalinity (TA), Chloride, Fluoride, Temperature, Turbidity, Dissolved oxygen (DO), Chemical Oxygen Demand (COD), Sulphate (SO<sub>4</sub>), Total Dissolved Solid (TDS) and Electrical Conductivity (EC). The analysis of water samples were carried out in accordance to standard analytical methods [11]. All the chemicals used were of AR grade and double distilled water used for preparation of solutions.

**RESULT AND DISCUSSION:**

**Regression Analysis** - The multiple regression analysis was

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conducted to investigate the relationship between dependent variables and potential predictors. The regression analysis was carried out on different water quality parameters showed high level of significance as indicated from high value of correlation coefficient (r) and coefficient of determination. Total eleven water quality parameters were used for the groundwater analysis among them three variables were considered as potential predictors i.e. pH, EC and temperature and eight variables were considered as dependent variables. The positive sign of the  $\hat{\alpha}$  coefficient indicates that there is a positive relationship between dependent variables and potential predictors, presented in Table 1. It was stated that the greater the value of regression coefficient, have the more effect on dependent variable [12].

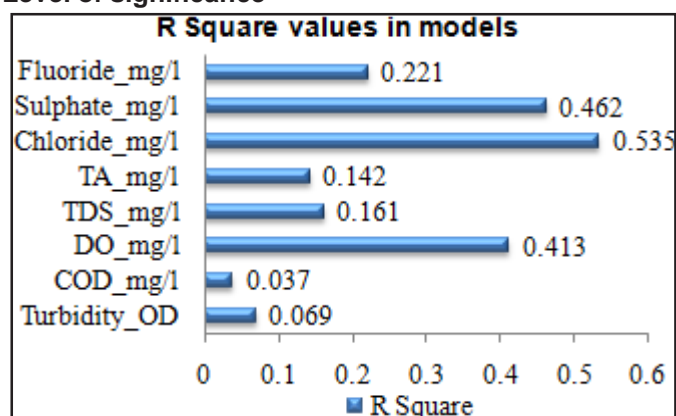
The regression analysis of dependent variables and potential predictors can be explained as when-

The dependent variable COD with predictors T, pH and EC produced coefficient of determination or measure of variance,  $R^2 = 0.037$ , F value (F = 1.680),  $P > 0.05$ . The electrical conductivity found to be non significant and had no regression weight ( $\hat{\alpha} = 0.000$ ) indicating COD was not effected from the electrical conductivity after controlling for other variables. Similarly EC has the positive correlation with turbidity, TDS, total alkalinity (TA), chloride as shown in Table 1. It was indicated that most of the ions are involved in various physicochemical reactions such as oxidation-reduction and ion-exchange in the groundwater aquifer system [13].

**Table 1: Regression of Dependent Variables**

S.	Dependent variables	R	R Square	ANOVA	
				F	P value or sig.
1	Turbidity (Absorbance)	0.263	0.069	3.251	0.013
2	COD_mg/l	0.192	0.037	1.680	0.157
3	DO_mg/l	0.643	0.413	30.804	0.000
4	TDS_mg/l	0.401	0.161	8.371	0.000
5	TA_mg/l	0.377	0.142	7.263	0.000
6	Chloride_mg/l	0.731	0.535	50.243	0.000
7	Sulphate_mg/l	0.679	0.462	37.523	0.000
8	Fluoride_mg/l	0.47	0.221	12.383	0.000

$R^2$  = Coefficient of determination; F = F test value; P = Level of significance



**Figure 1 : Regression of Dependent Variables**

In addition, the TDS, fluoride found to be significant. It has the positive regression weight with pH value but fluoride has negative regression weight with pH value which indicates that fluoride is more and TDS is less affected by pH.

**CONCLUSIONS**-Regarding water quality the results of current study revealed that ground water, used by the people residing in villages of Jaipur District is not suitable for drinking purpose. So, there is a need of continuous monitoring of water quality and proper environment management plan must be adopted to control drinking water pollution immediately. Based on these results and analysis of water samples, it is also recommended to use water only after boiling and filtering or by reverse osmosis treatment for drinking purpose by the individuals to prevent adverse health effects.

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## A Review Article: Research Methodology

Shakti Shrivastava\* Smruti Sohani\*\*

**Abstract** - Research is an art of scientific investigation for new knowledge and it is an academic activity and as such it should be viewed in technical sense. To explore, diagnose, describe and to establish causal relationship. Basic, applied, empirical, qualitative, quantitative and others. Significance of research: Helps in framing of policies, useful in business, innovation of unknown facts, gain knowledge, leads to development of social welfare and society. Research process: Includes discovering and defining the research problem, literature, survey, developing a working hypothesis, research design, executing research design, analysis of data, hypothesis testing, data interpretation and report writing. Research is an immortal process, till the existence of society on earth and it is a journey of truth, discoveries and inventions. With the growth of fast moving society, there is more need for research, research methods and researcher.

**Keywords** - Discoveries, invention, hypothesis, etc.

**Introduction** - All progress is born with inquiry. The quest for knowledge is an immortal process and in its very simplest form this process has been called as research [1]. Research evolves through our own inquisitiveness and this makes us to probe into the unknown facts and makes us to understand. Hence, inquisitiveness has been called as the mother of all knowledge [2]. The way in which the research will be conducted is seen in terms of the research philosophy, research strategy, research instruments, research objective and the quest for solving the problem [3]. Research is an art of scientific investigation for new knowledge [4]. Gathering knowledge for knowledge sake is called as research.

**Definition of Research** - Research is defined as an "art of gathering knowledge for the sake of knowledge." Research is defined as a "systematic approach regarding generalizations and formulation of new theories." [5] According to Zina O' Leary [6]: Research is a creative and strategic thinking process that involves constantly accessing, reassessing and making decisions about the best possible means for obtaining trustworthy information, carrying out appropriate analysis and tracing credible solution.

According to Clifford Woody (7): Research is a method for the discovery of truth which is really a method of critical thinking.

According to D. Slesinger and M. Stephenson (8) in the Encyclopedia of social sciences defined research as "the manipulation of things, concepts or symbols for the purpose of generalizing to extend, correct or verify knowledge, whether that knowledge aids in construction of theory or in the practice of a art." Before proceeding further it is very

important to know the difference between research methods and research methodology.

Research Method is defined as the methods or techniques used by the researcher. It explains the modus of conducting the research [10]. Research methodology is a way of solving the problem systematically and in proper manner. It is also defines as science of using methods or techniques for conducting the research. Thus when we are talking of research methodology, we not only talk about research method but also the logic behind it to use the technique.

**Objectives of Research** - Research is conducted for the growth of knowledge by digging deep into the unknown facts and unexplored theories. Even though each and every research has its own set of objectives, but still research can be conducted on the following four broad objectives in mind:

**To Explore:** Research can be carried out by the researcher with the intention of exploring the unexplored phenomenon or facts. This type of research is carried out before the formulation of hypothesis. Such types of research are called as exploratory or formulative research studies.

**To Describe:** Sometimes research are conducted to portray the characteristic of an individual, group or society or to describe a particular situation or an event. Eg: A study can be conducted on different religious festival in different parts of India. These type of studies are also called as Ex post facto studies.

**To Diagnose:** This study helps to understand the frequency of a particular event which is associated with another event. Descriptive studies are normally used by the investigators and doctors eg A patient coming for a

treatment is diagnosed by the doctor through various questions, checkups and tests to give the exact output.

**To Establish Casual Relationships:** A research can be conducted for testing the hypothesis between the dependent variables with independent variables. These types of research are also called as hypothesis testing research studies. Eg: A study can be conducted to establish the relationship between dengue vaccine and its effectiveness in controlling dengue disease.

**Types of Research** - Research can be classified on the basis of time, purpose, settings, place and technique. Some research have similarities and some have little variations. But all the types of research have its own significance.

**Basic Research:** It is also called as pure research. Research for the sake of enhancement of knowledge is termed as Basic Research. It is done with the intention of overpowering of the unknown facts. It is concerned with the generalizations and also with the formulation of new theory. Basic research may not produce solutions or results to the present problem but it contributes something to the scientific knowledge. Though its work may have zero importance, but it may become useful in the future.

**Applied Research:** It is also called as practical research or 'need based' research. The main intention is to find solutions to the current problems being faced by an institution, society, business or in government offices. Research to identify social, political and economic changes, which has adverse effects in different sectors are some of the examples of applied research. This type of research is mainly carried on with the secondary data.

**Empirical Research:** It is often referred to as experimental research. In this primary data is collected, analyzed, interpretation is done and subjected to hypothesis testing. Researcher should develop his experimental designs and should provide working hypothesis before the commencement of his research for good output.

**Qualitative Research:** As the name itself suggests, this research is concerned with the qualitative process. It generally works with the study of human behavior. By this research one can find the body language, attitude, opinions, feelings etc from the opposite person through observation. It is mainly helpful for Psychiatrists and interviewers. Many techniques are being used like word association test, sentence completion, drawing pictures, Thematic Apperception Test. It is needed in times where quantitative research does not work. Hence, it is also called as 'Motivation Research'.

**Quantitative Research:** This research is mainly concerned with the measurement of phenomenon in terms of quantity. Many a times a debate is conducted between qualitative and quantitative terms. An example for the quantitative research is carrying out senses for collecting population, social, economic statistics of a particular area. They are subjected to statistical analysis. It relays mainly on primary data like survey method and questionnaire method. However, one can observe the inter-dependence

between one another.

**Descriptive Research:** As the name itself indicates, this research directly deals with description. It includes different data collection like survey method and fact finding techniques. The main character of this research is that, the researcher does not have control over the variables. He should describe what has happened and what is happening. Most Ex post facto projects use descriptive research.

**Some other types of research:** Apart from the above types of research, there are many other classifications like **Longitudinal Research** which is spread over for a long period of time. In these changes takes place gradually.

**Historical Research** which is concerned with the collecting of auto biographies, letters, documents, enquiries for knowing the past.

**Simulation Research** deals with the creation of an artificial environment which is quite similar to real environment. Depending upon the need of the situation we can create and adjust to it.

**Significance of Research** - It helps in framing of policies: Research helps in the framing of various government policies. Nearly all the government policies and budgets are planned and executed through research with the help of researcher. Annual budget, monthly budget, monetary and economic policies are all framed by the government. The government is assisted by various organizations for framing the policies through research. Basic aim is to gain knowledge: It leads to many ideas and changes old facts.

- It is used in business organization: Many business companies hire researcher to work on various things. It is used in studying the changes taking place in the market. It helps in capital budgeting, tax management and cost saving policies.
- It leads to discovery and innovation of unknown facts and unexplored theories. It leads to the growth of the society and its citizens. It gives chance to the researcher to go deep into the subject and to innovate it.
- It avoids superstitious beliefs, myths and prejudices: Many people are still not aware of the research activities and its importance. Many ancient beliefs and myths have been proven wrong with the help of research.
- It leads to development of social welfare and society. It is useful for PhD students to write their thesis.
- Thus Research is a fountain of knowledge, which helps in solving all government policies, business problems, avoids superstitious beliefs and helps in the development and maturity of society and its citizens.

**Steps for writing the report** - Report writing is one of the tough task and time consuming. One should go through a detailed study of their study. It includes following steps:

**Report Format** - There are three types of formats like Logical pattern in which the topic is written from general to complex or from complex to general. Chronological pattern is based on time of work done.

Psychological Pattern in which the complex information

is stated first and general findings are written later to get a conclusion.

**Preparing report outline** - Once the analysis of data is finalized the next stage is preparing an outline. There are two types of outline. Sentence outline which highlights the essentials in a sentence form and is best for the inexperienced researchers. Topic outline uses only key words.

**Preparation of rough draft** - After deciding the report outline, the researcher should work out on the placement of graphics, pictures and graphs. In this the entire research should be written.

**Rewriting and refining the research** - It is a long exhaustive process. In this writes and rewrites the errors and also hides the weakness of the research.

**Preparing Bibliography** - Bibliography is a document of the sources used in a research. The researcher should write down all the details of the consulted people and referred books and articles for the research.

**Writing the final proof** - It is the final stage in a research. In this the researcher should write the final statement which should be very attractive and meaningful. In this some steps can be excluded and sequence of the steps can also be changed depending upon the type of research.

**Research in India** - India is a vast country. It is one of the fastest developing countries in terms of economy. Though it has a long history from the time of Vedas in the field of science and research, yet it has not gained a complete momentum in the field of research. Now a days it has started investing on research because of its importance in all the sectors. The role of government sectors, business companies and academic institutions in promoting research is being duly recognized and efforts are made to encourage research in almost all the sectors. But there are some problems which are being faced by a researcher in India. They are as follows:

- Unavailability of qualified personnel: Research is a work which should be done by the experts in their respective fields. Even though India has got more number of qualified personnel but many of them do not know the importance of research. Many researchers are going to foreign countries for their studies.
- Lack of scientific training: This is the main problem in India. Many of the research activities conducted by the researchers do not sound methodologically correct. Many people just do the work of copy and paste method.

Before a researcher undertakes or starts his project, he should get a good training and also complete information of the study.

- Lack of funds: Even though a researcher trying to work on his respective topic, but he will be getting less funds or no funds at all to his project. Even the business organization and some government sectors do not fund more than 5% of their revenue sales.
- Lack of interaction between academicians on one side and business & government organizations. Development should be made for the liaison of these sectors.
- Misuse of data provided by the investors. Lack of availability of the data published.

**Conclusion** - To conclude, Research being one of the ancient methods for discoveries and inventions has got a great significance in society. It is an immortal process, till the existence of society on earth. Thus the research is a journey of truth, discoveries and inventions. It is only through research, the society is consistently developing. With the growth of fast moving society, there is more need for research, research methods and researcher.

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# Season wise comparison of *Eucalyptus tereticornis* Sm. and *Tamarindus indica* L. Bark for the accumulation of Air Pollutants at Indore City

Dr. Priya Trivedi\*

**Abstract** - Bark provide a large surface area next to leaves for accumulation and absorption of gaseous and particulate matter. It is exposed to different environmental conditions along with different air pollutants, thus can be treated as good bioindicator of air pollution. The present study aimed to evaluate Sulphate and Nitrate accumulation during Rainy, Winter and Summer season in bark of *Eucalyptus tereticornis* and *Tamarindus indica* at four different pollution sites for year 2015 & 2016. A seasonwise clear difference was recorded in pollutant accumulation in bark. Among two *Tamarindus indica* recorded maximum sulphate accumulation in summer season at all the three polluted sites while Nitrate accumulation was more in rainy season at all pollution sites in bark of *Tamarindus indica* and *Eucalyptus tereticornis* as well. Overall highest values for sulphate and nitrate was observed in *Tamarindus indica* in comparison to *Eucalyptus tereticornis*.

**Keywords** :Bark, Sulphate, Nitrate, *Eucalyptus tereticornis*, *Tamarindus indica*, Bioindicator

**Introduction** - Air is the most important natural resource for the sustenance as well as development of every living organism. In about last 150 years there occurred a fast deterioration of air, water and soil quality, that ultimately resulted in the environmental crisis. The accumulation of air pollutants in bark is purely a physio-chemical process. The pollutants either passively accumulate on the surface of the bark or become absorbed through ion exchange processes in the outer parts of the dead cork layer (Walkenhorst et al. 1993, Schulz et al. 1999). The first study of air quality using tree bark dates back to the second half of the 20<sup>th</sup> century and such studies are constantly being developed today. Reports published almost every year present the potential of using tree bark of different tree species for monitoring atmospheric pollution (Charbaszez and Mroz 2017), but we find India as an exceptional country.

Indore, which is considered as educational and medical hub, air quality is not safe for last so many years. However, only few efforts have been made to assess and evaluate the impact of air pollution on plants at Indore city. Joshi (1989) worked out effect of urban air pollution on some morphological and biochemical aspects of plants growing in city area. Wagela (1998) paid much attention to automobile pollution with reference to lead in plants and soil. Swamy (2006) studied the effect of air pollution on reproductive behaviour of some trees. Biochemical aspects of air pollution induced injury symptoms on common road side plants (*Bauhinia variegata* and *Cryptostegia grandiflora*) were worked out by Pawar et al. (2010). So far the effect

of ambient air pollution on tree bark is concerned, it remained mostly untouched not only at Indore, but in other parts of country as well. Hence the present work is undertaken to study quantitative analysis for sulphate and nitrate.

**Study area** - Sampling sites were selected on the basis of sources and nature of pollutants. Four sites were selected. Mixed pollution area (MPA) which was located in scheme No.78. Vehicular Pollution area (VPA), is a part of Eastern ring road between Khajarana to Bengali square. Sanwer Road, Industrial pollution area (IPA) the Industrial cluster situated on Sanwer road. Ralamandal village, which is located 10km away from Indore in north east direction was considered as reference area for comparison.

**Material methods** - Bark is the main material for present work. Bark samples of *Mangifera indica* was collected in triplicate in all the three seasons i.e. Rainy (August) Winter (December) and Summer (April) in year 2015 and 2016. About 2 to 5 mm thick chips of bark were removed by sharp knife from all the directions around the tree at a height of 5-6 feet above the ground level and after cleaning with brush placed in a zipper poly bag. For uniformity trees of same height, canopy and main trunk size were considered at all sampling sites. Bark samples was also collected from low polluted area which serves reference for comparison. The samples were brought in the laboratory for the further analysis. For the Quantitative estimation of Sulphate - Sulphur, the method given by Patterson (1958) was adopted. The nitrate contents in bark powder was

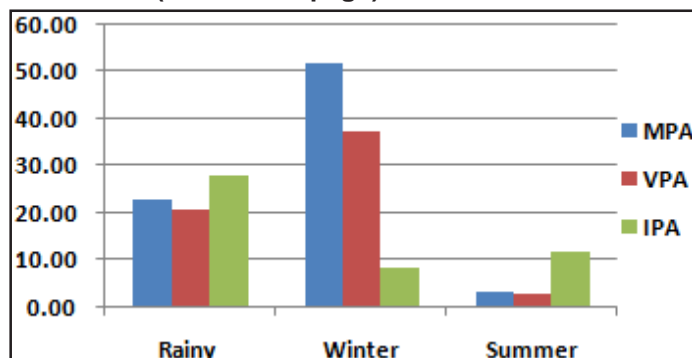
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determined by using rapid colorimetric method given by Cataldo et al., (1975).

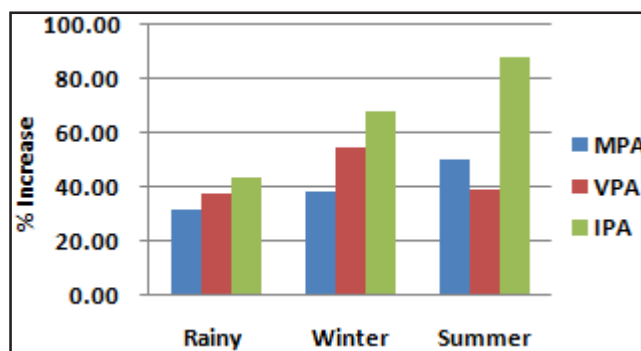
#### Observation

Table no. 1 (see in next page)



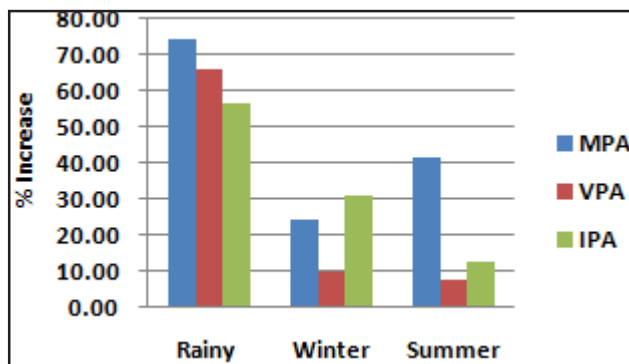
**Fig. 1 Showing Seasonal % increase in sulphate accumulation over LPA in bark extract of *Eucalyptus tereticornis***

Table no. 2 (see in next page)



**Fig. 2 Showing Seasonal % increase in sulphate accumulation over LPA in bark extract of *Tamarindus indica***

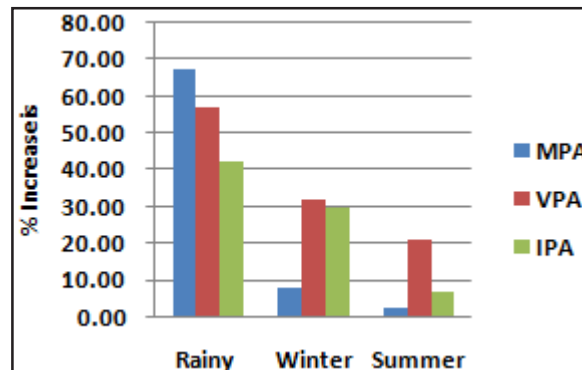
Table no. 3 (see in next page)



**Fig. 3 Showing Seasonal % Increase in nitrate accumulation over LPA in bark extract of *Eucalyptus tereticornis***

Table no. 4 (see in last page)

**Fig 4 Showing Seasonal % Increase in nitrate accumulation over LPA in bark extract of *Tamarindus indica***



**RESULT AND DISCUSSION** - In urban areas major air pollutants are  $\text{SO}_2$ ,  $\text{NO}_x$ ,  $\text{CO}$ ,  $\text{HC}$ , ozone and particulate matter. Apart from these gases like chlorine, ammonia, chlorofluorocarbons and other photochemical oxidants and some heavy metals are also polluting the air. Higher concentration of particulates could potentiate hazardous effects of gaseous pollutants to a greater degree. Among two plant species the increasing trend in sulphate accumulation was observed at all the three pollution areas over LPA, might be due to presence of  $\text{SO}_2$  at pollution areas emitted by industrialization, urbanization and increase traffic density (Wotlerbeek et al. 1996). Among two plant species higher value for sulphate ( $36.9 \text{ mg kg}^{-1}$ ) and nitrate ( $27.3 \text{ mg kg}^{-1}$ ) was observed in *Tamarindus indica* in comparison to *Eucalyptus tereticornis*. This can be accounted to rough bark surface which results in more absorption of pollutants than Smooth bark as in *Eucalyptus tereticornis*. In *Tamarindus indica* maximum accumulation was recorded in summer season at all the three polluted areas while with reference to sulphate minimum accumulation was observed in *Eucalyptus tereticornis*. In polluted areas the plants are reported to have higher sulphate content (Reddy and Dubey, 2002), though in leaves but it is in conformation with our findings.

Higher sulphate accumulation in summer may be due to dry deposition, because dry climate does not allow dust to washed continuously which resulted in long residence time.

Nitrate accumulation was more in rainy season at all pollution sites in *Tamarindus indica* and *Eucalyptus tereticornis*. A reducing trend for nitrate accumulation was found at IPA from rainy to summer. It was also suggested by Treshow (1971) that in dry season  $\text{SO}_2$  is long lived and settled down slowly with aerosols and dust. Hence, it is possible that in summer season dry bark may have absorb more acidic and this has appeared in rainy season.

Sources of nitrates are  $\text{NO}_x$  pollutants including,  $\text{NO}$ ,  $\text{N}_2\text{O}$ ,  $\text{NO}_2$ ,  $\text{N}_2\text{O}_3$  and  $\text{N}_2\text{O}_5$ .  $\text{NO}_x$  are 10 to 100 times greater in urban atmosphere as compared to rural areas and increasing economic growth has raised the level of atmospheric  $\text{NO}_2$  over industrial areas.  $\text{NO}_2$  levels from the ground to the altitude of 10 Km are about 50% higher. Average residence times of  $\text{NO}$  and  $\text{NO}_2$  in atmosphere

are 4 and 3 days respectively. More residence time over  $\text{SO}_2$  may be the possible reason for more nitrate accumulation than sulphate. Natural processes including photochemical reactions takes care of  $\text{NO}_x$ , the product being  $\text{HNO}_3$  which is precipitated as nitrate salts in either rainfall or as dust (Sharma, 2012).  $\text{NO}_x$  with  $\text{SO}_2$  and SPM when absorbed by tree bark may cause rise in accumulation in nitrate and sulphate both.

**ACKNOWLEDGEMENT** - Authors are thankful to UGC CRO, Bhopal for financial support. Authors are also thankful to Principal and Head of Botany department PMB Gujarati Science College, Indore for providing the research facilities.

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**Table no. 1 Sulphate accumulation in bark extract of *Eucalyptus tereticornis* growing in different Pollution areas of Indore city in different seasons ( mg  $\text{kg}^{-1}$  dry weight)**

AREA	*LPA			**MPA *			**VPA			****IPA		
Season Year	R	W	S	R	W	S	R	W	S	R	W	S
2015	21.3	15.0	17.3	22.0	18.5	20.5	23.9	18.3	19.2	24.1	15.4	19.6
2016	27.3	13.3	16.3	25.3	24.7	14.3	22.7	20.7	15.3	25.3	15.3	18.0
AV $\pm$ SD	19.3 $\pm 2.8$	14.2 $\pm 2.8$	16.8 $\pm 0.7$	23.7 $\pm 2.3$	21.6 $\pm 4.4$	17.4 $\pm 4.4$	23.3 $\pm 0.8$	19.5 $\pm 1.7$	17.3 $\pm 2.8$	24.7 $\pm 0.8$	15.4 $\pm 0.1$	18.8 $\pm 1.1$

\*LPA - Low polluted area, \*\*MPA – Mixed polluted area, \*\*\*VPA – Vehicular polluted area, \*\*\*\*IPA – Industrial polluted area

**Table no. 2 Sulphate accumulation in bark extract of *Tamarindus indica* growing in different Pollution areas of Indore city in different seasons ( mg kg<sup>-1</sup> dry weight)**

AREA	LPA			MPA *			VPA			IPA		
Season Year	R	W	S	R	W	S	R	W	S	R	W	S
2015	25.2	14.8	12.0	33.6	21.4	18.9	33.5	25.4	12.4	39.4	27.5	23.7
2016	26.3	19.0	11.3	34.3	25.3	16.3	37.3	27.0	20.1	34.3	29.3	20.3
AV ± SD	25.7 ±0.8	16.9 ±3.0	11.7 ±0.5	34.0 ±0.5	23.4 ±2.8	17.6 ±1.8	35.4 ±2.7	26.2 ±1.1	16.3 ±5.4	36.9 ±3.6	28.4 ±1.3	22.0 ±2.4

\*LPA - Low polluted area, \*\*MPA – Mixed polluted area, \*\*\*VPA – Vehicular polluted area, \*\*\*\*IPA – Industrial polluted area

**Table no. 3 Nitrate accumulation in bark extract of *Eucalyptus tereticornis* growing in different Pollution areas of Indore city in different seasons ( mg kg<sup>-1</sup> dry weight)**

AREA	LPA			MPA *			VPA			IPA		
Season Year	R	W	S	R	W	S	R	W	S	R	W	S
2015	5.3	12.3	16.3	13.3	14.3	22.2	10.3	15.7	19.8	10.7	19.3	18.0
2016	9.5	13.3	17.5	12.5	17.5	15.9	14.3	12.5	16.5	12.5	14.2	20.2
AV ± SD	7.4 ±3.0	12.8 ±0.7	16.9 ±0.8	12.9 ±0.6	15.9 ±2.3	23.9 ±2.3	12.3 ±2.8	14.1 ±2.3	18.2 ±2.3	11.6 ±1.3	16.8 ±1.6	19.1 ±1.6

\*LPA - Low polluted area, \*\*MPA – Mixed polluted area, \*\*\*VPA – Vehicular polluted area, \*\*\*\*IPA – Industrial polluted area

**Table no. 4 Nitrate accumulation in bark extract of *Tamarindus indica* growing in different Pollution areas of Indore city in different seasons ( mg kg<sup>-1</sup> dry weight)**

AREA	LPA			MPA *			VPA			IPA		
Season Year	R	W	S	R	W	S	R	W	S	R	W	S
2015	14.0	11.8	16.9	29.2	15.1	17.3	24.9	19.7	18.9	19.3	19.0	20.4
2016	18.5	15.5	18.9	25.3	14.5	19.5	26.3	16.5	24.5	27.0	16.5	18.0
AV ± SD	16.2 ±3.2	13.7 ±2.6	17.9 ±1.4	27.3 ±2.8	14.8 ±0.4	18.4 ±1.6	25.6 ±1.0	18.1 ±2.3	21.7 ±4.0	23.2 ±5.4	17.8 ±1.8	19.2 ±1.7

\*LPA - Low polluted area, \*\*MPA – Mixed polluted area, \*\*\*VPA – Vehicular polluted area, \*\*\*\*IPA – Industrial polluted area

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# Status of approach towards research in teaching staff of Engineering Sciences

Dr. Amit Singh Thakur\*

**Abstract** - Research skill is one of the significant attribute that is obligatory in teaching staff of a growing Higher Educational Institute. This skill cannot be developed in a teacher lacking the knowledge of proper way of carrying out research work. Present research work is based on analyzing the research performance of teachers of Engineering Sciences and need of undergoing training of Research Methodology in these technical teachers. Results of this work show that teachers of Engineering Sciences are not well aware of different aspects of performing Research. This is the reason that these faculty members fail to publish and present their valuable research work in a proper manner in time. It is suggested that teachers of Engineering Science be mandatorily trained for Research Methodology which will improve the academic & scientific temperament of faculty members, student and nation.

**Key words** - Research Methodology, training, teachers.

**Introduction** - Elementary research issues and concerns as well as an alternative conceptual structure for studying the connection of achievement and teaching are highlighted in the present manuscript. Research in Indian Higher Educational Institutes is considered to be inferior thing, While University Grants Commission (UGC) of India in its regulation 2018 has clearly mentioned that carrying out research is duty of a staff dealing in academic and provided clauses for research in weekly workload of teachers. (UGC Regulation, 2010). It is observed that Indian Technical and Engineering Institutes are lacking the potential to compete with Institutes of other Nations. The status of lack of knowledge of research methodology teachers of Government and Private Engineering Institutes is to be taken into consideration for overall development of nation. This lack of knowledge has perished the budding engineering & technical talent of India, this is the only reason that students and researchers of Engineering Science fail to publish and present their achievements at International platform. Lack of knowledge of performing research in a proper manner in teaching staff of engineering institutes is one of the reason that despite of potential youth no Indian institute stands in top 200 institutes of the world.

Ryans (1960) conducted a study on teacher effectiveness and research aptitude found that teachers' classroom behavior differ significantly with the knowledge of research methodology and with research aptitude. Similarly Debnath (1971) studies some important determinants of teaching efficiency and found that age, experience, academic achievement and teaching are significantly related to knowledge of research methodology. A perusal of NAAC Grade Sheet of various

institutes reveals that they secure less score in the criterion of Research

The present study is an attempt to estimate the extent of relationship of research aptitude with Academic Achievement for teachers of engineering institutes. The study was conducted on 160 teachers actively engaged in teaching subjects of engineering sciences in government and private engineering institute of Madhya Pradesh state of India. To compare the result of this study subsequently information from teachers of same institutes those have undergone training of research methodology was obtained. The main aim of this study is to analyse the knowledge of Research Methodology in teachers of Engineering Colleges. It was also targeted to study the need of these teachers to undergo training of research methodology. The data obtained from this study was compared with the data management teachers those had studied research methodology. The results of this study were shocking, that even experienced engineering teachers those are guiding students for their B.E. & M.Tech. projects are not well aware of different aspects of performing research.

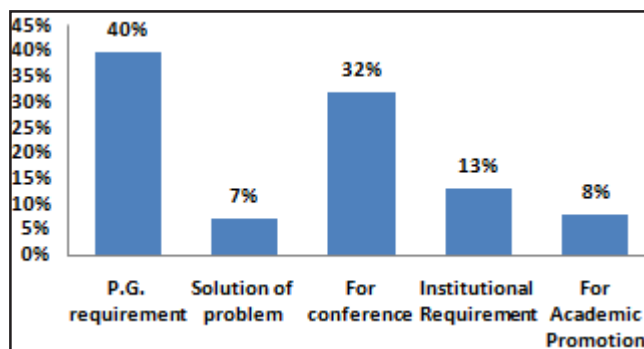
**Material & methods** - Survey of different government and private engineering institute of Madhya Pradesh state of India was done for the selection of sample subjects from May to October 2014. Total 160 samples actively engaged in teaching of subjects Engineering Sciences were selected for inclusion in this study. The selected samples were having undergraduate and postgraduate teaching experience of 2 to 15 years and have not undergone or studied Research Methodology. Teachers of same institutes undergone training or studied of Research methodology were included in the study as controls. A detailed questionnaire to collect

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information's of all the sample and control subjects was filled during the survey and study. The important element of the questionnaire includes education qualification, years of UG & PG teaching experiences, knowledge about various aspects of research viz. identification of problem, research gap, review of literature, hypothesis, hypothesis testing, tools of research, synopsis, plagiarism, publication of manuscripts etc. The test of hypothesis was done using 'z' test at 5% significance level.

**Results & Discussion-** The data obtained from questionnaire filled during the study was segregated on different parameters, viz reason for performing research, knowledge of hypothesis, formulation of hypotheses and different aspects of publication. Appropriate statistics were applied to the collected data to achieve the inference of the study. Fig No. 1 contains the data of reasons stated by teachers actively engaged in teaching Engineering Sciences. About 40% of Engineering teachers agreed that they have performed research only during their Post Graduate study i.e. for the fulfillment of their M.Tech. or M.E. degree. About 32% of Engineering teachers have written research manuscript to submit it in conferences/seminars, while 8% for academic promotion and 13% due to institutional requirement or pressure. Only 7% of teachers are engaged in teaching Engineering sciences have conducted research to provide solution of a problem on comparing with management teachers the results were significantly less.



**Fig No. 1:**Data of reason stated by teachers actively engaged in teaching Engineering Sciences

Figure No. 2 depicts the results of list of Journals provided by UGC in sample subjects actively engaged in teaching Engineering Sciences. It was observed that 78% of teachers of Engineering Sciences were not aware of list of Journals. They were also not aware of terms like impact factor, citation index etc. Only 15 % of teachers of Engineering Sciences were having knowledge of list of Journals provided by UGC which was significantly less as compared to 88% teachers of management.

**Fig No. 2:**Knowledge of list of Journals provided by UGC in sample subjects actively engaged in teaching Engineering Sciences

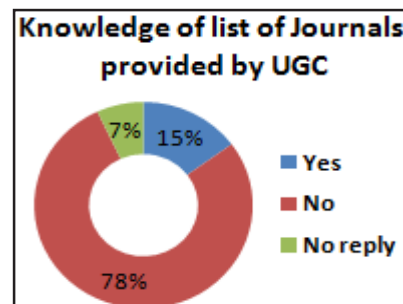
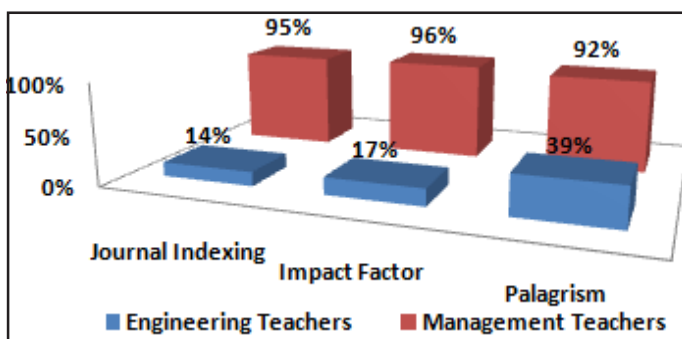


Figure No. 3 depicts the results of knowledge of hypothesis & its testing in sample subjects actively engaged in teaching Engineering Sciences. It was observed that 72% of teachers of Engineering Sciences were not aware of need of hypothesis for performing research. They were also not aware of reasons to formulate hypothesis and the importance of testing the hypothesis. The lack of knowledge of tools used in performing research was one of the shocking observations of this study. Only 17 % of teachers of Engineering Sciences were having knowledge of need of hypothesis for performing proper research which was significantly less as compared to 97% teachers of management.



**Fig No. 3:**Knowledge of Hypothesis & its testing in sample subjects actively engaged in teaching Engineering Sciences Figure No. 4. shows the results knowledge of different aspects of research publication in teachers of Engineering Sciences and Management. It is observed that only 14% of engineering teachers were aware of Journal indexing which was significantly less as compared to 95% of management teachers. When teachers were inquired about the knowledge of impact factor it was observed that only 17% of engineering teachers were aware of Journal Impact factors which was significantly less as compared to 96% of management teachers.



**Fig No. 4:** Knowledge of different aspects of research publication in teachers of Engineering Sciences and Management.

**Conclusion & Suggestions** - The results of the study were surprising to be reported, most of teaching staff actively engaged in teaching subjects of Engineering Sciences at undergraduate and post graduate level were not aware of proper method of conducting scientific research. This study clarifies the only reason behind the backwardness of Indian Technical Institute is the lack of knowledge of Research Methodology in teachers actively engaged in teaching subjects of Engineering Sciences. The conditions of lack of knowledge of research methodology did not differ in Government and Private Engineering Institutes. This lack of knowledge has perished the budding engineering & technical talent of India, this is the only reason that students and researchers of Engineering Science fail to publish and present their achievements at International platform. This study supports the view of including the subject of Research Methodology in the syllabus of engineering sciences. If it is

not possible at academic level the Engineering institutes have the moral responsibility to organize and conduct workshops or training programme for the faculty members of Engineering Science at regular interval. The general trend shown by these study can be considered while interpreting the results of the future such studies.

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# Study of ethnoveterinary plants used against different ailments from Khargone district of Nimar region

Parashar Preeti\*

**Abstract** - The study was carried out in Khargone district of Nimar region. Ethnoveterinary data were collected using pre-structured questionnaires, interviews and field observations with elderly persons, cattle owners, and traditional healers. A total 30 plant species belonging to 26 families were documented in the area. The most frequently used plant parts were leaves (37%) followed by roots (21%), seeds and fruits (10%), whole plant and bark (8%), flower and rhizomes (3%).

**Keywords** - Ethnoveterinary, Nimar, Khargone, Cattle owners, Traditional healers.

**Introduction** - The history of ethnoveterinary medicine is as old as the evolution of man on earth. Human and animal relationship was so close from the beginning. Veterinary science was developed in India as early as the Vedic period. The Rig-Veda (4500 - 1600 B.C.) mentions the uses of medicinal plants in the treatment of man and animals. Atharveda (3500 - 500 B.C.) provides information about healing herbs and drugs. Khargone district of Nimar is the south western region of Madhya Pradesh state in West Central India was formerly known as West Nimar. The region lies south of the Vindhya range and consists of two portions of the Narmada and Tapti river valleys separated by a section of the Satpura range. It is situated between 21°22' and 22°35' north latitudes, 74°25' and 76°14' east longitudes. It is famous for its cotton and chilly production. The district is divided into 08 tehsils and has 1407 villages. About 40% of the population consists of tribal people. Bhil, Bhilala, Barela, Gond are most common tribes.

**Material and Methods** - The data on medicinal plants had been collected from different villages of Khargone district of M.P. covering 09 Tehsil (Khargone, Segaon, Bhagwanpura, Jhiranga, Maheshwar, Bailgaon, Barwah, Kasrawat). Bhil, Bhilala, Barela, Gond, Korku and Tadvi are most common tribes. The information was gathered through questionnaire method and interviews. Field observations and discussions with tribal, local healers, elderly persons, cattle owners was held during survey. Details of medicinal plants used, mode of treatment, methods of preparation and types of administration were documented by interacting with them. The plants are arranged alphabetically, the botanical name, local name and family. Identification of plants done with the help of flora and other taxonomic literature.

## Observations:

### 1. *Abrus precatorius* L.

**Family:** Leguminosae

**Local name:** Ratti and Guraj.

**Plant Part Used:** Seeds..

**Ethnoveterinary Uses:**

- 10 gm paste of seeds is fed to cattle in bone fracture.
- Paste of seed powder in coconut oil is used for wound healing.

2. *Abutilon indicum* (L.) Sweet, Hort. Brit. ed. 1, 54. 1826; Fl. MP. 1:192. 1993.

**Family:** Malvaceae

**Local name:** Kanghi.

**Plant Part Used:** Leaves

**Ethnoveterinary Uses:**

- Decoction of leaves applied on sores for killing maggots.
- Decoction of leaves poured inside the hole of horn to cure horn cancer.
- Leaf paste is applied in tail gangrene.

3. *Acacia nilotica* (L.) Willd.

**Family:** Leguminosae

**Local name:** Babul, Kikar, Desi babool.

**Plant Part Used:** Leaves and bark.

**Ethnoveterinary Uses :**

- Fresh leaves are crushed and mixed with 100 ml of water is given orally in dysentery of cattle.
- Decoction of bark is applied over the hooves to cure foot and mouth diseases.

4. *Acampe praemorsa* (Roxb.) Blatter and McCann in J. Bombay Nat. Hist. Soc. 35:495. 1932; Fl. MP. 3:14. 2001.

**Family:** Orchidaceae

**Local name:** Banda, Lambdi.

**Plant Part Used:** Whole plant.

**Ethnoveterinary Use :**

- Entire plants are chopped with normal fodder and given to cattle in flatulence

### 5. *Acanthospermum hispidum* DC.

**Family:** Compositae

**Local name:** Bada gokhru.

**Plant Part Used:** Leaves and seeds.

**Ethnoveterinary Uses:**

- Leaf ash mixed with coconut oil applied around horns of animals suffering from worms.
- Smoke produced by burning seeds is used to treat hemorrhagic septicemia.

### 6. *Achyranthes aspera* L.

**Family:** Amaranthaceae

**Local name:** Aandhi jhada, Apmarg.

**Plant Part Used:** Leaves and seeds.

**Ethnoveterinary Uses:**

- 50 gm leaves mixed with 100 ml mustard oil are given orally to cure gastritis.
- Seeds are burnt and the animals are exposed to smoke to treat hemorrhagic septicemia.

### 7. *Ailanthus excelsa* Roxb.

**Family:** Simoroubaceae

**Local name:** Maharukh, Addoo, Papdi.

**Plant Part Used:** Leaves.

**Ethnoveterinary Uses:**

- Leaves juice is used to kill lice and ticks on the skin of cattle.
- Decoction of leaves is applied to remove maggots from the wound.

### 8. *Albizia procera* (Roxb.) Benth.

**Family:** Leguminosae

**Local name:** Karak, Safed siris.

**Plant Part Used:** Roots and leaves.

**Ethnoveterinary Uses:**

- Leaves juice is dropped in to eyes to cure eye trouble.
- Root paste in cow's urine is applied in eyes against night blindness.

### 9. *Alangium salviifolium* (L. f.) Wang.

**Family:** Cornaceae

**Local name:** Ankol

**Plant Part Used:** Leaves and stem.

**Ethnoveterinary Uses:**

- Leaves paste or extract used in washing and healing of wounds.
- Stem bark juice is mixed with *Citrus limonia* (Lemon) juice given orally, 2-3 times a day to cure cough and sneezing in cattle.

### 10. *Asparagus racemosus* Willd.

**Family:** Asparagaceae

**Local name:** Shatavari, Sevariya, Shatmul, Musli.

**Plant Part Used:** Roots.

**Ethnoveterinary Uses:**

- Roots mixed with fodder given to the milching animals to increase lactation.
- Root paste mixed with the paste of *Allium cepa* (Onion) and jaggery given orally to cure mastitis

### 11. *Azadirachta indica* A.

**Family:** Meliaceae

**Local name:** Neem, Neemdo.

**Plant Part Used:** Leaves and seeds.

**Ethnoveterinary Uses:**

- Leaves paste is used for killing ectoparasites.
- Seed oil or decoction of leaves is applied on hooves of cattle in foot and mouth disease.

12. *Bacopamonnieri* (L.) Wettst. in Engl. & Prantl, Nat. Pflanzenfam. IV.3b:77 1891; Fl. MP. 2:207. 1992.

**Family:** Plantaginaceae

**Local name:** Brahmi, Jalbuti.

**Plant Part Used:** Whole plant, leaves and roots.

**Ethnoveterinary Uses:**

- Warmed leaves are applied on swelling of cattle.
- Root mixed with raw rice and fed to animal for cough and cold.

### 13. *Capsicum annuum* L.

**Family:** Solanaceae

**Local name:** Lal mirch, Marchaya.

**Plant Part Used:** Roots, leaves and fruits.

**Ethnoveterinary Uses:**

- Crushed leaves are used for wound healing and swelling of body parts.
- Root extract (two cups) is given twice a day for snake bite.
- Fruit powder with jaggery given to cattle in stomach disorders and to improve digestion.

### 14. *Catunaregam spinosa* (Thunb.) Tirveng.

**Family:** Rubiaceae

**Local name:** Purput, Kalapendra.

**Plant Part Used:** Fruits, whole plant and leaves.

**Ethnoveterinary Uses:**

- Fruits or leaves are boiled in water, cooled and applied on wounds of cattle.
- Plant extract mixed with fodder is used to treat diarrhoea.

### 15. *Cleome viscosa* L.

**Family:** Cleomaceae

**Local name:** Hulhul or Machundi.

**Plant Part Used:** Leaves and whole plant.

**Ethnoveterinary Uses:**

- Leaf paste mixed with tobacco leaves is applied to remove ectoparasites from the skin of animals.
- Whole plant powder is given to animal along with bread two times a day to cure 'black quarter' disease.

### 16. *Crinum viviparum* (Lam.) Ansari & V. J. Nair.

**Family:** Amaryllidaceae

**Local name:** Sudarshan, Govel, Nagadamani.

**Plant Part Use:** Roots.

**Ethnoveterinary Uses:**

- The extract of bulbous root is slightly warmed and applied externally to cure stomach pain.

### 17. *Cucumis melo* L.

**Family:** Cucurbitaceae

**Local name:** Phoot, Kharbooj.

**Plant Part Used:** Fruits.

**Ethnoveterinary Uses:**



- Fruit paste mixed with whey is given orally to cattle for 3 days to cure dysentery.
- Fresh fruits are fed with fodder to expel placenta after delivery.

#### 18. *Euphorbia hirta* L.

**Family:** Euphorbiaceae

**Local name:** Thaur, Dudhai.

**Plant Part Used:** Leaves and latex.

**Ethnoveterinary Uses:**

- Crushed leaves mixed with fodder given to cattle to increase lactation in cattle.
- Latex is applied on wounds for quick healing.

#### 19. *Gloriosa superba* L.

**Family:** Colchicaceae

**Local name:** Kaliharikand, Kallavi, Karkari.

**Plant Part Used:** Roots and tuber.

**Ethnoveterinary Uses:**

- Tubers are crushed and paste is applied over the hooves of cattle to cure foot and mouth disease.
- Tuber is rubbed and applied on swelling of neck of cattle.
- Root paste is applied on uterus to cure prolapsed uterus.

#### 20. *Grewia hirsuta* Vahl, Symb.

**Family:** Malvaceae

**Local name:** Gadsatri, Gursakri.

**Plant Part Used:** Roots.

**Ethnoveterinary Uses:**

- Dried root powder mixed with water is given to cattle to treat bone fractures.
- 50 ml of roots decoction is given to cattle after delivery for quick removal of placenta.

#### 21. *Madhuca longifolia* var.

**Family:** Sapotaceae

**Local name:** Mahua, Moho.

**Plant Part Used:** Flowers and stem.

**Ethnoveterinary Uses:**

- Flower decoction is given to calves to expel intestinal worms.
- Decoction of stem bark is applied on hooves and bandaged in foot rot disease.

#### 22. *Ricinus communis* L.

**Family:** Euphorbiaceae

**Local name:** Arand, arandi, Aandi.

**Plant Part Used:** Leaves and seeds.

**Ethnoveterinary Uses:**

- Seed oil and decoction of *Capparis zeylanica* (Hur hur) is applied to reduce pains in joints of cattle.
- Leaves are slightly warmed and bandaged over bone fracture.

#### 23. *Sapindus marginatus* Vahl, Symb.

**Family:** Sapindaceae

**Local name:** Aritha, Reetha.

**Plant Part Used:** Fruits.

**Ethnoveterinary Uses:**

- Fruit powder and seeds stirred in water and adminis-

tered to cattle to cure in snake bite.

- Decoction of fruits given orally in asthma and dysentery.

#### 24. *Sarcostemma acidum* (Roxb.) Voigt, Hort. Suburb. Calcutt. 542. 1845; Fl. MP. 2:85. 1997.

**Family:** Apocynaceae

**Local name:** Bhurvel, Samarbel.

**Plant Part Used:** Stem and whole plant.

**Ethnoveterinary Uses:**

- Powder of stem and of *Tinospora sinensis* (Gudvel) are mixed in warm ghee is given orally for prolapsed placenta.
- Whole plant along with *Aristolochia bracteolata* (Girdan) are grounded and boiled in water. This decoction is drenched to animal for 12 days to cure rheumatic pain.

#### 25. *Senna tora* (L.) Roxb. Fl. Ind. 2:340. 1832. Syn *Cassia tora* Fl. MP. 1:424. 1993.

**Family:** Leguminosae

**Local name:** Puadia, Chirota, Ashapur.

**Plant Part Used:** Seeds, Leaves.

**Ethnoveterinary Uses:**

- Paste of leaves is applied with the help of cloth on eye lid of cattle to cure redness of eyes.
- Seeds of plant and *Trigonella foenum graecum* (Methi) mixed with black salt are pounded and mixed in water. It is drenched to animal to cure rheumatism.

#### 26. *Syzygium cumini* (L.) Skeel, U. S. D. A. Bur. Pl. Industr. Bull. 248:25. 1812; Fl. MP. 1:466. 1991.

**Family:** Myrtaceae

**Local name:** Jamun, Jamna

**Plant Part Used:** Bark.

**Ethnoveterinary Uses:**

- Stem bark mixed with curd and ghee to prepare a juice. It is drenched to animal to cure blood in urine.
- Stem bark is boiled in 500 ml. water to prepare the juice and given to cattle for treating stomach disorder.

#### 27. *Terminalia arjuna* (Roxb. ex DC.) Wight & Arn.

**Family:** Combretaceae

**Local name:** Kau, Kahu.

**Plant Part Used:** Bark

**Ethnoveterinary Uses:**

- Bark paste is plastered over bone fracture and bandaged for fast recovery.
- Paste of fresh bark is given to cows for removal of placenta after delivery

#### 28. *Tribulus terrestris* L., Sp. Pl. 387. 1753; Fl. MP. 1:242. 1993.

**Family:** Zygophyllaceae.

**Local name:** Chottagokharu.

**Plant Part Used:** Roots, leaves and stem.

**Ethnoveterinary Uses:**

- Leaves are crushed to make paste. It is applied on septic wounds of animals.
- 250 gm. stem mixed with fodder is given to animals for two days for removal of internal parasites.

- 250 gm. root paste and 25 gm. paste of leaves of *Azadirachta indica* (Neem) is applied locally for removal of external parasites.

### 29. *Zingiber officinale* Roscoe.

**Family:** Zingiberaceae

**Local name:** Adrak.

**Plant Part Used:** Rhizome.

**Ethnoveterinary Uses:**

- Rhizome paste with leaf paste of *Aloe vera* (Guar patha) applied on swelling of udder in cattle.
- Dried rhizome mixed with black salt is given for three days to cure indigestion.

### 30. *Ziziphus nummularia* (Burm. f.) Wight & Arn.

**Family:** Rhamnaceae

**Local name:** Chinya bor, Jharbari, Jharbar.

**Plant Part Used:** Leaves and roots.

**Ethnoveterinary Uses:**

- Leaves pounded finely in *Linum usitatissimum* (Alsi) oil to form a paste. It is applied on burnt parts of animals till cure.
- Root crushed and mixed with water is applied on the shoulder pain of the bullocks.
- Decoction of root is applied on hooves and oral cavity in foot and mouth disease of cattle.

**Results and Discussion** - The study revealed that 30 plant species are used in 20 different ailments of cattle. A total 30 plant species belonging to 26 families were documented in the area. Leguminosae is dominant among the families. The most frequently used plant parts were leaves (37%), followed by roots (21%), seeds and fruits (10%), whole plant and bark (8%) flower and rhizomes (3%) Common ailments are bone fracture, foot and mouth disease, mastitis, dysentery, wounds, horn cancer etc. Single and combination of different plant parts were used in different ailments. Tribals used to cure single disease of animals by using different plant species. These study indicates that tribals have sufficient knowledge about the therapeutic uses. The low cost and almost no side effects of these preparations make them sustainable by the local community.

**Acknowledgement** - The author's is grateful to Principal Dr. Kiran Dixit and Dr. J. Sikka, Head of Botany Department, P.M.B. Gujarati Science College, Indore for research, library facilities. We are very much thankful to Dr. C.M. Solanki, Dr. S. Ray for encouragement and valuable suggestion. We thankful to veterinary doctors, informant person for providing the necessary information.

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# Synthesis and antioxidant activity of some novel benzothiazole derivatives

Pallavi Dhakoniya\* Shubha Jain\*\* Dhananjay Dwivedi\*\*\*

**Abstract** - A series of some novel benzothiazole derivatives were synthesized and evaluated for antioxidant activity. The structures of the compounds were confirmed by spectral data. The antioxidant activity were determined by DPPH free radical scavenging assay method.

**Keywords** - Benzothiazoles, synthesis, antioxidant.

**Introduction** - The best of biologically active agrochemicals and pharmaceuticals used in industrial application extending from cosmetics, data storage, reprography and plastics are heterocyclic in nature. Heterocycles make an enormously significant class of compounds. In the study of organic chemistry heterocycles have occupied a major and magnificent research area.<sup>1</sup> Many of them are naturally occurring and have biological activity.

Heterocycles are also useful compounds for their synthetic value as synthetic intermediate, protecting group, chiral auxiliaries, organic reagents in organic synthesis.<sup>2</sup> Alkaloids such as Ergotamine: indole based and Cinchonine : quinolone based exhibited antimigraine and antimalarial activities respectively, they contain basic N-atoms. A triazole based alkaloid: Posaconazole has also been used as antifungal drug.

The noticeable capability of heterocyclic core to attend equally as dynamic and biomimetics pharmacophores has generally been devoted to their exclusive worth as classic key elements of many drugs. Bi and tri cyclic derivatives create an important class of natural products showing an expanded variety of interesting biological activities.<sup>3-5</sup>

The compounds enclosing benzothiazole fraction constructed by a merged thiazole and benzene moiety are of excessive attention and have been broadly used in pharmaceutical chemistry and agricultural division. Heterocycles consisting a benzothiazole ring residues are described to show, anti-inflammatory, sedative, analgesic, anticancer, muscle relaxant, antitubercular, diuretic, anti-microbial, anti-allergic, antimalarial, antiviral, anticonvulsant, CNS depressant, antioxidant, and plant growth regulatory activities etc. In calculation, benzothiazole forms an imperative pharmacophore in herbicidal, fungicidal and insecticidal agents. A broad spectrum of pharmacological activity is shown by 2- substituted benzothiazoles.<sup>6-8</sup>

Typically, multi-component reactions (MCRs) are a powerful implement which attract much more attention in synthetic organic reactions with varied range of complexity where the initial materials are easily available. In MCRs the protection- deprotection steps are non-existent and environmentally benign.<sup>9-11</sup>

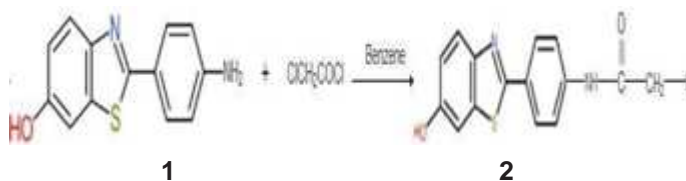
In continuation of our work on synthesis of various heterocycle is using green methods and MCRs,<sup>12-20</sup> here in we report a novel approach for the synthesis of benzothiazole derivatives and their antioxidant activity.

## 2. Experimental

### Materials and methods:-

#### Synthesis of 2-chloro-N-[4-(4-(5-hydroxybenzothiazol-2-yl)phenyl)]acetamide (2)

A solution of the reactant chloroacetyl chloride in benzene (100ml) was gradually added to solution of **1**, the starting compound (0.0055mole) in dry benzene (100ml). The reaction mixture was refluxed on a water bath for 2hrs. The product obtained was washed with 5% sodium bicarbonate solution. Finally again washed with water, dried and recrystallized from alcohol.



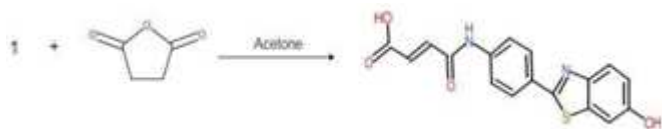
#### Synthesis of 4-[(4-(5-hydroxybenzothiazol-2-yl)phenyl) amino]-4- oxobut-2-enoic acid (3)

The solution of maleic anhydride (0.1mol) in dry acetone (80ml) was prepared and added to a solution of **1** in dry acetone (30ml). The mixture was cooled in ice and was stirred for 1 hr. The product obtained was filtered, washed, dried and recrystallized from alcohol.

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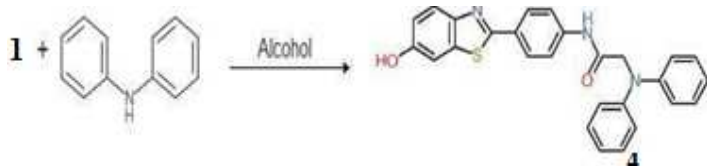
\*\*\* School of Studies in Chemistry and Biochemistry, Vikram University, Ujjain (M.P.) INDIA



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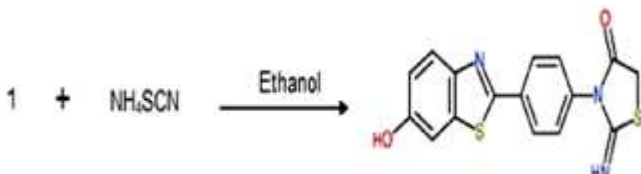
### Synthesis of 2-(diphenyl amino)-N-[4-(5-hydroxy benzo thiazol-2- yl) phenyl]acetamide(4)

The solution of 1(0.1 mol) was prepared in absolute alcohol (25ml) diphenyl amine(0.01 mol) was added to it. The mixture was refluxed on water bath for 4 hrs. The product obtained was filtered, dried and recrystallized from alcohol.



### Synthesis of 3-[4-(5-hydroxy benzothiazol 2 yl) phenyl 2- iminothiazolidin-4-one(5)

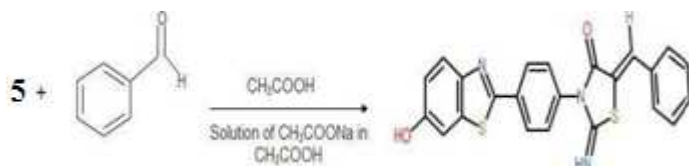
The solution of 1(0.1 mol) was prepared in ethanol and ammoniumthiocyanate (0.1mol) was added to it and refluxed for 6hrs. The product obtained was washed with water and dried and recrystallized from alcohol.



5

### Synthesis of 5-benzylidene-3-[4-(5-hydroxy benzo thiazol-2- yl)phenyl]-2- iminothiazolidin-4-one (6)

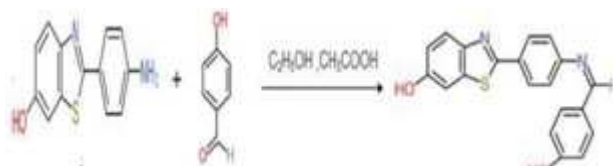
The compound 6 (0.1mol) and benzaldehyde(20mmol) were added to a solution of anhydrous sodium acetate(20mmol) in glacial acetic acid(30ml). The mixture was heated at 100 °C for 8hrs and then cooled to room temperature and poured into ice water. The solid product was obtained and filtered. The filtered product was washed with water and dried then crystallized from ethanol.



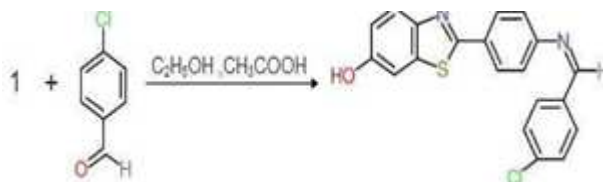
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Synthesis of Benzylidene derivatives of Benzothiazole (7 & 8)

A solution of 2-(4-aminophenyl)benzothiazol-5-ol (1)(0.0055mole) and 4-hydroxy,4-methoxy,4-chloro benzaldehyde and furfuraldehyde (20mol) was prepared in absolute ethanol (100ml) and refluxed for 3hrs in the presence of acetic acid. The product obtained, was washed with water, dried and recrystallized from alcohol.



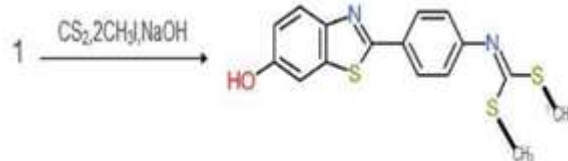
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8

### Synthesis of dimethyl[4-(5-hydroxybenzothiazol-2- yl) phenyl] carbonimidodithioate (9)

To a well stirred ice cold solution of 1 (0.05 mole) in DMF (20 ml), an aqueous solution of 10 M NaOH (5ml), carbondisulphide (0.10 mole) and methyl iodide (0.05 mole) was added in sequence at an interval of 30 min. with continuous stirring for 3hrs. Then mixture was poured into ice cold water. The product was obtained, washed with water and recrystallized from alcohol.



9

**2.2 Antioxidant activity** - The antioxidant activity of all compounds was analyzed using DPPH free radical scavenging assay method. Different concentrations of compounds (222.5 to 2225 ig in 100 il) were taken in test tubes and 2.9 ml of DPPH solution (2.5mg/100ml) was added. The reaction mixture was incubated for 30 min in dark and absorbance at 520 nm was recorded. The radical scavenging activity of the tested sample was calculated using the formula

**% Free Radical Scavenging Activity = [(Ac-At)/Ac]x 100**, where, Ac =absorbance of control and At = absorbance of test.

### 3 Results and Discussions

**The Spectral data of all synthesized compounds are as follows**

#### Compound 2

IR(KBr)Cm<sup>-1</sup> 3479(O-H), 3387(N-H), 1659(C=O). <sup>1</sup>HNMR(400MHzDMSO)ppm 8.32(O-H), 8.16(N-H), 5.6-7.7(Ar-H), 2.53(CH<sub>2</sub>). <sup>13</sup>CNMR(400MHzDMSO)ppm 162.92, 154.05, 148.78, 140.63, 130.02, 79.12, 78.47, 40.11, 39.70, 39.07, 38.86

#### Compound 3

IR(KBr)Cm<sup>-1</sup> 3409(O-H phenol), 3069(N-H), 1732(C=Oacid), 1703(C=Oamide). <sup>1</sup>HNMR(400MHzDMSO)



ppm10.43(COOH),9.57(Ph-OH),6.08-8.32(Ar-H) 5.3235(N-H) 4.83(CH=CH).  $^{13}\text{C}$ NMR (400MHzDMSO)ppm 163.01,154.08,148.87,140.77,130.49,130.08,128.87,123.30,123.15,115.51, 114.93,79.03,78.70,78.37,40.17,39.96,39.13,38.92

#### Compound 4

IR(KBr) $\text{Cm}^{-1}$  3239(OH/NH), 3030(Ar-CH),1740(C=O)etc.  $^1\text{H}$ NMR(400MHzDMSO)ppm 8.27 (Ph-OH),6.55-7.72 (Ar-H),2.5066(CH<sub>2</sub>).  $^{13}\text{C}$ NMR(400MHzDMSO)ppm 167.57,165.91,163.02,160.76,159.76,154.12,152.87, 151.56,148.87,140.78,136.90,128.10,123.16,119.43, 115.67, 113.14,112.59,112.54

#### Compound 5

IR(KBr) $\text{Cm}^{-1}$  3775(O-H),3377(NH),1582(C=O)etc.  $^1\text{H}$ NMR(400MHzDMSO)ppm9.30(OH),6.75-8.32(Ar-H),6.51(NH),2.52(CH<sub>2</sub>)  $^{13}\text{C}$  NMR(400MHzDMSO) ppm162.92,154.05,148.78,140.63,130.02,128.97,123.04,122.24,114.85,79.12,78.79,78.47,40.11,39.70,39.07,38.86

#### Compound 6

IR (KBr)  $\text{Cm}^{-1}$  3305 (O-H), 1634 (C=O) etc.  $^1\text{H}$ NMR(400MHzDMSO)ppm8.32(Ph-OH),6.00(NH) 6.92-8.16(Ar-H)5.77(=CH).  $^{13}\text{C}$ NMR(400MHzDMSO)ppm 167.57,165.91,163.02,160.76,159.76,154.12,152.87,151.56,148.87,140.78,136.90,128.10,123.16,119.43, 115.67, 113.14,112.59,112.54

#### Compound 7

IR(KBr) $\text{Cm}^{-1}$ 3427.52(Ar-OH)etc.  $^1\text{H}$ NMR (400MHzDMSO) ppm 8.32 & 8.14(Ar-OH),6.06-7.71(Ar-H),5.90(=CH)  $^{13}\text{C}$ NMR (400MHzDMSO)ppm 167.57, 165.91,163.02,159.76,154.12,152.48,151.56,148.87,140.78,136.90,130.52,128.10,122.31,119.43,115.67,114.74,112.59,112.54

#### Compound 8

IR(KBr) $\text{Cm}^{-1}$ 3371(O-H),803.76(C-Cl)etc.  $^1\text{H}$ NMR(400MHzDMSO)ppm8.19(O-H),6.05-7.34(Ar-H),4.32(=CH).  $^{13}\text{C}$  NMR(400MHzDMSO) ppm167.57,163.02,159.76, 151.56,136.90,132.01,130.52,128.91,123.33, 122.05,119.43,115.67,113.14,112.54

#### Compound 9

IR(KBr) $\text{Cm}^{-1}$ 3258.28(O-H),1658.45(C=N) etc.  $^1\text{H}$ NMR(400MHzDMSO) ppm 9.3035(O-H),6.51-8.32(Ar-H),2.51(CH<sub>3</sub>).  $^{13}\text{C}$ NMR (400MHzDMSO)ppm 162.92,154.05, 148.78,140.63,130.02,122.24,114.85

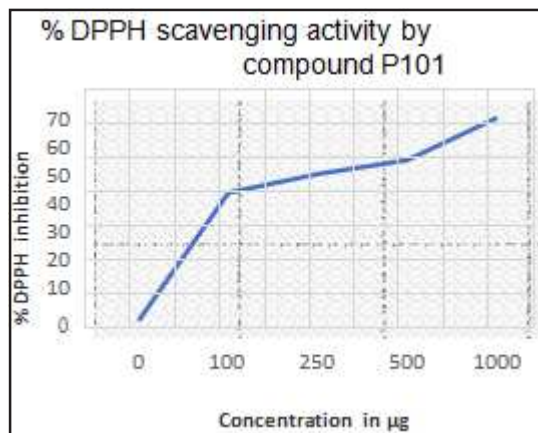
**Antioxidant activity** - Following the protocol, change in OD517 were observed, which were used to calculate the % DPPH inhibition shown by different test sample and calculation of IC<sub>50</sub>.

#### % DPPH inhibition

% DPPH scavenging activity by compound P101

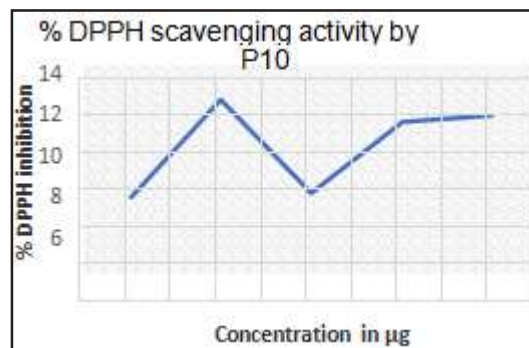
#### Concentration in $\mu\text{g}$

%DPPHactivity/ compound P101		IC <sub>50</sub>
In $\mu\text{g}$	TEST	500 $\mu\text{g}$
0	6.450554	
100	42.75	
250	48.0	
500	52.2	
1000	64.75	



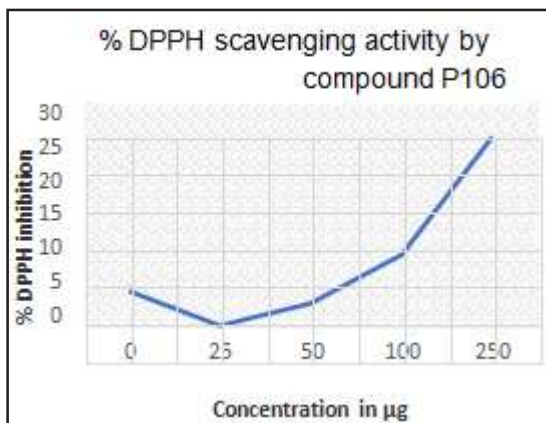
A graph was plotted for the % DPPH scavenging activity against varying amount of the compound 2 and IC<sub>50</sub> was calculated which was found to be 500  $\mu\text{g}$

%DPPHactivity/ Compound P104		IC <sub>50</sub>
In $\mu\text{g}$	TEST	NOT DETECTABLE
0	6.450554	
50	11.7	
100	5.38	
250	10.15	
500	10.6	



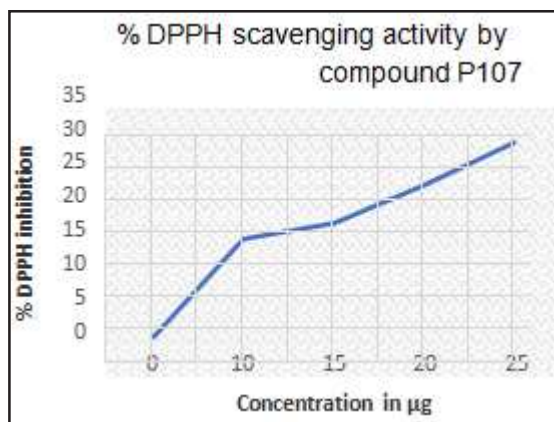
A graph was plotted for the % DPPH scavenging activity against varying amount of the Compound 3 and IC<sub>50</sub> value could not be calculated due to repeated abrupt OD 517.

% DPPHactivity/ Compound P106		IC <sub>50</sub>
In $\mu\text{g}$	TEST	500 $\mu\text{g}$
25	0.44	
50	3.35	
100	9.89	
250	25.53	



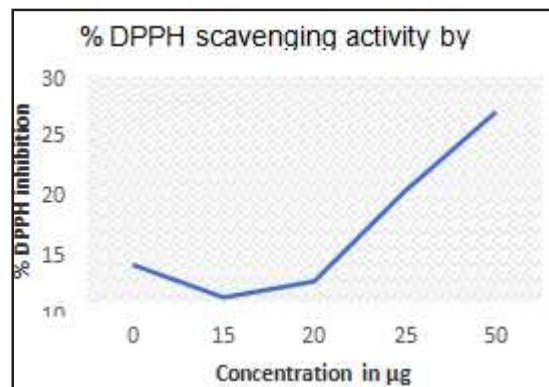
A graph was plotted for the % DPPH scavenging activity against varying amount of the **Compound 4** and IC50 was calculated which was found to be 500 µg.

% DPPHactivity/ compound P107		IC50
In µg	TEST	40 µg
0	6.3	
10	18	
15	20	
20	25	
25	30.5	



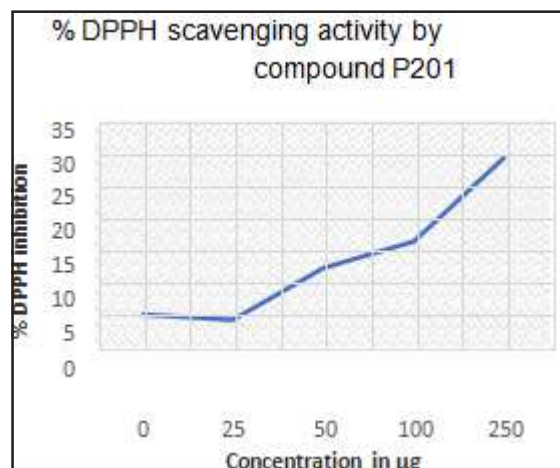
A graph was plotted for the % DPPH scavenging activity against varying amount of the sample 15 compound 5 and IC50 was calculated which was found to be 40 µg.

% DPPHactivity/ compound P108		IC50
In µg	TEST	100µg
15	0.70	
20	2.82	
25	15	
50	25.53	



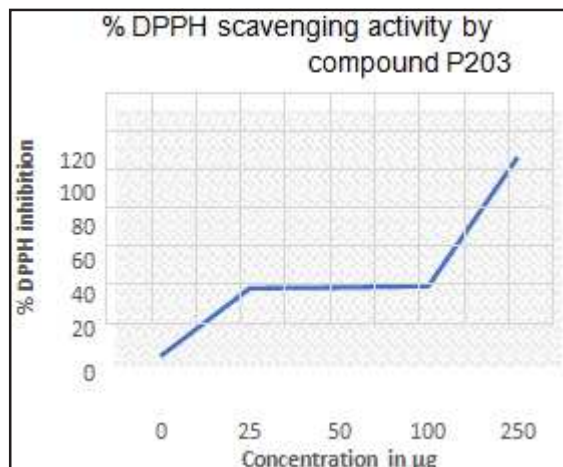
A graph was plotted for the % DPPH scavenging activity against varying amount of the compound 6 and IC50 was calculated which was found to be 100 µg.

% DPPHactivity/ compound P201		IC50
In µg	TEST	400 µg
25	5	
50	13	
100	17	
250	29.5	



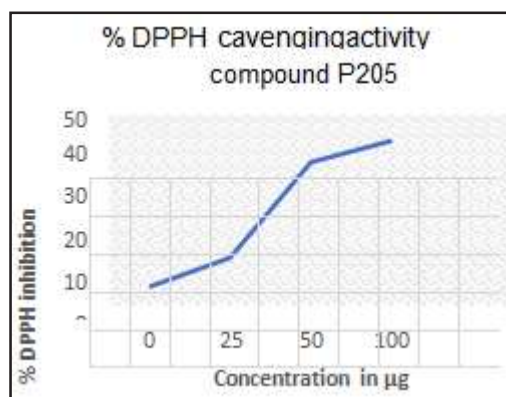
A graph was plotted for the % DPPH scavenging activity against varying amount of the compound 7 and IC50 was calculated which was found to be 400 µg.

%DPPHactivity/ compound P203		IC50
In µg	TEST	128µg
0	6.37	
25	36.6	
50	37.2	
100	37.5	
250	97.73	



A graph was plotted for the % DPPH scavenging activity against varying amount of the **compound 8** and **IC50** was calculated which was found to be **128 µg**.

% DPPH activity/ compound P205		IC50
In µg	TEST	115 µg
0	6.450554	
25	12.57	
50	37.9	
100	43.56	

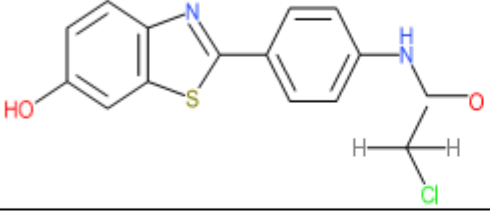
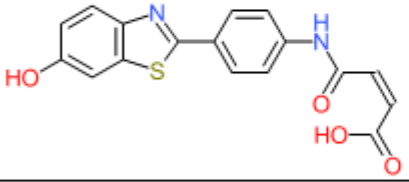
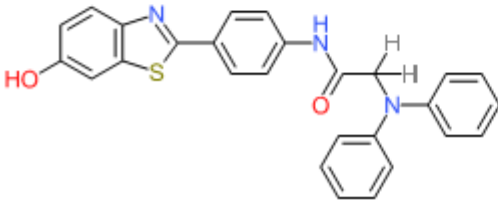
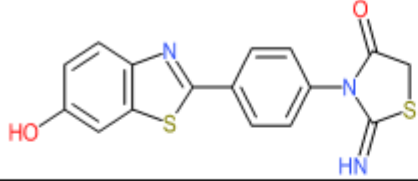
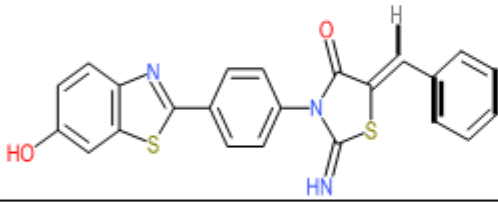
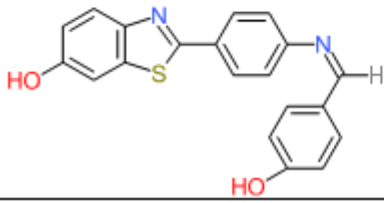


A graph was plotted for the % DPPH scavenging activity against varying amount of the **compound 9** and **IC50** value was calculated which is **115 µg**.

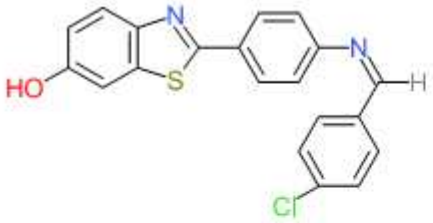
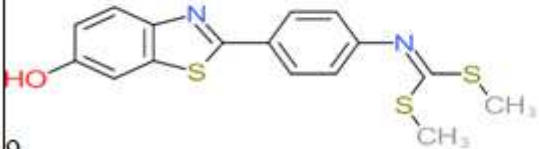
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Compounds	Activity tested	Results
<p>2</p> 	Antioxidant	Poorly active
<p>3</p> 	Antioxidant	Not detectable
<p>4</p> 	Antioxidant	Poorly active
<p>5</p> 	Antioxidant	Highly active
<p>6</p> 	Antioxidant	Moderately active
<p>7</p> 	Antioxidant	Poorly active



<p>8</p> 	<p>Antioxidant</p>	<p>Moderately active</p>
<p>9</p> 	<p>Antioxidant</p>	<p>Moderately active</p>

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# Sustainable Development Goals And India

Dr. Neha Paliwal\*

**Abstract** - Since from the beginning, the phenomenon of globalization has captured world attention in various ways. The tremendous change in the countries caused erosion of environmental quality to a large extent. Hence the concept of sustainable development has gained importance since Rio Declaration. The central purpose of it is to create an enabling environment in which all human beings lead secure and creative lives. This paper focuses on the adverse effect of globalization on environment, and the need for sustainable development of environment with the industrial growth.

**Key words** - SDGs, MDGs, Globalization, WTO.

**Introduction** - Sustainable Development as a norm has been accepted in the literature ever since the publication of the Brundtland Commission report in 1987. The Brundtland Commission defined Sustainable Development as that which “meets the needs of the present without compromising the ability of the future generations to meet their own needs”. The publication of this report has been followed by several attempts at defining Sustainable Development. It is defined as “a pattern of social and structured economic transformations (i.e. development) that optimizes the economic and societal benefits available in the present, without jeopardizing the likely potential for similar benefits in the future.” A primary goal of sustainable development is to achieve a reasonable and equitably distributed level of economic well being that can be perpetuated continually for many human generations. It also implies using renewable natural resources in a manner that does not eliminate or degrade them, or otherwise diminish their usefulness for future generations. Sustainable development also requires depleting non-renewable energy resources at a slow enough rate so as to ensure the high probability of an orderly society transition to renewable energy sources.

**Sustainable Development** - Sustainable development is development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. Thus, it takes into account both the present and future generations without over-exploitation of natural resources and environmental degradation.

## Features of Sustainable Development:

- **Sustained Rise in Real per Capita Income** : There should be a sustained rise in real per capita income and economic welfare on long-term basis.
- **Rational Use of Natural Resources** : Sustainable development simply means that natural resources should be rationally used in a manner such that they are not

overexploited.

- **Preserving the natural resources for future generations** : Sustainable development aims at making use of natural resources and environment for raising the existing standard of living in such a way as not to reduce ability of the future generations to meet their own needs.

## Sustainable Development Goals

- The documentary screened at the Rio+20 conference – “Future We Want” presented the idea of post 2015 development agenda.
- Sustainable development Goals (SDGs) is an intergovernmental agreement formulated to act as post 2015 Development agenda, its predecessor being Millennium Development Goals.
- It is a group of **17 goals with 169 targets and 304 indicators**, as proposed by the United Nation General Assembly’s Open Working Group on Sustainable Development Goals to be achieved by **2030**.
- Post negotiations, agenda titled “Transforming Our World: the 2030 agenda for Sustainable Development” was adopted at the United Nations Sustainable Development Summit.
- SDGs is the outcome of **Rio+20 conference (2012)** held in Rio De Janerio and is a non-binding document.

## 17 Sustainable Development Goals

- SDG 1: No Poverty
- SDG 2: Zero Hunger
- SDG 3: Good Health and Well-being
- SDG 4: Quality Education
- SDG 5: Gender Equality
- SDG 6: Clean Water and Sanitation
- SDG 7: Affordable and clean energy
- SDG 8: Decent Work and Economic Growth
- SDG 9: Industry, innovation and infrastructure
- SDG 10: Reduced inequalities

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- SDG 11: Sustainable cities and communities
- SDG 12: Responsible production and Consumption
- SDG 13: Climate actions
- SDG 14: Conserve life below water
- SDG 15: Protect the life on land
- SDG 16: Peace, justice and strong institutions
- SDG 17: Partnerships for the goals

#### Why focus on Sustainable Development?

- "Sustainable development is the development that meets the needs of the present, without compromising the ability of future generations to meet their own needs".
- The focus of sustainable development is far broader than just the environment. It's also about ensuring a strong, healthy and just society.
- This means meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion, and inclusion, and creating equal opportunity.
- The rampant growth of industry had adversely affected the environment and is also against the ethos of sustainable development.
- In 2018 itself we are 1.1 degrees above the pre-industrial temperature already. And if the greenhouse emissions are not drastically cut then by the end of the century the rise of the temperature could be 3—3.5 degree. Such an increase would have an irreversible and catastrophic impact across the world.

**Sustainable Development Goals in India** - "From India's point of view, Sustainable Development Goals need to bring together development and environment into a single set of targets. The fault line, as ever in global conferences, is the inappropriate balance between environment and development...we could also view the SDGs and the post 2015 agenda as an opportunity for revisiting and fine-tuning the MDG framework and sustainably regaining focus on developmental issues."

**Need of Sustainable Development in India** - This admission is of course an understatement. All available indicators point to the ecological situation being nothing short of disastrous. Natural ecosystems are under stress and decline across most of the country; some 10 per cent of the country's wildlife is threatened with extinction; agricultural biodiversity has declined by over 90 per cent in many regions; well over half the available water bodies are polluted beyond drinking and often beyond even agricultural use; two-thirds of the land is degraded to various levels of sub-optimal productivity; air pollution in several cities is amongst the world's worst; 'modern' wastes including electronic and chemical are being produced at rates far exceeding our capacity to recycle or manage. A 2008 report by the Global Footprint Network and Confederation of Indian Industries suggests that India has the world's third biggest ecological footprint, that its resource use is already twice of its bio-capacity, and that this bio-capacity itself has declined by half in the last few decades.

#### SDGs and India's Commitment

- **Clean Fuel**
  - India introduces BS-VI petrol and diesel.
  - Delhi will be the first city to leapfrog from BS-IV to BS-VI.
  - 13 major cities like Mumbai, Chennai, Bengaluru, etc. will make the shift from 1st Jan 2019.
  - The rest of the country will make the change from April 2020 next year.
- **No Plastics**
  - India has pledged to eliminate all single-use plastic in the country by 2022.
- **International Solar Alliance (ISA)**
  - ISA is a group of 121 solar rich countries which are situated either on or between the tropics.
  - Aims to deploy over 1000 GW of solar energy and mobilize more than \$1000 billion into solar power by 2030.
- **Climate Change**
  - To reduce the emissions intensity of its GDP by 33 to 35 percent by 2030 from 2005 level.
  - To achieve about 40 percent cumulative electric power installed capacity from non-fossil fuel based energy resources by 2030, with the help of transfer of technology and low-cost international finance, including from Green Climate Fund.
  - To create an additional carbon sink of 2.5 to 3 billion tonnes of CO<sub>2</sub> equivalent through additional forest and tree cover by 2030.

**Conclusion** - Shepherding the achievements of the SDGs is an enormous task that requires the involvement of every sector and each level of society. The experiences of the pilot countries illustrate the opportunities the platform can create for India to build meaningful and lasting state-philanthropy partnerships to achieve the prime minister's vision of "sabka saath, sabka vikas (collective effort, inclusive growth). SDGs provide broad goals and targets, it will be up to the national, and state governments to identify priorities, decide appropriate locally relevant policies, harness innovation and ensure that an implementation and monitoring plan is in place. It is also the responsibility of people, society, NGOs, media to help the government in achieving these only and contributing towards them.

- NGOs, CSOs can be a powerful tool in highlighting the plight of the vulnerable at the local as well as international level e.g. CRIES, Doctors without borders etc.
- Philanthropists, big corporate to leverage their CSR on socio-economic needs of the society for their inclusive and sustainable development e.g. Bill and Milinda Gates Foundation, WIPRO 3 donations, cess, bringing more people under the bit of income tax and such revenue to be diverted to the fulfillment of SDGs.
- Experts in various fields' e.g. medical, engineering, economy, law, finances etc. Need to collaborate for the formulation of policies, framework, and regulations

- etc. In a cost-effective manner.
- Efforts to give effect to international treaties such as GCF, Paris Agreement, Doha round of WTO etc.
- Increasing budgetary allocation for policies, plans aimed at achieving quality education, health, gender equality etc.

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# A New Arena in Libraries with Handshake of Information and Communication Technology (ICT)

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**Abstract** - In modern era essence of information & communication technology (ICT) revolves around us. In every sector ICT creates a magic to improve and optimize the work in a very healthy manner for every professional field. To Explore the new routes of information technology which makes a good dimension for the development of any organization. ICT is a boon for modern society which changes the demand beyond their imagination. The Adaptation of ICT in libraries which takes a large credit to access the library functions and services for library professionals and users. It also creates a lot of challenges to understand the impact of ICT skills and knowledge for library professionals and researchers. Advancement of web 2.0 multimedia tools, data base management system (DBMS) and telecommunication networks provides a correct route for the application of ICT gadgets in libraries which takes a large credit to develop the overall ethics and skills in library science. Through this paper highlighted some bright and white shades of application of ICT in libraries which makes a phenomenal change for the development of libraries.

**Keywords** - Information & communication Technology (ICT), optimize, libraries, web 2.0, data base management system (DBMS), Telecommunication.

**Introduction** - "Digital world is changing its home, and I am in search of an evolution that exists beyond the digital world."- Pranav Mistry

As we know that science makes existing technology more updated and developed day to day to make our work easier and more efficient. ICT is one the best quoted example which proves the degree, importance and application of science to deal with that technology. ICT simply deal with information with the help of telecommunication networks. With the advancement of a mode of communication through physical means to digitalize form, the art of doing work in professional bodies gives the new dimension and has a drastic change to take the things easier, optimize and efficient. ICT is a broad gauge concept and simultaneous with information technology. ICT includes both information and communication technology where Communication technologies include wireless network, mobile phone, the internet, etc. are the best examples to understand the elements of ICT.

The successful application of ICT in the field of library and information science realized the roles of library professionals like a custodian of books and information resources, how to disseminate and manage the relevant information, perform library functions and tasks, overall development, user requirements, etc. these things are done through ICT today. The concept of the digital library and their components like capturing, processing,

communication, display, and storage provides a great platform for library professionals as well as researchers to imagine and innovate the things and a great motivation in them to the development of ethics in library science.

## Objectives:

- To introduce the potential of ICT.
- Handshake of ICT with library functions and services.
- Artificial Intelligence- A new dimension in Library Technology.
- ICT with good security services.
- Fundamental skills to deal with ICT.

**An introduction of ICT** - In modern arena, digitalization makes a bond with traditional work to save the time, reduce complexity and increase efficiency for every working professional. The term ICT can be defined as "the integration of computing, networking and information processing technologies and their applications" (Riyasat & Fatima, 2008). ICT deals with computer and communication technology. The computer technology is a tool that store and process the information in digital format while with the help of communication technology it helps to expand and convey the digital information.

The intrusion of ICT in library technology has a wonderful modification for performing library tasks, information preservation and growth that makes easier to perform duties for every library professional and researcher. In modern arena, ICT is a boon for library professional and researcher that makes a phenomenal growth in library

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organization.

### **Library Functions and Elements with Handshake of ICT**

- The application of ICT in a optimize manner in libraries pushes the organization for overall growth and development. It creates great enthusiasm for LIS professionals. With launching of key elements of ICT in library technology increases the skill, potential, working efficiency, research and organizational growth for LIS professionals as well as library organization. Some of the major elements of library technology with intrusion of ICT are:

- **Library Management:** Good management skill leads to increase the efficiency and productivity of LIS professionals and overall development of organization. All administrative traditional work is converted into a digitalized form through computer technology. Maintaining audit records, employees personal and salary details, important documentation and bills etc. all are conserved in E- digital format in libraries today.
- **Technical Processing:** It is a major performing task in libraries. It includes classification, cataloguing and indexes of material. These all are done through artificial intelligence and E- data processing.
- **Library Networking:** Networking is an interconnected common server with many library and information centers which can exchange their information and communicate between the other connected library centers. It includes telecommunication gadgets like E-mails, fax, chat, messaging etc.
- **Library Automation:** Automation evanesce the manual work for LIS professionals and move it into a self automated form which reduces the time and mechanical hard work for LIS professionals. For growth of automation in libraries it requires a user demand and their imagination to confer the relevant information at low cost with due comfort. Connection of libraries duties like classification, cataloguing, circulation, collection building and stock verification with launching of open and commercial source software like KOHA, SOUL, etc. which is turn to a marvelous effect to performing these duties for LIS professionals and users.
- **Audiovisual Technology:** This technology better communicates via visualizing, listening and watching the things. It also has a good way of communication in which user and professionals can understand the things. It includes optical technology like CD--ROM, magnetic recorder, video text, tele -text, online websites like youtube, microfilms, photography, audio, tapes, etc. It is mandatory technology for each library for its particular types of user like visionless users.
- **Library Security:** Safety first and work must be a most important condition for every professional organization. Adaptation of new security ICT tools in library technology enhanced the level of security in libraries. RFID, bar codes, QR codes, closed -circuit television (CCTV) etc. are the new gifted tools given by ICT in library technology. Launch-

ing the new security password protected technologies are eye retina, drawing patterns, finger print expression, face scanner etc. are also used by the LIS professionals to secure their data and work.

### **Modern and Present shades of ICT in Library Technology:**

**The era of Artificial Intelligence:** John McCarthy first introduced the concept of artificial intelligence (AI). It tends to embolden the human intelligence into machines and makes easier the art of doing tasks through an objective fundamental of learning, reasoning, and self correction. AI makes a bond with human speech, potential of sharing emotions and a power of self decision capacity as command by the professionals. With mix combination of AI and ICT application in library technology is surprisingly modifications of performing library functions and duties which makes the task easier and more user-friendly for library professionals. Some of the new fundamental gadgets used in library technology based on ICT and AI are:

- **Metal Detectors or Scanners:** It detects a metal part when entrance at the library premises.
- **Digital inclusion touch points:** It's a self automated service operated through a self automatic control. In library premises these digital checkpoints are established in which the book is discharge or return through RFID or Bar code scanning. It also indicates when a person exceeds the limit of any circulation rules which will notify a person through a message on registered email or mobile number of the user. In the library, several digital checkpoints are available, i.e. OPAC to facilitate the users for search, reserve, request to the materials available in the library and see their library account information, i.e. borrowing history, overdue, etc.
- **Stock control:** This gadget is based on RFID with Acrus RFID uhf technology. It is used for physical maintenance of books which includes physical screening and ample books are arranged in shelves. This technology is now used by IIT Madras, NIT Surat, IIM Shilong, etc.
- **Robotics in Libraries:** It is designed by artificial and computation intelligence technique which seems like an artificial human body. Robots in library can able to perform a function like physical carrying , shelving of books and many other tasks as humans can do. The intrusion of robotics in libraries has a drastic change in development of library technology ethical values and demands. Robotics are successfully used by the Shanghai library, China.
- **Conveyor Belts:** It is often difficult for users as well as professionals to transport and carry out the books from one place to another when a library is settled into a number of floors. The conveyor rotating transportation belts works on the principle of hydraulics and mechanical machines which are transported books in a circular motion through moving belt from one place to another. This technology currently used by New York public library and Silver Lake library, Los Angeles, USA.
- **Reinventing searching:** This is a virtual three dimensional concept parallel concept like Microsoft HoloLens. This

technology is visualizing with wearing of optical eye tool gadget. Currently it is a research ongoing technology by ie library pro in Madrid, Spain.

**Security services with ICT in libraries** - In modern world with the advancement of technology, the degree of security should also be enhanced. In modern digitalized world humans are connected through computer networks via androids, smartphones, internet etc. they all have a wonderful benefits beyond the imagination. But every phase has two flows, in contexts of demerits of ICT technology illegal use of ICT technology through unfair and cheats done by the fraudulent leads to damage and decline of development of any professional organization.

With mix combination of AI and RFID technology, library get more security, save time, dynamic changes and workforce in circulation and stock verification by using drop-box reader and self-check in and out kiosk. Some of the highlights of ICT based security technology are:

- **RFID Technology:** used in smart tagging, barrier system, self check kiosk, detection system etc. in modern libraries.
- **Biometric Technology:** used to secure personal data and also used to access the network login. It includes eye retina, finger print expression, face scanner, etc.
- **Keylogger or Keystroke Logger:** This tool is particularly used to record and judge each keystroke typed by a specific computer keyboard. With the help of this tool, the organization can able to judge employees computer activities, unauthorized work and activity on computer. It is available in both hardware and software form.
- **Network Security:** It is one of the most common branch of ICT that correlates with it in a broader aspect. In communication network relay active attacks are more common in which receiver receive a modified or corrupted message by the fraudulent.
- **Miscellaneous services:** It includes other gadgets like moisture measurement in books to protect from degrading, natural disasters indicator, unwanted physical hazards etc.

#### **Fundamental skills to deal with new vistas of ICT for LIS professionals:**

With the development of infrastructure of ICT, skill plays a vital role to deal with ICT and its wonderful gadgets. Potential of doing work at a time with good efficacy is termed as skill. For the development of ethics in library technology, good skill is a prerequisite criteria for the overall development of library organization. For LIS professionals, some of the following fundamental skills to polish their working, saves time and give enthusiasm for their professional work are:

- **Hardware skills:** Hardware skills deal with the physical component of computer technology. Through hardware, one can easily command and deal with the technology and gadgets. Some hardware peripheral devices includes printer, RFID, Xerox, connector, modem, scanners etc. are information and computer technology hardware. LIS pro-

fessional is able to operate and use of hardware component that will easily help to connect the ICT tools.

- **Software skills:** Software is a set of instructions that supports and communicate with computer hardware. For LIS professionals one can understand the software skills like pros and cons of technology, system requirements, future upgrades, its potential etc. these all are helpful for LIS professional to deal with software and network technology.

- **System Administration skills:** All software has its own system requirement and its capabilities. For LIS professionals, it is necessary to understand these skills for better communicate with software. LIS professionals need to know about the system requirements, installation and compatibility with current system and the mode of use.

- **Soft Skills:** It composed of etiquette of learning, communication, logical and critical thinking and presentation. These skills also composed of communication with users and organization and help the professionals to take decision in adverse situation.

**Conclusion** - Now the last but foremost, it's a perfect time to grow with the digital world with good vision. In modern era, people demand technology and technology demand development as by society. The degree of application of ICT in library technology shows intense shades of development of library organization and move towards 'techno-illiterate' to 'techno-literate'. ICT proved that is a boon in the field of library technology. ICT is a gift for LIS professionals and its luminosity can only feel and experience with understanding, enthusiasm and learning. The power of ICT, its advancement and efficient use with proper security are the main constituents that accelerate the development of library organization today. In context of ICT, launching of 4 E's principles which are ease, economy, expansion and efficiency will motivate the LIS professionals to understand the potential of ICT in a friendly manner. The study conclude that with handshake of ICT, it supports the law "library is a growing organism" and LIS professionals can more enjoy the gifts of ICT that is enabled to satisfy the users information need.

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# Sustainable development by Commercialization of Biogas Purification and Bottling Technology

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**Abstract** - The world has developed rapidly with advanced technologies. Unfortunately, this phase of development has led to problems resulting in depletion of various natural resources, pollution, depletion of food stock, ozone depletion, increase in the temperature, etc. The time has come to adopt more sustainable alternatives rather than the conventional ones. Like using non conventional sources of energy, CNG, CBG, bio composting, etc.

Sustainable development means development of the economy without depletion of natural resources. For this every consumer in the economy needs to be aware about the hazardous effects to the future generation. We must conserve the resources for our upcoming generations so that they can live in the natural environment rather than artificial environment.

**Keywords** - Biogas purification, biogas bottling technology, Sustainable development.

**Introduction** - Biogas is an important part of the solution to the energy crisis faced by developing countries. Not only does it provide a cheap, readily available and renewable energy source, but also a valuable fertilizer to primarily rural regions. Using biogas as an alternative reduces the need to deplete surrounding forest areas, while improving the treatment of waste by breaking it down into less harmful components.

The state capital of Madhya Pradesh is moving forward for a better future with sustainable development idea. An eco friendly project has been set up in Bhopal. In order to produce a fuel substitute, benefits of biogas adoption include reduction or elimination of pathogens in human and animal wastes and production of a stable, generally environmentally acceptable slurry or sludge which can be used as a fertilizer and soil conditioner. The increases in population, standards of living, and energy demands, along with decreases in supplies of traditional fuels and subsequent oil crises have contributed to a current high level of interest in the science, technology, utilization, and economics of biogas.

The primary goal of biogas purification is to achieve economic and social benefits through sustainable resource. Biogas is produced through, anaerobic digestion. It is a process in which anaerobic digestion by which organic materials are degraded in the absence of oxygen to produce a combustible gas, methane, and carbon dioxide. This process occurs naturally in wet, decaying organic matter (biomass) found in swamps, bottom mud of streams, and garbage dumps. **Biogas is combusted to generate electricity and heat** for cooking, lighting, heating, water pumping, or grain milling, etc. and it **can be processed into renewable natural gas and transportation fuels** in

larger applications where scale and skills warrant, biogas can be pressurized and stored, cleaned for sale to commercial gas suppliers, or converted to electricity and sold to power grids, to meet peak energy needs. The combustion of biogas produces a hot, clean flame that does not dirty pots or irritates the eyes, as does the smoke from other fuels. Biogas has a wide range of different uses – it can be burnt directly as a fuel.

Anaerobic digestion is approached as an integral part of a resource recovery system. Not only do the gases produced by digesters have many uses, but the by-product – sludge – is also a good fertilizer. Considering that the majority of India is rural regions with access to a regular supply of vegetable and animal wastes, this sludge fertilizer is a valuable derivative of such systems.

**Process of Biogas preparation** - The biogas plant in Bhopal uses cow dung which is provided by a gaushala nearby. The process is divided into four phases of degradation, named hydrolysis, acidogenesis, acetogenesis and methanation. In the first phase (hydrolysis phase), undissolved compounds are cracked into monomers (water - soluble fragments). The monomers formed in the hydrolytic phase are taken up by different facultative and obligatorily anaerobic bacteria and are degraded in the second phase. In other words, during this phase simple sugars, fatty acids and amino acids are converted into organic acids, and alcohols. During the third phase organic acids and alcohols are converted into acetate. Acetate serves as a substrate for methane-forming bacteria. For example, when ethanol is converted to acetate, carbon dioxide is used and acetate and hydrogen are produced. In the fourth stage (methanogenic phase), the methane formation takes place

under strict anaerobic conditions.

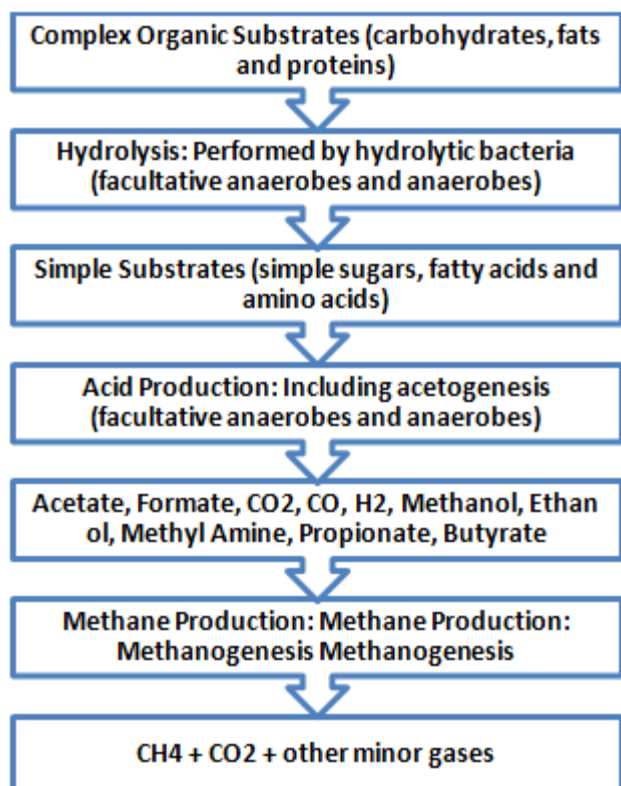


Figure 1- Flow chart showing process of Biogas preparation

**Biogas production unit** - This unit is KVIC type floating drum biogas plant. KVIC type model has two parts, i.e., digester and gas holder. In order to produce 100 cubic metre of daily biogas the digester should be fed with 2.5 tonnes/ day of cow dung. 2.5 tonnes of dung have 500 kg of total solids with 2000 kg of water. The specific biogas productivity of dung based total solids has been considered as 0.20 m<sup>3</sup>/kg total solids over a period of 40 days. The biogas plant digester should be fed with 10% of total solids concentration (2.5 tonnes of fresh dung + 2.5 tonnes of water). The water holding capacity of digester should be 200 m<sup>3</sup> for above feeding rate and considered hydraulic retention time.

#### Components of the biogas plant

1. Slurry preparation: The dung is mixed with water in the slurry preparation tank with the help of mechanical stirrer. The ratio of the mixing of water and waste depends upon quality of material. The feed material like dung is gathered in the mixing tank. Using sufficient water, the material is thoroughly mixed till homogeneous slurry is formed.
2. Inlet feed pipe: The slurry is moved into the digester through the inlet pipe/tank.
3. Digester: The mixed slurry is then fed to the anaerobic digester for production of biogas. It is equipped with a stirrer and heating system. Inside the digester, the slurry is fermented. Biogas is produced through bacterial action.

4. Biogas holder: The biogas thus formed gets collected in the gas holder. It holds the gas till the time it is transported for purification.
5. Slurry outlet pipe: The slurry is discharged into the outlet tank. This is done through the outlet pipe or the opening in the digester.

**Application of CBG** - A Maruti OMNI vehicle was used to test the compressed biogas (CBG). The performance of vehicle was evaluated on the basis of mileage on the upgraded biogas. The average mileage of the vehicle was found as 19.28 km/kg of upgraded biogas under whereas Omni petrol car gives average of 14 usual traffic conditions in Bhopal city. Furthermore, the mileage of same vehicle on Bhopal – Indore Highway was found as 24.0 km/kg of upgraded biogas and average of petrol Omni was 17.

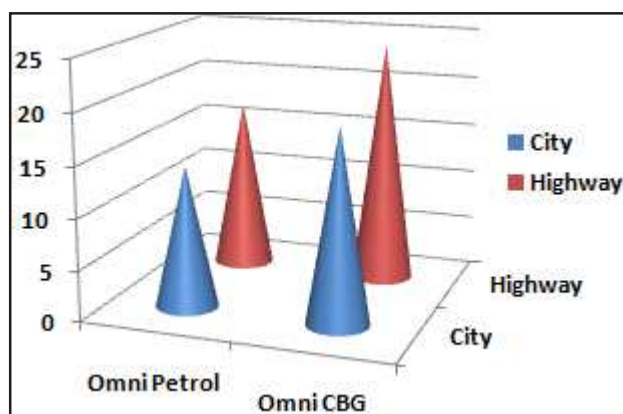


Figure 2 – Comparison of Omni Petrol and Omni CBG.

**The Literature on Biogas** - The Benefits of digestion include reduction or elimination of pathogens, depending upon temperature, and production of a stable, generally environmentally acceptable slurry or sludge which can be used as a fertilizer and soil conditioner (Charles G Gunnerson and David C. Stuckey, 1986). The economic benefits can be provided through a plant as the by-products of the plant can be used as the fertilizers. In such way farmers will be able to produce much organic crop than before. B P Nema, suggests anaerobic digestion does not only produces clean and easy to use fuels but through this process nutrients are not destroyed but made more available to plants. He adds satisfactory technologies are available so government must adopt and promote the biogas production. According to G. Hudson, N. Patel & P. Haskard, adopting biogas will improve the standard of living in many areas especially rural area by offering a system that effectively utilises a cheap, readily available and renewable energy source. Using biogas as an alternative reduces the need to deplete surrounding forest areas, while improving the treatment of waste by breaking it down into less harmful components. Hence, it is also an objective to provide the means by which people can save time and money while improving their measure of health.

#### Research Methodology

**Data source :**

1. Primary data: Interaction with Manager.
2. Secondary data: Company report and other related websites.

**Area covered for research** - Sharda Vihar Jankalyan Samiti, Bhopal, Madhya Pradesh

**Findings :**

1. Biogas plants are non-polluting and renewable source of energy.
2. Compressed biogas (CBG) can be used in Industries, Canteens, Restaurant, Hotels, Hostels, Sweet shop, Dhabas, etc.
3. Biogas plants also produce enriched organic manure. This can be used as fertilizers.
4. Liquid slurry, a by-product is rich in micro & macro nutrients can be directly applied in fields.
5. Optimum utilization of waste materials.
6. End of over depletion of resources like, wood, fossil fuels, etc.

**Suggestions :**

1. There is need to demonstrate such compressed biogas (CBG) production system at locations in various states of India for deeper penetration of technology for providing a sustainable alternate towards affordable transportation.
2. This unit also provides employment opportunities in areas such as collection and transportation of cow dung, filling station of CBG, management and administration of the unit etc.
3. These biogas plants can help in making sustainable business units with minimum adverse effects to the environment.
4. The waste can be managed efficiently through this technology by converting it into fuel.
5. The problem of depletion of natural resources can come to an end through adopting biogas technology.

By adopting and implementing Biogas technology the government as well as the corporate can help in sustainable development.

**Conclusion** - By adopting biogas purification technology we can provide employment through opening CBG stations similar to petrol stations in urban and rural areas. Biogas plants itself will provide employment in rural areas to those who will supply waste cow dung as required. It's by-product, fertilizer can be used by farmers to make organic crop. Hence it can be concluded that this technology is an approach towards sustainable development. It will not only create an alternative to conventional fuels but will help maintaining ecological balance.

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# E-Commerce and Sustainable Development : A Literature Review

Dr. Vikas Bakshi\* Prof. Jaya Kameriya\*\*

**Abstract** - With a few swipes on a smart phone or clicks on a computer, these days many of us choose and purchase a wealth of goods and services without giving it a second thought. This is how the best technology works – so simple and easy to use that not so long ago it would have seemed like magic. There is nothing like the thrill of getting something you ordered online in the mail. Part of the joy and convenience of ordering items online is when they actually arrive. But that packaging that wraps those perfect items could actually be hurting the environment. Many e-commerce packages are sent in materials that are harmful to the environment, but a new wave of companies is setting out to create more sustainable packaging solutions. This paper is presented and prepared to throw light upon the relation between E commerce and sustainable development with the help of previous studies done on this concern which can help to understand this important aspect of our surrounding.

**Key words** - development, E-Commerce, Sustainability.

**Introduction** - E-commerce is providing individuals and SMEs with unprecedented opportunities to gain access to domestic and international markets. But not all countries in the Asia-Pacific region are reaping the benefits.

E-business and Information and Communication Technologies (ICT) are growing at an exponential rate and playing a more and more important role in our life today. The whole world is racing to promote business, politics, entertainment, etc. online.

Technology is transforming the retail landscape as we know it. The Census Bureau estimates that U.S. online retail sales were \$97.3 million in second quarter 2016, a 15.8% increase from the previous year. According to Forrester, that growth is expected to continue with U.S. online retail sales anticipated to exceed \$520 billion by 2020. Globally, online sales are growing three-times faster than GDP.

**Objectives** - The paper has only one sole objective to achieve is to describe the role of e commerce in sustainable development concern.

**Research Methodology** - The presented paper is prepared on the basis of descriptive method of research with literature review in this regard. The data and facts have been collected through secondary data sources i.e. online published report, information and web articles.

## WHAT IS SUSTAINABLE DEVELOPMENT?

Sustainability is development that satisfies the needs of the present without compromising the capacity of future generations, guaranteeing the balance between economic growth, care for the environment and social well-being.

Sustainable development is a concept that appeared

for the first time in 1987 with the publication of the Brundtland Report, warning of the negative environmental consequences of economic growth and globalization, which tried to find possible solutions to the problems caused by industrialization and population growth.

## WHAT IS E-COMMERCE?

E-commerce (electronic 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 occur either as business-to-business (B2B), business-to-consumer (B2C), 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 the transactional processes for online shopping.

**Literature Review** - If e-commerce is such a powerful tool to boost trade, raise incomes and reduce poverty, why does it only successful in a few countries in the region? Why isn't it working in the least developed countries (LDCs), small economies in the Pacific? What are the barriers that limit its potential?

A report titled "Embracing the E-commerce Revolution in Asia and the Pacific" jointly published by the Asian Development Bank (ADB) and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) answers these key questions. The report shows there are enormous challenges for e-commerce development in many countries, which can be grouped into three categories: economic factors and conditions, legal and institutional environment, and social acceptance and awareness.

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**Dangers of Packaging** - It's no surprise that Americans love to shop online. Every year, 165 billion packages are shipped in the U.S., which uses enough cardboard to equal more than 1 billion trees. That doesn't even consider the waste from the plastic air bags and additional packaging that keep items safe in transit.

Other common packaging options aren't much better. Many packages contain materials that are difficult to recycle and are harmful to the environment. Many e-commerce companies, including Amazon, have started packaging more items in bubble mailers, which are lighter and allow for more items to be placed on planes and trucks. However, mixed materials of plastic and bubble wrap often can't be recycled and instead block the recycling systems and slow down the process. When a bubble mailer gets stuck in the recycling machinery, the entire system has to be shut down to cut the package free. The materials not only aren't recyclable themselves, they literally stop other items from being recycled.

**E-Commerce Sustainability Efforts** - As e-commerce grows at a staggering rate—online sales are expected to double in the next decade—many retailers are increasing their sustainability efforts to cut back on packaging. Amazon, the largest e-commerce retailer in the world, offers “frustration free” packaging on some items, which sends items in their original packaging without excess boxes. Amazon recently doubled down on its efforts in the program by asking vendors to adopt new packaging standards and threatening to fine small retailers if they don't comply. It also introduced a new program for Prime members earlier this year that allows customers to choose their “Amazon Day” and get multiple orders delivered on the same day in an effort to combine orders and cut back on packaging. By cutting back on overboxing, or items being sent in multiple boxes, Amazon has eliminated more than 500 million boxes and 244,000 tons of packaging materials. CEO Jeff Bezos also recently signed The Climate Pledge on behalf of Amazon to advance Paris Climate Accord goals by 10 years, even though his own company could arguably be doing much more for sustainability and climate change.

Another e-commerce leader, Target, recently redesigned its three most common box sizes with fun designs that encourage shoppers to reuse the boxes and turn them into race cars, dog houses or other items. The idea is that if the boxes are enticing, customers will find another use for them instead of throwing them away.

**Innovative Packaging Solutions** - As environmental concerns grow, a large number of startups and smaller companies are creating innovative packaging solutions. The aptly named Package Free Shop mails its household items and health and beauty products in completely recyclable and compostable boxes and uses paper tape and wrapping that can also be recycled. Startup Limeloop recycles billboard wraps to create durable shipping pouches that can be reused up to 2,000 times. Companies send orders to customers in the mailers, and then customers attach a

pre-paid return mailing label to return the pouch to the company to use for the next customer.

No issue is another start up that creates compostable mailers made from corn starch that break down completely within six months. 3M recently developed the Flex and Seal roll of packing material that is completely recyclable and seals on itself. Companies or individual sellers simply cut the material down to size and fold it on itself to create a secure, recyclable package. Many of these sustainable packing solutions have yet to expand beyond a niche market. If companies want to make a real difference in their packaging, they need to think bigger and leverage new technologies and products.

Sustainable packaging has a huge impact on the environment and customers. E-commerce companies have a responsibility to take care of the environment. They need to be accountable for the repercussions of their mass experiences. Sustainability is an issue that all customers and brands should get behind.

Online shopping will only continue to grow, and unless we take strong steps towards sustainable packaging, the size of our landfills will grow right alongside it. Forward-thinking companies need to deliver a great experience in all areas for their customers, including how they send their packages.

The findings of the Report echo the results of the Global Survey on trade facilitation and paperless trade implementation, conducted by all five UN regional commissions and led by ESCAP. The Global Survey pointed out that addressing legal and technical challenges for establishing cross-border paperless trade would have enormous potential to expand e-commerce.

According to the 2016 UPS Pulse of the Online Shopper study, 38% of purchases combine store visits with online research or purchase, and half of the surveyed respondents' ship purchases to brick-and-mortar stores for pickup. Adding to this mix is a trend toward recurring deliveries. For items that are more predictable, consumers are increasingly willing to trust automatic refills, where one request results in ongoing fulfillment.

Ecommerce is growing at a crazy rate, showing no signs of stopping. Let's look at China, for example. Chinese ecommerce ballooned by 24% in 2018 and accounted for 18.4% of consumer retail sales, according to the National Bureau of Statistics of China shared by Digital Commerce 360. Things in the United States are expanding similarly. In 2018, US ecommerce grew 15%, according to Digital Commerce 360. But as ecommerce grows, so does its environmental impact. All those cardboard boxes, plastic packing puffs, and Styrofoam peanuts have to go somewhere, and a lot of the time that somewhere is out to sea or a landfill. Enter the rise of sustainable ecommerce, an approach to digital business founded on the belief that no matter your industry or product, there are ways to make your ecommerce business more sustainable.

A few brands have taken the lead and set a great

example. You're probably familiar with TOMS shoes, one of the first retailers to publicly pledge to give to those in need. For every pair of TOMS sold, a person without shoes gets a pair. TOMS has expanded its philanthropy to offer other charitable services.

**Navigating New E-Commerce Challenges** - As more shoppers click to buy, the demand for a seamless shopping experience lands on retailers, and oftentimes the effort to provide this comes at an increased cost to the environment. Merchants now face the challenge of offering faster and easier shipping and return options, as well as the growing expectation that returning an item should be as simple and convenient as receiving it. If the returns process isn't smooth, the customer experience level drops and what started out to be a satisfied consumer soon becomes a frustrated one.

As retailers deal with an ever-increasing number of packages that must be delivered in record time, their struggle rests in how to remain profitable while also reaching customers across channels in the most effective, efficient and sustainable manner possible. With goods flowing in multiple directions among manufacturing facilities, warehouses, stores and consumers, traditional supply chain models are insufficient. Now is the opportune moment to bring in new practices that are efficient, cost effective and environmentally conscious.

**Collaborating to Drive Sustainable Solutions** - E-commerce brings with it new considerations on everything from packaging and fulfillment to returns, as well as new possibilities to create and implement innovative and sustainable solutions. Businesses are partnering with forward-thinking logistics providers to reduce impact and improve operating efficiencies.

For instance, there are consumer-friendly services available, like UPS My Choice and UPS Access Point, which allow residential customers to modify their delivery times and locations, as well as provide access to an extensive network that supplies customers with new ways to receive deliveries at an alternative location – especially important for deliveries to apartments or other urban environments. These services help online shoppers avoid missed deliveries and eliminate the environmental impact associated with wasted trips caused by multiple delivery attempts. Another area worth taking a closer look at is packaging. Properly packaged goods have a better chance of arriving intact, reducing the number of returns and the overall environmental footprint. When a shipment is packed correctly and arrives undamaged, no replacement goods need to be picked, no additional transport is required to replace the item, and no broken items have to be managed, recycled or sent to a landfill. Packaging made from sustainable materials also helps to further reduce the environmental impact and reduce waste, while demonstrating to customers that the company is using ethical and thoughtful practices. And it's not just large companies that are committed to navigating e-commerce

sustainably. Small businesses are also using smart partnerships to enhance sustainable business practices. Take for example travel bag designer TOM BIHN. The company now uses shipping boxes made of recycled cardboard that are right-sized to prevent the use of excess materials, and crush tested to prevent product damage, as well as to reduce the rate of return shipments. Additionally, TOM BIHN ships every order via UPS carbon neutral, where carbon offsets are purchased to balance out the emissions produced by the transportation of shipments.

Moving Toward More Sustainable E-Commerce, following are a few ways retailers can navigate the changes taking place to drive measurable results:

**1. Optimize supply chains** - Businesses evolving to meet the demand for e-commerce must re-evaluate current supply chains that were created to support in-store deliveries. E-commerce brings with it new challenges that include an increase in residential deliveries and complexities associated with product returns. By identifying areas where service needs and environmental challenges converge, and exploring new ways to drive efficiencies and reduce impact, companies can create viable solutions that address both business and environmental goals.

**2. Tap the power of data** - The flow of goods throughout supply chains generates a tremendous amount of data. By partnering with a logistics provider that can tap into the power of this data, retailers can gain insight into customer preferences and trends, learn about hidden issues (e.g., ineffective processes or packaging), and fine tune supply chain movement so that valuable assets such as re-sellable returns don't get lost or overlooked.

**3. Fuel collaboration** - Technology has made collaboration and innovation even more powerful. While collaboration between retailers and service providers can be highly effective, providing e-commerce customers with better choices and allowing them to actively participate in delivery decisions can help to build trust and preference. Simple steps, such as providing customers with a way to shift their delivery to a time and location that meets their needs, reduces the environmental impact and results in a better experience for everyone.

**4. Measure, manage, mitigate and market** - Companies that are willing to understand the extent of their carbon footprint (including Scope 3 emissions) are then able to take the necessary steps to manage and reduce what they can and mitigate the remaining emissions. This, in turn, demonstrates company concern that goes beyond capturing immediate revenues. This type of positioning can help support the company's reputation and offer a competitive advantage when driving consumer preference.

**Conclusion** - The cultural shift to e-commerce has brought about new expectations for immediate gratification from consumers, and with that, increased environmental impacts as retailers attempt to meet those demands. However, when companies are willing to invest in creating sustainable solutions to navigate the evolving demands of today's

shopper, they will see a return on their investment beyond operational efficiencies. In short as conclusion, it can be stated that:

- E-commerce sales are expected to double in the next decade.
- Online shopping packaging contributes huge amounts of waste.
- Large companies like Amazon are taking steps to cut back their packaging and group orders together.
- Start ups are creating sustainable packaging from recycled materials.
- In order to provide a complete customer experience, e-commerce companies need to take steps towards sustainable packaging.

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# Child labour in India

Dr. Bharati Sharma\*

**Introduction - The term 'Child Labour' is defined as a work that deprives children of their childhood, their potential and their dignity and is harmful to their physical and mental development.** It refers to the work that is mentally, physically, socially or morally dangerous and harmful to children, interferes with schooling by depriving them of the opportunity to attend school, obligation to leave school prematurely or requiring them to attempt to combine school attendance with excessively long and heavy work.

## Who is a child?

"Child" as defined by the Child and Adolescent Labour (prohibition and regulation) Act 1986 is a person who has not completed the age of 14 years.

## What is child labour?

The International Labour Organisation (ILO) defines child labour as work that deprives children of their childhood, their potential and their dignity, and that is harmful to their physical and mental development.

## Forms of Child Labour

- All forms of slavery or practices similar to the slavery including but not limited to the **sale or trafficking of children, debt bondage** and forced or compulsory labour.
- It also means the **forced or compulsory recruitment** of children for use in armed conflict.
- The use of a **child for prostitution**, for the production of pornography or for pornographic performances.
- The use of a child for **illicit activities in particular for the production and trafficking of drugs** as defined in the relevant international treaties.
- It also includes work, by its nature or the circumstances in which it is carried out, that is **likely to harm the health, safety and morals of children**.

## Child Labour Figures in India

- In India, children are working at starvation wages in **textile factories helping with the processing of carpets** and doing backbreaking work in **brick making factories**.
- They are also employed in **making and selling tobacco products** and are also used for cheap labour in **industries such as steel extraction**.
- This year, India is at the 113th position out of 176

countries on an index that evaluates countries on the well being of children.

- According to the National Census 2011, the total child population in India in the age group of 5-14 years is about 260 million. Of these, about 10 million (about 4%) of the total child population are child labourers working either as the main or marginal workers.
- In the age group of 15-18 years, India has around 23 million working children. This means one in eleven children between the ages of five and eighteen years in the country are working.
- The 2011 census showed a decline in the incidence of child labour in India by 2.6 million or around 20% between 2001 and 2011. The decline was more visible in rural areas. However, the number of child workers increased in urban areas during this period.
  - o In the year 2001, there were around 11 million child workers in rural areas which came down to about 8 million in the year 2011.
  - o In urban areas, the number of child workers went up from 1.3 million in 2001 to 2 million in 2011.
- This change suggests that child labour is now invisible as the location of work has changed from the factories to the homes of urban dwellers.

## Causes of child labour in India

**POVERTY** - Poverty can be termed as the main reason for child labour in India.

**HIGH COMPETITION FOR JOBS** - The industrialists in India have been successful in taking advantage of this disadvantage faced by job seekers. Due to high population, the job seekers are not in a position to bargain a higher wage. As a result, the poor remain poor working for low wages.

**ILLETERACY AND LACK OF EDUCATION** - Illiteracy is a situation when a person is not able to read and/or write. This is when the person is not in a position to get even primary education. Lack of education is another aspect which is a result of illiteracy and lack of information. An uneducated person is one, who is generally unaware of things which an average person is required to know. Such people are normally unaware of their human rights and the rights of their children too. The children of such people normally become child labourers around their homes.

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**IRRESPONSIBLE ATTITUDE OF EMPLOYERS** - A general sense of irresponsibility towards society is seen among the employers in India, who are least bothered as to how their employees survive. In spite of being aware of the high cost of living and inflation, they are least bothered and least ashamed to pay wages, which are much below sustenance levels. Also, if the employers were responsible, they in the first place would not employ children at all. The following are some of the situations in which children are engaged in work:

- Agriculture- children working long hours, and under severe hardships on the fields. They are also exposed to the hazards of working with modern machinery and chemicals;
- hazardous industries/ occupations- like glass making, mining, construction, carpet-weaving, zari-making, fireworks, and others, as listed under the Child Labour Act;
- small industrial workshops and service establishments;
- on the streets- rag-pickers, porters, vendors etc;
- Domestic work- largely invisible and silent, and hence face higher degree of exploitation and abuse in the home of employees.

**Social factors** - There is a strong correlation between India's differentiated social structure and child labour. The majority of child labourers in India belong to the so called lower castes (SCs), the tribal and Muslim religious minority.

**Cultural factors** - An expectation that children should contribute to the socioeconomic survival of the family and community, as well as the existence of large families contribute to prevalence of child labour.

- Children often take up family's traditional work from an early age. For example, a Goldsmith's son takes to gold-smithery, or a carpenter's child takes up carpentry from an early age.

#### **Child Labour Laws in India**

- According to the **Child Labour (Prohibition and Regulation) Amendment Bill, 2016:**
  - o **employment of children below the age of 14 years** in any commercial enterprise is illegal. However, it excludes a section of toiling children in the unorganized sectors including agriculture as well as the household work.
  - o The bill also **bars the employment of adolescents in occupations that deals with hazardous working conditions** such as chemical plants and mines.
  - o The act says that **children can only work after school hours or during holidays** and that children are allowed to work in family owned secure sectors.
  - o However, **no child is permitted to work between 7 pm and 8 am.**
  - o Children are also **not allowed to work overtime.**
  - o An establishment must provide **holiday of one whole day in each week** to every child employed.
- **National Policy on Child Labour** (1987), with a focus more on rehabilitation of children working in hazardous

occupations and processes, rather than on prevention.

- **Juvenile Justice (Care and Protection of Children) Act 2000** (the JJ Act) and **amendment of the JJ Act** in 2006: includes the working child in the category of children in need of care and protection, without any limitation of age or type of occupation.
- **The Right to Education Act, 2009** has made it mandatory for the state to ensure that all children aged 6 to 14 years are in school and receive free education. Along with **Article 21A** of the Constitution of India recognizing education as a fundamental right, this constitutes a timely opportunity to use education to combat child labour in India.
- According to the **Mines Act of 1952**, employment of children below the age of 18 years is illegal in mines.

#### **Way Forward**

- Experts opine that child labour has become a social norm in the country that is largely accepted and tolerated by the society. This exploitative and abusive practice will continue unless society adopts a zero tolerance attitude towards it.
- Right kind of focus and orientation with state level authorities is also needed to avoid this practice.
- Convincing families to send their children in schools is not a tough job provided that families are provided with a vision of a better future for their children.
- Pre school education should be a priority and also there is a need to reach more and more children to reap the benefits of RTE.
- Forced Child Labour requires an urgent action from governments and the international communities.
- The Government generally focuses on immediate rescue and not on the long term situation or the prevention dimension. The prevention dimension needs to be focussed upon.

**Conclusions** - Child labour cannot be eliminated by focusing on one determinant, for example education, or by brute enforcement of child labour laws. The government of India must ensure that the needs of the poor are filled before attacking child labour. If poverty is addressed, the need for child labour will automatically diminish. No matter how hard India tries, child labour always will exist until the need for it is removed. The development of India as a nation is being hampered by child labour. Children are growing up illiterate because they have been working and not attending school. A cycle of poverty is formed and the need for child labour is reborn after every generation. India needs to address the situation by tackling the underlying causes of child labour through governmental policies and the enforcement of these policies. Only then will India succeed in the fight against child labour.

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# The Threat Of Biodiversity In Agriculture Practices As A Review

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**Abstract** - This article is concerned with factors contributing to agro-biodiversity loss in India. The aim of this paper is to analyse the causes of agriculture biodiversity loss and draw out some concrete recommendations. The review study was group discussion, key informant, research paper in formal discussion, and interview. The paper focus that Ecosystem based farming practices, ensuring food security concept of agro biodiversity, Reasons of decrease in agro-biodiversity, biological meltdown and technological advancement are greatly contributing to agro-biodiversity loss in India.

**Keywords**- Agro-biodiversity, farming practices, biological meltdown, Ecosystem Conservation, Inequality Land use.

**Introduction** - Agriculture is one of the perfect key motors of the global economy. It is a source of foods, fibers and, increasingly, fuel. It provides livelihoods and subsistence for the largest number of people worldwide (Sustainability 2011). Agricultural biodiversity or agro-biodiversity includes all the animal, plant and micro-organism species that sustain agricultural ecosystems, and the variety between and within them, and is essential to food and nutrition security.

India's agro biodiversity is most significant one in the world. This diversity is the result of thousands of years of farmer's selection, experimentation even cross breeding and propagation of desirable traits of desirable species in innumerable ways for their subsistence and cultural purposes (Frison, E.A 2007). Over the years this unparallel diversity of various crops of India has been eroded. Replacement of landraces a crop cultivar that evolved with and has been genetically improved by traditional agriculture scientist, but has not been influenced by modern breeding exercise or traditional varieties by modern varieties or High Yielding Varieties is one of the most important reasons.

Everyone depends on agricultural biodiversity; it provides a wide variety of food, fibre, fuel and other products that are essential to the present and future survival and wellbeing of all people on Earth. But what is biodiversity? Let us start by explaining what biological diversity also known as biodiversity is the variety of living organisms – animals, plants and micro-organisms – from all sources, such as terrestrial, marine and other aquatic ecosystems (CBD 2006). It can be considered at several different levels, including: Within species, variation, among species (inter specific) variation and Ecosystems (National Research Council. 1992).

A literature exists of research into agricultural biodiversity and several researches are active on this topic. Many of the perspective aim to concrete a farming systems perspective into the research, focusing on questions like the role that biological diversity plays in agriculture. An overview can be found in the Reasons of decrease in agro-biodiversity and biological meltdown.

**The concept of agro biodiversity** - Agriculture is fundamentally linked to biodiversity. "Biological diversity" or biodiversity (Altieri, M.A 2003) has formed the basis for human food production systems for millennia, and plays an important role in the provisioning services, i.e., production of foods, fuels, and fibers, that agriculture supplies. Biodiversity in agriculture also provides cultural services that form key elements of the agricultural knowledge base, and define spiritual, religious, and aesthetic values for human societies (Jackson, L 2005).

Biodiversity is totally linked with human wellbeing; through its contribution to the functioning and resilience of ecosystems; as a resource with the potential for discovery of new compounds or processes; and a source of emotional wellbeing (D'áz et al 2006). Agricultural biodiversity includes those components of biological diversity relevant to food and agriculture as well as the components of biological diversity that constitute the agro-ecosystem. Modern, intensive agriculture reduces agricultural biodiversity. In fact, it is predicated on such a reduction (Emile A. Frison, 2011). Natural ecosystems provide resources including food, fresh water, fibre etc, and biodiversity loss affects the ability of ecosystems to fulfil these roles. This in turn affects poorest communities the most, since they are least able to afford to substitute the lost ecosystem services (CBD 2000).

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**The causes of agro biodiversity loss** - Population growth, changes in food demand, conversion to modern, high-input agriculture, land use changes, and the globalization of agricultural markets have caused rapid loss of agricultural biodiversity, and of biodiversity in wild land ecosystems. Despite the importance of biodiversity for agriculture, ecologists and conservation biologists have tended to place greatest emphasis on the negative agricultural impacts on wild biodiversity that have resulted from modern agricultural intensification and expansion (Jackson, L 2005).

While agriculture contributes significantly to conservation and sustainable use of biodiversity, it is also a major driver of biodiversity loss. The causes of agro biodiversity loss are diverse and interconnected. The spread of modern, commercial agriculture and intensive, high-input production systems features as the prime driver of diversity decrease, putting native varieties and breeds at risk (FAO 1996a: 13, FAO 2003). Domestic varieties and breeds are substituted with high-yielding crops and FAO 2003 breeds that no longer need to be adapted to natural like climate, soil etc. conditions, since machinery, irrigation, fertilizers and pharmaceuticals unite habitats in a both costly and environmentally harmful way. In developing countries, this process has been supplemented by a donor policy that has promoted the import of exotic breeds and crossbreeding and that intimidate the survival of local breeds.

Climate change is already removing unique habitats and contracting others faster than some species can disperse, and it will become an increasingly important driver of biodiversity loss in the future (Thomas et al 2004a); indeed one of the key motivations for tackling climate change is to protect natural ecosystems and the goods and services they provide. The joint pressures of climate change and expansion of agriculture set up a potential conflict between elements of human wellbeing; meeting food demand and improving diets requires the growth of agriculture, which in turn causes biodiversity loss and contributes to climate change. The use of bio-energy crops, in particular, is put in a highly ambiguous position among these interactions (FAO 2003). They have the potential to mitigate climate change, but may also compete with food production, cause the destruction of natural habitats, and even cause CO<sub>2</sub> emissions as a result of land-use change.

During the last decades, worldwide biodiversity has been lost at an unprecedented rate in all the ecosystems, including agro-ecosystems (Mr Ahmed Djoghlaif 2011). According to the FAO, it is estimated that about three-quarters of the genetic diversity found in agricultural crops has been lost over the last century, and this genetic erosion continues. For example, today, 90% of our food energy and protein comes from only 15 plant and 8 animal species, with disturbing consequences for nutrition and food security. Wheat, rice and maize alone provide more than 50% of the global plant-based energy intake (Mr Ahmed Djoghlaif 2010).

In addition to agricultural biodiversity, modern agricultural practices can also impact biodiversity in other

ecosystems through several ways such as unsustainable demands on water (for irrigation for example), overgrazing, as well as excessive use of nutrients and chemical inputs to control weeds, pests and diseases that result in problems of pollution and eutrophication (Jain HK 2010). Furthermore, land and habitat conversion (in particular forests, wetlands, and marginal lands) to large-scale agricultural production also cause significant loss of biodiversity (Sara J. Scherr).

Although farmers' traditional knowledge is key to both sustain biodiversity and to ensure global food security, today it is as well considered by many to be part of the much-threatened global commons. Farmers are requested to both preserve biodiversity and contribute to meet the nutritional needs of a growing population. However, they do not control all factors involved including those related to agricultural policies, incentives, markets or consumption patterns, and therefore need support from government policy (National Research Council. 1992).

**Conclusion** - In conclusion, agriculture of the twenty-first century will see a different kind of focus both in research and development. Recent concerns about high food prices and low food availability indicate that agriculture and agricultural production are clearly back on the international agenda (Jain HK 2010). There is a new recognition of the profound challenges faced in increasing production to meet the needs of a growing population under changing climates and the need to do so in a sustainable manner (National Research Council. 1992). From this agricultural biodiversity clearly has an increasingly important role to play, not simply in the classical paradigm as a provider of traits for the incremental, never-ending improvement of staples, but more effectively as an essential component of improved production systems (Emile A. Frison 2011). Of course there are other elements of food-systems and production that require additional research and development, such as harvesting and post-harvest storage, small-scale processing domestic cooking methods and marketing to ensure sustainable improvements in food and nutrition security; more effective use of agricultural biodiversity needs to take its place alongside these sectors.

While the desire will always be to look for quick fixes, these are unlikely to be sustainable or to meet current concerns for an environmentally acceptable agriculture that responds to the needs of small-scale farmers throughout the world. Almost all of the approaches used to date in agricultural intensification strategies. We need to build production systems that deliver intensification without simplification. This will entail different dimensions, from varietal mixtures (Mundt, C.C 2002, Li, S.M 2003) to species intercropping (Weigelt, A 2009 & Zhang, F 2008), to broader diversification strategies Batugal, P 2005). This perspective is particularly relevant in areas where multiple production systems still succeed, most particularly marginal areas, but better deployment of agricultural biodiversity in areas that have lost it must also receive greater attention in the future. Diversity will be essential to improve

productivity, to enhance ecosystem functions, and to provide flexibility.

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# Study The Effect Of E-Waste On Environment And Human Health

Kavita Dhare (Bhawsar)\*

**Abstract** - 'E-waste' is a popular, informal name for electronic products nearing the end of their "useful life." E-wastes are considered dangerous, as certain components of some electronic products contain materials that are hazardous, depending on their condition and density. E-waste contains over 1,000 different substances and chemicals, many of which are toxic and are likely to create serious problems for the environment and human health if not handled properly. However, classification of e-waste as hazardous, or otherwise, depends on the amount of hazardous constituents present in it. E-waste contains many toxics such as heavy metals, including lead, cadmium, mercury, Polychlorinated Biphenyls (PCBs), Poly Vinyl Chloride (PVC), etc, in some components. The highly toxic chemicals found in the different components of computer parts can contaminate soil, groundwater and air, as well as affect the workers of the unit and the community living around it. Moreover, the workers in computer waste recycling operations may face dangerous working conditions where health and environmental conditions are compromised. This paper highlights the adverse effects of E- waste on environment and human health.

**Keywords** - E-waste, Waste Management, Hazardous chemical, heavy metals.

**Introduction** - Solid waste can be classified into different types depending on their source: Industrial waste, hazardous waste, Household waste is generally classified as municipal waste, biomedical waste or hospital waste as infectious waste and E-waste. Electronic waste such as TV's, refrigerators and computer waste. Electronic waste or E-waste as it is popularly called is a collective terminology for the entire stream of electronic wastes such as used TV's, refrigerators, telephones, air conditioners, computers, mobile phones etc. computer waste is the most significant of all waste due to the gigantic amounts as well as the rate at which it is generated. In addition, its recycling is a complex process that involves many hazardous materials and poses significant environmental and health hazard. E-waste is of particular concern to India currently. India is setting a shining example not only in the IT sector, but unfortunately, also in importing e-waste. The primary source of computer waste in India is imports from developed countries though, recently, domestic waste also has shot up due to the astounding growth in the IT sector and its application in various new sectors, including governance.

Many of the components in discarded electronics contain toxic constituents. An average desktop computer (monitor, central processing unit and accessories) is made up of many different heavy metals and plastics. Many materials used in the construction of computer hardware can be recovered in the recycling process for use in future production. Reuse of tin, silicon, iron, aluminum, and a variety of plastics, all present in bulk in computers can

reduce the costs of constructing new systems. In addition, components frequently contain copper, gold, and other materials valuable enough to reclaim in their own right. The aim of the authors are to enlighten the hazardous effects of E-waste on environment and human health with special references to personal computer because now a days personal computers are used in large quantities by human beings, so that the E- waste from personal computers are widely spread in environment and affect the health of human being as well as environment.

## Material Composition of E- wastes (Personal Computers):

Type	%
Plastics	23
Silica glass	26
Cu	20.1
Fe	20
Al	14
Others (includes Pb, Zn, Hg, Cd, Cu)	17

\*Source Environment Canada

Hazardous Materials present in E waste

- Americium: smoke alarms (radioactive source).
- Mercury: fluorescent tubes (numerous applications), tilt switches (pinball games, mechanical doorbells, thermostats).
- Sulfur: lead-acid batteries.
- Cadmium: light-sensitive resistors, corrosion-resistant alloys for marine and aviation environments, nickel-

cadmium batteries.

- Lead: solder, CRT monitor glass, lead-acid batteries, some formulations of PVC. A typical 15-inch cathode ray tube may contain 1.5 pounds of lead, but other CRTs have been estimated as having up to 8 pounds of lead.
- Beryllium oxide: filler in some thermal interface materials such as thermal grease used on heatsinks for CPUs and power transistors, magnetrons, X-ray-transparent ceramic windows, heat transfer fins in vacuum tubes, and gas lasers.
- Polyvinyl chloride Third most widely produced plastic, contains additional chemicals to change the chemical consistency of the product. Some of these additional chemicals called additives can leach out of vinyl products. Plasticizers that must be added to make PVC flexible have been additives of particular concern. Burning PVC in connection with humidity in the air creates Hydrogen Chloride (HCl), an acid.

**Effects on environment** - Disposal of e-wastes is a particular problem faced in many regions across the globe. Computer wastes that are land filled produce contaminated leachates, which eventually pollute the groundwater. Acids and sludge obtained from melting computer chips, if disposed on the ground causes acidification of soil. Incineration of e-wastes can emit toxic fumes and gases, thereby polluting the surrounding air. Improperly monitored landfills can cause environmental hazards. Mercury will leach when certain electronic devices, such as circuit breakers are destroyed. The same is true for polychlorinated biphenyls (PCBs) from condensers. When brominated flame retardant plastic or cadmium containing plastics are landfilled, both polybrominated diphenyl ethers (PBDE) and cadmium may leach into the soil and groundwater. It has been found that significant amounts of lead ion are dissolved from broken lead containing glass, such as the cone glass of cathode ray tubes, gets mixed with acid waters and are a common occurrence in landfills. Not only does the leaching of mercury pose specific problems, the vaporization of metallic mercury and dimethylene mercury, both part of Waste Electrical and Electronic Equipment (WEEE) is also of concern. In addition, uncontrolled fires may arise at landfills and this could be a frequent occurrence in many countries. When exposed to fire, metals and other chemical substances, such as the extremely toxic dioxins and furans (TCDD- tetrachloro - dibenzo - dioxin. PCDDs - polychlorinated dibenzodioxins. PBDDs- polybrominated dibenzo-dioxin and PCDFs - polychlorinated dibenzo furans) from halogenated flame retardant products and PCB containing condensers can be emitted. The most dangerous form of burning e-waste is the open-air burning of plastics in order to recover copper and other metals. The toxic fall-out from open air burning affects the local environment and broader global air currents, depositing highly toxic byproducts in many places throughout the world. If these electronic items are discarded with other household

garbage, the toxics pose a threat to both health and vital components of the ecosystem.

**Effects on human health** - Different types of heavy metals present in E Waste, causes adverse effect on human health. Details are given below:

**Arsenic** - Arsenic is a poisonous metallic element. Chronic exposure to arsenic can lead to various diseases of the skin, decrease nerve conduction velocity and lung cancer.

**Barium** - Barium is a metallic element that is used in sparkplugs, fluorescent lamps and "getters" in vacuum tubes. It causes brain swelling, muscle weakness, damage to the heart, liver and spleen.

**Beryllium** - Beryllium has recently been classified as a human carcinogen because exposure to it can cause lung cancer. Workers who are constantly exposed to beryllium, causes a disease (berylliosis), which primarily affects the lungs.

**Cadmium** - Cadmium components may have serious impacts on the kidneys. Due to the long half-life in the body, cadmium can easily be accumulated in amounts that cause symptoms of poisoning. The primary health risks of long term exposure are lung cancer and kidney damage. Cadmium is also responsible for pulmonary emphysema and bone disease (osteomalacia and osteoporosis) in human being.

**CFCs (Chlorofluorocarbons)** - CFCs used mainly in cooling units and insulation foam, they have been phased out because when released into the atmosphere, they accumulate in the stratosphere and have a deleterious effect on the ozone layer. This results in increased incidence of skin cancer in humans and in genetic damage in many organisms.

**Chromium** - Chromium (VI) is easily absorbed in the human body and can produce various toxic effects within cells. Most chromium (VI) compounds are irritating to eyes, skin and mucous membranes. Chronic exposure to chromium (VI) compounds can cause permanent eye injury, unless properly treated. Chromium VI may also cause DNA damage.

**Lead** - Lead is commonly used in the electrical and electronics industry in solder, lead-acid batteries, electronic components, cable sheathing, in the glass of CRTs etc. Its short-term exposure to high levels of lead can cause vomiting, diarrhea, convulsions, coma or even death and excessive exposure, as in an industrial setting, can affect the kidneys. It is particularly dangerous for young children because it can damage nervous connections and cause blood and brain disorders.

**Mercury** - Mercury is one of the most toxic yet widely used metals in the production of electrical and electronic applications. It is a toxic heavy metal and causes brain and liver damage if ingested or inhaled.

**Result and Discussion** - In view of the ill-effects of hazardous wastes to both environment and health, several countries exhorted the need for a global agreement to address the problems and challenges posed by hazardous

waste. Searching for cheaper ways to get rid of the wastes, "toxic traders" began shipping hazardous waste to developing countries. International outrage following these irresponsible activities led to the drafting and adoption of strategic plans and regulations at the Basel Convention.

**Conclusion** - Manufacturers of computer monitors, television sets and other electronic devices containing hazardous materials must be responsible for educating consumers and the general public regarding the potential threat to public health and the environment posed by their products. At minimum, all computer monitors, television sets and other electronic devices containing hazardous materials must be clearly labeled to identify environmental hazards and proper materials management.

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# A study of Impact of Education on Perception about Competency and Performance

Dr. Anshu Thakur \*

**Abstract - Purpose** - The aim of the paper is to study the perception of service sector employee about the relationship between competency and performance.

**Methodology** - For the purpose of study the primary data has been used. The data has been collected in the form of structure, self administered questionnaire. Sample size is 150 employees from different service sector organization. For the purpose of statistical analysis, Anova has been applied and further analysis has been done thorough post-hoc.

**Findings** - Educational qualification has no impact on perception about the competency and its impact on performance.

**Key words** - Service sector, Performance, Educational qualification, Competency.

**Introduction** - The development of any organization depends upon the performance of the employees. Employees are the face of the any organization. They interact with the customer and their behavior create and image of the organization from which they belong. What competencies they posses become very important. Telecom industry has seen rapid changes in the past few years. It has expanding very rapidly and catering to the needs of every customer. With the rapid expansion and growth of the industry, skilled and competent employees become the need of the company. Either the HR managers must recruit the employees those who posses such requisite skill sets or competencies or the training programs must be designed in such a way that it should be able to deliver the right things or should be able to inculcate the requisite competencies.

Indian economy is among one of the fastest developing economy of the world. India is the country which has the country which has the highest population after China in the world which is a weakness and strength for Indian at the same time. India is the country which is known as one of the youngest country in the world.

Indian economy was large and prosperous during the reign of Mughal's. Indian artisans were having patronage of the state. They made India as one of the important manufacturing hub. India was one of the major centres for exporting goods processed and unprocessed such as textile steel, cotton, silk, jute etc. Cities and towns boomed under the Mughal Empire, which had a relatively high degree of urbanization for its time, with 15% of its population living in urban centres, higher than the percentage of the urban population in contemporary Europe at the time and higher than that of British India in the 19th century. In the 18<sup>th</sup> century the Mughal's were declined, which has affected the Indian economy adversely. Agriculture produce has affected due to which textile industry has affected adversely.

By the late 18<sup>th</sup> Century British entered to India this marked a determinative shift in India's trade. British ruled the India for more than 2 centuries during that period Indian economy has faced several downs and shift from lead to lagging economy. British exploited the Indian economy like never before which made the country at the verge of bankruptcy.

After the independence the leaders tried to bring the Indian economy on track by introducing five years plan. During the first three decades the growth rate of Indian economy was very slow and it was termed as Hindu Growth rate because it was stagnated to 3.5% till liberalization.

In the year 1991 the government lead by Mr. P.V. Narsimha Rao and Finance Minister Dr. Manmohan Singh initiated economic reforms which reduced the tariffs and interest rates and many public monopolies by allowing automatic approval of Foreign Direct Investment in many sectors(Task Force Report, 2006 ). India witnessed high growth rate from 2003 to 2007 with the average of 9% world economic situation and prospects 2010.

Indian economy & GDP is divided into three sectors namely agriculture, industry and services. Agriculture includes crops, horticulture, milk and animal husbandry, aquaculture, fishing, sericulture, aviculture, forestry and related activities. Industry includes various manufacturing sub-sectors. Service sector includes construction, retail, software, IT, communications, hospitality, infrastructure operations, education, healthcare, banking, insurance and others.

Service sector is the largest sector of Indian economy and contribute highest to the GDP, accounting 57% in 2012 up from 15% in 1950 All economic indicators on Quandi.

The present research has been conducted with the objective to study the perception of service sector employee about the relationship between competency and



performance.

**Literature Review** -The most challenging face for any of the organization in the present era in the study of organizational behavior is the effect of behavioural traits on organizational performance. Lindner (2001) sensitivity to situations is the most important factor followed by communication, which have direct impact on their performance. Hashim (2008) the competencies primarily required for job fulfillment are communication, managerial and job knowledge. Dreyfus (2008) with the increasing age competencies required for high performance were keep on improving. Zaim et al. (2013) revealed that there is a positive linkage existed between the competencies skill set and individual performance. Ngo et al. (2014) applied the multiple regressions and result indicated that there is positive relationship observed between HRM competency and performance of the firm. Murray (2003) that universal strategy does not work in all situations one has to adopt the customized competencies for performance. Jayan (2006) emotional competency is most important factor which affect the job performance. Sudsakorn and Swierczek (2009) searched the area of competencies which are expected in management students to become successful as manager. Ryan et al. (2009) reveal the relationship of other specific competencies with performance differs, but team leadership as well as achievement orientation is constantly related with performance of managers. Boyatzis (2009) in his researched came out that competency variables and performance is directly associated. Ryan et al. (2012) has concluded that competencies were significantly affect the productivity of business.

**Research Methodology** - For the purpose of the research primary data has been used. Data has been collected in the form of structure questionnaire form the different employees working in the service sector. The sample size was 150. Data collection method used for the purpose of research is convenient sampling. Data has been collected through self administered questionnaire.

Scope of the study is limited to the geographical boundries of Indore city.

For the purpose of statistical analysis t-test and Anova is used and following hypothesis has been formulated:

$H_1$  There is no significant difference in the mean value of different qualification and performance.

$H_{1a}$  There is a significant difference in the mean value of different qualification and performance.

**Results** - Hypothesis there is no significant difference in the mean value of different qualification and performance is accepted. For the purpose of statistical analysis Anova has been applied. The statistical result shows that educational qualification has no impact on the perception that competency has impact on performance ( $p=0.321$ ). Hence we can say that there is no difference in the opinion in the employee with the change in qualification about the impact of competency on the performance.

**Table 1 - ANOVA**

Percept

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	5.344	3	1.781	1.177	.321
Within Groups	220.930	146	1.513		
Total	226.273	149			

For further analysis post hoc test has been applies. Table 2 (see in next page)

From the table 2 and analysis it can be concluded that there is no statistically significant difference between in the perception of impact of competency on performance between graduate and diploma ( $p=.892$ ), graduate and post graduate ( $p=.643$ ), graduate and others ( $p=.430$ ), diploma and post graduate ( $p=.981$ ), diploma and others ( $p=.621$ ), post graduate and other ( $p=.727$ )

**Discussions** - Educational qualification has effect on the perception that competency has direct relation with the performance because the reason may be it is established fact that only job specific competent persons were recruited or selected at the time of initial screening, organization can align individual performance and their competencies in terms of efficiency (Sengupta A et al (2013). Hence the HR managers were well aware about the fact and they select the employees on the basis of their competency which is well suited for the job and convert that potential into efficiency or performance.

**Conclusion** - Performance is measurable and has tangible value. It is very easy to measure or identify or distinguish between performer or non performer. The performance is only possible when someone is having capability to do that work either in terms of knowledge or in terms of practical exposure. Hence there is relationship between educational qualification and perception about the competency and performance relationship.

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### Multiple Comparisons

Dependent Variable: percept Tukey HSD

(I) Qualification	(J) Qualification	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Graduate	Diploma	-.18944	.26550	.892	-.8794	.5006
	post grauate	-.31643	.26925	.643	-1.0162	.3833
	other	-1.09420	.72170	.430	-2.9698	.7814
Diploma	graduate	.18944	.26550	.892	-.5006	.8794
	post grauate	-.12698	.33180	.981	-.9893	.7353
	Other	-.90476	.74729	.621	-2.8469	1.0374
post grauate	graduate	.31643	.26925	.643	-.3833	1.0162
	Diploma	.12698	.33180	.981	-.7353	.9893
	Other	-.77778	.74863	.727	-2.7234	1.1678
Other	graduate	1.09420	.72170	.430	-.7814	2.9698
	Diploma	.90476	.74729	.621	-1.0374	2.8469
	post grauate	.77778	.74863	.727	-1.1678	2.7234

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# A Study on Digital Marketing: Critical Evaluation of Content Writing

Ms. Farha Naz\*

**Abstract** - In this challenging world where technology changes very rapidly and innovation and development takes place, it becomes very essential for the companies and organization to update them and accept the technological changes for the survival in the economy. Rapid changes make the market more challenging as previous. So it is necessary to reach at consumer's mind as before the other companies reach.

According to the study adult in India Spend 29.9% of their 4 hrs 59 min on internet and the smart marketer accept the change by arm outstretched and ensure their marketing strategies touches point mirror where the consumer is spending time. Increased sources of high Internet speed and data facility plays a vital role in developing digital market. Main digital platform are Google, Face book, Twitter, Instagram. Content marketing gives wings to digital marketing and make it competent to supply the appropriate product to its most desirable consumer.

This Paper will cover the is t the fundamental of Internet base marketing and critically analysis the content marketing, its tools and effect on consumer.

**Keywords** - Digital marketing, Content marketing, Blogs, webinar, Podcast, E-mail, Video, Marketing.

**Introduction** - Demonetization lead to the country into the new revolution period called digitalization. Digital India is the dream of developed India, and this dream is being caught the pace. Reliance jio play a vital role in this role by free internet. Best offers and plans attract consumers and users to spend more time on the internet and use it, gradually people's daily working and requirements depends on the internet and they used applications and software for their working.

Because of easily availability of internet and electronic devices assemble all people on the virtual place called digital platform or social sites. This assembly of human resources become the center point of attraction for the e-commerce companies for marketing their products and services and thus developed a new modern technique named digital marketing. E-commerce has unleashed the revolution. In 1997 US. Government allowed use of internet by commercial organization. Rapid growth and immense benefit of e-commerce takes the companies towards mass media advertising. Main digital platform s is Google, face book, twitter, You-tube.

In the traditional marketing detail and long advertisement were found which require lots of time energy and became very challenging and difficult to bind the consumer on it till the end. Introduction of digital marketing end long form of advertising asking consumers to keep edit and short length,

## WHAT IS CONTENT?

Content is vocabulary in written, graphs, charts and in the

form of attractive pictures colors and arts and animation. All these form of content is used for stimulating interest and desire for purchasing the particular product after identifying and reporting its dynamic feature and usefulness.

Content is design for the end user, according to their needs and preferences and expressed through some medium as speech writing and any of various art.

**CONTENT MARKETING** - Content marketing is different from traditional marketing, instead of physically meeting of consumer and marketer, content marketing creating a skilled and technical bridge between these. This made easy for both the parties to understanding and taking the decision of either purchasing the goods or not. They can be used different examples and media for the selection of buying. Content marketing includes things like educational articles, e-books, videos, entertainment, and webinars. Content marketing takes a lot of work, persistence, and patience- it's not for everyone. It requires the carefully selection of words and their used at right place. The reader can be influenced by it and its desire for purchasing the product and its usefulness can be increased. In such a way marketing is became successful and overall depends on the content stimulation and selection of right words through the appropriate medium for a right customer.

In other words it can be describe that the content marketing is the form of online marketing which create the desire of buying the product by the use of attractive and imperative writing content. It is in the form of digitization marketing information which is closely linked to the web

marketing.

### CONTENT MARKETING CATEGORIES:

- **BLOGS** - A blog is a website that contains information of some specific topic and opinion. It is the informal means of information that reader can find inspirational or educational.

A blog is a website or webpage that is uploaded on the regular bases. Blog is the short form of weblog. It is a web publishing tool for the non technical user who did not have much familiar with HTML or computer programming. It is simplest way of finding and delivering information for the end user.

Main attractiveness of blogging is that publishing content online through it not required too much technical or software knowledge. So that for an individual writer and for a group of writers it became a useful platform to share their idea, views and information on an individual subject.

Blogging allows you to connect to the relevant audience and boost traffic.

Delivering of quality content and regular posting on recent and timely topic create or increase the chances for your website to get discovered and visited by targeted audience and help you to come in top of search result.

**Blogging Skills:** A successful Blogging require a skills blogger who have the good command on the selection of words content and their presentation. Posting on the regular basis for the long and successful life of blog.

- **PODCAST** - Podcast is media player application developed by Apple Inc. It is the audio form of sending and receiving information and knowledge. Physical presence of a trainer or informer doesn't require for it.

As we know the YouTube is the most popular digital platform for delivering and acquiring information. If we want clear descriptive knowledge on some subject YouTube is the means which fulfill our need and satisfied our query. It provides the opportunity to attend the live session of experience trainer or attend offline classes. We can able to see and listen the trainer or

- **VIDEO** - Creating a useful and meaningful video on a particular topic requires a lot of skills, research and fact and figures. It is the duty of uploaded of a video informational and educational videos have to maintain specific time and design necessary content of videos in such a way that all relevant and important information should be convey and it would be useful for the user. Time limit in videos is also a most important point to be considered before making the video.

- **E-mail** - Sending or receiving information through the electronic mail is considered to be most secure, because of its authentication. It is being more desirable and confidential because of its features. It becomes necessary that the e mail should be more impressive and attractive that have the ability to bind the reader in such a way that stimulate the interest of him for purchasing the product or avail the services.

- **WEBINAR** - The word webinar is a blend of word web

and seminar. Webinar is a form of an event which is held interest and attended exclusively by online audience. Through the webinar seminar and lecture conducted by an individual and offer to attend who wants to take knowledge and information of the relevant topic.

Main advantage of webinar is, it is one too many type of communication and there is open platform where the information seeker can be easily connected through his digital device and form the use of interest. They can be easily gives their feedback and ask question directly with the lecturer.

Webinar market's popularity increased day by day because of his cost saving. Personal appearance live and interactive quality and helping participates to learn and understand more quickly. Because of its amazing quality and features. It became necessary to gives quality content to your webinar that enables the number of audience will be able to get qualitative and useful information in a short time. Currently webinar stand at an average time of 56 minute.

- **WEBCAST** - Physical appearance of information provider through the media is necessary. You can see the trainer gesture, Posture, audio and also video can be viewed. It can be more helpful in understanding the subject and also remembering it, because through the video you can stable and hold the viewer for more long time as compared by only video. In webcast chances of loss of attention can be minimize.

- **INFOGRAPHIC** - Info graph is a combination of two words information and graphics that represent the very interesting meaning information through the design and graphics.

It is designed to reach a wider audience. It simplifies complex subject and arranging it in an easy to understand format unlike other type of visualization.

The aim of info graph as visual representation of information which aim to make the data easily understand-able at a first glance.

Info graph simplify large data sets providing a high level view and making them easier to understand.

**TYPE OF INFO GRAPH** - Uses of different types of info graph are based on given situation and that fit more suitable and appropriately in the given situation. Your audience also matters and selection also based according to the type of audience.

- Information graphics
- Timeline info graphic
- charts info graphic
- Process info graphic
- comparison info graphic
- Number info graphic

**INFO GRAPHIC COLOR & FONT** - For presenting before the mass audience content should be pre analyzed and evaluate, so that the audience can absorb maximum knowledge from your info graph and like and follow them also give positive and encouraging feedback, for this it would



be necessary that content should be more attractive and impressive and having the ability to bound the eye contact of the viewer and listener. The color of the info graph should be eye catching, highlighting and relaxing for the eyes.

When we talk about the font of the content Time new Roman, Calibri, Comic sans, serif font have been preferable

#### **TOOLS OF CONTENT WRITING:**

- Research a lot
- find your unique style
- stick to the point
- Become creative
- Select a memorable title
- Keep it at smiling and positive point
- Edit and read

#### **TYPE OF CONTENT WRITER:**

- Blog writer
- Brand journalist
- Copy writer
- Ghost writer
- Technical writer
- Social media writer
- E-mail writer
- Script writer
- Ad and Promo writer
- E-books

**CONCLUSION** - Rapid growth of e commerce and digital revolution is two main key factors that attract the attention of marketer towards the mass media. Marketer's main motive is it set the brand image and creates the great opportunities. With the use of internet and popularity of social media create a large traffic on digital world, an individual spend too much of its time on digital platform and a smart marketer first priority is to keep the innovative strategies always on top and touch the point where the

consumer spent much of his time. In this way the use of digital market has been developed and achieves an immense growth day by day. A digital marketer must understand and analysis of the target audience in order to choose the right way of promoting and advertising it.

It becomes ease to connect with your target audience through the use of easy and understandable content. Content marketing is about telling the brand story in an entertainment and educational way and engaging the consumer. It is an art of communicating with your consumer, because you are not only selling the product but also your content should be at that level and having the ability pitching your product and services. Main motive of content is to delivering information and that makes your buyer more intelligent and loyal, by this you became a trusted and reliable authority in your expertise area.

Content can be everything from BlogSpot, Memes, and Stories, Info graph, Video, Podcast, and e book.

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# Diabetes Mellitus Treatment Using Herbal Drugs

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**Abstract** - Diabetes mellitus represents a spectrum of metabolic disorders characterized by abnormal metabolism, has emerged as a major health issue worldwide. The prevalence of diabetes mellitus is expected to reach up to 4% in the world by 2030. By conducting large number of research work, numerous traditional medicines have been found for diabetes. Medicine plant play important role in the treatment of diabetes mellitus. so, these article present the various type of herbal anti diabetic medicinal plant, as a result the diabetes may be cure without any type of side effects.

**Keywords** - diabetes mellitus ; herbal drug ; extract ; hypoglycemia.

**Introduction** - Diabetes mellitus is a disorder that affects the body's ability to make or use insulin. Insulin is a hormone produced in the pancreas that helps transport glucose (blood sugar) from the bloodstream into the cells so they can break it down and use it for fuel. diabetes mellitus also known as diabetes which was observed as diseases related with "sweet urine" and muscle loss. It also linked with development of various serious disease like micro vascular (nephropathy, retinopathy, nephropathy and macro vascular) peripheral vascular diseases and coronary heart diseases [1] [2]

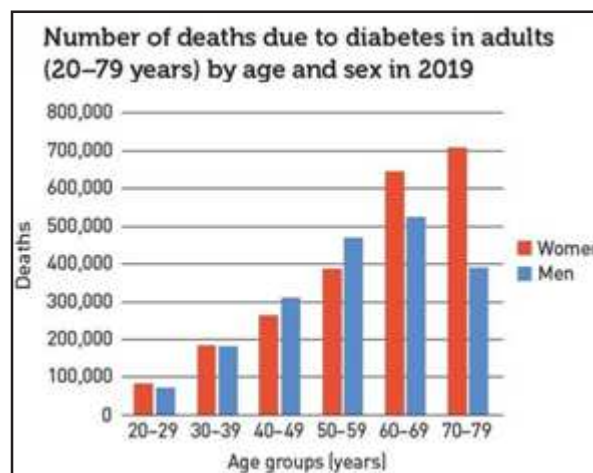
**Type and difference of diabetes** : there are several forms of diabetes scientist are still defining and categorizing some of these type include

**Type 1 diabetes mellitus** : Type 1 Diabetes mellitus is known as insulin dependent diabetes mellitus which is due to total loss of function of  $\beta$  cell of islets of (Langerhans) which are present in pancreas.

**Type 2 diabetes mellitus** : Type 2 Diabetes mellitus is known as insulin non dependent diabetes mellitus which is temporary loss of  $\beta$  cell mass and it is due to genetic predisposition and mostly occur in obese persons and associated with high blood pressure and high cholesterol levels.

**Gestational diabetes** : Gestational diabetes is a type of diabetes which present with hyperglycemia in pregnant women. It usually appears in 2-4% pregnancies in 2nd or 3rd trimester.[3]

According to Aroha world reports 61.3 million people have diabetes in INDIA and consist of 20-79 age group in the population. It may approx. doubled by the year 2030. [4]



**Diagnosis of diabetes mellitus** - The blood sugar level in healthy man on fasting are 80mg/dl and in postprandial state is up to 160mg/dl. blood sugar level analyzation can measured diabetes, different test to be done in laboratory as prick blood sugar test, fasting blood sugar, glucose tolerance diagnostic test glycol hemoglobin. [5]

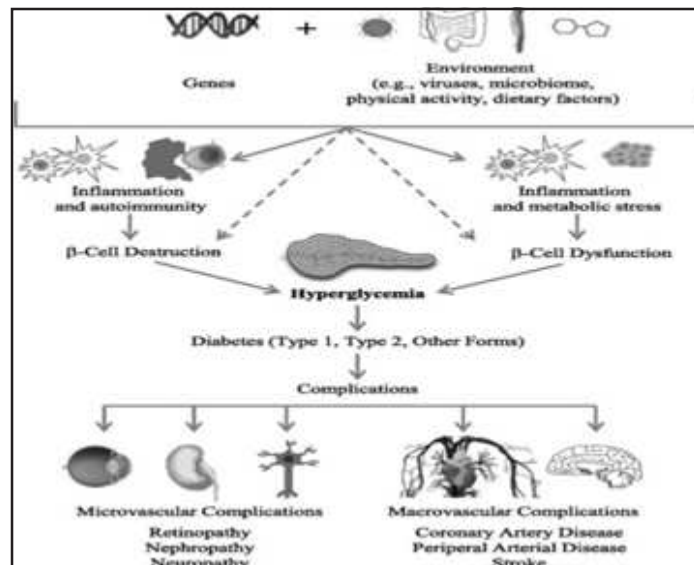
**Mechanism of diabetes mellitus** - The blood delivers glucose to provide the body with energy to perform all of a person's daily activities. The liver converts the food a person eats into glucose. The glucose is then released into the bloodstream. In a healthy person, the blood glucose level is regulated by several hormones, primarily insulin. Insulin is produced by the pancreas, a small organ between the stomach and liver. Insulin allows glucose to move out of the blood into cells throughout the body where it is used for fuel. People suffered diabetes either do not produce enough insulin (type 1 diabetes) or cannot use insulin

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properly (type 2 diabetes), or both (which occurs with several forms of diabetes). In diabetes, glucose in the blood cannot move efficiently into cells, so blood glucose levels remain high. This not only starves all the cells that need the glucose level.[6]



**Role of herbs** - The green or leafy plants which show fragrance or aromatic properties are called herbs. In the case of diabetes mellitus treatment without any adverse effect is still the biggest question, although according to world ethnobotanical 800 medicinal plants possess anti-diabetic properties. Many of these plants have been used ethnopharmacologically in traditional medicine as anti-diabetic particularly 4T2DM, L-carnitine, vanadium, gymenia sylvestre, are the examples of common herbal and dietary supplements that have been used to treat diabetes because of less side effect and adverse effect. Herbal drugs are a better choice over any other synthetic drug.[5]

#### Herbs used in treatment of diabetes mellitus:-



**Ocimum sanctum** - It is also known as tulsi and belongs to Labiateae family. It is widely found all over India. It is used in Indian ayurvedic medicines for treatment of various diseases. Various animal studies proved that aqueous extract of Ocimum sanctum leaves (200 mg/kg) showed

the hypoglycemic activity in streptozotocin induced rats. It is also used for treatment of viral infection, fungal infection, reduces stress, treatment of tumor and treatment of peptic ulcer. Tulsi or holy basil is a sacred plant used by Vaishnavas for thousands of years. Ocimum sanctum at 400 mg/kg showed significant anti-diabetic effect in alloxan induced diabetes mellitus in rats and the fixed oil of O. sanctum significantly reduced hyperlipidemia induced by high fat diet fed Wistar rats.[7]



**Allium sativum** - It is also known as Garlic which has a broad spectrum of medicinal properties. It is composed of a large number of sulfur compounds, with suspected bioactive compounds called allyl thiosulphate (mainly allicin). Garlic has been reported to possess anti-diabetic properties. Several experimental and clinical studies have been conducted to assess the interaction between garlic and anti-diabetic medicines.[8] In another study combination therapy of garlic extract (50 or 100 mg/kg) and metformin over 28 days was tested in a rat model of streptozotocin-induced diabetes. Garlic alone, as well as in combination with metformin, improved body weight, these combination therapies are more effective in reducing blood glucose levels. In a clinical trial, 60 diabetic patients with fasting blood sugar levels above 126 mg/dl. [9] [10]



**Aloe barbadensis** - It is also known as Ghritikumar/Aloe vera. It is filled with clear viscid gel. It has green blade-shaped leaves that are heavy narrowing, and hairy structure. Its viscous gel consists of various therapeutic effects such as anti-diabetic, antioxidant, increases the decrease level of glutathione by four times in diabetic rats. If Aloe vera is taken regularly in specific amount (200 mg/dl) it significantly lowers the glucose level in the blood stream.[11]

**Zingiber officinale** - It is also commonly known as ginger, which is an important medicinal plant from many years. Its



aqueous extract is in use as an antidiabetic in many countries as part of traditional therapy. It is believed that the anti-diabetic effect of ginger is derived from its antioxidant and anti-glycation properties, and its ability to express the glucose transporter Glut 4. In a study by Al-Omari et al. at model of streptozotocin (STZ)-induced diabetes, a concurrent treatment of ginger extract (25 or 50 mg/kg) and glibenclamide (5 mg/kg) significantly reduced non-fasting blood glucose level by 26 and 25% respectively [12].

In another study, a combination of ginger extract and a sub-optimal dose of glibenclamide (0.5 mg/kg) was found to exert effects similar to a full therapeutic dose of glibenclamide (1 mg/kg) in the STZ-induced diabetic model. In addition, ginger has been shown to have renal protective effects when used with metformin. [13] [14]



**Allium cepa**- It is also known as onion or pyaz belongs to Liliaceae, a family of Allium cepa. It contains chemical ingredients (ADPs) which inhibit insulin destruction by the liver, and it provokes the production of insulin by the pancreas. These productions improve the concentration of insulin and decrease the glucose level in the blood. Crucial oil (100 mg/kg) collected from red onion frequently shows antihyperglycemic activity, antistatin and antioxidant effects in alloxan-induced diabetic rats. (300 mg/kg) are most useful percentage in treatment of hyperglycemia and hyperlipidemia. According to the various journals or researches, it can clearly say that onion has medicinal properties which is used for treatment of cancer, diabetes, and various viral diseases. [15]



**Table 1 (see in next page)**

**Conclusion** - Millions of people are affected from endocrine disorders which is commonly known as (Diabetes). This is because with the restricted number of commercially available drugs for these disorders still present many side effects and also other problems like certain hypoglycemic

effect. This unwanted change is still the biggest threat of people who are suffering from these disorders. Diabetes is such a type of disease which not only affects the patient's blood sugar level but it also shows its adverse effects on kidney, liver and heart, so the allopathic medications used in the treatment of diabetes mellitus also give their adverse effects on the major organs of the body but the use of medications based on herbal preparations instead of pharmaceutical drugs does not leave their side effects and do not affect the proper functioning of the major organs." In these conclusions the article has presented the list of those medicinal plants and herbs which show anti-diabetic properties and commonly use in the treatment of diabetes mellitus, and also useful for those health care professionals and scientists who have work to find the alternate treatment and drug to cure these types of (Disorders)"

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**TABLE NO:1**

**Few more herbs/trees used for treatment of diabetes mellitus**

S.	Plant species	Common name	Family	Part used
1.	Allium sativum	Garlic	Lilliaceae	Bulb Extract
2.	Azadirachta indica	Neem	Meliaceae	Leaf extract
3.	Zingiber officinale	Ginger	Zingiberaceae	Full extract
4.	Eugenia jambolana	Jamun	Myrtaceae	Pulp of fruit
5.	Azadirachta indica	African mahogany	Fabaceae	Stem bark
6.	Ajuga reptans	Bugweed	Lamiaceae	Leaves
7.	Blighia sapida	Ackee	Sapindaceae	Fruit
8.	Brassica rapa	Field mustard	Brassicaceae	Root
9.	Cajanus cajan	green pea / pigeon pea	Fabaceae	Seeds
10.	Callistemon lanceolatus	Melaleuca citrina/ lemon	Myrtaceae	Aerial parts
11.	Eclipta alba	Bhringraj	Asteraceae	Leaves
12.	Humulus lupulus	Hops/ hop	Cannabinaceae	strobiles
13.	Salvia fruticosa	Sage	Lamiaceae	Leaves
14.	Vinca major	Bigleaf periwinkle	Apocynaceae	Whole plant
15.	Zea mays	Corn	Poaceae	Fruit

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## Natural Anti-Inflammatory Agents

Mayank Pradhan\* Shruti Purohit\*\* Mohit Dwivedi\*\*\* Aadarsh Jedhe\*\*\*\*

**Abstract** - The main objective of this is to study the natural anti-inflammatory agents. Medicinal plants are progressively used in the treatment of diseases as a complementary medicine. Natural products play a significant role in human health in relation to the prevention and treatment of inflammatory action. The lotions and oils prepared from natural sources such as:- Camphor, Eucalyptus, Sandalwood, Ginger etc. doesn't cause any type of skin irritation and skin sensitization.[1]. The use of herbal medications is frequently recommended in a typical inflammation cases. The herbal medications can be effective, alternative treatment for pain relief, especially for long-term use.[3]

**Key Words** - Inflammation, natural anti-inflammatories, side effects of active pharmaceutical agents and steroid based medication.

**Introduction** - Pain, heat, redness and swelling are classic manifestations of inflammatory process. Inflammation usually occur when infectious microorganisms such as bacteria, viruses or fungi invade the body, reside in particular tissues /or circulate in the blood. Inflammation may also happen in response to processes such as tissue injury, cell death, cancer, ischemia and degradation. Mostly, both the innate immune responses as well as the adaptive immune responses are involved in the formation of inflammation.[5]

According to the case study the association of upper gastrointestinal bleeding and exposure to non-steroidal anti-inflammatory drugs (NSAID). The rate of upper GI bleeding was compared in 47,136 patients exposed to a NSAID and 44,634 unexposed patients. The risk of bleeding was 1.5 times higher in patients exposed to a NSAID. The rate of upper GI bleeding was then compared among 88,044 patients exposed to only one NSAID.[9]

According to the case study of National Health Insurance Research Database (NHIRD) in Taiwan. The traditionally used NSAIDs and Cyclooxygenase (COX) inhibitors were associated with an increased risk of heart failure leading hospitalization in patients without a related history of heart failure.[10]

**Inflammation** - Inflammation is the complex biological response of vascular tissues to harmful stimuli, such as pathogens, damaged cells or irritants. Avascular tissues such as cornea, articular cartilage, intervertebral disc etc. do not show inflammatory response. Inflammatory response is a protective attempt by the organism to remove the injurious stimuli as well as initiate the healing process. Inflammation is not a synonym for infection. Even in cases

where inflammation is caused by infection, the two are not synonymous: infection is caused by an exogenous pathogen, while inflammation is the response of the organism to the pathogen.

Inflammation can be classified as either acute or chronic. Acute inflammation is the initial response of the body to harmful stimuli and is achieved by the increased movement of plasma and leukocytes (initially neutrophils) from the blood into the injured tissues. A cascade of biochemical events propagates and matures the inflammatory response, involving the local vascular system, the immune system, and various cells within the injured tissue. It comes to an end with in a few hours or days. Prolonged inflammation persisting for weeks or months is known as chronic inflammation. Whereas, neutrophil accumulation in the lesion is a hallmark of acute inflammation, chronic inflammatory lesion is characterized by the presence of lymphocytes, monocytes, macrophages and plasma cells. Another hallmark of chronic inflammation is simultaneous processes of tissues destruction and healing resulting in the formation of scar tissue. Inflammation may result from two sets of causes; exogenous and endogenous.

- A. Exogenous factor:- 1. Mechanical injury (traumatic injury)
2. Physical injury
3. Chemical injury (poisons, venom)
4. Biological injury (viruses, protozoan)
5. Ischemic injury
- B. Endogenous factors:- 1. The immune-pathological responses such as allergic inflammations and

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autoimmune inflammatory disorders.

2. Endogenous products of tissue metabolism such as gout. [12]

#### Natural Anti-Inflammatory Agents:-



**1. Sandal wood (*Santalum album*)** - Family : Santalaceae  
- Sandalwood oil, also known as East Indian sandalwood oil, is an essential oil distilled from the *Santalum album* tree and has demonstrated biological activity as an anti-inflammatory, anti-microbial, and anti-proliferative agent. It shows its effects in treatment of acne, psoriasis, eczema, common warts and molluscum contagiosum.

**Mechanism of action** :-Sandalwood oil is known to mediate its anti-inflammatory properties in vitro through multiple mechanisms. The oil inhibits the oxidative enzyme 5-lipoxygenase and has DPPH radical scavenging activity and, in vivo, SAO is able to protect liver from damage. Alpha-santalol was found to be an inhibitor of tyrosinase, a key enzyme in the biosynthetic pathway for the skin pigment melanin. This SOA potentially acts as an inhibitor of abnormal pigmentation associated with aging and exposure to ultraviolet light.

**2. Ginger (*Zingiber officinale*)** :-Family : Zingiberaceae . This one is used for easing the pain of backaches and improves joint mobility in all cases ginger having anti-inflammatory property so that used for arthritis as well as rheumatic pain. Its anti-inflammatory properties have been known and valued for centuries.

**Mechanism of action** :-Ginger suppresses prostaglandin synthesis through inhibition of cyclooxygenase-1 and cyclooxygenase-2. Ginger also suppresses leukotriene production by inhibiting 5-lipoxygenase. This pharmacological property of ginger differentiates it from non-steroidal anti-inflammatory drugs. This dual inhibitor process may have a better therapeutic profile and have fewer side effects than non-steroidal anti-inflammatory drugs. The characterization of the pharmacological properties of ginger that ginger extract derived from *Zingiber officinale* and *Alpinagalangalin* inhibits the induction of several genes involved in the inflammatory response.

The earlier reports suggested that the use of powdered ginger in the case of Rheumatoid arthritis and Osteoarthritis for 3 months to 2-5 year period, reduce pain and inflammation in 75% patients without any adverse effect and suggested ginger is an anti-inflammatory agent. [1]



**3. Garlic (*Allium sativum*)** :- Family : Amaryllidaceae . Garlic is a common spice with many health benefits, mainly due to its diverse bioactive compounds, such as organic sulfides, saponins, phenolic compounds and polysaccharides. It exhibits anti-inflammatory properties.

**Mechanism of action** :-The garlic 14-kDa protein inhibited the inflammatory mediators including nitric oxide (NO), TNF- $\alpha$ , and interleukin (IL) -1  $\beta$  by inhibiting the transcription factor nuclear factor- $\kappa$ B signaling pathway in lipopolysaccharide stimulated macrophages. In other study, the ethyl linoleate in garlic reduced the production of NO and prostaglandin E-2 by down regulating the expression of inducible NO synthase (iNOS) and COX-2 in lipopolysaccharide stimulated macrophages. [14]



**4. Lavender (*Lavandula*)** :- Family : Lamiaceae.

This is the most popular oil it became a powerful pain relief and relaxation. Lavender oil having property of anti-microbial, anti-inflammatory, as well as sedative that will be used for relieving the pain from muscle tension, muscle spasms, joint pain and headache.

**Mechanism of action** :-In the inflammatory response there is an increase in permeability of endothelial lining cells and influxes of blood leukocytes into the interstitium, oxidative burst, and release of cytokines [interleukins and tumor necrosis factor- $\alpha$ ]. At the same time, there is also an induction of the activity of several enzymes (oxygenases, nitric oxide synthases, peroxidases) as well as the arachidonic acid metabolism. In the inflammatory process there is also the expression of cellular adhesion molecules, such as intercellular adhesion molecule (ICAM) and vascular cell adhesion molecule (VCAM). [19]





**5. Peppermint (Mentha piperita) :-**Family : Lamiaceae. Peppermint is used to stop headaches, this is also used for the pain that caused by muscle aches, joint pain, nerve pain. There are several reports that peppermint compounds have crucial roles in prevention of inflammation and angiogenesis.

**Mechanism of action :-**The methanol extract of peppermint has cytotoxic effect on L1210 cancer cells [17]. Lin and colleagues showed that apparently methanol, in higher doses, effects on NAT activity in the human liver tumor cell line. The NAT activity is responsible for the biotransformation of numerous arylamine drugs and carcinogens. This enzyme has three critical residues consists of Cys68, His107 and Asp122. On docking of peppermint compounds in NAD enzyme as receptor showed that cineole and methyl acetate interact with His107 residue and therefore, they are able to inhibit NAT enzyme activity. Lin and co-workers reported that the methanol a possible uncompetitive inhibitor to NAT activity in cytosols. [18]

**Side Effects of Active Pharmaceutical Ingredients [11] :-**

**1. Lanolin :-**Side effects – a) Skin burning, stinging, redness, irritation.

b) Unusual changes in the skin (ex. Turning white etc.)

**2. Cetylalcohol :-**Side effects :- It can cause burning, stinging, redness or irritation may.

**3. Methyl Paraben :-**Side effects :- a) It can cause itching, swelling, redness.

b) Can cause dry and scaly skin.

**4. Clove oil :-**Side effects :- a) Can not be used at the time of pregnancy.

b) Can cause liver damage.

**Side Effects of Steroid based medications [4] :-**

a) Increased risk of infection

b) Dermatitis

c) Fat deposits in face, chest, upper back

d) Hypertension

e) Peptic ulcers

f) Osteoporosis

g) Impaired wound healing

h) Increased appetite

i) Weight gain

j) Hyperglycemia

k) Adrenal suppression and crisis

l) Cataracts

**Conclusion -** The purpose of this review was to develop a topical essential oil based formulations along with the most effective and natural anti-inflammatory agents such as ginger, garlic, peppermint, lavender etc. Herbal medicines are used as complementary medicines now a days. A lot of studies have been asselted. The role of several herbs in inflammation remissions. In this article we introduce some Indian herbs which shows good performance in clinical and experimental field as an anti-inflammatory agent.

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# Social Media Marketing- A Powerful Tool Of Marketing

Dr. Neha Chourasia \*

**Abstract** - Social media is a platform based on computer technology, that facilitates the sharing of ideas and information about business. It also builds virtual network and communities. Social media originated as a tool that people used to interact with friends and family but later it was adopted by business. Business wanted to take benefit of a new and popular communication method to reach out to customers.

Social media is a powerful tool to connect and share information with anyone on earth as long as they also use social media. The improved popularity of social networking sites such as WhatsApp, Facebook, Twitter etc. these have opened new opportunities for new business models for electronic commerce, often referred to as social commerce. Social media technology is not only provide a new platform for entrepreneurs to innovate but also raise a variety of new issues for E-commerce researchers that require the development of new theories.

Social media is a modern communication platform giving impact to business today. Customers are now become more particular about with whom and from where they are buying products or hiring services. Business must use social media because their competitors are using this platform daily as marketing strategy. Customers and future customers also using social media thousands of companies worldwide involve in offering social media services. These services offers a thousand of job opportunities to unemployed youth.

Social media network are fast becoming the infrastructure of the web as all of our personal data and connections are being aggregated into database. The rise of popularity of social networking websites and other social media outlets has grown fast during recent years. The form of marketing that provides a global-scale interaction between the business and its stakeholders and customers through the virtual networks and communities, is called social media marketing. Now a days with the help of social technologies, the information is spread without boundaries and the content constraints people can share and exchange their experience and knowledge online.

**Key Words** - Social media, Communication, Powerful tool, Business, Platform.

**Introduction** - Social media networks are fast becoming the infrastructure of the web as all of our personal data and connections are being aggregated into database. The rise in popularity of social networking websites and other social media outlets such as Facebook, Twitter and individual blogs has grown fast during recent years.

The form of marketing that provides a global-scale interaction between the business and its stakeholders and customers through the virtual networks and communities is called social media marketing. Now a days with the help of social technologies, the information is spread without boundaries and the content constraints people can share and exchange their experience and knowledge online, which marketers as an outstanding.

About 88 percent of marketers are using social media and that they are spending much money annually on social media advertising. In the recent years making contact successfully with consumers via social media is given a great return to marketers.

## Objective of the study :

- To examine the extent, social media that helps consumers in buying decision making.

- To study the gap between consumer expectations from social media and its performance.
- To suggest strategies to bridge the gap between expectation and performance to improve its effectiveness.

## Literature Review

**1. Kaplan and Haenlein, 2010**- Social media is defined as a group of internet based applications that build on the ideological and technical foundations of web 2.0 and that allow the creation and exchange of user generated content.

**2. Murugesan, 2007**- social media includes a multitude of sources of online information that are created, circulated and used by consumers to educate one another about products, services and brands available in the market place.

**3. Williams et al. 2012**- uses and gratifications theory is relevant to social media because of its origins in the communications literature. Social media is a communication mechanism that allows users to communicate with thousands and perhaps billions of individuals all over the world.

**4.1 Ariscy et al. 2011**- the basic premise of uses and gratifications theory is that individuals will seek out media among competitors that fulfills their needs and leads to ultimate

gratifications.

**5. kaye and Johnson, 2002-** palmgreen and rayburn 1979 says- studies have been shown that gratifications received are good predictors of media use and recurring media use.

**Research methodology** - Due to limited amount of literature on uses and gratifications theory and its relationship to social media .secondary data are used to explain social media marketing as a powerful tool. the study is based on descriptive research design. A survey was conducted online through social networking sites and responses of 50 social networks were collected.

**Meaning** - Social media marketing is the use of social media platforms and websites to promote a product or service. Although the terms e-marketing and digital marketing are still dominant in academia, social media marketing is becoming more popular for both practitioners and researchers. Most social media platforms have built-in data analytics tools, which enable companies to track the progress, success, and engagement of ad campaigns. Companies address a range of stakeholders through social media marketing, including current and potential customers, current and potential employees, and the general public. On a strategic level, social media marketing includes the management of a marketing campaign, governance, setting the scope (e.g. more active or passive use) and the establishment of a firm's desired social media "culture" and "tone."

When using social media marketing, firms can allow customers and Internet users to post user-generated content (e.g., online comments, product reviews, etc.), also known as "Earned Media" rather than use marketer-prepared advertising copy. Social networking websites.

**Tools of Social Media Marketing** - Social media websites allow individuals, businesses and other organizations to interact with one another and build relationships and communities online. When companies join these social channels, consumers can interact with them directly. That interaction can be more personal to users than traditional methods of outbound marketing and advertising. Social networking sites act as word of mouth or more precisely, e-word of mouth. The Internet's ability to reach billions across the globe has given online word of mouth a powerful voice and far reach. The ability to rapidly change buying patterns and product or service acquisition and activity to a growing number of consumers is defined as an influence network. Social networking sites and blogs allow followers to "retweet" or "repost" comments made by others about a product being promoted, which occurs quite frequently on some social media sites. By repeating the message, the user's connections are able to see the message, therefore reaching more people. Because the information about the product is being put out there and is getting repeated, more traffic is brought to the product/company. Social networking websites are based on building virtual communities that allow consumers to express their needs, wants and values, online. Social media marketing then connects these

consumers and audiences to businesses that share the same needs, wants, and values. Through social networking sites, companies can keep in touch with individual followers. This personal interaction can instill a feeling of loyalty into followers and potential customers. Also, by choosing whom to follow on these sites, products can reach a very narrow target audience. Social networking sites also include much information about what products and services prospective clients might be interested in. Through the use of new semantic analysis technologies, marketers can detect buying signals, such as content shared by people and questions posted online. An understanding of buying signals can help sales people target relevant prospects and marketers run micro-targeted campaigns.

In 2014, over 80% of business executives identified social media as an integral part of their business. Business retailers have seen 133% increases in their revenues from social media marketing.

**Marketing techniques** - Social media marketing involves the use of social networks, consumer's online brand-related activities (COBRA) and electronic word of mouth (eWOM) to successfully advertise online. Social networks such as Facebook and Twitter provide advertisers with information about the likes and dislikes of their consumers. This technique is crucial, as it provides the businesses with a "target audience".<sup>[67]</sup> With social networks, information relevant to the user's likes is available to businesses; who then advertise accordingly. Activities such as uploading a picture of your "new Converse sneakers to Facebook" is an example of a COBRA. Electronic recommendations and appraisals are a convenient manner to have a product promoted via "consumer-to-consumer interactions."<sup>[81][81]</sup> An example of eWOM would be an online hotel review the hotel company can have two possible outcomes based on their service. A good service would result in a positive review which gets the hotel free advertising via social media. However, a poor service will result in a negative consumer review which can potentially harm the company's reputation.

Social networking sites such as Facebook, Instagram, Twitter, MySpace etc. have all influenced the buzz of word of mouth marketing. In 1999, Misner said that word-of-mouth marketing is, "the world's most effective, yet least understood marketing strategy. Through the influence of opinion leaders, the increased online "buzz" of "word-of-mouth" marketing that a product, service or companies are experiencing is due to the rise in use of social media and smartphones. Businesses and marketers have noticed that, "a person's behaviour is influenced by many small groups. These small groups rotate around social networking accounts that are run by influential people leaders" who have followers of groups. The types of groups (followers) are called: reference groups (people who know each other either face-to-face or have an indirect influence on a person's attitude or behaviour); membership groups (a person has a direct influence on a person's attitude or behaviour); and aspirational groups.

## Advantages of Social Media Marketing -

**1. Increased Brand Awareness** - Social media is one of the most cost-efficient digital marketing methods used to syndicate content and increase your business' visibility. Implementing a social media strategy will greatly increase your brand recognition since you will be engaging with a broad audience of consumers. To get started, create social media profiles for your business and begin interacting with others. Get employees, business partners, and sponsors to "like" and "share" your page. Simply having people interact with your content will increase brand awareness and begin building your reputation as a business. Each post that is shared will be introduced to a new network of individuals, which can lead them to becoming potential customers, and the more people who know about your business, the better. By investing only a few hours per week, over 91% of marketers claimed that their social marketing efforts greatly increased their exposure. There is no doubt that by simply having a social media page your brand will benefit, and with regular use it can generate a wide audience for your business.

**2. More Inbound Traffic** - Without marketing your business on social media, your inbound traffic is limited to your usual customers. The people familiar with your brand are likely searching for the same keywords you already rank for. Without utilizing social media as part of your marketing strategy, you'll have much more difficulty reaching anyone outside of your loyal customer circle. Every social media profile you add to your marketing mix is a gateway to your website, and every piece of content you post is another opportunity to acquire a new customer. Social media is a melting pot of different types of people with varying backgrounds and behaviors. With different people come different needs and different ways of thinking. Syndicating your content on as many platforms as possible allows these individuals to organically reach your business. For instance, perhaps someone in an older demographic of consumers will search for your website using a particular keyword on Facebook, but a millennial could begin their search by using a different social media platform entirely, because they search for products totally differently. By marketing on social media you can effectively open your business to a wider variety of versatile consumers all over the world.

**3. Improved Search Engine Rankings** - Although posting on social media might get your business some site traffic, more effort than that is required to see significant success. Search engine optimization is very important for achieving higher page rankings and obtaining traffic to your business website. While social media doesn't directly increase search engine rankings, Social Media Examiner states that more than 58% of marketers who have been using social media for one year or longer still see improved search engine rankings. Being able to rank in the top positions for your keywords will revolutionize your traffic and continue to generate positive results for your business. Let's face it, everyone uses Google to find information, and

they likely won't navigate past page 1 because their answer normally is on the first page of results. If your business website isn't ranked towards the top of search engine results, you should probably adjust your search engine optimization strategy. To give yourself the best chance of ranking better through social media.

**4. Higher Conversion Rates** - With increased visibility, your business gains more opportunities for conversion. Every blog post, image, video, or comment may lead viewers to your company's website and increase traffic. Social media marketing allows your business to give a positive impression through a humanization factor. When brands are interactive by sharing content, commenting, and posting statuses on social media, it personifies a brand. People prefer to do business with other relationships with consumers showed positive results in sales. The better impression you make on a visitor, the more likely they are to think of your business when the need for your product or services arises. Studies have also shown that social media has a 100% higher lead-to-close rate than outbound marketing. When a brand is interactive online, consumers who follow your brand's accounts often begin to more completely trust the credibility of your business. People use social media platforms to stay connected to their friends, family, and communities. Since people are already talking, why not throw your brand into the mix? More likely than not, they'll mention your brand to a friend when your products or services are needed, overall providing your business with social proof of its quality. As reported by Social Media Examiner, about 66% of marketers saw lead generation benefits by using social media platforms at least 6 hours per week. Putting your brand in an atmosphere where people are sharing, liking, and talking, can only improve the conversion rates on your existing traffic.

**5. Better Customer Satisfaction** - Social media is a networking and communication platform. Creating a voice for your company through these platforms is important in humanizing your company. Customers appreciate knowing that when they post comments on your pages, they will receive a personalized response rather than an automated message. Being able to acknowledge each comment shows that you are attentive of your visitors' needs and aim to provide the best experience.

**Disadvantages of Social media marketing** - As with all the advantages that social media marketing can bring to and for your business you need to be aware of the disadvantages, as these are most likely the facts that will influence your decision the most when it comes to starting with social media marketing, increasing your social media campaign/s and efforts and or to stop with your existing social media efforts.

Here are some of the biggest disadvantages when it comes to social media marketing:

- Real-time customer complaints and feedback
- Customer complaints and feedback visible and open for scrutiny from the public



- Increased usage of business and personal resources to manage and control your social media campaign
- Training and expertise necessary to manage social media to the optimum
- Your digital footprint becomes too much to handle – Turn to negative online reputation
- Negative employee influence – internally and externally to your business
- Not enough ROI for the amount of risk and effort
- Not enough knowledge to take the right steps and follow an optimised process

### **Suggestions to Improve Social Media Marketing**

**1. Choose the Right Networks** - Social media has exploded since Facebook went public back in 2012, and there are thousands of networks out there dedicated to anything from connecting old classmates to social activism and everything else under the sun.

So with all these options out there, how does a business hone in on the right ones? The advice from most experts is to join four of the most popular, and choosing the right ones comes down to your audience (and where they are) and your goals. Here's some information to help guide you:

**2. Set a Goal** - Being active on social media has a number of benefits for business, and there are many things you can accomplish with your social presence, such as performing customer service, engaging customers, generating leads, expanding your audience, driving sales, increasing web traffic, gaining valuable insights and feedback, and much more.

But in order to achieve these with any measure of success, you must have a goal in mind that you can work toward because you'll need to create a strategy to get there. Your techniques for driving sales, for instance, will be different than your approach if you wanted to improve your customer service offering, so it's important to know what you want to accomplish.

**3. Come up with a Strategy** - Having a goal for improving your social media presence is great, but it's only the beginning. Once you know what you want to achieve, you have to come up with a plan to help you get there.

Start by designating the person or people who will be part of the social media team, and break up their roles and responsibilities clearly so everybody knows what's expected and when.

**4. Make a Content Creation or Curation Plan with Your Audience in Mind** - Knowing your audience is critical when it comes to finding success with social media engagement because the interests and needs of your audience will determine the type of content you should be sharing and the way you engage your followers.

For instance, if you were a coffee roastery, your target audience might be interested in recipes for fancy coffee drinks, brewing tips and techniques, and other Java-related articles. Some of the important things you should know about your audience include age, location, gender, goals, likes, needs, behaviors, challenges, and pain points.

**5. Actively Engage Your Audience in Relevant Ways** - Although content is supremely important on social media, it's not enough to just post your content and walk away. Social media is also about connection and engagement, and that's the only way you can foster the relationships you want to build and gain the trust of your audience.

**Conclusion** - In conclusion, business today is being transformed from a transactional relationship to a social relationship. It is now more grave than ever that successful businesses use Engagement Marketing principles to plan for successfully engaging their prospects and customers before, during and after their purchase cycle, and that the basis for this engagement is high-quality and relevant information. Information which is demanded by target market at a time and place of their choice (24/7 and 365 days/year). Marketer's job is to provide this information in such a manner that you are viewed in a positive light, create a positive brand and product reputation, and are selected as their brand of choice. With the present growth and scale of social networking, we would even be able to buy products and services through the social medium. The medium is growing very fast and holds huge potential but is still in its budding stage in India. time for the companies to make effective strategies and execute them to win larger share of business through this revolutionary medium and become the innovative firm of coming future.

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behaviour is influenced by many small groups" (Kotler, Burton, Deans, Brown, & Armstrong, 2013, p. 189). These small groups rotate around social networking accounts that are run by influential people opinion leaders or "thought leaders. who have followers of groups. The types of groups (followers) are called, reference groups (people who know each other either face-to-face or have an indirect influence on a persons attitude or behaviour); membership groups (a person has a direct influence on a person's attitude or behaviour), and aspirational groups.

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# Information Technology

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**Abstract** - In this paper we discuss about information technology, it's meaning, history, importance, uses, advantages and disadvantages.

**Introduction - Information technology** is defined as the study, design, development, implementation and the management of computer based information systems. This entails the study of computer software applications as well as computer hardware. With the advent of electronic computers, information technology is used covert, store, process, retrieve, protect, and transmit information to various sources.

From obscurity, information technology has become an everyday term that has encompassed computing and technology. Therefore IT is a wide term and it involves use in many areas. IT professionals perform a wide range of tasks like installation of computer applications, designing and maintaining complex networks and computer databases.

The term IT therefore include the activities that include data management, networking, engineering computer hardware, database design, software design and its management and administration. IT thus includes the use of computers as well its association with information:-

**History of IT** - Information technology has been around for some time now as it has been used in communication since time memorial. There are four main ages for IT but it is the latest, electronic age that has a big impact in us. IT has evolved over time to become a common term to most people as it affect like everybody in the world.

**Importance and Uses of IT** - The importance of IT in business can be said to be revolutionary. Many businesses need software packages to satisfying their operational and functional needs. IT is essential for ensuring that a smooth running of businesses and all its departments. The specific importance of IT in business includes:

- IT plays a major role in management and up-keep of vast amounts of information. This helps in creating and also aiding in information exchange. Due to this, business partners can work from any part of the world as if they were in the same room.
- In medicine, IT has played and continues to pay an important role in various diagnostic procedures of different disease. With increasing innovation,

- nowadays there are computer aided surgeries as well.
- IT has immensely contributed to various security systems for homes and companies. Complex security systems are also used in military bases and government agencies.
- In science and engineering, IT plays a vital role in collecting and exchange of demographic data, weather patterns, behavioral science.
- Through the World Wide Web (WWW) better known as the internet, is one of the most important means of connoting the world and thus has resulted to the "global village" making the world a much smaller place.
- In the entertainment industry, IT has been used in special effects, graphical additions and such innovative multi-media applications that are used in movie making.
- Through Global positioning System (GPS), IT is catching to more and more people nowadays. People are using the GPS technology to track out travel routes, recover stolen items like cars and mobile phones.
- With a help of IT, public databases and secret identification of people is now maintained. Through this, criminals can be easily tracked by electronic gadgets that they may have been using.
- In the educational sector, IT helps both the teachers and students to study course materials due to fast access. With the help of online libraries, has made knowledge grasping and learning easier. (Importance of information technology).

**Advantages of IT** - The world today has changed greatly with the advent of IT. Computerization has made manual work easy that by a single click, tasks get completed. The IT significance is seen from the fact that it has penetrated almost every aspect of our life; from business, leisure, work place and even society. IT helps us to streamline business processes and get constant real tie information that is up-to-date. Today personal computers, cell phones, fax machines, pagers, email and the internet have just but become an integral part of today's' lives as they play an important and essential role in our lives.

Some advantages of IT include in;

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**Globalization:** globalization has brought the world together and enabled the world's economy to become a single interdependent system. Therefore information is now easily and efficiently shared. Also, geographical and language barriers have been bridged. The world is now termed as a "global village" allowing countries that have both language and boundary barriers to share important ideas and information.

**Communication:** through IT, communication has become not only quicker and cheaper but also more efficient. It is now so easy and cheaper to communicate to anyone around the world by texting, emailing, talking over the internet and getting instant reply. Through the internet and such ideas as video conferencing, people are able to have face to face communication from different parts of the world.

**Cost effective:** IT has computerized business processes and thus streamlined businesses to make them cost effective money making machines. This in turn gives rise to profits through increased productivity translating to better salaries and less strenuous working conditions.

**Bridging the cultural gap:** IT has enabled people from different cultural to communicate with one another. This has resulted to exchange of ideas and overall awareness of cultural diversity implying reduced prejudice against other cultures.

**Creation of new jobs:** this is one of the best advantages of IT, creating new jobs. We have different categories of people who are directly employed as IT experts. They include; computer programmers, hardware and software programmers, hardware and software developers, web designers, system analyzers and many more who are involved in the IT business.

**Disadvantages of IT -** The advent of IT has also its own disadvantages. These include:

**Unemployment:** although IT has streamlined business processes, IT has resulted to downsizing and outsourcing meaning that a lot jobs have been cut and some have been done away with causing unemployment.

**Privacy:** although IT has made communication easier, privacy of information has been compromised. Cell phone signals can be tapped, emails can be hacked making people worry about their once private life becoming a public knowledge.

**Lack of job security:** experts in the IT field believe that job security in IT is a big issue as technology keeps on changing every now and then. Therefore people employed in the IT industry have to keep on constant learning mode if they want to have their jobs secured.

**Dominant culture:** yes, IT has made the world a global village but this has contributed to one culture dominating over the others especially the weaker ones. An example is

the argument on how the US influences teenagers around the world on how to dress and behave. Some languages also may be come overshadowed while making others superior. For example English has become like the mode of communication in the IT world at the expense of other well established languages which are rarely used.

**Future of IT -** There are strong signs that the IT industry will continue to grow across several industries as it is an essential component which ensures that that businesses run effectively. It is now hard to imagine a future without IT and the internet in general. Although not a reality now, but it seems that whatever humans think can be done. The future of IT seems that will be integrating human minds and technology. Technological advances will be made in computing with non-computer based populace in the world. Sidney Harris, a famous US journalist sees this in advance that he once said, "The real danger is not that computers will begin to think like men, but that men will begin to think like computers."

Coupled to the above, there are a number of emerging trends that have significantly combined the way society integrates. There is still unceasing demand for IT enabled innovations in the market and technology intensive products and services across all the sectors. Some of these future trends are in;

- Off shoring- off shoring is expected to increase and through IT, such low cost nations will gain a greater proportion of the IT market. Through IT, china has managed to become the biggest exporter of IT market
- IT is expected to shove up technology. This is expected to be done by digital natives. Creation of new technologies will most definitely shape the future of IT products and skills.

**Social factors:** there is a great desire for 'green IT' and this will major in debates about energy in the 21<sup>st</sup> century. Other social factors that will influence the future of IT will be the rise of social computing. The demand for employees to have higher IT skills will also be on the rise. Employers will want to remain competitive and seek an advantage through IT. Demands for IT professionals will remain competitive as a result, in the global environment. (Information technology: future trends).

**Conclusion -** The article has dealt with IT in general. From its definition, its importance, advantages, disadvantages and the future trends of IT. Although such an important aspect of our lives, people should tread carefully as IT can also lead to professionals losing their jobs. The future of IT though looks bright for as it has formed an integral part of lives.

**Reference :-**

1. Personal Research.



# Role of Internet Search in Research and Innovation: A Panoramic Analysis

Dr. Rekha Dhoot \*

**Abstract** - 'Internet' and 'Information' these are the two close terminologies playing a vital role in present era of globalization. The creation & emergence of internet is now a source of information which is growing day by day, covering all the fields related to knowledge, obtaining the latest information. Internet has set the foundation for global communication by providing open access to millions of everyday users. It can bring revolutionary changes in the existing world by changing the mind set of people. Thus internet is trying to open a new era of globalization of information with more wide cooperation for resource sharing. This versatility gives the internet its power. 'Research' and 'Innovation' likewise 'internet' and 'information' also play an important role for the growth of nation and world and internet is contributing a lot for the same. In connection with the internet for research one will discover that it has done more than enough for mankind and has made life easier. We all are aware of the fact that nothing is permanent in this world, neither products nor technology. As day by day, improvements and updation are made in technology, leading to new inventions and innovations in every sphere of life, internet is a treasure on its own in this regard. It generates current information, facts-finding, and is the most outstanding invention in the area of communication in the history of human race. The Internet has been very useful to mankind in the aspect of learning and research development. Furthermore, the Internet is a wealth of information and very advantageous in various reasons. The information contained on the Internet can be useful for academic research. It is a potential research tool and opens up a new and comprehensive source of information.

**Keywords** - Internet, Research, Innovation, Invention, New Reformation.

**Introduction** - The everyday emergence of new technology is a symbol of widespread use of internet. "In this era, the National Science Foundation (NSF) was the major supporter of networking, primarily through the NSFNET, which evolved into the Internet." (1) Most recently, in the early 1990s, the invention of the Web made it much easier for users to publish and access information. Today the internet connects millions of people around the world. It is not merely a technological development but it has quickly diffused into the world of commerce, research, invention, innovation economic and social order etc. and took almost 30 years to emerge as a major technological force with the contribution of internet users to find the information they need as per their utility and work. When the first computer became operational J.C.R. Licklider (1960), argued that "within a few years, computers would become sufficiently powerful to cooperate with humans in solving scientific and technical problems. (2)"

The Internet also eases of communication to the researchers and helps in innovation. It serves as a guidance and original source of information. It is very easy to access and at the same time saves time thereby allowing an individual to manage his/her resources better and effectively. Additionally, the Internet is very convenient because an individual can easily carry out a research work

at home with much comfort and convenience. The internet is a valuable search tool and has been informative for academic research, as it helps significantly to improve research skills, and makes learning visual and easy to follow.

Innovation is an act of making changes to the existing product or the process by introducing new ways or ideas. Internet helps in generating new ideas and ways to make the product, idea more efficiently implement with low investment. Both are keys to ensure sustained success in the digital age. One can't imagine one without the other. In an increasingly competitive and complex business environment, it's a matter of innovate and thrive – or struggle to survive. And this relies on information technology.

**Research & Internet a Life Blood Co-relation:** This is true to say that the internet has made life easier than the past. Even some time one has very casual approach towards his research work as well due to the easy accessibility of internet search. It saves time by providing the required number of text books, journals, magazines, periodicals & reports etc. within a short span of time. One can even easily access the libraries of the foreign country. In comparison to other resources internet is quite inexpensive. Therefore, several organizations even individuals can now upload and share their information to

millions of users and researchers can make use of this circulated information for their work and can do add-ons accordingly.

**Invention a Building Block for Innovation:** There is a thin borderline difference between the words “invention” and “innovation”. Invention is about creating something new, while innovation introduces the concept of use of an idea or method. Invention refers to the occurrence of an idea for a product or process that has never been made before. Innovation implies the implementation of idea for product or process for the very first time. A need is felt for a product or improvement in existing product and in this process of ideology internet helps like a right hand support when something new is introduced to fulfill the needs of the customers by delivering better products and services. Before making any changes in the existing product line, a company has to analyze its profitability, by making it economically feasible. Inventions are a proof of the authority of scientific knowledge to deal with practical problems and needs through innovations. By accessing the current technologies one will always be able to have the first mover advantage and hence deliver value to the customers. Hamid Tohidi wrote in his article, “ Innovation is one of the most important concerns of each organization and its role in the development and coordination of the market is inalienable. Innovation in all human areas is applicable from product development, methods of management, ways of doing works and etc. In all of definition used for innovation, changing or improvement of the process or product are common. Innovation is a process that begins with introduction to plan of an idea and will become a new function and so it different from creation.”(3)

**Internet a Well Spring of Information:** Information is probably the biggest advantage internet is offering to the users. Sending E-mail messages and receiving feedbacks the internet could be regarded as a powerful content publishing tool due to some application software like HTML. Consequently, these applications will allow and assist the researcher to develop content for the World Wide Web and spread the information. Man asserts that, “the Internet is considered not simply as a technological tool, but as a wholly new constructed environment with its own codes of practice.”(4)

**Cons of Internet Search:** Numerous advantages of internet search drag the attention to be sticky with it for a

longer time. But keeping in view the disadvantages of internet search one should be too perceptive in case of re-planning about any product or services or doing research on any aspect or genre. Because of the huge availability of material, sources of information, the freedom to write as long as it makes sense to them, references written without review process, theft of personal information and misuse etc. Therefore to be away from all frustrations, problems and confusions one should go through the things in depth before being reliable. If one talk about the new reformation one can say firmly that it keeps the mindset of a researcher or innovator very limited. As sometimes we see that people are not putting efforts, even they stop to think or they think around certain aspects due to the availability of the ideas and sources easily available on internet. The result we can see in the form of the degraded research quality.

**Conclusion -** Irrespective of the fact that the Internet has some numerous disadvantages, it can be understood that “It is still very useful to mankind as in helps in medical research works and subsequent inventions, as well as produce some good interactive entertainment and multimedia.”(5) Hence, man needs the Internet to keep life going. Additionally the dispersion of information to various users of internet on web site gives a paradigm shift to researchers. Therefore, getting information from book or from various other printed sources in the library can guarantee that it is of high standard and peer reviewed.

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# A Research On Securing Data From Intruder Using Honey Pot

Anand Kumar Gupta \*

**Abstract** - A modern technology in the area of Intruder detection is Honey Pot technology that unlike common IDSs tends to provide the attacker with all the necessary resources needed for a successful attack. Honey Pots provide a platform for studying the methods and tools used by the intruders (black hat community), thus deriving their value from the unauthorized use of their resources. This paper discusses the design of a dynamic honey pot, which is an autonomous Honey Pot capable of adapting in a dynamic and constantly changing network environment. The dynamic Honey Pot approach integrates passive or active probing and virtual Honey Pot. This approach addresses the challenge of deploying and configuring virtual Honey Pots. Security in the enterprise has lately become the primary concern of both IT managers and other executives. The challenges of securing enterprise networks in the face of intruders armed with the tools of compromise have become overwhelming and are still growing. To improve their network security, organizations have sought solutions such as firewalls, Virtual Private Networks (VPNs), and intruder detection variants. All of these solutions, however, continue to leave proprietary data accessible to determined intruders. The Computer Security Institute/FBI 2003 Computer Crime and Security Survey indicate that the total annual losses reported in the 2003 were \$201,797,340 [1].

**Introduction** - As Small Data Sets: Honey pots only collect data when someone or something is interacting with them. Organizations that may log thousands of alerts a day with traditional technologies will only log a hundred alerts with honey pots. This makes the data honey pots collect much higher value, easier to manage and simpler to analyze. As Reduced False Positives: One of the greatest challenges with most detection technologies is the generation of false positives or false alerts. The larger the probability that a security technology produces a false positive the less likely the technology will be deployed. Honey pots dramatically reduce false positives. Any activity with honey pots is by definition unauthorized, making it extremely efficient at detecting attacks. As Catching False Negatives: Another challenge of traditional technologies is failing to detect unknown attacks. This is a critical difference between honey pots and traditional computer security technologies which rely upon known signatures or upon statistical detection. Signature-based security technologies by definition imply that "someone is going to get hurt" before the new attack is discovered and a signature is distributed. Statistical detection also suffers from probabilistic failures - there is some non-zero probability that a new kind of attack is going to go undetected. Honey pots on the other hand can easily identify and capture new attacks against them. Any activity with the Honey Pot is an anomaly, making new or unseen attacks easily stand out.

**OBJECTIVES** - The goal of the project is to implement a

## Intrusion Detection Systems.

- **Short Term Goal** - A short term goal is something to be accomplished in a short period of time. There is no specific length of time related to the definition of a short term goal. It is concerned with intermediate task.

Short term goal of our project can be considered as the successful implementation of various phases and sub-phases concerning with project and the milestones predefined.

- **Long Term Goal** - A long term goal is an achievement set to be reached over a long period of time. It would be appropriate to define a long term goal for this week, month, year, lifetime, etc. They are used in a variety of areas:

1. Financial
2. Educational

**Purpose** - Intrusion detection is the process of monitoring computers or networks for unauthorized entrance or activity. IDS can also be used to monitor network traffic, thereby detecting if a system is being targeted by a network attack. There are two basic types of intrusion detection: host-based (HIDS) and network based (NIDS). Each has a distinct approach to monitoring and securing data, and each has distinct advantages and disadvantages.

**Scope** - Security in the enterprise has lately become the primary concern of both IT managers and other executives. The challenges of securing enterprise networks in the face of intruders armed with the tools of compromise have become overwhelming and are still growing. To improve

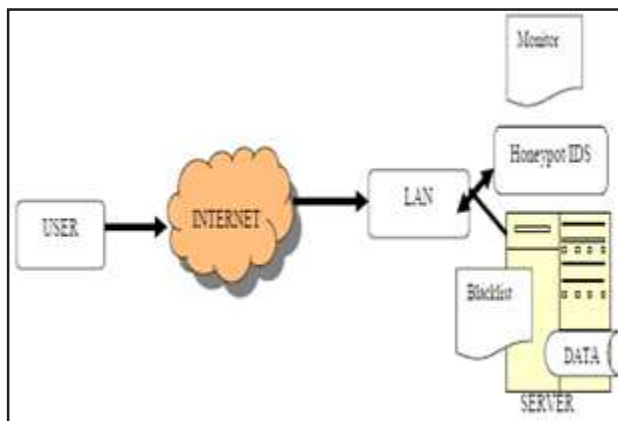
their network security, organizations have sought solutions such as firewalls, Virtual Private Networks (VPNs), and intruder detection variants.

**PROBLEM STATEMENT** - The most of the attacks by a hacker would like to attack on the database concerning the username, the password and their respective account numbers. After acquisition of the same the hackers would very conveniently trespass the security walls of authentication and authorization and thereby making the transaction official.

As it is necessary to maintain the security of a system or network where confidential data is processing, the data which should be remain confidential, there was a need for an intrusion detection system which not only protects the network from intruders but also gathers information about the attacker like the place from where he is trying to intrude the network, type of activities in which the intruder is interested, a system which provides the information of methods and tools used by the intruders (black hat community), thus deriving their value from the unauthorized use of their resources.

**PROPOSED SOLUTION** - To divert the attention of the attacker from the real network in a way that the actual information resources are not compromised. To build attackers profiles in order to identify their preferred attack methods. Criminal profiles, therefore, can be used by law enforcement, in order to be punished or to sue.

#### ARCHITECTURE USED



The proposed system architecture using Honey Pot as IDS to protect a network. The users or attacker will access the network either Internet or direct. Within a LAN, IDS with Honey Pot and a centralized server with database layers as described above are being connected. Once the user will access the network, all its interactions low or high will be monitored by the IDS and make a log file for that user. IDS will decide to make a user as blacklisted or not, also server's data will be checked for integrity and identify the source of the user. Database layers also are checked for integrity by the system. Our proposed system for banking system, which will divide internal database into three layers,

first, the public database, which will have all the information for the public to view like new policies or schemes by the bank or some new promotion stunt for e.g. some added bonuses or credits for making a current or saving account with them in some specific time. The point being the data which helps bring business more than nuisance will be placed in the public database. Second layer will be the main database, which will be real data of various users for the system, like the database for the list of account holders or for that sake the policies that are on their way to the market but still not disclosed due to assent of some senior authorities or due to some current market conditions. The third layer is the dummy database, which holds the information having no relevance to the real life world. This data will be automatically generated by the system by shuffling of the existing system. This is the data that the system will offer to the attacker and it is to this that we propose to set our eyes on to monitor the attack. With respect to above three layers of database, we have four modules in our system are described below.

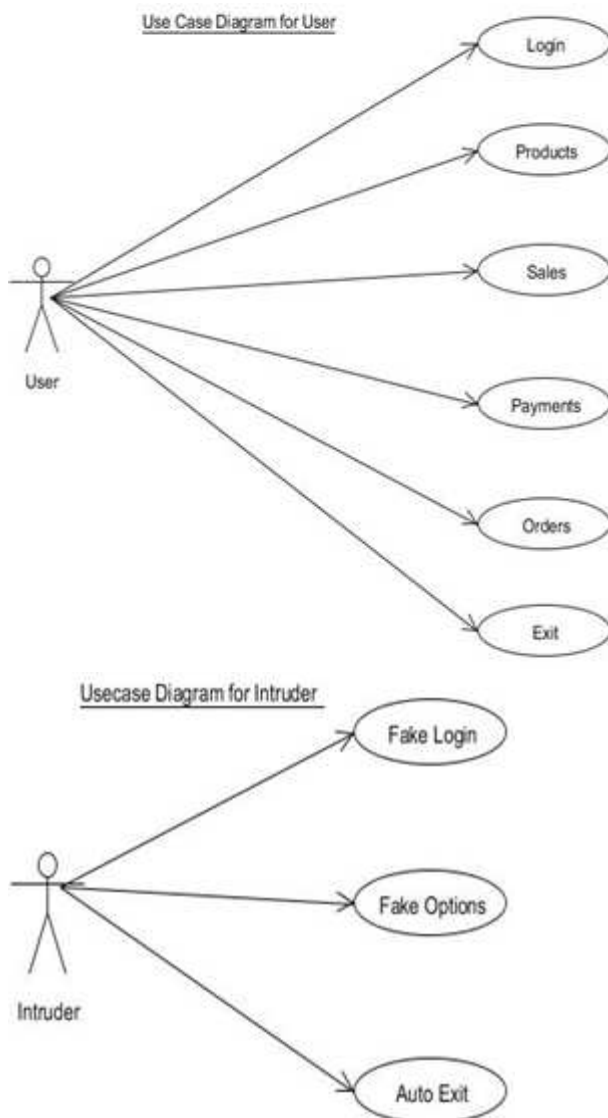
**EXISTING SYSTEM** - There are no such existing systems and the work on Honey Pots may take a little bit longer to surface but there have been some serious attempts to deploy the most from the concept and the finest example to it may be the new honey monkeys that Microsoft are coming up with the most of the attacks by a hacker would like to attack on the database concerning the username, the password and their respective account numbers. After acquisition of the same the hackers would very conveniently trespass the security walls of authentication and authorization and thereby making the transaction official. 2.1 pitfalls in the current architecture

2.1.1 There is the risk of detection: once the true identity of a honey pot has been identified, its value is dramatically reduced. Attackers can ignore or bypass the honey pot, eliminating its capability for capturing information. Perhaps even more dangerous is the threat that once identified, an attacker can introduce false or bogus information into a honey pot, misleading the data analysis.

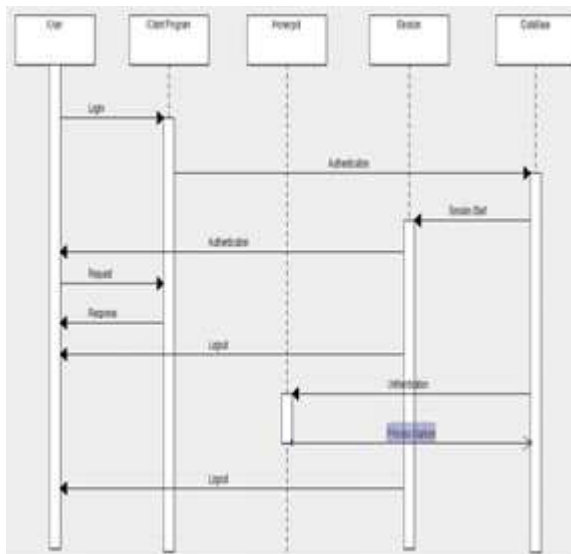
2.1.2 There is the risk of disabling honey pot functionality: this could be an attack against either data control or data capture routines. Attackers may want to not only detect a honey pot's identity, but disable its data control or data capture capabilities, potentially without the honey pot administrator knowing that functionality has been disabled. For example, an attacker may gain access to a honey pot within the honey net, and then disable data capture functionality on the honey pot. The attacker could then feed the honey pot with bogus activity, making administrators think data capture is still functioning and recording activity, when it's not. Having multiple layers of data control and data capture helps mitigate this risk, as there is no single point of failure.



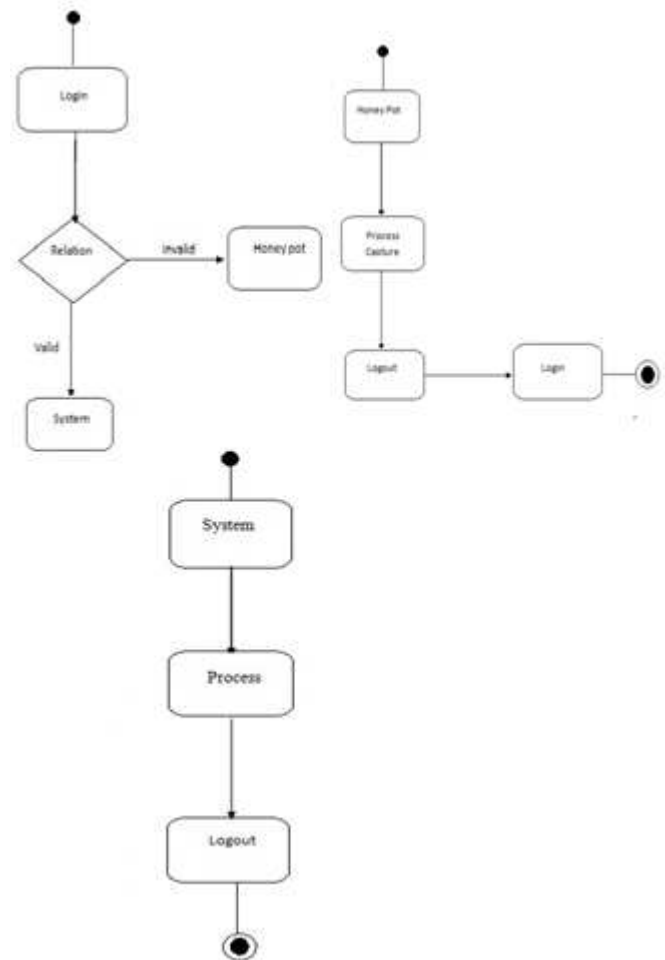
## Use Case diagram



## Sequence diagram



## 3.2.5 Activity Diagram



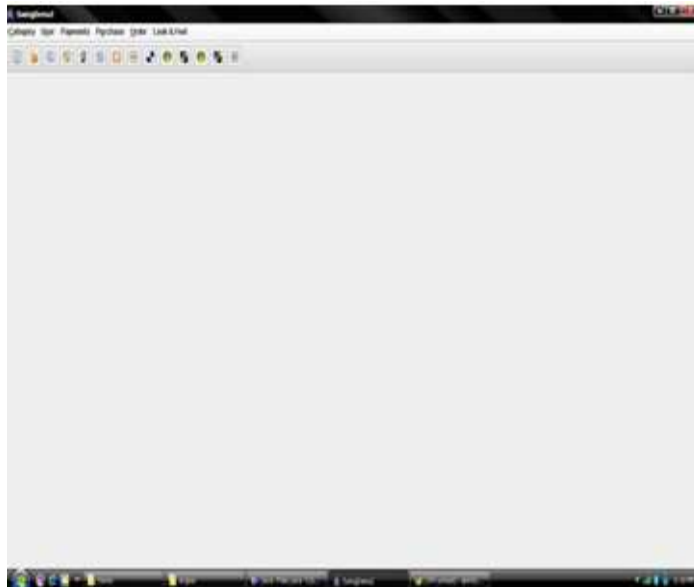
**RESULT** - This paper has given an in depth knowledge about Honey Pots and their contributions to the security community. A Honey Pot is just a tool. How one uses this tool is upto them.

Honey Pots are in their infancy and new ideas and technologies will surface in the next time. At the same time as Honey Pots are getting more advanced, hackers will also develop methods to detect such systems. A regular arms race could start between the good guys and the blackhat community.

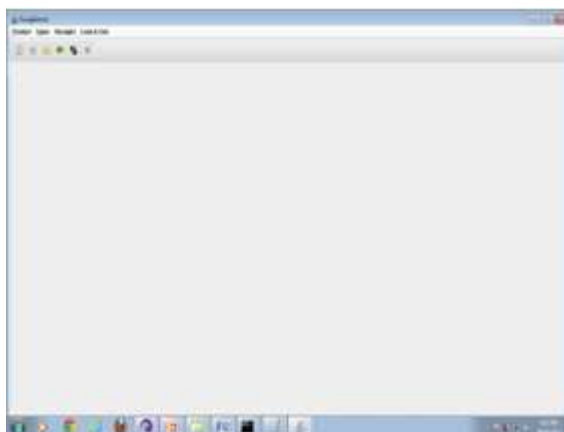
Honey Pots are an emerging technology, with extensive potential. They have tremendous advantages that can be applied to a variety of different environments. They dramatically reduce false positives, while providing an extremely flexible tool that is easy to customize for different. Traditionally, Honey Pots have been applied against external threats or common internal threats. By combining the capabilities of honey tokens and Honey nets, Honey Pots contribute to the early indication and confirmation of advanced insider threats. The research in this area is still in the early stages, with the intent of greater testing and development in the future.



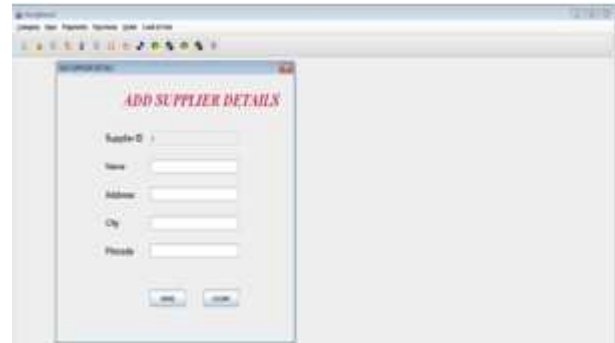
LOGIN SCREEN



ADMIN SCREEN



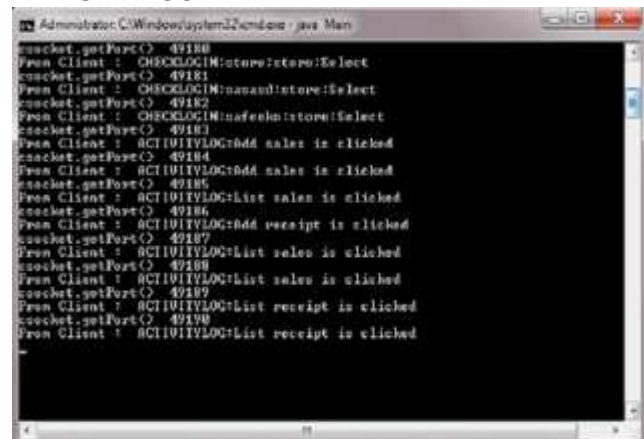
USER SCREEN



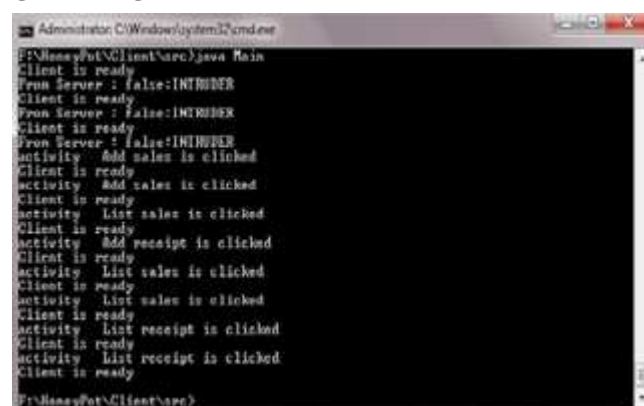
ADMINSCREEN

LOGIN SCREEN OF INTRUDER

INTRUDER SCREEN



SERVER SITE



CLIENT SITE



# **CAPTURED FILE**

**CONCLUSION** - The purpose of this topic was to define what Honey Pots are and their value to the security community.

## **Limitations of the Research:**

Like any technology, Honey Pots also have their weaknesses. It is because of this they do not replace any current technology, but work with existing technologies.

- Limited View: Honey Pots can only track and capture activity that directly interacts with them. Honey Pots will not capture attacks against other systems, unless the attacker or threat interacts with the Honey Pots also.
- Honey Pots are no different, they have risk also. Specifically, Honey Pots have the risk of being taken over by the bad guy and being used to harm other systems. Depending on the type of Honey Pot, it can have no more risk than an IDS sensor, while some Honey Pots have a great deal of risk.

**Future Enhancements** - Honey Pots can be used for production purposes by preventing, detecting, or responding to attacks. Honey Pots can also be used for research, gathering information on threats so we can better understand and defend against them.

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With the help of this web site we got the information of networking and how to use this project for IP tracing and working of Ip. what is IP?
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In this web reference we got the detail of Tools for tracing a IP. and how to trace IP using tools
5. <http://www.keyfocus.net/kfsensor/overview.php>  
Using this url we got a information of attacks. How to attack on websites and how to busy any server at hacking time and how to trace a hacked account. How to store the information of intruder. Using this web reference we knew about hacking system. How to hack account and its techniques.

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# Environment, Social Teaching-Learning process

Pooja Gupta\*

**Abstract** - The aim of this article is to study how environmental education is integrated into vocational education and training (VET) in Indore. The article covers analysis of the relevant documents, study of VET, teachers attitude towards integrating environment education into VET and their teaching practices and method of teaching. The study is conducted using the qualitative and quantitative methods in 2019 in the city of Indore. Overall teachers have positive attitude towards this aim. Although teachers' attitude are related to their willingness towards implementing environmental topics in their classes to some extent, there is a lack of correspondence between teachers attitude and their assessment practices.

The study identified barriers that teachers face in the teaching of environmental issues. Based on the findings the research provide recommendations at policy and delivery levels. Also research also aims at the students behaviors in the teaching learning processes used by the teachers and the social relationships that the students have to manage with in their life or the role of society in teaching learning process.

**Key Words** - Learning environment, social relationships, vocational education, environmental education, delivery levels.

**Introduction** - In the modern educational system, one of the most important tasks before a teacher is to design the educational systems and the learning environments. In completion of this task, he plays a role of manager. He has a plan, organize and implement a number of immediate and long term decisions. The teachers until recent past was regarded as all knowing and all giving. Students activities were limited to their presence in class and hearing lectures of teachers.

Today, the position is entirely different. The teachers has to recognize that they are also learners with students. Teachers have to create the necessary conditions that will make learning meaningful and pleasurable. He also provides available information to the learner. He also develops an enquiring mind in his students and approaches to problems of life. So, we can say that learning environment provided by the teachers has a direct and Major impact on process of learning and acquiring education by the students and also the social relationships made by students.

**Vygotsky Theory** - Lev Vygotsky, a Russian psychologist developed a theory of cognitive development in the early twentieth century called as Sociocultural theory. The main assertion of the theory is that the cognitive development of the children is advanced through social interaction with other people, particularly those who are more skilled. In other words, Vygotsky believed that social learning comes before cognitive development and that children construct knowledge activity.

**Zone of proximal development** - Vygotsky is the most recognized for his concept of zone of proximal development (ZDP) pertaining to the learning process of

children. According to Vygotsky theory children who are in ZDP for a particular task can almost perform the task independently, but not quite there yet. They need some help in order to perform the task successfully.

For example, a 5 year old child know how to ride a tricycle. However she can't ride a bicycle without his grandfather holding onto back of his bike with his grandfathers help the little boy learns to balance his bike. With some more practice he can ride the bike on his own. In this scenario, we can say that the child is in the Zone of proximal development for riding a bike.

As children are given instructions or shown how to perform certain tasks, they organize the new information received in their existing mental schemas. The use this information as a guide on how to perform these tasks and eventually learn to perform them independently.

More knowledgeable Other: According to Vygotsky theory, children learn through social interaction that includes collaborative and cooperative dialogue with someone who is more skilled in the tasks they are trying to learn. Vygotsky called these people with higher skill level More Knowledgeable Other (MKO). They could be teachers, parents, tutors and even peers.

**Scaffolding**: Vygotsky concept of scaffolding closely related to the concept of the ZDP. Scaffolding refers to the temporary support given to child by a MKO that enables the child to perform a task until such time that the child can perform this task independently.

**Conclusion**: In the concluding paragraph we can say that Environment, Students' behaviors and social relationships all these terms are interrelated to each other. Environment



itself provides the chances for the vocational education and also an important factor in the recording of Student's behaviors and this ultimately builds the social relationships of a student or we can say that of a person .

Also the education gives an idea of the working in any type of environment.Both environment and the society have there final impact on the teaching and learning.Teaching and learning environment is the basic need of a good curriculum and it's development and implementation in the school and society.We can get a basic knowledge and ideas for conducting better teaching and learning process.So environmental education should be given an important and compulsory place in the curriculum in schools and colleges to enhance the social teaching and learning process and to guide children for the vocational education and training so efforts should be made by teachers, scholars, society as well as the students in the given direction.

**Research Methodology** - I used the following research methodology for the findings in field of environment, social teaching and learning and Student's behaviors:

1. In this three different methods of teachings are applied on three different group of students and the basic environment is also provided to them in whole experiment.Only the change done is the changes in methods of teaching in different groups choosen.
2. The environment provided also examined as the environment has the major and direct impact on the students and teachers and the teaching learning process.
3. The methods of teaching I used and applied are naturalistic observation method, interview methods and case study methods.All these three methods of teaching and observation have different effect and impacts on the research findings.
4. We can also use group discussion method or individual teaching as our basis for the observation but the above methods of gathering data about the children from different contexts is the best way of observation of students and the impact of different environment and social variations on teaching learning process and the students.

For convenience we first of all take a look at all these three methods one by one.

**A. Naturalistic observation method:** It is a research method commonly used by psychologist and other social scientists.This technique involves observing subjects in their natural environment.It involves looking at a behavior as it occurs in its natural setting with no attempt at intervention on the part of a researcher.

For example, researchs interested in looking at certain aspects of classroom behavior,such as interaction between Students or even dynamic between teachers and students, might opt to use naturalistic observation method as part of their research.

**B. Interview Method:** Interview Method has become very popular.In this method,there is face to face interaction

between the investigator and the subject.The interviewer ask questions to the subject and records the answer.The main objectiveof the interview method is to collect information about unknown fact of the subject and his inner feelings.

**C. Case study Method:** Case study Method deals with the emotional and mental state of an individual.Specially trained teachers,psychologists and psychiatrics apply this method to study special behavioral problem of an individual.Through this method all the information relating to family background, schooling and social conditions of the individual is obtained.Hence it can be called a cumulative record.This is of great help in understanding the source of an individual's behavior,fear,anxiety,worry or some other kind of maladjustment.The main objective of this method is to help individual adjust better with the environment and gain self confidence and higher levels of achievement.

**Research Findings:** The section briefly summarizes the main findings of the research.The research shows that some regulatory initiatives are in place to support of integration of environmental education to the vocational education and the social aspects but they are often fragmented and need further development in add there are more challenges remaining in relation to the implementation status of these initiatives.

The major finding shows a greater impact of the changing environment and method of teachings on the students behavior and the results or output of the teaching learning process.

The case study Method found to be the bestest method for determination of impact of environment and society on the students behavior. The second most convenient method found to be the interview method determine the personality of individual students in simply face to face conversation.

#### Results:

Factors of observation	Naturalistic observation method	Interview method	Case study method
Environm-ental factors	33 percent impact on students.	40 percent impact on students.	49 percent impact on students.
Social factors	67 percent impact on students.	60 percent impact on students.	51 percent impact on students.

As shown in the table the findings says that environment and social factors both have the more or less equal impact on the students behavior. These results came after the survey in various school and using 3 major types of methods of gathering data about the students by the teacher.

**Recommendations** - Based on the findings of the research the following recommendations have been formulated

A new partnership should be formed between government,employers and vocational education institution to support integration of environmental education and social educational factors or societies into VET.All stakeholders

need to recognize that investment in promoting environmental education can have significant results such as the health of environment or meeting global standard and student personality or behavior.

Environmental and social studies should be integrated with all levels of education, including vocational education. It is recommended to encourage communication among VET institutions and NGOs employee not in the pr of implementation of part but also in the process of planning and implementing various non formal and extra curricular activities.

Development of human and materials resources should be supported. Teachers pointed out that it is important for them to upgrade the environmental knowledge and teaching skills. This can be achieved through preserving and in service trainings. Networking and sharing best practices among the VET institutions is also very important. In addition, VET institutions need to be equipped with relevant facilities, teaching and learning material according to the modern standard. It is important to support development of the healthy social and ecological environment in the educational institutions. This will support not only

achievement of the learning outcomes but also to the development of awareness of culture.

It is important to implement various awareness raising activities with the relevant stakeholders about the importance of environmental education. The research is limited in Indore, however findings can be used for teaching and learning of environmental education in VET in Whole State. In addition the research findings can be used as the basis for more comprehensive research in this field. Systematic research is important for providing targeted educational interventions and an evidence based educational policy.

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# A Study Of Impact Of Spiritual And Yoga Meditation On Promoting Mental Health

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**Abstract** - Yoga Science is a way of life. It is predominantly concerned with maintaining a state of equanimity at all costs. All yoga schools of thought emphasize the importance of mind remaining calm. As the saying goes, only when the water is still, can you see through it. Yoga Darshan or Yoga Philosophy also happens to be a valid discipline of Indian metaphysics (Brahma Vidya). It is the result of human wisdom and insight on philosophy, psychology, ethics and spirituality collected together and practiced over thousands of years for the well being of humanity. The basic idea of yoga is to unite the atma or individual soul with the paramatma or the Universal.

**Introduction** - Meditation refers to the of positive factors in one's life, through a practice session and/or throughout one's daily life. Meditation may be compared to a sport, where with practice one develops greater skill in what is being practiced. There has been an increase in scientific research, experiments, studies, and the like, on how meditation changes the body, especially the brain. New results show that indeed meditation does change the body in significant ways which are being scientifically demonstrated using state-of-the-art measuring techniques, such as MRI.

## OBJECTIVES :

1. The research seeks to determine:
2. The nature, extent and effect of Meditation on choices, including a desire to achieve personal goals or meet individual needs.

## HYPOTHESIS

1. Certain regular exercises of yoga increases the Logical-Mental Health of students.

**RESEARCH METHODOLOGY** - There is a great difference in faith or belief and scientific methods. The basic difference between faith or belief and scientific method is that while the faith or belief depends upon authority and traditions, the scientific method is objective because it depends upon evidence.

## Inductive And Deductive Method:

1. Through questionnaires, the development in the Logical-Mental Health of the controlled group of secondary students will be checked every month.
2. The questionnaires will be given to both girls and boys group without considering cast and creed.
3. Same questionnaires will be applied on the uncontrolled group. Monthly tests will be taken for both the groups regularly for a time period of through out the year.

**VARIABLES** - Any concept can be expressed in quantitative value or qualitative value is called variable.

In my research work the concept of mathematical-logical intelligence can be expressed from low to high. Thus Mathematical-logical intelligence can be considered here one variable.

Another variable is that different method of teaching as independent variable and academic achievement will be dependent variables. Through the linear diagramme it can be considered as below :

Different method of teaching (independent variable)	Academic Achievement (Dependent Variable)
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**TIME FRAME** - The time duration was kept under observation for the whole year. And the reports has been collected bi month wise . The result of Study has been calculated on the basis of 6 month progress reports of the students by conductive periodic test.

## OBSERVATION AND DATA INTERPRETATION INTRODUCTION

Groups of 150 students divided into 5 groups. 15 students enrolled in each group of age group 12-16 years from class VI-X are kept under observation.

75 -75 students are divided in two groups controlled group and uncontrolled group.

One group is given predetermined meditation and mental exercises, while the other group is left as it is. Bi Monthly tests of both the controlled and uncontrolled groups were taken to check the development in **Logical-Mental Health** through questionnaires. The process repeated over a period of 6 months. A comparison of the development of logical Mental Health between these two groups is done.

## ANALYSIS AND DATA INTERPRETATION

### OBSERVATION TABLE – 1

### STUDY OF IMPACT OF SPIRITUAL AND YOGYA

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## MEDITATION ON PROMOTING MENTAL HEALTH

CONTROLLED GROUP-1				UNCONTROLLED GROUP-1			
SN	MARKS OBTAINED			SN	MARKS OBTAINED		
	AUG	OCT	DEC		AUG	OCT	DEC
C1	27	28	30	UC1	22	23	23
C2	30	32	36	UC2	36	36	38
C3	6	6	12	UC3	32	30	36
C4	12	16	18	UC4	25	27	29
C5	33	36	37	UC5	31	28	29
C6	25	30	33	UC6	28	26	29
C7	31	35	37	UC7	23	24	27
C8	20	24	25	UC8	30	31	34
C9	6	12	16	UC9	26	27	29
C10	15	18	22	UC10	29	33	31
C11	18	22	26	UC11	34	32	37
C12	11	15	18	UC12	30	27	28
C13	26	28	29	UC13	26	24	26
C14	36	37	38	UC14	26	27	29
C15	24	29	33	UC15	34	30	29
MEAN	21.3	24.5	27.3	MEAN	28.8	28.3	30.3
MIN	6.0	6.0	12.0	MIN	22.0	23.0	23.0
MAX	36.0	37.0	38.0	MAX	36.0	36.0	38.0
MODE	6	28	18	MODE	26	27	29
MEDI AN	24.0	28.0	29.0	MEDI AN	29.0	27.0	29.0
STDV	9.678	9.410	8.550	STDV	4.161	3.638	4.217
<b>T Test value</b>		<b>0.183</b>	<b>0.200</b>	<b>T Test value</b>		<b>0.173</b>	<b>0.173</b>
<b>Cont. group 1</b>				<b>for UnCon. group N-1</b>			

**T TEST VALUE :** Here for calculation , We have Considered Two Tables Arrays. Marks obtained by students in the month of August is considered as FIRST TABLE of controlled group and the marks obtained by controlled group of students in

the month of Oct us considered as II array group. Tails of these group is 1 while group option is considered 3. And so on.....

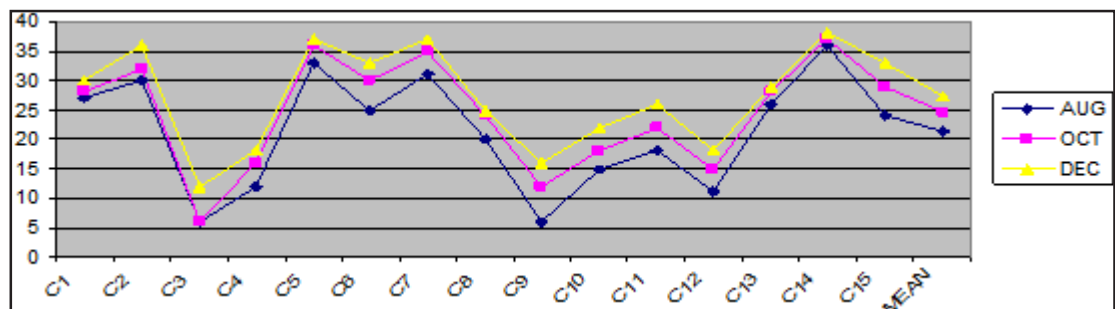
**Conclusion -** With the above 5 set of two groups controlled and uncontrolled group graphs It has been observed that the Logical-Mental Health of the students practicing the predetermined mental exercises increases while the group which was not being trained through the same exercises remained unchanged.

This proves that our hypothesis that logical Mental Health increases by practicing meditation. Meditation helps to increase the mental power. With t-test the positive value returns the probability associated with student's t- test .

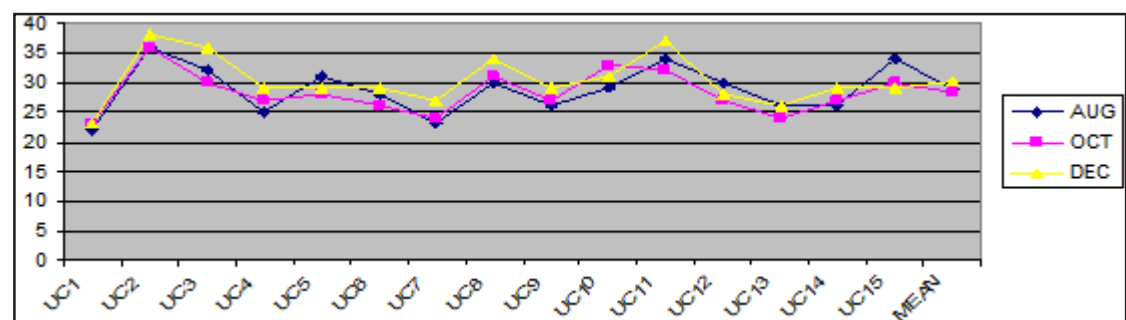
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### A1) Graphical Representation Of Controlled Group Of Students Who Were Under Yoga Practice : Controlled group graph for CN-1



### B1) Graphical Representation Of Uncontrolled Group Of Students Who Were not In Yoga Practices: Uncontrolled group graph for UCN-1





# Commitment Competence and Performance of Teachers: A Quality Perspective

Prof. Jeetu Dabur\*

**Abstract** - The progress of country depends upon the quality of its teachers and for this reason, teaching is the noblest among all professions and the teachers are called the nation builders. But, a teacher can not perform his or her multifarious tasks and responsibilities until he or she is not updated professionally and personally. The Secondary Education Commission (1953) rightly observed. 'No amount of spacious buildings, costly equipments and sound syllabus will serve any useful purpose unless there are teachers who are fully alive to the nobility of the profession and its accompanying responsibilities'.

**Introduction** - Teachers can act as trailblazers in the lives of learners in the process of education for development. If teachers acquire professional competencies and commitment, and if they are enabled and empowered to perform their multiple tasks in the classroom, school and community in a genuinely professional manner, then a chain reaction can begin starting with a sound teacher performance and culminating into high quality learning among increasingly more students in cognitive-, affective-, and psychomotor- areas of human development. Therefore, training of teacher is of paramount importance in improving the quality of education.

**Teacher's Commitment** - Quality of education is directly linked with quality of teacher. Up to 1950 there was no serious discussion on the quality of education and in those days it was commonly believed that teachers are committed to their profession. Now there is a st. Professor (Department of Education) Regional Institute of Education, Bhopal, Madhya Pradesh, India,

Crisis of commitment. Commitment is involvement and dedication; it is a sense of being bound emotionally or intellectually to some course of action, which may include a person's relationship with other individual, group or organization. Commitment is a part of teacher's affective or emotional reaction to their experience in an educational setting. It can be seen as a part of a learned behavior or attitude associated with the professional behavior of teachers. Teachers are the sculptor who shapes the young one into individual of potential and worthy characteristics. For this, a teacher should have some commitment as an extension worker or social engineer and as an experimenter. As regards the literacy conception of the term commitment, the Cambridge International Dictionary of English says; 'Commitment' means to promise 'or give your loyalty or money to a particular principle, person or plan of action.

Commitment depicts the firm and not changing orientation in support of one's belief in his/her principles.

**Areas of Teacher's Commitment** - Dave (1998) conceptualized the well trained and effective teachers are those who are both competent as well as committed professional practitioner. He elaborated the following five commitment areas of teachers:

**(i) Commitment to the Learner:** As a profession of teaching, the teacher is pledged to the progress development of the learners. This can happen only when the teacher evinces sincere concern and affection for the learners and is tolerant towards mistakes and mischief committed.

**(ii) Commitment to the School:** Teacher commitment indicates that teachers with high levels of commitment work harder, demonstrate stronger affiliation to their schools, and show more desire to carry out the goals of teaching than teachers with low levels of commitment. More importantly, committed teachers develop a positive attitude toward school. Teacher commitment is a key factor influencing the teaching-learning process. It is the psychological identification of the individual teacher with the school and the subject matter or goals, and the intention of that teacher to maintain organizational membership and become involved in the job well beyond personal interest.

**(iii) Commitment to the Profession:** Teachers are entrusted by the community to shoulder the crucial responsibility of shaping the generation for the future through the process of teaching and learning. Only committed professionals will adopt various innovative methods of teaching, taking into consideration best to learner and bring about effective learning. This can happen only when teachers themselves evince commitment to the profession to improve both guided as well as self directing learning.

(iv) **Commitment to the Parents:** A teacher who is committed to the learners should also simultaneously commit to the parents. This can happen only when the teacher communicate with parents regularly.

(v) **Commitment to the Society:** This conception considers teacher commitment as taking responsibility for imparting a body of knowledge and/or certain attitudes, values and beliefs towards the society. Within this conceptualization is the belief that teachers have a professional responsibility that reaches out beyond the four walls of the classroom and perhaps even extends beyond the boundary of the school.

**Types of Teacher Commitment** - Teacher Commitment has been viewed as a multidimensional concept. For instance: Meyer and Allen (1991) defined the teacher's commitment into three dimensions of commitment that they labeled affective, normative and continuance.

**Affective Commitment:** Affective Commitment is the teacher's positive emotional attachment to the school for the learning of the students. A teacher who is affectively committed strongly identifies with the goals of the school and desires to remain a part of it. This teacher commits to the school because he/she "wants to".

**Normative Commitment:** Normative Commitment is the teacher's perceived obligation to remain the school or stay because of the feelings of obligation. The individual commits to and remains with an organization because of feelings of obligation. These feelings may derive from a 'moral' obligation to put forth effort on the job and stay with the organization to 'repay the debt.' It may also reflect an internalized norm, developed before the person joins the organization through family or other socialization processes, that one should be loyal to one's organization. The employee stays with the organization because he/she "ought to".

**Continuance Commitment:** Continuance Commitment the teacher commits to the school because he/she perceives high costs of losing the job, including economic costs (such as pension accruals) and social costs (friendship ties with co-workers) that would be incurred. The employee remains a member of the organization because he/she "has to".

For the researchers in the field of education, the degree of teacher commitment is one of the most important aspects of the performance and quality of school staff. Commitment is defined as the degree of positive, affective bond between the teacher and the school. It does not refer to a passive type of loyalty where teachers stay with their jobs, but are not really involved in the school or their work. Rather, it reflects the degree of internal motivation, enthusiasm, and job satisfaction teachers derive from teaching and the degree of efficacy and effectiveness they achieve in their jobs. To this effect, many researchers have identified the element of commitment as one of the most critical but important factor for the future success of education and secondary schools in terms of their performance. Cheng (1999) report that teacher commitment is closely connected to teacher's work performance and their ability to innovate

and to integrate new ideas into their own practice, absenteeism, staff turnover, as well as having an important influence on students' achievement in, and attitudes toward school. Meta analyses of commitment studies indicate that commitment is related negatively to turnover (Cooper-Hakim and Viswesvarn, 2005), absenteeism (Farrel and Stam, 1988) and positively to **job satisfaction** (Cooper-Hakim and Viswesvaran, 2005) and organizational citizenship behaviors (Riketta, 2002). This literature has also dealt with effects of commitment on performance (Meyer et al, 1989).

**Teaching Competence** - It is an established fact that effective teaching can only be assessed in relation to effective learning. This raises the question of how learning and teaching are generally conceptualized. It has been seen on a continuum from the transmission of knowledge at one end to the facilitation of learning. However, teaching in the secondary school serves functions other than those that purely academic. It may be for this reason that there are many ways of viewing it, for instance as clinical problem solving, a cognitive skill, work, craft knowledge, management apprenticeship, transaction, guided participation or as the practice of community of learner. Teachers are essential for the effective functioning of education system and for improving the quality of learning process. Teachers can act as trailblazers in the lives of learners and in the process of education for development. Teachers play an important role in development of their students. If teachers acquire professional competencies and commitment, and if they are enabled and empowered to perform their multiple tasks in the classroom as well as in the school and the community in a genuinely professional manner, there is a chain reaction can begin starting with sound teacher performance and culminating into a high quality learning in cognitive, affective and psychomotor areas of human development.

**a) Concept of Teaching Competency** - Teaching is a relationship, which is established among three focal points: education, the teacher, the students and the subject matter. Teaching is the process by which the teacher brings the students and the subject matter together. The teacher and the taught are active, the former in teaching and the latter in learning. Modern teaching is not a mechanical process. It is exacting and intricate as well. Teaching is not "telling and testing". Teaching is a complex art of guiding students through variety of selected experiences towards the attainment of appropriate teaching, learning goals. According to **American Educational Research Association Commission (1962)** mentioned that teaching is a form of interpersonal influence aimed at changing the behavior potential of another person. Competency is nothing more than an improved modern term applied to an ancient human value; for e.g. the right way of doing things is the competent way; the right way to perform a job, the right way to live and work in association and co-operation with others. It means a desired quality of performance. It must

become functionally operative at the appropriate pattern of behavior to serve a useful purpose. The term “competency” or “competence” is frequently used when we talk about any profession or work that express one’s quality of being competent, possessing adequate professional skills, knowledge, qualification or capacity. When we talk about the teacher or his profession, we come to understand that teaching constitutes one of the major tasks of a teacher “teaching competency”. Hence, “teaching competency”, in one way or the other, has been a debatable term. Both the terms were tried to be defined separately and also together in different ways by social scientists at different time.

**Approaches to Teaching Competence** - There are many approaches to develop teaching competency.

**Trait Approach:** In ancient India, there was no systematic provision for the education of teachers but it was assumed that he alone had a right to teach who had acquired complete mastery over knowledge and could also translate it into practical life. There was no formal curriculum for teacher training as well as award of diploma or degree as we have today. The teacher’s image was reflected in his outstanding intellectual ability and vast erudition. There was a general belief in that period that “teachers are born not made.” Professional training was not considered necessary. But with increase knowledge about child psychology and advancement in the science of pedagogy it is being recognized that the teacher should not only know the content but also know the ‘child’ whom he has to teach. In order to do the job of teaching well the teacher should be well conversant with the art, science and skill of teaching. Hence, it is being increasingly felt that teachers should be educated and re. educated to be able to do the job well. That is why it is very apt to say that teachers are not only born but made also and can be made through good programs of pre- service and in-service teacher training programs .

**Classroom Behavior Approach (Flanders’ Technique):**

The quality of teaching I behavior, in turn, depends upon the level of equipment of teachers with necessary skills in designing and handling teaching behavior. This can be successfully I accomplished through understanding teaching behaviors, their effectiveness in terms 3 of corresponding pupil outcomes and their adoption by the master designer and Architect the teacher.

**Microteaching skill based Approach:** The Education Commission (1964-66) has stated, “Involvement in Education can yield very rich dividends against the resulting improvement in the education of millions. First rate teacher training institutions can thus play crucial role in the development of education. Microteaching is a teacher training technique. It is now considered not only as a constructive teacher training technique but also as “a versatile research tool which dramatically simplifies the logistic of investigating certain teaching skills and learning variables.” (Allen and Ryan, 1961) Complexity in teaching is reduced by practicing teaching skill one at a time. This

concept of microteaching although originated in early sixties, had developed to such an extent that a large number of teacher training institutions in many countries have adopted this as an approach to teacher training. Skinnerian theory of ‘shaping’ or ‘successive approximation’ in acquiring the new patterns of behavior seems to have been applied to teacher feedback-re teach pattern in microteaching technique.

**Model Approach** - To prepare teacher for effective teaching learning process, Joyce and Weil (1972) have developed different models of teaching based on different theories of teaching. A teaching model is necessarily characterized by the frame of reference’ and focus that it provides to the teacher an act purposefully and rationally. A model is considered as a ‘blueprint for teaching’. The models are grouped into four families as the basis of their chief emphasis in the ways they approach educational goals and means.

- (a) Social Interaction Models
- (b) Personal Models
- (c) Information Processing Models.

**Teacher’s Performance** - Performance’ is a core concept within work and organizational psychology During the past 10 or 15 years ,research have made progress in clarifying and extending the performance concept. Performance is a multi dimensional concept. it is commonly accepted that the teacher is the element for the success of education. In the last two decades, policy makers, teacher education institutions and schools have implemented numerous initiatives in teacher education and development, aiming to improve teacher performance. Therefore in order to understand the complex nature of teacher’s performance and develop an approach to maximizing it, there is ‘a great demand for research on teaching. Areas of Teacher’s Performance

**(i) Classroom Performance:** Performance in the classroom comprises major areas like instructional/ transactional activities, evaluation of classroom activities and classroom management. Teachers in-service have been performing these tasks in their’ respective: traditional ways at individual levels. However, in the changed context of competency based teacher education, they are expected to re-orient themselves to perform along competency parameters. For this, they will have to undertake competency based teaching, develop remedial and enrichment programs for respective groups, follow appropriate management techniques and set personal examples of value based behavior.

**(ii) School level Performance:** Teachers are expected to organize various types of activities and events in the school such as morning assembly, games, and national events, annual programs etc. The major objective of these activities is to develop right attitudes and value through organizing them in constructive way. Transmission of social, cultural, national and basic values would be greatly facilitated by appropriate teacher performance.

**(iii) Performance in the out of -school educational activities:** Teachers are not only required to organize the activities including excursions, picnics, visits to museums, historical places, libraries etc but only required to organize these activities as a major component of the learning process in the school. Towards their own professional developments they should participate in seminars, workshops, discussions and other academic interactions. In these again, they need to participate effectively and gain maximum possible advantage through their participation. Consequently, every teacher needs to acquire excellence in performance outside the school in order to effectively contribute to this sphere of activities through their vision, insight and expertise in the changing times. This would require continuous and regular re-orientation and enrichment through in-service teacher education programs in the light of competency based approach.

**(iv) Parents related Performance:** Teachers mostly get opportunities to interact with parents at the time of admission and annual results. This obviously is not sufficient. A competent and committed teacher who understands the family background of the child in different contexts attempts regular and intensive interaction with parents. He/she knows the strategies to involve the parents in the total development of the child and ensures healthy environment to the child in the home by earning confidence of parents through his/her behavior. Only those teachers who understand the context and are capable of maintaining dynamic relationship and rapport with the parents can perform their roles comprehensively. Such teachers would also receive due respect and regard from the parents and the community.

**(v) Community related Performance:** Involvement of the community, apart from parents, is equally essential for effective functioning of the school. Community can provide various resources, personnel as well as material, to school

as and when required and once these are mobilized, they can contribute continuously and significantly to the cause of quality schooling. Teachers too can contribute in constructive work undertaken by the community.

**Conclusion** - Quality of education depends upon the quality of teachers, which in turn depends upon the characteristics, and qualities of teachers. There are so many factors that affect the teacher's quality. It has been found that commitment and Competency are important factors, which influence the performance of teachers and ultimately the quality of education. These characteristic of teacher like commitment and competence are inter related and also affects the teacher's performance. It can be said that commitment and competence are the input variables and performance is the output product or variables. Therefore, in order to improve the quality of teachers it is essential to provide orientation toward competency and commitment For better performance.

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# Leadership can facilitate change in Organizations through development , innovation and improvement

Prof. Payal Alawe\*

**Abstract** - This research intends to explain effective leadership and how It can bring positive change that helps the organization to improve and be innovative in the current business environment. Effective leadership and change management will be discussed in the paper and also how leadership affect other factors, for instance trust, culture and clear vision , In the organization as it facilitates the change . Leadership is one of the main factors in bringing positive change to the organization ; If there is no leadership in the organization they will not be able to change in the direction they desire and could experience negative change instead .

**Keywords** - Leadership, improvement, Innovation.

**Introduction** - The rapid growth of the economic environment as well as the emergence of the internet made it easy to communicate with countries around the whole world. Therefore internet in turn changed the business environment in each and every country, causing a competitiveness in the market that increases with each passing year.

In order to keep their business a float , business owner discovered better quality product to offer at lower cast and also discover effective strategies that were different , exclusive or uncommon form others for the organization to adapt according to current business trends.

Effective leadership is one of the most essential parts of the overall method for an organization to sustain their business in the face of problems caused by the rapid growth of the economic environment. Leaders are the one who control and take charge of due operation of an organization and good leaders are able to set optimistic goals and objectives while steering the operation of the company towards those goals through effective strategies .

Intelligent leaders also have the responsibility to use their skills and knowledge to effectively and efficiently guide their business forward in the face of an uncertain future and also to decrease the feelings of insecurity in their employee caused by that uncertainly. A leader has the power to influence the success of the organization , due to his full power to control the direction of the organization, as well as through the influence they strive on their employs that motivates their to bring the company to great heights.

**Effective Leadership** - Leadership is a power, an energy where one person having the ability to influence or change the values, beliefs, behavior and attitudes of another person. A person with strong leadership ability will be a good example or role model to their employees, because the leader who is able to effectively achieve some good result

or achievements gains the trust and administration of their employees.

“Leaders who possess strong leadership have the goals and objectives of the organization” With the effective leadership a leader can manage the whole organization proper and can run employee on the principle of going concern , and can take the business forward.

Leadership and management are two different aspect management is more like the traditional way of managing business, which the owner of the business has complete control of the organization. On the Other hand leadership is when the leader guides their employees towards the organization goals, all the while trying to communicate and motivate their employees in order to make sure their employees are in right position to use their talent and commit to their job.

**Change Management** - Change has always an issue for organization, just as it has always be a common characteristics of human life. And a human tendency that change may bring some defaults or may bring some unwanted changes. Change is definitely hard for human to accept as it is something that pull people out of their comfort zones, which force them to change their habits and makes them highly uncomfortable .

Change management in an organization can be define as an approach to deal with change in to different areas- the organization and the individual , with individuals and the over all organization adapting to change at their on pace , stride and style .

**Change factor lead by leadership** - In term of leadership , it is defined as the ability to influence a group of employee's values, beliefs, attitude and behavior. A leader with strong leadership skills can easily motivate and influence the employees of the organization and apply effective changes

to the organization.

According to Atkinson, if there is no effective leadership in an organization no changes will be made, because there are no leaders that motivate and lead the organization's employees as well as provide a clear direction for the organization. (Atkinson, 2015)

**A) Trust** - Trust is an essential issue in leadership for a leader, as gaining the trust of group members or employees could help to improve the overall performance and commitment of the group members or employee. Trust is the key component between the leader and employees. Trust is the base of the good leadership and also can make the good relation between leader and employee. If the employees or the group members trust in their leaders, it reflects that they are good effective leaders. If the employees trust their leader their relationship will bring them together and improve the overall performance and commitment of the employees.

**B) Organizational Culture** - Leadership can shape a good culture. A culture is shaped within the trust between the employees and the leaders of an organization, or it can be defined as cultures need trust to be able to form. Employees and leaders in the organization need to trust each other in order to shape a positive organizational culture.

**C) Learning** - An effective can encourage employee in the organization to learn through certain types of motivators, such as rewards or position. Continuously learning is one of the ways to improve the overall performance of the organization. It is not only the employees that need to improve but even all segment of the leadership level of an organization. If only to set a good example to the bottom line to motivate them to learn. Leaders should join leadership training programs in order to strengthen their skills and knowledge, making them more effective in their strategies and execution.

**D) Team work, communication and leading** - Besides strengthening their leadership skills, leaders also need to encourage the employees to the organization to be innovative and cooperative. Teamwork and communication are the best way to create innovative ideas in order to produce the best outcome for the organization (Maxwell, 2009)

Leadership is not only influence the employees in the organization, but also provides a clear direction to the employees according to the organization's vision and

mission.

**Conclusion** - Effective leadership place a role in an organization to motivate and encourage the employees to change in order for the organization to be able to sustain and adapt to the business environment, to make sure the organization will improve and be innovative.

Effective leadership skill can help leaders to gain the trust of employee, making other tasks easier to operate because the employees trust their leaders. This could make other parts of business management easier too, such as shaping the culture in an organization. A good culture in the organization not only provides a good working environment for their employees but also gives a sense of belonging to the employees and increases the commitment of employees to continue working in the organization.

When an organization leader leads the employees in the correct direction and motivate them to continuously improve and innovate, the organization's performance will surely increase and be able to sustain the organization in the current complex business environment. Hence effective leadership is the main factor that bring change to the organization.

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## वस्तु एवं सेवा कर का उपभोक्ताओं पर प्रभाव

डॉ. मनीष दुबे \*

**शोध सारांश -** 1 जुलाई, 2017 से पूरे भारत में जी.एस.टी. लागू हो चुका है। इसका उद्देश्य है एक देश (भारत) एक कर प्रणाली हो। भारतीय अर्थव्यवस्था में महत्वपूर्ण तथ्यों पर एवं जी.एस.टी. से होने वाले प्रभावों पर विचार विमर्श पर बातचीत करने का यह एकदम सही समय है। सबसे पहले हमें इसे समझने के लिए इस परिभाषा के तहत शब्दों को समझना होगा, तो आइए हम 'बहु-स्तरीय' शब्द के साथ शुरु करना होगा, क्योंकि कोई भी वस्तु निर्माण से लेकर अंतिम उपयोग या उपभोग करने योग्य बनने के लिए उसे कई चरणों के माध्यमों से गुजरना पड़ता है। प्रथम चरण कच्चा माल लेना या खरीदना। द्वितीय चरण उत्पादन या निर्माण करना या करवाना। वस्तु के तैयार होने पर उसका संग्रहण या भण्डारण की व्यवस्था करना। इसके पश्चात् उत्पादित वस्तु को रिटेलर या फुटकर विक्रेता के पास विक्रय के लिए उपलब्ध करवाया जाना। अंतिम चरण में वस्तु का विक्रय, विक्रेता द्वारा किया जाता है।

अब यदि वस्तु एवं सेवा कर होने वाले लाभों को देखा जाए तो यह प्रारंभिक स्तर पर वर्तमान कर प्रणाली सरल, पारदर्शी, सुसंगत व प्रभावी बनाना, जिससे करारोपण एवं कर वसूली दोनों स्तरों पर जटिल प्रक्रिया एवं नियमों-विनियमों के जंगल से छुटकारा मिल सकेगा। एकीकृत कर प्रणाली दोहरे करारोपण से भी ग्राहकों को मुक्ति दिलाने में सक्षम है। इससे ग्राहकों को सुविधा भी होगी और वे कीमतों में होने वाली वृद्धि से भी बच पायेंगे।

**प्रस्तावना -** कोई भी वस्तु उत्पादक से होकर उपभोक्ता के पास पहुँचने से पहले उत्पादन एवं वितरण के अनेक चरणों से होकर पहुँचती है। जैसे निर्माता से वितरक, वितरक से थोक विक्रेता, थोक विक्रेता से खुदरा विक्रेता।

जी.एस.टी. लागू होने से पूर्व हर एक चरण पर एक या एक से अधिक अप्रत्यक्ष कर लगाए जाते थे तथा इस प्रकार से कर प्रणाली व कर की दरों को समझने में बहुत कठिनाता होती थी तथा प्रत्येक राज्य में अप्रत्यक्ष करों की दरें भिन्न होने के कारण अप्रत्यक्ष कर प्रणाली अत्यन्त जटिल हो गई थी। इस जटिलता की वजह से अलग-अलग समस्याएँ उत्पन्न हुईं।

जैसे-ईमानदार करदाता को कर देने में अनेक कठिनाईयों का सामना करना पड़ता था। वहीं कर की चोरी करने वाले इस जटिल व्यवस्था का लाभ उठाकर कर चोरी करते थे। साथ ही साथ एक ही वस्तु पर कई प्रकार के कर लगाने के कारण वस्तु का मूल्य बढ़ जाता था।

इस समस्या के समाधान हेतु राज्य एवं केन्द्रीय सरकार के द्वारा लगभग सभी अप्रत्यक्ष करों के स्थान पर एक कर वस्तु एवं सेवा कर को लागू कर दिया गया है। वस्तु एवं सेवा कर प्रत्येक राज्य में एक समान लागू होगा तथा कर की दरें सभी राज्यों में एक समान होंगी।

जी.एस.टी. लागू होने के बाद कुछ वस्तुओं की कीमतों के घटने के साथ ही सकल घरेलू उत्पाद में भी 2 प्रतिशत की वृद्धि होने का अनुमान है।

जी.एस.टी. एक एकीकृत कर है जो वस्तुओं और सेवाओं दोनों पर लगेगा। जी.एस.टी. लागू होने से पूरा देश एकीकृत बाजार में तब्दील हो जाएगा और विभिन्न कर जी.एस.टी. में समाहित हो जाएँगे एवं अब पूरे भारत में एक ही प्रकार का अप्रत्यक्ष कर जी.एस.टी. लगेगा।

**वस्तु एवं सेवा कर का आशय -** सरकार के द्वारा राजस्व की प्राप्ति हेतु अनेक प्रकार के कर लगाए जाते हैं। करों को हम दो भागों में बाँट सकते हैं-प्रत्यक्ष कर एवं अप्रत्यक्ष कर। प्रत्यक्ष कर आय एवं सम्पत्ति पर लगाया जाता है-आयकर, कम्पनी कर, सम्पत्ति कर इसके उदाहरण हैं।

अप्रत्यक्ष कर वस्तुओं एवं सेवाओं के खरीद एवं बिक्री पर लगाया जाता है। उदाहरण के लिए विदेशी व्यापार करने पर लगाया जाने वाला आयात शुल्क, सेवा प्रदान की जाने वाली व्यावसायिक ईकाईयों पर सेवा कर एवं वस्तुओं के उत्पादन पर लगाया जाने वाला उत्पादन कर, परन्तु जुलाई 2017 को केन्द्र एवं राज्य सरकारों द्वारा लगभग सभी अप्रत्यक्ष करों को हटाकर उनके स्थान पर सिर्फ एक ही कर जी.एस.टी. अर्थात् वस्तु एवं सेवा कर लगाया जाएगा, जिसके लिए भारत सरकार द्वारा नारा दिया गया है - "One Nation one Tax" 'एक देश एक कर'।

**वस्तु एवं सेवा कर की विशेषताएँ :-**

1. वस्तु एवं सेवा कर अनेक अप्रत्यक्ष करों को हटाकर लगाया गया है।
2. पहले अलग-अलग राज्यों में अलग-अलग दरों पर लगाया जाता था, परन्तु वस्तु एवं सेवा कर की दर प्रत्येक राज्य के लिए एक जैसी होगी।
3. कुछ व्यवसायों जैसे-पेट्रोलियम, शराब, जमीन एवं भवन को वस्तु एवं सेवा कर के दायरे से बाहर रखा गया है।
4. वस्तु एवं सेवा कर की सीमा से स्थानीय निकायों जैसे-नगर निगम एवं ग्राम पंचायतों को भी बाहर रखा गया है।
5. स्थानीय निकायों एवं पंचायतों से कर लगाने का अधिकार भी नहीं लिया गया है।

**अध्ययन का उद्देश्य -** अध्ययन का मुख्य उद्देश्य वस्तु एवं सेवा कर का उपभोक्ताओं पर प्रभाव का अध्ययन करना है। साथ ही वस्तु एवं सेवा कर को पूर्ण रूप से समझना, कर का आरोपण करके धनात्मक व ऋणात्मक प्रभावों को समझना। कर के क्षेत्र में आने वाली वस्तुओं एवं सेवाओं को जानना तथा उन पर कर लगाने वाली दरों को समझना है।

**शोध अध्ययन की विधि -** शोध-पत्र में वस्तु एवं सेवा कर का अध्ययन मुख्यतः द्वितीयक आंकड़ों व सूचनाओं की सहायता से किया गया है।

सूचनाओं के संग्रह हेतु विभिन्न आलेखों, समाचार-पत्र व शोध-पत्रों का अध्ययन किया गया है। मुख्यतः वस्तु एवं सेवा कर को समझने हेतु प्रतिशत एवं औसत का प्रयोग किया गया है।

### वस्तु एवं सेवा कर की आवश्यकता :

1. वस्तु एवं सेवा कर को लगाने का प्रमुख उद्देश्य कर की चोरी रोकना है।
2. अधिकतम करदाताओं को ऑनलाइन कर प्रणाली को सरल एवं सुगम बनाना है।
3. जी.एस.टी. के लागू होने से कर की दरें 4 से 5 प्रतिशत तक कम हो गई हैं, जिससे कि उपभोक्ताओं पर से कर का भार कम हो गया है तथा कर की दर में भी कमी आ गई है।
4. टैक्स की दर में भी कमी आने से कर की चोरी में कमी आ जाएगी।
5. भारतीय अर्थव्यवस्था में काफी बदलाव आया एवं देश का विकास तेज गति से होगा।
6. सभी राज्यों में वस्तुओं और सेवाओं की कीमतें एक जैसी हो जाएगी, जिससे राज्य की मनमानी बंद हो जाएगी।

**जी.एस.टी. आने से निम्न वस्तुओं के मूल्य में कमी** - कार, यूटिलिटी वाहन, दुपहिए वाहन, मूवी टिकिट, पंखे एवं लाइटिंग, वाटर हीटर, एयर कूलर, पेंट, सीमेंट, टेलीविजन, फ्रिज, मोबाइल, हैंडसेट, घरा वस्तु एवं सेवा कर के आने से निम्न कर समाप्त हो जाएंगे -

1. उत्पाद शुल्क
2. केन्द्रीय उत्पाद शुल्क
3. सेवा कर
4. वेट
5. केन्द्रीय विक्रय कर
6. खरीद कर
7. विलासिता कर
8. मनोरंजन कर
9. विज्ञापनों पर लगने वाला कर
10. वस्तुओं एवं सेवाओं पर लगने वाले सरचार्ज।

**जी.एस.टी. के आने से निम्न वस्तुओं के मूल्यों में वृद्धि** - एयर टिकिट, होटल बिल, मोबाइल बिल, ट्रेन टिकिट, सिगरेट, कपड़ा एवं गारमेंट्स, ब्रांडेड ज्वेलरी, कोरियर सेवाएँ, टैक्सी सेवाएँ।

**जी.एस.टी. के क्षेत्र से बाहर रहने वाली वस्तुएँ एवं सेवाएँ** - रसोई गैस, पेट्रोल, डीजल, हवाई ईंधन, प्राकृतिक गैस एवं द्वितीय उत्पादन, वितरण प्रणाली में बदलाव द्वारा कर की दरों में परिवर्तन होने से यह प्रभाव तात्कालिक रूप से नजर आने लगेगा, परन्तु यह प्रभाव उत्पादन एवं वितरण प्रणाली में कुछ समय पश्चात् नजर आएगा।

वस्तु एवं सेवा कर के अंतर्गत निम्न दरें 5, 12, 18 या 28 प्रतिशत में से किसी एक दर से कर लगता है या वस्तु सेवा कर के दायरे से बाहर हो गई है तो उस पर 0 प्रतिशत की दर से कर लगाया जाएगा। इस बदलाव के फलस्वरूप या तो किसी वस्तु का मूल्य बढ़ेगा अथवा कम होगा।

जी.एस.टी. के अंतर्गत अनाज, दाल, फल, सब्जियाँ, दूध, शिक्षा एवं स्वास्थ्य जैसी आवश्यक वस्तुओं एवं सेवाओं को कर के दायरे से बाहर रखा गया है अर्थात् उन पर 0 प्रतिशत कर लगेगा। ये सभी वस्तुएँ एक परिवार की आय का 40-45 प्रतिशत हिस्सा खर्च करते हैं। साथ ही रोजमर्रा की

चीज जैसे चीनी, काफी इन सब की 5 प्रतिशत कर वाली सूची में रखा गया है एवं अधिकतर सेवाओं पर 18 प्रतिशत जी.एस.टी. लगाया गया है। कुछ अर्थशास्त्रियों का मत है कि लगभग 50 प्रतिशत चीजों में लगने वाले जिने कर होंगे, उनमें लगभग 30 प्रतिशत की कमी हो सकती है, जबकि शेष वस्तुओं में 20 प्रतिशत कुल भार बढ़ने की संभावना है।

इन सबके अतिरिक्त उपभोक्ताओं पर आने वाले कुल कर भार में व्यापारियों को मिलने वाले इनपुट टैक्स छूट या आई.टी.सी. की वजह से कमी आएगी। इसके अतिरिक्त जी.एस.टी. एक्ट में यह भी प्रावधान किया गया है कि निर्माता, वितरक एवं व्यापारियों को जी.एस.टी. के लागू होने के बाद हुई लागत में कमी के अनुसार मूल्य में कमी करना अनिवार्य किया गया है। जी.एस.टी. का सकारात्मक प्रभाव वस्तुओं की आपूर्ति प्रणाली पर भी पड़ेगा एवं दो राज्यों के मध्य होने वाले वस्तुओं के आवागमन पर भी इसका सकारात्मक प्रभाव होगा। साथ ही यह उम्मीद भी है कि वस्तुओं के परिवहन लागत में गिरावट एवं समय की बचत होगी।

**जी.एस.टी. की सफलता** - जी.एस.टी. के आने के फलस्वरूप कर संरचना सरल हुई है एवं उपभोक्ताओं को विभिन्न करों के स्थान पर केवल एक ही वस्तु एवं सेवा कर का भुगतान करना पड़ता है। कर चोरी की संभावना कम हो गई है। अधिक कर दाताओं के कर चुकाने के फलस्वरूप सरकार के लिए राजस्व में वृद्धि हुई है तथा भारतीय अर्थव्यवस्था को बढ़ावा मिला है। कर प्रणाली में पारदर्शिता आने की वजह से विदेशी निवेशकों की रुचि भारतीय बाजार में बढ़ी है। राज्यों एवं केन्द्र की दोहरी निगरानी होने से कर मुक्त वस्तुओं की संख्या में कमी आई है।

**जी.एस.टी. की विफलता** - जी.एस.टी. के लागू होने के बाद प्रत्येक कर कर रिटर्न ऑनलाइन होने के कारण नेटवर्क में आ रही समस्याओं के कारण व्यवस्था चरमरा गई है। व्यापारियों में नियमों की जागरूकता में कमी की समस्या भी आ रही है। नेटवर्क के धीमे कार्य करने के कारण व्यापारियों को रिटर्न भरने में समस्या आ रही है। कई व्यापारी अभी भी कच्चे बिल में व्यापार कर रहे हैं एवं नियमों के जटिल होने के कारण भी छोटे व्यापारी इस सहजता से स्वीकार नहीं कर पा रहे हैं।

**निष्कर्ष** - निष्कर्षतः यह कहा जा सकता है कि कर प्रणाली किसी भी राष्ट्र की आर्थिक प्रणाली की रीढ़ होती है। इसका मजबूत होना अत्यन्त आवश्यक है। यह जितनी मजबूत होगी आर्थिक ढाँचा उतना ही सृष्टि व मजबूत होगा। इसके परिप्रेक्ष्य में 'वस्तु एवं सेवा कर' से संबंधित अंतर्राष्ट्रीय अनुभवों को भी देखें तो सकारात्मक एवं उत्साहजनक परिणाम दिखते हैं। भारत जैसी उभरती आर्थिक शक्ति के लिए आर्थिक सुधार अनिवार्य है। अतः वस्तु और सेवा कर संबंधी प्रावधानों पर केन्द्र व राज्यों को सभी को सहमति बनाते हुए इसे लागू कराना श्रेयस्कर प्रतीत होता है।

### संदर्भ ग्रंथ सूची :-

1. अप्रत्यक्ष कर - डॉ. श्रीपाल सकलेचा
2. माल एवं सेवा कर - साहित्य भवन पब्लिकेशन
3. दि प्रिंट, नई दिल्ली
4. विकीपीडिया
5. दैनिक भास्कर
6. नईदुनिया



## पुलिस अधिकारियों एवं कर्मियों पर शासकीय कल्याणकारी नीतियों का प्रभाव

डॉ. शैलबाला गौड़ \*

**प्रस्तावना** – औद्योगिकरण एवं नगरीकरण के कारण सामाजिक नियंत्रण के प्राथमिक साधन परिवार, पास-पड़ोसी, धर्म-जाति व्यवस्था आदि शिथिल हुए हैं, साथ ही जहाँ शिक्षा के प्रसार ने जनता के मानसिक स्तर को ऊपर उठाया है वहीं इससे सफेदपोश अपराधों में भी तेजी आयी है। इसके साथ-साथ भौतिक साधनों के नये-नये अविष्कारों के कारण भौतिकवाद बढ़ा है, परंतु दूसरी ओर हमारी रूढ़ियां, कुआथाएं और अंधविश्वासों में उस अनुपातमें कमी नहीं हुई है जिसके परिणामस्वरूप अनेकों प्रकार के अपराधों में वृद्धि हुई है। संसार के समस्त कानूनों पर एक अलिखित कानून भारी पड़ता है और वो यह कि कानून माना तभी जाता है जब वो मनवाया जाता है। दूसरे शब्दों में सारी विधि व्यवस्था क्रियान्वयन और प्रवर्तन पर निर्भर करती है। विधि को प्रवर्तित करने को कार्य यानि लॉ-इफोर्समेंट पुलिस के हिस्से में आता है, चूँकि हर क्रिया की प्रतिक्रिया होती है और प्रतिक्रिया का गहरा प्रभाव पुलिस कर्मियों एवं अधिकारियों के जीवन पर प्रत्यक्ष-अप्रत्यक्ष रूप से पड़ता है। द्वाचागत परिवर्तनों के साथ पुलिस का सशक्तिकरण न्यायपूर्ण प्रशासन, विधि सम्मत व्यवस्था व विधि प्रवर्तन यानी कानून के बाध्यकरण के लिये अनिवार्य भी है और अपरिहार्य भी। राज्य जिन अधिकारियों एवं कर्मचारियों के माध्यम से जनसेवा का दायित्व निभाता है, उन अधिकारियों एवं कर्मचारियों के लिये कल्याणकारी नीतियों एवं योजनाओं को क्रियान्वयन भी न्यायोचित आवश्यकता है। 'पुलिस शब्द प्राथमिक रूप से राज्य के उन एजेंटों की ओर संकेत करता है, जिसका कार्य कानून और व्यवस्था को बनाए रखना और विशेषकर नियमित अपराध संहिता को लागू कराना है। श्री बी.एन.मलिक ने स्पष्ट कहा है कि 'पुलिस शब्द का अभिप्राय व्यवस्था बनाए रखना, कानून का अनुपालन कराना एवं समाज के आंतरिक नियंत्रण की पद्धति निर्धारित करना है'। उपरोक्त परिभाषा से स्पष्ट होता है कि पुलिस राज्य की सैनिक सेवाओं की वह संस्था है, जिसे शांति व्यवस्था बनाये रखना तथा जीवन एवं संपत्ति की रक्षा, कानून व्यवस्था बनाये रखना का कार्य सौंपा गया है। इसका कार्य है उत्पीड़न, अन्याय एवं अपराध से व्यक्तियों की रक्षा करना एवं अन्य व्यवस्थाओं का दायित्व निभाना है।

**शोध प्रविधि** – वर्तमान में वर्ष 2016 के अद्यतन आँकड़ों के अनुसार पुलिस विभाग में आरक्षक 3070, प्रधान आरक्षक 1082, सहायक उपनिरीक्षक 569, सहायक निरीक्षक 234, निरीक्षक 56, उपपुलिस अधीक्षक 23, अतिरिक्त पुलिस अधीक्षक 09, पुलिस अधीक्षक 03, उपपुलिस महानिरीक्षक 01 वर्तमान में कार्यरत हैं। अतः निदर्शन पद्धति जिसके द्वारा केवल समग्र के एक अंश का निरीक्षण करके संपूर्ण समग्र के बारे में विस्तृत रूप से जाना जा सकता है। जनसंख्या के अनुपात से 500 व्यक्तियों पर एक आरक्षक होना आवश्यक है। स्वीकृत बल के अनुसार शोधार्थी उपरोक्त बल

4052 आरक्षक एवं प्रधान आरक्षक में से अपने शोध के लिए 200 और 889 अधिकारियों में से 200 अधिकारियों को दैव-निदर्शन प्रणाली के माध्यम से लाटरी विधि द्वारा उत्तरदाताओं का चयन किया।

**शोध समस्या का चयन** – योजनाओं का क्रियान्वयन हो रहा है या नहीं, पुलिस विभाग में कार्यरत पुलिसकर्मी एवं अधिकारी इसका कितना लाभ ले रहे, इसका अध्ययन कर विश्लेषण कर सके।

**अध्ययन का उद्देश्य :**

1. पुलिस विभाग के लिए राज्य शासन की कल्याणकारी नीतियों का वस्तुपरक अध्ययन एवं समीक्षा करना।
2. उपरोक्त कल्याणकारी योजनाओं में रूपान्तरण की सूक्ष्म विवेचना करना।
3. उपरोक्त कल्याणकारी योजनाओं के क्रियान्वयन का आंकड़ों के आधार पर सटीक विश्लेषण करना तथा निष्पक्ष मूल्यांकन करना।
4. यह ज्ञात करना की पुलिस अधिकारियों की तुलना में पुलिस कर्मियों के मामले में कल्याणकारी कार्यक्रमों एवं प्रदत्त अधिकारों का प्रभाव असमानता एवं पक्षपातपूर्ण तो नहीं है।
5. समस्त हितग्राहियों के सामाजिक, आर्थिक, बौद्धिक, मनोवैज्ञानिक, शैक्षणिक, पारिवारिक एवं स्वास्थ्य संबंधी कल्याण का महत्वाकांक्षी कार्य वास्तव में किस सीमा तक संपादित हो रहा है तथा इस संबंध में सुधारात्मक अनुशंसाएँ जिससे शासकीय कल्याणकारी नीतियाँ अपने उद्देश्य को प्राप्त कर सके।

**अध्ययन का महत्व :**

1. वंश कर्मियों व अधिकारियों के लिए, इनके परिवार के लिये पुलिस विभाग द्वारा समय-समय पर योजनाएं संचालित होती हैं, जिसका लाभ इनको एवं इनके परिवार को मिल सके।
2. योजनाओं के केन्द्रीय कल्याण निधि से प्राप्त धनराशि में से इनको एवं इनके परिवार के सदस्यों को शिक्षा निधि, संकट निधि, परोपकार निधि, जीवन रक्षा हेतु चिकित्सा अग्रिम आदि योजनाओं के माध्यम से सहायता प्रदान की जाती है।
3. कर्मचारियों को चिकित्सा सुविधा, सेवा में रहते हुए असमय मृत्यु के पश्चात् बच्चों को दी जाने वाली शिक्षा निधि से नियमित छात्रवृत्ति एवं गम्भीर बीमारियों के लिये उपचार हेतु सहायता प्रदान की जाती है।
4. इन सबका अध्ययन एवं योजनाओं के क्रियान्वयन से मिल रहे लाभ एवं सुविधाओं का व्यापक अध्ययन किया जाना विभाग के लिये सार्थक सिद्ध होगा।

**शोध संबंधी उपकल्पना :**

1. पुलिस विभाग में कार्यरत पुलिस कर्मों एवं अधिकारी योजना का लाभ उठाते हैं या नहीं।
2. कौन सी योजना पुलिस कर्मियों के लिये और है कौन सी योजना पुलिस अधिकारियों के लिये क्या वास्तव में ऐसा है।
3. योजनाओं का लाभ प्राप्त करने में क्या कठिनाईयाँ आती हैं।
4. जिन योजनाओं के लिये आवेदन है वास्तव में उसका लाभ मिलता है।
5. योजनाओं का क्रियान्वयन सही रूप से हो रहा है।

#### कल्याणकारी योजनाएं एवं उनका प्रभाव :

1. नगर निगम, नगर पालिका निकायों से संपर्क स्थापित कर आवासीय कॉलोनिजों की साफ-सफाई कराना, सांसद निधि, विधायक निधि से आवश्यक निर्माण कार्य कराना, मंगल-भवन, सामुदायिक भवन, मनोरंजन भवन बनाना तथा खेल की सुविधाओं को बढ़ाना।
2. आवासगृहों की मरम्मत करने, प्रकाश (विद्युत) व्यवस्था करने, पेयजल सुविधा मुहैया कराने, शौचालयों का निर्माण।
3. क्वार्टर गार्ड का उन्नयन, पुलिस केंटीन का उन्नयन।
4. विशेष प्रकरणों में चिकित्सा कराने हेतु अग्रिम ऋण देना, जवानों एवं उनके परिवारों के लिये चिकित्सा शिविरों एवं विकलांग सदस्यों के इलाज हेतु अनुदान देना।
5. अधिकारियों एवं कर्मियों के बच्चों के कम्प्यूटर प्रशिक्षण हेतु कम्प्यूटर व सह उपकरणों को क्रय करना, कूलर आदि प्रदाय करना।

#### निष्कर्ष :

1. अधिकांश उत्तरदाता आरक्षक के पद एवं उप सहायक निरीक्षक, उपनिरीक्षक के पद पर कार्यरत हैं।
2. अधिकांश पुलिसकर्मों एवं अधिकारी हायर सेकेण्डरी एवं स्नातक, स्नातकोत्तर शिक्षा प्राप्त हैं।
3. उत्तरदाता पुलिस कर्मचारी एवं अधिकारी आवास सुविधा से सन्तुष्ट नहीं हैं।
4. शासकीय आवासों में बिजली, पानी, रखरखाव की कमी के साथ साफ-सफाई का भी अभाव है।
5. पुलिसकर्मों एवं अधिकारियों ने बताया कि कार्यावधि केवल 8 से 10 घण्टे होना चाहिए।
6. जबकि अधिकांश उत्तरदाता पुलिस अधिकारियों ने बताया कि रात्रिकालीन गश्त ड्यूटी के दौरान उन्हें विभागीय वाहन सुविधा उपलब्ध होती है।
7. पुलिस कर्मियों को ₹.1500 से 3000 स्थानान्तरण भत्ता मिलता है। पुलिस अधिकारियों को राशि ₹.9000 से अधिक स्थानान्तरण भत्ता प्राप्त होता है।
8. पुलिस कर्मों स्वयं अपने बच्चों के विवाह हेतु अपने भविष्य निधि अंशदान खाते से राशि निकालते हैं वहीं पुलिस अधिकारियों ने मकान बनवाने या खरीदने के लिये अपने भविष्य निधि अंशदान खाते से राशि निकाली।
9. पुलिस विभाग में कार्यरत पुलिसकर्मों एवं पुलिस अधिकारी गम्भीर बीमारियों के लिये संकट निधी से सहायता प्राप्त होती है, जिससे इनके मनोबल में वृद्धि होती है।
10. पुलिस कर्मियों द्वारा बताया कि कागजी कार्यवाही बहुत अधिक है।
11. पुलिसकर्मों एवं पुलिस अधिकारियों के पारिवारिक सदस्यों द्वारा कल्याणकारी गतिविधियों द्वारा संचालित शिक्षा निधि से छात्रवृत्ति

प्राप्त की जाती है।

12. अध्ययन में पाया गया कि कल्याणकारी निधि द्वारा चलाई जा रही योजना का लाभ पुलिस कर्मियों एवं अधिकारियों को अवश्य मिल रहा है। पुलिस कर्मियों और पुलिस अधिकारी इस योजना से सन्तुष्ट हैं और योजनाओं का विस्तार होना चाहिए ऐसा बताया गया है।

#### सुझाव :

1. विभाग द्वारा वर्तमान योजनाओं में कार्यवाही इतनी अधिक है कि आवेदन करने में परेशानी का सामना करना पड़ता है। कार्यवाही को सरल किया जाना चाहिए।
2. पुलिस विभाग में कार्यरत पुलिसकर्मों एवं पुलिस अधिकारी लगातार ड्यूटी से तनाव ग्रस्त रहते हैं इसके लिए आराम की व्यवस्था की जाना चाहिए।
3. पुलिस अधिकारियों की तुलना में पुलिस कर्मियों का वेतन कम होता है, पुलिसकर्मों हर समय कार्य के लिए तत्पर रहते हैं। इसके लिए इन्हें शीघ्र पदोन्नति दी जानी चाहिए जिससे इनका मनोबल बना रहे।
4. जो पुलिसकर्मों एवं पुलिस अधिकारी अपनी ड्यूटी कर्तव्य निष्ठा के साथ करते हैं उनके परिवार को सुरक्षा प्रदान की जानी चाहिए।
5. पुलिस कर्मियों को अपराधियों से सामना करने के लिए अन्य साधन उपलब्ध करवाये जाना चाहिए।
6. कुछ पुलिसकर्मों अपनी ड्यूटी के दौरान मानसिक प्रताड़ना के कारण आत्महत्या कर रहे हैं, यह पुलिस विभाग के लिए दुर्भाग्य की बात है, इनको मानसिक प्रताड़ना से उभारने के लिये कार्य अवधि निश्चित कि जाना आवश्यक है जिससे इनका मनोबल बना रहे। अनुचित कदम न उठा सके।
7. आवेदन प्राप्त होने के पश्चात उनको योजनाओं का लाभ मिल रहा है या नहीं इसकी सूचना पुलिस प्रशासन को प्रतिमाह भेजी जाए।
8. योजनाओं का लाभ प्राप्त होने के पश्चात क्या परिवर्तन हुआ इसकी विवेचना की जाना चाहिए जिससे विभाग को ज्ञात हो सके की उसे योजना का लाभ प्राप्त हुआ और उसके जीवन यापन में परिवर्तन आया।

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## अंतर्राष्ट्रीय स्तर का शोध पत्र : महत्व, मुद्दे, उद्देश्य, साहित्य चोरी से बचाव एवं चुनौतियाँ

रवीन्द्र मोदी \*

**शोध सारांश** - इस लघु शोध-पत्र में अन्तर्राष्ट्रीय स्तर के शोध पत्रों का महत्व, उद्देश्य, साहित्य चोरी की सम्भावनाएँ एवं इससे बचाव के उपाय व शोध लेखन में आने वाली चुनौतियाँ आदि का अध्ययन इस शोध पत्र के अंतर्गत किया गया है, जिसे विस्तृत रूप में आगे प्रस्तुत किया जा रहा है।

**मुख्य शब्द** - शोध, वैज्ञानिक, प्रारूप, पत्र लेखन, अन्तर्राष्ट्रीय, साहित्य, चुनौतियाँ, अनुसंधान आदि।

**प्रस्तावना** - संसार में अनेक प्राणी हैं। परन्तु मानव ही एक ऐसा प्राणी है, जो प्रारम्भ से ही अपने पर्यावरण के प्रति जागरूक एवं जिज्ञासु रहा है। उसने अपने तर्क, बुद्धि, चिन्तन, मनन आदि के द्वारा प्राकृतिक एवं सामाजिक पर्यावरण का अवलोकन किया। वह निरन्तर खोज करता रहा कि किन परिस्थितियों में, किन-किन कारणों से कौनसे परिणाम निकलते हैं। मानव की जिज्ञासा की प्रवृत्ति का ही परिणाम है वह अपने चारों ओर की दुनियाँ को देखने व समझने का अनवरत प्रयास करता है। जो जिज्ञासु व्यक्ति इन अनेक प्रकार के समस्याओं के उत्तरों को जानने का प्रयास करता है उसे शोधकर्ता कहा जाता है।

व्यापक अर्थ में अनुसंधान (Research) किसी भी क्षेत्र में 'ज्ञान की खोज करना' या 'विधिवत गवेषणा' करना होता है। वैज्ञानिक अनुसंधान में वैज्ञानिक विधि का सहारा लेते हुए जिज्ञासा का समाधान करने की कोशिश की जाती है। नवीन वस्तुओं की खोज और पुराने वस्तुओं एवं सिद्धांतों का पुनः परीक्षण करना, जिससे की नए तथ्य प्राप्त हो सके, उसे शोध कहते हैं। सामान्यतः अनुसंधान अंग्रेजी के 'Research' शब्द से बना है, जो मुख्यतः दो शब्दों के संयोजन Re + Search क्रमशः दोबारा, पुनः खोज या नया कर अनुसंधान करने से है अर्थात् जिसकी पूर्व में खोज हो चुकी है, उसे आगे संशोधित कर तथ्यात्मक एवं वैज्ञानिक बनाकर आगे बढ़ाना है।

**स्माल के अनुसार**, 'इसके निम्नतम स्तर पर सरल अंग्रेजी में (अनुसंधान) केवल वस्तुओं की खोज निकालने का एक प्रयास है।'

**शोध का उद्देश्य** - इस लघु शोध-पत्र के मुख्य उद्देश्य निम्न हैं-

1. शोध पत्र लेखन में आने वाली चुनौतियों को जानना एवं समाधान के उपाय सुझाना।
2. शोध पत्र व शोध लेखन में साहित्य चोरी के बचाव के उपाय सुझाना।
3. शोध पत्र की महत्वता को विश्व समाज के समक्ष प्रस्तुत करना।
4. शोध पत्र को अन्तर्राष्ट्रीय स्तर पर बल मिलने के उपाय सुझाना।
5. शोध पत्र को अन्तर्राष्ट्रीय स्तर पर स्टेज मिलने के उपाय सुझाना।
6. शोध पत्र में आने वाली समस्याओं व चुनौतियों का समाधान सुझाना।

**शोध विधि** - प्रस्तुत शोध पत्र के द्वारा शोध की महत्ता प्रस्तुत कर भारतीय समाज ही नहीं बल्कि अन्तर्राष्ट्रीय स्तर पर पूरे विश्व के प्रत्येक देश के समाज में इसकी आवश्यकता को बताना है, किन्तु किसी शोध पत्र के लेखन कार्य

में कई समस्याएँ बीच में आती हैं। यह एक चुनौतिपूर्ण कार्य है, की कहीं उसका शोध कार्य किसी अन्य साहित्य का कॉपीराइट तो नहीं है। अतः शोध पत्र लेखन में मेरे द्वारा विभिन्न सर्वेक्षण पद्धतियों का प्रयोग कर अध्ययन को अधिक विश्लेषणात्मक एवं वैज्ञानिक बनाया गया है। शोध पत्र हेतु प्राथमिक व द्वितीयक स्रोतों, विभिन्न पत्र-पत्रिकाओं की सहायता से आँकड़े एकत्रित कर उनका विश्लेषण कर निष्कर्ष पर पहुँचा गया है। ये प्रमुख चुनौतियाँ हैं, जिसका सामना करना जरूरी है।

**अन्तर्राष्ट्रीय स्तर के शोध पत्र की महत्वता** - शोध पत्र से शोध प्रारूप के महत्व का स्पष्ट अनुमान हो जाता है, ब्लैक और चैम्पियक (1976-77) के शब्दों में कहा जाये तो- 'शोध प्रारूप से शोध कार्य को चलाने के लिए एक रेखा तैयार हो जाती है, शोध प्रारूप से शोध सीमा और कार्य क्षेत्र परिभाषित होता है। शोधकर्ता को शोध को आगे बढ़ाने वाली प्रक्रिया में आने वाली समस्याओं का पूर्वानुमान लगाने का अवसर प्राप्त होता है।'

इसके अतिरिक्त शोध पत्र की आवश्यकता व महत्व अनेक प्रकार से हैं। यह मानव समाज का वैज्ञानिक पद्धति से अध्ययन करके हमें अनेक प्रकार से सहायता पहुँचाता है। समाज की संरचना कार्यों, संगठनों उनकी समस्याओं आदि का हमें ज्ञान प्रदान करता है। इस ज्ञान का उपयोग समाज के विकास की योजनाओं को बनाने में किया जाता है। समाज की क्या-क्या समस्याएँ हैं ? इन सबका ज्ञान अन्तर्राष्ट्रीय स्तर के अनुसंधान हमें समय-समय पर प्रदान करता है। एक अच्छे अन्तर्राष्ट्रीय स्तर के शोध व शोध पत्रों की पूरे विश्व में महत्वता रहती है। शोध पत्र की महत्वता को कुछ बिन्दुओं के माध्यम से और अच्छे से समझा जा सकता है, जो निम्न हैं-

1. अनुसंधान के माध्यम से हम वैज्ञानिक नीतियों चिंतन करना और साथ ही साथ इन विकल्पों में से प्रत्येक के परिणामों की जाँच कर सकते हैं।
2. अनुसंधान हमारी आर्थिक प्रणाली में लगभग सभी सरकारी नीतियों के लिए आधार प्रदान करता है।
3. यह बौद्धिक संतुष्टि प्रदान करता है।
4. रिसर्च सामाजिक रिश्तों का अध्ययन करने में सामाजिक वैज्ञानिकों के लिए भी उतना ही महत्वपूर्ण है।
5. अनुसंधान ज्ञान की खातिर के लिए ज्ञान का फव्वारा है।
6. यह एक बेहतर तरीकों से एवं क्षेत्र में नए घटनाक्रम को समझने के लिए

सक्षम बनाता हैं।

7. यह एक तरह का औपचारिक प्रशिक्षण हैं।
8. शोध पत्र नए सिद्धांतों का सामान्यीकरण मतलब हो सकता हैं।
9. अज्ञानता का निवारण।
10. शोध पत्र नई शैली और रचनात्मक के विकास का मतलब हो सकता हैं।
11. ज्ञान में वृद्धि एवं समस्याओं का समाधान।
12. भविष्यवाणी एवं विज्ञानों का विकास।

शोध पत्र का विज्ञान में बहुमुखी विकास के लिए अत्यंत महत्व हैं। इन विज्ञानों के तथ्यों, सिद्धांतों तथा ज्ञान के विकास में शोध पत्र लेखन अनेक प्रकार से महत्वपूर्ण तथा उपयोगी हैं।

**शोध पत्र का उद्देश्य** – अध्ययन के उद्देश्य का निर्धारण शोध पत्र का महत्वपूर्ण अंग हैं। एक अच्छे शोध पत्र के अनुरूप शोध कार्य की तैयारी आवश्यक है। अतः एक अच्छे शोध पत्र के निम्न उद्देश्य हो सकते हैं –

1. एक ऐसा शोध करना जिसे शोध की विषय वस्तु और शोध कार्यविधि कि दृष्टि से दोराहाया जा सके।
2. अपनी उपकल्पना का समर्थन करने और वैकल्पिक उपकल्पनाओं का खण्डन करने हेतु प्रयास साक्ष्य इकट्ठा करना।
3. एक पूर्ण विकसित शोध परियोजना कि भावी योजनाओं को चलाने के लिए मार्ग दर्शन शोध पत्र के अध्ययन कि आवश्यकता को दिखाना।
4. परिवर्तनों के मध्य सम्बंधों को इस तरह से जाँच ने में सक्षम होना जिससे सहसम्बंध ज्ञात हो सके।
5. शोध सामग्रीयों के चयन की उचित तकनीकों के चूनाव द्वारा समय और साधनों के अपव्यय को रोकने में सक्षम होना।
6. शोध के परिपूर्ण परिदृश्य को प्रदान करना।

**साहित्य की चोरी से अभिप्राय** – किसी दुसरे कि भाषा, विचार, उपाय, शैली आदि का अधिकांशतः नकल करते हुये अपने मौलिक कृति के रूप में प्रकाशन करना साहित्यिक चोरी कहलाता है। साहित्यिक चोरी तब मानी जाती है जब हम किसी के द्वारा लिखे गए साहित्य को बिना उसका सन्दर्भ दिए अपने नाम से प्रकाशित कर लेते हैं, इस प्रकार से लिया गया साहित्य अनैतिक बन जाता है और इसे साहित्यिक चोरी कहा जाता है, ऐसे अनैतिक कार्य आसानी से पकड़ में आ जाते हैं, वर्तमान में 'प्लेगारिज्म' अकादमिक बैझमानी समझी जाती है।

**साहित्य की चोरी से बचने के उपाय** – एक अच्छे शोध पत्र जो एक अंतर्राष्ट्रीय स्तर का तब होता है, जिसका निर्माण स्वयं शोधकर्ता ने अपने आत्मचिन्तन, आत्मबल व अपने विचार, भावनाओं को अपने शोध पत्र में उतारा है। अगर जरूरत पड़ी तो वह किसी के कहे गये शब्दों को संदर्भ सहित बता सकता है। अतः इससे बचने के लिये कुछ उपायों को अपनाकर बचा जा सकता है।

**1. शोध पत्र को उद्धरण विधियों में ढालें** – सभी शोध प्रबंधों को किसी न किसी विधि में दस्तावेजीकरण किया जाता है ताकि शैक्षिक चोरी से बचा जा सके। अपने शोध विषय और अध्ययन क्षेत्र के आधार पर आपको अलग-अलग प्रकार कि फॉर्मेटिंग विधियों को चुनना होगा।

**प्रथम विधि (MLA) - MLA** फॉर्मेट को विशेष रूप से साहित्यिक शोध-पत्रों के लिए इस्तेमाल किया जाता है और इसमें 'उद्धृत सामग्री' की एक सूची अंत में जोड़नी होती है, इस विधि में अंतर्राष्ट्रीय उद्धरण प्रयोग किये जाते हैं।

**द्वितीय विधि (APA) - APA** फॉर्मेट का इस्तेमाल सामाजिक विज्ञान के क्षेत्र में शोध पत्रों के लिये शोधकर्ताओं द्वारा किया जाता है और इसमें भी अंतर्राष्ट्रीय उद्धरण देने होते हैं। इसमें निबंध का अंत 'संदर्भ' पृष्ठ के साथ होता है और इसमें मुख्य भाग के पेराग्राफों के बीच में अनुच्छेद शीर्षक का प्रयोग भी किया जा सकता है।

**तृतीय विधि (शिकांगो)** : शिकांगो फॉर्मेटिंग को प्रमुखतः ऐतिहासिक शोधपत्रों के लिये इस्तेमाल किया जाता है और इसमें अंतर्राष्ट्रीय उद्धरण के स्थान पर पृष्ठ के नीचे फुटनोट का प्रयोग होता है और साथ में 'उद्धृत सामग्री' और संदर्भों का पृष्ठ जुड़ता है।

**2. जिस विषय में बात कर रहे हो उससे परिचित हो जाइये** : विषय को समझ जाने से, किसी और के द्वारा दी गई परिभाषा के पुनः कथन के स्थान पर आपके द्वारा उसे अपने शब्दों में लिखे जाने की सम्भावना बढ़ जाती है।

**3. स्वयं को विषय कई बार बताइये** : असल बात है सामग्री को समझा पाना तथा उसका अर्थ अपने शब्दों में बताने की योग्यता। दूसरे लेखक की सामग्री बहुत ध्यान देकर मत पढ़ये अन्यथा झुकाव लेखक के व्यक्तव्य को ही फिर से कह देने का हो जायेगा।

**4. अपने उद्धरणों और स्रोतों का संदर्भ** : आपको अपने लेख में संदर्भ सूची या उद्धृत कार्यों का विवरण अवश्य सम्मिलित करना चाहिए।

**5. जब संदेह हो, तब आभार मान लिजिये** : साहित्यिक चोरी से बचने के लिये यह करने के अनेक तरिके हैं उनमें से कुछ यहां दिये गये हैं। अपनी व्याख्या के अंदर ही स्रोत का विवरण दे।

**6. कॉपीराइट के सम्बंध में कुछ आधारभूत बातें समझ लिजिये** : साहित्यिक चोरी न केवल अकादमिक दृष्टि से बुरी है, बल्कि यदि आप कॉपीराइट भंग करते हैं, तो वैधानिक अपराध भी। सामान्य नियम यह है कि तथ्यों को कॉपीराइट नहीं किया जा सकता है।

**7. समझिये कि क्या उद्धृत 'नहीं' किया जाना चाहिए** – अकादमिक शोध में प्रत्येक चीज उद्धृत नहीं होनी चाहिए अन्यथा शोध करने वालों के लिये वह बहुत कष्टदायी हो जायेगा। इन चीजों को अपने शोध या निर्णायक लेख में उद्धृत मत करिये।

वर्तमान में 'प्लेगारिज्म' अकादमिक बैझमानी समझी जाती है। प्लेगारिज्म कोई अपराध नहीं है बल्कि नैतिक आधार पर अमान्य हैं।

**शोध पत्र लेखन में चुनौतियाँ** – शोध पत्र की कार्यप्रणाली में एक वैज्ञानिक प्रशिक्षण की कमी के कारण महान बाधा हमारे देश के शोधकर्ताओं के लिए उत्पन्न हो गयी हैं। शोध पत्र लेखन के अनेक महत्व और उपयोगिताएँ हैं लेकिन उसकी कुछ विशिष्ट समस्याएँ भी हैं, जैसे –

1. घटनाओं की जटिलता
2. प्रकाशित आंकड़ों की समय पर उपलब्धता की कठिनाई।
3. अच्छे स्तर की पुस्तकालयों की उपलब्धता न होना।
4. उच्च स्तर की गुणवत्ता पूर्ण पुस्तक व विषय सामग्री उपलब्ध न होना।
5. अवधारणा की समस्या।
6. एक अच्छा गाइडेंस ना मिलना।
7. वस्तुनिष्ठता में कठिनाई एवं प्रयोगशाला का अभाव।

आदि चुनौतियाँ होती हैं, जिससे उसका शोध लेख अंतर्राष्ट्रीय स्तर का होते हुए भी उस स्तर पर नहीं पहुँच पाता है।

**निष्कर्ष** – एक अंतर्राष्ट्रीय स्तर का शोध पत्र लेखन के लिए पूर्व में शोध रणनीति का चयन एवं अनुसंधान डिजाइन बना कर उसके अनुरूप अपना कार्य सम्पादन करना चाहिए। जिससे एक अच्छे गुणवत्ता पूर्ण वैज्ञानिक



शोध पत्र का निर्माण हो सके। यह तभी संभव है, जब एक शोधकर्ता अपने आप को इस विषय के इर्द-गिर्द अपने आप को ढालकर आत्मबल, आत्मचिंतन एवं स्वयं के विचारों अनुभवों लोगों से प्राप्त ज्ञान के आधार पर अपना लेख लिखे तो वह उसका शोध पत्र अवश्य ही एक अंतर्राष्ट्रीय स्तर पर जरूर पहुँचेगा। वैश्वीकरण के वर्तमान दौर में उच्च शिक्षा की सहज उपलब्धता और उच्च शिक्षण संस्थाओं को इसकी महत्वता को बढ़ावा मिले और शोध का क्षेत्र ओर विस्तृत हो सके एवं समाज के सामने नई-नई जानकारी प्राप्त हो और एक सुव्यवस्थित विकसित समाज का विकास हो।

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## आधुनिक व्यवसाय प्रबंध और नेतृत्व के नए आयाम

श्रीमती सीमा वर्मा \*

**प्रस्तावना** – एक समय था जब व्यवसाय प्रबंध के क्षेत्र में अपने अधिनस्थों से व्यावसायिक लक्ष्यों की पूर्ति करवाने हेतु 'कमांड अंड कंट्रोल' ही सर्वमान्य प्रविधि मानी जाती थी। व्यवसाय लीडर और प्रबन्धक अपने अधीनस्थ कर्मचारियों को विस्तृत निर्देश देते ताकि व्यवसाय के लक्षित उद्देश्यों को प्राप्त किया जा सके। इन लक्ष्यों की प्राप्ति हेतु लीडर अपने कर्मचारियों को 'दंड और लाभ (Carrot and Stick Policy)' के नियम से प्रेरित करता है, अच्छा काम करो और लाभ प्राप्त करो या दंड भुगतने के लिए तैयार रहो।

इसी दौरान व्यवसाय की दुनिया में ऐसे लीडर भी रहे जो 'दंड और लाभ (Carrot and Stick Policy)' के सिद्धान्त को व्यवसाय के लिए अनुकूल नहीं मानते थे और उन्होंने प्रबंधकीय लीडरशिप के ज्यादा मानवीय, ज्यादा प्रोत्साहनवादी बनाने की वकालत करते रहे। आज हम उस दौर से निकालकर आधुनिक प्रबंधकीय युग में प्रवेश कर चुके हैं जहां व्यवसाय प्रबंध के लिए 'समंदर लीन' मेटड को ज्यादा व्यावहारिक, लाभदायक, और प्रभावी माना जाता है। इसी के साथ लीडरशिप मेटड भी में भी ज्यादा प्रोत्साहनवादी आधुनिक एजाइल मेटडोलोजी का प्रयोग किया जाने लगा है। एजाइल मेटडोलोजी के फरवरी 2000 में आगमन के 20 वर्षों बाद सभी व्यावसायिक क्षेत्रों में जिनमें शिक्षा, खेल, सुरक्षा, सूचना प्रौद्योगिकी, विज्ञान, मेडिकल आदि शामिल हैं एजाइल प्रबंध पद्धति ही प्रयोग की जा रही है।

### लीडर के प्रकार और उनका प्रबंध पर प्रभाव

H. Ross Perot का कहना है 'लोगों को मैनेज नहीं किया जा सकता, वस्तुओं को मैनेज किया जा सकता है, लेकिन लोगों का नेतृत्व किया जाना चाहिए' और जब बात लोगों को मैनेज करने की हो तब कुछ विशेष तरीकों का सहारा लिया जाता है। नेतृत्व विषय पर विशेष नियंत्रण रखनेवाले वक्ता और लेखक सायरस एम गोंडा ने आधुनिक भारत के आदर्श इंडस्ट्रियलिस्ट और भारत की प्रथम वायुसेवा के प्रणेता जे आर डी टाटा के विचारों के आधार पर नेतृत्वकर्ता के आवश्यक 4 तत्व बताए हैं, ये हैं :-

1. विजन अर्थात् दूरदृष्टि
2. वैल्यू अर्थात् मूल्य
3. वेलोर अर्थात् साहस
4. पिक्वी अर्थात् विजय

उन तत्वों के आधार पर नेतृत्व की विभिन्न विधियों को श्रेणीकरण किया जाता है। एक लीडर में विजन, मानवीयता, ऊर्जा और साहस का गुण आवश्यक है। एक लीडर का काम बहुत से लोगों को प्रेरित करना और उन्हें वो कार्य अपने संगठन के लिए करवाना जो वो समान्यतया या तो करना

नहीं चाहते अथवा अनमने ढंग से करते हैं। लीडर अपने गुणों और प्रभाव से अपने सहयोगियों और कर्मचारियों के प्रेरित कर के संगठन के लक्ष्यों की पूर्ति कर सकता है।

हवाई बिसेनेस रिव्यू के अनुसार नेतृत्वकर्ता में 'मानवता, सहजबोध (Intuition), अद्वितीयपन (यूनिकनेस) और कर्मचारियों से उनका सर्वश्रेष्ठ योगदान प्राप्त करने की क्षमता होना आवश्यक है'।

कोई भी व्यक्ति किसी ऐसे व्यक्ति के अधीन काम नहीं कर सकता जो उस व्यक्ति से श्रेष्ठ न हो। एक श्रेष्ठ प्रबन्धक ही अपने कर्मचारियों से श्रेष्ठ काम करवा सकता है। बीते समय की नेतृत्व क्षमता आधुनिक समय की तेजगति से बदलती और स्मार्ट होती दुनिया में काम नहीं कर सकती। आधुनिक समय की तेजगति से बदलती और स्मार्ट होती दुनिया में काम नहीं कर सकती। आधुनिक समय में रचनात्मक और साहसी किन्तु दयावान और मानवीय पद्धति के नेतृत्व की आवश्यकता है।

### वर्तमान आधुनिक नेतृत्व के प्रकार

**कारोबारी नेतृत्व (Transactional Leadership)** ने नेतृत्व करने वाले और उसके कर्मचारियों में यह सहमति होती है कि कर्मचारी अपने नेता की बात मानेंगे और उसके निर्देशों का पालन लक्ष्य प्राप्ति में करेंगे। अगर निर्धारित लक्ष्य प्राप्त नहीं होते हैं तो कर्मचारी दंड के लिए तैयार रहें। आधुनिक समय में इस तरह के नेतृत्व को बहुत सम्मान के साथ नहीं देखा जाता। मैनेजमेंट गुरु ये मानते हैं कि यह एक प्रकार का अमानवीय तरीका है और इसके परिणाम व्यवसाय के हित में नहीं होते हैं।

**निरंकुश नेतृत्व (Autocratic Leadership)** में नेता सर्वशक्तिमान और निरंकुश होता है, उसी के हाथ में समस्त निर्णय शक्ति है जिस से वह अपने कर्मचारियों पर अनुचित दबाव बना कर कार्य करता है। इस पद्धति में प्रबंधन अपने कर्मचारियों से विचार विमर्श किए बगर निर्णय लेता है। कर्मचारियों को सुझाव रखने की अनुमति नहीं होती उन्हें केवल निर्देशों का पालन करना होता है। इस तरह के नेतृत्व में टीम वर्क के लाभ संगठन को नहीं मिल पते क्यों कि निरंकुश नेतृत्व की वजह से टीम वर्क को प्रोत्साहन नहीं मिलता और कर्मचारी केवल अपने निर्देशों को पूरा करने में लगे रहते हैं। यह संगठन के लिए और कर्मचारियों के लिए अलाभप्रद है।

**परिवर्तनकारी नेतृत्व (Transformational Leadership)** में नेतृत्व का प्रयास कर्मचारियों में सकारात्मक परिवर्तन करने पर रहता है ताकि कर्मचारी सकारात्मक मानसिकता से अपना मूल्यवान योगदान संगठन के लक्ष्यों को प्राप्त करने में दे सकें और कर्मचारियों में नए नेता उभर कर सामने आ सकें। इस तरह का नेता मानवतावादी, गुणवान, साहसी, दूरदृष्टि वाला और प्रेरक व्यक्ति होता है जो अपने कर्मचारियों में अच्छे गुणों की तलाश

करता है और उन्हें विकसित होना का अवसर प्रदान करता है जिस से संगठन का समग्र विकास होता है।

**लोकतान्त्रिक नेतृत्व (Democratic Leadership)** में नेता अपने संगठन में लोकतान्त्रिक मूल्यों के अनुरूप अपने कर्मचारियों को अपने सुझाव देने और निर्णय प्रक्रिया में हिस्सा लेने का अवसर प्रदान करता है। इस तरह के नेतृत्व से कर्मचारियों में अपने काम के प्रति आनंद और जिम्मेदारी की भावना बढ़ती है जिस से कर्मचारी अपने संगठन के प्रति ज्यादा लगन और जिम्मेदारी से काम करते हैं। इस तरह के नेतृत्व से परिणाम बहुत धीमी गति से प्राप्त होते हैं लेकिन अंतिम परिणाम बहुत लाभकारी होने की अत्यधिक संभावना रहती है।

**सेवन नेतृत्व (Servant Leadership)** यह आधुनिक समय की सबसे अधिक प्रचलित विधियों में एक है। सेवन नेतृत्व का आशय यह नहीं है की नेता अपने कर्मचारियों को सेवक है। इसका तात्पर्य यह है की नेता अपने कर्मचारियों पर नियंत्रण रखने के बजाय उन्हें स्वतन्त्रता देता है ताकि वे आत्मनिर्भर और सक्षम बन कर कार्य करें और जहां किसी समस्या का सामना करना पड़े तब नेता उनका मार्गदर्शन करें। नेतृत्व के इस तरीके में नेता की भूमिका एक ऐसे मैटर और कोच की होती है जो अपनी टीम को आत्मनिर्भर बन कर काम करना सिखाता है और उसे स्वविवेक से काम करने की स्वतन्त्रता भी देता है साथ ही वह अपनी टीम के लक्ष्य प्राप्ति में आने वाली रुकावटों को दूर करने का कार्य करता है।

**करिष्माई नेतृत्व (Charismatic Leadership)** एक ऐसा नेतृत्व है जो परिवर्तनकारी नेतृत्व के समान ही प्रभावी तरीके से अपने अनुयायियों में सकारात्मक परिवर्तन लाता है साथ ही यह अपने कर्मचारियों में जोश, ऊर्जा और सकारात्मकता का विस्फोट करता है और ऐसे नेता की उपस्थिति में कर्मचारी अपना सर्वश्रेष्ठ प्रदर्शन करते हैं। इस तरह के नेतृत्व में यह समस्या है की संगठन की सफलता पूरी तरह से नेता पर निर्भर हो जाती है। अगर नेता संगठन से चला जाए तो पूरा संगठन धराशायी हो जाता है क्योंकि कर्मचारी यह मानने लग जाते हैं की उनकी सफलता उनके करिष्माई नेता की वजह से ही थी।

**पारंपरिक और आधुनिक प्रबंधन दृष्टिकोण की तुलना** – प्रबंधन मानुषी सभ्यता की तरह पुराना है और मनुष्य के विकास के साथ साथ प्रबंध के तरीकों का भी विकास होता रहा है। पारंपरिक प्रबंध विशेषज्ञों ने सफल प्रबंधकों के अनुभव के आधार पर प्रबंधन की प्रकृति को सामान्य बनाने का प्रयास किया कि यदि कोई विशेष व्यवसाय सफल होता है, तो उनकी तरीकों और रणनीतियों का प्रयोग करके उसी तरह की स्थिति और समस्या को हल किया जा सकता है। पारंपरिक नेतृत्व दृष्टिकोण निरंकुश, और

कारोबारी नेतृत्व तरीकों को अपनाता है और उसी पारंपरिक दृष्टिकोण से कार्य व्यवस्था करता है।

आधुनिक प्रबंध दृष्टिकोण समय के साथ गलतियों और सफलताओं, असफलताओं से सीखे गए पाठ के आधार पर उन्नत होता गया और अधिक प्रगतिवादी, मनवतावादी दृष्टिकोण के साथ अपना काम करता है। आधुनिक प्रबंध तरीके अपने अनुयाई की क्षमताओं को पहचानने और उन्हें विकसित करने में प्रोत्साहित करने पर बल देता है साथ ही कर्मचारियों के एम्पोवरमेंट यानि सशक्तिकरण और आत्मनिर्भरता पर बल देता है ताकि कर्मचारी संगठन की प्रगति में अपना श्रेष्ठ और अधिकतम योगदान दे सके और कर्मचारियों में सम्मान की भावना का विकास हो और वे अपने आप के प्रबंध प्रक्रिया का ही एक अंग समझ कर काम करें ताकि संगठन अपने लक्ष्यों को ज्यादा जल्दी, ज्यादा प्रभावी तरीकों से प्राप्त कर सके।

**निष्कर्ष** – आधुनिक व्यवसाय का ट्रेंड यह है कि व्यवसाय की भूमिका समाज के लिए जिम्मेदारीभरी हो और इसी ट्रेंड के मुताबिक व्यवसाय प्रबंधन भी समाज के प्रति जिम्मेदारी से अपनी भूमिका को नए तरीके से परिभाषित करने का प्रयास कर रहा है। प्रबंध क्षेत्र में काम कर रही शैक्षणिक संस्थाएं और देश की अग्रणी व्यावसायिक और इंस्टीट्यूटल संस्थान अपने प्रबंधकों और नेतृत्व को आधुनिक व्यापार की चुनौतियों पर विजय प्राप्त करने हेतु नए जमाने की नई तकनीकों का प्रयोग करने पर प्राथमिकता दे रहे हैं।

आज व्यवसाय की सफलता में कर्मचारियों को मात्र वर्कर नहीं समझा जाता है उन्हें वेल्युवल् मानव संसाधन समझा जाता है। कुछ संस्थाएं तो 'रेसोर्स' शब्द पर भी आपत्ति रखती हैं और कर्मचारियों को 'मानव' ही समझकर नेतृत्व नीतियों का निर्धारण करती हैं। इसी दृष्टिकोण से पारंपरिक नेतृत्व विधियों जैसे निरंकुश विधि, या व्यावसायिक विधि का प्रचलन कम होता जा रहा है और दूसरी तरफ सेवन नेतृत्व, लोकतान्त्रिक नेतृत्व विधियों का प्रचलन बढ़ रहा है।

Agile प्रबंध एवम नेतृत्व विधियों के प्रचलन में आने से कर्मचारियों की कार्यक्षमता, दक्षता कार्यकुशलता और संतुष्टि में वृद्धि हुई है साथ ही व्यवसाय में लाभदायक स्थिति पहले से बेहतर है, हुई है। आधुनिक विधिया समाज, व्यवसाय, कर्मचारी और प्रबंधन सभी के लिए हितकारी सिद्ध हो रही हैं।

### संदर्भ ग्रंथ सूची :-

1. हावर्ड बिजनेस रिव्यू
2. जे आर डी टाटा, द मैजिक ऑफ लीडरशिप, सायरस एम गोंडा
3. स्कर्म, द आर्ट ऑफ ड्रइंग ट्वाइस द वर्क इन हाफ द टाइम, जेफ सदरलैंड

## आधुनिक समय में भारतीय अर्थव्यवस्था के सतत् विकास में गोसंपदा की भूमिका

डॉ. अंजुली कांठेड़ \*

**शोध सारांश** – किसी भी देश की उन्नति तभी संभव है, जब वह आर्थिक रूप से उन्नत हो। भारत एक विकासशील राष्ट्र है तथा यहाँ कि 65 प्रतिशत आबादी आज भी गाँवों में निवास करती हैं तथा जो आबादी शहरों में निवास करती है, उनका प्रत्यक्ष व अप्रत्यक्ष रूप से पशुपालन से संबंध होता है। पशुपालन के अन्तर्गत गोपालन की अपनी अलग ही महत्ता है। भारतीय अर्थव्यवस्था कृषि पर आधारित है। कृषि व गोवंश एक दुसरे के पुरक है। गायों को पृथक कर गाँव के विकास के बारे में सोचना बिना बिजली के औद्योगिकरण करने जैसा विचार होगा। भारत में गाय की 40 नस्ले पायी जाती है। विश्व की कुल गायों का 20 प्रतिशत भाग भारत देश में है जहाँ गाय को माता तुल्य माना जाता है। आधुनिक समय में सरकार द्वारा गोसम्पदा के संरक्षण हेतु अद्यतन प्रयास किये जा रहे हैं। जिससे देश को आर्थिक व सामाजिक लाभ प्राप्त हो रहे हैं। भारत की गरीबी भूखमरी बेरोजगारी की समस्या को यदि वास्तव में हल करना है तो गोसंपदा का पालन पोषण और संरक्षण न केवल आवश्यक है बल्कि समय की अपरिहार्यता है। इसे हमारी अर्थनीति का अंग बनाना चाहिए। गोसंपदा का आर्थिक दृष्टि से मूल्यांकन करें तो निष्कर्ष निकलता है कि जन्म से मृत्युपर्यन्त, गोसम्पदा का कोई भी अंग अथवा कृत्य ऐसा नहीं है, जो अनुपयोगी अथवा प्रकृति के प्रतिकूल हो। गोसंपदा के शरीर का प्रत्येक अंग, उसका दुग्ध व उत्सर्जन हमारे जीवन के लिए अत्यन्त उपयोगी है। गाय ही एकमात्र प्राणी है जो ऑक्सीजन ग्रहण करती है तथा ऑक्सीजन ही छोड़ती है।

**शब्द कुंजी** – गोसंपदा, अर्थव्यवस्था।

**प्रस्तावना** – आधुनिक समय में देश में रोजगार की समस्या एक बहुत बड़ी समस्या है। व्यवसायिक रूप से देखा जाये तो गाय कभी भी आर्थिक बोझ नहीं होती है, यहाँ तक की जब वह बुढ़ी हो जाती है या दुध देना बंद कर देती है तब भी अपने गोबर व मूत्र के जरिये कृषि कार्यों व औषधि में अपना योगदान देती है। भारतीय कृषि के विकास में गोसंपदा का महत्वपूर्ण योगदान रहा है और भविष्य में भी रहेगा क्योंकि गाय ही ऐसा प्राणी है जिसका मल, मल नहीं बल्कि मलशोधक और कीटाणुनाशक है। जिन खेतों में गाय के गोबर का खाद प्रयोग किया जाता है उनमें उगी फसलों पर विनाशकारी कीटों का प्रकोप नहीं होता। अतः वहाँ कीटनाशकों के छिड़काव की आवश्यकता नहीं पड़ती है। एक गाय प्रति वर्ष औसतन 3500 किलोग्राम गोबर प्रदान करती है, जिससे कि 80 मेट्रिक टन जैविक खाद तथा औसतन 2000 लीटर तक मूत्र उपलब्ध होता है जो कि उत्तम जैविक कीटनाशक के रूप में प्रयुक्त किया जा सकता है। खाद व कीटनाशक के साथ ही साबुन, घेम्पू, दंतमंजन, मरहम, धूपबत्ती, आदि अनेक वस्तु का निर्माण होता है। इन वस्तुओं की माँग सिर्फ देश में ही नहीं अन्य देशों में भी होने लगी है जिससे देश के नागरिकों को रोजगार प्राप्त हो रहा है तथा साथ ही जैविक खेती को बढ़ावा मिल रहा है।

गाय के गोबर से गोबर गैस संयंत्र संचालित किए जा सकते हैं। इस गैस का प्रयोग ईंधन व रोशनी के लिए किया जा सकता है। गैस के ईंधन में प्रयोग से तथा गैस प्लांट के प्रसार-प्रचलन से ईंधन के लिए वनों की कटाई के दबाव को कम किया जा सकता है जिससे पर्यावरण संरक्षण की संभावनाएँ बढ़ती हैं। गाँव के लोगों को बिना धुँए का स्वच्छ ईंधन मिल सकता है। गोबर गैस संयंत्र से निकला गोबर सीधे खेत में खाद के रूप में प्रयोग किया जा सकता है। ये खेती के लिए ज्यादा प्रभावकारी है। गोबर गैस संयंत्र से जनरेटर

चलाकर बिजली पैदा की जा सकती है। इस ढंग से गैस से चलाए गए जनरेटर में केवल 20 प्रतिशत डीजल का उपयोग होता है जो कम प्रदूषणकारी है। विद्युत प्रणाली पर जो इतना दबाव पड़ रहा है वह कम होकर उतनी ही विद्युत किसी ग्रामीण औद्योगिक विकास के लिए काम में लायी जा सकती है।

बायोगैस का प्रयोग कर ईंधन की कमी को पूरा किया जा सकता है। यह एक सस्ता और सुलभ विकल्प है। वैज्ञानिक प्रयोग से यह ज्ञात हुआ है कि गाय का दुध तो अमूल्य है ही लेकिन साथ ही गोबर और मूत्र में कार्बोनिक् ऐसिड तथा मेक्नीज होने की वजह से विषैले कीटाणुओं का शीघ्र नाश करता है। इसमें स्वर्णक्षार ओरम आक्साइड भी पाया जाता है इसलिए औषधियाँ बनाकर कैंसर, एड्स जैसी घातक बीमारियों को भी दूर करने का प्रयास किया जा रहा है। रोगोपचार के लिए अनेकों आयुर्वेदिक औषधियों से लेकर रोजमर्रा की आवश्यकताओं को कितने ही उत्पाद इसके आधार पर बन रहे हैं जो ग्रामोद्योग / कुटीर उद्योगों से स्वावलम्बी आर्थिक ढाँचा खड़ा करने में चमत्कारिक भूमिका निभा सकते हैं। अतः स्पष्ट है कि वर्तमान अनेक समस्याओं जैसे – कृषि, उद्योग, ऊर्जा, पर्यावरण तथा स्वदेशी आदि के दृष्टिकोण से गोसंपदा की अत्यधिक महत्ता है। गोबर-गोमूत्र से बायोगैस, ऊर्जा, जैविक उर्वरक, रासायनिक विषाक्तता से मुक्त कीटनाशक तथा शुद्ध आयुर्वेदिक औषधियाँ प्राप्त होती हैं, गोरस-गोमय के अधिकतम उपयोग से गोसंपदा पर आधारित प्रदूषण मुक्त, स्वावलम्बी, स्वदेशी अर्थव्यवस्था को मूर्तरूप देकर गोपालन को लाभकारी उद्योग बनाकर बिना अधिक लागत के हमारे देश की गरीब जनता की गरीबी दूर करने तथा लाखों बेरोजगारों को काम दिलाकर बेरोजगारी दूर की जा सकती है तथा राष्ट्र की समृद्धि का आधार खड़ा किया जा सकता है।

**समस्याएँ एवं सुझाव** – आज का गोपालक गाय का महत्व सिर्फ दुध और



उपले तक ही समझ रहा है। आजकल चारागाह भूमि के विलुप्त होने की वजह से गाय पालन में आहार विहार से संबंधित समस्या का सामना करना पड़ रहा है, और गोपालन बोझिल कार्य होता जा रहा है। गाय को बिमारी से बचाने हेतु पर्याप्त उपचार का अभाव भी एक जटिल समस्या है। आज की सबसे बड़ी समस्या प्लास्टिक हैं, जिसे खाने से उनका दम घुटने लगता है। प्लास्टिक में मौजूद केमिकल्स की वजह से इंफेक्शन हो जाता है जिसके कारण कुछ समय बाद गाय की मौत हो जाती है। सरकार द्वारा बनाये गये गोसंरक्षण कानूनों का क्रियान्वयन सख्ती से न किया जाना भी हमारे देश की एक गंभीर समस्या है, जिसके कारण गायों के मांस का निर्यात बहुतायत में हो रहा है और हमारा देश बहुमुल्य गोवंश खो रहा है।

केन्द्र सरकार को स्पष्ट गोसुरक्षा अधिनियम बनाना चाहिये जिसके अन्तर्गत गोशालाओं का निर्माण किया जाना चाहिये, उन्हें संरक्षण प्रदान करना चाहिये। बायो गैस प्लांट लगाने हेतु ग्रामीणों को अधिक प्रोत्साहित किया जाना चाहिये, गोधन के खाने हेतु सरकार द्वारा उत्तम चारे की व्यवस्था की जाना चाहिये। गोधन को बीमारियों से बचाने हेतु उन्नत किस्म के टीको का निर्माण किया जाना चाहिये। अच्छी हवादार, शेडवाली, साफ सुथरी गोशालाओं का निर्माण किया जाना चाहिये तथा अयोग्य स्वअनुपयोगी गोधन को रखा जा सके तथा शासन की ओर से एक पशुचिकित्सक की नियुक्ति की जानी चाहिए और केन्द्रीय जेल भोपाल की तरह देश की सभी जेलों में गोशालाओं की स्थापना की जानी चाहिए। राष्ट्रीय स्वयंसेवक संघ प्रमुख मोहन भागवत ने कहा कि यह देखा गया है कि जेल में बंद कैदियों को जब गायों की देखभाल का काम दिया जाता है तब उनकी अपराधिक प्रवृत्ति में कमी आती है। जैविक खाद, जैविक कृषि को प्राथमिकता देनी चाहिये, विदेशों में आज जैविक खाद से उत्पन्न सब्जियों की मांग है। सरकार द्वारा स्वतः सुलभ एवं सस्ते गोबर, गोमूत्र से निर्मित जैविक खाद व कीटनाशक दवाईयों के निर्माण केन्द्र सरकारी व गैर-सरकारी स्तर पर खोले जाए। बायोगैस के उत्पादन और विपणन के क्षेत्र में सरकार को आगे आना होगा, ग्रामीण क्षेत्रों में गोबर गैस के प्लांट लगाकर उनका प्रदर्शन किया जाये व ग्रामीणों को इनके लाभों से अवगत कराया जाए। सभी को बताना चाहिये की गोसंपदा को बचाने के लिये प्लास्टिक पूर्ण तरह बंद होना बहुत जरूरी है देश के युवा वर्ग एवं महिलाओं को शिक्षा के माध्यम से जागृत करना होगा की गोसंपदा देश की अमूल्य धरोहर हैं जिससे देश, समाज, आम नागरिक सभी को आर्थिक मजबूती मिलती है, एवं स्वास्थ्य की दृष्टि से जैविक खेती बहुत ही अहम है।

**उपसंहार** - भारतीय संस्कृति कृषि संस्कृति ही है। भारतीय जीवन दर्शन,

कृषि दर्शन समान ही है। कृषि का आधार गोसंपदा रहा है। गोसंपदा देश का चेतन धन है। चेतन धन की रक्षा भारतीय संस्कृति का मंगलाचरण है। भारतीय अर्थव्यवस्था कृषि पर आधारित है। कृषि और गोसंपदा एक दूसरे के पूरक हैं तथा भारतीय कृषि अर्थव्यवस्था तथा ग्रामीण अर्थव्यवस्था में गोसंपदा का महत्वपूर्ण स्थान है। गोसंपदा के योगदान से न सिर्फ एक कृषक अपितु शहरी क्षेत्र के व्यक्ति भी स्वरोजगार संचालित कर रहे हैं और अच्छी आय अर्जित कर अर्थव्यवस्था में योगदान दे रहे हैं। संयुक्त राज्य अमेरिका के राष्ट्रपति श्री जार्ज डब्ल्यू बुश ने सभी विकसित राष्ट्रों से मीथेन फार्मिंग की जोरदार अपील की थी उन्होंने कहा था कि मीथेन फार्मिंग ही कच्चे तेल की असमान छूती कीमतों का मुकाबला कर सकेगी तथा खनिज तेल जिनके भण्डार, आने वाले कुछ समय में समाप्त हो सकते हैं, मीथेन गैस ही विकल्प के तौर पर उभर सकेगी।

गोमूत्र के गुणों के बारे में यदि बात की जाए तो उसके गुणों का व्याख्यान करना बहुत ही कठिन है आज गोमूत्र को अमेरिका से पेटेंट प्राप्त है। आज इन सब अनगिनत लाभों के पश्चात भी सरकार की कोई ठोस नीति गोपालन, गोवर्द्धन एवं गोरक्षण के लिए नहीं है। निःसंदेह देश का कृषक परिवार गोसंपदा से जुड़ा हुआ है, श्वेत क्रांति के माध्यम से उसकी आय में निरन्तर वृद्धि हुई है। वर्तमान में यहां तक कि जैविक खाद तो बनाया जाता रहा है साथ ही गोमूत्र से घातक बिमारियों के लिये भी औषधियां बनाई जा रही हैं। जिसमें ग्रामीण महिलाएं भी नारी सशक्तिकरण का परिचय देते हुए साथ दे रही हैं तथा हम देख सकते हैं कि बौद्धिक संपदा के वर्तमान दौर में गोसंपदा का आर्थिक महत्व बढ़ गया है और गोसंपदा का मुद्दा अब सांस्कृतिक और धार्मिक नहीं रह गया है, अब यह अर्थव्यवस्था का प्रश्न बन गया।

#### **सन्दर्भ ग्रंथ सूची :-**

1. गोसंवर्धन एवं जैविक कृषि विकास
2. पंचगव्य
3. गोहत्या-श्री मेघराज जी जैन, अध्यक्ष, गोसंवर्धन बोर्ड समिति
4. राष्ट्र के अर्थतंत्र का मेरुदण्ड गोशाला, गायत्री ट्रस्ट हरिद्वार द्वारा प्रकाशित।

#### **पत्रिकाएं एवं सामाचार पत्र -**

1. अहिसक खेती
2. गौसंरक्षण
3. दैनिक भास्कर
4. टाइम्स ऑफ इण्डिया

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## प्रधानमंत्री जन धन योजना (समस्याएँ एवं समाधान)

प्रो. ललित चौहान \*

**प्रस्तावना** - भारत देश में निरक्षर और श्रमिक व निर्धन वर्ग की एक बड़ी जनसंख्या ऐसी है जो बैंकिंग प्रणाली से अछूती थी। बैंक से दी जाने वाली सुविधाओं जैसे अपनी अतिरिक्त आय को बैंक में जमा करना आवश्यकता होने पर ऋण प्राप्त करना आदि से वंचित वर्ग के लिए प्रधानमंत्री श्री नरेन्द्र मोदी द्वारा 15 अगस्त 2014 को जन धन योजना की घोषणा की गई। ओर संपूर्ण देश में यह योजना 28 अगस्त 2015 से प्रभावी ढंग से लागू की गई। तब से अब तक निरंतर इस योजना के अंतर्गत बैंक खाते खोले जा रहे हैं एवं बैंक प्रणाली से वंचित वर्ग को बैंक सुविधाएँ मुहैया कराई जा रही हैं। प्राप्त जानकारी के अनुसार देश के लगभग 19 करोड़ वयस्कों का बैंक खाता नहीं है, हालांकि खाताधारकों की संख्या 2011 के 35 फीसदी से बढ़कर 2017 में 80 फीसदी हो चुकी है, विश्व बैंक की रिपोर्ट में यह जानकारी दी गई है। विश्व बैंक द्वारा जारी वैश्विक फाइनेक्स रिपोर्ट में कहा गया है कि भारत में वित्तीय समावेशन में तेजी से बढ़ोतरी हो रही है और खाताधारकों की संख्या जो 2011 में 35 फीसदी थी और 2014 में 53 फीसदी थी वह 2017 में बढ़कर 80 फीसदी हो गई है। योजनाएँ सदैव श्रेष्ठ उद्देश्यों को लेकर प्रारंभ की जाती हैं परंतु धरातल पर उन्हें क्रियान्वित करने में कई समस्याओं एवं कठिनाईयों का सामना करना होता है

**उद्देश्य** :- प्रस्तुत शोध का उद्देश्य जनधन योजना के अंतर्गत हितग्राहियों को खाता खुलवाने में किन समस्याओं का सामना करना पड़ता है। व्यवहारिक तौर पर उन्हें जन धन योजना के अंतर्गत खाता खुलवाने में आने वाली समस्याओं को रेखांकित करना है।

**शोध विधि** :- प्रस्तुत शोध हेतु प्राथमिक समकों का संकलन जन धन योजना हेतु खाता खुलवाने के लिए आवेदन करने वाले हितग्राहियों में से 100 हितग्राहियों का साक्षात्कार लेकर किया गया है।

**शोध सारांश** :- जन धन योजना के चरण:- प्रथम चरण (15 अगस्त 2014 से 14 अगस्त 2015)

बैंकिंग सुविधाओं तक सबकी पहुंच सुनिश्चित करना। 6 महीने बाद रुपये 10000 की ओवरड्रफ्ट सुविधा के साथ बुनियादी बैंक खाते ओर 2 लाख रुपये के अंतर्निहित दुर्घटना बीमा कवर के साथ रुपया डेबिट कार्ड ओर रुपया किसान कार्ड सुविधा प्रदान करना।

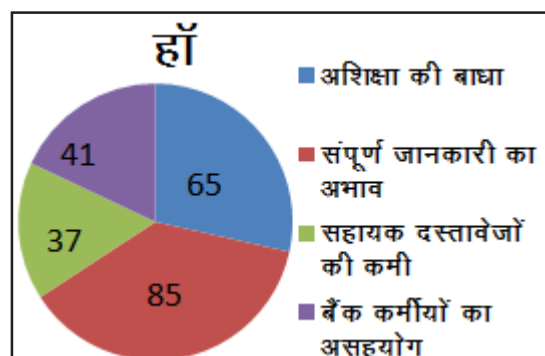
**जन धन योजना के चरण:- द्वितीय चरण (15 अगस्त 2015 से 15 अगस्त 2016)** - ड्राफ्ट खातों में चूक कवर करने के लिए क्रेडिट गारंटी फंड की स्थापना। सूक्ष्म बीमा स्वावलम्बन जैसी असंगठित क्षेत्र बीमा योजना। इसके अतिरिक्त इस चरण में पर्वतीय, जनजातीय और दुर्गम क्षेत्रों में रहने वाले परिवारों को शामिल किया जाएगा। इतना ही नहीं, इस चरण में परिवार के शेष व्यस्क सदस्यों और विद्यार्थियों पर भी ध्यान केंद्रित किया जाएगा।

### जन धन योजना के लाभ :

1. जन धन योजना के अंतर्गत खाता खुलवाने पर प्रत्येक खाताधारक को 30000 रु. की जीवन बीमा पॉलीसी प्रदान की जाती है।
2. इस योजना के अंतर्गत खाता खुलवाने पर प्रत्येक खाताधारक को 5000 रु. तक का ऋण लेने में आसानी होती है।
3. मोबाईल फोन के माध्यम से खाते की जानकारी प्राप्त की जा सकती है।
4. खाता धारक को रुपये कार्ड का निर्गमन किया जाता है जिससे वे ए.टी.एम. के माध्यम से रुपये की निकासी आदि कर सकते हैं।
5. इस खाते का सबसे महत्वपूर्ण लाभ यह है कि न्यूनतम शेष की बाध्यता यहां नहीं होती है।

### तालिका क्रमांक 01 - हितग्राहियों को योजना का लाभ लेने में आने वाली समस्याएँ

हितग्राहियों द्वारा खाता खुलवाने के दौरान देखी जाने वाली समस्याएँ	हाँ	नहीं	कुल
अशिक्षा की बाधा	65	135	200
संपूर्ण जानकारी का अभाव	85	115	200
सहायक दस्तावेजों की कमी	37	163	200
बैंक कर्मियों का असहयोग	41	159	200



### जन धन योजना के अंतर्गत खाता खुलवाने में हितग्राहियों को होने वाली समस्याएँ :

1. हितग्राहियों में जागरूकता का अभाव।
2. निरक्षरता के कारण हितग्राहियों को खाते का आवेदन फार्म भरने की समस्याओं का सामना करना पड़ता है।
3. सहायक दस्तावेजों जैसे वोटर कार्ड, आधार कार्ड एवं अन्य दस्तावेजों की अनुपलब्धता के कारण योजना का लाभ कई लोग नहीं ले पा रहे हैं।

4. योजना के अंतर्गत दिया जाने वाला ऋण अल्प राशि का है।
5. बैंक कर्मचारियों द्वारा आपेक्षित सहयोग नहीं मिल पाना भी एक समस्या है।

**सुझाव** - योजना का उचित एवं प्रभावी ढंग से प्रचार प्रसार किए जाने की आवश्यकता है ताकि अधिक से अधिक लोगों को योजना का लाभ मिल सके, सहायक दस्तावेजों की कमी होने पर इन दस्तावेजों की पूर्ति हेतु आवश्यक सहयोग आवेदनकर्ताओं को दिया जाना चाहिए, बैंकों में एक विशेष हेल्प डेस्क की व्यवस्था होना चाहिए जहाँ आवेदकों को आवेदन पत्र भरने, दस्तावेजों को सही क्रम में लगाने एवं योजना से जुड़ी विभिन्न जानकारी देने की व्यवस्था हो।

**निष्कर्ष** - प्रधानमंत्री जन धन योजना के दो चरणों में जो कार्य किए गए हैं वे सराहनीय हैं। प्रत्येक योजना का लाभ लेने के लिए आवश्यक प्रक्रियाएँ

पूर्ण करना होती हैं। इसी प्रकार जन धन योजना का लाभ लेने हेतु भी उचित आवश्यक प्रक्रिया का पालन करते हुए निर्धारित प्रारूप में बैंक में आवेदन करना होता है। यदि आवेदन करने की यह प्रक्रिया ओर सरल कर दी जाए एवं बीमा राशि एवं ऋण राशि में वृद्धि कर दी जाए तो यह योजना लक्षित वर्ग के लिए अत्यन्त महत्वपूर्ण एवं उन्हें आर्थिक रूप से सहारा देने वाली सिद्ध होगी।

#### संदर्भ ग्रंथ सूची :-

- 1 दैनिक भास्कर
- 2 पत्रिका
- 3 नव भारत टाइम्स
- 4 आगे आए लाभ उठाए मध्य प्रदेश प्रकाशन 2018।

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## महार अनुसूचित जाति के सामाजिक, शैक्षणिक एवं आर्थिक विकास में सूचना एवं संचार प्रौद्योगिकी के साधनों की उपयोगिता (इन्दौर जिले के विशेष संदर्भ में)

नयन इगंले \* डॉ. कुम्भन खण्डेलवाल \*\*

**शोध सारांश** - 21 वीं शताब्दी में सूचना एवं संचार प्रौद्योगिकी क्षेत्र का ही वर्चस्व रहेगा। सूचना प्रौद्योगिकी ने सम्पूर्ण विश्व को भूमण्डलीकृत कर दिया है। भारत में कम्प्यूटर का विकास 1955 ई. में शुरू हुआ, परन्तु 'राजीव गांधी' के प्रधानमन्त्रित्व काल में 1984 में ही इस प्रौद्योगिकी को पर्याप्त महत्व मिला। कम्प्यूटर के विकास ने सूचना एवं संचार प्रौद्योगिकी को नये आयाम दिए हैं। हमारे देश के लोग कम्प्यूटर के नेटवर्क इंटरनेट के द्वारा पारस्परिक सूचनाओं एवं आंकड़ों का आदान-प्रदान कर रहे हैं इसी तरह अनुसूचित जाति महार के लोग को भी इस क्षेत्र में अधिक से अधिक भागीदारी के लिये इसके बारे में मौलिक एवं आवश्यक जानकारी होना जरूरी है। कम्प्यूटर, दूरसंचार के विभिन्न माध्यमों- टेलिफोन, मोबाइल, उपग्रह-संचार, ऑप्टिकल फाइबर, दूरदर्शन, डाक आदि ने सम्मिलित रूप से सम्पूर्ण विश्व में सूचना-क्रान्ति का सूत्रपात किया है।

**शब्द कुंजी** - सूचना एवं प्रौद्योगिकी, अनुसूचित जाति महार, कम्प्यूटर एवं मोबाइल की उपयोगिता, सामाजिक, आर्थिक, शैक्षणिक।

**प्रस्तावना** - महार अनुसूचित जाति सामाजिक शैक्षणिक एवं आर्थिक विकास में सूचना एवं प्रौद्योगिकी के साधनों ने महत्वपूर्ण भूमिका निभाई है महार जाति के लोग सामाजिक, शैक्षणिक एवं आर्थिक कार्यों के लिये सूचना प्रौद्योगिकी का सहारा ले रहे हैं।

सामाजिक कार्यों को करते समय महार जाति के लोग एक दुसरे से सम्पर्क करने के लिये मोबाइल फोन, इंटरनेट और कम्प्यूटर जैसे साधनों का उपयोग कर रहे हैं कोई भी सामाजिक गति होती है तो वह उस कार्य के लिये मोबाइल के माध्यम से वाट्स अप ग्रुप का सहारा लेकर अपने समाज में चल रही गतिविधियों की जानकारी, जैसे कार्यक्रम, शौक संदेश, आने वाले अतिथियों एवं साथ ही महार समाज के लोगों द्वारा समाज के लिये किये गये अच्छे कार्यों का वाट्स अप एवं यू ट्यूब के माध्यम से प्रचार प्रसार किया जाता है।

शैक्षणिक कार्यों के लिये भी आजकल महार जाति के लोगों द्वारा सूचना एवं प्रौद्योगिकी के साधनों का उपयोग बहुत बड़ा है। फिर भी इस समुदाय का एक तकबा अभी भी ऐसा है जो इन कार्यों जैसे कम्प्यूटर शिक्षा के सम्बन्ध में जानकारी प्राप्त करने में असमर्थ है या उसे पढ़े लिखे अन्य लोगों की सहायता लेनी पड़ती है। जिसका बुरा प्रभाव यह होता है कि या तो उन्हें जानकारी सहि समय पर प्राप्त नहीं होने के कारण समझ नहीं पाते हैं क्योंकि शिक्षा के सम्बन्ध में कुछ जानकारी या अंग्रेजी में दी गई होती है बच्चों को भी वह किसी तरह सामान्य विद्यालयों में भेजते हैं जो हिन्दी मिडीयम के होते हैं और वहाँ भी अंग्रेजी का केवल एक ही पेरिड होता है जिसमें पढ़ाने वाले शिक्षक अंग्रेजी को पढ़ाने में निपुण नहीं होते हैं जिस के कारण उन्हें शिक्षा के माध्यम से कम्प्यूटर, मोबाइल से प्राप्त होने वाली शिक्षा सम्बन्धीत जानकारी को समझने एवं प्राप्त करने में अनेक कठनाईयों का सामना करना पड़ता है।

इसका प्रभाव उनके आर्थिक विकास में पड़ता है सूचना एवं प्रौद्योगिकी की उपयोगिता बहुत ही कम मात्र में प्राप्त होती है क्योंकि आज के समय में जो व्यक्ति कम्प्यूटर शिक्षा में निपुण नहीं है तो वह किस तरह से अपना अधिक से अधिक आर्थिक विकास कर पायेगा। महार जाति के लोगों को कम्प्यूटर शिक्षा और सूचना एवं प्रौद्योगिकी उचित जानकारी नहीं होने के कारण उन्हें रोजगार के अवसरों का भी नुकसान उठाना पड़ता है। और वह कम्प्यूटर एवं सूचना प्रौद्योगिकी से सम्बन्धीत व्यवसाय या नौकरीयों को प्राप्त करने में असफल हो जाते हैं। जिसके कारण यह कह सकते हैं कि सामाजिक, आर्थिक एवं शैक्षणिक रूप से बहुत पिछड़े जाते हैं।

फिर भी कहना पड़ेगा कि कम्प्यूटर एवं मोबाइल जैसी सूचना प्रौद्योगिकी के विकास वाले वातावरण में इन लोगों के द्वारा भले ही कम मात्रा में सूचना एवं प्रौद्योगिकी के साधनों का उपयोग किया जाता हो लेकिन उपयोग बढ़ा है सबसे ज्यादा उपयोग सामाजिक गतिविधियों में मोबाइल फोन का बढ़ा है किसी से भी किसी भी प्रकार की जानकारी प्राप्त करने जैसे सामाजिक कार्यक्रम आदि के लिये मोबाइल से बातचीत एवं वाट्स अप का उपयोग बढ़ा है। फिर भी शैक्षणिक एवं आर्थिक क्षेत्र में आज भी सूचना एवं प्रौद्योगिकी का क्षेत्र आज भी चिन्ता का विषय बना हुआ है।

**पुर्व-शोध** :-स्कूलों में सूचना और संचार प्रौद्योगिकी 'आई.सी.टी' एक केन्द्र प्रायोजित योजना है जो माध्यमिक विद्यालय के छात्रों को सूचना व संचार प्रौद्योगिकी आधारित शिक्षण सुविधा उपलब्ध कराने, उनमें उचित आईसीटी कौशल विकसित करने और अन्य संबंधित अवसर उपलब्ध कराने के उद्देश्य से दिसंबर 2004 में शुरू की गई थी योजना का उद्देश्य सामाजिक-आर्थिक और भौगोलिक कारणों से अनुसूचित जाति 'महार' के छात्र-छात्राओं के बीच इस योजना के अंतर्गत सुस्थिर कंप्यूटर प्रयोगशालाओं की स्थापना के लिए राज्यों व संघ शासित प्रदेशों को वित्तीय सहायता उपलब्ध कराई

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\*\* प्राध्यापक, अटल विहारी वाजपेयी शा. कला एवं वाणिज्य महाविद्यालय, इन्दौर (म.प्र.) भारत



जानी है। इस योजना का उद्देश्य केन्द्रीय विद्यालय और नवोदय विद्यालयों में स्मार्ट स्कूलों की स्थापना कर, स्कूली छात्रों के बीच में आईसीटी कौशल का प्रचार करना। यह योजना वर्तमान में सरकारी स्कूलों तथा सरकारी सहायता प्राप्त उच्च माध्यमिक विद्यालयों में कार्यान्वित की जा रही है।

केन्द्र सरकार ने राष्ट्रीय स्किलिंग मिशन के तहत कौशल विकास की योजना शुरू की है। इसके तहत वर्ष 2022 तक 50 करोड़ युवाओं को विभिन्न टेड में कौशल विकास किया जाएगा। योजना के तहत रोजगारपरक कार्यशालाएं की जाएगी जिसमें कौशल विकास परिषद् की सक्रिय भागीदारी होगी। योजना के तहत जिला व ब्लॉक स्तर पर प्रशिक्षण देने के लिए शिक्षण संस्थानों से आवेदन मांगे गए हैं। इसके लिए दो से पांच क्लास रूम, एक कम्प्यूटर लैब होना जरूरी है इसी बात से समझ आता है कि इसमें भी सूचना प्रौद्योगिकी से सम्बन्धित कोर्स है यह योजना अनुसूचित जाति के लोगों को भी प्राप्त होगी तो महार जाति के लोगों को भी मिलेगी इसकी जानकारी उन महार जाति के लोगों तक पहुंचना जरूरी है इन विधाओं में मिलेगा प्रशिक्षण - आइटी, टेलीकाम, बैंकिंग, एवं सुरक्षा आदि यह विधाएं सूचना एवं प्रौद्योगिकी से सम्बन्धित है। इन प्रयासों से महार समाज भी सूचना एवं प्रौद्योगिकी के क्षेत्र में आगे बढ़ेगा।

इस तरह कह सकते हैं सूचना प्रौद्योगिकी आंकड़ों की प्राप्ति, सूचना प्रौद्योगिकी आंकड़ों की प्राप्ति, सूचना संग्रह, सुरक्षा, परिवर्तन, आदान-प्रदान, अध्ययन, डिजाइन आदि कार्यों तथा इन कार्यों के निष्पादन के लिये आवश्यक कम्प्यूटर हार्डवेयर एवं सॉफ्टवेयर अनुप्रयोगों से सम्बन्धित है। सूचना प्रौद्योगिकी कंप्यूटर पर आधारित सूचना-प्रणाली का आधार है। एक उद्योग के तौर पर यह एक उभरता हुआ क्षेत्र है। अनेक तरह की दूरसंचारमय लिखित और दूरदर्शनमय संचार जो दृश्य और आवाज के रूप में लोगों की बिच में सूचना एवं डाटा का आदान प्रदान करने में सहायक हो यह सब सूचना प्रौद्योगिकी ही देन है।

सूचना प्रौद्योगिकी हर क्षेत्र में उपयोगी और क्रियाओं की दृष्टि से महत्वपूर्ण मानी गयी है। कार्ड की प्रक्रिया कम्प्यूटरीकृत बैंकिंग के लिए एक महत्वपूर्ण इकाई है आवश्यकतानुसार ग्राहकों द्वारा प्रयोग में लाए जाते हैं। जैसे - क्रेडिट कार्ड, डेबिट कार्ड, स्मार्ट कार्ड, एवं ए.टी.एम आदि का उपयोग भी आवश्यकतानुसार ग्राहकों द्वारा प्रयोग में लाए जाते हैं।

जिसमें अनुसूचित जाति के लोग और महार जाति के लोगों के लिये भी इस क्षेत्र में बहुत सम्भावनाएं हैं जिस पर ध्यान दिया जाना चाहिए।

#### अध्ययन के उद्देश्य :

1. महार जाति के उत्थान में सूचना प्रौद्योगिकी की भूमिका का अध्ययन करना।
2. महार जाति के उत्थान में कम्प्यूटर मोबाईल की भूमिका का अध्ययन करना।
3. सूचना एवं प्रौद्योगिकी के उपयोग में आने वाली समस्याओं का अध्ययन करना।

#### परिकल्पनाएँ :

1. महार जाति के विकास में कम्प्यूटर की अपेक्षा मोबाईल का अधिक मात्रा में उपयोग।
2. महार जाति के लोगों द्वारा सूचना एवं प्रौद्योगिकी के उपयोग को वर्तमान में और अधिक सामाजिक, शैक्षणिक एवं आर्थिक क्षेत्र में उपयोगी बनाना।

**प्रदत्त संकलन** - इन्दौर जिले में निवासरत 150 महार अनुसूचित जाति के

व्यक्तियों का अध्ययन किया गया।

**अध्ययन का विश्लेषण** - प्रस्तुत शोध प्राथमिक समकों पर आधारित है। मध्य प्रदेश के इन्दौर जिले को समग्र मानते हुए सविचार निर्देशन पद्धति के माध्यम से इन्दौर जिले का अध्ययन किया गया है।

#### तालिका क्रमांक - 1 : मोबाईल एवं कम्प्यूटर के उपयोग की स्थिति सामाजिक सूचनाओं के आदान प्रदान के क्षेत्र में

क्र.	आवृत्ति	आवृत्ति	प्रतिशत
1	मोबाईल का उपयोग	121	80.67
2	कम्प्यूटर का उपयोग	17	11.33
3	किसी साधन के उपयोग की जानकारी नहीं	12	8.00
4	कुल	150	100

स्रोत- प्राथमिक सर्वेक्षण पर आधारित समंक विश्लेषण।

उक्त तालिका से स्पष्ट होता है कि सर्वाधिक 79.33 प्रतिशत लोग सामाजिक गतिविधियों में मोबाईल का उपयोग करते हैं अतः स्पष्ट है कि मोबाईल का उपयोग कम्प्यूटर की अपेक्षा ज्यादा है।

#### तालिका क्रमांक-2 : उत्तरदाता द्वारा शैक्षणिक क्षेत्र में मोबाईल एवं कम्प्यूटर पर इन्टरनेट का उपयोग की स्थिति

क्र.	विवरण	आवृत्ति	प्रतिशत
1	मोबाईल का उपयोग	52	34.67
2	कम्प्यूटर का उपयोग	16	10.66
3	किसी साधन के उपयोग की जानकारी नहीं	82	54.67
4	कुल	150	100

स्रोत- प्राथमिक सर्वेक्षण पर आधारित समंक विश्लेषण।

उक्त तालिका से स्पष्ट होता है कि सर्वाधिक 34.67 प्रतिशत लोग शिक्षा सम्बन्धीत गतिविधियों में मोबाईल का उपयोग करते हैं अतः स्पष्ट है कि मोबाईल का उपयोग कम्प्यूटर की अपेक्षा ज्यादा है। इस में अधिकांश 54.67 प्रतिशत महार जाति के लोगों को शिक्षा के रूप में ज्ञान प्राप्त करने के लिये सूचना एवं प्रौद्योगिकी के उपयोग की जानकारी नहीं है।

#### तालिका क्रमांक -3 : उत्तरदाताओं द्वारा रोजगार, व्यापार, एवं आर्थिक कार्यों को करने के लिये या आय प्राप्त करने के लिये या आर्थिक क्रिया को करते समय मोबाईल एवं कम्प्यूटर के उपयोग की स्थिति

क्र.	विवरण	आवृत्ति	प्रतिशत
1	मोबाईल का उपयोग	96	64.00
2	कम्प्यूटर का उपयोग	8	5.33
3	किसी साधन के उपयोग की जानकारी नहीं	46	30.67
4	कुल	150	100

स्रोत- प्राथमिक सर्वेक्षण पर आधारित समंक विश्लेषण।

उक्त तालिका से स्पष्ट होता है कि सर्वाधिक 64 प्रतिशत महार लोग आर्थिक गतिविधियों में मोबाईल का उपयोग करते हैं अतः स्पष्ट है कि मोबाईल का उपयोग कम्प्यूटर की अपेक्षा ज्यादा है।

**निष्कर्ष** - अतः हम कह सकते हैं कि सूचना एवं प्रौद्योगिकी के इस वर्तमान जिवन में इस की उपयोगिता दिन ब दिन बढ़ती ही जा रही है जिसके कारण सूचना एवं प्रौद्योगिकी जिवन के प्रत्येक क्षेत्र में बहुत महत्वपूर्ण भूमिका निभा रही है। प्रत्येक समाज के लोग इस के महत्व को जानने और समझने लगे हैं इसी तरह महार जाति के लोग भी सामाजिक, शैक्षणिक एवं आर्थिक क्षेत्र में सूचना एवं प्रौद्योगिकी का उपयोग करने के लिये लगातार जागरूक

हो रहे हैं फिर भी महार जाति को आगे बढ़ाने के लिये इस दिशा में और अधिक ध्यान देने की जरूरत है खासतौर से शिक्षा एवं आर्थिक क्षेत्र में और अधिक महार जाति के लोगो को सूचना एवं प्रौद्योगिकी के क्षेत्र में ध्यान देने की आवश्यकता है। यह तभी संभव होगा जब सरकार एवं अन्य समाज मिलकर इन को आगे बढ़ाने का कार्य करेगा तभी महार जाति के लोग इस क्षेत्र में पूरी तरह से परिपक्व हो सकेंगे।

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## अनुसंधान और नवाचार : मुद्दे, समस्याएँ और चुनौतियाँ

मोहम्मद सगीर\* डॉ. दिपेश आर. उपाध्याय\*\*

**शोध सारांश -** परिवर्तन ही प्रकृति का नियम है इस कथन से हम सभी भली-भांति परिचित हैं। अनुसंधान और नवाचार से हम पुराने परम्परागत तौर तरिकों को एक नयी दिशा प्रदान करते हैं। जब तक किसी क्षेत्र में परिवर्तन नहीं होगा तब तक उसमें प्रगति नहीं होगी हमारे आसपास सामाजिक, औद्योगिक, शिक्षा, कृषि आदि ऐसे क्षेत्र हैं जिनमें कई नए परिवर्तन हुए हैं और आगे भी निरंतर होते रहेंगे। आज यदि हम इन क्षेत्रों में आगे बढ़ना चाहते हैं तो इस प्रतिस्पर्धी युग में हमें नई पद्धतियों को अपनाना होगा हमें ऐसे अनुसंधान और नवाचार की आवश्यकता होगी जो कि प्रयोगात्मक, व्यवहारवादी, अनुभवात्मक हो क्योंकि किसी भी क्षेत्र के लाभार्थी द्वारा इस प्रकार के नए परिवर्तन को अपनाना भी किसी चुनौती से कम नहीं होता किसी भी क्षेत्र में परिवर्तन को आसानी से स्वीकार्य नहीं किया जाता इसके लिए उन्हें विश्वास में लेना तथा इसके लिए प्रोत्साहित करना एक कठिन कार्य है सरकार द्वारा इस हेतु अनेक ऐसे शासकिय और अशासकिय प्रयास किये जाते हैं जिनमें की अनुसंधान और नवाचार को लाभार्थियों तक पहुँचाया जा सके। भारत सरकार द्वारा अटल टिकरिंग लैब की शुरुआत स्कुलो से कि गई अब तक लगभग 3000 स्कुलों में अटल टिकरिंग लैब काम कर रहे हैं। इसमें रोबोटिक्स, थ्री-डी. प्रिंटिंग, हैकेथॉन का आईडिया, ऑटोमेटिड इंटेलिजेंस जैसे आधुनिक उपकरण स्कुलों को उपलब्ध कराये गए हैं। इस प्रकार के शासकिय प्रयासों के साथ साथ अशासकिय प्रयास भी एन. जी. ओ. संस्थाओं के साथ मिलकर चलाए जा रहे हैं। जिसके माध्यम से लाभार्थियों के साथ विचार विमर्श करके अनुसंधान और नवाचार को उनके समक्ष सही तरीके से प्रस्तुत किया जा सके। हमें इस प्रतिस्पर्धी युग में आधुनिक पद्धतियों को अनुसंधान और नवाचार के माध्यम से ही अपनाने में मदद मिलेगी। जिससे एक अभिनव समाज की स्थापना की जा सके।

**शब्द कुंजी -** इनोवेट, अभिनव, लाभार्थियों, व्यवहारवादी, अनुभवात्मक, तथ्यपरक।

**प्रस्तावना -** अनुसंधान एक महत्वपूर्ण तत्व है जिसके द्वारा नवाचार को प्राप्त किया जा सकता है। प्रतिस्पर्धी अर्थव्यवस्था में नवाचार का स्थान एक ऐसे द्वार के समान है जिसमें प्रवेश कर रचनात्मक रोजगार के अवसर और उच्च जीवन स्तर प्राप्त किया जा सकता है। भारत एक विशाल देश है इसमें अनेक ऐसे क्षेत्र जैसे - शिक्षा, कृषि, सामाजिक और औद्योगिक आदि। जिनमें नवाचार हेतु अनुसंधान की अति आवश्यकता है। हमारे द्वारा चयनित मुद्दा कृषि संबंधित अनुसंधान है जो कि एक महत्वपूर्ण बिन्दु है। भारत में लगभग 75 प्रतिशत जनसंख्या प्रत्यक्ष एवं अप्रत्यक्ष रूप से कृषि पर आधारित है। परन्तु परम्परागत कृषि प्रणाली समस्याग्रस्त है। इसका समाधान संरक्षित खेती है। जिसका सबसे अच्छा उदाहरण ग्रीन हाउस एवं पॉली हाउस है। कृषि में नवाचार लाने पर हम हमारे प्राकृतिक संसाधनों का प्रयोग एक नई दिशा में कर सकेंगे जिससे की उत्पादन में वृद्धि होने की संभावनाएँ बढ़ जाती हैं। शिक्षा के क्षेत्र में अनुसंधान और नवाचार करके यह संभव है कि देश में आधुनिक कृषि पद्धति को कृषकों तक पहुँचाया जा सके। **लाभार्थियों** को ऐसी शिक्षा मिल सके जिससे की प्रयोगात्मक अनुसंधान करके वह अपने विचारों को सार्थक कर सके। और यह कृषि, उद्योग और अन्य क्षेत्रों में भी हमें एक नयी विचारधारा से जोड़ने में सहायक होंगे। व्यापार में भी कई बदलाव हुए जैसे पहले वस्तु विनिमय हुआ करता था फिर उसमें मुद्रा का चलन आया जिससे विनिमय आसान हुआ अब वर्तमान में एक नवीन परिवर्तन ऑन लाइन व्यापार के रूप में देखा जा रहा है यह तभी संभव हो सका जब नवाचार पर अनुसंधान हुआ। आज हमारे देश के लिए अनुसंधान और इनोवेशन महत्वपूर्ण है, **इनोवेशन** सबसे जरूरी है।

**इनोवेट** नहीं होगा तो सतत विकास की कल्पना नहीं की जा सकती। एक **अभिनव** समाज के माध्यम से ही हम प्रगति कर सकते हैं।

**मुद्दे -** अनुसंधान और नवाचार एक ऐसी क्रिया है जिसके माध्यम से किसी भी क्षेत्र में परिवर्तन लाया जा सकता है। अनुसंधान और नवाचार में सैद्धान्तिक समस्याएँ, व्यवहारिक समस्याएँ, प्रायोगिक समस्याएँ, शिक्षा, मनोविज्ञान, समाज विज्ञान, औद्योगिक विकास आदि मुद्दों पर परिवर्तन की आवश्यकता है। अनुसंधान और नवाचार इन प्रत्येक मुद्दों पर लाभार्थियों को सही दिशा ज्ञान प्रदान करेंगे। नवप्रवर्तन के द्वारा हम प्रत्येक क्षेत्र में ऐसी क्रांति ला सकते हैं जिससे उत्पादन और उत्पादकता में वृद्धि होती है। आज के प्रतिस्पर्धी युग में नवाचार और अनुसंधान ही एक ऐसी कुंजी है जिसका प्रयोग सामाजिक क्षेत्र, औद्योगिक क्षेत्र, कृषि एवं विज्ञान के क्षेत्र में परिवर्तन लाया जा सकता है। हमें अनेक प्रकार की समस्याओं का समाधान अनुसंधान और नवाचार के प्रयोगात्मक तरीके को अपनाकर ही करना होगा। इन क्षेत्रों में कई ऐसे मुद्दे हैं जो कि नवाचार और अनुसंधान पर निर्भर हैं। प्रत्येक क्षेत्र में अनुसंधान और नवाचार करने से उनसे संबंधित समस्याओं का अध्ययन करना अत्यंत महत्वपूर्ण है ताकि सही दिशा में उद्देश्य की प्राप्ति की जा सके।

**समस्याएँ और चुनौतियाँ -** अनुसंधान और नवाचार को संस्थाओं द्वारा संबंधित करने की आवश्यकता है। संस्थागत रूप से अनुसंधान कार्यक्रमों में निरंतरता है। सार्वजनिक विचार विमर्श, नियमित रूप से प्रचार प्रसार, शासकिय योजनाओं के बारे में विस्तृत और सरल जानकारी प्रदान न करना, शासकिय प्रयासों के साथ गैर शासकिय प्रयासों एन. जी. ओ. के माध्यम से प्रयोगात्मक अनुसंधान पर क्रियांवयन योजनाओं का सही तालमेल न

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हो पाना। विशेष क्षेत्रों में अनुसंधान क्षमता का आंकलन नहीं किया जाता जिससे की लक्ष्य प्राप्ति में बाधाएँ उत्पन्न होती हैं। ये सभी बिन्दुओं अनुसंधान और नवाचार के आयाम में सामाजिक, आर्थिक समस्याएँ और चुनौतियाँ हैं।

#### उद्देश्य :

1. अनुसंधान और नवाचार का अध्ययन करना।
2. अनुसंधान और नवाचार में शासकीय प्रयासों का अध्ययन करना।
3. अनुसंधान और नवाचार के साथ कृषि क्षेत्र में भी कई परिवर्तन हुए हैं, जिससे कृषकों की आर्थिक स्थिति में हुए परिवर्तन का विस्तृत अध्ययन करना इस शोध पत्र का उद्देश्य है।

#### परिकल्पना :

1. अनुसंधान और नवाचार से आर्थिक और सामाजिक स्थिति में सुधार होता है।
2. अनुसंधान और नवाचार को अपनाने में लाभार्थी स्वयं को अक्षम मानते हैं।
3. अनुसंधान और नवाचार से आधुनिकरण को बढ़ावा मिलता है।

**निष्कर्ष** – अतः कहा जा सकता है कि अनुसंधान कार्य करके नवाचार को प्रयोग में लाने से शिक्षा, औद्योगिक, सामाजिक और कृषि इत्यादि के क्षेत्र अत्याधिक प्रभावित हुए हैं। इस कारण अनुसंधान और नवाचार का कृषि में प्रयोग की अधिक संभावनाएँ हैं। पॉली हाउस के प्रयोग ने अब कृषकों में व्यवहारवादी, अनुभवात्मक शोध को सरल, तथ्यपरक एवं वैज्ञानिक

बना दिया है। अनुसंधान एवं नवाचार कृषि के क्षेत्र में विकासात्मक कार्यों द्वारा सकारात्मक प्रयोगों से रोजगार निर्माण की अनेक संभावनाएँ उद्घटित होने जैसे परिणाम प्राप्त होने की संभावनाएँ हैं। इससे शोध निष्कर्ष अधिक विश्वसनीय होने लगे हैं। तथा उनके द्वारा आधुनिक कृषि को अपनाया जाने लगा है। उनके जीवन स्तर में सुधार आया है।

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## पश्चिम निमाड़ की जनजातीय संस्कृति की सामाजिक स्थिति का चित्रण

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**शोध सारांश** - प्रस्तुत शोध आलेख में पश्चिम निमाड़ की जनजातीय संस्कृति की सामाजिक स्थिति का चित्रण किया गया है। संस्कृति यानि जीवनशैली। प्रत्येक समुदाय की अपनी एक संस्कृति होती है और जो प्रत्येक मनुष्य के साथ इस संसार में जन्म के साथ ही जुड़ जाती है। जिस प्रकार भारतीय संस्कृति की विशेषता अनेकता में एकता है उसी प्रकार भारत के हर अंचल में आदिवासियों का पहनावा, उसे पहनने का तरीका एवं अलंकरण शैली भिन्न है। जनजातियों का अस्तित्व अति प्राचीनकाल से चला आ रहा है, जहा एक ओर सुदूर जंगलों, पहाड़ों पर बसे जनजातीय जीवन का अपना सांस्कृतिक एवं सामाजिक, ऐतिहासिक गौरव है, तो दूसरी ओर मूलभूत सुविधाओं की वंचना में अपने अस्तित्व को बचाए एवं बनाए रखने की संघर्षरत परिलक्षिता भी है। यह प्रारंभ से ही दूरस्थ एवं निर्जन स्थानों पर निवास करते रहे हैं। परिणामस्वरूप आदिवासियों पर नगरीय सभ्यता एवं विकास का बहुत कम प्रभाव पड़ा है। आदिम समाजों में जादूटोना का महत्व बहुत अधिक है। आदिवासियों के कलात्मक क्रियाकलापों में संगीत एवं नृत्य के अलावा कहावतों एवं पहेलियों का भी काफी मात्रा में प्रचलन पाया जाता है।

**शब्द कुंजी** - जनजाति, आदिवासी, भील, भीलाला, समाज, आवास, लोककथाएँ।

**प्रस्तावना** - भारत एक विशाल देश है जिसमें अनेक विविधताएँ हैं। यहाँ अनेक धर्म, मत, सम्प्रदाय, प्रजाति एवं जाति के लोग निवास करते हैं। यहाँ की सम्पूर्ण जनसंख्या का लगभग 8.8 प्रतिशत भाग आदिम जातियों द्वारा निर्मित है। 2001 की जनगणना के अनुसार भारत में 8.50 करोड़ जनसंख्या जनजातियों की थी जो बढ़कर 2011 में 8,43,26,240 हो गई।

भारत में 'ट्राईब' शब्द के स्थान पर अब 'शेड्यूल्ड ट्राईब' मानक शब्द का प्रयोग होने लगा है जिसे हिन्दी में 'अनुसूचित जनजाति' अनुदित किया गया है।

**गिलिन और गिलिन** - स्थानीय जनजातीय समूह का एक ऐसा समुदाय जनजाति कहा जाता है, जो एक सामान्य क्षेत्र में निवास करता है तथा जिसकी एक समान संस्कृति है।

भारतीय संविधान के 16 वें अनुच्छेद की धारा 330 में उल्लेख किया गया है कि-राष्ट्रपति को यह अधिकार है कि समय-समय पर आदिम जातियों अथवा आदिम समुदायों अथवा इनके कुछ वर्गों अथवा समूहों को अनुसूचित घोषित करें तथा संविधान के उद्देश्यों के लिए इसी घोषणा के आधार पर उन्हें अनुसूचित आदिम जातियों कहा जाएगा।

जनजातियों का अस्तित्व अति प्राचीनकाल से चला आ रहा है। एकलव्य नामक एक भील जिसने द्रोणाचार्य को अपना अंगूठा अर्पित कर दिया था, दंत कथाओं में एक आदर्श शिष्य के रूप में वर्णित किया गया है। मुंडा एवं नागाओं ने कौरवों की ओर से पाण्डवों के विरुद्ध लड़ने का दावा किया है। भीम का पुत्र घटोत्कच, जिसने युद्ध में असाधारण वीरता का प्रदर्शन किया था, का जन्म भीम की जनजातीय पत्नी से हुआ था। अर्जुन ने एक नागा राजकुमारी चित्रांगदा से विवाह किया था। इस तरह यह पता चलता है कि जनजातियों का अस्तित्व अति प्राचीनकाल से चला आ रहा है।

ऐतिहासिक काल के प्रारंभिक चरण में आक्रमणकारियों एवं मूल सामाजिक शक्तियों द्वारा छोटी जनजातीय टुकड़ियों को पराधीन बनाया गया। अजातशत्रु ने वैशाली जनजातीय गणतंत्र को विनष्ट कर दिया। सिंकदर ने उत्तर पश्चिमी सीमाओं पर जनजातियों का सफाया कर दिया। निशाद जनजाति ने प्रारंभिक स्थिति खो दी और यह आखेट से अपना जीवनयापन करने लगे।

युगों से जनजातीय लोग भारतीय समाज की आदिकालीन इकाई के प्रमुख मूल निवासी माने जाते हैं। एक ओर सुदूर जंगलों, पहाड़ों पर बसे जनजातीय जीवन का अपना सांस्कृतिक एवं सामाजिक, ऐतिहासिक गौरव है, तो दूसरी ओर मूलभूत सुविधाओं की वंचना में अपने अस्तित्व को बचाये एवं बनाये रखने की संघर्षरत परिलक्षिता भी है। यह प्रारंभ से ही दूरस्थ एवं निर्जन स्थानों पर निवास करते रहे हैं, परिणामस्वरूप आदिवासियों पर नगरीय सभ्यता एवं विकास का बहुत कम प्रभाव पड़ा है।

जनजातियों का शोषण से मुक्ति दिलवाने एवं उनकी सांस्कृतिक धरोहर को सुरक्षित रखने के उद्देश्य से 1874 में ब्रिटिश सरकार द्वारा शेड्यूल्ड डिस्ट्रिक्ट एक्ट लागू किया गया जिसके द्वारा इनके अधिकारों की सुरक्षा की गई। इस प्रकार स्वतंत्रता से पूर्व जनजातियों के विकास हेतु नाममात्र के प्रयत्न किये गये, परिणामस्वरूप आदिवासी देश की मुख्य धारा से कटे रहे।

प्रदेश में आदिवासी जनजातियाँ बहुत सी उप-जनजातियों में विभाजित हैं, जो स्वयं अपने आप में एक जनजातीय समूह बनाती हैं।

**भील** - भील शब्द की उत्पत्ति तमिल भाषा के बिल्लुपर शब्द से हुई है, जिसका अर्थ धनुष है। चूंकि ये लोग धनुषधारी होते हैं, अतः इन्हें भील कहा जाता है। दूसरे शब्दों में बहेलिया शब्द का अपभ्रंश है। भील जिसका शाब्दिक अर्थ शिकारी होता है।

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**भिलाला** – भील से ही भिलाला जाति की उत्पत्ति हुई है। शारीरिक रूप से सुदृढ़ और साहसिक होने के कारण इनको राजपूत राजाओं से स्नेह प्राप्त था। अमूमन भील राजपूत राजाओं की सेना में हुआ करते थे। राजपूत और भीलों के सम्बंध में कालांतर में रोटी-बेटी तक के रिश्ते होते चले गये।

**पटलिया** – जिस प्रकार भीलों से भिलालों की उत्पत्ति हुई, ठीक उसी प्रकार भील एवं भिलालों से पटलिया जाति की उत्पत्ति हुई। मुख्यतः यह जाति सर्वाधिक परिष्कृत, उन्नत और सात्विक रही है, ये भगत कहलाते हैं। कृषि पर विशेष ध्यान देते हैं।

**आदिवासी विकास एक परिचय** – मनुष्य एक सामाजिक प्राणी है। समाज में सदस्य के रूप में उनका इतिहास छोटे-छोटे कबीलों में प्रारम्भ हुआ था। इन लघु समाजों को प्रकृति के विभिन्न तत्वों एवं वनों में विचरण करने वाले अन्य प्राणियों से मात्र अस्तित्व के लिए भी संघर्ष के एक अत्यन्त लम्बे दौर से गुजरना पड़ा। ऐतिहासिक विकास क्रम में उस समय एक नया चरण आया, जब विभिन्न आदिवासी समाज सीमित साधनों पर प्रभुत्व के लिए एक-दूसरे से स्पर्धा करने लगे। यह प्रतिस्पर्धा और संघर्ष हजारों वर्षों तक चलता रहा। मानव के इतिहास में अभी हाल ही में पश्चिमी देशों में औद्योगिक क्रांति ने एक ऐसी नयी शक्ति तथा कार्यप्रणाली को जन्म दिया है, जिससे हमारा समाज विश्व-समाज के रूप में एक विषालतम पैमाने पर संगठित होता जा रहा है।

**आदिवासियों के आवास** – आवास मानव की मूलभूत आवश्यकता है। आवास का तात्पर्य रहने के लिए मकान से है। व्यापक अर्थों में आवास का अर्थ एक ऐसे मकान से है, जो आरामदायक हो, व्यक्तियों की आवश्यकताओं के अनुरूप हो और जहाँ उसके परिवार के सदस्य आराम से रह सकें।

सामान्यतः आदिवासियों के आवास बिखरी हुई अवस्था में पाये जाते हैं। सामान्यतः भीलों के मकान दूर-दूर स्थित होते हैं, किन्तु भिलालों व पटलियों के मकान पास-पास या झुण्ड बनाकर रहते हैं। आदिवासियों के मकान मुख्यतः मिट्टी व पत्थर के बने होते हैं। वर्तमान स्थिति में कुछ परिवर्तन हुआ है। अब जो आदिवासी आर्थिक स्थिति से थोड़ा बहुत सुदृढ़ हुए हैं उनके मकान ईंट, पत्थर व सीमेन्ट के बने हैं। गोबर से लिपी हुई छत पत्तों से ढंकी हुई जिसे स्थानीय बोली में टापरी कहते हैं।

गांवों में आदिवासियों के घर अत्यंत साधारण देखे गये हैं। भिलाला, भील और बारेलाल लोग पहाड़ी, टेकरियों पर झोपड़ियाँ बनाना पसंद करते हैं। वन प्रांतर में एक-एक अथवा दो-दो फर्लांग पर इनके निवास देखे जा सकते हैं। कभी-कभी लगातार चार-चार और पाँच-पाँच घर भी एक-दूसरे के साथ बने हुए दिखाई देते हैं। इस प्रकार उनकी बसने की पद्धति अपने-अपने खेत पर अलग-अलग अपनी झोपड़ी बांधकर रहना है, एक जगह गांव के रूप में समूह में बसने की पद्धति नहीं है। अब वे 10-15 के समूह में बसने लगे हैं, जो कि इसे फलिया कहलाता है। स तरह अलग-अलग बसने के कारण गांव फल्याओं में बंटा होता है। हर एक गांव में एक मुखिया होता है, जिसे पटेल कहते हैं। भील, भिलाल और बारेलालों की आवास व्यवस्था बड़ी ही विचित्र और सरल ढंग की देखने को मिलती है। जंगल से काटकर लायी गयी चार मोटी बल्लियाँ सुविधानुसार नापकर जमीन में गाड़ दी जाती हैं। ऊपर आड़े रखकर बांस ठोक दिए जाते हैं तथा आसपास बांस की खपच्चियों के टटे बांधकर उस पर मिट्टी थाप दी जाती है। छत सम्भव हुआ तो कवेलुओं से ढंक दी जाती है, नहीं तो खाखरे और सागौन के पत्तों अथवा घास-फूस से ढंक देने की परम्परा सदियों पुरानी है।

भीलों की अपेक्षा भिलाले और बारेलाल अपने आवास को थोड़ा सजा-सवार कर रखते हैं। राजपूत वर्ग के भिलाले मिट्टी की दीवारों पर पीली मिट्टी अथवा गोबर आदि से लीप-पोत कर सुन्दर बनाने हैं। भीलों के अधिकांश झोपड़े बांस के टट्टों अथवा तुवर काठी के झांझ से तैयार किए जाते हैं। भिलाला और बारेलाल वर्ग के झोपड़े थोड़े अव्यवस्थित और छतें कवेलू से ढंकी हुई होती हैं।

गांव में भील, भिलाल और बारेलाल परिवारों में कठोर पितृ सत्तात्मक व्यवस्था होती है। यहाँ पर परिवार में पिता को असाधारण अधिकार प्राप्त होते हैं। भिलाला और बारेलालों में संयुक्त परिवार प्रणाली प्रचलित है प्रायः ऐसे संयुक्त परिवार में चार-चार पीढ़ियों के सदस्य एक साथ रहते हैं। परिवार के मुखिया को संयुक्त परिवार की सम्पत्ति बेचने का अधिकार होता है। भीलों के संयुक्त परिवार इससे भिन्न होते हैं। यहाँ शादी के पश्चात् लड़का पिता से अलग रहने लगता है और पास में ही घर बसाकर अपनी पत्नी और बच्चों के साथ रहने लगता है। पिता उसे कुछ जमीन और जानवर जीविकोपार्जन के लिए दे देता है। उससे यह आशा की जाती है कि वह आर्थिक दृष्टि से पिता पर निर्भर नहीं रहेगा, लेकिन उस पर पिता का नियंत्रण फिर भी बना रहता है। पिता अपने पृथक् रहने वाले पुत्रों और उसके परिवार के सदस्यों के आचरण और व्यवस्था पर पूरा नियंत्रण रखता है। संयुक्त परिवार में कम से कम 10 से 12 सदस्य होते हैं।

**एकाकी परिवार** – गांवों में भील जनजाति में अधिकांश परिवार एकाकी ही देखे गये हैं जबकि भिलाला और बारेलाल में नहीं। घर के बड़े लड़के का जैसे ही विवाह होता है, वैसे ही मुखिया लड़के का झोपड़ा अलग तैयार कर देता है।

**आदिवासियों में जादू-टोना** – जादू-टोना आदिमकालीन मानवों के धर्म का एक अभिन्न हिस्सा है। यह धर्म के साथ घुला-मिला हुआ है। जादू के अंतर्गत भूत-प्रेत, विद्या एवं जादू-टोना आदि का समावेश होता है। आदिम समाजों में इसका महत्व बहुत अधिक है। विभिन्न रोगों का उपचार करने, महामारी रोकने, समय पर वर्षा होने, फसल अच्छी होने तथा प्रसव कष्टमुक्त होने के लिये विभिन्न धार्मिक क्रियाओं के साथ-साथ जादू-टोने का सहारा लिया जाता है।

आदिम समाज के लोग कल्पित एवं दंत कथाओं को नाटक के रूप में प्रस्तुत करते हैं, हालांकि ये नाटक रंगमंच पर खेले जाने वाले नाटकों से बिल्कुल भिन्न प्रकार के होते हैं। समस्त ग्रामवासी एक बाड़े में एकत्रित हो जाते हैं तथा संगीत एवं नृत्य के साथ नाटक खेले जाते हैं। नाटक के अलावा जनजातीय समाजों में कहावतों तथा पहेलियों का भी काफी मात्रा में प्रचलन पाया जाता है। ये उनकी संस्कृति की धरोहर के रूप में मौखिक रूप से पीढ़ी दर पीढ़ी चली आ रही है, परंतु नगरीकरण, संस्कृतिकरण एवं औद्योगिकरण के फलस्वरूप इनका हास होता जा रहा है। अब ये लोग इन्हें भूलते जा रहे हैं।

आदिवासियों के कलात्मक क्रियाकलापों में संगीत एवं नृत्य का भी महत्वपूर्ण स्थान है। ये जनजातीय समाज के अभिन्न अंग रहे हैं। संगीत एवं नृत्य ही दूरस्थ स्थानों में मनोरंजन का एकमात्र साधन हैं। अनेक धार्मिक एवं सामाजिक अवसरों पर जनजातीय गांवों में स्त्री-पुरुष एवं बच्चे एकत्रित होते हैं, जहाँ संगीत एवं नृत्य का आयोजन होता है। आदिवासियों की इस कला से बाहरी जगत का उतना अधिक परिचय नहीं हो पाता जितना कि उनकी सामाजिक एवं आर्थिक व्यवस्था से हुआ। जैसा कि डब्ल्यू. जी. आर्थर ने लिखा है 'कुछ दिनों पूर्व तक भारतीय जनजातियों की कविता सभी जिज्ञासुओं के लिये वर्जित प्रदेश थी। अधिकतर विद्वान इसे बकवास मानते

थे। लेकिन यह एक मिथ्या धारणा थी, जिसमें धीरे-धीरे अध्ययन, संपर्क एवं आदिवासी जनजीवन को वास्तव में पहचानने के दृष्टिकोण में परिवर्तन लाने में सफलता प्राप्त की। वैरियर एल्विन ने मध्यप्रदेश की जनजातियों का अध्ययन कर उनकी कलाकृतियों को स्पष्ट रूप से सामने रखा है।

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## सांप्रदायिक सद्भाव में शिक्षा की भूमिका

डॉ. जगदीश मेहरा \* डॉ. उदय कालभर \*\*

**प्रस्तावना -** साम्प्रदाय का अर्थ है- विशेष रूप से देने योग्य, सामान्य रूप से नहीं अर्थात् हिन्दूमातावलम्बी के घर में जन्म लेने वाले बालक की हिन्दू धर्म की ही शिक्षा मिल सकती है, दूसरे को नहीं। इस प्रकार से साम्प्रदायिकता का अर्थ हुआ एक पन्थ, एक मत, एक धर्म या एक वाद। न केवल हमारा देश ही अपितु विश्व के अनेक देश भी साम्प्रदायिक हैं। अतः वहाँ भी साम्प्रदायिक है। अतः वहाँ भी साम्प्रदायिकता है। इस प्रकार साम्प्रदायिकता का विश्व व्यापी रूप है। इस तरह यह विश्व चर्चित और प्रभावित है।

**सांप्रदायिक सद्भाव का अर्थ:-** राष्ट्रीय साम्प्रदायिक सद्भाव फाउण्डेशन की सोच है भारत सांप्रदायिक और अन्य सभी प्रकार की हिंसा से मुक्त रहे। जहाँ सभी नागरिक, विशेष रूप से बच्चे और युवा शांति और सद्भाव के साथ रहे। इसके लिए फाउण्डेशन साम्प्रदायिक सद्भाव को बढ़ावा देती है, राष्ट्रीय एकता को सुदृढ़ करती है और सामूहिक सामाजिक कार्यों और जागरूकता कार्यक्रमों के जरिए विविधता में एकता की भावना को मजबूत करती है तथा हिंसा के शिकार लोगों की मदद करती है। ताकि देश की सुरक्षा शांति और खुशहाली के लिए विभिन्न धर्मों के लोगों के बीच आपस में विचार विमर्श होता रहे। फाउण्डेशन हिंसा के शिकार बच्चों को उनकी देखभाल, शिक्षा और प्रशिक्षण के लिए आर्थिक सहायता देती है ताकि उनका ठीक ढंग से पुनर्वास हो सके। साम्प्रदायिक सद्भाव और संगठनों और संस्थाओं के साथ मिलकर कई प्रकार की गतिविधियों का आयोजन करती है। अहिंसा तथा विवादों को निपटने के सिद्धान्तों में विश्वास बढ़ाने के कार्यों को प्रोत्साहन देती है। जब कोई संप्रदाय स्वयं को सर्वश्रेष्ठ और अन्य संप्रदायों को निम्न मानने लगता है, तब सांप्रदायिकता का जन्म होता है। दूसरी तरफ भी कम अंधे लोग नहीं होते। परिणामस्वरूप एक संप्रदाय के अंधे लोग अन्य धर्मांधों से भिड़ पड़ते हैं और सारा जन-जीवन लहलुहान कर देते हैं। इन्हीं अंधों को फटकारते हुए महात्मा कबीर ने कहा है- हिंदू कहत राम हमारा, मुसलमान रहमान। धर्मों संप्रदायों के लोगों के प्रति समानता, सहिष्णुता बनाए रखने की शिक्षा देते हैं। कुछ धार्मिक पंथ या संप्रदाय तो बने ही मानवता की सेवा या विशेष धर्मों की रक्षा के लिए थे पर सत्ता की भूख, अपने को अलग, विशिष्ट और महान समझने की भूल वस्तुतः अच्छे लोगों को भी भड़काकर गुमराह कर दिया करती है। सत्ता के भूखे कुछ राजनीतिक लोग जब धार्मिक बाने पहन या ओढ़कर धर्म-स्थलों और धार्मिक भावनाओं को अपवित्र करने लगते हैं, सांप्रदायिक भेदभाव भड़काने लगते हैं, तब तक उस सबका प्रभाव विशाल ही हुआ करता है, अनुभव बताते हैं और यह बात कई बार स्पष्ट भी हो चुकी है। इस विषय से बचने में ही सारी

मानवता की भलाई है। अपना धर्म और राष्ट्र भी इस बार भी देखना पड़ता, इतना निश्चित है। इतिहास गवाह है कि केवल एक बार सांप्रदायिकता के विश्व के प्रभाव से हमें ऐसा झटका खाना पड़ा है कि उसके घाव कभी भी भर नहीं सकते। यह झटका इस देश को अंग्रेजी साम्राज्यवाद ने दिया और सांप्रदायिकता के आधार पर ही यह देश 1947 में दो भागों में बटकर रह गया। इस प्रकार का विभाजन आज तक के विश्व के इतिहास में एक अभूतपूर्व घटना मानी गई है। यह ठीक है कि भारत बंट गया, उसका एक बहुत बड़ा भाग एक सांप्रदायिक देश एवं संस्कृति का रूप ले गया पर मूल भारतीय आत्मा ने सांप्रदायिकता के भाव को फिर भी बेहतर करने व प्रगति के पर्याप्त अवसर मिले। वे यह भी समझते हैं कि सांप्रदायिक हिंसा व तनाव भड़कने से देश व समाज की प्रगति में बाधा पड़ती है। ऐसी समझ व्यापक स्तर पर होने के बावजूद संकीर्ण व साम्प्रदायिक सोच के संगठन बड़ी चालाकी से तनाव व तरह-तरह के संदेह उत्पन्न करते हैं। वे ऐसा प्रचार प्रसार बहुत चालाकी से करते हैं, जिनसे समस्याओं के बुनियादी कारण छिप जाए व समस्याओं के लिए किसी अन्य समुदाय को दोष देने की प्रवृत्ति बड़ जाये इसके लिए बड़े योजनाबद्ध ढंग से तैयारी की जाती है कि किस तरह का प्रचार-प्रसार करना है। इस प्रयास में तथ्यों, मिथकों, मनगढ़त बातों, भ्रांतियों का मिला जुला प्रयास केवल इस मकसद से किया जाता है कि कठिनाइयों के लिए दोष दूसरे धार्मिक जातीय समुदाय को दिया जा सके। इस तरह के संगठनों के प्रयास निरंतरता से चलते रहते हैं।

**साम्प्रदायिक के दुष्प्रभाव:-** साम्प्रदायिकता के अर्थ आज पूरे हो गये हैं। इससे आज चारों ओर भेदभाव, नफरत और कटुता का जहर फैलता जा रहा है। साम्प्रदायिकता से प्रभावित व्यक्ति, समाज और राष्ट्र एक दूसरे के प्रति असद्भावों को पहुँचाता है। धर्म और निति जब मदान्धता को चुन लेती है। तब वहाँ साम्प्रदायिकता उत्पन्न हो जाती है। उस समय धर्म धर्म नहीं रह जाता है वह तो काल का रूप धारण करके मानवता को ही समाप्त करने पर तुल जाता है। सज्जन तो साम्प्रदायिकता ढंगों को भड़काने में विशेष हिस्सा लेते रहे हैं, अखबार वाले हैं। पत्रकारिता का व्यवसाय, किसी समय बहुत उच्चा समझा जाता था। आज बहुत ही गंदा हो गया है। यह लोग एक-दूसरे के विरुद्ध बड़े मोटे-मोटे शिर्षक देकर लोगों की भावनाएँ भड़काते हैं और परस्पर सर फुटौवल करवाते हैं। एक दो जगह ही नहीं कितनी ही जगहों पर इसलिये दंगे हुए हैं कि स्थानिय अखबारों ने बड़े उत्तेजनापूर्ण लेख लिखे हैं। ऐसे लेखक बहुत कम हैं जिनके दिल व दिमाग ऐसे दिनों में भी शांत रहे हो। अखबारों का असली कर्तव्य शिक्षा देना, लोगों से संकिर्णता निकालना, साम्प्रदायिक भावनाएँ हटाना, परस्पर मेल मिलाप बढ़ाना और भारत की



साझी राष्ट्र सहयता बनाना था लेकिन इन्होंने अपना मुख्य कर्तव्य अज्ञान फैलाना, संकीर्णता का प्रचार करना, साम्प्रदायिकता बनाना, लड़ाई-झगड़े करवाना और भारत की साझी राष्ट्रीयता को नष्ट करना बना लिया है। तीसरा दुष्परिणाम यह है कि इस तरह के बड़ते साम्प्रदायिक तनावों के कारण वैसा सामाजिक माहोल नहीं बन सकेगा जो टिकाऊ तथा व्यापक आर्थिक विकास के लिए जरूरी है। तनाव के माहोल में आर्थिक निवेश की कमी आती है। देश के विभिन्न समुदायों से कुशल श्रम, हुनर, उद्यम व पुंजी के लिए अधिकतम सहयोग प्राप्त नहीं हो पाता है। इस तरह के आर्थिक विकास के कार्यों में बाधा पहुंचती है। इस तरह सामाजिक दुख दर्द व तनावों को कम करने के लिए, सामाजिक समरसता को बढ़ाने के लिए, राष्ट्रीय सुरक्षा को मजबूत करने के लिए व आर्थिक विकास हेतु अनुकूल सामाजिक माहोल बनाने के लिए सभी दृष्टिकोण से राष्ट्रीय एकता व सद्भावना को उच्च प्राथमिकता देना जरूरी है।

**राष्ट्रीय एकता और धार्मिक सद्भाव:-** माजूदा दौर में संकीर्ण सांप्रदायिक तत्वों के अनेक बेहद हानिकारक परिणाम सामने आ रहे हैं। देश के अनेक भागों में विभिन्न समुदायों के लिए जीवन अधिक असुरक्षित हो गया है अपनी सुरक्षा को लेकर लोग तनावग्रस्त जीवन जीने को मजबूर हैं। सभी समुदायों को न केवल अमन-शांति व सुरक्षा का माहौल मिलना चाहिए, अपितु साथ में समता व न्याय भी मिलने चाहिए। सविधान ने धर्म के आधार पर किसी भी भेदभाव को मजबूती से अस्वीकृत कर दिया, सभी समुदायों की धार्मिक स्वतंत्रता व कानून के सामने समानता का पूरा आश्वासन दिया है। धर्मों के उन्माद फैलाकर सत्ता करने की हर कोशिश साम्प्रदायिकता को बढ़ाती है, चाहे वह कोशिश किसी भी व्यक्ति, समूह या दल के द्वारा क्यों न होती हो। थोक के भाव वोट हासिल करने के लिए धर्म-गुरुओं और धार्मिक भावनाओं का स्तेमाल लगभग सभी दल कर रहे हैं। इसमें धर्म निरपेक्षता की बात कहने वाले राजनीतिक दल भी शामिल हैं। इन दलों ने चुनाव में साम्प्रदायिक दलों के साथ समझौते भी किए हैं। और सत्ता हासिल करने के लिए समझौते भी किए हैं, सत्ता में इनके साथ साझेदारी की है। यदि धर्म निरपेक्षता की बात कहने वाले दलों ने मौकापरस्ती की यह राजनीति नहीं की होती तो धर्म-सम्प्रदायि धारित राजनीति करने वालों को इतना बढ़ावा हर्गिज नहीं मिलता। जब धर्म-सम्प्रदाय की राजनीति होगी तो साफ है कि समझ से अधिक खुली साम्प्रदायिक ताकतवर बनेगी।

**साम्प्रदायिक सद्भाव और राष्ट्रीय एकता:-** हमारे देश भाषाई, ईलाकाई और जातीय स्तर पर, तथा रहन-सहन के तौर-तरिकों, रीति-रिवाज-त्योहारों, और मौसमों में भी हमें अपने देश में जबरजस्त विविधता नजकमाती है। 1652 भाषाओं और बोलियों, तथा 25 लिपियों का हमारा देश 30 लाख वर्ग किलोमीटर से भी अधिक में फैला है। क्षेत्रफल के लिहाज में दुनिया में हमारा सातवाँ स्थान है। दुनिया का शायद ही कोई धर्म होगा जिसे मानने वाले भारत में न हों। यहाँ भाँति-भाँति की नस्लों, जातीयों वर्गों के लोग बसते हैं। सन् 2002 के आस-पास एंथ्रोमॉलॉजिकल सर्वे ऑल इण्डिया के मुताबिक हमारे देश में 4635 विभिन्न समुदाय हैं जिनकी अपनी-अपनी अनुवांषिक विशेषताएँ, भाषाएँ, पहनावे पूजा-पाठ की विधियाँ, खान-पान रिस्तेदारी और शादी ब्याह की रीतियाँ हैं। शायद हमारे देश की इसी विविधता को देखते हुए ब्रिटेन के नेता विन्सटन चर्चिल हमारी आजादी में भी पहले यह कहने के लिए उत्तेजित हुए थे कि एक बार अंग्रेज भारत से चले गये तो भारत के लिए अस्तित्व में बना रहना सम्भव नहीं होगा। विविधताओं के इस रूप-आकार को देखते हुए खुद-ब-खुद सवाल खड़े होते हैं कि ऐसे देश में राष्ट्रीय

एकता का अर्थ और स्वरूप क्या होगा? इस सवाल का जवाब हमें अपने पिछले 67 साल के इतिहास में ही नहीं, पिछली कई सदियों के इतिहास में मिलता है, जिसे जानना हमारे लिए बहुत जरूरी है। और इसी ऐतिहासिक पृष्ठभूमि में हम इस विषय को देखेंगे तो हमारे लिए बहुत सी बातें स्पष्ट होंगी। लेकिन सब से पहले हम अपने लिए कुछ परिभाषाओं को स्पष्ट कर लें। हम 'सम्प्रदाय' शब्द की ओर ध्यान दे तो इस की आम-साधारण प्रचलित व्याख्या विशेष धार्मिक मत के रूप में की जाती है। लेकिन बृहत् हिन्दी कोष में हमें 'सम्प्रदाय' शब्द के अन्य अर्थ भी मिलते हैं- यानी यगुरु परंपरा से प्राप्त मंत्र, सिद्धान्त आदि, तथा परंपरागत विश्वास या प्रथा। इसी प्रकार 'मत' को परिभाषित किया जाता है 'विचार, सिद्धान्त' के रूप में, 'धर्म मत' और 'पंथ' पंथ के रूप में। सद्भाव को हम परिभाषित करेंगे 'नेकमिजकाजी' 'सज्जनता', 'दयालुता' के अर्थ में - यानी किसी दूसरे के प्रति अच्छी भावना रखना। सीमित सन्दर्भ में 'सम्प्रदाय' शब्द को किसी विचार, सिद्धान्त, परम्परागत विश्वास या प्रथा पर आधारित 'विशेष धार्मिक मत' के रूप में परिभाषित कर लेते हैं।

### वर्तमान में समस्याएँ:

1. साम्प्रदायिकता है- अपनी पूजा-पाठ उपासना विधियों, खान-पान, रहन-सहन के तौर तरिकों, जाति नस्ल आदि की भिन्नताओं को ही धर्म का आधार मानना तथा अपनी मान्यता वाले धर्म को सर्वश्रेष्ठ और दूसरी मान्यता वाले धर्मों को निकृष्ट समझना, उनके प्रति नफरत द्वेष-भाव पालना और फैलाना अपने लिए श्रेष्ठता और दूसरों के प्रति निकृष्टता का यही भाव हमारी सामाजिक विघटन का मूल कारण है, क्योंकि इससे आपसी सामाजिक रिश्ते टूटते हैं। परस्पर शंका-अविश्वास के बढ़ने से सामाजिक विभाजन इतना अधिक हो जाता है कि अलग-अलग धर्मों को मानने वालों कि बस्तियाँ एक-दूसरे से अलग-थलग होने लगती हैं। यह अलगाव कई आर्थिक, राजनीतिक, सांस्कृतिक कारणों से जुड़कर देश के टूटने का कारण बनता है
2. हमारा समाज, हमारा देश एक बार इस प्रकार की अलगाववादी-प्रवृत्ति का शिकार होकर विघटन के अत्यंत दुखान्त दौर से गुजर चुका है। क्या हम उसे फिर दोहराया जाना देखना-भोगना चाहते हैं? यदि नहीं तो फिर धर्म के आधार राज्य और राष्ट्र की बात जिस किसी भी धर्म वाले के द्वारा क्यों न कही जाती हो, हम उसका डटकर विरोध क्यों नहीं करते? सोचिये, क्या धर्म के नाम पर राष्ट्र की बात कहने या उसका समर्थन करने से अन्ततः हम उस मान्यता के ही पक्षधर नहीं बनते, जिसमें धर्म की अलग राष्ट्र का आधार माना गया था और जिस मान्यता के कारण भारत विभाजन हुआ था?

**समस्याओं का समाधान:-** साम्प्रदायिकता देश की अस्मिता के लिए बड़ी चुनौती बन चुकी है। यह देश इस के कारण अनेक बार और अनेक वर्षों तक पराधीन रहा है। सांप्रदायिकता राष्ट्रीय भावना के उदय होने में सबसे बड़ा अवरोध है। सांप्रदायिकता से देश की स्वतंत्रता के लिए बहुत बड़ा संकट है। जब सांप्रदायिकता की महामारी इतनी विकराल एवं भयावह है तो इसका निदान अवश्य खोजा ही जाना चाहिये। इसी के निदान के लिए हमें इसके कारणों की खोज करना चाहिये और इसके प्रसारण के क्या कारण हैं उन पर कारगर प्रतिबंध लगाये जाने चाहिये। साम्प्रदायिक तत्व अफवाहों के सहारे इसका प्रसार करते हैं। इसके प्रसार के कारणों को रोका जाना चाहिये। साम्प्रदायिकता के विरुद्ध धर्म निरपेक्षता एक कारगर प्रयास है इस लिये धर्म निरपेक्षता का प्रचार-प्रसार होना चाहिये। साम्प्रदायिकतावाद परम्परावाद की जड़ से निकलता है। परंपराओं के प्रति मोह साम्प्रदायिकता को जन्म देता है। यही सही है कि परंपरा में कुछ ऐसे जीवन तत्व होते जा रहे

सामाजिक चेतना के अंग होते हैं पर इन परम्पराओं को इतना स्वार्थपरक बना दिया गया है। साम्प्रदायिकता की समस्या तब तक नहीं सुलझ सकती, जब तक कि धर्म के ठेकेदार उसे सुलझाना नहीं चाहते। यदि सभी धर्मों के अनुयायी दूसरों के मत का सम्मान करें, उन्हें स्वीकारें, अपनाएँ उनके कार्यक्रमों में सम्मिलित हों, उन्हें उत्सवों पर बधाई देकर भाईचारे का परिचय दें। विभिन्न धर्मों के संघर्षों को महत्व देने की बजाय उनकी समानताओं को महत्व दे तो आपसी झगड़े पैदा ही नहीं होंगे। कभी-कभी ईद-मिलन या होली-दिवाली पर ऐसे दृष्टि दिखाई देते हैं तो एक सुखद आशा जन्म लती है। साहित्यकार और कलाकार भी सांप्रदायिकता से मुक्ति दिलाने में योगदान कर सकते हैं।

**साम्प्रदायिक सद्भाव में शिक्षा की भूमिका:-** शिक्षक का ध्येय बच्चों का चरित्र निर्माण करना तथा ऐसे मूल्यों का रापना होना चाहिए जिससे कि उनके सीखने की क्षमता में वृद्धि हो। वे उनमें वह आत्मविश्वास पैदा करें कि छात्र कल्पनाशील और सृजन बन सके। इस रूप में छात्रों का विकास ही उन्हें भविष्य की चुनौतियों का सामना करते हुए प्रतिस्पर्द्धा में उतारेगा। सामान्य प्रक्रिया में शिक्षक कुछ सर्वोत्तम परिणाम देने वाले छात्रों की और आकर्षित होते हैं तथा और अधिक सफलता प्राप्त करने के लिए उन्हें प्रोत्साहित करते रहते हैं। इसका विपरीत एक शिक्षक की अहम भूमिका यह है कि वह उन विद्यार्थियों की और ध्यान केन्द्रित करे जो पढ़ने में कमजोर हैं तथा उनमें बेहतर समझदारी एवं सीखने की प्रवृत्ति विकसित करने का प्रयास करे। ऐसा शिक्षक ही वास्तविक गुरु होता है।

**एक शिक्षक होने के नाते सद्भाव बनाए रखने में योगदान:-** हमारे देश के एक महान नेता थे भिमराव अम्बेडकर। अंबेडकर के नाम का महत्व पूरा नाम भिमराव में निहित है। भिमराव अछूत कही जाने वाली एक जाती के विद्यार्थी तथा अंबेडकर उनके उच्चवर्ण के ब्राम्हण शिक्षक। शिक्षक अम्बेडकर अपने विद्यार्थी भीमराव का बहुत ध्यान रखते थे। वह न सिर्फ अपने विद्यार्थी को अपना ज्ञान देते थे, अपितु खाने के लिए अपने भोजन का एक हिस्सा भी उसे दे देते थे। पढ़ाई समाप्त करने के बाद जब भीमराव बैरिस्टर बने तो अपने उस गुरु को याद रखने के लिए अपना नाम बदलकर भीमराव अम्बेडकर रख लिया। शिक्षक के गुण: महान शिक्षक एवं भारत के भूतपूर्व राष्ट्रपति डॉ. सर्वपल्ली राधाकृष्णा शिक्षकों को सलाह देते थे कि- 'हमें सतत् बौद्धिक निष्ठा एवं सार्वभौम करुणा की खोज में रहना चाहिए। ये दोनों गुण किसी सच्चे शिक्षक की पहचान है।' एक शिक्षक में अपने पेशे के प्रति प्रतिबद्धता होनी चाहिए। अगर आप निष्ठावान नहीं हैं तो किसी भी दूसरी चीज का कोई अर्थ नहीं है। इस कथन से एक समीक्षात्मक संदेश मिलता है। अगर समाज में एक लाख योग्य, चरित्रवान एवं निष्ठावान छात्र हो जाएं तो वर्तमान कमजोर समाज को प्रत्येक पांच वर्ष में एक सुखद झटका दिया जा सकता है और यह कार्य शिक्षक, जो गुरु है, प्रेरणास्त्रोत हैं, वही कर सकते हैं। शिक्षक दिवस: डॉ. सर्वपल्ली राधाकृष्ण हमारे देश के राष्ट्रपति भी रहे हैं और एक श्रेष्ठ अध्यापक भी। उनका जन्म पांच सितम्बर को हुआ था। जब भी कभी उनके जन्म दिन को सार्वजनिक रूप से मनाने की बात कही जाती थी तो वे कहते थे कि मेरा जन्म दिन नहीं, पांच सितम्बर को अध्यापक दिवस ही मनाए

जिससे सभी अध्यापकों को सम्मान मिले। छात्र-छात्राओं को तो यह दिन बड़े ही उत्साह से मनाना चाहिए और मेरी दृष्टि में छात्रों के अभिभावकों को इसमें पूरे उत्साह के साथ भाग लेना चाहिए। देश के प्रत्येक स्कूल पांच सितम्बर को अध्यापक दिवस बड़े उत्साह के साथ आयोजित करें। इस दिन हम अपने अध्यापकों को सम्मान करे कि कैसे उन्होंने अपना पूरा जीवन देश की भावी पीढ़ी के निर्माण में लगाया है और उनके पढ़ाये हुए छात्र किस प्रकार जिम्मेदार नागरिक बनकर समाज और राष्ट्र की सेवा कर रहे हैं।

#### सांप्रदायिक एकता पर नारे:

1. सभी धर्म की एक पुकार, एकता को करो साकार,
2. अनेकता में एकता यही भारत की विशेषता।
3. 'ह' से हिन्दू, 'म' से मुसलमान और हमसे सारा हमारा हिन्दूस्तान।
4. जाति पाती तोड़ दो भेदभाव तुम छोड़ दो।
5. हमारा हे एक ही नारा, भाईचारा भाईचारा।
6. जात-पात के बंधन तोड़ो भारत जोड़ो भारत जोड़ो।
7. देश हमारा हिन्दुस्तान, रखेंगे हम उसकी शान।
8. हमलावर खबरदार, हिन्दुस्तान हैं तैयार।
9. घर-घर से आयी आवाज, बनायेंगे हम नया समाज।
10. करें हम ऐसा काम, बनी रहेगी देश की शान।
11. शांति मानव का धर्म है, अशांति अधर्म है।
12. अमरावती हो या अमृतसर, सारा देश अपना घर।
13. गौतम, गांधी और नेहरू का यह देश, एकता का देता संदेश।

**निष्कर्ष:-** साम्प्रदायिकता मानवता के नाम पर कलंक है यदि इस पर यथाशीघ्र विजय नहीं पाई गई तो यह किसी को भी समाप्त करने से बाज नहीं आएगा। साम्प्रदायिकता का जहर कभी उतरता नहीं अतएव हमें ऐसा प्रयास करना चाहिए कि यह कहीं किसी तरह से फैले ही नहीं। हमें ऐसे भाव पैदा करने चाहिए जो इसको कुचल सके। समस्त नागरिकों सामाजिक, आर्थिक और राजनीतिक न्याय, विचार, अभिव्यक्ति, विश्वास, धर्म और उपासना की स्वतंत्रता, प्रतिष्ठा और अवसर की समता प्राप्त करने के लिए तथा उन सब में व्यक्ति की गरिमा और (राष्ट्र की एकता और अखंडता) सुनिश्चित करने वाली बंधुता बढ़ाने के लिए दृढ़ संकल्प करें। देश के सभी धर्मों को अपनी धार्मिक आजादी को बनाये रखने का अधिकार दिया गया है। स्वतंत्रता के बाद से अब तक पिछले 65 वर्षों में इस दिशा में लगातार प्रयास किये जाते रहे हैं ताकि सांप्रदायिक बिछड़ने न पाये। सरकार ने सांप्रदायिक सौहार्द को बनाए रखने के लिए संवैधानिक, कानूनी, प्रशासनिक, आर्थिक एवं अन्य कदम उठाकर अपने प्रतिबद्धता की पुष्टि की है। सांप्रदायिक सद्भाव को कायम रखना और साम्प्रदायिक गड़बडीयों और उपद्रवों की रोकथाम करना तथा किसी भी ऐसी गड़बडी पर नियंत्रण करने और प्रभावित लोगों की सुरक्षा और राहत पहुंचाने के उपाय करना मुख्य रूप से राज्य सरकार की जिम्मेदारी है।

#### संदर्भ ग्रंथ सूची :-

1. व्यक्तिगत शोध के आधार पर।

## बालिकाओं के मानव अधिकारों के प्रति जागरूकता का तुलनात्मक अध्ययन

सुनील कुमार पाटीदार \*

**शोध सारांश** – प्रस्तुत पत्रक में शासकीय एवं अशासकीय विद्यालय की बालिकाओं में मानव अधिकारों के प्रति जागरूकता लाना है। बालिकाओं को मानव अधिकार की शिक्षा प्राथमिक कक्षा से ही देना चाहिए ताकि वह युवा होने तक अपने मानव अधिकारों को अच्छी तरह से समझ कर और अपनी नैतिक जिम्मेदारी मान कर लोगों के साथ हो रहे अन्याय के विरुद्ध लड़कर उन्हें भी मानव अधिकारों की जानकारी देकर जागरूक कर सके। मानव अधिकार जो केवल मानवों के लिए बनाये गये हैं। जिससे प्रत्येक मनुष्य प्रभावित होता है चाहे वह स्त्री हो पुरुष हो या बालक हो। मानव अधिकार सबके लिए समान होते हैं।

**प्रस्तावना** – ‘हम सब बराबर  
बराबर हमारे अधिकार’ – म.प्र. मानव अधिकार आयोग  
‘जी हां मानवाधिकारों की घोषणा सभी व्यक्तियों को सभी अधिकारों  
के प्रारूप पर आधारित है, परंतु दुर्भाग्यवश आज भी हमें इसे कार्य व्यवहार  
में लाना बाकी है।’

कोफी अन्नान, 16 मार्च 1998, मानवाधिकार आयोग अधिवेशन,  
जिनेवा आज के बालक कल के नागरिक है, उन्हीं के कंधों पर कल के भारत  
का भार है वे ही आने वाले समय के नेता हैं उन्हीं पर राष्ट्र का गौरव एवं  
गरिमा निर्भर है। शासकीय एवं अशासकीय विद्यालयों की बालिकाओं को  
अंतर्राष्ट्रीय स्तर पर मानव अधिकारों का संरक्षण एक अहम विषय रहा है।  
संयुक्त राष्ट्र संघ की स्थापना से लेकर आज तक मानव अधिकार के संरक्षण  
को अधिक महत्व दिया जा रहा है। शिक्षा ही एक ऐसी साधन है जिसके  
द्वारा संस्कृति का प्रसार करके एक पीढ़ी से दूसरी पीढ़ी तक पहुंचाया जा  
सकता है। शिक्षा नागरिकों का व्यक्तित्व गढ़कर उसे मानवव्यापी गुणों से  
विभूषित करती है। शिक्षा बालिकाओं की मानव अधिकारों की जितनी अच्छी  
होगी वह राष्ट्र उतना ही सम्पन्न एवं विकासशील होगा। मनुष्य के अस्तित्व  
एवं सर्वांगीण विकास के लिए मानवाधिकार परम आवश्यक है। हमारा कर्तव्य  
है कि हम प्राथमिक स्तर से ही बालिकाओं को मानव अधिकारों से परिचित  
कराये। जब तक छात्राओं एवं संपूर्ण समाज को मानव अधिकारों का ज्ञान  
नहीं होगा तब तक उनके पालन की उम्मीद नहीं की जा सकती है। अतः  
शिक्षा के प्रत्येक स्तर पर मानव अधिकार की शिक्षा प्रदान करना अत्यंत  
आवश्यक है।

**उद्देश्य** – शोधकर्ता ने शोध के लिए अधोलिखित चार उद्देश्य निर्धारित किए  
हैं –

1. शासकीय एवं अशासकीय विद्यालयों में अध्ययनरत बालिकाओं में  
समान शिक्षा के अधिकार संबंधी जागरूकता का तुलनात्मक अध्ययन  
करना।
2. शासकीय एवं अशासकीय विद्यालयों में अध्ययनरत बालिकाओं में  
मनुष्य की स्वतंत्रता पर तथा प्रतिष्ठा एवं अधिकारों में समानता संबंधी  
जागरूकता का तुलनात्मक अध्ययन करना।

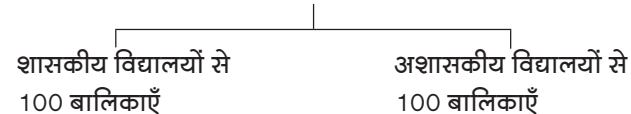
3. शासकीय एवं अशासकीय विद्यालयों में अध्ययनरत छात्राओं में  
शारीरिक मानसिक एवं बौद्धिक विकास में समानता संबंधी जागरूकता  
का तुलनात्मक अध्ययन करना।
4. शासकीय एवं अशासकीय विद्यालयों में अध्ययनरत बालिकाओं में  
अमानवीय व्यवहार एवं आर्थिक, शारीरिक दण्ड का समान अधिकारों  
संबंधी जागरूकता का तुलनात्मक अध्ययन करना।

**शोध परिकल्पना** – प्रस्तुत शोध समस्या में निम्न परिकल्पनाओं का निर्माण  
किया गया है –

1. शासकीय एवं अशासकीय विद्यालयों में समान शिक्षा के अधिकारों  
संबंधी जागरूकता के स्तर में सार्थक अंतर नहीं है।
2. शासकीय एवं अशासकीय विद्यालयों में अध्ययनरत छात्राओं में मनुष्य  
स्वतंत्रता तथा प्रतिष्ठा एवं अधिकारों संबंधी जागरूकता के स्तर में  
सार्थक अंतर नहीं है।
3. शासकीय एवं अशासकीय विद्यालयों में अध्ययनरत छात्राओं में  
शारीरिक, मानसिक एवं बौद्धिक विकास में समान अधिकारों संबंधी  
जागरूकता के स्तर में सार्थक अंतर नहीं है।
4. शासकीय एवं अशासकीय विद्यालयों में अध्ययनरत छात्राओं में  
अमानवीय व्यवहार एवं आर्थिक शारीरिक दण्ड का समान अधिकार  
संबंधी जागरूकता के स्तर में सार्थक अंतर नहीं है।

**न्यादर्श** – शोधकर्ता ने अपने अध्ययन को पूर्ण करने के लिए इन्दौर के  
शासकीय एवं अशासकीय विद्यालयों में अध्ययनरत कक्षा 9वीं की 200  
बालिकाओं का चयन यादृच्छिक प्रतिदर्श के आधार पर बालिकाओं के मानव  
अधिकार के प्रति जागरूकता के लिए किया गया है।

न्यादर्श 200 बालिकाएँ।



**उपकरण** – प्रस्तुत शोध अध्ययन को सफल बनाने तथा उद्देश्यों की  
सफलतापूर्वक प्राप्ति के लिए शोधकर्ता ने प्रश्नावली परिक्षण का निर्माण  
किया है।

**शोध प्रक्रिया** – प्रस्तुत शोधकार्य के लिए सर्वेक्षण विधि का चयन किया गया है। प्रस्तुत शोध में इन्दौर की शासकीय एवं अशासकीय विद्यालयों की कक्षा 9वीं की 200 बालिकाओं का चयन किया गया है। परीक्षण हेतु शोधकर्ता द्वारा बनाई गई परीक्षण प्रश्नावली का प्रयोग किया गया है। शोधकार्य में अध्ययन मानक विचलन तथा क्रांतिक अनुपात की गणना की गई तथा सार्थकता ज्ञात करने के लिए स्वतन्त्रता के स्तर 0.05 का प्रयोग किया गया।

**प्रदत्तों के संकलन की प्रक्रिया** – शोधकर्ता ने प्रदत्तों के संग्रह के लिए शासकीय व अशासकीय विद्यालयों के प्राचार्य से शोध सम्बंधी कार्य को पूर्ण करने के लिए अनुमति चाही। तत्पश्चात न्यादर्श में चयनित शासकीय विद्यालय के कक्षा 9वीं की छात्राओं पर प्रश्नावली को प्रशासित करने के उद्देश्य से छात्राओं को एक वर्ग में बिठाकर प्रश्नावली के सम्बंध में आवश्यक निर्देश दिए गए। इसके बाद छात्राओं की प्रश्नावली को एक-एक प्रपत्र बांटा गया और निर्धारित समयावधि में सभी प्रश्नों सही ( ) या गलत (x) में उत्तर देने का अनुरोध किया गया। समय समाप्त होने के बाद प्रश्नावली को एकत्र किया गया। ठीक यही प्रक्रिया अशासकीय विद्यालय की छात्राओं पर लागू की गई।

**परिणामों का विश्लेषण एवं व्याख्या** – प्रदत्तों का सर्वप्रथम वर्गीकरण एवं सारणीयन किया गया जिससे शोध कार्य सूचारु ढंग से सम्पन्न हो सके।  
**01 शासकीय विद्यालय एवं अशासकीय विद्यालय में समान शिक्षा के अधिकार संबंधी जागरूकता के स्तर में सार्थक अंतर नहीं है।**

सारणी क्रमांक - 1

समान शिक्षा संबंधी	संख्या	मध्यमान	मानक विचलन	आंतर मानक त्रुटि	क्रांतिक अनुपात	सार्थकता
		M	SD	$\sigma d$	CR	
शासकीय विद्यालय	100	9.79	0.77	0.15	1.6	<.05
अशासकीय विद्यालय	100	9.55	1.22			

0.01 स्तर पर न्यूनतम मान = 2.60

0.05 स्तर पर न्यूनतम मान = 1.98

उपर्युक्त सारणी से स्पष्ट होता है कि शासकीय विद्यालय में एवं अशासकीय विद्यालय में अध्ययनरत् बालिकाओं में मानव अधिकार का मध्यमान 9.79 है व अशासकीय विद्यालय में अध्ययनरत् बालिकाओं में मानव अधिकार का मध्यमान 9.55 है व जिनका अंतर 0.24 है। यह अंतर सांख्यिकी दृष्टिकोण से सार्थक है, क्योंकि सार्थकता ज्ञात करने हेतु प्राप्त क्रांतिक अनुपात 1.6 है जो कि 't' मान तालिका के सार्थकता भाग देखने पर 0.05 विश्वास स्तर के लिए आवश्यक मान 1.97 से कम है और 't' मान तालिका के अनुसार 0.01 विश्वास स्तर के लिए आवश्यक मान 2.60 से भी कम है। उससे ज्ञात होता है कि माध्यमिक स्तर के शासकीय विद्यालय एवं अशासकीय विद्यालय की बालिकाओं में मानव अधिकार में सार्थक अंतर नहीं है। अतः परिकल्पना स्वीकृत की जाती है।

दोनों समूहों के लिए मानक त्रुटि 0.15 है अतः उपरोक्त विवेचना के आधार पर कहा जा सकता है कि शासकीय एवं अशासकीय विद्यालयों में समान शिक्षा के अधिकारों की जानकारी में अंतर नहीं है।

**02 शासकीय विद्यालय एवं अशासकीय विद्यालय में अध्ययनरत**

**बालिकाओं में मनुष्य स्वतंत्रता तथा प्रतिष्ठा एवं अधिकारों संबंधी जागरूकता के स्तर में सार्थक अंतर नहीं है।**

सारणी क्रमांक - 2

समान शिक्षा संबंधी	संख्या	मध्यमान	मानक विचलन	आंतर मानक त्रुटि	क्रांतिक अनुपात	सार्थकता
		M	SD	$\sigma d$	CR	
शासकीय विद्यालय	100	8.32	0.94	0.21	1.72	<.05
अशासकीय विद्यालय	100	8.68	1.82			

0.01 स्तर पर न्यूनतम मान = 2.60

0.05 स्तर पर न्यूनतम मान = 1.97

उपर्युक्त सारणी से स्पष्ट होता है कि शासकीय विद्यालय में अध्ययनरत बालिकाओं में मानव अधिकार का मध्यमान 8.32 है व अशासकीय जिनका अंतर 0.03 है। यह अंतर सांख्यिकी दृष्टिकोण से सार्थक अंतर है; क्योंकि सार्थकता ज्ञात करने हेतु प्राप्त क्रांतिक अनुपात 1.72 है जो कि 't' मान तालिका के सार्थकता मान देखने पर 0.05 विश्वास स्तर के लिए आवश्यक मान 1.97 से अधिक है और 't' मान तालिका के अनुसार 0.01 विश्वास स्तर के लिए आवश्यक मान 2.60 से भी कम है। उससे ज्ञात होता है कि माध्यमिक स्तर के शासकीय विद्यालय एवं अशासकीय विद्यालय की बालिकाओं के मानव अधिकार में सार्थक अंतर नहीं है। अतः परिकल्पना स्वीकृत की जाती है।

दोनों समूहों के लिए मानक त्रुटि 0.21 है अतः उपरोक्त विवेचना के आधार पर कहा जा सकता है कि शासकीय विद्यालय एवं अशासकीय विद्यालयों में मनुष्य स्वतंत्रता तथा प्रतिष्ठा एवं अधिकारों के अध्ययन में अंतर नहीं है।

**03 शासकीय विद्यालय एवं अशासकीय विद्यालय में अध्ययनरत बालिकाओं में शारीरिक, मानसिक एवं बौद्धिक विकास में समान अधिकारों संबंधी जागरूकता के स्तर में सार्थक अंतर नहीं है।**

सारणी क्रमांक - 3

विकास के अध्ययन में	संख्या	मध्यमान	मानक विचलन	आंतर मानक त्रुटि	क्रांतिक अनुपात	सार्थकता
		M	SD	$\sigma d$	CR	
शासकीय विद्यालय	100	8.95	1.77	0.27	3	<.01
अशासकीय विद्यालय	100	8.14	1.94			

0.01 स्तर पर न्यूनतम मान = 2.60

0.05 स्तर पर न्यूनतम मान = 1.97

उपर्युक्त सारणी से स्पष्ट होता है कि शासकीय विद्यालय में अध्ययनरत बालिकाओं में मानव अधिकार का मध्यमान 8.95 है व अशासकीय विद्यालय में अध्ययनरत बालिकाओं में मानव अधिकार का मध्यमान 8.14 है व जिनका अंतर 0.80 है। यह अंतर सांख्यिकी दृष्टिकोण से सार्थक नहीं है, क्योंकि सार्थकता ज्ञात करने हेतु प्राप्त क्रांतिक अनुपात 3 है जो कि 't' मान तालिका के सार्थकता मान देखने पर 0.05 विश्वास स्तर के लिए आवश्यक



मान 1.97 से कम है और 't' मान तालिका के अनुसार 0.01 विश्वास स्तर के लिए आवश्यक मान 2.60 से भी कम है। उससे ज्ञात होता है कि माध्यमिक स्तर के शासकीय विद्यालय एवं अशासकीय विद्यालय की बालिकाओं के मानव अधिकार में सार्थक अंतर है। अतः परिकल्पना अस्वीकृत की जाती है। दोनों समूहों के लिए मानक त्रुटि 0.27 है अतः उपरोक्त विवेचना के आधार पर कहा जा सकता है कि शासकीय विद्यालय एवं अशासकीय विद्यालयों में बालिकाओं में शारीरिक, मानसिक एवं बौद्धिक विकास में समान अधिकारों की जानकारी में अंतर है।

#### 04 शासकीय विद्यालय एवं अशासकीय विद्यालय में अध्ययनरत छात्राओं में अमानवीय व्यवहार एवं आर्थिक, शारीरिक दण्ड का समान अधिकारों संबंधी जागरूकता के स्तर में सार्थक अंतर नहीं है।

सारणी क्रमांक - 4

अमानवीय व्यवहार एवं दण्ड	संख्या	मध्यमान	मानक विचलन	आंतर मानक त्रुटि	क्रांतिक अनुपात	सार्थकता
		M	SD	$\sigma_d$	CR	
शासकीय विद्यालय	100	7.06	1.70	0.25	3	<0.1
अशासकीय विद्यालय	100	6.31	1.94			

0.01 स्तर पर न्यूनतम मान = 2.60

0.05 स्तर पर न्यूनतम मान = 1.97

उपर्युक्त सारणी से स्पष्ट होता है कि शासकीय विद्यालय में अध्ययनरत बालिकाओं में मानव अधिकार का मध्यमान 7.06 है व अशासकीय विद्यालय में अध्ययनरत बालिकाओं में मानव अधिकार का मध्यमान 6.31 है व जिनका अंतर 0.75 है। यह अंतर सांख्यिकी दृष्टिकोण से सार्थक है, क्योंकि सार्थकता ज्ञात करने हेतु प्राप्त क्रांतिक अनुपात 3 है जो कि 't' मान तालिका के सार्थकता मान देखने पर 0.05 विश्वास स्तर के लिए आवश्यक मान 1.97 से कम है और 't' मान तालिका के अनुसार 0.01 विश्वास स्तर के लिए आवश्यक मान 2.60 से भी कम है। उससे ज्ञात होता है कि माध्यमिक

स्तर के शासकीय विद्यालय एवं अशासकीय विद्यालय की बालिकाओं के मानव अधिकार में सार्थक अंतर है। अतः परिकल्पना अस्वीकृत की जाती है। दोनों समूहों के लिए मानक त्रुटि 0.25 है अतः उपरोक्त विवेचना के आधार पर कहा जा सकता है कि शासकीय विद्यालय एवं अशासकीय विद्यालयों में बालिकाओं में अमानवीय व्यवहार एवं आर्थिक, शारीरिक दण्ड का समान अधिकार व तुलनात्मक अध्ययन की जानकारी में अंतर है।

**अन्त में** - मानव अधिकारों के प्रति चेतना जागृत करने का मुख्य स्रोत शिक्षा है। बालिकाओं को प्राथमिक स्तर से ही मानव अधिकार एवं मानवीय कर्तव्य की शिक्षा दी जायेगी तभी मानव अधिकारों का संरक्षण संभव है।

प्रस्तुत शोध में शासकीय एवं अशासकीय विद्यालयों में बालिकाओं के मानव अधिकारों के प्रति जागरूकता लाना है। ऐसी जागरूकता हम बालिकाओं में विविध प्रकार के कार्यक्रम आयोजित करके ला सकते हैं।

ऐसे बालिकाओं के माता-पिता अभिभावकों, शिक्षकों, प्राचार्यों प्रधान पाठकों का दायित्व है कि प्रदेश के सभी विद्यालय में इस प्रकार के कार्यक्रम आयोजित करायें कि बालिकाओं को एवं समाज के सभी लोगों को उनके अधिकारों के बारे में जानकारी प्राप्त हो जाए। इन सबके संयुक्त प्रयास से ही समाज एवं बालिकाओं का स्तर उंचा उठाया जा सकता है।

संक्षेप में 'मैं यह कहना चाहूंगा कि शिक्षा के सभी स्तरों में', 'मानव मूल्यों', 'मानवीय संवेदनाएं', 'मानव अधिकारों' मानवीय कर्तव्यों आपसी सहयोग एवं प्रेम बढ़ाने वाली शिक्षा को पाठ्यक्रमों में सम्मिलित करके मानव अधिकारों का बेहतर संरक्षण किया जा सकता है।

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## सूचना प्रौद्योगिकी का ग्रामीण विकास में योगदान का अध्ययन

डॉ. खुशबू बाफना\*

**शोध सारांश** - भारत एक विकासशील राष्ट्र है वर्ष 2011 की जनगणना के अनुसार भारत की कुल जनसंख्या का 68.8 प्रतिशत भाग गाँवों में निवास करती है। अधिकतर ग्रामीण कृषि से संबंधित कार्य करते हैं। आधुनिक समय में ग्रामीणों द्वारा सूचना प्रौद्योगिकी का हर क्षेत्र तक प्रयोग किया जा रहा है। भारत में सूचना प्रौद्योगिकी का क्षेत्र तेजी से विकसित हो रहा है। तेजी से होने विकास के कारण गाँवों का सम्पर्क देश के बड़े प्रतिष्ठानों, अनुसंधान संस्थाओं, स्वेच्छिक संगठनों आदि से हो रहा है। जिसका प्रत्यक्ष व अप्रत्यक्ष रूप से ग्रामीणों को लाभ मिल रहा है।

**शब्द कुँजी** - सूचना प्रौद्योगिकी, ग्रामीण विकास, कृषि।

**प्रस्तावना** - ग्रामीण विकास प्रक्रिया का मुख्य उद्देश्य है ग्रामीण वातावरण का विभिन्न सेवाओं, सुविधाओं के विस्तार एवं गुणात्मक उन्नयन तथा उत्पादक कार्यकलापों के अवसर में वृद्धि द्वारा परिष्कार करना। अतः ग्रामीण विकास की आधुनिक रणनीति यह है कि सूचना प्रौद्योगिकी द्वारा विकास के अधिक अवसर प्रदान कर उनके सामाजिक आर्थिक जीवन की विषमता को दूर करना है। सूचना प्रौद्योगिकी एक व्यापक क्षेत्र है जिसमें सूचना के संचार के लिए हर तरह की प्रौद्योगिकी समाहित है यह वह प्रौद्योगिकी है जो सूचना के संचालन की योग्यता रखती है तथा संचार के विभिन्न माध्यमों से सूचना के प्रसारण की सुविधा प्रदान करती है।

**मैकमिलन के अनुसार** - 'कम्प्यूटिंग और दूरसंचार के समिश्रण पर आधारित माइक्रो-इलेक्ट्रॉनिक्स द्वारा मौखिक, चित्रात्मक, मूलपाठ विषयक और संख्या संबंधी सूचना का अर्जन, संसाधन (प्रोसेसिंग) भण्डारण और प्रसार है', सूचना प्रौद्योगिकरण द्वारा ग्रामीणों के सशक्तिकरण का कार्य किया जाता है तथा इसके द्वारा ग्रामीण क्षेत्रों में गरीबी उन्मूलन, खाद्य सुरक्षा और सम्प्रेषित विकास के उद्देश्य प्राप्त करने के लिए सुविचारित निर्णयन द्वारा ग्रामीणों के विकास की प्रभावशीलता बढ़ती है। सूचना प्रौद्योगिकी तकनीकी, प्रशासन और सरकार में पारदर्शिता बनाए रखती है। आजादी के बाद से ही ग्रामीण जनता के जीवन स्तर को सुधारने के लिए ठोस प्रयास किए गए हैं इसलिए सभी पंचवर्षीय योजनाओं में ग्रामीण विकास कार्यक्रम चलाए गए हैं। विभिन्न क्षेत्रों में राष्ट्र ने जो आर्थिक विकास और अनुकरणीय प्रगति की है वह तब तक पूर्ण नहीं मानी जाएगी जब तक इसका लाभ ग्रामीण भारत में रह रहे अधिसंख्य लोगों के जीवन को ओर अच्छा और गरिमापूर्ण बनाने के लिए न पहुँचे। भूमण्डलीकरण के इस व्यावसायिक वातावरण में सूचना प्रौद्योगिकी की रचना एक क्रांतिकारी परिवर्तन है जिससे उत्पादन का क्षेत्र ही नहीं बल्कि सेवा क्षेत्र में भी परिवर्तन हो रहे हैं।

**शोध प्रविधि व क्षेत्र** - प्रस्तुत शोध पत्र द्वितीयक संमर्कों पर आधारित है एवं समाचार पत्रों के माध्यम की सहायता ली गई है शोध पत्र में भारत में ग्रामीण क्षेत्र के विकास में सूचना प्रौद्योगिकी के प्रभाव का अध्ययन किया गया है।

**उद्देश्य** - भारत में ग्रामीण विकास में सूचना प्रौद्योगिकी ने अमूल्य योगदान दिया है यह ज्ञात करना शोध पत्र का प्रमुख उद्देश्य है।

**परिकल्पना** - सूचना प्रौद्योगिकी के योगदान से भारत की ग्रामीण क्षेत्र की आर्थिक व सामाजिक स्थिति में सुधार हुआ है।

**सूचना प्रौद्योगिकी व ग्रामीण विकास** - भारत देश तभी उन्नति कर सकता है जब गाँवों की उन्नति हो! महात्मा गाँधी ने कहा था कि 'भारत की आत्मा गाँवों में बसती है'। कोई भी ग्रामीण क्षेत्र यदि विश्वसनीय, दक्ष एवं त्वरित दूर-संचार, इन्टरनेट एवं सूचना प्रौद्योगिकी सेवाओं के रूप में इलेक्ट्रॉनिक सम्पर्क स्थापित करते हैं तो न सिर्फ वह गाँव उन्नत होता है, बल्कि गाँव के आसपास के क्षेत्र भी समृद्धि केन्द्र बनते हैं भारत में ग्रामीण विकास बीसवीं शताब्दी के प्रारंभ से ही किया जाने लगा था, ग्रामीणों के विकास को ध्यान में रखते हुए वर्ष 2018-19 में भारत सरकार द्वारा डिजिटल इण्डिया कार्यक्रम को 3073 करोड़ रु का आबंटन किया गया। शिक्षा के क्षेत्र में उल्लेखनीय विकास एवं शिक्षा की गुणवत्ता बढ़ाने के लिए आई.सी.टी. के द्वारा डिजिटल पुस्तकालय का सृजन हुआ है। जिसका लाभ ग्रामीण विद्यार्थी ले सकते हैं। ग्रामीण विकास में दूरस्थ शिक्षा से अर्थ एसी शिक्षा से है जिसमें विद्यार्थी ओर शिक्षक विभिन्न भौगोलिक स्थानों में हो सकते हैं, दूरस्थ शिक्षा से ग्रामीण विद्यार्थियों की परिवहन की लागत भी कम हो जाती है। सूचना प्रौद्योगिकी के विस्तार से ग्रामीण क्षेत्रों में आधारभूत सुविधाओं जैसे स्कूल, स्वास्थ्य सुविधाओं, सड़क, परिवहन, विधुतीकरण आदि में वृद्धि हुई है। ग्रामीण क्षेत्रों में कृषि उत्पादकता में सुधार हुआ है। पूर्व वर्षों में ग्रामीण अर्थव्यवस्था में सुधार हेतु कृषि में हरित क्रांति जैसे विकास हुए पर उनका प्रचार प्रसार नहीं हो पाया, यद्यपि कृषि आज भी जीविका का प्रधान का प्रधान स्रोत है कृषि उत्पादकता जब बढ़ती है तो ग्रामीण उद्योगों को बढ़ावा मिलता है स्थानीय रोजगार की प्राप्ति होती है, कृषि भारतीय अर्थव्यवस्था क रीढ़ है अर्थव्यवस्था की गति को बढ़ाने में कृषि का महत्वपूर्ण योगदान रहा है। ग्रामीणों का मुख्य व्यवसाय कृषि ही है। इस प्रकार कृषि ग्रामीणों को सुख-दुख का प्रतीक है वर्ष 2017-18 में देश के सकल मूल्य संवर्धन में इसकी भागीदारी 17.2 प्रतिशत रही है। कृषि और उससे संबद्ध क्षेत्र ने वर्ष 2018-19 के दौरान चालू मूल्यों पर भारत के सकल मूल्यवर्धन में लगभग 16.0 प्रतिशत का योगदान किया।

ग्रामीणों के विकास के लिए ई-गवर्नेंस योजना क्रियान्वित की जा रही है इसका लक्ष्य यह है कि ग्रामीण किसान सूचना प्रौद्योगिकी व दूरसंचार

के प्रयोग से कृषि संबंधी सूचना आसानी से प्राप्त कर सके। इस योजना की शुरुआत वर्ष 2010-2011 की अंतिम तिमाही में सात राज्यों में की गई। वर्ष 2014-2015 में सभी राज्यों और सात संघ राज्य क्षेत्रों को शामिल करने के लिए इस योजना का आगे विस्तार किया गया। 14 मार्च 2019 की स्थिति अनुसार वित्तीय वर्ष में योजना के तहत राज्यों को 22.53 करोड़ रु. की राशि जारी की गई।

ई-गवर्नेंस के तहत आज तक कृषि परामर्शिका प्राप्त करने के लिए एम. किसान पोर्टल पर 5.15 करोड़ से अधिक किसानों का पंजीकरण किया गया है जिसके माध्यम से ग्रामीण किसान विभिन्न विषयों जैसे बीज, उर्वरक, कीटनाशक, ऋण, श्रेष्ठ पद्धतिया, डीलर नेटवर्क, आदानों की उपलब्धता, कृषि मौसम, विज्ञान सलाह, पशुपालन इत्यादि से संबंधित प्रासांगिक सूचना प्राप्त करते हैं। एंटर एक्टिव वीडियो कान्फ्रेंसिंग सेवा की सुविधा द्वारा किसान कृषि से सम्बन्धित समस्याओं का निवारण प्राप्त कर सकते हैं वर्तमान समय में टेलीविजन में प्रसारित कई कृषि व खेती से जुड़े चैनल में प्रश्नोत्तरी कार्यक्रम द्वारा भी ग्रामीण किसान की कई महत्वपूर्ण जानकारी प्राप्त करते हैं एवं दूरदर्शन के एक राष्ट्रीय एवं 18 क्षेत्रीय केन्द्रों के माध्यम से सप्ताह में पाँच दिन 30 मिनट के कार्यक्रम प्रसारित किए जा रहे हैं, कृषि दर्शन, हैलो किसान और चौपाल चर्चा का प्रसारण करने के लिए आकाशवाणी के 96 ग्रामीण एफएम रेडियो केन्द्रों का उपयोग किया जा रहा है।

गाँव कनेक्शन के सर्वे के अनुसार मध्य प्रदेश के लिए 43.3 प्रतिशत ग्रामीण जानकारी हासिल करने के लिये इंटरनेट का उपयोग करते हैं दिसम्बर 2018 में आई ट्राई की रिपोर्ट के मुताबिक 19 करोड़ 40 लाख सब्सक्राइब्ड ग्रामीण क्षेत्र के हैं रिपोर्ट के मुताबिक ग्रामीण क्षेत्र में इंटरनेट उपयोगकर्ता की संख्या 18 प्रतिशत से बढ़कर 20.26 प्रतिशत हो गई। आधुनिक समय में जहाँ दुनिया भर में 4 जी मोबाइल नेटवर्क का लोग लाभ प्राप्त कर रहे हैं। वही ग्रामीण जन भी इससे दूर नहीं हैं। इंटरनेट ग्रामीणों के लिए भी वरदान साबित हुआ है। वे चाहे तो घर बैठे अपने उत्पादों को ऑनलाइन बेच सकते हैं। चूंकि ग्रामीण क्षेत्रों में भी इंटरनेट युक्त स्मार्ट फोन की पहुँच आसान हो गई है आज मोबाइल एप और सुविधाएँ विश्व के विभिन्न भागों में जारी की जा रही हैं मोबाइल एप ग्रामीण किसानों को सशक्तिकरण के व्यापक उद्देश्यों की पूर्ति करते हैं जब ग्रामीणों को घर बैठे ही सारी विभिन्न जानकारीयों मोबाइल से उपलब्ध हो जाती है तो उसका लाभ उठाते हैं वे कच्चे माल को बाजार में बेचते हैं कुटीर उद्योगों का विस्तार होता है। ग्रामीणों की आय व बचत का स्तर बढ़ता है जिसका प्रयोग वे विनियोग करने में कर सकते हैं जिससे कच्चे मकानों को पक्के मकानों में परिणत किया जाता है। उनके रहन-सहन का स्तर ऊँचा उठता है सूचना प्रौद्योगिकी द्वारा महिला सशक्तिकरण को बढ़ावा मिलता है जब किसी भी परिवार में महिला आर्थिक व सामाजिक रूप से मजबूत होती है तो वह परिवार का पालन-पोषण सही तरीके से कर सकती है जिससे ग्रामीण क्षेत्र में शिक्षा के स्तर में वृद्धि होती है व गरीबी दूर होती है गाँवों की कई कुरीतियाँ समाप्त हो जाती हैं जिससे गाँवों का विकास होता है ग्रामीणों के विकास के लिए किसान समूहों का एकत्रीकरण और फार्म स्कूलों के माध्यम से कृषि उत्पादन को बढ़ाने के लिए विभिन्न क्षेत्रों के विस्तार पद्धति पुनरुद्धान और नवीनतम कृषि प्रौद्योगिकीय उपलब्ध कराने के लिए राज्य व केन्द्र सरकार द्वारा विभिन्न योजनाएँ व कार्यक्रम संचालित

किए जा रहे हैं।

**परिकल्पना की कसौटी** – प्रस्तुत शोध पत्र से स्पष्ट हो रहा है कि ग्रामीण समुदायों द्वारा सूचना प्रौद्योगिकी का उपयोग कर उनकी सामाजिक व आर्थिक स्थिति में सुधार हुआ है कृषकों द्वारा टेक्नालॉजी और संचार का उपयोग उद्यम में दक्षता के उच्च स्तर को प्राप्त किया जा रहा है। वैश्वीकरण के इस युग में भारतीय अर्थव्यवस्था पर सूचना व प्रौद्योगिकी का बहुत प्रभाव पड़ा है जिनका प्रत्यक्ष व अप्रत्यक्ष रूप से लाभ ग्रामीण क्षेत्रों को मिला है।

**सुझाव** – सही समय पर सूचना न प्राप्त हो पाने से ग्रामीणों को कई बार भारी हानि उठानी पड़ती है। सरकार द्वारा ग्रामीणों को सूचना प्रौद्योगिकी से संबंधित जानकारी देकर उन्हें मार्गदर्शन दे। जिससे कि ग्रामीण कृषक प्रौद्योगिकी का लाभ प्राप्त कर सकें। सूचना प्रौद्योगिकी को बढ़ाने के लिए शिक्षा के स्तर को बढ़ाया जाना आवश्यक है क्योंकि दोनों एक-दूसरे पर आश्रित हैं। कौशल विकास द्वारा ग्रामीण क्षेत्रों के लोगों को तकनीकी जानकारी दी जानी चाहिए, संचार व तकनीकी को बढ़ावा देने के लिए सरकार को सब्सिडी देना चाहिए, साथ ही विज्ञान व प्रौद्योगिकी को ज्ञान का उपयोग करते हुए हर व्यक्ति को लाभान्वित होना चाहिए व इसके उचित उपयोग के लिए जागरूकता होना चाहिए।

**उपसंहार** – डिजिटल मीडिया की पहुँच एवं संचार क्षमताओं द्वारा ग्रामीण किसानों की रुचि कृषि साक्षरता की ओर बढ़ी है कृषि जो कि पहले जीवीकोपार्जन का एक साधन थी आधुनिक समय में सूचना तकनीकी के विस्तार से व्यवसाय का रूप धारण करती जा रही है। ग्रामीण क्षेत्रों में विकास, रोजगार तथा आर्थिक समृद्धि लाने के लिए कृषि क्षेत्र को विकसित बाजारों की जरूरत है कृषि क्षेत्रों को समूह बनाने के लिए उच्च मूल्य फसलों का विस्तार आवश्यक है जो कि सूचना प्रौद्योगिकी द्वारा ही संभव है।

ग्रामीणजन कई कार्य इंटरनेट के माध्यम से कर सकते हैं जिनके अन्तर्गत आयकर फाइल करना, गाड़ी चलाने का लाइसेंस का फार्म ऑनलाइन, परीक्षाएँ देना, ऑनलाइन शिकायत करना आदि है सूचना एवं प्रौद्योगिकी द्वारा ग्रामीण क्षेत्र में खाद्य सुरक्षा, गरीबी उन्मूलन और सम्प्रेषित विकास किए जाने में सहायता मिलती है। सरकार द्वारा ग्रामीण क्षेत्रों में शिक्षा, स्वास्थ्य, सड़क, बिजली, जल-संरक्षण, कृषि विकास पर्यावरण संरक्षण इत्यादि की जानकारी सूचना प्रौद्योगिकी द्वारा देकर ग्रामीण विकास का कार्य किया जा रहा है।

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## पर्यावरण एवं सामाजिक शिक्षण - अधिगम प्रक्रिया

ऋतिका देसाई \* डॉ. दिपेश आर. उपाध्याय\*\*

**शोध सारांश -** पर्यावरण को भौतिक, सामाजिक, सांस्कृतिक आदि वर्गों में परिभाषित किया जाता है प्रस्तुत शोध-पत्र में पर्यावरण को प्राकृतिक एवं सामाजिक पर्यावरण के साथ शिक्षण- अधिगम प्रक्रिया के साथ संबंध कर प्रस्तुत करने का प्रयास किया गया है। मानव द्वारा किसी भी कार्य को प्राकृतिक पर्यावरण के अंतर्गत सम्पन्न किया जाना संभव है प्राकृतिक दशाएँ शैक्षिक क्रिया का आधार बनकर अधिगम को सफल बनाती हैं आधुनिक युग संपन्नता के युग का परिचायक बन चुका है जहाँ शिक्षण को अधिगम हेतु प्रयुक्त किया जाता है सामाजिक पर्यावरण में प्रकृति की मौलिक दशाएँ विद्यमान हैं जो अनुकूलता का परिचायक हैं इस अनुकूलता में किसी भी प्रकार का अवांछित परिवर्तन जिससे विपरीत प्रभाव द्वारा प्रकृति को हानि हो प्रदूषण कहलाता है प्रदूषण की इस गंभीर समस्या का परिणाम वर्तमान में हरितगृह प्रभाव, तापमान में वृद्धि, अनियमित ऋतुचक्र द्वारा पर्यावरण की हानि होती है इस विश्वस्तरीय समस्या को शिक्षा का विषय बनाकर समस्याओं और उनके समाधानों को सम्प्रेषित करना है।

**शब्द कुंजी -** क्योटो प्रोटोकॉल, पृथ्वी शिखर सम्मेलन, आपदाएँ, अवधारणाएँ, आगमन, निगमन, अध्येता, अस्तित्ववाद, प्रयोजनविधि।

**प्रस्तावना -** पर्यावरण, प्रकृति की ओर से दिया गया ऐसा उपहार जिसके अंतर्गत पादप जन्तु, वायु जल, मृदा, आदि सृजनकर्ता के रूप में सम्मिलित हैं। पर्यावरणीय तत्व के अंतर्गत जैव-अजैव तत्व को शामिल किया जाता है। पर्यावरण एक आवरण प्रदान करता है। जिसके अंतर्गत पृथ्वी स्थलमण्डल, जलमण्डल, जीवमण्डल वायुमण्डल द्वारा प्रकृति गतिमान है। पर्यावरण के अध्ययन के लिये पारिस्थितिकी का अध्ययन किया जाता है। जिसके अंतर्गत जीव का वातावरण पर एवं वातावरण का जीव पर प्रभाव अध्ययन का विषय है। पारिस्थितिकी शब्द 1866 में अर्नस्ट हैकल द्वारा प्रयोग में लाया गया, जो एक जर्मन प्रो. थे। पर्यावरण एक विस्तृत शब्द है, पर्यावरण पर प्रतिकूल व अनुकूल प्रभाव पर्यावरण के विकास में गति व बाधक का कार्य करता है। अनुकूल पर्यावरण दशाएँ जहाँ स्वस्थ, स्वच्छ पर्यावरण को गति प्रदान कर जैविक प्रक्रिया को सम्पन्न करने में सहायक सिद्ध होती हैं। वहीं प्रतिकूल दशाएँ पर्यावरण के विकास में बाधा उत्पन्न कर प्राकृतिक आपदाओं का कारण बनती हैं। आज का वैश्विक युग पर्यावरण की प्रतिकूल दशाओं से जूझ रहा है प्रतिकूल दशाओं में पर्यावरण प्रदूषण जो कि मानव निर्मित होकर पर्यावरण की प्राकृतिक सम्पदा को नष्ट व क्षति पहुँचा रहा है। वायु, जल, मृदा, नाभिकीय प्रदूषण, प्राकृतिक आपदाएँ, भूकम्प, सुनामी, ज्वालामुखी, चक्रवात, बाढ़, सूखा आदि को उत्पन्न कर कई वर्षों के लिये प्रकृति को नष्ट तक कर देते हैं। पर्यावरण जीवन का आधार है। जिसके अंतर्गत प्रकृति में रहते हुये समाज का निर्माण होता है, और यह समाज प्रकृति के साधनों का उपयोग कर अपनी जीविका संपन्न करते हैं परंतु आधुनिक जीवन शैली की लालसा में मानव को पर्यावरण के अतिदोहन के लिये मजबूर कर प्रदूषण की ओर अग्रसर किया है। प्रदूषण की समस्या इतनी जटिल होती जा रही है कि आज युग वैश्विक तपन (ग्लोबल वार्मिंग) का सामना कर रहा है। वैश्विक स्तर की इस समस्या के समाधान हेतु कई वैश्विक संधियाँ 1992 पृथ्वी शिखर सम्मेलन, रामसर सम्मेलन 1971, क्योटो प्रोटोकॉल, पेरिस समझौता जैसे वैश्विक प्रयास कार्यरत हैं।

पर्यावरण के संरक्षण के लिये पर्यावरण संरक्षण अधिनियम 1986 जिसके अंतर्गत चार अध्याय 26 धारा पर्यावरण के लिये समर्पित हैं।

प्राकृतिक पर्यावरण जैव विविधता की विषय-वस्तु को परिभाषित करता है। वही सामाजिक पर्यावरण में समुदाय जनसांख्यिकी एवं उनके विशिष्ट लक्षण, रीति रिवाज, शैक्षिक एवं जीविका उपार्जन गतिविधि को समाहित किये हैं। प्रस्तुत शोध पत्र पर्यावरण के सामाजिक तत्व को उदघटित करने का प्रयास करता है।

सामाजिक शिक्षण- अधिगम प्रक्रिया- शिक्षण अधिगम प्रक्रिया को हम सामाजिक प्रक्रिया के रूप में परिभाषित कर सकते हैं। चूँकि शिक्षण द्वारा अधिगम सम्पन्न किया जाता है। जिस हेतु शिक्षण हेतु शिक्षक व शिक्षण क्रिया जो सीखने को प्रेरित करती है, को अधिगम कहा गया है। अध्ययन, अध्यापन, अनुसंधान कार्य में शिक्षण - अधिगम सम्पूरक प्रक्रिया है। शिक्षण क्रिया द्वारा अध्येता अधिगम को उद्देश्यपूर्ण बनाता है। जिसके द्वारा ज्ञानप्राप्ति, लक्ष्यप्राप्ति को सम्भव बनाया जा सके। अधिगम क्रिया शिक्षण पर आश्रित नहीं है। अधिगम क्रिया स्वयं द्वारा प्रेरित होकर प्रकृति द्वारा शिक्षण प्राप्त कर भी पूर्ण की जा सकती है परन्तु शिक्षण क्रिया के साथ अधिगम प्रक्रिया के रूप में प्रस्तुत होती है। शिक्षण क्रिया की प्रतिक्रिया अधिगम कहलाती है, शिक्षण क्रिया द्वारा उद्देश्य की प्राप्ति को अधिगम कहते हैं। सामाजिक शिक्षण के अंतर्गत समाज के दो वर्ग को प्रस्तुत कर सकते हैं। प्रथम वर्ग जो शिक्षण क्रिया करता है। अध्येता, शिक्षक, अध्यापक हैं। दूसरा वर्ग जो शिक्षण क्रिया का आधार है, क्योंकि उसी के लिये शिक्षणक्रिया सम्पन्न की जा रही है। इसे विधार्थी कहा जाता है। शिक्षण - अधिगम प्रक्रिया तब ही सम्पन्न व पूर्ण हो सकती है जब यह दो वर्ग इस प्रक्रिया का भाग बन पाये। शिक्षण - अधिगम प्रक्रिया को सम्पन्न करने के लिये कई वर्ग की अपनी महत्वपूर्ण भूमिका है। जिसके बिना शिक्षण - अधिगम प्रक्रिया उद्देश्यपूर्ण रूप से सम्पन्न नहीं हो पाती है। इसके अंतर्गत सर्वप्रथम हमारी प्रकृति है। प्राकृतिक वातावरण इस प्रक्रिया को गति प्रदान

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करता है। इसमें प्राकृतिक पर्यावरण जैसे - वायु, प्रकाश सीखने हेतु प्राकृतिक साधन, पेड़-पौधे, जीव-जन्तु, ब्रह्माण्ड के तत्व आदि सम्मिलित है। सामाजिक पर्यावरण के अंतर्गत समाज में स्थान, अभिभावक, विधार्थी को उन्नत करने हेतु गतिविधियाँ समाहित है। शिक्षण- अधिगम प्रक्रिया का आरंभ बिन्दु सम्प्रेषण है। सम्प्रेषण द्वारा ही अध्येता शिक्षण संबंधी विचार, अवधारणाएँ, विधियाँ प्रेषित करता है, एवं प्रतिक्रिया प्राप्त करता है, समय के अनुसार अपने शिक्षण कार्य को अद्यतन करता है। सम्प्रेषण के बिना शिक्षण - अधिगम प्रक्रिया का चिंतन भी व्यर्थ है।

### उद्देश्य:

1. पर्यावरण की शिक्षण-अधिगम में महत्ता स्थापित करना।
2. सामाजिक शिक्षणविधि का उल्लेख करना।
3. पर्यावरणीय मुद्दों का शिक्षा द्वारा प्रसार।

**परिचलपना** - पर्यावरण, सामाजिक शिक्षण-अधिगम को आधार प्रदान कर निरंतर गतिमान रखता है।

**शोध-विधि** - प्रस्तुत शोध पत्र में पर्यावरण, सामाजिक शिक्षण-अधिगम के संबंध को प्रस्तुत करने हेतु द्वितीय समंक का प्रयोग किया है। प्राथमिक समंक हेतु मौखिक जानकारी एवं अनुभव का प्रयोग किया गया है। समंक के स्रोत प्रचलित किताबें, समाचार पत्र आदि को प्रयोग किया है।

**सामाजिक शिक्षण** - समाज में रहते हुये शिक्षण कार्य सामाजिक शिक्षण कहलाता है। जिसमें समाज के कई तत्व मिलकर स क्रिया को पूर्ण करते हैं। आज के युग में शिक्षण को संव्यवसाय के रूप में भी जाना जाता है। शिक्षण को अन्य व्यवसाय का आधार कहा जाता है। क्योंकि सीखने की औपचारिक क्रिया शिक्षण द्वारा संभव हो पाती है। सामाजिक शिक्षण स्वयं अपनी प्राचीन व आधारभूत विशेषताओं जैसे :- प्रकृतिवाद में प्रकृति को अध्येता की उपाधि दी है। आदर्शवाद में नैतिकता, बौद्धिक गुण समाहित है, योग द्वारा शिक्षण में नियंत्रण, आत्मसंयम, ध्यान, प्राणायाम एवं आहार को विषय माना जाता है। आधुनिक सामाजिक शिक्षण में जॉन डेवी की प्रयोजनवाद धारणा कीर्कगार्ड की अस्तित्ववाद अवधारणा प्रचलित है। शिक्षण प्रतिरूप में अध्येताकेन्द्रीत शिक्षण जिसमें अध्येता नियंत्रणकर्ता की भूमिका में होता है एवं विधार्थी सम्पूर्णतः उस पर आश्रित होता है। विधार्थी केन्द्रित शिक्षण जिसमें सीखनेवाला स्वनिर्देशित, स्वअनुशासित, होकर अध्येता की प्रेरणा द्वारा सीखता है। शिक्षण क्रिया विभिन्न उद्देश्यों हेतु विभिन्न तरह से कार्य करती है। इन उद्देश्यों को ब्लूम द्वारा 1956 में ज्ञानात्मक, भावनात्मक, मनोसंचलनात्मक वर्ग में विभाजित किया है। समय-समय पर विभिन्न शिक्षाविदों ने अद्यतन किया है। जिसमें गैब्ले, ब्रिक्स, एंडरसन व करतवूल शामिल है। कही शिक्षण अवधारणाएँ सिद्धांत सूत्र प्रतिपादित किये गये हैं। जिसमें शिक्षण के सर्वविधित सूत्र में आगमन, निगमन विधि को प्रमुख स्थान प्राप्त है। इन विधियों की उपविधियाँ जिसमें पूर्ण से अंश कि ओर, ज्ञात से अज्ञात की ओर, विश्लेषण से संश्लेषण, विशेष से सामान्य आदि हैं शिक्षण विधि में विशाल, लघु, समूह एवं व्यक्तिगत विधियाँ प्रचलित हैं आधुनिक विधियों में किलपेट्रिक की परियोजना विधि, संगणक आधारित इन्टरएक्टिव विधिया प्रचलित हैं शिक्षण व अधिगम प्रक्रिया को संबंध करने वाले तत्व में शिक्षण सहायक सामग्री आती है जिसके द्वारा अधिगम रोचकता, स्थायित्व जैसी विशेषताएँ प्राप्त करता है सामग्री को दृश्य, श्रव्य,

दृश्य-श्रव्य सामग्री परम्परगत सामग्री, आधुनिक सामग्री, हार्डवेयर, साफ्टवेयर सामग्री आदि प्रकारों में विभक्त करते हैं। जिसके अंतर्गत रेडियो, टेलीविजन, चार्ट, मानचित्र, ग्राफस, श्यामपट, चलचित्र, ऐपिडियोस्कोप, प्रोजेक्टर आदि हैं। शिक्षण- अधिगम प्रक्रिया गतिशील व निरंतर चलने वाली है, इस प्रक्रिया के अभिन्न अंग के रूप में मूल्यांकन का महत्वपूर्ण स्थान है। सामाजिक शिक्षण-अधिगम प्रक्रिया एक उद्देश्यपूर्ण प्रक्रिया है। इसके उद्देश्य की सफलता, असफलता के मापक के रूप में मूल्यांकन को परिभाषित किया जाता है। मूल्यांकन व्यापकता, निरंतरता जैसी विशेषताएँ लिये हुये हैं। मूल्यांकन द्वारा अधिगम की सफलता को प्रकट किया जा सकता है। मूल्यांकन विधियाँ, मात्रात्मक एवं गुणात्मक विधियों में वर्गीकृत हैं। मात्रात्मक विधियों में लिखित, मौखिक, प्रायोगिक आदि विधियाँ हैं। गुणात्मक में सुचिलेखन, अवलोकन रिकार्ड रखना आदि हैं। शिक्षण-अधिगम प्रक्रिया में नैदानिक, रचनात्मक, निर्माणात्मक, मूल्यांकन आदि हैं।

**शिक्षण-अधिगम** - सामाजिक पर्यावरण का एक तत्व शैक्षिक पर्यावरण है जिसमें शिक्षण कार्य अपनी महत्ता दर्शाता है शिक्षण कार्य द्वारा अधिगम को उद्देश्यपूर्ण करने में शैक्षिक पर्यावरण महत्वपूर्ण भूमिका निभाता है। अनुभव द्वारा सीखने की क्रियाविधि डेलमाडल द्वारा प्रदर्शित कि जाती है जिसमें इन्होंने बताया है कि अधिगम के उच्च सफलता हेतु शिक्षण में पढ़ना, सुनना एवं लिखना, स्वयं करके देखना शिक्षण अधिगम को सुगम व स्थायित्व प्रदान करता है। रविन्द्रनाथ टैगोर द्वारा अधिगम को प्रकृति से संलग्न किया गया है रूसो भी शिक्षण स्रोत के रूप में प्रकृति को शिक्षक मानते हैं इस प्रकार शिक्षण अधिगम में प्राकृतिक पर्यावरण की भूमिका प्राचीनकाल से वर्तमान तक समान महत्ता के साथ स्थापित है। पर्यावरण की अनदेखी करके शिक्षण - अधिगम को सफल नहीं बनाया जा सकता इस प्रक्रिया का निरंतर अद्यतन होना पर्यावरण की अनुकूल स्थितियों में संभव है पर्यावरण, संरक्षण विकास हेतु पर्यावरण को शिक्षण-अधिगम प्रक्रिया में विषयवस्तु के रूप में सम्मिलित किया है जिससे कि शिक्षा के द्वारा पर्यावरण को सुरक्षित, संरक्षित एवं पर्यावरणीय विश्वस्तरीय समस्या को संप्रेषित कर पर्यावरण के प्रति जागरूक और जिम्मेदार बनाया जा सके।

**निष्कर्ष** - प्रस्तुत शोध पत्र द्वारा शिक्षण- अधिगम को सामाजिक पर्यावरण की अनुकूल परिस्थितियों से संबंध बताया है पर्यावरण का सामाजिक तत्व शिक्षण में महत्वपूर्ण भूमिका निभाकर अधिगम को सफल बनाने का प्रयास करता है अधिगम की सफलता शिक्षण को सफल बनाती है शिक्षण क्रिया सामाजिक क्रिया है और सामाजिक दशाएँ प्रकृति, जनसांख्यिकी, अवधारणाएँ, वायु, जल, मृदा आदि सब पर्यावरण निर्माण के लिये महत्वपूर्ण तत्व के रूप में सम्मिलित है

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## शिशुपालवध महाकाव्य में पदलालित्य

अनिल मुवेल \*

**प्रस्तावना** – काव्यशास्त्रीय दृष्टि से शिशुपालवध महाकाव्य एक श्लाघनीय रचना है। यह ऐतिहासिक आख्यान का उज्ज्वलतम रूप है। शिशुपालवध के कर्ता का नाम 'माघ' है। डॉक्टर याकोबी का मत है कि जिस प्रकार 'भारवि' ने अपनी प्रतिभा की प्रखरता सूचित करने के लिए 'भा-रवि' (सूर्य कातेज) नाम रखा, उसी भाँति शिशुपालवध के अज्ञातनामा रचयिता ने अपनी कविता से भारवि को वस्तु करने के लिए 'माघ' का नाम धारण किया, क्योंकि माघमास में सूर्य की किरणें ठंडी पड़ जाती हैं। परन्तु यह कल्पना बिल्कुल निराधार जान पड़ती है। शिशुपालवध के कर्ता का व्यक्तिगत नाम ही 'माघ' है, उपाधि नहीं। माघ की जीवन घटनाओं का पता 'भोजप्रबन्ध' तथा 'प्रबन्ध-चिन्तामणि' से लगता है। माघ के दादा सुप्रभदेव वर्मलात नामक राजा के, जो गुजरात के किसी प्रदेश का शासक था, प्रधानमंत्री थे। अतः माघ कवि का जन्म एक प्रतिष्ठित धनाढ्य ब्राह्मणकुल में हुआ था। इनके पिता 'दत्तक' बड़े विद्वान् तथा दानी थे। गरीबों की सहायता में इन्होंने अपने धन का अधिकांश भाग लगा दिया। माघ का जन्म भीन-माल में हुआ था। यह गुजरात का एक प्रधान नगर था, जो बहुत दिनों तक राजधानी तथा विद्या का मुख्य केन्द्र था।<sup>1</sup> पदों का श्रुतिमधुर विन्यास पदलालित्य है जो कोमल कान्त पदावली से या सानुप्रास पदों से निष्पन्ना होता है। दण्डी, कालिदास आदि प्रथम कोटि के पदलालित्य का प्रयोग करते हैं तो श्रीहर्ष, जयदेव, पण्डितराज जगन्नाथ आदि का पदलालित्य अनुप्रासों पर आश्रित है; परवर्ती युग में यही कोटि अधिक लोकप्रिय हुई। माघ ने दोनों विधाओं का सफल प्रयोग किया है, ये दोनों में सर्गीतात्मकता का आनन्द है। शष्ठ सर्ग के यमक-युक्त पद्यों में लालित्य का प्राचुर्य है।<sup>2</sup> वसन्त काल में मधुकर-गुंजन का ध्वनिमय चित्र कवि ने इस प्रकार खींचा है- मधुरया मधुबोधितमाधवी-मधुसमृद्धिसमेधित-मेधया। मधुकरागंनया मुहुरुन्मद-ध्वनिभृता निभृताक्षरमुंचे। (6/20) इसी प्रकार रैवतक-पर्वत के वर्णन में माघ ने पद-लालित्य का यमक-युक्त मधुर सन्निवेश किया है जिसमें देवांगनाओं के राक्षसोपद्रव से रहित होकर निवास का वर्णन है- राजीव-राजी-वशालोल भृगं मृणन्तमुष्णं ततिभिस्तुरूपां।

कान्तालकान्ता ललनाः सुराणां रक्षोभिरक्षोभितमुद्धहन्तम्॥ (4/9) शब्द और अर्थ की परस्पर प्रतिस्पर्धा के रूप में पदलालित्य का निवेश निम्नांकित पद्य में देखा जा सकता है जिसमें समुद्र द्वारा भगवान् कृष्ण का अभिनन्दन किये जाने का वर्णन है- तमागतं वीक्ष्य यगुन्तबन्धुमुत्संग शय्या-शयमम्बुराशिः। प्रत्यज्जगामेव गुरु-प्रमोद-प्रसारितोत्तुंग-तरंग-बाहुः॥ (3/78) (1) प्रलय-काल के बान्धव तथा उत्संग (गोद) रूपी शय्या पर (=क्षीरसागर के मध्यभाग) शयन करने वाले उन कृष्ण भगवान् को आया हुआ देखकर समुद्र अतिशय हर्ष से तरंग-रूपबाँहों को फैलाकर

मानों उनका स्वागत करने लगा। स्वागत का अन्य प्रकार भी देखें - लवंगमालाकलितावतंसास्ते नारिकेलान्तरपः पिबन्तः। आस्वादितार्द्रक्रमुकाः समुद्रादाम्भ्यागतस्य प्रतिपतिमीयुः (3/81) आधुनिक समीक्षकों ने 'माघे सन्ति त्रयो गुणाः' की व्याख्या अन्य प्रकार से करते हुए यह प्रकट किया है कि माघ में 'त्रयो गुणाः' का अर्थ उपर्युक्त तीनों गुणों की उपस्थिति नहीं, अपितु ओज, माधुर्य तथा प्रसाद इन तीन काव्य-गुणों की स्थिति है। उपमा, अर्थगौरव और पदलालित्य ऐसी विशिष्टताएँ जो न्यून अधिक रूप से सभी कवियों में रहती हैं, तब माघ में इनकी उपस्थिति से प्रशस्तिकार का तात्पर्य क्या होगा? अवश्य ही प्रशस्तिकार ने माघ के पृथक् वैशिष्ट्य का निरूपण करना चाहा है। अन्य कवियों में जहाँ एक या दो गुण रहते हैं, माघ में तीनों काव्यगुण युगप्रतु वर्तमान रहते हैं, रसधर्म के रूप में नहीं अपितु अपने गौण अर्थ में अर्थात् शब्दार्थवृत्ति के रूप में।<sup>3</sup> काव्यप्रकाश- ये रसस्यागिनी धर्माः शौर्यादय इवात्मनः।

गुणवृत्त्या पुनस्तेषां वृत्तिः शब्दार्थयोर्मता॥<sup>4</sup> तदनुसार ओज गुण का सौन्दर्य देखा जा सकता है। हृदयमरिचधोदयादुदूढ-द्रुढि दधातु पुनः पुरन्दरस्या धनपुलक-पुलोमजा-कुचाग्र-द्रुतपरिरम्भ-निपीडन-क्षमत्वम्॥ (1/74)

इसी प्रकार प्रसाद गुण का सौन्दर्य द्वारका की ललनाओं के द्वारा कृष्ण के अवलोकन में उदाहरणीय है- यां यां प्रियां प्रैक्षत कातराक्षी, सा सा हिया नम्रमुखी बभूव। निःशंकमन्याः सममाहितेर्ष्या-स्तत्रान्तरे जधनुरमुं कटाक्षी॥ (3/16) माधुर्य- गुण- प्रभात वर्णन (एकादश सर्ग) के निम्नांकित पद्य में पूर्णतः विकसित रूप में द्रष्टव्य है। हवा बहने का वर्णन करने वाले इस पद्य पर मुग्ध होकर मल्लिनाथ ने कहा है कि आचार्यों के द्वारा प्रतिपादित दसों प्राचीन गुण इसमें वर्तमान हैं। पदलालित्य भी है- विकच-कमल-गन्धैरन्धयन् भृंगमालाः सुरभित-मकरन्दं मन्दमावाति वातः। प्रमद-मदन- माघद- यौवनोद्गम -रामा-रमण-रभस-खेद-स्वेद-विच्छेद-दक्षः॥ (11/19) विकसित कमलों की गन्धों से भ्रमर-पंक्तियों को अन्धा बनाने वाला वह प्रातः पवन मकरन्द को सुरभित करते हुए मन्द-मन्द बह रहा है जो हर्ष और काम से उन्मत्त तथा युवावस्था के कारण अनियन्त्रित (उद्गम) सुन्दरियों के रति-वेग की थकावट से उत्पन्ना स्वेद (पसीने को) दूर करने में समर्थ है। कुछ समालोचक- 'नैषधे पदलालित्यं' तथा कुछ 'दण्डिनः पद लालित्यं' मानते हैं। दोनों की कृतियों के अध्ययन से विदित होता है कि दण्डी के काव्य में इस प्रकार का पदलालित्य नहीं है जैसा श्रीहर्ष के काव्य में दृष्टिगोचर माघ भी पदलालित्य में किसी से कम नहीं है। उनकी मनोहर ललित पदावली से सहृदयों का हृदय आकृष्ट हो जाता है। उनका प्रत्येक पद लालित्य से भरा पड़ा है।<sup>5</sup> निम्नलिखित कतिपय उदाहरणों से

उनके पदलालित्य का ज्ञान हो जायेगा - (2) यत्रोत्तिष्ठताभिर्मुहुरम्बुवाहैः समुन्नमदभिर्न् समुन्नमदभिः। वन बबाधे विषपावकोत्था विपन्नगानाम विपन्नगानाम॥ 4-51 नीचे के श्लोकों में उपभावैचित्र्य के साथ लोकोत्तर पदविन्यास दिखाई देता है- रथांगपाणेः पटलेन रोचिवामृशित्विषः संवलिता विरेजिरे। चलत्पलाशान्तरगोचरास्तरोस्तुषारमूर्तेरिव नक्तमंशवः॥ 1-21 प्रफुल्लतापिच्छनिभैरमीशुभिः शुभैश्च सप्तच्छदपांसुपाण्डभिः। परस्परेण च्छुरितामलच्छवी तदैकवर्णाविव तौ बभूवतुः॥ 1-22 पदलालित्य का एक अन्य उदाहरण दिया जाता है जिसमें यमक अलंकार की अद्भुत छटा का दर्शन होता है। पाठक पढ़ते ही आनन्दविभोर हो जाता है- नवपलाशपलाशवनं पुरः स्फुटपरागपरागतपंकजम्। मृदुलतान्तलतान्तम लोकयत्स सुरभिं सुरभिं सुमनोभरैः॥ 6-2 कहा जाता है कि निम्न श्लोक के पदलालित्य से प्रसन्ना होकर महाराज भोज द्वारा कवि को एक लक्ष मुद्रा प्रदान की गई थी। यहाँ नादात्मक पदलालित्य दृष्टिगोचर होता है- कुमुदवनमपश्चि श्रीमदम्भोजखण्डं त्यजति मुद्युलकः प्रीतिमांश्चक्रवाकः। उदयमहिमरश्मिर्याति शीतांशुरस्तं हतविधिविलसितानां ही विचित्रो विपाकः॥ 11-64 ऊपर के उदाहरणों से स्पष्ट है कि माघ का पदलालित्य संस्कृत साहित्य में अद्वितीय है। इसी पदलालित्य के कारण माघ के शिशुपाल वध को पढ़कर कवियों का अभिमान जाता रहा। माघ के संबंध में कही गई प्रशस्तियाँ व्यर्थ नहीं हैं। वास्तव में बाद के बहुत से कवि उनसे प्रभावित हुए हैं तथा उनकी पद्धति का अनुसरण किया है। डॉ० एस० के० डे० कथन है- जीम मगजमदज वपि पदसिनमदबम वदीपेनबमेवतेए पद्वीवेम मेजपउंजपव दीमेजंदक मअमदीपहीमत जीदांसपके वठितअएवेमजे जीमेजंदकंतक (2) क वसिंजमत अमतेम उांपदह इनज जीम पदउमदेम चवचनसंतपजल वीपे चवमउसेवीवै जीज जीमतम पेंसूले कमउंदक वित चवमजतल वसिपजजसम सवूमतंदकंतजपपिबपंसापदकण्शपेजवतल वदितपज स्पजमतंजनतमय चंहम 194 ललित पदधारी नायक श्रीकृष्ण पदलालित्य के उत्कर्ष हैं। माघ ने शिशुपाल वध महाकाव्य में उनका अवतारी प्राकट्य पदलालित्य की भूमिका में प्रतिष्ठित किया है। जो काव्य सौष्ठव का श्रेष्ठतम बिन्दु है। शिशुपाल वध महाकाव्य के नायक श्रीकृष्ण हैं तथा प्रतिनायक शिशुपाल है। प्रमुख पात्र दो ही हैं। प्रसंगवश अन्य पात्र भी आ गये हैं। यहाँ प्रमुख पात्रों का चित्रण प्रथम सर्ग के आधार पर ही किया जा रहा है। 'नेतास्मिन् यदुनन्दनः स भगवान्' के अनुसार भगवान् कृष्ण ही इसके नायक हैं। माघ ने उन्हें विष्णु का अवतार मानकर तत्संबंधी पद के अनुकूल समस्त विभूतियों से विभूषित किया है। (3) उनके पौराणिक महात्म्य एवं कार्यकलापों की यत्र-तत्र चर्चा की गई। इतना ही नहीं उन्हें चराचर के लिए सेव्य बनाया है। उन्हें जगत् का आधार कहा गया है। संसार के प्राणी उन्हीं के आश्रय में रहकर

जीवित हैं। जगत् का नियंत्रण करने के लिए दुष्टों का दमन तथा सज्जनों की रक्षा करते हैं। (श्रियः पतिः श्रीमति शशितुं जगज्जगन्निवासो वसुदत्ते सन्ननि) वे लक्ष्मीपति हैं। श्रीकृष्ण नर हैं। वे उच्चकुलोत्पन्ना क्षत्रिय हैं। ऋषि, मुनि, ब्राह्मण आदि का वे उचित सत्कार करते हैं। महर्षि नारद के आकाशमार्ग से उतरकर भूमि पर आते ही वे अपने उच्चासन से अविलम्ब स्वागतार्थ उठ खड़े हुए। अर्ध, पाद्यादि पूजा-सामग्रियों से उनकी विधिपूर्वक पूजा की। अर्चनोपरान्त श्रीकृष्ण ने उन्हें अपने हाथ से आसन देकर सादर अपने सम्मुख बैठाया। नारायण और कपिल के अवतार में तपस्या करने के कारण उन्हें 'चिरन्तनमुनि' से अभिहित किया गया है। भगवान् श्रीकृष्ण श्यामवर्ण हैं। अंजन पर्वत, महामहानीलशिलारूचः नवाम्बुदश्यामवपुः से इनकी पुष्टि होती है। वे पीताम्बरधारी विनम्र हैं। उनके हाथ में सुदर्शन चक्र है। वे मर्यादापालक एवं मधुरभाषी हैं। उन्होंने वाराहावतार लेकर पृथ्वी का उद्धार किया था। वे तीनों लोकों के एकमात्र अधिपति हैं। उन्होंने नृसिंहावतार लेकर हिरण्यकशिपु का वध किया था। तदनन्तर रामावतार ग्रहण कर अत्यन्त मदोद्धत एवं दुर्दान्त रावण को लंका के समीप मारा। पद का लालित्य समासरहित सौम्य पदावली में तथा अनुप्रासयुक्त नाद सौन्दर्य के रूप में शिशुपालवध में परिलक्षित होता है सुन्दर से सुन्दर पदावली जिसमें वर्णसाम्य अनुप्रास स्वतः ही आ गया है। पदलालित्य के निवेश से माघ ने साधारण विषयों को भी चमत्कारी बना दिया है। आकर्षक और हृदयावर्जक वस्तु को 'ललित' कहते हैं। जिस पद रचना से पाठक आकृष्ट हो और साधुवाद करने लगे वह लालित्यपूर्ण होती है। सानुप्रास लालित्य की दृष्टि से माघ की कीर्तिकुण्डलिनी संस्कृत साहित्य के इतिहास में जागृत हुई है। माघ की वर्णन क्षमता में भी लालित्य का प्रवाह प्राप्त होता है। शिशुपालवध के वर्णनों में प्रसादगुण, वैदर्भी रीति, शालीनता और प्रवाहपूर्ण शशा का समन्वित रूप पदलालित्य के स्वरूप को आलोकित करता है।

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## मौसम आधारित फसल बीमा योजना का क्रियान्वयन एवं प्रभाव का अध्ययन

डॉ. सीमा परमार \*

**प्रस्तावना** – देश फल फूल सब्जी मसाला औषधिय एवं सुगंधित फसलों के उत्पादक में आत्म निर्भर होकर देश में अग्रणी उत्पादक की भूमिका अदा करे इस हेतु राज्य शासन एवं केन्द्र सरकार के उपक्रमों/संस्थाओं के माध्यम से विभिन्न विकासोन्मुखी योजनाएं क्रियान्वित की जा रही हैं। उसमें से एक है मौसम आधारित फसल बीमा जो कि केन्द्र व राज्य सरकार द्वारा 50:50 के अनुपात में संचालित की जा रही है। इसके अन्तर्गत व्यवसायिक एवं वाणिज्य फसलों का बीमा किया जाता है। और प्रकृति अपदाओं से होने वाले नुकसान की भरपाई की जाती है। 5% प्रीमियम का भुगतान कृषकों द्वारा किया जाता है। इस योजना का मुख्य उद्देश्य व्यवसायिक एवं वाणिज्यिक फसलों के क्षेत्रफल एवं उत्पादन में वृद्धि करना।

**योजना की योग्यता** – किसी भी संदर्भ ईकाई क्षेत्र के प्रायोगिक क्षेत्रों में फसल (योजना के अन्तर्गत बीमा योग्य) उगाने वाले सभी खेतिहारों (साझेदारी में खेती करने वाले एवं काश्तकारी खेतिहारों समेत) बीमा लेने के पात्र होंगे। लेकिन यह योजना उन सभी ऋण प्रदाता बैंकों। वित्तीय संस्थाओं से ऋण लेने वाले कृषकों के लिए अनिवार्य है जिनके पास विशेष फसल के लिए अनुमोदित ऋण सीमा है। एवं अन्यो के लिए वैकल्पिक।

**अध्ययन विधि** – व्यवसायिक एवं बागवानी फसलों के उत्पादन पर मौसम आधारित फसल बीमा योजना के क्रियान्वयन से क्या प्रभाव हुआ है यह जानने के लिए इस विषय का चयन किया गया है। आकड़ों का संकलन और वैधता के परीक्षण हेतु परिकल्पनाओं का निर्माण किया गया है। परिकल्पना के बिना न तो कोई प्रयोग हो सकता है। और न कोई वैज्ञानिक गति से अनुसंधान संभव है।

**अध्ययन के उद्देश्य :**

1. मौसम आधारित फसल बीमा योजना की क्रियान्वयन प्रक्रिया का अध्ययन करना।
2. मौसम आधारित फसल बीमा योजना के क्रियान्वयन एवं व्यवसायिक बागवानी फसलों पर हुए प्रभावों का अध्ययन करना

**शोध की परिकल्पनाएँ:**

1. मौसम आधारित फसल बीमा योजना का क्रियान्वयन सफलता पूर्वक हुआ है।
2. मौसम आधारित फसल बीमा योजना के क्रियान्वयन से उद्यानिकी एवं बागवानी फसलों के उत्पादन में वृद्धि हुई है।

**संमको का संकलन** – परिकल्पना के परीक्षण के लिए आकड़ों के संकलन की आवश्यकता होती है। उद्यानिकी एवं खाद्य प्रसंस्करण विभाग के अधिकारियों से साक्षात्कार कृषकों से साक्षात्कार के माध्यम से प्राथमिक

एवं समक एकत्र किये गये। द्वितीय समक उद्यनिकी एवं खाद्य प्रसंस्करण विभाग के वार्षिक प्रमिवेदना एवं प्रत्रिकाओं से प्राप्त की गई।

**भोजन कि विशेषताएँ –**

1. दिसम्बर तथा अप्रैल के बीच मौसम के विभिन्न मापदण्डों जैसे ओले गर्मी सापेक्षित आर्द्रता बारिश के विषम विचलन के विरुद्ध सुरक्षा प्रदान करता है।
2. वर्गीय बीमा उत्पाद जो गेहूँ आलू जो सरसों चना जैसे फसलों का बीमा प्रदान करता है।
3. अधिकतम जवाबदेही उपजाने के खर्च से जुड़ी होती है। तथा फसल के अनुसार अलग-अलग होता है।
4. दावों के त्वरित भुगतान में मदद करता है। जैसे कि बीमा अवधि के 4-6 हफ्तों के अन्दर

**कार्यप्रणाली** – मौसम आधारित फसल बीमा योजना (WDCIS) एरिया आप्रोच की परिकल्पना पर काम करती है। यानि क्षतिपूर्ति के उद्देश्यों पर एक संदर्भ ईकाई क्षेत्र या रेफरेंस यूनिट एरिया (RVA) बीमें की सजातीय ईकाई मानी जायेगी। मौसम शुरू होने के पहले यह संदर्भ ईकाई क्षेत्र राज्य सरकार द्वारा सूचित की जायेगी एवं उस क्षेत्र में एक विशेष फसल के लिए सभी बीमित कृषक दावों के आकलन के लिए सममूल्य पर माने जाएंगे। प्रत्येक संदर्भ ईकाई क्षेत्र एक रेफरेंस वेदर स्टेशन से जुड़ी है। जिसके आधार पर वर्तमान मौसम के आकड़ों एवं दावों का व्यवहार किया जायेगा चालू मौसम की सर्तकता बिन्दू एवं योजना की शर्तें लागू होने पर क्षेत्र पद्धति व्यक्तिगत पद्धति के विरुद्ध है जिसमें नुकसान उठाने वाले प्रत्येक कृषक के लिए दावे का आकलन किया जाता है।

**गणना विधि:-** मौटे तौर पर बीमा सुरक्षा धन (बीमित राशि) फसल उगाने के लिए बीमि व्यक्ति द्वारा खर्च की जाने वाली अनुमानित राशि होती है। कृषि बीमा कम्पनी द्वारा राज्य सरकार के विशेषज्ञों के परामर्श से हर फसल के मौसम की शुरुआत के प्रति ईकाई क्षेत्र (हेक्टेयर) बीमित राशि की पूर्व घोषणा की जाती है तथा यह विभिन्न संदर्भ ईकाई क्षेत्र में विभिन्न फसलों के लिए अलग-अलग हो सकती है। बीमें के लिए इस्तेमाल किए गए मुख्य मौसम मानदण्डों के अनुसार बीमित राशि का मौसम के मानदण्डों के सापेक्षित महत्व के अन्तर्गत और विभाजन होता है।

**प्रीमियम दर :-** प्रीमियम दर अनुमानित नुकसान पर निर्भर करती है। जो कि एक साल फसल की आदर्श मौसम आवश्यकताओं के सन्दर्भ में लगभग 25-100 वर्षों के ऐतिहासिक काल के मौसम मानदण्ड के स्वरूप पर निर्भर करती है। दूसरे शब्दों में प्रीमियम दर हर संदर्भ ईकाई क्षेत्र एवं हर फसल के



हिसाब से अलग हो सकती है लेकिन प्रीमियम दरें किसानों के लिए आवरण की तरह होती हैं। तथा आवरण से दरें प्रीमियम (दरें) केन्द्रीय तथा सम्बन्धित राज्य सरकार द्वारा 50:50 आधार पर वहन की जाती हैं। किसानों द्वारा विभिन्न उपजों के लिए चुकायी जाने वाली प्रीमियम दरें निम्नलिखित हैं।

**तालिका-1**

क्र.	प्रीमियम	सब्सिडी/प्रीमियम
1	2%	कोई सब्सिडी नहीं
2	2-5%	25: बशर्ते 2% न्यूनतम निवलप्रीमियम कृषक द्वारा देय हो
3	5-8%	40: बशर्ते 3.75% न्यूनतम निवल प्रीमियम कृषक द्वारा देय हो
4	8%	50% बशर्ते 4.8: न्यूनतम निवल प्रीमियम एवं 6% अधिकतम निवल प्रीमियम कृषक द्वारा देय हो

ऋण लेने वाले बीमित कृषक के मामले में देय निवल प्रीमियम ऋणदाता बैंक द्वारा वित्त पोषित की जाती है।

**कवरेज** - एग्रीकल्चर इन्शोरेस कम्पनी आफ इण्डिया लिमिटेड (AIC) इन कारणों से सम्भावित घटती फसल की पैदावार के एवज में बीमित व्यक्ति को क्षतिपूर्ति करती है। सर्तकता बिन्दुओं से अधिकतम वर्षों तथा सर्तकता बिन्दु नीचे खिली धूप के घण्टे।

**दावा प्रक्रिया** - दावे स्वचालित होते हैं। एवं उनका निपटारा प्रत्येक फसल के लिए अलग-अलग सम्बन्ध एंजेंसियों/संस्थाओं से प्राप्त वास्तविक अधिकतम तापमान न्यूनतम तापमान वर्षा एवं बी. एस.एच के आकड़ों के आधार पर होगा। भूगतान योग्य स्थिति में होने पर क्षेत्र के सभी बीमित उपजाने वालों को बीमित फसल उगाने के लिए दावों का भूगतान समान दर पर किया जाता है।

म.प्र. में योजना का क्रियान्वयन फसलों के क्षेत्रफल उत्पादक एवं उत्पादकता

**तालिका-2**

वर्ष	क्षे.(हे.मे)	उत्पादन	उत्पादकता
2013-14	212076	5846935	27.25
14-15	228784	5801962	27.57
15-16	291411	5312184	25.36
16-17	329359	5916713	28.196
17-18	329359	6020720	29.25

स्रोत:- उद्यानिकी एवं खाद्य प्रसंस्करण विभाग भोपाल के वार्षिक प्रतिवेदन सन्निधियों के क्षेत्रफल उत्पादक एवं उत्पादकता

**तालिका-3**

वर्ष	क्षे.(हे.मे)	उत्पादन (टन में)	उत्पादकता
2013-14	625347	13119780	20.90
14-15	666414	14121313	21.15
15-16	756812	13743780	14.47
16-17	864290	15801218	18.28
17-18	904500	16501200	19.20

स्रोत:- उद्यानिकी एवं खाद्य प्रसंस्करण विभाग भोपाल के वार्षिक प्रतिवेदन मसालों का क्षेत्रफल उत्पादन एवं उत्पादकता :-

**तालिका-4**

वर्ष	क्षे.(हे.मे)	उत्पादन (टन में)	उत्पादकता टन/ हे.मे
2013-14	561402	4328409	7.71
14-15	571165	4466510	7.82
15-16	582154	2687296	4.62
16-17	665056	4153233	6.24
17-18	670000	4202035	7.50

स्रोत:- उद्यानिकी एवं खाद्य प्रसंस्करण विभाग भोपाल के वार्षिक प्रतिवेदन उपरोक्त तालिका से स्पष्ट है कि योजना के क्रियान्वयन के पश्चात उत्पादकता में लगातार वृद्धि हुई है।

**निष्कर्ष** - केन्द्र व राज्य सरकार के प्रयत्नों से संचालित मौसम आधारित फसल बीमा योजना का क्रियान्वयन सफलतापूर्वक हुआ है। एवं वाणिज्यिक फसलों के उत्पादन में एवं अतः उसके क्रियान्वयन से राज्य में व्यवसायिक उत्पादकता में लगातार वृद्धि हुई है।

**संदर्भ ग्रंथ सूची :-**

1. भारतीय अर्थव्यवस्था रूढ़ दत्त (केपी.एम सुन्दरम्)रस्तोगी एण्ड कम्पनी मेरठ 2016
  2. सामान्य अध्ययन भारतीय अर्थव्यवस्था
- सामाचार पत्र पत्रिका :**
1. प्रतियोगिता दर्पण (सामान्य अध्ययन)
  2. मासिक पत्रिका
  3. दैनिक भास्कर, नई दुनिया, समसामयिकी
  4. www.M.P.krishi.org.
  5. www.aicohindia.com.
  6. www.google.com

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## महिला सशक्तिकरण में सरकारी योजनाओं का योगदान एवं प्रभाव

श्रीमती शिवानी श्रीरवताव\*

**प्रस्तावना -** 'आधी दुनिया का जुमला अब हुआ पुराना  
अपनी शक्ति रूप को हमने है पहचाना,  
अब अपने हक की खातिर हर हद तोड़ेगी  
बदलेगी अबला होने का हर अफसाना'

हमारे देश में महिलाओं की स्थिति प्राचीन काल से लेकर वर्तमान समय तक बहुत अधिक सुदृढ़ नहीं रही है। वैदिक युग में स्त्रियों को पुरुषों के समान स्थिति प्राप्त थी। प्राचीन समय में उनके सम्मान एवं महत्व की भावना प्रचलित थी, परंतु समय में परिवर्तन होने के साथ-साथ महिलाओं की स्थिति एवं महत्व कम होता गया और उन्हें सशक्त व मजबूत बनाने के लिए उनके सशक्तिकरण की आवश्यकता महसूस होने लगी तथा महिलाओं को सशक्त बनाने हेतु अनेक सामाजिक व शासकीय प्रयास प्रारंभ किए गए व निरन्तर जारी है।

महिलाओं की गरिमा, प्रतिष्ठा एवं सामाजिक स्थिति को बेहतर बनाने के लिए हमारे देश में स्वतंत्रता से पहले और बाद में बहुत से विधान बने हैं, परन्तु उनकी स्थिति में अपेक्षित सुधार अभी भी प्रतिक्षित हैं। संविधान निर्माताओं ने देश के सामाजिक ढांचे में महिलाओं को उचित, उपयुक्त एवं बराबरी का स्थान दिलाने के लिए भरसक प्रयास किया है जिसे संविधान के विभिन्न प्रावधानों में मूर्त रूप दिया गया है। राष्ट्र के विकास के लिए महिला को सशक्त किये जाने की आवश्यकता महसूस की गई।

परिवार की धुरी नारी को जागरूक व सशक्त बनाकर ही समाज को सशक्त बनाया जा सकता है। सशक्त समाज ही देश को मजबूत बना सकता है। ऐसे उदाहरण हमें अनेक जगह दिखायी देते हैं जहां पर स्त्रियों ने श्रम, संघर्ष और सहकारी प्रयत्न से अपना पक्ष सबल किया है, जिससे समाज में परिवर्तन भी दिखायी देने लगा है।

महिलाओं के सशक्तिकरण का तात्पर्य है। शिक्षा और स्वतंत्रता को समाहित करते हुए सामाजिक सेवाओं के समान अवसर, राजनैतिक और आर्थिक निर्धारण में भागीदारी, समान कार्य के लिए समान वेतन, कानून के तहत सुरक्षा एवं प्रजनन का अधिकार आदि मुद्दों को समाहित किया गया है। आज अधिक आवश्यकता इस बात की है कि महिलाओं में स्वयं की ताकत के बारे में चेतना जागृत करना जिससे केवल महिलाओं का कल्याण ही नहीं होगा बल्कि वे सामाजिक विकास की प्रवर्तक भी सकेंगी। महिलाएं जब तक अपनी शक्ति, क्षमता व आत्मविश्वास को जागृत नहीं करेंगी तब तक कोई बाहरी शक्ति उन्हें सशक्त नहीं कर सकती है।

सशक्तिकरण बाहर से नहीं किया जा सकता है। वह तो स्वयं महिलाओं में जागृत होना आवश्यक है।

महिलाओं को सशक्त बनाने हेतु उन्हें राष्ट्रीय विकास की धारा में

भागीदार बनाना होगा और साथ-साथ जागरूक भी करना होगा।

महिला सशक्तिकरण की दूसरी महत्वपूर्ण आवश्यकता महिलाओं की आर्थिक स्वतंत्रता है। महिलाओं के द्वारा प्रत्येक क्षेत्र में सबसे अधिक श्रम किया जाता है परन्तु उन्हें उनके श्रम का पूर्ण प्रतिफल नहीं मिलता है। इस हेतु महिलाओं को शिक्षित करने के साथ ही प्रशिक्षित करना भी आवश्यक है, जिससे वे लघु एवं स्वयं का रोजगार स्थापित करने में सक्षम हो पाएंगी।

भारत गाँवों का देश है। देश की लगभग 50 प्रतिशत जनसंख्या गाँवों में निवास करती है इसलिए स्वाभाविक है कि देश की लगभग 50 प्रतिशत महिलाएं ग्रामीण क्षेत्रों में निवास करती हैं। महिलाओं के शोषण एवं उत्पीड़न को रोकने के लिए आवश्यक है कि उनका बहुमुखी विकास किया जाए एवं निर्णय प्रक्रिया में महिलाओं की भागीदारी को बढ़ाया जाए।

नवें दशक में विभिन्न रोजगार एवं वित्तीय योजनाओं द्वारा महिलाओं की आर्थिक स्थिति को बेहतर बनाने के कई प्रयास किये गये। महिला समृद्धि योजना, बालिका समृद्धि योजना, इंदिरा महिला योजना जैसे कार्यक्रम के अतिरिक्त राष्ट्रीय ग्रामीण रोजगार कार्यक्रम, रोजगार गारंटी योजना तथा अकाल राहत कार्यों में महिलाओं को रोजगार उपलब्ध करवाने के विशेष प्रयास किये गये। महिलाओं के विकास को लेकर सरकार की दृष्टि समय-समय पर बदलती रही। आरंभ में यह योजना कि महिला परिवार की एक सदस्य है। परिवार के मुखिया को दी जाने वाली सहायता से महिलाओं की स्थिति में स्वयं ही सुधार आ जाएगा। लेकिन परिवारों में असमान वितरण व्यवस्था के चलते ऐसा नहीं हुआ।

स्वतंत्रता के बाद देश में महिलाओं के सामाजिक-आर्थिक परिप्रेक्ष्य में सुधार लाने के लिए सरकार की ओर से कई सकारात्मक और समन्वित प्रयास किए गए हैं।

प्रारंभिक दौर में महिला कल्याण का नजरिया अपनाते हुए केन्द्र तथा राज्य सरकार ने ऐसे कार्यक्रम प्रारंभ किये जिनके द्वारा महिला कल्याण संभव हो सके। इस क्रम में विभिन्न पंचवर्षीय योजनाओं के समय महिलाओं के कल्याण हेतु प्रावधान किए गए। परन्तु यह प्रयास केवल कुछ ही जाति की महिलाओं को आकर्षित कर पाये, अतः अधिक सफल नहीं हो पाये।

महिलाओं हेतु संचालित योजनाओं व कार्यक्रमों से महिलाओं की परम्परागत छवि को तोड़ने या बदलने में सहायता मिली है। परन्तु महिलाओं को प्रारंभिक प्रशिक्षण देने के बाद भी गैर परम्परागत व्यवसायों को स्थापित करने के प्रयास नहीं हो सके। सरकारी आर्थिक कार्यक्रमों की एक सबसे बड़ी कमजोरी यह रही है। कि महिलाओं के परंपरागत रोजगार के स्रोतों व अवसरों को बढ़ाने के प्रयास नहीं किये गये अर्थात् जो भी प्रयास हुए वे केवल ऊपरी तौर पर ही रहे हैं।

इन्हीं बातों व तत्वों को दृष्टिगोचर रखते हुए भारत सरकार व केन्द्रीय

सरकार के समान ही म.प्र.सरकार ने महिलाओं को सशक्त व आत्मनिर्भर बनाने हेतु कई शासकीय प्रयास किए हैं व कई योजनाएं प्रारंभ की हैं, जिसमें से कुछ प्रमुख योजनाएं निम्नानुसार हैं :-

1. सामाजिक सुरक्षा पेंशन योजना।
2. आंगनबाड़ी योजना।
3. ग्राम्या योजना।
4. लाइली लक्ष्मी योजना।
5. उषा किरण योजना।
6. तेजस्विनी ग्रामीण महिला सशक्तिकरण योजना।
7. गांव की बेटी योजना।
8. प्रतिभा किरण योजना।
9. स्वाधारा।

उपर्युक्त योजनाओं का उद्देश्य सरकारी व आर्थिक सहायता प्रदान कर महिलाओं और साथ ही साथ बालिकाओं को भी सशक्त बनाना था।

इन योजनाओं के अतिरिक्त महिलाओं को सशक्त बनाने हेतु सरकार द्वारा पंचायतों एवं संसद में महिलाओं हेतु आरक्षण का प्रावधान भी किया गया है।

**विषय का चयन** - सरकारी योजनाएं सेवा प्रदान करने वाला एक ऐसा क्षेत्र है, जो महिला की आवश्यकताओं को ध्यान में रखते हुए महिला विकास में योगदान तो प्रदान करता ही है, साथ ही महिलाओं के हृदय में परस्पर सहयोग, समन्वयता और मिल-जुलकर कार्य करने की प्रेरणा भी देता है।

वाणिज्य विषय में संबंधित होने के कारण जहाँ वाणिज्य से संबंध होता है, स्वयं ही जिज्ञासा जाग्रत हो जाती है, चूंकि हमारी संस्कृति नारी प्रधानता पर आधारित है अतः यह जानने की उत्सुकता हमेशा होती है कि, हमारी संस्कृति तथा नारी के आर्थिक विकास के लिए कौन-कौन से नवीन कार्य हो रहे हैं? सरकार जिन नीतियों व कार्यक्रमों की घोषणा करती है उनका क्रियान्वयन हो रहा है या नहीं, व उन योजनाओं से वे क्षेत्र लाभान्वित हो रहे हैं या नहीं जिनके लिए ये योजनाएँ बनाई गई हैं? इसलिए मेरे द्वारा 'महिला सशक्तिकरण में सरकारी योजनाओं का योगदान एवं प्रभाव' (इन्दौर संभाग के विशेष संदर्भ में) का अध्ययन किया जा रहा है।

एक शोधार्थी के रूप में हमेशा मेरे मन में यह जिज्ञासा रही है कि, सरकारी योजनाओं का योगदान किस प्रकार अपने को संतुष्ट करती है? समस्त योजनाओं की क्रियाशीलता का स्तर क्या है? ऋण सुविधाओं का प्रभाव कैसा और कितना है? यह सब जानने के लिए मेरे द्वारा शोध का विषय 'महिला सशक्तिकरण में सरकारी योजनाओं का योगदान एवं प्रभाव' - इन्दौर संभाग के विशेष संदर्भ में निर्धारित किया गया है।

**अध्ययन का औचित्य** - सरकार द्वारा महिलाओं को सशक्त व आर्थिक रूप से आत्मनिर्भर बनाने हेतु समय-समय पर अनेक योजनाएँ घोषित एवं क्रियान्वित की गयी हैं तथा इनके क्रियान्वयन में स्थानीय स्तर की भागीदारी भी सुनिश्चित की गई है। इसका समय-समय पर निष्पक्ष मूल्यांकन एवं अध्ययन अपेक्षित है। जिससे की शासकीय योजनाओं का क्रियान्वयन प्रगति, स्थानीय स्तरों का योगदान एवं रोजगार सृजन में योजना के प्रभाव का अध्ययन किया जा सके।

देश में बढ़ती हुई जनसंख्या और उसमें महिलाओं की घटती हुई भूमिका एवं महिलाओं को उचित स्थान प्रदान करने हेतु सरकार द्वारा अनेक प्रयास किये जाते रहे हैं, और इन्हीं प्रयासों में से एक प्रयास है म.प्र. सरकार द्वारा समय-समय पर महिला सशक्तिकरण हेतु विभिन्न योजनाएँ प्रारंभ करना। इस शोध कार्य से योजनाओं का महिलाओं की आर्थिक स्थिति में क्या प्रभाव

हुआ है। इसका मूल्यांकन हो सकेगा और योजनाओं में आने वाली समस्याओं का समाधान भी किया जा सकेगा।

इस अध्ययन का औचित्य यह ज्ञात करना है कि, म.प्र. सरकार द्वारा योजनाओं का क्रियान्वयन किस प्रकार किया जा रहा है एवं योजनाओं का मूल्यांकन की यथोचित रूप से हो सकेगा जो कि केन्द्र एवं राज्य सरकारों के लिए भी उपयोग एवं महत्वपूर्ण सिद्ध होगा। इस शोध कार्य द्वारा अर्थशास्त्री प्रशासकीय अधिकारी, शोधार्थी, हितग्राहियों, क्रियान्वयन एजेंसियों तथा इस विषय में रुचि रखने वाले लोगों को लाभ एवं मार्गदर्शन प्राप्त होगा।

**अध्ययन का उद्देश्य** - प्रत्येक कार्य की शुरुआत किसी विशेष उद्देश्य की प्राप्ति के लिए होती है। जब हम कोई भी कार्य करते हैं तो उस कार्य को करने का हमारा कोई निश्चित उद्देश्य होना चाहिए। क्योंकि बिना उद्देश्य के कोई भी कार्य सफलतापूर्वक संचालित नहीं हो सकता है।

मेरे द्वारा शोध का विषय 'महिला सशक्तिकरण में सरकारी योजनाओं का योगदान एवं प्रभाव' इन्दौर संभाग के विशेष संदर्भ में लिया गया है, इसके पीछे मेरा उद्देश्य महिलाओं से संबंधित सरकारी योजनाओं का योगदान एवं प्रभाव संबंधित समस्त जानकारियाँ एकत्रित कर उनका प्रचार-प्रसार करना है, जो कि, शोधार्थी द्वारा किये जा रहे शोध अध्ययन का मुख्य उद्देश्य थे।

**प्रमुख उद्देश्य** - महिला सशक्तिकरण में सरकारी योजनाओं का योगदान, प्रभाव एवं महिलाओं की स्थिति का अध्ययन करना।

इस प्रमुख उद्देश्य की पूर्ति हेतु कुछ सहायक उद्देश्यों का निर्धारण किया गया था, जो कि, निम्नलिखित हैं :-

**सहायक उद्देश्य :**

1. महिला सशक्तिकरण योजनाओं से लाभान्वित महिलाओं की स्थिति ज्ञात करना।
2. योजनाओं के क्रियान्वयन में निर्धारित प्रावधानों का अध्ययन करना।

**अध्ययन की परिकल्पना** - मानव की यह प्रवृत्ति रही है कि, वह हमेशा से जिज्ञासु रहा है। मनुष्य की यह जिज्ञासु प्रवृत्ति ही, उसे नये-नये अविष्कार करने, खोज करने, समस्याओं का समाधान ढूँढने तथा किसी विषय पर गहन एवं विस्तृत अध्ययन तथा चिंतन करने की दिशा में प्रेरित करती है। प्रस्तुत शोध प्रबंध में निम्नलिखित परिकल्पनाएँ थी :

1. महिला सशक्तिकरण योजनाओं का क्रियान्वयन सरकार द्वारा निर्धारित दिशा-निर्देश के अनुरूप किया जा रहा है।
2. महिला सशक्तिकरण योजनाओं के परिणामस्वरूप महिलाओं की आर्थिक स्थिति में सुधार हुआ है।
3. महिला सशक्तिकरण योजनाओं से महिलाओं के रोजगार अवसरों में वृद्धि तथा उनका जीवन स्तर में सुधार हुआ है।

**अध्ययन की प्रविधि** - किसी भी शोध या अनुसंधान को पूर्ण करने के लिए समंको की आवश्यकता होती है। कोई भी शोध कार्य समंको के बिना संभव नहीं है क्योंकि समंको ही विश्लेषण का आधार होते हैं। इसलिए समंको का संग्रहण करना होता है। समंको को हम तथ्यों से अभिव्यक्त करते हैं, इसलिए तथ्यों को समस्या का दर्पण या संवाहक कहा जाता है। किसी भी शोध की पहली आवश्यकता समंको संग्रह है। म.प्र. शासन द्वारा महिला सशक्तिकरण में सरकारी योजनाओं का योगदान एवं प्रभाव (इन्दौर संभाग के विशेष संदर्भ में) के अंतर्गत प्रस्तुत शोध में शोधार्थी द्वारा प्रत्येक योजना से लाभान्वित 50-50 हितग्राही महिलाओं का चयन यादृच्छिक पद्धति के आधार पर किया गया है तथा प्राप्त जानकारी को देव निर्देशन विधि का

प्रयोग करके 200-200 लाभान्वित (हितग्राही) महिलाओं का चयन किया गया है, जिसके आधार पर विश्लेषणात्मक अध्ययन तथा निष्कर्ष ज्ञात किया गया तथा इन समंको का संग्रह निम्नलिखित विधियों का प्रयोग करके किया गया है :-

**1. अवलोकन विधि** - शोध की इस विधि के अंतर्गत किसी भी प्रकार का साक्षात्कार नहीं लिया जाता है। अवलोकनकर्ता जो कुछ भी होते हुए देखता है, उसी को अभिलिखित कर देता है, जिसमें शोधार्थी प्रत्यक्ष रूप से हितग्राहियों का यथास्थान उपस्थित होकर अवलोकन करता है तथा स्वयं के विवेक अनुसार देख, सुनकर, निर्णय लेकर निष्कर्ष लिख लेता है।

**2. सर्वेक्षण विधि** - इस विधि के अंतर्गत जिन व्यक्तियों से सूचनाएँ प्राप्त होती हैं, उनसे प्रश्नावली या तालिका की सहायता से प्रश्न पूछे गये हैं तथा इसमें प्राप्त उत्तरों के आधार पर ही निष्कर्ष ज्ञात किया गया है।

**3. प्रयोगात्मक विधि** - इस विधि में छोटे-छोटे प्रयोगों द्वारा विपणन समस्या के कारकों का प्रभाव जाना जाता है और बाद में सफलता के अनुसार इनके आकार में वृद्धि कर दी जाती है। इसमें जितने अधिक प्रयोग होते हैं उतने ही अधिक निष्कर्ष के सही होने की संभावना होती है।

**4. विश्लेषणात्मक विधि** - इस विधि के अंतर्गत शोधकर्ता द्वारा आँकड़े या जानकारी एकत्र की गई तथा उसका विस्तृत विश्लेषण करके निष्कर्ष प्राप्त किया गया। इसी आधार पर प्रस्तुत शोध में भी इस विधि का उपयोग किया गया है।

किसी भी शोध कार्य को करने के लिए प्राथमिक एवं द्वितीयक समंको की आवश्यकता होती है परन्तु प्रस्तुत शोध प्रबंध मुख्यतः द्वितीयक समंको पर आधारित रहेगा। यथा स्थान प्राथमिक समंको को भी प्रश्नावली, अनुसूची

एवं साक्षात्कार के माध्यम से सम्मिलित किया गया है। शोध कार्य के लिए शासकीय नीति एवं बाजार शक्तियों को स्वतंत्रचर तथा संगठन एवं इसकी कार्य प्रणाली को आश्रितचर मानकर चर विश्लेषण किया गया है।

किसी भी शोध विषय की अनुसंधान विधि अपेक्षित लक्ष्य पूर्ति करने में सहायक होती है। चूंकि अनुसंधान किसी भी एक पद्धति को अपनाकर नहीं किया जा सकता है। अर्थात् सिर्फ एक पद्धति के द्वारा विभिन्न तथ्यों का आकलन असंभव है। अतः हमने अनुसंधान की विभिन्न पद्धतियों के अन्तर्गत अनुपात, प्रतिशत, ग्राफ आदि का यथा स्थान प्रयोग किया है, क्योंकि समंको की परिशुद्धता व व्यापकता पर ही हमारे शोध की सफलता निर्भर है। किसी भी विषय के अध्ययन का तरीका उस विषय के उचित एवं सही विश्लेषण की रीढ़ होता है अर्थात् किसी भी विश्लेषण के पूर्व अध्ययन की रीतियों का चुनाव करना आवश्यक है।

अध्ययन को प्रामाणिक व वैज्ञानिक रूप देने के लिए सांख्यिकीय पद्धतियों का भी उपयोग किया गया है।

**अध्ययन का क्षेत्र एवं सीमाएँ** - मेरे द्वारा शोध का जो विषय निर्धारित किया गया है, यह इन्दौर संभाग के विशेष संदर्भ में सीमित है। प्रस्तुत शोध प्रबंध में सरकार की समस्त योजनाओं, सुविधाओं तथा उनके प्रभाव का अध्ययन इन्दौर संभाग के विशेष संदर्भ में वर्ष 2018 से 2019 के मध्य किया गया है। इसके अलावा मैंने शोध कार्य में लाभान्वित होने वाले हितग्राहियों की स्थिति पर शोध कार्य केन्द्रित किया गया था।

### संदर्भ ग्रंथ सूची :-

1. व्यक्तिगत शोध के आधार पर।

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## पर्यावरण के संदर्भ में डॉ. सुरेश मिश्र की बुक 'जंगल बोलते हैं'

**प्रो. ज्योति जोशी\***

**शोध सारांश -** डॉ. सुरेश मिश्र एक इतिहासवेत्ता और पर्यावरणविद् हैं। उन्होंने अपने गंभीर अनुसंधान से न केवल अनेक ऐतिहासिक पहलियों को हल किया है, अपितु पर्यावरणीय समस्याओं के समाधान हेतु भी सुझावों की खोज की है। ऐसे ही विशिष्ट अपादेयता से युक्त सुझावों पर आधारित उनकी अनमोल रचना का शीर्षक है- 'जंगल बोलते हैं'। इस ग्रंथ में कुल अठारह मौलिक आलेख समाहित हैं। प्रस्तुत शोध पत्र इसी रचना पर आधारित है। इस शोध पत्र में जंगल के विभिन्न वृक्षों, वन्य जीवों, मानव बस्तियों, फलों, फूलों का विवेचन किया गया है। साथ ही जंगलों में होने वाली प्रभावी राजनीतिज्ञों और प्राकृतिक पर्यटकों की यात्राओं और उनके अनुकूल-प्रतिकूल परिणामों को भी रेखांकित किया गया है। यह शोधपत्र वन विकास तथा वन संरक्षण द्वारा प्रदूषणों के निवारण के लिए पथ-प्रदर्शक सिद्ध होगा।

**शब्द कुंजी -** नेशनल पार्क, अभयारण्य, आदिवासी जीवनचर्या, दुर्लभ पशु-पक्षी, पारिस्थिकी तंत्र, प्रदूषण आदि

**प्रस्तावना -** 'जंगल बोलते हैं', 2012 में प्रकाशित उल्लेखों का संग्रह है जो डॉ. मिश्र के एक अन्य पहलू से हमारा परिचय कराता है। 1983 से 1986 तक डॉ. मिश्र को डेपुटेशन पर 'कान्हा नेशनल पार्क' में काम करने का अवसर प्राप्त हुआ एवं डॉ. मिश्र के श्वसुर श्री शंकरलाल दुबे जो विख्यात वनाधिकारी थे, के सान्निध्य में उन्हें वन एवं जंगली जीवों को निकटता से समझने का मौका मिला। उन्हीं दिनों की स्मृतियों को एवं जंगल के अन्य जीवों की स्थिति, महत्व, आवश्यकता, संरक्षण, विकास योजनाओं की आवश्यकता को गहराई से अध्ययन कर 'जंगल बोलते हैं' में संग्रहीत किया है। इस पुस्तक के लेखों से यह कहना कठिन हो जाता है कि श्री मिश्र इतिहासकार है या जीव अभयारण्य के संरक्षक। इस पुस्तक के प्रत्येक लेख एक नई जानकारी एवं नवीन संदेश देते हैं एवं पाठकों, इतिहासकारों व पर्यटकों के लिए यह पुस्तक अनुपम कृति है। इस अनूठे प्रकाशन के लिए डॉ. मिश्र अभिनंदन के योग्य है। पुस्तक में सर्वप्रथम 'मैकल की उपत्का के अहीर नृतक' लेख संकलित है, जिसमें अहीरों की जीवन शैली, पहनावा, अलंकरण, वर्ण भेद, नृत्यसंगीत, त्यौहार, पूजा-विधान का उनके ही स्वरों में वर्णन किया है। नृतकों के इस दल के चित्र भारती संस्कृति में अहीर समारोह की लोक परम्परा की सजीवता का चित्रण करता प्रतीत होता है।

दूसरा लेख 'आलमेलकर के चित्रों में महकते वन फूल' है, जिसमें चित्रकार आलमेलकर के साथ लेखक डॉ. सुरेश मिश्र का छायाचित्र प्रकाशित है। लेख में चित्रकार आलमेलकर के आदिवासी जीवनचर्या हेतु मीलों पैदल यात्रा, आदिवासियों के घरों, रहन-सहन, तौर तरीकों, खेत-खलियान, वेशभूषा-अलंकरण का अध्ययन कर सजीव चित्रकारी किस प्रकार की गयी इस पर प्रकाश डाला गया है। आलमेलकर स्वं को पहले भारतीय मानते हैं और बाद में चित्रकार। अतः उन्होंने भारतीय शैली को अपनी चित्रकारिता का विषय बनाया और उनके लिए पैदल यात्रा कर अथक परिश्रम से लोगों के बीच जाकर उन्हें जाना-समझा व चित्रों को आकार दिया। माड़िया नृतक, बाजार से वापसी लोये, गौड चरवाहा-दानी टोला के चित्र लेखक के अथक परिश्रम व कला हेतु समर्पित चित्रकार की अभिव्यक्ति को व्यक्त करते हैं।

तीसरा लेख 'काटक की नरभक्षी शैरनी' है। जिसका विवरण इंडिन

फारेस्टर में संक्षिप्त रूप से दिया गया है जिसका विस्तृत वर्णन लेख में दिया गया है। श्री एस.एल.दुबे ने अत्यंत निडरता से तीन शिकार करने वाली नरभक्षी शैरनी को बड़ी आसानी से मार दिया और लोगों को भय मुक्त कि। चौथा लेख 'लखाराका नर हत्यारा शेर' से संबंधित है। श्री एस.एल. दुबे ने काटक की शैरनी के पहले लखारा के एक कुख्यात नर हत्यारा शेर को भी मारा था। लखारा पचास वर्ग किलोमीटर क्षेत्र में फैले आयताकार जंगल था, जहाँ गाँवों के पालतू पशु को चरवाहे ले आते थे। यह शेर लखारा के रक्षित वन में कहीं बाहर से आया था। जिसने लोगों को मारा था पर उन्हें खाय़ा नहीं। अतः उसे आदमखोर नहीं नर हत्यारा शेर कहा गया। दुबे ने सारी योजना बनाकर नर हत्यारे पर दो गोली दागी और वहीं बड़ी सरलता से उसे मार दिया।

पाँच वाले 'अल्लापल्ली के हाथी' पर लिखा गया। चन्द्रपुर से कुछ दूर अल्लापल्ली में सात हाथी थे जिनमें तीन नर थे, सुरेन्द्रगज, हरीहरगंज और लक्ष्मीप्रसाद तथा मादाएं जिनके ना' थे- गौहरजान, 'मौलापरी और शीतलकलिन' 1953 में एस.एल. दुबे, डी.ओ. होकर अल्लापल्ली पहुँचे। उनके अधीन ये सात हाथी थे। लेखक डॉ. सुरेश मिश्र ने इस लेख में सभी हाथियों की संवेदनशीलता का सार्थक वर्णन प्रस्तुत किया है।

छठा लेख 'विदेशी विशेषज्ञ बनाम देशी वन्य पशु' एक महत्वपूर्ण लेख है जिसमें यह स्पष्ट करने का पर्याप्त किया गया है कि वैज्ञानिक उपकरणों या विदेशी विशेषज्ञों का उपयोग करते समय संबंधित वन्य प्राणी के स्वभाव, परिस्थितिकी, उसके लिए आवश्यक परिवेश और दूसरे प्राणियों के संदर्भ में उसकी स्थिति इन सब का ज्ञान होना आवश्यक है। विदेशी तकनीक व आर्थिक सहाता की वृद्धि के साथ ही देश के विभिन्न आरक्षित वनों या राष्ट्रीय वनोद्यानों में दुर्लभ वन्य पशुओं का अध्ययन करने वाले विदेशी शोध-छात्रों और विदेशी वन्य प्राणी विशेषज्ञों के आगमन में वृद्धि हुई है, जिनमें अधिकांश सामान्य ज्ञान वाले तथाकथित विदेशी विशेषज्ञ किताबी और सैद्धांतिक ज्ञान के चाहे भंडार रहे हों, उन्हें भारत के संदर्भ में व्यवहारिक ज्ञान बहुत कम है।

सातवां लेख 'कान्हा में बाघ और बारहसिंगों के बीच' विषय पर है।

जिसमें कान्हा में दुर्लभ पशुओं के संरक्षण पर पर्याप्त प्रकाश डाला गया है। पुराने जमींदार, अधिकारियों और सम्पन्न लोगों के दीवानखाने में लगे वन्य पशुओं के चमड़े, सिर या सिंग हर क्षण यह बात याद दिलाते हैं कि मानव ही पशुओं का सबसे बड़ा शत्रु है और उसी ने इनका विनाश करके धरती से पशुओं की कितनी ही नस्लें खत्म कर दी हैं।

आठवां लेख 'प्रकृति का विराट रूप कान्हा' में स्पष्ट किया गया है कि कान्हा पर्यावरण के पारिस्थितिकी के संरक्षण का एक सफल नमूना है और भूमि के बुद्धिमानपूर्ण उपयोग का प्रतीक है। शेर का संरक्षण भी पारिस्थितिकी के संरक्षण का प्रतीक है, क्योंकि शेर तभी जीवित रहेगा, जब उसे शाकाहारी वन्य प्राणी खाने को मिलते रहे। शाकाहारी वन्य प्राणी तभी जीवित रहेंगे जब वनस्पति और पानी की प्रचुरता हो और वनस्पति तथा पानी की प्रचुरता तभी होगी, जब संरक्षण सही होगा और भूमि का सही उपयोग होगा। अतः शेर तभी दहाड़ेगा जब व्यापक संरक्षण होगा। कान्हा में शेरों की पर्याप्त संख्या इस बात का द्योतक है कि कान्हा में संरक्षण अपने सफलतम रूप में है।

नवां लेख 'बारह सिंगा की वापसी' में बारह सिंगा को राष्ट्रीय पशु घोषित करने की आवश्यकता, स्थिति, व महत्व को स्पष्ट किया गया है।

दसवां लेख 'शेर की दहाड़ और वनस्पतियों की शांति' में कान्हा के आसपास एवं कान्हा में प्रकृति की सुरम्य छंद का मनोहारी वर्णन तो है ही साथ ही हाथी, शेर, चीतलों के झुण्ड, बारहसिंगों, कालाबाज, लंगूर, मैना, बगूला, गौर, महालट की अटखेलियां जंगल में पर्यटकों को रोकने के लिए कैसे विवश कर देती है, इसका रोमांचित विवेचन प्रस्तुत किया गया है।

गरहवां लेख 'झौली की नरभक्षी शेरनी' पर प्रकाशित है। 7 जनवरी को 'झौली की नरभक्षी शेरनी' कान्हा राष्ट्रीय उद्यान के उपसंचालक अमरसिंह परिहार की गोली से मारी गयी और पांच मास से झौली क्षेत्र में फैला आतंक सम्पन्न हुआ। पहले यह ज्ञात हुआ कि शेरनी आदतन नरभक्षी नहीं है बल्कि उसके हाथों केवल दुर्घटनावश मौतें हुई हैं। इस कारण प्रारंभ में शेरनी को बेहोश करके जीवित पकड़ने की कोशिश की गयी, क्योंकि शेरों की संख्या देश में वैसे भी कम है। उस क्षेत्र में सघन झाड़ियों में शेरनी को बेहोश करने का प्रयास नाकाम कर दिया। इसी बीच जांच पड़ताल से यह पुष्टि हो गयी कि वह नरभक्षी है तो मुख्य वन्य प्राणी अधीक्षक द्वारा शेरनी को मार डालने का आदेश दिया गया। फिर उसे खत्म करने में एक माह से कम समय लगा।

बारहवां लेख 'अंतरिक्ष से आये शेर देखने' में 7 मई 1984 को भारतीय व रूसी अंतरिक्ष यात्री के कान्हा राष्ट्रीय उद्यान आगमन पर आधारित है। अतिथियों के आगमन का कान्हा आदिवासी नृत्य मंडली ने नृत्य द्वारा स्वागत किया। वहीं हाथियों के द्वारा 'ट्रैकिंग' करके शेर ढूँढ़ना और कान्हा का निकट से निरीक्षण एवं वन्य जीवों का मनोहारी वर्णन किया गया है।

तेरहवां लेख 'प्रधानमंत्री कान्हा में' के अन्तर्गत प्रधानमंत्री राजीव गांधी, श्रीमती सोनिया गांधी, बच्चे प्रियका व राहुल, अरुण सिंह, विजेन्द्रसिंह उनके परिवार के लोग, राजीव गांधी के रिश्तेदार विन्सी व उनकी बेटी के कान्हा आगमन व अनुभव को लेखांकित किया गया है। जनवरी 1984 में स्व. इंदिरा गांधी ने विश्राम गृह के दाहिने बाजू में आम का पौधा लगाया था जो

अब पेड़ बन चुका है।

चौदहवां लेख 'शेर की टोह में' के अन्तर्गत कान्हा में शेर खोजने व देखने के अनुभव को बताया गया है। कान्हा में शेर देखने का यत्नलब्ध था कान्हा भ्रमण की सफलता और सार्थकता।

पन्द्रहवां लेख 'तेदूएं की गिरफ्तारी और मुक्ति' में 5 फरवरी 1986 में प्राप्त खबर के पश्चात् सिवनी से 50 किलोमीटर दूर तोलालाहोड़ बांध के रास्ते कटंगी नामक वनग्राम में एक ग्रामीण के घर तेदूआं घुसने व उसे जंगल में फिर से मुक्त करने पर आधारित है जो जंगली जानवर की सुरक्षा व उसके प्राकृतिक आवास की आवश्यकता को महत्व देता है।

सोलहवां लेख 'शेर की अलावा भी' में कान्हा में शेर के अलावा भी बहुत कुछ देखने व आनंद उठाने को है जैसे- सुरम्य आबोहवा, सुरम्य वनश्री, बहुरंगी पक्षी, जंगल के ढेर सारे वन्य प्राणी।

सत्रहवां लेख 'सतपुड़ा का सुरम्य वन क्षेत्र बोरी' में बोरी अभयारण्य पर विस्तृत प्रकाश डाला गया है जहां पर्याप्त पशु-पक्षी का संरक्षण उत्साहवर्द्धक पर्यटकों हेतु आकर्षण का केन्द्र रहा है। बोरी अभयारण्य की विकास की आवश्यकता को स्पष्ट किया गया है।

अठारहवां लेख 'मिलिये बाघ से' बाघ, बाघ परियोजना की आवश्यकता, बाघ को खतरा एवं उनकी स्थिति पर पर्याप्त प्रकाश डाला गया है। बाघ भी प्रकृति की भेंट है, जिन्हें सुरक्षित रखना हमारी जिम्मेदारी है, क्योंकि बाघ मात्र जंगल की सजावट नहीं वरन् प्रकृति के स्वरूप होने का सबूत भी है। इस प्रकार 'जंगल बोलते हैं' पुस्तक के माध्यम से डॉ. सुरेश मिश्र ने जंगल के वन्य जीवों की स्थिति, महत्व, आवश्यकता, संरक्षण, विकास योजनाओं की आवश्यकता आदि बातों का उल्लेख किया है।

**मूल्यांकन** - एक वरिष्ठ इतिहासकार डॉ. सुरेश मिश्र का प्रकृति प्रेम, जंगली वन्य जीवों के प्रति ज्ञानपिपासा और उनके संरक्षण हेतु अथक प्रयासों का कलेवर प्रस्तुत करना वास्तव में एक महान उत्तरदायित्व है। प्रस्तुत पुस्तक के लेखों से डॉ. सुरेश मिश्र के व्यक्तित्व का यह अलग ही रंग उभरकर आता है कि वे इतिहासकार हैं अथवा जीव अभयारण्य के संरक्षक। वास्तव में मानवी संवेदनाएँ ही प्रकृति व वन्य जीवों को संरक्षित रख सकती हैं एवं मानव की क्रूरता से सब कुछ नष्ट भी हो सकता है। अतः यदि मानव प्रयास करें तो निश्चित रूप से जंगल बोलते हैं की आवाज मानव के अन्तर मन को सुनायी देगी व मानवी चेतना को वन्य जीवों एवं प्रकृति संरक्षण हेतु जागृत करेगी। इस दिशा में सुरेश मिश्र का संकलित प्रत्येक लेख अपने आप में एक नवीन संदेश देता है एवं पाठकों, इतिहासकारों व पर्यटकों के लिए भी यह पुस्तक उत्साहवर्धनीय व रोमांचित करने वाली अनुपम कृति है जो मानव को प्रकृति बोध व प्रकृति के निकट लाती है। इस अनूठे प्रकाशन के लिए सुरेश मिश्र का अभिनंदन।

### संदर्भ ग्रंथ सूची :-

1. जंगल बोलते हैं प्रकाशन नेशनल बुक ट्रस्ट, नई दिल्ली 2011, प्रथम संस्करण
2. स्वयं के शोध-प्रबंध से

## अल्पसंख्यक समुदायों की महिलाओं का नेतृत्व विकास

श्रीमती मनीषा पाटीदार \*

**प्रस्तावना** – नेतृत्व एक प्रक्रिया है जिसमें कोई व्यक्ति सामाजिक प्रभाव के द्वारा अन्य लोगों की सहायता लेते हुए एक सर्वनिष्ठ कार्य सिद्ध करता है। ओसवाल्ट स्पेगलर ने अपनी पुस्तक में एंड टेविनक्स में लिखा है कि-

इस युग में केवल दो प्रकार की तकनीक ही नहीं वरन् दो प्रकार के आदमी भी हैं। जिस प्रकार प्रत्येक व्यक्ति में कार्य करने तथा निर्देशन देने की प्रवृत्ति आजा मानने की है। यही मनुष्य जीवन का स्वाभाविक रूप है। यह रूप युग परिवर्तन के साथ कितना ही बदलता रहे किन्तु इसका अस्तित्व तब तक रहेगा जब तक यह संसार रहेगा।

देश में महिलाओं की स्थिति खासकर उनकी जो समाज के पिछड़े तबके से आते हैं, उनकी स्थिति बहुत दयनीय है। बच्ची अपने जन्म के पहले से ही भेदभाव का शिकार होती है और जन्म के बाद भी उसके साथ खान-पान, शिक्षा, स्वास्थ्य सुविधाओं आदि मामलों में भेदभाव किया जाता है तथा अल्पसंख्यक महिलाओं की स्थिति ठीक नहीं है। वे केवल अल्पसंख्यक ही नहीं होती बल्कि वे हाशिये पर पड़े बहुसंख्यक समुदाय के भी अंग होती हैं। परिवार के अहम् फैसलों में उनकी कोई इच्छा नहीं पुछी जाती है और सामाजिक कामों में भी उन्हें भाग लेने के अवसर नहीं दिया जाते हैं। और इस प्रकार समाज से मिलने वाले लाभों में उनकी भागीदारी बराबर की नहीं होती है। भारतीय मुस्लिम समुदाय की सामाजिक आर्थिक और शैक्षणिक स्थिति पर एक उच्च स्तरीय समिति की रिपोर्ट में इस तथ्य को रेखांकित किया गया है कि 13.83 करोड़ की जनसंख्या वाले भारत के सबसे बड़े अल्पसंख्यक समुदाय विकास की दौड़ में पीछे छूट रहा है और इस समुदाय के अंदर महिलाओं की दशा तो और भी बुरी है। इस तथ्य को ध्यान में रखकर महिला एवं बाल विकास मंत्रालय ने 2007-08 में अल्पसंख्यक महिलाओं के जीवन आजिविका नागरिक सशक्तिकरण के लिए एक योजना चलाई जिसका लक्ष्य है। अल्पसंख्यक समुदाय की वंचित महिलाओं तक विकास का लाभ पहुँचाना है। अब इस योजना को अल्पसंख्यक मामलों के मंत्रालय को हस्तान्तरित कर दिया गया है।

अल्पसंख्यक मामलों के मंत्रालय द्वारा इस योजना को उपयुक्त तरीके से पुनर्गठित किया गया है और इसका नाम दिया गया है, अल्पसंख्यक महिलाओं के लिए नेतृत्व विकास की योजना इस योजना को लागू कराने वाले अधिकारी को नेतृत्व प्रशिक्षण प्राप्त कर रही महिलाओं के समूह को सेवा प्रदान करने के लिए समय समय पर नियमित रूप से गांव या सम्बद्ध इलाकों का दौरा करना होगा ताकि इनको सिखाई जाने वाली तकनीकियों के बारे में निर्देशित किया जा सके जिससे उनके प्रयास लाभप्रद हो ऐसे क्षेत्र आधारित सघन क्रियाकलाप उँचे लक्ष्य वाले और समर्पित समुदाय आधारित संगठनों के लिए सर्वाधिक उपयुक्त है। महिलाओं के घर गृहस्थी के कामकाज

ऐसे होते हैं कि जिनके कारण घर के निकट रहना उनकी बाध्यता होती है। इसलिए इस योजना को चलाने वाले संगठनों के लिए यह जरूरी है कि वे गांव या सम्बद्ध इलाके में जाकर प्रशिक्षण प्रदान करने का कार्य करें जहाँ ऐसी महिलाएँ निवास करती हैं। इस संगठनों के पास महिलाओं के लिए मान्यता प्राप्त सरकारी प्रशिक्षण संस्थानों में आवासीय प्रशिक्षण कार्य संचालित करने का अनुभव और संसाधन होने चाहिए इसलिए यह जरूरी है कि इस संगठनों के पास गाँवों और दूरदराज के इलाकों में जाकर काम करने की सुविधा, इच्छा शक्ति और समर्पण होने चाहिये साथ ही इनके पास इस हेतु पर्याप्त संख्या में मानव संसाधन भी होने चाहिए और उनके पास सरकारी प्रशिक्षण संस्थानों में प्रशिक्षित कार्य सम्पन्न करने का अनुभव भी होना चाहिये। प्रशिक्षण के प्रकार और कार्यशाला - अल्पसंख्यक समुदायों की महिलाओं के लिए दो प्रकार के प्रस्तावित प्रशिक्षण इस प्रकार हैं।

**क) गांव इलाके में नेतृत्व विकास प्रशिक्षण** – गांव इलाके में प्रशिक्षण के उद्देश्य से मौजूदा सुविधाओं की मदद ली जा सकती है, हाल किराये पर लिया जा सकता है या अस्थाई टेंट खड़ा किया जा सकता है प्रशिक्षण की अवधि 6 दिनों की होगी जिसे 3 महीने के दौरान कम से कम 3 अवसरों पर होना चाहिए।

**ख ) आवासीय प्रशिक्षण में नेतृत्व विकास हेतु प्रशिक्षण**

11 वी योजना में योजना अंतर्गत 3 साल के लिए 48 करोड़ की आवश्यकता होगी वार्षिक वित्तीय और भौतिक ब्रेकअप इस प्रकार है।

सत्र	प्रशिक्षण योग्य समूह बैच की संख्या	प्रशिक्षण योग्य महिलाओं की संख्या	आवश्यक निधि (रु. में)
2009-10 के लिए कुल	659	32950	80409011
2010-11 के लिए कुल	56850	56850	1502158027
2011-12 के लिए कुल	1860	93000	25105703
11 वी योजना के लिए कुल	3764	182800	480729740

**संदर्भ ग्रंथ सूची :-**

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