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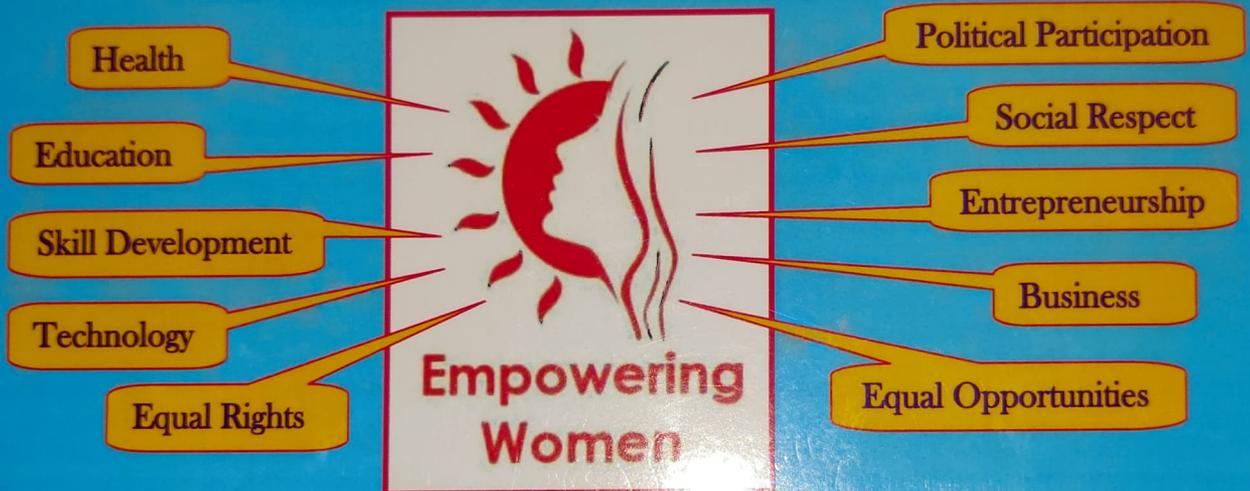
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SWATIDHAN PUBLICATIONS



## Skill Development : Opportunities & Challenges in India

Prin. Dr. H. G. Vidhate

Anandrao Dhonde Collage Kada,

Tal.:- Ashti, Dist.:- Beed

### Abstract:

India has witnessed rapid growth in recent years, driven by the development of new-age industries. The rise in the purchasing power has resulted in the demand for a new level of quality of service. With the changing economic environment, it is essential to focus on imparting and promoting the skill sets of the young population of India as the countries with advanced and improved levels of skills adjust more effectively to the opportunities and challenges of world of work. In spite of the emphatic stress laid on education and training in India, there is still a shortage of skilled manpower to address the rising needs and demands of the economy. This study attempts to come up with the suggestions to minimize the existing differences in the demand and supply of skills in the Indian economy. The approach adopted involves analyzing the skill gap and appraising the existing skill development initiatives in India. It further explores the challenges facing the skills development system in India & proposes solutions that could be adopted to resolve such challenges.

**Keywords:** Skill gap; skilled manpower; skill development initiatives.

### Introduction:

In the globalized economy, with the rise in competition, workers are required to have higher levels of skills and knowledge which will enable them to complete their tasks efficiently so as to meet the required quality standards and increase the efficiency of the value chain process as a whole. Due to the rapid technological changes, and rising complexity of economic activity, jobs are increasingly becoming skill-intensive leading to skill shortages and thus unemployment. Thus it is required to reform the training and education system so as to upgrade the skills of the workforce in order to facilitate them in applying and diffusing the newly adopted technologies. Such challenges are greater for developing countries like India, which needs more skilled workforce to attract foreign direct investments (FDI), expand foreign trade, and thereby stimulating industrial and economic development.

Skills may be broadly classified into hard skills and soft skills. Hard skills are the technical abilities related to an organization's core business e.g. operating machinery, computer protocols, financial procedures, safety standards, and sales administration. Such skills are typically easy to observe, quantify & measure and can be methodically taught. In contrast, soft skills are the personal characteristics of an individual that cannot be quantified, e.g. communicating, listening, giving feedback, problem solving, resolving conflicts etc. They are applicable in all settings i.e. work places as well as everyday lives.

According to National Skill Development Corporation (NSDC) – India, skills can be classified into four levels based on the degree and duration of training required. Skill Level 1 (Semi skilled) refers to skills that can be acquired through short-term courses, focused interventions and on-the-job training. Skill Level 2 (Skilled) refers to skills that are specific to the occupation and can be acquired through technical or vocational training. Skill Level 3 (Highly Skilled) refers to skills involved in highly technical or commercial operations and can be acquired through degrees, diplomas and post graduate education. Skill Level 4 (Highly skilled with specialization) refers to the skills with high specialization involving research and design that can be acquired through doctorate or many years of work experience.

### Objectives Of The Study

1. To study the present skill capacity of India.
2. To study the challenges faced by skill development system in India.

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UNIVERSITÀ DEGLI STUDI DELL'AQUILA

## A STUDY OF DEVELOPMENT OF EDUCATIONAL MANAGEMENT SYSTEM IN INDIA

Prin. Dr. H.G Vidhate

Anandrao Dhonde College Kada, Dist-Beed.

### ABSTRACT :

*The change current in world society has become an important factor in livelihood on knowledge-based society and economy. If the country had the quality of population, it would be a winner in competition. The characteristics of human for modern society must be learning person in learning society and learning organization. Education is the most important instrument in human development because if the population had quality education, they also would have the quality of good life. Thus, all over the country in the world including with india had tried to adjust the direction of modern future that has focused on human development and human learning and has encouraged learners to develop themselves at their own pace and to continuous lifelong learning.*

**Keywords:-** quality education, human learning

### Introduction

India has one of the largest Higher Education systems in the world. The Central Government is responsible for major policies relating to higher education in India. It provides grants to the University Grants Commission (UGC) and establishes central universities in the country. The Central Government is also responsible for declaration of educational institutions as "deemed to be university " on the recommendation of the UGC. State Governments are responsible for the establishment of State Universities and colleges. The coordination and cooperation between the Union and the States is brought about by the Central Advisory Board of Education (CABE).

While the UGC is responsible for coordination, determination and maintenance of standards as also the release of grants, Professional Councils are responsible for recognition of courses, promotion of professional institutions and providing grants to undergraduate programmes and various awards. The statutory Professional Councils are:

- All India Council of Technical Education ( AICTE )
- Medical Council of India ( MCI )
- Indian Council for Agricultural Research ( ICAR )
- National Council for Teacher Education ( NCTE )

- The organisation and functioning of guidance and counselling cells on the campus
- The organisation of community reach programmes
- The provision of auxiliary services like midday meals, school uniforms, books medical checkups etc

**Conclusion:**

Educational Administration has a vast area of operation ranging from Planning to Budgeting in an effort to make the educational process purposive and functional. An important tool it is effective, systematic and has a definite purpose. It focuses upon the attitude towards work and adopts practical measures to ensure that the system of work functions efficiently and assists in the achievement of the aims of education thus benefiting the learners who are the main stakeholders in the educational system.

**References:**

1. Ribbins, P. (1985). Organisation theory and the study of educational institutions, in M. Hughes P. Ribbins and H. Thomas (eds.). Managing Education: The System and the Institution, Holt
2. Pandya, S.R, (2011), Administration and Management of Education, Himalaya Publishing House, Mumbai.
3. Sundar, I and Jawahar, R., (2009); Principles of Economics of Education, Sarup Book Publishers Pvt Ltd, New Delhi.
4. Thakur, D and Thakur, D.N, (1997); Educational Planning and Administration, Deep & Deep Publications, New Delhi.
5. Tyagi, R.S.,(2009), Administration and Management in School Education, Shipra Publications, Delhi.

**Websites**

- <http://164.100.47.134/intranet/FinalGovernmentSchemesforSchoolEducation.pdf>
- [http://en.wikipedia.org/wiki/Financial\\_endowment](http://en.wikipedia.org/wiki/Financial_endowment)
- [http://gse.buffalo.edu/org/inthigheredfinance/files/Country\\_Profiles/Asia/India.pdf](http://gse.buffalo.edu/org/inthigheredfinance/files/Country_Profiles/Asia/India.pdf)
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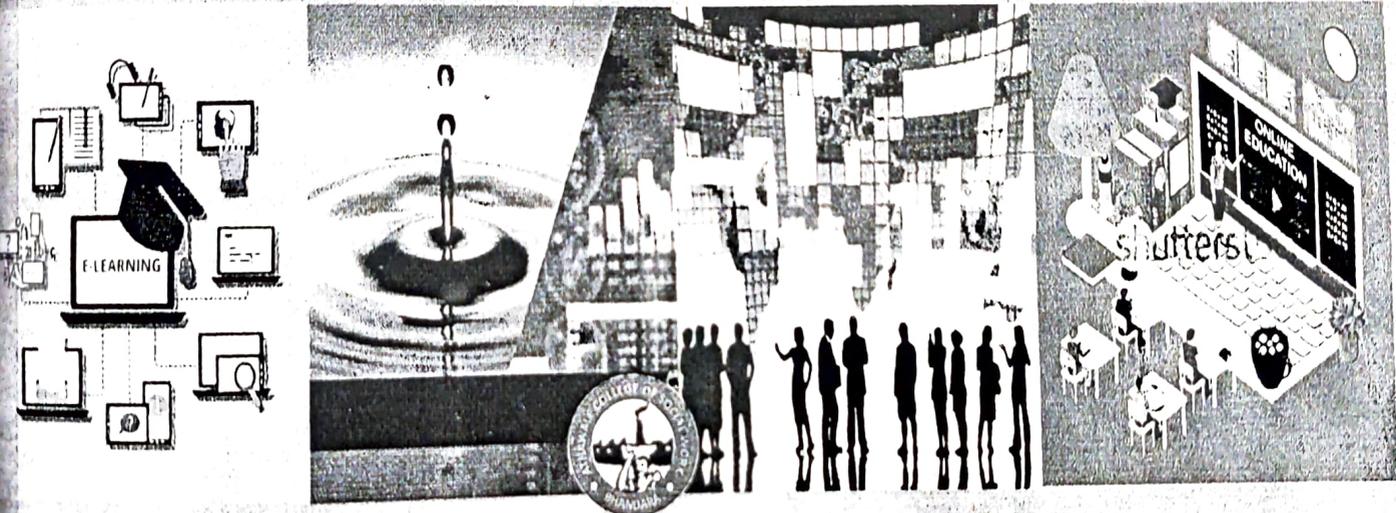
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## Working Capital Management

Dr. S.N. Waghule.

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### Abstract-

Working capital is the lifeblood and nerve center of business. Just as blood circulation is very important in the human body to maintain life, working capital is also very important to maintain a smooth business. No business can run successfully without adequate working capital. To understand working capital better, we must have basic knowledge about various aspects of working capital. To begin, there are two concepts of working capital.

(Keywords - working capital points, current assets, net working capital, capital management)

### introduction

1-Gross working capital: Gross working capital, also known only as working capital, refers to a company's investment in current assets: another aspect of gross working capital indicates the need to arrange funds to finance current assets. The concept of gross working capital focuses attention on two aspects of current asset management, first is optimal investment in current assets and second in financing current assets. Both of these aspects will help in keeping away from two danger points from excessive or inadequate current asset investment.

2-Net Working Capital: The term net working capital refers to the difference between current assets and current liabilities. Net working capital can be positive or negative. Positive working capital refers to situations where current liabilities exceed current assets. Net working capital management, therefore working capital can be said to measure company liquidity. In other words, the goal of working capital management is to manage current assets and liabilities so that the acceptable level of net working capital is maintained.

**Definition:** "Working capital is the amount of funds needed to cover the company's operating costs." "Working capital is also referred to as circulating capital.

"Circulating means the company's current assets are converted in ordinary business activities from one to another such as cash from inventory to receivables and receivables to cash"

### Working Capital Overall display

Working Capital Management is current asset management. Current assets, by definition accounting are assets that are usually converted into cash within a one year period. Therefore working capital management can be considered as cash management, market receivables, current inventory and liabilities. In reality, current asset management is similar to fixed assets in the sense that both of them in the case of companies analyze their effects on profitability and risk factors. It is different in the main aspects

1. Large ownership of the current aspects, especially cash, can strengthen the company's liquidity position, but is bound to reduce the company's profitability because the ideal car does not produce anything.

2. The level of fixed assets as well as current assets depends on the expected sales, but only current assets are in accordance with fluctuations in short-term business.

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## Role of NAAC in the Educational Development of Higher Education in India



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## Teaching and Learning with Technology : Effectiveness of ICT

**Dr. S. N. Waghule**

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### Abstract:

*Integration of Information, Communication, and Technology (ICT) will assist teachers to the global requirement to replace traditional teaching methods with a technology-based teaching and learning tools and facilities. In Maharashtra, ICT is considered as one of the main elements in transforming the country to the future development. The Ministry of Education, through the latest Education Blue print, insights the importance of technology-based teaching and learning into the schools' national curriculum. This study aims to analyze teachers' perceptions on effectiveness of ICT integration to support teaching and learning process in classroom. A survey questionnaire was distributed randomly to the total of 101 teachers from 10 public secondary schools in Maharashtra. The data for this quantitative research were analyzed for both descriptive and inferential statistic using SPSS software.*

**Keywords:** ICT integration; Teaching and learning; Technology effectiveness; Education; Maharashtra)

### Introduction:

In this 21st century, the term "technology" is an important issue in many fields including education. This is because technology has become the knowledge transfer highway in most countries. Technology integration nowadays has gone through innovations and transformed our societies that has totally changed the way people think, work and live - As part of this, schools and other educational institutions which are supposed to prepare students to live in "a knowledge society" need to consider ICT integration in their curriculum

Integration of Information, Communication, and Technology (ICT) in education refers to the use of computer- based communication that incorporates into daily classroom instructional process. In conjunction with preparing students for the current digital era, teachers are seen as the key players in using ICT in their daily classrooms. This is due to the capability of ICT in providing dynamic and proactive teaching-learning environment While, the aim of ICT integration is to improve and increase the quality, accessibility and cost-efficiency of the delivery of instruction to students, it also refers to benefits from networking the learning communities to face the challenges of current globalization. Process of adoption of ICT is nota single step, but it is ongoing and continuous steps that fully support teaching and learning and information resources.

### Teachers' Belief on Technology-based Teaching and Learning:

With the development of learning technologies in the late 20th century, education system has changed rapidly. This is due to the capability of technology to provide a proactive, easy access and comprehensive teaching and learning environment. Nowadays, Ministry of education in all over the world has provide a lot of facilities and training in order to enhance the use of advanced technologies in the countries' teaching and learning process. A high budget has been placed in order to provide the equipment needed by teachers to improve the education system. Despite all the efforts, most of the countries are facing similar problem whereby the teachers are not maximizing the usage of the



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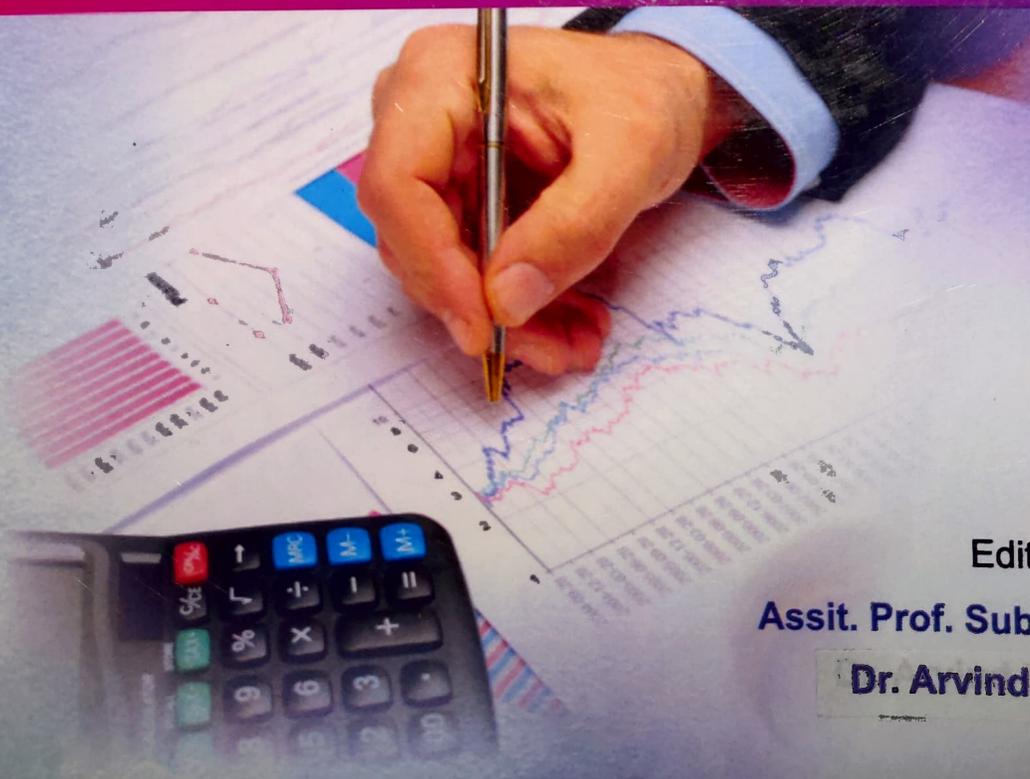
**Recent Trends and Issues  
in Economics, Commerce  
& Management in India**



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## Management Information System (MIS) In Banking Industry

**Dr. S. N. Waghule**

Associate Professor & Head,  
Department of Commerce,

Anandrao Dhonde Alias Babaji College Kada,  
Tq- Ashti, Distt- Beed

\*\*\*\*\*

### Abstract-

Management Information System (MIS) is a set of procedures to gather information from a variety of a source compile it and present it in a readable format manger use Management Information System (MIS) to generate reports that provide them with comprehensive over view of all the information they need to make decisions ranging from the daily details of the strategy at high level. Management Information System Today are largely dependent on technology for data collection and presentation, put the concept is the oldest of the modern computing techniques.

(**Keywords**-Management Information System, comprehensive, modern computing techniques.)

### Introduction:

Management information System is very useful tools for the purpose of reviewing and controlling company's operation. The main goal of these systems is to organize all data Collected from every level of the company, summarize it, and present it in a way that facilitates and improve the quality of the decisions being made to increase the company's profitability and productivity.

A Management Information System is a set of combined procedures that gathers

and Produces reliable, relevant, and properly organized data that supports that decision making process of an organization. To sum up, it is a group of processes through which data is obtained. Sorted, and displayed in a useful way for decision-making purposes.'

These system are typically are computer -based including either simple excel sheets or more complex platforms. The information being collected and gathered for the system normally comes from both inside and outside sources.

### Importance and Significance of the study:-

A bank is understood as place where the financial service such as checking /saving and providing credit to the customers are offered .the scoop of the service in today's world is expanded to a "financial service super Shoppe" Where the bank have becoming is strumpet in providing financial assistance to some activates as the policy or by regulation.

### Definition of MIS:

'A Management Information System is a set of combined procedures that gathers and produces reliable, relevant, and properly organized data that supports the decision making process of an organization. To sum up, it is a group of processes through which data is obtained, sorted, and displayed in a useful way for decision-making purposes.

Management Information Systems are very useful tools for the purpose of reviewing and controlling company's operations. The main goal of these systems is to organize all data collected from every level of the company, summarize it, and present it in a way that facilitates and improve the quality of the decisions being made to increase the company's profitability and productivity.

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## “Recent Trends in Material Science and Nanotechnology”

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## Sustainable Development Efforts in India-A Study

*Dr. S. N. Waghule*

Associate Prof. & Head, Department of Commerce, Anandrao Dhonde Alias Babaji College Kada.Tq-Ashti; Distt-Beed. 414202 (Maharashtra)

### Abstract

Development, to be meaningful, should always be sustainable in nature, for it is a process of long term character; it doesn't halt anywhere, any time. Sustained efforts must always be on to reap the fruits of sustainable development. Sustainable development is one that of commitment towards social progress accelerated economic growth and increased environmental conservation. The ninth five year plan has explicitly recognized the need for linking environment, health and development and showed concern towards ensuring environmental sustainability of the development process through social mobilization and participation of people at all levels. However, the Indian experience has been growth becoming unsustainable because of poor state of infrastructures, increased social and regional imbalances, the looming environmental threats including water and energy shortages. The current growth status, it is argued, is not sustainable as we are measured on International standards, poor in road network, ports, distribution networks etc With the above backdrop, based on secondary data, the intended paper shall be a study on the efforts made in India aimed at sustainable development, the problems therein as well the study paper will concentrate on suggesting remedies to overcome the problems identified in the study  
(Keywords-sustainable nature, linking mobilization, infrastructures,)

### Introduction

Development should always be meaningful in nature. It is a process of long term character; it does not halt anywhere, any time. Sustained efforts must always be on to reap the fruits of sustainable development. As early as in 2015 in a Report entitled 'Our Common Future', the land Commission defined sustainable development as development, which meets the needs of the present without compromising the ability of future generations to meet their own needs". Extensive efforts by the governments, international organizations, local authorities, business, citizen groups and individuals are being made, across the globe, to operationalize the task of sustainable development. A World Summit on Sustainable Development was held in Johannesburg in 2010 which resulted in Johannesburg Plan of Implementation and was committed for achieving internationally agreed development goals including United Nations Millennium Declaration, United Nations, Framework Convention on Climate Change, Convention on Biodiversity, Convention to Combat Desertification and non-binding targets of the Forestry Principles. The Constitution of India ensures to all the Indian citizens, Justice-social, economic and Political Equality of states and opportunity and the Dignity of the individual. The Right to Life is conferred in Article 21 encompassing right to clean environment, right to livelihood right to live with dignity.

### Objectives of the study:

- To study the barriers in Implementation of sustainable development.
- To study the Impact of sustainable development on various Business.
- To suggest Improvement of sustainable development

### • Research design:

Descriptive research design has been used for this study. This helps in the deliberate selection of a particular unit of universe for constituting sample that represents all units.

### ➤ Data collection:

The study is based on primary and secondary data. The primary data were collected through well structured questionnaire.

### Scope of the Study

This Study is an attempt an analysis of sustainable development efforts made in India. based on the published sources, and showcasing the current Indian economic scenario. This is a descriptive Study. Part-I is on the Policies and Programmes of sustainable development in India. The issues of Achievements and Challenges of sustainable development are dealt with in Part-II. A brief sketch of Future Outlook is presented in Part-III of the Paper prior to the conclusion in Part-IV

I Sustainable Development-the Policies and Programmes With an aim to fulfill

- a) Commitment towards social progress.
- b) Accelerated economic growth and

c) Increased environmental conservation, the policies and programmes of the sustainable development, in India, have been designed and implemented, since the 1990s Ensuring the environmental sustainability of the development process

Waghule S.N.

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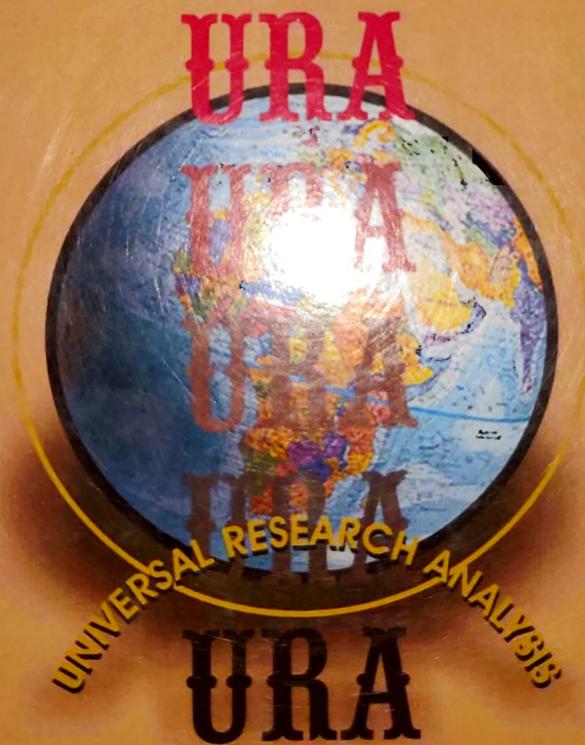
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## Human Resource Management

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Kada, Dist. Beed.

### Research Paper - Commerce

#### ABSTRACT

*Human resources management (HRM) is a management function concerned with hiring, motivating and maintaining people in an organization. It focuses on people in organizations. Human resource management is designing management systems to ensure that human talent is used effectively and efficiently to accomplish organizational goals. HRM is the personnel function which is concerned with procurement, development, compensation, integration and maintenance of the personnel of an organization for the purpose of contributing towards the accomplishments of the organization's objectives. Therefore, personnel management is the planning, organizing, directing, and controlling of the performance of those operative functions.*

**Key words:** (Introduction, Objectives and Function of Human Resource Management.)

#### Introduction

Human beings are social beings and hardly ever live and work in isolation. We always plan, develop and manage our relations both consciously and unconsciously. The



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## 7. GST- Impact on Indian Economy

Dr. S. N. Waghule

Associate Prof. & Head, Department of Commerce, Anandrao Dhonde Alias  
Babaji College Kada, Tq-Ashti; Distt- Beed, (Maharashtra).

### Abstract

India has witnessed substantial reforms in indirect taxes over the past two decades. The Goods and Service Tax (GST) is one of the biggest taxation reforms in India, the decision on which is pending in Parliament since March 2011. The central idea behind this form of taxation is to replace existing levies like value-added tax, excise duty, service tax, and sales tax by levying a comprehensive tax on the manufacture, sale and consumption of goods and services in the country. GST is expected to unite the country economically as it will remove various forms of taxes that are currently levied at different points. This paper presents the background, silent features and the impact of GST in the present tax scenario in India.

**(Key Words** - Goods and Service Tax, Value added tax, Excise duty, Service tax and Sale tax.)

### Introduction

Tax policies of a country play an important role on the economy through their impact on both efficiency and equity. A good tax system should keep in view issues of income distribution and at the same time, also generate tax revenues to support government expenditure on public services and infrastructure development. The framework of value added tax (VAT), recognized as GST as well in several countries, has been one of the major development in taxation structures worldwide. More than 135 countries adopted the GST/ VAT framework effectively. Indian economy is getting more and more globalised. Introduction of an integrated Goods and Services Tax (GST) to replace the existing multiple tax structures of Centre and State taxes is not only desirable but imperative in the emerging economic environment. The implementation of GST would ensure that India provides a tax regime that is almost similar to the rest of the world. It will also improve the international cost competitiveness of native goods and services.

### Objectives of the Study

- To study the barriers in Implementation of GST.

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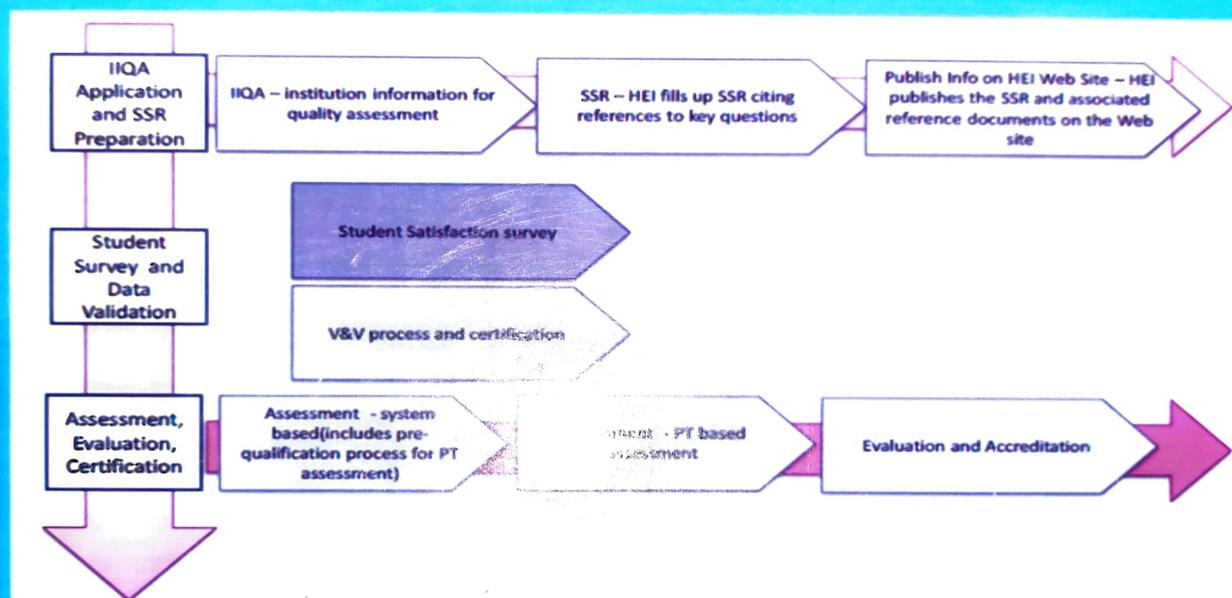
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**NAAC : Revised Accreditation Framework and Quality Improvement Strategies in Higher Education**



Guest Editor :

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SWATIDHAN PUBLICATIONS



## Impact of Information Communication Technology (ICT) on Library Professional Development

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### Abstract-

*Information needs and diverse information tools have affected our daily life as well as research and developmental activities. Latest devices for information communication have resulted in the expeditious dissemination of information and revolutionized the information handling activities in research and academic libraries in India. Academic libraries, mostly attached to universities and research institutions as centers of information services, have largely benefited by the rapid changes in technology. The advent of digital computer advances in telecommunication and audiovisual technologies have opened up new ways of collecting, organizing and disseminating scientific and technical information.*

**Keywords-** Information needs, (ICT), Information support, digital computer

### Introduction-

Technology has drastically changed the way librarians define themselves and the way they think about their profession and the institutions they serve. The librarian in the digital world now acts as a guardian of information, as a consultant to the users, an information broker and also a continuous learner. The platform of Internet and WWW has helped to change the ways of accessing and locating information and thereby change the functions of an academic librarian and academic library in the modern information society.

The biggest challenges facing the library profession today is preparing the professionals to use technology effectively. An academic library professional will be required to serve as an information service consultant with specific information technology skills. As technology has saturated all levels of library's operations and services, the library professional in an academic institution has to anticipate the changing expectations of users, and be flexible in adapting and adopting new skills and levels of awareness. While being trained in IT skills, what every library professional chooses to ignore is the management aspect of a library. In addition to the technical and professional skills,

### Significance of the study

The shift from print to digital information has a high impact on all components of the academic library system in India, especially the users, the services and the staff. Though information is considered as an important resource, the use of ICT tools to collect and disseminate information has been in a slow pace in majority of the University libraries. This may be due to various factors like insufficient funds, inadequate staff trained in handling computers and software packages, administrative concerns, etc. In Kerala, automation has been initiated in almost all University libraries using library automation software and is under different stages of completion, but this has been extended to only a few department libraries in each university. In the library system in the Universities, comprising of a Central library and departmental libraries.

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# Black Money

Black Money  
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Editor

**Dr. Abasaheb Hange**

## ROLE OF MEDIA AND CORRUPTION

Dr. Aute P. N

A.D. College Kada  
Tal- Ashti, Dist- Beed.**Abstract :-**

The role of the media is critical in promoting good governance and controlling corruption. Enhance the role of the media in the anti-corruption battle in the country. Primarily this paper argues that the media has a significant role to play to fight against the corruption. In modern society, the media is a part of the solution to the problem of "How to fight corruption" There is no justice if people cannot see what is happening. Media fulfills the first act of justice in any society they help us see what is happening.

Like the "man on the street" we find that media uses a much more general understanding of corruption that may be more useful for corruption fighters. Media as a tool for social justice is not bound by academic or policy definitions of corruption. Media can provide awareness of the negative impact on society and is one of the most fundamental parts of an anticorruption strategy for society sometimes journals, editors and publishers lose their role as a voice to inspire positive change. They lose sight of the idea that positive change is possible and fall into the lowest levels of journalism whereby they merely try to create any emotional reaction in the leaders.

**Three functions of media:-**

- 1) To be watching of corruption.
- 2) To promote integrity
- 3) To engage citizens in anti-corruption efforts.

The watchdog function is founded on an understanding of the media as the "fourth pillar" of democracy within a system of checks and balances with the purposes to monitor and observe the behavior of public officials in the legislature, executive and judiciary. Government performance or through investing exposure of particular transgression, which might pressure decision makers to take action. By providing continuous oversight over individuals and institutions, the media can name and shame those representations in public office that use their influence to hide instances of corruption or remain inactive when well-founded evidence about corruption is presented them. Changes for the Media's watchdog include tight governmental control over the press changes have become more accentuated over the past years as 2019 freedom of the world data shows, indicating that in the past 13 years freedom of expression has progressions decreased.

The role of the media in promoting integrity has recently gained force, especially in response to the social disenchantment regarding government's commitment to eradicate corruption; there is a deep rooted civic cynicism with regards to the political process and credibility of actors in the state civil society and the media alike. Efforts to promote integrity are present among different media genres but appear to be particularly effective when they involve popular media such as television channels reaching large audiences. The role of the media in engaging citizens in anti-corruption efforts has been favored by new technologies and digitalization various forms of participatory and civic journalism have emerged as a result of technical innovation, the rapid growth of the internet, network journalism and the proliferation of skills with digital technology, which partly dissolve the separation of skills with digital technology, which partly dissolve the separation between consumer and producer this might suggest a general "watchdog culture" in the making.

**Assessing the medias effects on Anti - Corruption:-**

The impact of the Media on corruption can be the long-term and short-term. In the short-term in some cases, critical media coverage of corruption cases have yielded immediate effects in countering corruption.

**Conclusion:-** The role of media is critical in promoting good governance. The study measures the relationship between media freedom and corruption accounting for elements of vertical accountability media reporting in general and especially investigative journalism by affiliated or independent journalist.

**References:-**

- 1) An Analysis of the evolution of mass media.
- 2) Related articles corrupt public officials 2011
- 3) Corruption political settlement and power relations - 2018.

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SWATIDHAN PUBLICATIONS



## Recent Trends in Indian Banking

Dr. Aute. P. N.

A.D. College Kada. Tal – Ashti, Dist – Beed.

### Abstract: -

The banking industry and financial institutions are two parts of the economy. These two parts can make an impact on the country's growth. In the era of "Digital India" Banking and financial services in India have experienced a massive evolution. This change can be attributed to various components such as new regulatory policies and customer expectations. The advent of innovative financial technology has revolutionized financial services in India as well as the banking sector.

This has resulted in the introduction and advancement of several technological trends, which has contributed to the radical transformation, growth and progress of these industries. After many false hopes over the past few years, there seems to be a new dawn for the banking industry in 2019. Trends in the banking industry are developing such as ML, AI, Can calculate and many other similar technologies.

There are several trends in the banking sector that can change the overall scenario.

### Introduction:-

Many banks have used electronic and telecommunications networks for their services. The internet and the world wide web are increasingly being used by banks. The financial sector, where the banking industry is the biggest player. At present the banking industry is stronger and able to withstand competitive pressures. The Indian banking industry is gradually moving towards adopting best practices in accounting, corporate governance and risk management. There is a lot of innovation and diversification in the commercial bank business.

### Latest Trends in Banking

#### 1) Digitalization: -

The rapid growth of digital technology, this has become a necessity for balancing services in India. Instead of financial institutions, insurance, health care, retail, trade and trade are some of the big industries that experienced a huge digital shift when the banking sector introduced the use of information technology to perform basic functions such as immediate quality core banking solutions adopted enhance customer experience. The transformation began in the 1990s during the liberalization period, when the Indian economy opened itself to the global market.

Modern trends in the banking system make it simpler, paperless, without signature, easier and without branches. In modern times in Indian banking various services such as IMPS (Immediate payment services), RTGS (Real Time Gross Settlement), NEFT Fund Transfer (National Electronics) Online Banking and Telebanking Digitalization have created the convenience of "banking anytime and anywhere". is an increase in customer stratification if it allows customers to create personalized solutions to their investment plans and improve the overall banking experience.

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January-2020 Special Issue - 212 (A)

## Women Empowerment

Through Entrepreneurship & Skill Development



Guest Editor :

**Dr. Sopan Nimbore**

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SWATIDHAN PUBLICATIONS



## Women Entrepreneurship in India : Problems and Prospects

**Dr. P. N. Aute**

Assistant professor (Dept. of Commerce)

Anandrao Dhonde Mahavidyalaya Kada'

Tal:- Ashti, Dist:- Beed

### Abstract:

*The educated Indian women have to go a long way to achieve equal rights and position because traditions are deep rooted in Indian society where the sociological set up has been a male dominated one. Despite all the social hurdles, Indian women stand tall from the rest of the crowd and are applauded for their achievements in their respective field. The transformation of social fabric of the Indian society, in terms of increased educational status of women and varied aspirations for better living, necessitated a change in the life style of Indian women. These women leaders are assertive, persuasive and willing to take risks. They managed to survive and succeed in this cut throat competition with their hard work, diligence and perseverance.*

*The present paper endeavors to study the concept of women entrepreneur-Reasons women become entrepreneurs -Reasons for slow progress of women entrepreneurs in India - suggestions for the growth of women entrepreneurs-Schemes for promotion & development of women entrepreneurship in India-Case study of a women entrepreneur of Ludhiana.*

**Keywords:** Entrepreneurship, Women, Business, Gent

### Introduction :

The educated women do not want to limit their lives in the four walls of the house. They demand equal respect from their partners. However, Indian women have to go a long way to achieve equal rights and position because traditions are deep rooted in Indian society where the sociological set up has been a male dominated one. Women are considered as weaker sex and always made to depend on men folk in their family and outside, throughout their life. The Indian culture made them only subordinates and executors of the decisions made by other male members, in the basic family structure. While at least half the brainpower on earth belongs to women, women remain perhaps the world's most underutilized resource. Despite all the social hurdles, India is brimming with the success stories of women. They stand tall from the rest of the crowd and are applauded for their achievements in their respective field. The transformation of social fabric of the Indian society, in terms of increased educational status of women and varied aspirations for better living, necessitated a change in the life style of Indian women. She has competed with man and successfully stood up with him in every walk of life and business is no exception for this. These women leaders are assertive, persuasive and willing to take risks. They managed to survive and succeed in this cut throat competition with their hard work, diligence and perseverance. Ability to learn quickly from her abilities, her persuasiveness, open style of problem solving, willingness to take risks and chances, ability to motivate people, knowing how to win and lose gracefully are the strengths of the Indian women entrepreneurs

With the advance of science and technology, a certain amount of change has come about. An increasing number of women want to participate in the economic activities of the nation. Thus we find the emergence of women entrepreneurs.

A woman entrepreneur is a person who is an enterprising individual with an eye for opportunities, and an uncanny vision, commercial acumen, with tremendous perseverance and above all a person who is willing to take risks with the unknown because of the adventurous spirit she possesses.

### Objective of The Study:

1. To analyses the different problems and challenges facing women entrepreneurship in India after independence.



## **PUBLICATION CERTIFICATE**

**This publication certificate has been issued to**

*Dr. p.N. āute*

**For publication of research paper titled**

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## **Rural Development and Entrepreneurship**

**Dr. P. N. Aute**  
**Dept. of Commerce**  
**Anandrao Dhonde College**  
**Kada Tal. Ashti Dist. Beed**

### **Abstract:**

Recent rural development and entrepreneurship is the helping development to the nation. In the Present Paper I am going to write my research paper about the rural development and entrepreneurship. I have the knowledge and experience about the entrepreneurship and rural development. Entrepreneurship is always helps to economic growth, productivity, Job creation and innovations. In this research paper I am going to present how rural development is important and acceptable for the nations economic growth. My research paper is related with he key issues related to entrepreneurship. The conclusion is that to explore the rural development in rural areas, therefore it is necessary to promote entrepreneurship.

### **Introduction:**

Entrepreneurship is key to economic progress of a nation leading to rapid industrialization and hence improved the well being of the country. The development of entrepreneur defined to inculcate the entrepreneurial skills into a common person. It provides the knowledge, developing the technical, marketing, financial and managerial skills. It building the entrepreneurial attitude. The concept involves equipping a person with the required information. Now a days, entrepreneurial development programmers are treated as an important tool of industrialization. Therefore there is a need to develop rural development and industries. To solve rural development and rural migration it is important to diverse the mind of people towards the entrepreneur. Rural development is more than ever before connected to entrepreneurship.

### **Importance of Rural Entrepreneurship:**

The entrepreneurship has been regulated as an important of social and economic change. Entrepreneurship confined to large scale business and industry. Rural entrepreneurs are those who carry out entrepreneurial units in the rural sector of the economy. The concept of rural entrepreneurship does not define the definition of entrepreneur in general. An entrepreneur can be defined as a person who fails to confirm to the traditional structured role given to him in the society. The emerging entrepreneurship in the rural areas across. The country is treated to be entrepreneurship which implies rural in industrialization. It tends to cater the rural needs entrepreneurship is now regarded as a strategic development intervention that could accelerate the rural development process.

Rural entrepreneurship play a vital Role in the overall economic development of the Country. The development and growth of rural industries facilitate self employment, results in



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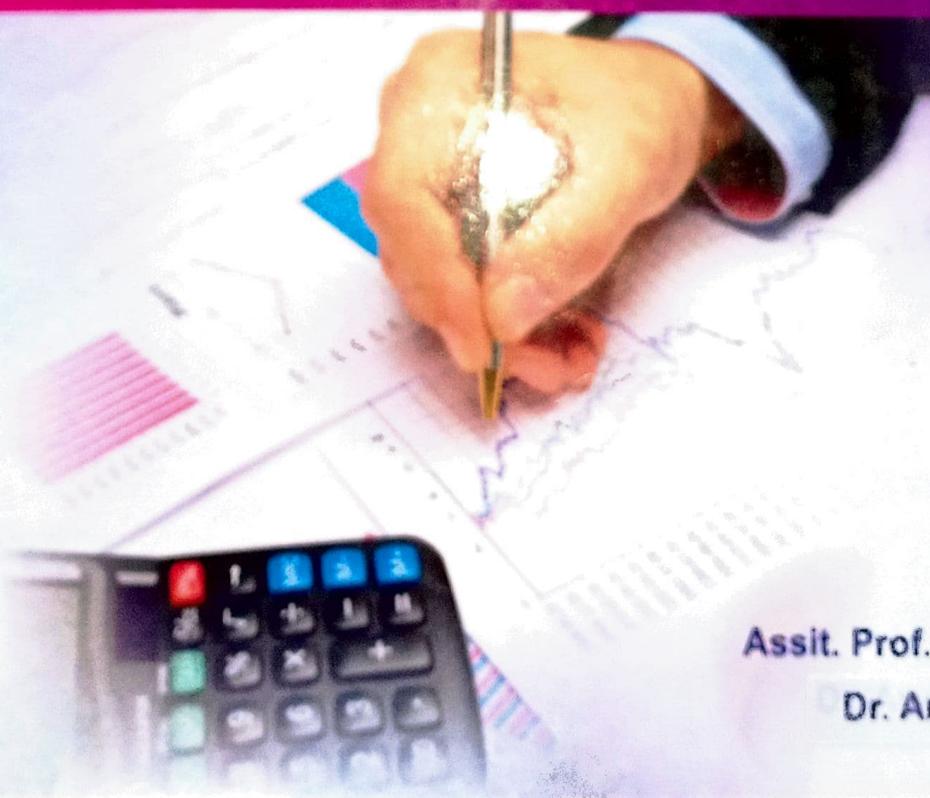
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On

**Recent Trends and Issues  
in Economics, Commerce  
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## Recent Trends in E-Marketing

Dr. D. B. Borade

Assist. Prof. in commerce,

Anandrao Dhonde Alias Babaji College Kada,  
Tq- Ashti, Dist.- Beed

### Abstract

Internet Marketing Online defines the online marketing strategies taken for promotion of your business. If you feel that internet marketing methods employed by you are not yielding desired results as per your expectations for your business. Team believes that your business is our business and success of your business definitely spells our success of our online internet marketing strategies. Internet marketing is the component of marketing that deal with the planning, pricing, promotion, and distribution of your products and services online. Good Internet marketing strategies clearly communicate a firm's unique selling proposition, or the unique collection of benefits that creates value for its customers. Everything you do to promote your business online is Internet marketing.

Marketing your product or service online offers the opportunity for increased communication with your target market through techniques such as interactive websites, email newsletters, online surveys and forms, blogs, and discussion groups. The Internet allows you to collect immediate feedback from your client base with little out-of-pocket expense.

**Keywords:** -Internet, Market research, Surveys, Sampling E-Commerce

### Introduction

Online consumers tend to be younger, more affluent, and better educated than the

general population. But as more people find their way onto the Internet, the cyberspace population is becoming more main stream and diverse. Younger users are more likely to use the Internet for entertainment and socializing. Yet 45 percent of users are 40 Years of age or older, and use the Internet for investment and more serious matters. Finding success online is no different from finding if offline. Choosing the right product or service and designing offline. Choosing the right product or service and designing an appropriate online and off-line marketing mix are key to successful Internet marketing.

### Objectives of the study

Marketing researchers may use the Internet to meet three different types of research objectives:

1. They can study how the Internet is used as a marketing tool;
2. They can use the Internet as an alternative medium for traditional questionnaire surveys.
3. They can use the Internet to study Internet consumer behaviors.

### Data Collection methods

The third dimension of our typology of Internet marketing survey designs is related to the data collection methods. Three different methods may be used;

1. Direct observation;
2. A questionnaire; or
3. An experiment.

### Scope of the Research:

If your Web site offers more than a few products and services, it's ordinarily best to begin marketing just the most important keywords but needs vary and we're adaptable. We begin by asking you to tell us which of your products and services you want to emphasize; this will often be because of their profit potential.

We then research how often people search on keywords associated with your most

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**SWATIDHAN PUBLICATIONS**



## Recent Trends in production and marketing of cotton crops in India

**Dr. D.B. Borade**

Assit professor Anandrao Dhonde College kada Tal Ashti Dist Beed

### Abstract: -

In India cotton cultivation is a source of livelihood for most farming communities. In addition, the king of textiles provides employment through textile mills and spinning mills. to people in many parts of the country. Cotton, called white gold. This is one of the most important fiber plants grown in India. It is known for its trade production and marketing value compared to other fibers such as jute and mesta. Although an increase in cotton production and marketing can be realized, an increase in consumption has decreased the quantity of cotton exports over the years. Specifically productivity leads to growth: in wholeness by the development of research activities where the truth of high yields and appropriate efficient resource utilization techniques, Ultimately, the price of cotton is much higher than the price at which it is exported. So, it is better to take the steps necessary to stabilize the cotton market and precautions must be taken to protect crops from pest damage and natural disasters that are uncertain to stabilize the market from prices.

### Introduction: -

In India cotton is the most important crop ... cotton cultivation started 7,000 years ago in Mexico. This is called the new world, planting cotton in the world. Cotton grows in tropical and subtropical parts of Asia, Africa, Australia and America. Every year, 25 million tons of cotton are produced in 70 countries around the world. International cotton trade is 12 billion dollars with business. Of the 43 cotton species, only four are cultivated in large production. India is one of the largest cotton producers in the world. India produces 27 percent of world cotton production. Which is the biggest difference having cotton cultivation in the world. China is the number one country in cotton production in the world.

In recent years India has experienced a significant increase in cotton production. Until 1970, the country used to import large amounts of cotton in the range of 8.00 to 9.00 lakh bales per year. In India the domestic textile industry, one of the largest industries in the country and has witnessed phenomenal growth in the last two decades in terms of installed spindles and yarn production. In India the growth of the spinning and modernization mushroom industry has led to continued growth in cotton consumption. If it happens during the years when the country harvests good crop production

### Research purposes -

- To analyze the production and marketing of cotton in India.
- To study areas of instability and trends in cotton production and productivity in India.
- To learn values based on production and marketing dates in India.

### Research methodology :-

The research method used by secondary data. Related to reference books, journals, newspapers & websites etc

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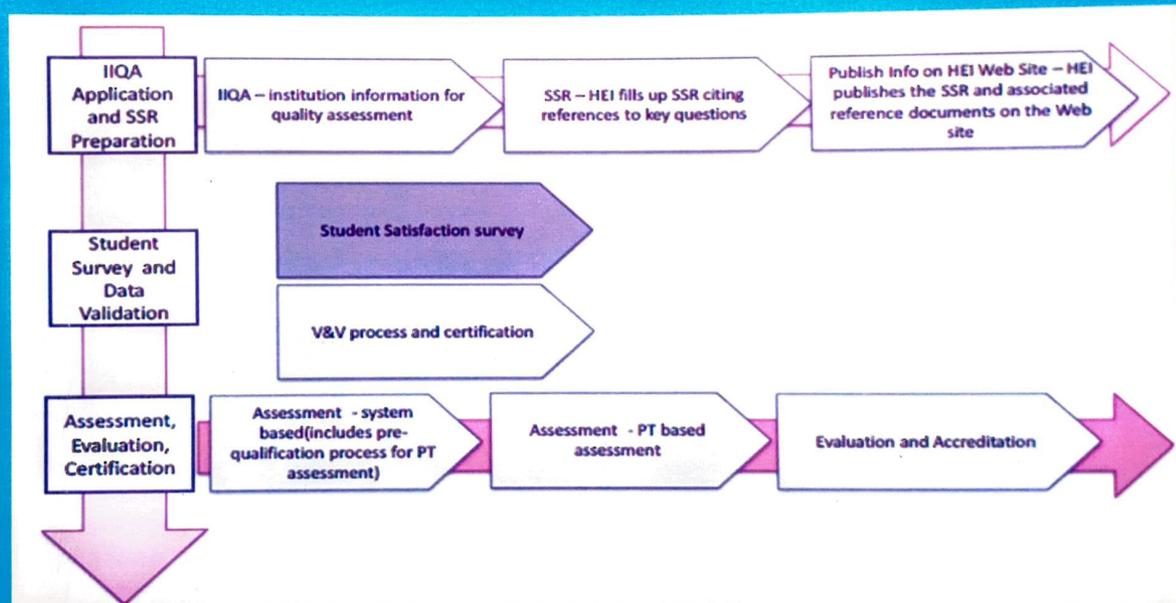
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**NAAC : Revised Accreditation Framework and Quality Improvement Strategies in Higher Education**



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SWATIDHAN PUBLICATIONS



## ICT Education and Its Importance in Higher Education

Dr. D. B. Borade

Assistant Professor, Department of Commerce  
Anandrao Dhonde Alias Babaji College, Kadi  
Tq- Ashti; Dist- Beed-414202 (MH)

### Abstract:

*This essay describes some benefits of implementing ICT in classroom, especially within the area of collaborative and self-managed learning. However, implementing ICT in classroom is not an easy and simple matter. There are many issues which should be addressed. Those issues range from the school culture, teachers barriers, and finance, leadership, curriculum and ethical issues. Those problems are experience by both developed and developing countries. This also refutes a widespread assumption that developing countries experience more barriers for implementing ICT than developed countries.*

**Keywords:** Collaborative Learning, Self-Managed Learning Process, Technological Competition, Constructive Change, Technological Culture.

### Introduction:

Recently, the development of ICT gradually replaces the traditional teaching pedagogy. Face to face classroom interaction is getting replaced by on-line communication, traditional white or blackboard is getting replaced by interactive whiteboard, and books or printed resources are getting replaced by on-line resources.

It is believed that technology can bring our education sector from the Dark Age to the light age. This is because the implementation of ICT in schools can bring about some potential benefits. However, to obtain those benefits we have to overcome its enormous difficulties. These difficulties may vary from school to school, from region to region, and from country to country. It is frequently firmly believed by the developing countries that the most essential prerequisite of building prosperous nations is technological access, skills, and managements. This makes many developing countries see and learn what the developed countries do with their technology. In reality, not only we as the developing countries face difficulties in integrating ICT into our schools sector, but also the developed countries. In some respects, we have share similar difficulties, but in some others we face different difficulties.

The above phenomena will be the main discussion in this essay. The discussion in this essay is divided into four main parts. This first part covers the discussion of the benefits of ICT in teaching and learning area. The second part converse the discussion of the difficulties in western countries. In third part some examples of ICT implementation in western and eastern countries will be discussed. The last part covers the organizational issue in implementing ICT.

This study uses secondary data as the basis of its discussion. The use of secondary data in this discussion brings a benefit. As noted by Bryman the use of secondary data allows us to make a journey exploring what other researchers have found, comparing and contrasting their findings to see the whole picture of what they have found.

### The Potential Benefits of ITC

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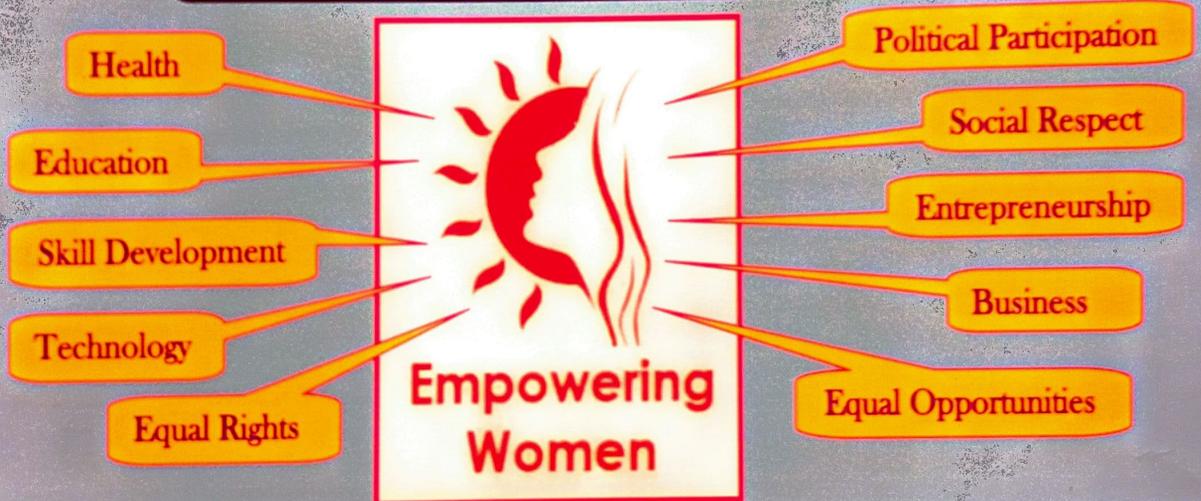
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## Women Entrepreneurship Development in India

Dr. D. B. Borade

Assistant Professor (Dept. of Commerce)

Anandrao Dhonde Alias Babaji

Mahavidyalaya Kada,

Tal:- Ashti, Dist:- Beed

### Abstract:

*Women entrepreneurship development is an essential part of human resource development. The development of women entrepreneurship is very low in India, especially in the rural areas. Entrepreneurship amongst women has been a recent concern. Women have become aware of their existence their rights and their work situation. However, women of middle class are not too eager to alter their role in fear of social backlash. The progress is more visible among upper class families in urban cities.*

*This paper focuses on women entrepreneur. Any understanding of Indian women, of their identity, and especially of their role taking and breaking new paths, will be incomplete without a walk down the corridors of Indian history where women have lived and internalized various role models.*

**Keywords:** - Women Entrepreneurs, Women Problems, Women workforce, Women Empowerment,

### Introduction

The Indian economy has been witnessing a drastic change since mid -1991, with new policies of economic liberalization, globalization and privatization initiated by the Indian government. India has great entrepreneurial potential. At present, women involvement in economic activities is marked by a low work participation rate, excessive concentration in the unorganized sector and employment in less skilled jobs. Any strategy aimed at economic development will be lop-sided without involving women who constitute half of the world population. Evidence has unequivocally established that entrepreneurial spirit is not a male prerogative. Women entrepreneurship has gained momentum in the last three decades with the increase in the number of women enterprises and their substantive contribution to economic growth. The industrial performance of Asia-Pacific region propelled by Foreign Direct Investment, technological innovations and manufactured exports has brought a wide range of economic and social opportunities to women entrepreneurs.

In this dynamic world, women entrepreneurs are an important part of the global quest for sustained economic development and social progress. In India, though women have played a key role in the society, their entrepreneurial ability has not been properly tapped due to the lower status of women in the society. It is only from the Fifth Five Year Plan (1974-78) onwards that their role has been explicitly recognized with a marked shift in the approach from women welfare to women development and empowerment. The development of women entrepreneurship has become an important aspect of our plan priorities. Several policies and programmes are being implemented for the development of women entrepreneurship in India.

There is a need for changing the mindset towards women so as to give equal rights as enshrined in the constitution. The progress towards gender equality is slow and is partly due to the failure to attach money to policy commitments. In the words of president APJ Abdul Kalam "empowering women is a prerequisite for creating a good nation, when women are empowered, society with stability is assured. Empowerment of women is essential as their thoughts and their value systems lead to the development of a good family, good society and ultimately a good nation."

When a woman is empowered it does not mean that another individual becomes powerless or is having less power. On the contrary, if a women is empowered her competencies towards decision-making will surely influence her family's behavior. In advanced countries, there is a phenomenon of

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# “Machine Learning and Artificial Intelligence (AI) for Effective Marketing”

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## ABSTRACT:

Machine learning is a term thrown around in technology circles with an ever-increasing intensity. Major technology companies have attached themselves to this buzzword to receive capital investments, and every major technology company is pushing its even shinier parent artificial intelligence (AI).

While the topic of machine learning and AI has been exhaustively covered in the technology space, not enough documentation has been created in the marketing space on the topic, including how it affects marketers and their work. This space is so thick with technology-based terminology, but not every marketer is opting to explore the full potential of Machine learning with limited bandwidth available with them. With many products coming to market, it is important to prepare marketers to tackle the landscape armed with a solid foundation.

Machine learning touches an ever-increasing number of industries, we'll also touch on several different ways that machine learning is impacting people in many professions. Most data scientists use R and Python for machine learning, but we still see very few marketer these days that only lives and breathes data science.

**Keywords: Machine Learning, Artificial Intelligence (AI), Product Management, Product Manager (PM),**

## RESEARCH METHODOLOGY:

This is a conceptual research with explorative methodology. The secondary data was collected from different authentic sources like various research papers, articles, newspapers, blogs and presentations on Machine Learning & Artificial Intelligence (AI) in product Management.

## OBJECTIVE:

1. To study importance of Machine Learning/AI and how it is transforming today's product management
2. To understand different aspects of AI and different ways of

## INTRODUCTION:

Machine learning is a term thrown around in technology circles with an ever-increasing intensity. Major technology companies have attached themselves to this buzzword to receive capital investments, and every major technology company is pushing its even shinier parent artificial intelligence (AI).

The reality is that Machine Learning as a concept is as old as computing itself. As early as 1950, Alan Turing was asking the question, “Can computers think?” In 1969, Arthur Samuel helped define machine learning specifically by stating, “[Machine Learning is the] field of study that gives computers the ability to learn without being explicitly programmed.” While the concept has been around for more than half a century, we have finally reached a point in technological advancement where hardware and software can actually help developers match their aspirations with tangible reality. This development has led to not only the rise of machine learning and AI advancements, but, more importantly, also advancements inexpensive enough for anyone to use.



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A handwritten signature in blue ink, appearing to read "Borade", is written over a faint, larger version of the signature.

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## **Innovation and Entrepreneurship**

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### **Abstract**

Social entrepreneurship is a phenomenon that has resisted attempts to establish a clear definition. A focus on organizational structures and or what constitutes a worthy social cause has created a diverse set of terminology. Observing the positive social impact of entrepreneurs catering to basic needs, this paper recognizes their unique role in efficiently contributing to the achievement of sustainable development goals. From this perspective, the term “social” can be much better defined. The frameworks proposed in this paper should guide much-needed further research and facilitate decision making about more focused support from a financial as well as a learning perspective.

( **Keywords-** Social entrepreneurship, organizational structures, social impact of entrepreneurs)

### **Introduction**

Social entrepreneurs endeavor to create social value through innovative, entrepreneurial business models. The potential market for these entrepreneurs is huge because of the wide range of social needs that remain unsatisfied by existing markets and institutions. Social entrepreneurs often create tremendous value when they cater to very basic humanitarian needs; for example, by providing medicines or food, which can be a matter of life or death for those who receive them. However, the challenges these entrepreneurs face are severe. Their “customers” may be willing, but often unable, to pay even a small portion of the cost of the products and services provided. Many social entrepreneurs operate in developing countries that have no structures or resources that would enable and support traditional entrepreneurship. Therefore, social entrepreneurs must create novel business models and organizational structures, and unique strategies for brokering between very limited, disparate and often dynamic resources to create social value. Perhaps the greatest challenge is to capture some of the value created in financial terms, or to secure external financing, merely to keep to keep their organization running. It is even more difficult to expand

## ADSORPTION OF CR (VI) METAL IONS FROM AQUEOUS SOLUTIONS USING LOW COST ADSORBENT AS APPLICATIONS OF GREEN CHEMISTRY

Dattatraya Jirekar<sup>\*1</sup>, Pramila Ghumare<sup>\*2</sup>

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### ABSTRACT

Sarpgandha (*Rauwolfia serpentine*) leaves powder (SLP) has been used as clean for adsorbent elimination of Cr (VI) metal ion from aqueous solutions. Adsorption experiments were performed by studying some parameters include contact time, initial concentration of Cr (VI) metal ion, amount of adsorbent (SLP), initial pH and temperature. The optimum conditions were obtained at 6.9, 301.5<sup>0</sup>k, 60 min., 100 mg/L as initial pH, temperature, contact time, and initial concentration of Cr (VI) metal ion respectively. Adsorption kinetic models include pseudo-first order and pseudo-second order was applied in order to investigate the adsorption. Langmuir and Freundlich isotherm models were used to investigate the adsorption techniques. Thermodynamic parameters such as  $\Delta G^0$ ,  $\Delta H^0$  and  $\Delta S^0$  were calculated.

**KEYWORDS:** Adsorption, Sarpgandha leaves, Cr (VI) metal ion, isotherm models, pseudo-first order and pseudo-second order kinetics.

### I. INTRODUCTION

The increasing contamination of urban and industrial wastewater by toxic metal ions is a worrying of environmental problems. The problem of eliminating pollutants from water is an important process and is becoming more important with the increasing of industrial activities. About 97 % of water contamination is generated by chemicals, paper, petroleum and primarily metal sectors [1].

Various technologies employed to remove toxic heavy metal ions includes ion-exchange, electro-deposition [2], solvent extraction [3], reverse osmosis, electro-dialysis [4], precipitation [5], flocculation [6], sorption [7], ultrasound oxidation process [8], Biological process [9], and adsorption, etc., but the selection of the wastewater treatment method is based on the concentration of waste and the cost of treatment.

Adsorption is one of the most popular methods for the elimination of metal ions from the aqueous solutions. Adsorption is a surface phenomenon, in which molecules of adsorbate are attached and held to the surface of an adsorbent until equilibrium is reached between adsorbate and adsorbent. The adsorption phenomenon depends on the interaction between the surface of the adsorbent and the adsorbed species. The interaction may be due to chemical bonding, hydrogen bonding, hydrophobic and Van der Waals forces [10].

The presence of toxic heavy metals in industrial effluent has become a matter of environmental concern, chromium (VI) is known to be one of the heavy metals and widely used in many industries including leather tanning, explosives, ceramics, photography, wood preservatives [10,11] paints and pigments [12]. Disposal of untreated effluent in these industries contains a considerable amount of Cr (VI), which spreads into the environment through soil and water streams and accumulates along the food chain, resulting in a high risk to human health, as high concentration of chromium will cause dermatitis, allergic skin reactions ulceration of intestine. It is also reported to be carcinogen to animals [13]. As Chromium does not degrade biologically, the control of chromium pollution has special importance for both organisms that live in water and those that benefit from water.

Recently many researchers have concentrated their work on the identification of low cost, unconventional adsorbents for the treatment of wastewater. Agricultural wastes have often been used as adsorbents to minimize pollution. Some recently studied low cost agricultural adsorbents include Pisum sativum [15], Neem leaves [16],

# Adsorption of Congo Red Dye from Aqueous Solution: Equilibrium and Its Kinetics

<sup>1</sup>Dattatraya Jirekar, <sup>2</sup>Pramila Ghumare

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**Abstract - Congo red (CR), one of the toxic dyes, which is extensively used for dyestuffs, textile, paper and plastic industries. CR does not easily biodegrade in aqueous medium and show harmful effect on aquatic as well as human life. In the present work adsorption studies of CR onto Sarpagandha (*Rauwolfia serpentina*) leaves powder (SLP) adsorbent was examined in aqueous solution at 27.5°C with the effects of initial concentration, adsorbent dose, temperature and contact time. Highest 70.98% adsorption efficiency recorded for 20 mg/L solution concentration onto 2.5g of SLP. The applicability of Langmuir and Freundlich isotherm model was investigated, and the Freundlich adsorption isotherm model exhibited the best fit than Langmuir isotherm model with the experimental data. The kinetic data was fitted to pseudo-second-order kinetic model. The adsorption technique was found to be SLP is very useful and cost effective for a better removal of hazardous CR dye.**

**Keywords:** Congo red; Isotherm; Kinetics; Sarpagandha leaves powder; Thermodynamics.

## I. INTRODUCTION

Nowadays, dyes are widely used in chemical Industries, which may enter ecosystems (e.g. aquatic, soils) during dyes production and subsequent application processes<sup>1</sup>. Dyes are natural or synthetic coloured organic compounds having the property of imparting their colours to other substances. Although there are many natural dyes available, the ingrain coloured by these are neither bright nor durable. Hence synthetic dyes are generally used which are cheap and readily available. Synthetic dyes are widely used in industries such as textiles, plastics, paper rubber, tanning, cosmetics, pharmaceutical and food stuff. In industrial effluents dyes are one of the most hazardous chemical compound found and need to be treated, since their presence in water bodies reduces light penetration, producing the photosynthesis of aqueous flora<sup>2</sup>. Among various dye species, Congo red (CR) is a typical benzidine-based azo dye and mainly exists in the effluent of textile, paper, printing industries, etc. After entering natural environment, CR can be metabolized to benzidine, a well-known human carcinogen, which may be a cause for human

allergic diseases. Due to its high chemical stability and low biodegradability, conventional biological process was found to be ineffective to decolorize and degrade CR wastewater treatment. Over the past few decades, several processes have been used for the removal of dyes from wastewater such as biological, chemical precipitation, coagulation or flocculation, solvent extraction, membrane filtration, ion exchange, ozonation, electrochemical destruction and adsorption<sup>3-4</sup>. Adsorption process has simplicity of design, more efficient, easy to operate, insensitivity to toxic substances, environmental friendliness, non-toxicity, availability of a wide range and cost effective, hence, it has been suggested as a potential alternative to the existing physical / chemical /biological methods for the removal of dyes from industrial effluents or waste water. Natural adsorbents such as agricultural waste, waste food or low-cost inorganic material have been most popular for wastewater treatment due to availability and low-cost adsorbent.

Various low-cost adsorbents that have been successfully used for the adsorption of dyes such as, peanut hull<sup>5</sup>, gram seed husk<sup>6</sup>, watermelon rind<sup>7</sup>, rice husk<sup>8</sup>, bentonite<sup>9</sup>, *Azadirachta indica* leaf<sup>10</sup>, Jujuba seeds<sup>11</sup>, green gram seed husk<sup>12</sup> and ball-milled sugarcane bagasse<sup>13</sup> etc.. Today, more attention is being given to the use of low-cost adsorbents.

For the present work low-cost agricultural adsorbent was selected from *Rauwolfia serpentina* (Sarpagandha) shrub is used to adsorption of Congo red organic dye. Its leaves when freshly ground and used as adsorbent for removal of CR. The objective of the present study was to investigate the potential of Sarpagandha leaves powder (SLP) as an alternative adsorbent for the removal of Congo red dye from aqueous solution.

Kinetics of adsorption has also been studied to explore the equilibrium as well as the rate of adsorption of congo red dye on SLP adsorbent. The equilibrium study was investigated to observe the effects of various adsorption parameters such as contact time, adsorbent dose and initial dye concentration on the process. Adsorption data were analysed using Langmuir and Freundlich adsorption isotherm models. The adsorption technique was found to be very useful and cost effective for a better removal of hazardous CR dye.



## DYE REMOVAL FROM AQUEOUS SOLUTION USING AGRICULTURAL WASTES: KINETIC AND EQUILIBRIUM STUDIES

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Kada, Maharashtra

### **Abstract**

In Present research paper Black gram seed husk (BGS) waste, an agriculture waste available in adequate quantity in Maharashtra state (India), to remove basic dye (methylene blue) from aqueous solution by adsorption was studied. Batch experimental technique were studied at 299.3k to study the effect of contact time, effect of adsorption dose, effect of initial concentration, effect of pH, and effect of temperature, Adsorption isotherm equilibrium and kinetics were investigated. The experimental data were analyzed by Langmuir, Freundlich, and Temkin models of adsorption. The adsorption isotherm data were best fitted well to Freundlich isotherm and equilibrium on heterogeneous surfaces adsorption capacity was found to be 11.98 mg/g at 299.3 k. The kinetic data obtained at different concentrations of MB have been analyzed using pseudo first order, pseudo second order equation. The experimental data fitted very well the pseudo second order kinetics.

**Keywords:** Adsorption, Black Gram Seed Husk, Equilibrium, Isotherm, Kinetics, Methylene Blue.

### **I. Introduction**

Today one of the major problems in worldwide is water pollution. According to the United World Water Development Report, 2,000,000 tons of wastes are discharged to the receptor water bodies every day, including industrial wastes, dyes and chemicals and etc. More than 600 organic and inorganic pollutants have been reported in receptor water [1]; about 10,000 of various commercial dyes and pigments exist and over 700,000 tons are produced annually, worldwide [2]. Textile industries use large amount of dyes for finishing process. These dyes are chemical compounds which become a serious environmental problem if they are discharged as wastewater without any treatment. The adsorption process was efficient way for industrial effluents treatment. However, for successful wastewater treatment, the process must be economic by using available and cheap materials. Recently, enormous researches have been studied the ability use cheap and available adsorbents for treatment of industrial effluents. Methylene blue (MB) dye is one of the basic dyes which are used for

## *Adsorption of Nickel (II) Ions onto a Low-Cost Bio-adsorbent*

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### **Abstract**

*Gram seed husk (GSH) reproduced by pulses forming industries has been demonstrated to be an effective adsorbent for the removal of metal ions like Ni (II) from aqueous solution. Batch adsorption techniques were conducted to study the effects of contact time, adsorbent dose, concentration of Ni (II) metal ion solution, and effect of pH of Ni (II) metal ion solution. Pseudo-first and pseudo-second order kinetics were tested to examine the adsorption mechanism. The adsorption kinetic data were described very well by the pseudo-second-order kinetics. Equilibrium data were more effectively fitted to the both Langmuir and Freundlich model. Adsorption equilibrium was obtained at 60 min. for 5 to 20 mg/L of Ni (II) concentrations. Adsorption of Ni (II) metal ions was fundamentally dependent on pH of solution, and the optimum adsorption of Ni (II) ion was observed at pH 7. The thermodynamic parameters like ( $\Delta G^\circ$ ), ( $\Delta H$ ) and ( $\Delta S$ ) indicates that adsorption was spontaneous and exothermic in nature. From experimental results, conclude that gram seed husk (GSH) is recommended as least expensive and easily available bio adsorbent to removal of harmful heavy metal ions from industrial wastewater.*

**Keywords:** *Adsorption isotherms, Gram seed husk, Kinetics*

### **INTRODUCTION**

Water is essential for survival. However today, about 200 million people in India don't get pure drinking water due to

contamination of water. Besides in the fast development of the total world population, industrialization, unplanned urbanization, farming activities, as well as the more

## Adsorption of copper metal ion from aqueous solution by using low cost materials

Dattatraya Jirekar<sup>\*1</sup>, Pramila Ghumare<sup>1</sup>, Shailendrasingh Thakur<sup>2</sup>, Ramesh Ware<sup>2</sup>, Mazahar Farooqui<sup>3</sup>

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### Abstract

In this study the matki (*Vigna aconitifolia*) seed husk was tested for removal of Cu metal ion from solution. Batch adsorption techniques were administered to measure the adsorption characteristics of the matki seed husk for Cu (II) metal ion removal from aqueous solutions. The adsorption isotherms, thermodynamic parameters, kinetics, effect of pH were examined. The results show that the utmost adsorption capacity of matki seed husk was approximately 80.39 % Cu (II) at temperature 305 K and at the initial Cu (II) metal ion concentration of 100 mg/L and at 5.1 pH. Adsorption isotherm data might be well fitted by Freundlich isotherm equation. Thermodynamic studies confirmed that the method was spontaneous and endothermic. The adsorption amounts of Cu (II) metal ion tend to extend with the rise in of pH. The relatively low cost and high capability of the matki seed husk make it potentially attractive adsorbent for the removal of Cu (II) metal ions from waste water.

**Keywords:** matki seed husk, Cu (II) metal ion removal, adsorption capacity, adsorption isotherm adsorption kinetics.

### Introduction

Water may be a basic source of life, energy and thus is an important element to all or any things on earth. If water is in pure form, then it's colorless, tasteless and odorless in nature. Level of contaminants has increased because of discharge of industrial effluents in aquatic ecosystems which pollute and contaminate the water streams naturally [11]. Heavy metals generate serious environmental distresses because their non-biodegradable and persistent nature [17]. Many toxic heavy metals are discharged into the environment as industrial wastes causing significant issue of soil and water pollution. Pollution raises an excellent concern nowadays due to rapid industrialization e.g., metal mining operations, fertilizers, agricultural wastes, sewage, domestic wastes, alloy and leather industries, metal galvanization paper industries and pesticides which have largely discharged various sorts of pollutants into environment and cause disorder into an ecosystem [2]. The effluents from mining, mineral extraction, metal processing, metal polishing, cleaning, paint manufacturing and battery manufacturing industries and acid rain contribute for the increasing metal loads within the water bodies. The sources of copper metal in industrial effluents include cleaning of metals also as plating baths, pulp, paper and paper board mills, wood-pulp production, fertilizer industry, etc. Excessive intake of copper leads to in an accumulation within the liver. Copper is released into the environment during a number of various ways; it finds its way into water-streams leading to environmental contamination that poses threat to humans, animals, and plants. This will cause serious and sophisticated problem [15 & 16]. Similarly, another heavy metal like copper in very bit is important for all times process. However, with higher concentrations of this element within the environment and therefore consequent increase in human intake, copper concentrations have reached toxic levels causing various diseases and disorders like liver damage, Wilson disease and insomnia [12]. However, there are several methods for the treatment of wastewater containing Cu (II), including ion exchange, adsorption, precipitation and membrane separation [1 & 13]. During last decades, the method of adsorption using activated charcoal has been found to be an efficient technology for the removal of Cu (II) from the wastewater. Though the removal of Cu (II) through adsorption is sort of effective,



## Phytopharmacognostic, Antibacterial Activity of Different Extract of Terminalia Arjuna Roxb Leaves

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### Abstract

The wealth of India is stored in the broad natural flora which has been gifted to her. Endowed with a variety of agro-climatic conditions, India is a virtual herbarium of the world. The importance of medicinal and aromatic plants has been emphasized from time to time. It is accepted that the drug of natural origin shall play an important role in health care, particularly in the rural areas of India. India is having a high knowledge of phototherapy from Ayurveda, and still, hundreds of potent drugs are yet to be evaluated scientifically. Keeping this in view, we reviewed one of the potential trees whose leaves and other parts also have a potent traditional application, but it has not been much studied.

**Keywords:** Terminalia Arjuna Roxb, Pharmaco-Chemical, Antibacterial Activity.

### Introduction

Terminalia arjuna Roxb (Combretaceae) tree is usually referred to as Arjhan and Arjun in Bengal, India. It is an outsized tree, often with buttressed trunk, smooth gray bark and about 20 - 25 m in tall. The leaves of Arjhan are usually sub-opposite, oblong or elliptic-long, pale dark green above and pale-brown beneath, 10 - 20 cm long and hard. The flowers are yellowish-white, while the fruits are 2.5 - 5.0 cm ovoid or ovoid-oblong, fibrous-woody, and glabrous. It is common on the banks of rivers, streams and dry watercourses in sub-Himalayan tract, West Bengal as well as in central and south India. The skin of the plant is known to contain a crystalline compound, arjunine, a lactone, arjunetin, essential oil and reducing sugar.

Besides these, Terminalia arjuna Roxb tree also contains 34 % calcium carbonate, 9% of other salts of calcium, 13% tannin and aluminum, magnesium, organic acids, colouring matter and other substances [5]. The fruits of the plants are used as a tonic in traditional medicine in India, [2]. Externally, its leaves are used as a cover on sores and ulcer. The bark of Terminalia arjuna Roxb tree is anti-dysenteric, antipyretic, astringent, cardio tonic, lithotriptic and tonic [1] while the powder of the bark acts as a diuretic in cirrhosis of the liver and provides relief in symptomatic hypertension. A decoction of the thick bark made with milk is given every morning on an empty stomach or its powder with milk and gur as a cardio tonic [4]. The bark powder is additionally given with honey in fractures and contusions with echymosis. Furthermore, the extract of the skin, as an astringent, is used for cleaning sores, ulcers and cancers, etc. An ointment made up of the bark by mixing with honey is used to cure acne while the ashes of the bark are prescribed in scorpion stings [3].

### Material and method

The fresh leaves of Terminalia arjuna Roxb are collected from Kada, District Beed. The fresh leaves were dried under shade, powdered and undergo 40 mesh sieves and stored in a closed bottle for further use. The powder was extracted with water, ethanol, chloroform, acetone and petroleum ether by Sechelt apparatus.



## Formation of Alkaline Earth and Transition Metal Complexes with Efavirenz Drug in Ethanol-Water Media

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### Abstract:

The stability constant of Efavirenz drug with alkaline earth metal ions Mg(II), Ca(II) and transition metal ions Fe(III), Cu(II) were investigated using pH metric titration technique in 20%(v/v) ethanol-water mixture at 27 °C temperature and at an ionic strength of 0.1M NaClO<sub>4</sub>. {Metal to ligand ratio = 1:5 & 1:1} The method of Calvin and Bjerrum as adopted by Irving and Rossotti has been employed to determine proton ligand (pK<sub>a</sub>) and metal-ligand stability constants (log K) values. It is observed that alkaline earth metal & transition metal ion forms 1:1 and 1:2 complexes. The order of stability constants for these metal complexes was as: **Fe<sup>3+</sup> > Cu<sup>2+</sup> > Mg<sup>2+</sup> > Ca<sup>2+</sup>**

**Keywords:** Stability Constant, alkaline earth metal, transition metal, Efavirenz, pH metry.

### Introduction:

Coordination compound containing one metal and one ligand is known as binary complex. Metal complexes with various ligand shows their contribution in the field of pollution control, medicine, industries, analytical chemistry, pharmacology, pathology biochemistry, metallurgy etc. The stability of metal complexes with medicinal drugs plays a major role in the biological and chemical activity. Most of the s-block and d-block elements form complexes. Mg (II) ions form complexes with several enzymes which are essential for energy release. Ca (II) is important in bone, teeth and blood clotting. It maintains the regular breathing of hearts, contraction of muscles. There are different kinds of ligand used for complexation. For the present investigation, we selected Efavirenz drug. Efavirenz is a non-nucleoside reverse transcriptase inhibitor (NNRTI) and is used as a part of highly active anti-retroviral therapy (HAART) for the treatment of human immunodeficiency virus (HIV-1). Both nucleoside and non-nucleoside RTIs inhibit the same target. The reverse transcriptase enzyme transcribes viral RNA into DNA. Unlike nucleoside RTIs, which bind at the enzyme's active site, NNRTIs bind within a pocket, termed the NNRTI pocket. Efavirenz is not effective against HIV-2, as the pocket of the HIV-2 reverse transcriptase has a different structure, which confers intrinsic resistance to the NNRTI class. It is never used alone and is always given in combination with other drugs. It is a white to slightly pink crystalline powder and it is soluble in various organic solvents but practically insoluble in water. It is chemically (4S)-6-chloro - (cyclopropylethynyl)-1, 4-dihydro-4- (trifluoromethyl) - 2H-3, 1-benzoxazin-2-one. Efavirenz activity is mediated predominantly by non-competitive inhibition of HIV-1 RT. The toxicity of EFV is central nervous system (CNS) side-effects. The EFV-associated CNS side-effects typically resolve after two to four weeks. However, in some cases they can persist for months or not resolve at all. Thus, EFV should be avoided in patients with a history of psychiatric illness.

After a review of literature survey and in continuation of our earlier work with complexation of medicinal drugs [1-10], we have carried out a solution study on the complexation of Efavirenz drug with alkaline earth metal ions Mg<sup>2+</sup>, Ca<sup>2+</sup> and transition metal ions Fe<sup>3+</sup>, Cu<sup>2+</sup> using pH metrically in 20% (v/v) ethanol-water mixture at constant ionic strength of 0.1M NaClO<sub>4</sub>.

## Studies of Complexation of Transition Metal Ions With Benazepril Drug in Aqueous Media: Thermodynamic Aspect

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### Abstract :

Stability constant of Benazepril hydrochloride drug with transition metal ions  $\text{Fe}^{3+}$ ,  $\text{Co}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Cu}^{2+}$ ,  $\text{Zn}^{2+}$  and  $\text{Cd}^{2+}$  using a pH metric titration technique in 20%(v/v) ethanol-water mixture at three different temperatures 300K, 310K & 320K at an ionic strength of 0.1M  $\text{NaClO}_4$  were studied. The Calvin-Bjerrum method as adopted by Irving-Rossotti has been employed to determine metal-ligand stability, constant logK values. The trend in the formation constants for transition metal ions follows the order:  $\text{Fe}^{3+} > \text{Cu}^{2+} > \text{Cd}^{2+} > \text{Co}^{2+} > \text{Zn}^{2+} > \text{Ni}^{2+}$ . The thermodynamic parameters, such as Gibb's free energy change ( $\Delta G$ ), entropy change ( $\Delta S$ ), and enthalpy change ( $\Delta H$ ) associated with the complexation reactions, were calculated.

**Keywords:** stability constant, transition metal ions, Benazepril, pH metry, thermodynamic parameter etc.

### Introduction:

Metal complexes of drugs play a central role in the development of coordination chemistry. Most of the d-block elements form complexes. For the present investigation, we have selected drug Benazepril hydrochloride, (3-[(1-ethoxy carbonyl-3-phenyl-(1S)-propyl)-amino]-2,3,4,5-tetrahydro-2-oxo-1-(3S)-benzazepine-1-acetic acid hydrochloride), is a prodrug type angiotensin-converting enzyme (ACE) inhibitor, which is proved effective in treating congestive heart failure and hypertension. The family of ACE inhibitors inhibits the angiotensin-converting enzyme, which is involved in the conversion of angiotensin I to angiotensin II. Angiotensin II stimulates the synthesis and secretion of aldosterone and raises blood pressure via a potent direct vasoconstrictor effect. ACE inhibitors may reduce the degradation of bradykinin. It is used to inhibit blood clots in coronary artery disease, peripheral vascular disease and cerebro vascular disease.

In continuation of our earlier work [1-29] and after literature survey it was thought of interest to study the effect of temperature on thermodynamic parameters such as Gibb's free energy change  $\Delta G$ , enthalpy change  $\Delta H$  and entropy change  $\Delta S$  of complexes of Benazepril hydrochloride drug with transition metal ions  $\text{Fe}^{3+}$ ,  $\text{Co}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Cu}^{2+}$ ,  $\text{Zn}^{2+}$  and  $\text{Cd}^{2+}$  using pH metrically in 20% (v/v) ethanol-water mixture.

### Materials and Methods:

Transition metal, NaOH,  $\text{NaClO}_4$ ,  $\text{HClO}_4$  are of AR grade. The solutions used in the pH metric titration were prepared in double distilled water. The NaOH solution was standardized against oxalic acid solution and standard alkali solution was again used for standardization of  $\text{HClO}_4$ . The measurements were made at temperatures 300K, 310K & 320K in 20% (v/v) ethanol-water mixture at ionic strength (0.1M  $\text{NaClO}_4$ ). Water thermostat is used to maintain the temperature constant. The pH measurement was made using a digital pH meter model Elico L1-120 in conjunction with a glass and reference calomel electrode. The instrument was calibrated at pH 9.18, 7.00 and 4.00 using the standard buffer solutions.





## FTIR, phytochemical and antibacterial activity of different extract of *Feronia Limonia* leaves

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### Abstract

The present study deals with the phytochemical examination of therapeutic importance of leaves extract of *feronia limonia* is an important medicinal plant. Phytochemical analysis of the five extracts prepared from *feronia limonia* leaves revealed the presence of carbohydrate, alkaloids, glycoside, saponin, phytosterol, phenol, tannin, flavonoid, protein and amino acid. The FT-IR spectrum confirmed the presence of characteristic functional group. The aqueous, ethanol, chloroform, acetone and petroleum ether extract of *feronia limonia* leaves were tested against *Staphylococcus aureus*, *Salomonella typhimurium*, *Proteus vulgaris*, *Pseudomonas aeruginosa* and *Bacillus megaterium* by the cup-plate method.

**Keywords:** *feronia limonia* leaves, phytochemical screening, FT-IR, antibacterial activity

### 1. Introduction

Nearly all the medicinal plants available in the world have great potential sources for discovery as well as protection of new drugs of benefit to mankind. Now a day a lot of approaches available to reach for new biologically active ingredients in the medicinal plants for the preparation of safe drugs. Scientifically many works have been expended to evaluate and discover new antioxidant, antimicrobial and antifungal ingredients from different kinds of natural sources like soil, microorganisms, animals and plants. Different types of folk medicine or herbal medicine are among the most important resources. Check and need to systematic screening of these available traditional herbs may result in the discovery of novel effective bioactive compounds for the formulation of drugs [1]. Its leaves are commonly used as carminative, purgative, Bronchitis, Diarrhoea, Expectorant and cardiogenic. The juice of green leaves of *feronia limonia* is used for intestinal trouble of children. The *Feronia limonia* fruits are used for disease like tumors, Asthma, wounds, cardiac, Debility and Hepatitis. *Feronia limonia* belongs to family Rutaceae, is commonly known as kaith or wood apple and is widely distributed in most tropical and subtropical countries [2]. The *feronia limonia* is native and common in India, Shrilanka, China and Indonesia [3]. *Feronia limonia* as a whole or its parts such as unripe fruit, ripe fruit, root bark, trunk, gum and leaves have a broad spectrum of traditionally established therapeutic properties [4] and widely used in several Ayurvedic preparation like panch kapittha<sup>5</sup> and kapitthaashataka churna [6]. Leaves of *feronia limonia* showed anthelmintic activity [7]. The main chemical constituents of *feronia limonia* were flavonoids, saponins and tannin [8-11].

The increasing prevalence of multidrug resistant strains of bacteria and the recent appearance of strains with reduced susceptibility to antibiotics raise serious concern of health delivery and accessibility due to untreatable bacterial infections. There is therefore the needed urgently to the search for new antimicrobial drug. Plants are important source of potentially useful structures for the development of new chemotherapeutic agents [12]. To the best of our

knowledge, there is no record of work on the phytochemical screening, FT-IR analysis and antibacterial activity of the *feronia limonia* leaves. Therefore, the present study was carried out to evaluate the phytochemical screening, FT-IR analysis and antibacterial activity of the *feronia limonia* leaves.

### 2. Materials and Methods

#### 2.1 Collection of medicinal plants

The fresh leaves of *Feronialimonia* collected from Mahadeodara, District Beed. The fresh leaves were dried under shade, powdered and pass through 40 mesh sieve and stored in closed bottle for further use. The powder was extracted with different solvent such as water, ethanol, chloroform, acetone, petroleum ether by Soxhlet apparatus. Phytochemical analysis were carried out for all the extract as per the standard methods [13].

### 3. Screening of antibacterial activity

#### 3.1 Bacterial Strains

The test organisms were purchased from NCIM, NCL Pune. The organisms were sub-cultured in the media specified. The organisms, their ATCC code, media in which they are sub-cultured are given in Table No.1. Bacteria were incubated at 37 °C in incubator for 24 hrs. They were further stored at 4 °C in the refrigerator to maintain stock culture. Microorganisms with their ATCC Codes and media used for subculture are as follows [14].

**Table 1:** ATCC code and media used for development of micro-organism.

Sr. No.	Name of microorganism	ATCC Code	Media
1	<i>Salmonella typhimurium</i>	2501	Nutrient Agar
2	<i>Bacillus megeterium</i>	2087	Nutrient Agar
3	<i>Pseudomonas aeruginosa</i>	2200	Nutrient Agar
4	<i>Staphylococcus aureus</i>	2079	Nutrient Agar
5	<i>Proteus vulgaris</i>	2027	Nutrient Agar

### 4. Result and Discussion



## Research, Higher Education and the Quality of Teaching

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### Abstract-

*Higher education plays an essential role in society by creating new knowledge, transmitting it to students and fostering innovation. Research-based education has lately received increasing interest both among researchers in higher education and in public discussion.*

*The aim of this paper is to develop a thorough understanding of teacher education reform in Japan and its relation to the research development process. To identify whether Japanese teachers are equipped with the conceptual understanding and methodological skills to conduct research, field visits are carried out to some schools and higher education institutions; some content analysis of materials related to their Teacher Education Programs are conducted, twenty-five people are interviewed. Quantitative survey data as well as in-depth qualitative data are collected from survey questionnaires and semi-structured interviews over a period of two months. This research attempts to discuss the research policies, strategies and practices in graduate schools of teacher education and the contributions of research in developing high quality teaching.*

*Findings of this research is expected to make research-informed contributions to contemporary issues, initiatives and reforms in Japanese higher education, and will at least serve to initiate a debate about research-based teacher education and contribute to the decisions that need to be made regarding the future of higher education in Japan.*

**Keywords:** Research-based education, Teacher Education, Higher Education, Quality of Teaching, Education Reform.

### Introduction:

Higher education plays an essential role in society by creating new knowledge, transmitting it to students and fostering innovation. Quality teaching in higher education matters for student learning outcomes. But fostering quality teaching needs higher education institutions to ensure that the education they offer meets the expectations of students and the requirements of employers, both today and for the future.

In the last two decades, a great deal of attention has been directed towards developing research in teacher education all over the world. Teacher education is clearly an essential element for the improvement of education by producing highly qualified teachers. Many countries identify the production of "high quality teachers" as the goal and focus of their teacher education programs.

A primary goal of all teacher educators is to provide pre-service teachers with meaningful professional development opportunities that will help them succeed in making the transition into their own classrooms. In most of the developed countries, teacher education has moved from training teachers to transfer knowledge and preparing them to practice a new role of producing knowledge. In other words, in the process of becoming and being a teacher, doing a teacher.

## ADSORPTION OF CR (VI) METAL IONS FROM AQUEOUS SOLUTIONS USING LOW COST ADSORBENT AS APPLICATIONS OF GREEN CHEMISTRY

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### ABSTRACT

Sarpgandha (*Rauwolfia serpentine*) leaves powder (SLP) has been used as clean for adsorbent elimination of Cr (VI) metal ion from aqueous solutions. Adsorption experiments were performed by studying some parameters include contact time, initial concentration of Cr (VI) metal ion, amount of adsorbent (SLP), initial pH and temperature. The optimum conditions were obtained at 6.9, 301.5<sup>0</sup>k, 60 min., 100 mg/L as initial pH, temperature, contact time, and initial concentration of Cr (VI) metal ion respectively. Adsorption kinetic models include pseudo-first order and pseudo-second order was applied in order to investigate the adsorption. Langmuir and Freundlich isotherm models were used to investigate the adsorption techniques. Thermodynamic parameters such as  $\Delta G^0$ ,  $\Delta H^0$  and  $\Delta S^0$  were calculated.

**KEYWORDS:** Adsorption, Sarpgandha leaves, Cr (VI) metal ion, isotherm models, pseudo-first order and pseudo-second order kinetics.

### I. INTRODUCTION

The increasing contamination of urban and industrial wastewater by toxic metal ions is a worrying of environmental problems. The problem of eliminating pollutants from water is an important process and is becoming more important with the increasing of industrial activities. About 97 % of water contamination is generated by chemicals, paper, petroleum and primarily metal sectors [1].

Various technologies employed to remove toxic heavy metal ions includes ion-exchange, electro-deposition [2], solvent extraction [3], reverse osmosis, electro-dialysis [4], precipitation [5], flocculation [6], sorption [7], ultrasound oxidation process [8], Biological process [9], and adsorption, etc., but the selection of the wastewater treatment method is based on the concentration of waste and the cost of treatment.

Adsorption is one of the most popular methods for the elimination of metal ions from the aqueous solutions. Adsorption is a surface phenomenon, in which molecules of adsorbate are attached and held to the surface of an adsorbent until equilibrium is reached between adsorbate and adsorbent. The adsorption phenomenon depends on the interaction between the surface of the adsorbent and the adsorbed species. The interaction may be due to chemical bonding, hydrogen bonding, hydrophobic and Van der Waals forces [10].

The presence of toxic heavy metals in industrial effluent has become a matter of environmental concern, chromium (VI) is known to be one of the heavy metals and widely used in many industries including leather tanning, explosives, ceramics, photography, wood preservatives [10,11] paints and pigments [12]. Disposal of untreated effluent in these industries contains a considerable amount of Cr (VI), which spreads into the environment through soil and water streams and accumulates along the food chain, resulting in a high risk to human health, as high concentration of chromium will cause dermatitis, allergic skin reactions ulceration of intestine. It is also reported to be carcinogen to animals [13]. As Chromium does not degrade biologically, the control of chromium pollution has special importance for both organisms that live in water and those that benefit from water.

Recently many researchers have concentrated their work on the identification of low cost, unconventional adsorbents for the treatment of wastewater. Agricultural wastes have often been used as adsorbents to minimize pollution. Some recently studied low cost agricultural adsorbents include Pisum sativum [15], Neem leaves [16],

# Adsorption of Congo Red Dye from Aqueous Solution: Equilibrium and Its Kinetics

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**Abstract** - Congo red (CR), one of the toxic dyes, which is extensively used for dyestuffs, textile, paper and plastic industries. CR does not easily biodegrade in aqueous medium and show harmful effect on aquatic as well as human life. In the present work adsorption studies of CR onto Sarpagandha (*Rauwolfia serpentina*) leaves powder (SLP) adsorbent was examined in aqueous solution at 27.5°C with the effects of initial concentration, adsorbent dose, temperature and contact time. Highest 70.98% adsorption efficiency recorded for 20 mg/L solution concentration onto 2.5g of SLP. The applicability of Langmuir and Freundlich isotherm model was investigated, and the Freundlich adsorption isotherm model exhibited the best fit than Langmuir isotherm model with the experimental data. The kinetic data was fitted to pseudo-second-order kinetic model. The adsorption technique was found to be SLP is very useful and cost effective for a better removal of hazardous CR dye.

**Keywords:** Congo red; Isotherm; Kinetics; Sarpagandha leaves powder; Thermodynamics.

## I. INTRODUCTION

Nowadays, dyes are widely used in chemical Industries, which may enter ecosystems (e.g. aquatic, soils) during dyes production and subsequent application processes<sup>1</sup>. Dyes are natural or synthetic coloured organic compounds having the property of imparting their colours to other substances. Although there are many natural dyes available, the ingrain coloured by these are neither bright nor durable. Hence synthetic dyes are generally used which are cheap and readily available. Synthetic dyes are widely used in industries such as textiles, plastics, paper rubber, tanning, cosmetics, pharmaceutical and food stuff. In industrial effluents dyes are one of the most hazardous chemical compound found and need to be treated, since their presence in water bodies reduces light penetration, producing the photosynthesis of aqueous flora<sup>2</sup>. Among various dye species, Congo red (CR) is a typical benzidine-based azo dye and mainly exists in the effluent of textile, paper, printing industries, etc. After entering natural environment, CR can be metabolized to benzidine, a well-known human carcinogen, which may be a cause for human

allergic diseases. Due to its high chemical stability and low biodegradability, conventional biological process was found to be ineffective to decolorize and degrade CR wastewater treatment. Over the past few decades, several processes have been used for the removal of dyes from wastewater such as biological, chemical precipitation, coagulation or flocculation, solvent extraction, membrane filtration, ion exchange, ozonation, electrochemical destruction and adsorption<sup>3-4</sup>. Adsorption process has simplicity of design, more efficient, easy to operate, insensitivity to toxic substances, environmental friendliness, non-toxicity, availability of a wide range and cost effective, hence, it has been suggested as a potential alternative to the existing physical / chemical /biological methods for the removal of dyes from industrial effluents or waste water. Natural adsorbents such as agricultural waste, waste food or low-cost inorganic material have been most popular for wastewater treatment due to availability and low-cost adsorbent.

Various low-cost adsorbents that have been successfully used for the adsorption of dyes such as, peanut hull<sup>5</sup>, gram seed husk<sup>6</sup>, watermelon rind<sup>7</sup>, rice husk<sup>8</sup>, bentonite<sup>9</sup>, *Azadirachtaindica* leaf<sup>10</sup>, Jujuba seeds<sup>11</sup>, green gram seed husk<sup>12</sup> and ball-milled sugarcane bagasse<sup>13</sup> etc.. Today, more attention is being given to the use of low-cost adsorbents.

For the present work low-cost agricultural adsorbent was selected from *Rauwolfia serpentina* (Sarpagandha) shrub is used to adsorption of Congo red organic dye. Its leaves when freshly ground and used as adsorbent for removal of CR. The objective of the present study was to investigate the potential of Sarpagandha leaves powder (SLP) as an alternative adsorbent for the removal of Congo red dye from aqueous solution.

Kinetics of adsorption has also been studied to explore the equilibrium as well as the rate of adsorption of congo red dye on SLP adsorbent. The equilibrium study was investigated to observe the effects of various adsorption parameters such as contact time, adsorbent dose and initial dye concentration on the process. Adsorption data were analysed using Langmuir and Freundlich adsorption isotherm models. The adsorption technique was found to be very useful and cost effective for a better removal of hazardous CR dye.

## Adsorption of copper metal ion from aqueous solution by using low cost materials

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### Abstract

In this study the matki (*Vigna aconitifolia*) seed husk was tested for removal of Cu metal ion from solution. Batch adsorption techniques were administered to measure the adsorption characteristics of the matki seed husk for Cu (II) metal ion removal from aqueous solutions. The adsorption isotherms, thermodynamic parameters, kinetics, effect of pH were examined. The results show that the utmost adsorption capacity of matki seed husk was approximately 80.39 % Cu (II) at temperature 305 K and at the initial Cu (II) metal ion concentration of 100 mg/L and at 5.1 pH. Adsorption isotherm data might be well fitted by Freundlich isotherm equation. Thermodynamic studies confirmed that the method was spontaneous and endothermic. The adsorption amounts of Cu (II) metal ion tend to extend with the rise in of pH. The relatively low cost and high capability of the matki seed husk make it potentially attractive adsorbent for the removal of Cu (II) metal ions from waste water.

**Keywords:** matki seed husk, Cu (II) metal ion removal, adsorption capacity, adsorption isotherm adsorption kinetics.

### Introduction

Water may be a basic source of life, energy and thus is an important element to all or any things on earth. If water is in pure form, then it's colorless, tasteless and odorless in nature. Level of contaminants has increased because of discharge of industrial effluents in aquatic ecosystems which pollute and contaminate the water streams naturally [11]. Heavy metals generate serious environmental distresses because their non-biodegradable and persistent nature [17]. Many toxic heavy metals are discharged into the environment as industrial wastes causing significant issue of soil and water pollution. Pollution raises an excellent concern nowadays due to rapid industrialization e.g., metal mining operations, fertilizers, agricultural wastes, sewage, domestic wastes, alloy and leather industries, metal galvanization paper industries and pesticides which have largely discharged various sorts of pollutants into environment and cause disorder into an ecosystem [2]. The effluents from mining, mineral extraction, metal processing, metal polishing, cleaning, paint manufacturing and battery manufacturing industries and acid rain contribute for the increasing metal loads within the water bodies. The sources of copper metal in industrial effluents include cleaning of metals also as plating baths, pulp, paper and paper board mills, wood-pulp production, fertilizer industry, etc. Excessive intake of copper leads to in an accumulation within the liver. Copper is released into the environment during a number of various ways; it finds its way into water-streams leading to environmental contamination that poses threat to humans, animals, and plants. This will cause serious and sophisticated problem [15 & 16]. Similarly, another heavy metal like copper in very bit is important for all times process. However, with higher concentrations of this element within the environment and therefore consequent increase in human intake, copper concentrations have reached toxic levels causing various diseases and disorders like liver damage, Wilson disease and insomnia [12]. However, there are several methods for the treatment of wastewater containing Cu (II), including ion exchange, adsorption, precipitation and membrane separation [1 & 13]. During last decades, the method of adsorption using activated charcoal has been found to be an efficient technology for the removal of Cu (II) from the wastewater. Though the removal of Cu (II) through adsorption is sort of effective,



## Phytopharmacognostic, Antibacterial Activity of Different Extract of Terminalia Arjuna Roxb Leaves

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### Abstract

The wealth of India is stored in the broad natural flora which has been gifted to her. Endowed with a variety of agro-climatic conditions, India is a virtual herbarium of the world. The importance of medicinal and aromatic plants has been emphasized from time to time. It is accepted that the drug of natural origin shall play an important role in health care, particularly in the rural areas of India. India is having a high knowledge of phototherapy from Ayurveda, and still, hundreds of potent drugs are yet to be evaluated scientifically. Keeping this in view, we reviewed one of the potential trees whose leaves and other parts also have a potent traditional application, but it has not been much studied.

**Keywords:** Terminalia Arjuna Roxb, Pharmaco-Chemical, Antibacterial Activity.

### Introduction

Terminalia arjuna Roxb (Combretaceae) tree is usually referred to as Arjhan and Arjun in Bengal, India. It is an outsized tree, often with buttressed trunk, smooth gray bark and about 20 - 25 m in tall. The leaves of Arjhan are usually sub-opposite, oblong or elliptic-long, pale dark green above and pale-brown beneath, 10 - 20 cm long and hard. The flowers are yellowish-white, while the fruits are 2.5 - 5.0 cm ovoid or ovoid-oblong, fibrous-woody, and glabrous. It is common on the banks of rivers, streams and dry watercourses in sub-Himalayan tract, West Bengal as well as in central and south India. The skin of the plant is known to contain a crystalline compound, arjunine, a lactone, arjunetin, essential oil and reducing sugar.

Besides these, Terminalia arjuna Roxb tree also contains 34 % calcium carbonate, 9% of other salts of calcium, 13% tannin and aluminum, magnesium, organic acids, colouring matter and other substances [5]. The fruits of the plants are used as a tonic in traditional medicine in India, [2]. Externally, its leaves are used as a cover on sores and ulcer. The bark of Terminalia arjuna Roxb tree is anti-dysenteric, antipyretic, astringent, cardio tonic, lithotriptic and tonic [1] while the powder of the bark acts as a diuretic in cirrhosis of the liver and provides relief in symptomatic hypertension. A decoction of the thick bark made with milk is given every morning on an empty stomach or its powder with milk and gur as a cardio tonic [4]. The bark powder is additionally given with honey in fractures and contusions with echymosis. Furthermore, the extract of the skin, as an astringent, is used for cleaning sores, ulcers and cancers, etc. An ointment made up of the bark by mixing with honey is used to cure acne while the ashes of the bark are prescribed in scorpion stings [3].

### Material and method

The fresh leaves of Terminalia arjuna Roxb are collected from Kada, District Beed. The fresh leaves were dried under shade, powdered and undergo 40 mesh sieves and stored in a closed bottle for further use. The powder was extracted with water, ethanol, chloroform, acetone and petroleum ether by Sechelt apparatus.



## Formation of Alkaline Earth and Transition Metal Complexes with Efavirenz Drug in Ethanol-Water Media

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### Abstract:

The stability constant of Efavirenz drug with alkaline earth metal ions Mg(II), Ca(II) and transition metal ions Fe(III), Cu(II) were investigated using pH metric titration technique in 20%(v/v) ethanol-water mixture at 27 °C temperature and at an ionic strength of 0.1M NaClO<sub>4</sub>. {Metal to ligand ratio = 1:5 & 1:1} The method of Calvin and Bjerrum as adopted by Irving and Rossotti has been employed to determine proton ligand (pK<sub>a</sub>) and metal-ligand stability constants (log K) values. It is observed that alkaline earth metal & transition metal ion forms 1:1 and 1:2 complexes. The order of stability constants for these metal complexes was as: **Fe<sup>3+</sup> > Cu<sup>2+</sup> > Mg<sup>2+</sup> > Ca<sup>2+</sup>**

**Keywords:** Stability Constant, alkaline earth metal, transition metal, Efavirenz, pH metry.

### Introduction:

Coordination compound containing one metal and one ligand is known as binary complex. Metal complexes with various ligand shows their contribution in the field of pollution control, medicine, industries, analytical chemistry, pharmacology, pathology biochemistry, metallurgy etc. The stability of metal complexes with medicinal drugs plays a major role in the biological and chemical activity. Most of the s-block and d-block elements form complexes. Mg (II) ions form complexes with several enzymes which are essential for energy release. Ca (II) is important in bone, teeth and blood clotting. It maintains the regular breathing of hearts, contraction of muscles. There are different kinds of ligand used for complexation. For the present investigation, we selected Efavirenz drug. Efavirenz is a non-nucleoside reverse transcriptase inhibitor (NNRTI) and is used as a part of highly active anti-retroviral therapy (HAART) for the treatment of human immunodeficiency virus (HIV-1). Both nucleoside and non-nucleoside RTIs inhibit the same target. The reverse transcriptase enzyme transcribes viral RNA into DNA. Unlike nucleoside RTIs, which bind at the enzyme's active site, NNRTIs bind within a pocket, termed the NNRTI pocket. Efavirenz is not effective against HIV-2, as the pocket of the HIV-2 reverse transcriptase has a different structure, which confers intrinsic resistance to the NNRTI class. It is never used alone and is always given in combination with other drugs. It is a white to slightly pink crystalline powder and it is soluble in various organic solvents but practically insoluble in water. It is chemically (4S)-6-chloro - (cyclopropylethynyl)-1, 4-dihydro-4- (trifluoromethyl) - 2H-3, 1-benzoxazin-2-one. Efavirenz activity is mediated predominantly by non-competitive inhibition of HIV-1 RT. The toxicity of EFV is central nervous system (CNS) side-effects. The EFV-associated CNS side-effects typically resolve after two to four weeks. However, in some cases they can persist for months or not resolve at all. Thus, EFV should be avoided in patients with a history of psychiatric illness.

After a review of literature survey and in continuation of our earlier work with complexation of medicinal drugs [1-10], we have carried out a solution study on the complexation of Efavirenz drug with alkaline earth metal ions Mg<sup>2+</sup>, Ca<sup>2+</sup> and transition metal ions Fe<sup>3+</sup>, Cu<sup>2+</sup> using pH metrically in 20% (v/v) ethanol-water mixture at constant ionic strength of 0.1M NaClO<sub>4</sub>.

## Studies of Complexation of Transition Metal Ions With Benazepril Drug in Aqueous Media: Thermodynamic Aspect

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### Abstract :

Stability constant of Benazepril hydrochloride drug with transition metal ions  $\text{Fe}^{3+}$ ,  $\text{Co}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Cu}^{2+}$ ,  $\text{Zn}^{2+}$  and  $\text{Cd}^{2+}$  using a pH metric titration technique in 20%(v/v) ethanol-water mixture at three different temperatures 300K, 310K & 320K at an ionic strength of 0.1M  $\text{NaClO}_4$  were studied. The Calvin-Bjerrum method as adopted by Irving-Rossotti has been employed to determine metal-ligand stability, constant logK values. The trend in the formation constants for transition metal ions follows the order:  $\text{Fe}^{3+} > \text{Cu}^{2+} > \text{Cd}^{2+} > \text{Co}^{2+} > \text{Zn}^{2+} > \text{Ni}^{2+}$ . The thermodynamic parameters, such as Gibb's free energy change ( $\Delta G$ ), entropy change ( $\Delta S$ ), and enthalpy change ( $\Delta H$ ) associated with the complexation reactions, were calculated.

**Keywords:** stability constant, transition metal ions, Benazepril, pH metry, thermodynamic parameter etc.

### Introduction:

Metal complexes of drugs play a central role in the development of coordination chemistry. Most of the d-block elements form complexes. For the present investigation, we have selected drug Benazepril hydrochloride, (3-[(1-ethoxy carbonyl-3-phenyl-(1S)-propyl)-amino]-2,3,4,5-tetrahydro-2-oxo-1-(3S)-benzazepine-1-acetic acid hydrochloride), is a prodrug type angiotensin-converting enzyme (ACE) inhibitor, which is proved effective in treating congestive heart failure and hypertension. The family of ACE inhibitors inhibits the angiotensin-converting enzyme, which is involved in the conversion of angiotensin I to angiotensin II. Angiotensin II stimulates the synthesis and secretion of aldosterone and raises blood pressure via a potent direct vasoconstrictor effect. ACE inhibitors may reduce the degradation of bradykinin. It is used to inhibit blood clots in coronary artery disease, peripheral vascular disease and cerebrovascular disease.

In continuation of our earlier work [1-29] and after literature survey it was thought of interest to study the effect of temperature on thermodynamic parameters such as Gibb's free energy change  $\Delta G$ , enthalpy change  $\Delta H$  and entropy change  $\Delta S$  of complexes of Benazepril hydrochloride drug with transition metal ions  $\text{Fe}^{3+}$ ,  $\text{Co}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Cu}^{2+}$ ,  $\text{Zn}^{2+}$  and  $\text{Cd}^{2+}$  using pH metrically in 20% (v/v) ethanol-water mixture.

### Materials and Methods:

Transition metal, NaOH,  $\text{NaClO}_4$ ,  $\text{HClO}_4$  are of AR grade. The solutions used in the pH metric titration were prepared in double distilled water. The NaOH solution was standardized against oxalic acid solution and standard alkali solution was again used for standardization of  $\text{HClO}_4$ . The measurements were made at temperatures 300K, 310K & 320K in 20% (v/v) ethanol-water mixture at ionic strength (0.1M  $\text{NaClO}_4$ ). Water thermostat is used to maintain the temperature constant. The pH measurement was made using a digital pH meter model Elico L1-120 in conjunction with a glass and reference calomel electrode. The instrument was calibrated at pH 9.18, 7.00 and 4.00 using the standard buffer solutions.



## FTIR, phytochemical and antibacterial activity of different extract of *Feronia Limonia* leaves

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### Abstract

The present study deals with the phytochemical examination of therapeutic importance of leaves extract of *feronia limonia* is an important medicinal plant. Phytochemical analysis of the five extracts prepared from *feronia limonia* leaves revealed the presence of carbohydrate, alkaloids, glycoside, saponin, phytosterol, phenol, tannin, flavonoid, protein and amino acid. The FT-IR spectrum confirmed the presence of characteristic functional group. The aqueous, ethanol, chloroform, acetone and petroleum ether extract of *feronia limonia* leaves were tested against *Staphylococcus aureus*, *Salomonella typhimurium*, *Proteus vulgaris*, *Pseudomonas aeruginosa* and *Bacillus megaterium* by the cup-plate method.

**Keywords:** *feronia limonia* leaves, phytochemical screening, FT-IR, antibacterial activity

### 1. Introduction

Nearly all the medicinal plants available in the world have great potential sources for discovery as well as protection of new drugs of benefit to mankind. Now a day a lot of approaches available to reach for new biologically active ingredients in the medicinal plants for the preparation of safe drugs. Scientifically many works have been expended to evaluate and discover new antioxidant, antimicrobial and antifungal ingredients from different kinds of natural sources like soil, microorganisms, animals and plants. Different types of folk medicine or herbal medicine are among the most important resources. Check and need to systematic screening of these available traditional herbs may result in the discovery of novel effective bioactive compounds for the formulation of drugs [1]. Its leaves are commonly used as carminative, purgative, Bronchitis, Diarrhoea, Expectorant and cardiogenic. The juice of green leaves of *feronia limonia* is used for intestinal trouble of children. The *Feronia limonia* fruits are used for disease like tumors, Asthma, wounds, cardiac, Debility and Hepatitis. *Feronia limonia* belongs to family Rutaceae, is commonly known as kaith or wood apple and is widely distributed in most tropical and subtropical countries [2]. The *feronia limonia* is native and common in India, Shrilanka, China and Indonesia [3]. *Feronia limonia* as a whole or its parts such as unripe fruit, ripe fruit, root bark, trunk, gum and leaves have a broad spectrum of traditionally established therapeutic properties [4] and widely used in several Ayurvedic preparation like panch kapittha<sup>5</sup> and kapitthaashataka churna [6]. Leaves of *feronia limonia* showed anthelmintic activity [7]. The main chemical constituents of *feronia limonia* were flavonoids, saponins and tannin [8-11].

The increasing prevalence of multidrug resistant strains of bacteria and the recent appearance of strains with reduced susceptibility to antibiotics raise serious concern of health delivery and accessibility due to untreatable bacterial infections. There is therefore the needed urgently to the search for new antimicrobial drug. Plants are important source of potentially useful structures for the development of new chemotherapeutic agents [12]. To the best of our

knowledge, there is no record of work on the phytochemical screening, FT-IR analysis and antibacterial activity of the *feronia limonia* leaves. Therefore, the present study was carried out to evaluate the phytochemical screening, FT-IR analysis and antibacterial activity of the *feronia limonia* leaves.

### 2. Materials and Methods

#### 2.1 Collection of medicinal plants

The fresh leaves of *Feronialimonia* collected from Mahadeodara, District Beed. The fresh leaves were dried under shade, powdered and pass through 40 mesh sieve and stored in closed bottle for further use. The powder was extracted with different solvent such as water, ethanol, chloroform, acetone, petroleum ether by Soxhlet apparatus. Phytochemical analysis were carried out for all the extract as per the standard methods [13].

### 3. Screening of antibacterial activity

#### 3.1 Bacterial Strains

The test organisms were purchased from NCIM, NCL Pune. The organisms were sub-cultured in the media specified. The organisms, their ATCC code, media in which they are sub-cultured are given in Table No.1. Bacteria were incubated at 37 °C in incubator for 24 hrs. They were further stored at 4 °C in the refrigerator to maintain stock culture. Microorganisms with their ATCC Codes and media used for subculture are as follows [14].

**Table 1:** ATCC code and media used for development of micro-organism.

Sr. No.	Name of microorganism	ATCC Code	Media
1	<i>Salmonella typhimurium</i>	2501	Nutrient Agar
2	<i>Bacillus megeterium</i>	2087	Nutrient Agar
3	<i>Pseudomonas aeruginosa</i>	2200	Nutrient Agar
4	<i>Staphylococcus aureus</i>	2079	Nutrient Agar
5	<i>Proteus vulgaris</i>	2027	Nutrient Agar

### 4. Result and Discussion

# Kinetic, Equilibrium Isotherm And Thermodynamic Study Of Adsorption Of Congo Red Dye On Low-Cost Adsorbent

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The potential of masoor crop seed husk powder for the removal of congo red (CR) dye from aqueous solution was investigated. The adsorption experiments were carried out in batch techniques. The various parameters, like contact time, adsorbent dose, initial CR dye concentration and temperature were investigated. The kinetic data were analysed using pseudo-first order and pseudo-second order models. It was found that pseudo-first order kinetic model was the most appropriate model than pseudo-second order, describing the adsorption kinetics. Adsorption equilibrium was attained within 24 hr. The equilibrium data were best fitted by the Langmuir isotherm model than Freundlich model. Thermodynamic properties, like free energy ( $\Delta G$ ), enthalpy ( $\Delta H$ ) and entropy ( $\Delta S$ ) indicated spontaneous and exothermic nature of adsorption for masoor crop seed husk powder adsorbent. The study revealed that masoor crop seed husk powder can be used as efficient adsorbents for the removal of CR dye solution.

## KEYWORDS

Congo red dye, Masoor crop seed husk powder, Adsorption, Adsorption isotherms models, Equilibrium, Kinetics, Thermodynamics

## 1. INTRODUCTION

Nowadays, dyes are widely used in chemical industries, which may enter ecosystems (for example aquatic, soils) during dyes production and subsequent application processes [1]. Dyes are natural or synthetic coloured organic compounds having the property of imparting their colours to other substances. Although there are many natural dyes available, the ingrain coloured by these are neither bright nor durable. Hence synthetic dyes generally used which are cheap and readily available. Synthetic dyes are widely used in industries, such as textiles, plastics, paper, rubber, tanning, cosmetics, pharmaceutical and foodstuff. In industrial effluent, dyes are one of the most hazardous chemical compounds found and need to be treated, since their presence in water bodies reduces light penetration, producing photosynthesis of aqueous flora [2]. Among various dye species, congo red (CR) is a typical benzidine-based azo dye and mainly exists in the effluent of textile, paper, printing industries, etc. After entering natural environment, CR can be metabolized to benzidine, a well-known human carcinogen, which may be a cause for human allergic diseases. Due to its high chemical stability and low biodegradability, con-

ventional biological process was found to be ineffective to decolourize and degrade CR wastewater treatment. Over the past few decades, several processes have been used for the removal of dyes from wastewater, such as biological, chemical precipitation, coagulation or flocculation, solvent extraction, membrane filtration, ion exchange, ozonation, electrochemical destruction and adsorption [3,4]. Adsorption process has simplicity of design, more efficient, easy to operate, insensitivity to toxic substances, environmental friendliness, non-toxicity, availability of a wide range and cost-effective. Hence, it has been suggested as a potential alternative to the existing physical / chemical /biological methods for the removal of dyes from industrial effluents or wastewater. Natural adsorbents, such as agricultural waste, waste food or low-cost inorganic material have been most popular for wastewater treatment due to availability and low-cost of adsorbent.

Various low-cost adsorbents that have been successfully used for the adsorption of dyes, such as peanut hull [5], gram seed husk [6], watermelon rind [7], rice husk [8], bentonite [9], *Azadirachta indica* leaf [10], jujuba seeds [11], green gram seed husk [12] and ball-milled sugarcane bagasse [13] etc. Today, more attention is being given to the use of low-cost adsorbents. Masoor crop (*Lens esculent*) is a legume of the family Fabaceae. It is a 12-18 inch high, low bushy, weakly upright to semi-viny annual having the general appear-

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## ADVANCED NANOMATERIAL STUDIES FOR LIFE SCIENCES AND MEDICAL APPLICATION

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### **Abstract:**

*The Nanomaterial's have been widely studied from many years due to wide variety of potential application in biomedicine and other fields. The Nanotechnology provides an opportunity to develop new functional materials with vast potential in many areas. The role of nanotechnology in development of specific drug delivery systems, Polymeric nanoparticles, lipid Nano systems, and The Nano systems are described with special emphasis on targeted drug delivery in cancer therapy also. Nanotechnology is an industrial revolution based on integration of disciplines that could change human life.*

**Keywords:** Nanoparticles, Drug delivery, lipid Nano, Diagnostic, Polymers Tissue Engineering.

### **Introduction:**

The nanotechnology was actually known from very famous scientist Richard Feynman, he is a famous physicist gave this idea in his lecture given at California Institute of Technology called "there is plenty of room at the bottom". He presented a technological vision of miniaturization of materials, manipulating and controlling at Nano scale called Nanotechnology [1]. The work at the atomic and molecular levels to create a materials, structures, devices and systems has new properties [2]. The nanotechnology is to describe the materials, devices and systems with structures and components exhibiting new and significantly improved physical, chemical and biological properties. The phenomena and processes enabled by the ability to control properties at Nano scale [3, 4]. The Nanotechnology has role to build Nano-object, atom by atom and molecule-by-molecule [5]. The changes in properties are due to increase in surface to volume ratio and dominance of quantum effects which is associated with very small sizes and large surface area. The Copper which is opaque at macro scale becomes transparent at Nano scale because at Nano scale properties of material become size

dependent [6]. The platinum which is inert becomes a catalyst at Nano scale [7]. Otherwise stable aluminum is combustible [8]. There are two fundamental approaches at Nano scale one is Top down approach and second is Bottom Up approach. The Top down approach is the production of nanostructures materials by taking bulk material and forming it into desired structure which include development of integrated circuits (ICs). "Bottom-up" is the building up nanostructures atom-by-atom [9] i.e., quantum dots and nanotubes.

#### **Nanomaterial's For Drug Delivery:**

There are many potentially useable prospects in nanotechnology for drug delivery systems. Some of the advantageous areas in which nanotechnology efforts are being made include vaccine adjuvants and delivery systems [10]. The mechanisms of the biological and physical world operate mainly at the range of 1 to 100 nm. The diameter of a hydrogen atom is about 0.1 to 1 nm. A molecule may be made up of 20 to 30 atoms and has a diameter of about 1 to 10 nm. The width of a DNA molecule is about 2.5 nm, a typical protein is between 1 to 20 nm and ATP biochemical motor is 10 nm in diameter [11]. The viruses that attack human cells fall within 10 to 200 nm, which is within the nanometer region [12]. Nature itself has nanotechnology those producing nanostructures that offer functional proteins and many other compounds at cellular level of great significance to life on earth [13]. The DNA molecule can be seen as a self-assembly machine which replicates itself and also produces complex organisms under the right conditions. Ribosomes construct protein molecules with precision following instructions from DNA [14]. By knowing the principles of natural systems would enhance the design and fabrication of nanostructures that may mimic the functions of natural systems. The biomolecules such as proteins, peptides, DNA, lipids and carbohydrates can act as templates their shapes and chemical properties can be used to arrange inorganic substances such as metals on Nano scale [15]. The researcher presently seeks systematic approaches to fabricate man-made objects at Nano scale and to incorporate nanostructures into macrostructures as nature does [16]. The controlled release drug delivery system or delivery vehicles that enhance circulation and targets of drug and to specific cells, systems that improve the solubility of poorly water soluble drugs [17]. These approaches and concept which may differ from the living systems in aqueous medium as self-assembly of atomic and molecular structures on other nanostructures, interaction on surfaces of various shapes, self repair and integration on multiple length scales may be utilized as model

**Nanoparticles in polymer:**

Polymer drugs are used as drug delivery systems because many pharmaceuticals are not soluble in water, inefficiency towards specific target site [18]. The polymeric nanoparticles can be prepared from synthetic. The polymeric materials are either biodegradable or non-biodegradable, but should be essentially biocompatible. Poly D, L- lactide-co-glycolide, poly epsilon-caprolactone, poly alkyl cyanoacrylates, poly styrene-co-maleic anhydride, poly di-vinyl ether-co-maleic anhydride, poly vinyl alcohol, and poly ethylene glycol are some of the synthetic, non immunogenic polymers extensively used for preparation of nanoparticles [19]. The poly amino acids, hyaluronic acid, albumin, dextran, chitosan, and gelatin are few examples of the natural biodegradable polymers. While each of the polymers poses its own advantages. The nanoparticles can be synthesized with high degree of reproducibility from majority of them, natural polymers, due to their natural origin, non-toxicity and biodegradability. The advantage of synthetic polymers remains the possibility to synthesize them reproducibly with well-defined physico-chemical properties helping the natural polymers to overcome this drawback and we can expect a surge in delivery systems based on them. These polymeric nanoparticles can be administered into the systemic circulation which will be essentially removed within an hour of administration by the macrophages of the reticulo-endothelial systems. The poly ethylene oxide are very popular for surface modification of Nano particulate drug delivery systems since they have long history of safe use in biological and pharmaceutical products [20]. Surface-bound poly ethylene glycol chains extend into the aqueous physiological environment and repel proteins, decrease antibody formation, and increase the circulation of the formulation in the plasma for extended periods of time by the steric repulsion mechanism.

**Nanotechnology for lipids:**

The Nano science is an emerging science which is widely expected to provide solutions on various problems. The Nanomaterial's in biotechnology which finds applications in various fields like electronics, materials, environment, metrology, robotics, healthcare, information technology, pharmaceuticals, agriculture, transport etc. [21]. Nanotechnology is considered as a relatively young field, with tremendous potential to reinvent existing industries and significantly improve standards of living. In drug carriers the liposomes are the most extensively studied and possess the most suitable characteristics for protein encapsulation. Liposomes are the concentric spherical phospholipid bilayers encapsulating in an aqueous space. These are the particles which are completely biocompatible biologically inert and cause very little toxic. Their inner aqueous compartment is generally used for encapsulation of peptides and proteins. Many techniques for liposome preparation require only manipulations that are compatible with maintaining the drug integrity [22]. They have developed long-

circulating poly ethylene glycol modified liposomes linked with HIV-1 Tat-peptide for efficient DNA delivery in vitro and in vivo in tumor models. However, as with other Nano particulate delivery systems, conventional liposomes suffer from rapid elimination from the systemic circulation by the cells of the reticulate endothelial system (RES). For making of liposomes capable for delivering pharmaceutical agents to targets, attempts were made to prolong their circulation in lifetime. This was achieved with the development of surface-modified long circulating liposomes grafted with a flexible hydrophilic polymer, such as PEG or PEO. These are the most common examples of polymers which prevent plasma protein adsorption of nanoparticle surface and the consecutive recognition and uptake of liposomes. It has been shown with a broad variety of examples that, similar to macromolecules, liposomes are capable of accumulating in tumors of various origins via the EPR effect [23]. The form of Liposomal are the two conventional anticancer drugs, daunorubicin and doxorubicin, are currently used in the clinical practice. Liposomal doxorubicin, incorporated into long circulating PEG-coated liposomes, demonstrates excellent effects in EPR-based tumor therapy and diminishes the toxic side effects of the original drug.

#### **Nanomaterials in Diagnosis and tissue Engineering:**

The recent developing and revolutionary area of nanotechnology is molecular diagnostics which requires small amount of sample, less time, quick process and reliable for different kinds of analysis Companies are working harder to synthesize new chip analyzers require only Nano gram or Pico liter sized samples which gives more scope for efficient analysis and reliability [24]. Tissue engineering is the interlinked between pharmaceutical and biomedical sector where nanotechnology will have real impact on life science. In developed countries, this field growing rapidly in terms of commercial importance. The nanotechnology can be used to grow tissues & organs artificially on Nano patterned scaffolds, Medical devices include contact lenses require surface topography measurement at the Nano level to verify shape and intended optical profiles using nanostructured materials and functionalized surfaces [25]. In cases of particular tumors, the delivery systems with smaller sizes, such as peptide (protein)/polymer conjugates or drug-loaded micelles should be more efficiently use. The use of specific "vector" molecules can further enhance tumor targeting of peptide/protein carriers or make them EPR effect independent. The important for the cases of tumors is immature vasculature, such as tumors in the early stages of their development, and for delocalized tumors. The deliveries of peptide and protein anticancer pharmaceuticals, Self-assembled Nano systems for targeting subcellular organelles, such as the mitochondria, are also developed. It is observed that the mitochondrial dysfunction contributes to a variety of human disorders. The recent developments in mitochondrial research and increased pharmacological and pharmaceutical efforts have lead to the emergence of Mitochondrial Medicine

[26]. In-vivo testing devices or sensors which can be used to detect cancer, infections and coronary heart attacks and small transmitters are used to communicate with outside world and tell patient is at particular risk at that time. Miniaturization is the key to these applications, combining sensors and actuators with Nano scale features to produce personal health devices.

#### Conclusion:

The different aspects of nanotechnology brings the science almost incomprehensibly small device close and closer to reality and at some point developments will be so vast that they will affect all fields of science and technology. Although expectations are too high but safety of Nano medicine is not yet fully defined. Polymeric nanoparticles, lipid Nano systems that include liposomes and Nano emulsions, and self-assembling Nano systems such as micelles offer tremendous opportunity for development of site-specific delivery systems for drugs and genes. These delivery systems are especially critical in an era of rising healthcare cost and development of multidrug resistance in cancer and infectious diseases.

#### References:

- 1] Sahoo SK, Parveen S, Panda JJ (2007) The present and future of nanotechnology in human health care. *Nanomedicine: NBM* 3: 20-31
- 2] Stylios GK, Giannoudis PV, Wan T. Applications of nanotechnologies in medical practice. *Injury*, 2005; 36 (4, Suppl. 1): S6-S13.
- 3] The Royal Society and the Royal Academy of Engineering. Nanoscience and nanotechnologies. The Royal Society and the Royal Academy Engineering Report, July 2004.
- 4] Roco MC. Nanotechnology: Convergence with modern biology and medicine. *Curr Opin Biotech*, 2003; 14: 337-346.
- 5] Nelson AO, Patrick OO, Ndidi CN (2009) Nanotechnology & Drug Delivery Part I: Background and applications. *Tropical journal of pharmaceutical research* 8:265-274.
- 6] Williams D. The relationship between biomaterials and nanotechnology. *Biomaterials* doi:10.1016/j.biomaterials.2008.01.003.
- 7] Gao S, Zhao Y, Gou P, Chen N, Xie Y. Preparation of CuAlO<sub>2</sub> nanocrystalline transparent thin films with high conductivity. *Nanotechnology*, 2003;14: 538-541.
- 8] Luo J, Maye MM, Kariuki NN, Wang L, Njoki P, Lin Y, Schadt M, Naslund HR, Zhong CJ. Electrocatalytic oxidation of methanol: carbon supported gold-platinum nanoparticles catalysts prepared by two-phase protocol. *Catalysis Today*, 2005; 99 (3-4): 291-297.

- 9] Majumder DD, Banerjee R, Ulrichs CH, Mewis I (2007) Nano materials: Science of bottom-up and topdown. IETE Tech Rev 24: 9-25
- 10] Nimesh S, Manchanda R, Kumar R, Saxena A, Chaudhary P, et al. (2006) Preparation, characterization and in vitro drug release studies of novel polymeric nanoparticles. Int J Pharm 323: 146-152.
- 11] Roco MC. Towards a US National Nanotechnology Initiative. J Nanoparticle Res, 1999; 1: 435-438.
- 12] Yin J. Chemical engineering and virology: challenges and opportunities at the interface. Am Inst Chem Eng (AIChE) J, 2007; 53 (9): 2202-2209
- 13] Sheeparamatti BG, Sheeparamatti RB, Kadadevaramath JS. Nanotechnology: Inspiration from nature. IETE Technical Review, 2007.
- 14]. Smith A. Nanotechnology: lessons from Mother Nature. Chemistry International, 2006; 28(6): 10- 11.
- 15] Bittner AM. Biomolecular rods and tubes in nanotechnology. Natyrwissenschaften, 2005;92: 51-64
- 16] Jain PK, Huang X, El-Sayed IH, El-Sayed MA. Noble metals on the nanoscale:
- 17] Thomas S, Waterman P, Chen S, Marinelli B, Seaman M, et al. (2011) Development of Secreted Protein and Acidic and Rich in Cysteine (SPARC) Targeted Nanoparticles for the Prognostic Molecular Imaging of Metastatic Prostate Cancer. J Nanomedic Nanotechnol 2: 112.
- 18] Dibirdik I, Yiv S, Qazi S, Uckun FM (2010) In vivo Anti-Cancer Activity of a Liposomal Nanoparticle Construct of Multifunctional Tyrosine Kinase Inhibitor.
- 19] H. Otsuka, Y. Nagasaki, and K. Kataoka. Adv Drug Deliv Rev., 55(3): 403-419 (2003).
- 20] J.S. Chawla and M.M. Amiji. Int. J. Pharmac., 249: 127-138 (2002).
- 21] Lukianova-Hieb EY, Oginsky AO, Shenefelt DL, Drezek RA, Hafner JH, et al. (2011) Rainbow Plasmonic Nanobubbles: Synergistic Activation of Gold Nanoparticle Clusters. J Nanomedic Nanotechnol 2: 104.
- 22] V.P. Torchilin, et al., Proc. Natl. Acad. Sci., USA 100: 1972-1977 (2003).
- 23] T.S. Levchenko, R. Rammohan, et al., Int. J. Pharmac., 240: 95-102 (2002).
- 24] Cordell GA (2011) Sustainable medicines and global health care. Planta Med 77: 1129-1138.
- 25] Ambrogio MW, Thomas CR, Zhao YL, Zink JJ, Stoddart JF (2011) Mechanized Silica Nanoparticles: A New Frontier in Theranostic Nanomedicine. Acc Chem
- 26] G.G. D'Souza, R. Rammohan, et al., J. Control. Rel., 19: 189-197 (2003).

**Screening of FT-IR Profile for Phytoconstituents in Hydroalcoholic Extract of *Abrus precatorius* Linn. Plant Leaf****Bhimraj Gawade<sup>1</sup> Bhimraj Gawade<sup>2</sup> and Mazahar Farooqui<sup>3</sup>**<sup>1</sup>Department of Chemistry, Anandrao Dhonde Alias Babaji Mahavidyalaya, Kada. (India)<sup>2</sup>Department of Chemistry, Maulana Azad College of Arts, Science and Commerce, Aurangabad. (India)

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**ABSTRACT**

The screening of FT-IR profile is aimed to focus on the phytoconstituent's analysis of hydroalcoholic extract of *Abrus precatorius* Linn. plant leaf by Spectral analysis technique. The hydroalcoholic extract of the leaf were screened for the availability of various bioactive functional chemical components. The spectrum of FT-IR showed the presence of alcohols, phenols, carboxylic acids, amide, aldehydes, ketones, primary amines, alkanes, alkenes, aromatics, alkyl halides, esters, ethers, aliphatic/aromatic amines, peptides, nitro compounds, sulphone, phosphonate, phosphoramidate, phosphine, amine oxides, aromatic substituted compounds, nitroso, sulphate ester, disulfide and alkyl halides compounds, which showed major characteristic bands of bioactive phytoconstituent's. The results confirm the fact that this plant leaf possesses different bioactive constituents useful for our health and generated the FT-IR spectrum profile for the medicinally important plant.

**Keywords:** Phytoconstituent's, *Abrus precatorius* Linn., FT-IR, bioactive constituents.

**INTRODUCTION**

The richest bioactive resources of folk medicines are medicinal plants. These plants have been used in traditional systems of medicine, food supplements, pharmaceuticals industries and chemical entities for synthesis of drugs [1]. The birth place of renewed system of indigenous medicine like siddha, ayurvedha and unani is India. The medicines were traditionally used prepared from a single plant. The potency of medicine depends on the proper parts of plant use and its biological effect which in turn depends on the presence of required quantity dose and nature of secondary metabolite in a raw drug material [2]. The saponin is detected in crude dry powder of medicinal plants, while different parts extracts like leaf [3], stem and root were screened for phytoconstituent's compounds by FT-IR spectroscopic analysis technique [4]. The different functional groups in various extracts of medicinal plants were detected using spectroscopic method [5-6]. A literature survey revealed that the FT-IR screening of functional groups was not done so far with the medicinal plants such as *Abrus precatorius* Linn. Therefore, an attempt is made in the present study to screen the functional groups of phytoactive compounds present in the *Abrus precatorius* Linn. plant leaf.

**MATERIAL AND METHODS****Collection of Plant leaves**

A leaves of *Abrus precatorius* Linn. were collected from the local area. The collected plant leaves were washed with distilled water to remove the dirt and other impurities. The plant leaves was dried at room temperature in shade to retain their fresh green colour and also prevent the decomposition of active bioactive compounds. The dried plant leaves were milled to coarse powder and stored in air tight container for screening.

**Extraction of leaf material**

A 10g of powdered material of leaves were extracted with hydroalcoholic solvent by Soxhlet apparatus. The extracts were evaporated to dryness on a water bath and yielded quantities of leaf extracts in hydroalcoholic solvents were obtained and stored at 5°C for further studies taken to screen the phytoconstituents.

## FT-IR PROFILE SCREENING OF BIOACTIVE CHEMICAL COMPONENTS IN AQUEOUS EXTRACT OF *ABRUS PRECATORIUS* LINN PLANT LEAF

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### ABSTRACT

**Objective:** The FT-IR profile screening is aimed to focus on the bioactive chemical components analysis of aqueous extract of *Abrus precatorius* Linn plant leaves.

**Methods:** The profile screening for the bioactive chemical components analysis was performed with standard methods by using FT-IR spectral technique.

**Results:** The aqueous extract of the leaf were screened for the various bioactive functional chemical components. The spectrum of FT-IR showed the presence different functional groups of chemical constituents such as alcohols, phenols, carboxylic acids, amide, aldehydes, ketones, alkanes, alkenes, aromatics, esters, ethers, aliphatic amines, aromatic amines, peptides, nitro compounds, sulphone, phosphonate, phosphoramidate, phosphonic acid, phosphine, silane, amine oxides, aromatic substituted compounds, nitroso, sulphate ester and alkyl halides compounds, which showed 27 major characteristic bands of bioactive chemical components.

**Conclusion:** The results confirm the fact that leaf of *Abrus precatorius* Linn plant possesses different bioactive functional chemical components and generated the FT-IR spectrum profile for the medicinally important plant.

**Keywords:** - *Abrus precatorius* Linn, aqueous extract, FT-IR, chemical constituents.

### INTRODUCTION

The various plants are richest resources of bioactive folk medicines. These plants have been traditionally used as different systems of medicine, food supplements, pharmaceuticals industries and chemical entities for synthesis of drugs [1]. The origin place of renewed systems of indigenous medicine like siddha, ayurvedha and unani is India. The medicines were traditionally used were prepared from an only one plant. The activity of medicine depends on the proper parts of plant use and its biological effect which in turn depends on the presence of required quantity dose and nature of secondary metabolite in a raw drug material [2]. The different chemical constituents are detected in crude dry powder of various medicinal plants, while different parts extracts like leaf [3-4], stem, fruits [5] and root [6-7] were screened for phytochemical constituents by FT-IR spectroscopic analysis technique [8]. The different active functional groups of chemical components in various extracts of medicinal plants were detected using spectroscopic method [9-10]. A survey of literature reported that the FT-IR screening of functional groups of chemical components was not done so far with the *Abrus precatorius* Linn medicinal plant. Therefore, the present study used to screen the bioactive functional groups of chemical components in the leaf of *Abrus precatorius* Linn plant.

### MATERIAL AND METHODS

#### Collection of Plant leaves

A leaves of *Abrus precatorius* Linn was collected from the local area and authenticated by our institute botanist. The collected plant leaves were clean and washed with distilled water to remove the dirt and other impurities. The plant leaves was dried at room temperature in shade to retain their fresh green colour and also prevent the decomposition of bioactive chemical compounds. The dried plant leaves were milled to coarse powder and stored in air tight container for screening study.

#### Extraction of leaf material

A 5 g of leaf powder were extracted with aqueous solvent by Soxhlet apparatus. The extracts were evaporated to dryness and yielded quantities of leaf extracts were obtained and stored at 4°C for further studies taken to screen the bioactive chemical compounds.

#### FT-IR screening of aqueous extract

FT-IR is the most powerful tool for identifying the different types of functional groups present in bioactive compounds. The characteristic wavelengths of light absorbed by the chemical bonds can be seen in the annotated spectrum. The infrared absorption spectrum interpretation can be determined the chemical bonds present in a molecules. Dried powder materials of leaf extract was used for FT-IR screening study [11].

A 5 mg of dried powder of the extract was encapsulated in 50 mg of KBr pellet, in order to prepare translucent sample discs. The sample disc was loaded in FT-IR spectroscopy instrument and scanned for a resolution of 4 cm<sup>-1</sup> with range of 400 to 4000 cm<sup>-1</sup> [12].

### RESULTS AND DISCUSSION

The spectral screening study of *Abrus precatorius* Linn leaf aqueous extract was carried out by FT-IR spectroscopy method. This extract reported 27 characteristic band values with various probable functional groups of bioactive chemical compounds (Fig-1).

#### FT-IR spectral data interpretation of aqueous extract

The leaf aqueous extract exhibited characteristic absorption band at 3427.51 cm<sup>-1</sup> related due to stretching vibrations of alcoholic O-H and phenolic ArO-H groups. The bands at 3375.43 cm<sup>-1</sup>, 3304.06 cm<sup>-1</sup>, 3192.19 cm<sup>-1</sup> and 3178.69 cm<sup>-1</sup> due to stretching vibration

## Assessment of Anti-diabetic Activity of *Cassia Siamea* Lam Leaves Ethanol Extract

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**Abstract-** The species of the genus *Cassia* has been reported for various pharmacological activities and their rich contents of phytochemicals use to treat health related disorders. The different parts of *Cassia siamea* Lam plant has been traditionally used as a medicine to treat diabetes mellitus related disorders. The assessment study aimed to investigate anti-diabetic activity of locally used medicinal plant *Cassia siamea* Lam leaves ethanol extract by porcine pancreatic  $\alpha$ -amylase enzyme inhibition in vitro assay. A potent enzyme inhibitory activity was showed by the leaves of *Cassia siamea* Lam ethanol extract. The enzyme assay-guided leaves ethanol extract led to the inhibition activity of enzyme and has potent  $\alpha$ -amylase inhibitor content of bioactive phytochemicals. This assessment study that describes the potency of *Cassia siamea* Lam medicinal plant leaves has been used an alternative medicine to treat disorders of diabetes mellitus.

**Keywords-** *Cassia siamea* Lam, diabetes mellitus,  $\alpha$ -amylase, phytochemicals,  $\alpha$ -amylase inhibitor.

### I. INTRODUCTION

Diabetes mellitus disease is a metabolic disorder of irregular secretory action of hyperglycaemia regulating organ in the human beings and becomes a serious threat to mankind health. There are many therapeutic treatment exists for the regulate diabetes related disorders. In the treatment of diabetes mellitus especially in the developing countries medicinal plants has been plays important role due to their cost effectiveness. Plant based drugs are generally considered safe, easily available and are much effective [1]. Enzyme activity inhibitors also have been plays potential role for to control and treatment many diseases.

Artificially prepared enzyme inhibitory agents can produce serious side effects and are not suitable for use during a pregnancy [2]. Therefore, more effective and safer enzyme inhibitory agents has been searching of new area to active research, and after the recommendations made by WHO on diabetes mellitus [3] research on hypoglycaemic agents from medicinal plants has become an important aspect of study.

A medicinal plant *Cassia siamea* Lam has been shown different pharmacological activities like antimicrobial, antimalarial [4], anti-diabetic, anticancer, hypotensive, antipyretic, laxative, analgesic, diuretic, anti-inflammatory, sedatives antioxidant, anxiolytic and antidepressant. The

main constituents were reported in this plant as chromone, chromone alkaloids, anthraquinones, bianthraquinones, flavonoids and phenolics compounds are barakol was identified as the major chemical constituents of leaves and flowers [5].

The reviews of literature found that the traditionally used medicinal plants were possessing outstanding anti-diabetic property, which could be possibly investigated further for the presence of  $\alpha$ -amylase inhibitor contents [6]. The literature searches were provided updated information of various medicinal plants use in the treatment of Diabetes mellitus disease related disorders and afforded no more information on the  $\alpha$ -amylase inhibition activity of the *Cassia siamea* Lam leaves ethanol extract investigated [7].

Therefore, we design our study to assess potency of *Cassia siamea* Lam plant leaves as a source of  $\alpha$ -amylase inhibitor for assessing their anti-diabetic activity and bioactive contents.

### II. MEDICINAL PLANTS IN USE

The different species of the genus *Cassia* has also been reported various pharmacological activities and rich contents of novel phytochemical constituents useful for the treatment of many health related disorders [8].

The root extract of *Cassia siamea* Lam showed pancreatic lipase enzyme inhibition activity and its bioassay guided



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# ATMOSPHERIC CONCENTRATION OF *CERCOSPORA* OVERGREEN GRAM FIELD

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## ABSTRACT:

In India Green gram is affected by various fungal diseases viz. Leaf spot caused by *Alternariatenuissima*, *Cercospraconescens*, Leaf web blight caused by *Rhizoctoniasolani*. Due to these diseases plant yield and poor quality of pods and seeds decreases product and valuation. To study the general airspora and impact of weather parameters on the concentration of airborne mycosporophytes. The present paper deals with airborne concentration of *Cercospra* spores over a green gram field for one kharif season i.e. season from 5<sup>th</sup> June to 28<sup>th</sup> August 2007 using continuous volumetric Tilak Air Sampler. The concentration of airborne *Cercospras* spores was assessed and the role of the meteorological parameters over the spore concentration was discussed. Their contribution to the total airspora was recorded 0.26%. The maximum monthly mean concentration (196/m<sup>3</sup>) was recorded in the month of July 2007 and minimum (56/m<sup>3</sup>) in June 2007. The maximum daily mean concentration (56/m<sup>3</sup>) was recorded on 3<sup>rd</sup> August 2007.

The aerobiological investigations therefore are of great help in detecting the source of inoculum its dispersion in to the atmosphere, its transportation and deposition on the host surface and its subsequent impact on the host.

**Keywords:** Mycosporophytes, Green gram field, Air sampler, metrological parameters.

## I. INTRODUCTION :

Aerobiology is an interdisciplinary science which deals with the study of biological components like pollen grains fungal spores, hyphal fragments, viruses, algae, lichens, plant seeds and other propagules minute insects and insect's parts etc. in the atmosphere. The role of fungi in causing diseases to crop plants, man, domestic animals, in bringing about deterioration of food grain in storage, valuable monuments has been subject of great interest for long time. Standing vegetation has a great influence on airspora of any place and it change in weather. Aerobiological survey conducted in various parts of India revealed the richness of airspora. Green gram (*Phaseolusaurens* Rorb.) is one of the most important pulses crop in Marathwadaregion. Pulses are being grown India since ancient time. It is believed that Green Gram is native of India and Central Asia. Green gram is protein rich staple food. It contains about 2.5% proteins. As considering the survey of this crop that since last few years green gram is suffer with different types of pathogenic disease like Fungi, bacterial, viruses.

In India green gram is affected by various fungal diseases such as leaf spot caused by *Alternariatenuissima*, *Cercospora*, *conescens*, leaf web blight caused by *Rhizoctoniasolani*, Powdery Mildew caused by *Erysiphepolygona*, Dry root caused by *Macrophominaphaseoling*, Rust caused by *Uromycesphaseoli*, Anthracnose caused by *Glomerellalindemuthiana*. Seed and seedling root caused by *Rhizoctoniasolani*, etc. Due to this disease plant yield and poor quality of pods and seeds. This decreases product and valuation. It has been reported that other legume crop diseases. G. Rangaswami (1966).

It was with the aim to find out the important airborne pathogens, their distribution and seasonal variation in the concentration these investigations were undertaken, the prediction of airborne fungal disease could be attempted. If well in advance information of airspora of this crop is made timely available. In view of the above fact using by continuous Volumetric Tilak Air Sampler carried out an aero mycological survey over green gram field for kharif season. From 5<sup>th</sup> June to 28 August 2007.

## RESEARCH METHODOLOGY :

In the present investigation an exploration of airborne spores of *Alternaria* (Tilak and Kulkarni 1970) was undertaken over the fields, of green gram field for kharif season Tilak Air Sampler was installed at a constant height of 1 Meter above the ground level at Kada Tal Ashti Dist. Beed (M.S.) for one kharif season i.e. from 5<sup>th</sup> June to 28<sup>th</sup> Aug 2007. The air was sampled at the rate of 5litres/minutes which left traces of deposition over cellophane tape, affixed on the outer surface of drum. The slides were prepared every offer eight days. Before the scanning, the slides were marked with a ball pen point pen in the six equal parts, each part, indicating the spore catch of two hours of sampling

period. Area of 9600sq.micron of the total area of the trace obtained was scanned under 10Xx45X eye piece objective combination of binocular research microscope. The transformation of spore was done which was based on visual characteristics of spore such as size, shapes. The metrological data was recorded during period of investigation.

## RESULTS AND DISCUSSION :

Spores hyaline to olive brown, elongated long appendages at the tip, 10-15 septate slightly constricted at the septum, 215-315 um long including appendage, 6-8 um wide with a prominent basal scar.

Spores occurred frequently. Their contribution to the total airspora was recorded as 0.26 %

The maximum monthly mean concentration ( $196/m^3$ ) was recorded in the month of July 2007 and minimum ( $56/m^3$ ) in June 2007.

The maximum daily mean concentration ( $56/m^3$ ) was recorded on 3<sup>rd</sup> August 2007.

Richards (1956) from England, Pady (1957) from Kansas, reported these conidia in air. Kramer et.al (1959), recorded 1% spores from the air.

In India, Sreeramulu from Waltair, observed the spores while studying the conidial dispersal of the species of *Cercosporia*, *C. personata* (Berk and Curt) Eill. And Ever and *C. arachidicola* Hori over groundnut field. Kulkarni (1978) at Aurangabad reported 0.15%. Pande (1976) at Nanded reported 0.33%, Mane (1978) at Vijapur reported 1.65%, Tilak and Bhalke (1979) also reported from Aurangabad. Bhagwan (1983), Patil (1983), Patil (1985), Venugopalchari (1986), Ramakrishna Reddy (1987) Mighaj (1988) and Meghraj (1989) reported the spores to the total airspora over different fields at Aurangabad, Nanded and Aurangabad respectively. Kavishwar (1990) at Dhule reported 0.16%, Shinde (1998) at Nanded, reported 1.38%, Thite (1998) and Pawar (1998), reported spores over different fields at Shrigonda and Nanded respectively. Dhimdhome (1999) reported these spores from airspora at Aurangabad. Tuljapurkar (2000) reported these spores over sunflower fields at Aurangabad. Garje (2000) recorded 1.11% of these spores over bajra fields at Aurangabad Mali (2002), Gopan (2004) and Pathare (2005) reported 1.40% over sunflower fields.

The climatic factors generally are responsible to influence the sporadic outbreak at certain disease, however during period of present investigation did not occur. Thus the regional climate not only determines the profitable growth of crop but also influences the dangerous of disease to which crops are prone, the relation between the development of disease and weather is the basis on which incidence and occurrence of diseases can be predicted. At matter of fact, plant disease forecasting is the natural corollary of plant disease epidemiology. Thus the atmospheric microbial population in relation to phytopathology has an ample scope for further investigations. Such studies would bring many useful results like disease forecasting which would ultimately help in projecting our crop.

## REFERENCES :

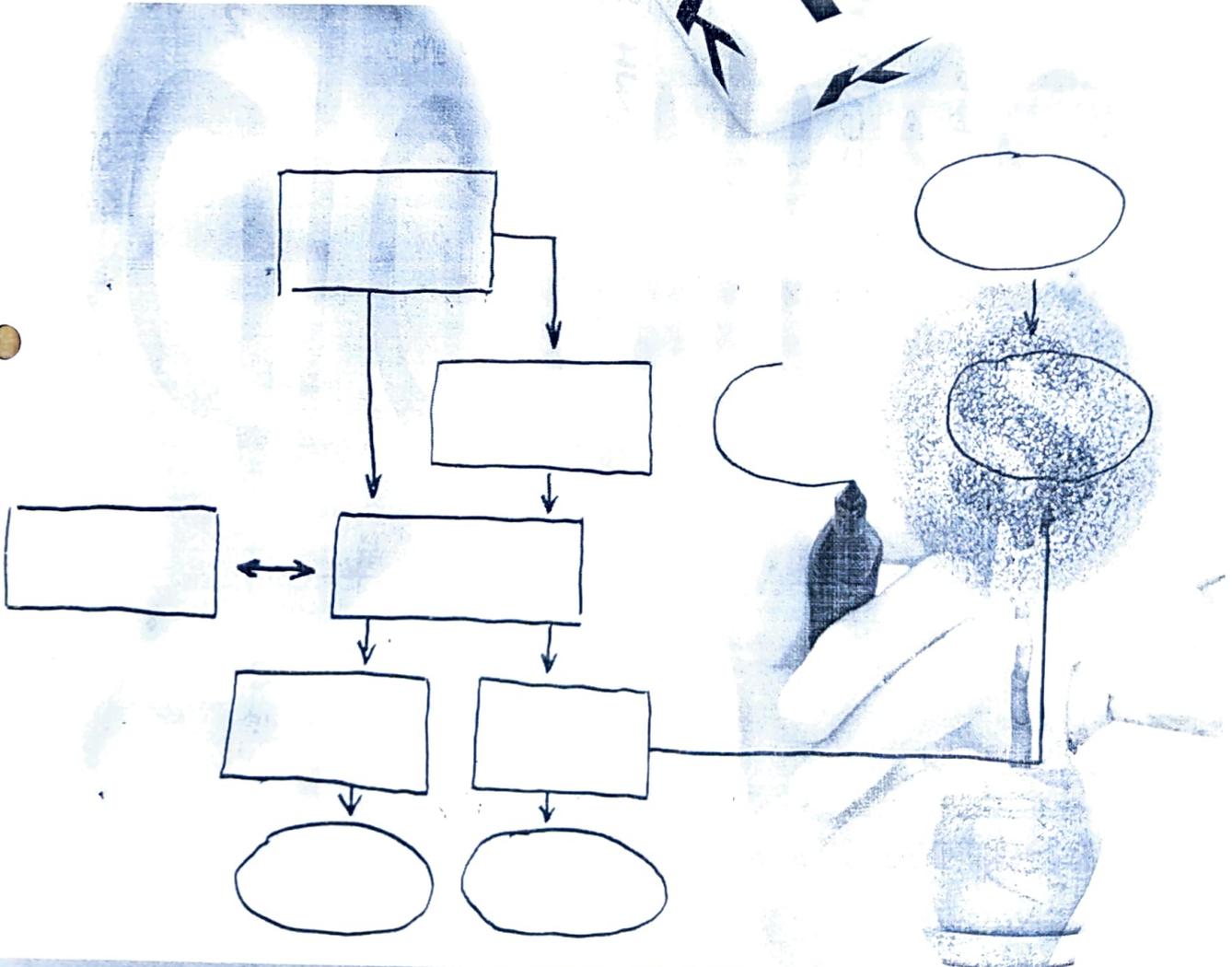
- [1] Aher, S.K., Thite S.V. & Pande B.N. (2002). Fungal airspora of a groundnut field. *Eco, Env. & Cons*, 8: 283 -288
- [2] Mane, D.A. (1978) Studies in airspora over some fields. Ph.D. Thesis Marathwada University, Aurangabad.
- [3] Pathare G.M. & Mali.V.P. (2008), "An aerobiological survey of fungal spores in two different season over sunflower fields". *Life Science Bulletin*, (5) (43-46)
- [4] Shastrri S.D. (1996), An aerobiological survey of fungal spores in two different seasons over maize fields. *Dr. B.A.M.U. J.Sci.* 27:85-90
- [5] Tilak, S.T. & Kulkarni R.L. (1970) A new air sampler *Experienta*. 26: 443-444  
Tilak, S.T. and Ramchander Rao K.S. 1989. Aerobiology of Sunflower diseases. *Recent Researchers in Ecology and Env. Pollution*: 41-66 (Ed. S.T. Tilak) Today and Tomorrows Printers and Publishers, New Delhi.



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# Atmospheric Concentration of *Curvularia* Spores Over Sunflower Fields

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**ABSTRACT:** Present paper deals with the aerobiological investigation over Sunflower fields by using Volumetric continuous Tilak Air Sampler was employed for exploring fungal air spora over a Sunflower field at Kada, Tal. Ashti and Dist. Beed. 1<sup>st</sup> July to 30<sup>th</sup> September 2002 for first Kharif season and from 5<sup>th</sup> July to 30<sup>th</sup> September 2003 for second Kharif season. The present paper deals with airborne concentration of *Curvularia* spores over sunflower fields. The concentration of airborne *Curvularia* spores was assessed and the roles of the meteorological parameters over the spore concentration were discussed. The spore concentration was maximum ( $7840 \text{ m}^{-3}$  and  $1574 \text{ m}^{-3}$  of air) in the month of September 2002 and August 2003 during first and second Kharif season respectively.

**Keywords:** Aerobiology, *Curvularia*, Air Sampler, Sunflower field

## 1. Introduction

Aerobiology is an interdisciplinary science which deals with the study of biological component like pollen grains, fragments of fungal spores, hyphal fragments, bacteria, viruses, algae, lichens, minute insects & insect parts, protozoan, etc. In the atmosphere a biotic particulates & gases affecting living organisms have been recently included in the concept of aerobiology. The aerobiological studies are mainly concern with interrelationship between the biological component in the atmosphere, source of biological component, their release in the atmosphere, their deposition & impact on health of plants & animals including human beings. Airborne infections & the resulting diseases threaten the lives & productivity of plants. Airborne diseases still pose a challenge to mankind.

The role of fungi in causing diseases to crop plants, man, domestic animal, in bringing deterioration of food grains in storage, valuable monuments has been subject of great interest for long time. Standing vegetation has a great influence of Aerospora of any place and it changes with changes in weather. Aerobiological survey conducted in various part of India revealed richness of Aerospora.

Sunflower (*Helianthus annuus* L.) is one of the most important oil seed crops being grown all over the world. It is mainly grown for its oil, which is generally for culinary purposes in preparation of vanaspati and in manufacture of soaps and cosmetics. The sunflower oil is chemically a triglyceride. It contains 68% linolic acid, so it is especially recommended for patients having heart troubles. Sunflower seed cake or meal is a protein rich feed and is used as a concentrate for cattle, animals like pig, sheep, goat and poultry feed. Sunflower is native of North America. In Germany and Russia it is grown on large scale. Now a day's sunflower crop cultivation has become more popular among the farmers of Marathwada region. As considering survey of this crop that since last few years sunflower is subjected to various type of fungal diseases which may be soil borne, seed borne, airborne etc. The aim of present study was to find out the atmospheric concentration of *Curvularia* and its correlation with meteorological parameters. It was with the aim to find out the important airborne pathogens, their

distribution and seasonal variation in the concentration these investigations were undertaken, the prediction of airborne fungal disease could be attempted. If well in advance information of airspora of this crop is made timely available. In view of the above fact using by continuous Volumetric Tilak Air Sampler carried out an aero mycological survey over sunflower field for two Kharif season.

## 2. Material and Methods

In the present investigation an exploration of airborne spores of *Curvularia* (Tilak and Kulkarni 1970) was undertaken over the fields of sunflower field for two Kharif season. Tilak Air Sampler was installed at a constant height of 1.5 meters above the ground level at Kada Tal Ashti Dist Beed (M.S.) for two Kharif season i.e. 1<sup>st</sup> July to 30<sup>th</sup> September 2002 for first Kharif season and from 5<sup>th</sup> July to 30<sup>th</sup> September 2003 for second Kharif season. The air was sampled at the rate of 5 litres/minutes which left traces of deposition over cellophane tape, affixed on the outer surface of drum. The slides were prepared every after eight days. Before the scanning, the slides were marked with a ball pen point pen in the six equal parts, each parts, indicating the spore catch of two hours of sampling period. Area of 9600sq. micron of the total area of the trace obtained was scanned under 10Xx45X eye piece objective combination of binocular research microscope. The transformation of spore was done which was based on visual characteristics of spore such as size, shapes. The metrological data was recorded during period of investigation.

## 3. Result and Discussion

Spores usually 3-4 septate, olivaceous brown, ellipsoid, typically curved or bent, one of central cells distinctly larger and darker than the terminal cells, terminal cell pale. Spores smooth or verrucose, 17-45x11-20 um.

Spores occurred continuously. The spores contributed 4.4% and 62.0% during first and second Kharif season respectively.

The maximum monthly mean concentration ( $7840/m^3$  and  $13734m^3$ ) was recorded in the month of September 2002 and August 2003 during first and second Kharif season respectively. The maximum daily mean concentration ( $448/m^3$  and  $1260m^3$ ) was recorded on 25<sup>th</sup> September 2002 and 1<sup>st</sup> September 2003 first and second Kharif season respectively.

Patil (1985) showed that it belongs to day sporangium exhibiting day time double pattern showing two peaks during day time. Some of the others reports of Pady (1957), Sreeramulu (1958), Kramer et al. (1959), Pathak and Pady (1965), Turner (1966) and Shukla (1971). Ress (1964) in Brisbane recorded 0.47% spores from the total airspora which were more frequent during day time. Tilak and srinivasulu (1967), Mishra and Kamal (1971), Kulkarni (1971), Pande (1976), Tilak and Bhalke (1978), Mane (1978), Verma (1979), Shastri (1981), Patil (1983), Bhagwan (1983), Patil (1985), Venugopalachari (1986), Ramakrishna Reddy (1987), Minhaj (1988), Meghraj (1989) and Kavishwar (1990) reported the incidence of the spores in air at different places. Thube (1992), Goud (1993), Narsimha (1996), Shinde (1996), Thite (1998) and Pawar (1998), recorded these spores over different fields. Dhindhime (1999), reported these spores from airspora at Aurangabad. Tuljapurkar (2000), Garje (2000), Mali (2002) and Banswadkar (2002) recorded these spores over different fields. Gopan (2004) and Pathare (2005) reported 5.33% spores over sunflower fields. *Curvularia* occurred predominantly in the environment. *Curvularia* species are commonly found as a parasite or saprophytes on different grasses present in this area. Most species of *Curvularia* are facultative pathogen of soil, plants. *Curvularia* is mostly parasitic and saprophytic forms, being liberated from infected wood stored in forest, lumber yards and sawmill compounds. Leaf blight in Bajra due to *Curvularia* was observed by Patil et al. (1966). As well as being a contaminant, *Curvularia* may cause infections in both humans and animals.

- [3] Pawar, S.R. & Ahuja, S.R. (1988). Prevalence of *Alternaria* spores in the atmosphere over groundnut fields. Dr. B.A.M.U. J.Sci. 28:95-100.
- [4] Shastri S.D. (1996), an aerobiological survey of fungal spores in two different seasons over maize fields. Dr. B.A.M.U. J.Sci. 27:85-90
- [5] Sheehy, J. & Hugel J.E. (1967) Diurnal Periodicity in *Helminthosporium* & *Alternaria* Phytopathology, 57:830
- [6] Tilak, S.T. & Kulkarni R.L. (1970) A new air sampler Experienta. 26 : 443-444

The climatic factors generally are responsible to influence the sporadic outbreak at certain disease, however during period of present investigation did not occur. Thus the regional climate not only determines the profitable growth of crop but also influences the dangerous of disease to which crops are prone, the relation between the development of disease and weather is the basis on which incidence and occurrence of diseases can be predicted. At matter of fact, plant disease forecasting is the natural corollary of plant disease epidemiology. Thus the atmospheric microbial population in relation to phytopathology has an ample scope for further investigations. Such studies would bring many useful results like disease forecasting which would ultimately help in projecting our crop.

## References

- [1] Aher, S.K., Thite S.V. & Pande B.N. (2002). Fungal airspora of a groundnut field. Eco, Env. & Cons, 8 : 283-288
- [2] Mane, D.A. (1978) Studies in airspora over some fields. Ph.D. Thesis Marathwada University, Aurangabad.



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## **Aeromycoflora Over Sunflower Field**

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**Abstract:** Present paper deals with aero mycological investigation were carried out by using Volumetric Continuous Tilak Air Sampler over Sunflower fields at Kada for two different seasons Kharif and Rabi seasons of the years 2003 and 2004. In Kharif seasons 58 and in Rabi seasons 67 air borne components were trapped and identified. All the trapped air borne mycoflora types have been categorized under Zygomycotina, Ascomycotina, Basidiomycotina and Deutromycotina. Hypel fragments, Insect parts, Pollen grains and Protozoan cyst were included under Other types. In kharif seasons *Cladosporium* dominated the airspora composition and contributed 26.02%, followed by *Alternaria* 13.75%, Rust spore 7.79%, *Curvularia* 6.20%, etc. In rabi season also *Cladosporium* dominated the airspora composition and contributed 24.62% followed by *Alternaria* 7.00%, *Periconia* 6.85%, Smut 6.00%, Hypel fragments etc.

**Keywords:** Air sampler, Airspora, Mycoflora, Fungal diversity.

**Introduction:** Sunflower (*Helianthus annuus* L.) Var. Nimbkar, native of Southern United States and Mexico as an oil seed crop was introduced in India in 1969. Sunflower is photo – thermo sensitive crop. Sunflower is not season bounded as such it can be grown throughout the with little irrigation when necessary. Another good feature of sunflower is its short span of life cycle. Well drained medium texture soil is best suited for the cultivation of sunflower. Now days sunflower cultivation has become more popular among the farmers of Marathwada region.

Like many other crops Sunflower is subjected to various types of fungal disease which may be soil born seed borne, airborne etc. The most important among them are downy mildew caused by *Plasmopara halstedii* rust diseases caused by *Puccinia helianthi* Schw. The other important being *Alternaria* leaf spot caused by *Puccinia helianthi*, root rot caused by *Rhizoctonia* sp, Powdery mildew caused by *Erysiphe cichoracearum*. *Leptosphaeria* leaf spot caused by *Leptosphaeria* sp. An important research on the diseases of sunflower was that of Siddiqui (1972), who made an intensive study on the sunflower rust caused by *Puccinia helianthi* and also reported the disease like powdery mildew. The air borne nature of pathogen over sunflower was reported by Tilak and Ramchander Rao (1987).

**Materials and method**

Continuous Volumetric Tilak air sampler (Tilak and Kulkarni 1970) was installed in the sunflower fields of a constant height of 1.5 meters above the ground level at Kada, Tal Ashti, Dist Beed (M.S). In Kharif season from 5<sup>th</sup> July 2003 to 30<sup>th</sup> September 2003 and Rabi season from 10<sup>th</sup> November 2003 to 29<sup>th</sup> February 2004. The air was sampled at the rate of 5 Liters/minutes which leaves trace of deposition over the cellophane tape fixed over the drum. The slides were prepared every after eight days and scanned regularly. The identification of spores based on visual characteristic of spores such as shape, size, colour, wall structure and ornamentation etc. The daily record of metrological data was regularly maintained.

**Results and Discussion.**

In Kharif crop season 58 types of airborne components were recorded of which 01 belonged to Oomycotina, 13 to Ascomycotina, 03 to Basidiomycotina, 36 to Deuteromycotina and 05 to another types ( Table 2) In the Kharif crop season Deuteromycotina stood first (68.26%) to the total airspora followed by Ascomycotina (11.25%) other types (10.72%) Basidiomycotina (7.47%) and Oomycotina (2.28%) Table I.

In Rabi season 67 types of airborne component were recorded of which 01 belonged to Oomycotina, 15 Ascomycotina 03 to Baidiomycotina, 43 to Deuteromycotina & 05 to other types. In the Rabi season Deuteromycotina stood first (72.08%) in other of concentration followed by Basidiomycotina (13.56%) other types (10.31%), Ascomycotina 3.77% and Oomycotinia 0.33%

**Table I – Total spore concentration and percentage contribution of different Fungal groups during two different seasons ( Kharif season from 5<sup>th</sup> July 2003 to 30 Sept 2003 and Rabi season from 10<sup>th</sup> Nov 2003 to 29 Feb 2004 ).**

Sr. No.	Spore Group	Spore Conc/m <sup>3</sup> of air		Percentage	
		Kharif	Rabi	Kharif	Rabi
1	Oomycotina	12446	1848	2.43	0.33
2	Ascomycotina	16926	20510	3.30	3.77
3	Basidiomycotina	70210	75138	13.72	13.56
4	Deuteromycotina	365916	399224	71.52	72.08
5	Other types	46102	57120	9.01	10.31
	Total	511600	553840	99.98	99.98

In the Kharif season airborne spores like Cladosporium Alternaria, Rust, Basidiospores, Nigrospora etc were recorded and in Rabi season also Cladosporium, Alternaria, Periconia, Smut, Hyphal Fragments, Basidiospores, Curvularia & Rust spores etc contributed significantly high to the total airspora in Kharif and Rabi crop season. **Table 2.**

Total spore concentration and percentage contribution of during two different seasons

Sr. No.	Spore Type	Season's total fungal spore conc/m <sup>3</sup> in air		% contribution of fungal spores in season's total airspora	
		Kharif	Rabi	Kharif	Rabi
1.	<b>Oomycotina</b>				
1)	Albugo	12446	1848	2.43	0.33
2.	<b>Ascomycotina</b>				-
1)	Chaetomium	434	630	0.08	0.11
2)	Claviceps	210	350	0.04	0.06
3)	Didymospharia	6272	1414	1.23	0.26
4)	Hypoxylon	1400	2296	0.27	0.41
5)	Hysterium	1316	1484	0.26	0.27
6)	Lecanidion	168	42	0.03	0.01
7)	Leptoshaeria	3794	10654	0.74	1.92
8)	Massarina	168	140	0.03	0.03
9)	Melanospora	1064	1218	0.21	0.22
10)	Parodiella	322	280	0.06	0.05
11)	Pleospora	742	1106	0.015	0.20
12)	Rosellinia	-	28	-	0.01
13)	Sporomia	532	28	0.10	0.01
14)	Teichospora	434	154	0.08	0.03



15)	Valsaria	-	686	-	0.12
3	<b>Basidiomycotina</b>				
	Basidiospores	25466	24094	4.98	4.35
1)	Rust spores	39858	17836	7.79	3.22
2)	Smut spores	4886	33208	0.96	6.00
3)					
4	<b>Deuteromycotina</b>				
	Alternariaa	70364	38794	13.75	7.00
1)					
2)	Beltrania	70	1792	0.01	0.32
3)	Beltraniella	42	1680	0.01	0.30
4)	Bispora	434	924	0.08	0.17
5)	Botrydiplodia	-	434	-	0.08
6)	Cercospora	10388	4144	2.03	0.75
7)	Chaetomella	224	112	0.04	0.02
8)	Cladosporium	133112	136360	26.02	24.62
9)	Cordana	-	2478	-	0.45
10)	Corynespora	-	966	-	0.17
11)	Curvularia	31710	18648	6.20	3.37
12)	Dendrographium	-	182	-	0.03
13)	Dictyoarthrinium	140	7266	0.03	1.31
14)	Drechslera	15764	9716	3.08	1.75
15)	Epicoccum	5656	9534	1.11	1.72
16)	Exosporium	-	14	-	-
17)	Fusariella	42	10668	0.01	1.93
18)	Haplosporella	1722	210	0.34	0.04
19)	Harknessia	880	266	0.17	0.05
20)	Helminthosporium	2688	13566	0.53	2.45
21)	Hetrosporium	-	2118	-	0.38
22)	Hrudinaria	-	42	-	0.01
23)	Lacellima	56	3976	0.01	0.72
24)	Lacellinospsis	1456	11648	0.28	2.10
25)	Memoniella	1162	7644	0.23	1.38
26)	Nigrospora	22008	26726	4.30	4.83
27)	Periconia	11578	38066	2.26	6.85
28)	Pithomyces	6090	6244	1.19	1.13
29)	Pestolotia	-	126	-	0.02
30)	Phacotrichoconis	-	602	-	0.11
31)	Pseudotorula	6398	13734	2.70	2.48
32)	Pyricularia	-	28	-	0.01
33)	Sirodesmium	56	294	0.01	0.05
34)	Spegazzinia	350	2156	0.07	0.39

35)	Spicaria	-	42	-	0.01
36)	Sporodesmium	462	2524	0.09	0.05
37)	Stemphylium	3528	6762	0.69	1.22
38)	Stigmina	4984	1120	0.97	0.20
39)	Tetracoccosporium	-	70	-	0.01
40)	Tetraploa	70	168	0.01	0.03
41)	Torula	6132	12810	1.20	2.31
42)	Zygosporium	1078	1484	0.21	0.27
43)	Sclerotium	560	5348	0.11	0.97
5.	<b>Other Types</b>				
1)	Hyphal fragment	20356	30660	3.98	5.54
2)	Insect parts	4816	4172	0.94	0.75
3)	Plant parts	2576	2646	0.50	0.48
4)	Pollen grains	12306	12012	2.41	2.17
5)	Protozoancyst	6048	7630	1.18	1.38
	<b>Total</b>	<b>511600</b>	<b>553840</b>	<b>99.98</b>	<b>99.98</b>

In Kharif season total airspora was found to be rich in concentration in total catches. ( $511600/m^3$  of air). In Rabi season concentration of airspora was found to be more as compared to the Kharif crop season ( $553840/m^3$  of air). In the Kharif season from the total airspora maximum number of spores ( $25553/m^3$  of air) was observed in the month of September (2003) followed by August and July. This could be due to the continues variation in relative Humidity percentage and Rainfall during these months. It is evident that temperature showed its marked effect on the enhancement in concentration of fungal spore's types in the air.

In Rabi season, from the total airspora, maximum monthly concentration ( $189336/m^3$  of air) was observed in the month of December, 2003 followed by Nov 2003, Jan. 2004 & Feb. 2004. In the month of December low temperature & high relative humidity percentage showed profound effect on growth and development of fungal population. In Rabi season, the lowest incidence was recorded during Jan 2004 ( $104118/m^3$  of air). These results are similar to the results reported by earlier works viz. Gregory (1961) Tilak & Kulkarni (1970), Kamal & Singh (1975), Shashtri (1996) & Aher et al (2002).



**References:**

Aher, S.K; Thite, S.V and Pnade B.N. (2002). Fungal Airspora of a Groundnut field. *Eco. Env And Cons*, 8(3): 283-288.

Gregory, P.H. (1961). *The Microbiology of the atmosphere*, Leonard Hill(book) Ltd Intersci. Pub. Inc , New York, p233.

Ingold C. T. (1965) *Spore liberation* Clarendon Press, Oxford, pp.210-220.

Kamal & singh, N.P. (1975). Fungal Airspora over cowpea & Maize fields at Gorakhpur *Proc.Nat.Conf.Acad.Sci.India*,45:53-60

Sreeramulu, T. (1970) The airspora of crop fields and its application. *J patynol*, 6:31-38.

Tilak,S.T. and Vishwe, D.B.(1975), Microbial content of air inside library, *Biovigyanum*, 1:91-94.

Tilak S.T. and Ramchander Rao K.S. 1989. Aerobiology of Sunflower diseases. *Recent researches in Ecology & Env. Polltion* : 41-66(Ed.S.T Tilak) Today and Tomorrows Printers and Publishers, New Delhi.

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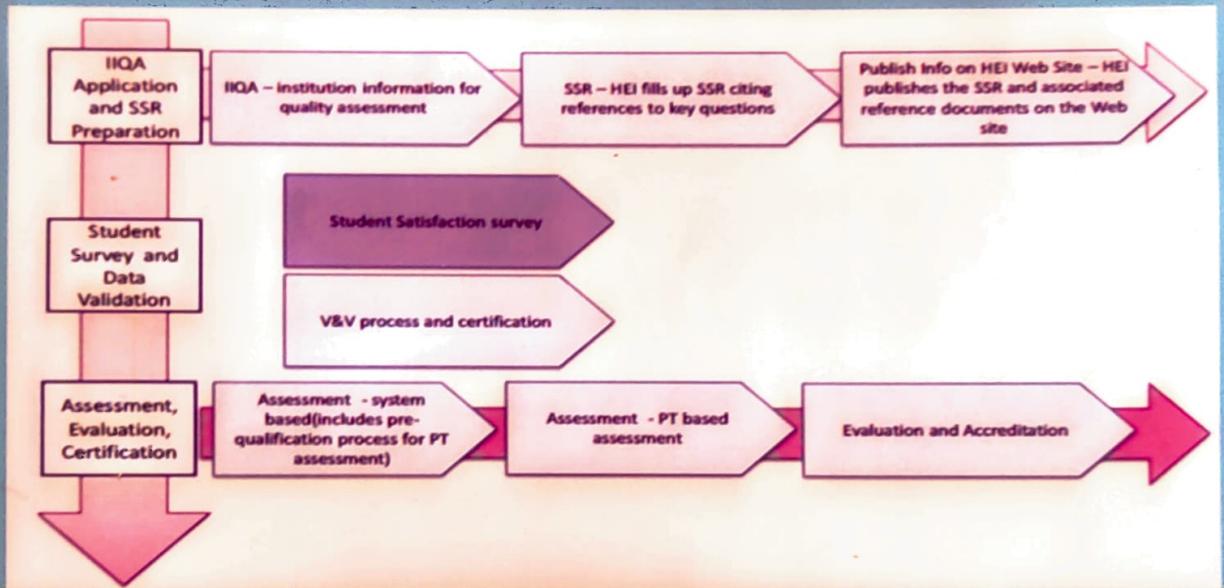
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## Improving Higher Educational Management through Good Governance

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### Abstract:

*The study investigated dimensions of good governance in order to improve higher educational management in Khyber Pakhtunkhwa province of Pakistan. The functions of the universities are to develop the people physically, mentally and spiritually. The purpose of higher education is to promote the economic, social, political and cultural life of a nation. The rapid economic, industrial and agricultural advancement of the developed nations is the outcome of their higher education institutions. Unlike its regional counterparts, the development indicators of Pakistan have not demonstrated positive results since its inception. According to the National Education Policy 2009, the participation rate of age group 18-23 at the level of higher education was 4.7% in 2008 as compared to the advanced countries which are achieving more than 40 percent participation rate in higher education. There are problems of quality of staff, students, library and laboratory and issues of governance in Pakistan. The relevance of education with social needs, research facilities, budgetary allocations, examination system, governance and academic results of Pakistan in general and Khyber Pakhtunkhwa in particular are not at par with international standards. Considering higher education to be the most important sector in development, the study was found significant and needed as research was scarce in this area. The objectives of the study included review of relevant literature and a description of different traditions, a search for best practices and identification of new dimensions for improvement of good governance of universities. The population of the study included all heads of institutions, teachers, administrators, planners, examination experts, and students of higher education in the Khyber Pakhtunkhwa. The sample of the study was three universities purposively selected for the study. Sixty six heads of institutions, teachers, administrators, planners and examinations experts and sixty students from all universities were included in the sample. The tools for collection of data were two questionnaires administered to the subjects. Both the questionnaires were refined after pilot testing. The data were collected personally. Based on the conclusions drawn a couple of recommendations were made for improvement, which suggested that the governance systems and institutions of higher education may be based on adequate inclusion of all relevant stakeholders, institutional autonomy may be granted for ensuring academic freedom, public authorities may establish and maintain an appropriate legislative framework to ensure institutional autonomy, merit may be the only consideration for enrollment in higher education, the grant for universities may be substantially increased and capacity of university staff and faculty may be developed.*

**Keywords:** good Governance, higher education, educational management, development indicators, participation rate and national education policy.

### Introduction:

Governance in higher education refers to the means by which higher educational institutions are formally organized and managed. University governance is the way in which



universities operate. It also refers to the internal structure, organization and management of autonomous institutions. The organization of internal governance is generally composed of a governing board, the university head with a term of administrative chancellors and staff, faculty senates, academic deans, department chairs, and usually some form of organization for student representation.

The study attempted to conceptualize good governance in higher education. It took stock of the relevant research in this area to identify and analyze different traditions and strategies of governance in the higher educational institutions in Khyber Pakhtunkhwa. The study also took cognizance of experiences of the heads of institutions, administrators, managers, teachers and students on the strategies of governance in their respective domains. The purpose was to enlist respective hurdles related to the governance of higher education. The study focused on the area of higher education, issues of governance with a view to explore new dimensions for improvement of educational management in universities. It was significant research as the planners, administrators, academicians, and experts working in the field of higher education could utilize the findings of the study for improvement. After drawing the conclusions, some workable recommendations were made for the improvement of governance of higher education.

Good governance promotes educational quality and brings about positive changes in the management of educational institutions. Traditions of governance vary from institution to institution. The governance patterns of public and private institutions in Pakistan are different from one another.

Ten parameters of 'good governance' with educational perspective were focused in the study, which included accountability, competence, legitimacy, openness, participation, relation between upper and lower hierarchy, responsibility, rule of law, transparency and impact. A set of implementable suggestions for the improvement of education governance were made.

### Literature Review

The study conceptualized different aspects of good governance in educational perspectives. It took into consideration the current research in this area to identify and analyze related research in education across the globe. The study also took cognizance of the best practices and experiences of different institutions and professionals associated with the problem. Analysis of the research studies documented provided a clear picture of the national and international experiences with respect to good governance at the level of higher education. The current status of institutions of higher education in Pakistan depicts a miserable picture. Some of the major issues and problems of universities in Pakistan that reviewed include:

Universities in Pakistan, in most cases are functioning only as postgraduate colleges and are concentrating mainly on teaching and examinations. Even the quality of teaching is at the lowest ebb. The degrees are not acceptable in other countries. In a World Bank Report (2000) it is stated that using international standards, the degree of Pakistani universities, M.A./M.Sc. could soon come to the equivalent of secondary school diploma in other countries.

The financial responsibility of the universities is with the federal government and the administrative and legislative authority lies with the provincial government. The separation of the two means that neither federal nor provincial university authorities can be held fully accountable for the overall management of the university system.



Extent of admission to different fields is not in accordance with the development and manpower needs of the society. The curriculum too, in many cases, is out dated and irrelevant. For these reasons external efficiency of the universities has become very low. As a result, on the one hand university graduates remain unemployed and on the other hand, qualified personnel are being imported in Pakistani industry and other employment sectors.

Universities always remain deficit in their budget. The proportion of budget allocated to the universities has decreased over the year but enrollments have increased enormously. No doubt, it provides broader access to higher education but it results in low quality education. In the given budget allocation, it is not possible to provide the pre-requisites for quality education such as good libraries and laboratories.

The new education policy (1978) mentioned that "universities should outreach to the public through extension service in the field of their specialization. Nothing tangible has been done in this direction except in case of agricultural universities."

### **Methodology of the Study**

The study attempted to identify dimensions of good governance in higher education in the context of Khyber Pakhtunkhwa province of Pakistan. It chose a descriptive methodology based on scientific method of research. Both qualitative and quantitative approaches were applied for analysis of data. The study was delimited to higher education institutions in public and private sectors of provincial capital Peshawar.

The population of the study included all heads of institutions, university teachers, administrators, planners, examination experts, and students in the Khyber Pakhtunkhwa. The sample of the study was three Higher Education Commission recognized universities (15%) purposively selected for the study. Sixty six heads of institutions, teachers, administrators, planners and examination experts and sixty students from all universities were included in the sample.

### **Data Collection and Analysis**

The tools for collection of data were two questionnaires administered to the subjects. Both the questionnaires were refined after pilot testing. The data were collected personally from the heads of institutions, teachers administrators, planners, managers, examination experts, and students of universities. Likert's five-point scale was used. The data obtained were given quantitative and qualitative treatment. The tabulated data were analyzed with percentages and discussed. The quantitative data were placed under different categories and interpreted for drawing conclusions.

### **Outcomes and Results of the Study**

The outcomes of the study were based on the analysis of data and suggested in brief that public should have access to the needed information in the university, a mechanism of transparency should be existed for effective institutional management, stakeholder's participation should be ensured for effective running of management affairs of the university, the management system of university should be based on the principle of responsible governance, performance based continuation should be the only criteria for teaching and non-teaching staff and students, education policies should be implemented in letter and spirit in institutions of higher education, management of a university should be capable of dealing with student's disciplinary issues and



political interference, academic standard of the universities should be compatible to the needs of national and international job market, university management should take cognizance of the fast changing needs of higher education, co-curricular activities such as conferences, seminars, workshops, exposure visits and sports etc. should be part of the curriculum, advanced research should be one of the priority areas of the university management, management should be given due importance to the qualitative and quantitative improvement of library and laboratory facilities, university should be equipped with modern technologies such as digital library, computers, multimedia projects etc., an impartial and uniform accountability mechanism should exist for ensuring good governance in the university, there should be a working system for the professional development of teachers, free and fair academic environment should be available in the universities for faculty, staff and students.

### References

1. Gov. of Pakistan (1978). The New Education Policy. Islamabad. Pak: Ministry of Education and Scientific Research.
2. Higher education commission Pakistan. (2009). Retrieved 15 July 2009. from:
3. <http://www.hec.gov.pk/OurInstitutes/Pages/Default.aspx>
4. Mirza. M. (1994). University Education in Pakistan. Bulletin of Education and Research, V. 16 (1-2):11.
5. World Bank. (2000). World development Indicators, 2000. Washington. DC: World Bank

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## Prevalence of Nigrosporasporoes Over Sunflower Fields

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### ABSTRACT

Present paper deals with airborne concentration of *Nigrosporasporoes* over the Sunflower fields by using Volumetric continuous Tilak Air Sampler was employed for exploring fungal airspora over a Sunflower field at Kada, Tal.Ashti, Dist.Beed.1<sup>st</sup>July to 30<sup>th</sup> September 2002 for first Kharif season and from 10<sup>th</sup>November 2003 to 29<sup>th</sup>February 2004 for First Rabi season. The present paper deals with airborne concentration of *Nigrosporasporoes* over sunflower fields. The concentration of airborne *Nigrosporasporoes* was assessed and the roles of the metrological parameters over the spore concentration were discussed. The spore concentration was maximum (6160/<sup>m</sup>3 and 10472/<sup>m</sup>3 of air) in the month of September 2002 and December 2003 during first Kharif season and first Rabi season respectively. Metrological parameters such as Rainfall, Relative humidity, Wind velocity and temperature showed significant effect on liberation of spores of *Nigrospora* in the airspora composition qualitatively and quantitatively.

**Key Words:** Aerobiology, Sunflower field, Air Sampler, Airspora.

### INTRODUCTION

Aerobiology is branch of science which deals with the study of biological component like pollen grains, fragments of fungal spores, hyphal fragments, bacteria, viruses, algae, lichens, minute insects & insect parts, protozoanycyst, etc. In the atmosphere a biotic particulates & gases affecting living organisms have been recently included in the concept of aerobiology.

The aerobiological studies are mainly concern with interrelationship between the biological component in the atmosphere, source of biological component, their release in the atmosphere, their deposition & impact on health of plants & animals including human beings. Airborne infections & the resulting diseases threaten the lives & productivity of plants. Airborne diseases still pose a challenge to mankind.

The role of fungi in causing diseases to crop plants, man, domestic animal, in bringing deterioration of food grains in storage, valuable monuments has been subject of great interest for long time. Standing vegetation has a great influence of aerospora of any place and it changes with changes in weather.

Sunflower (*Helianthus annuus* L.) is one of the most important oil seed crops being grown all over the world. Sunflower seed cake or meal is a protein rich feed and is used as a concentrate for cattle, animals like pig, sheep, goat and poultry feed. Sunflower is native of North America. In Germany and Russia it is grown on large scale. Sunflower is not season bounded; as such it can be grown throughout the year with little irrigation when necessary. Another good feature is it's short of life cycle. Now a day's sunflower crop cultivation has become more popular among the farmers of Marathwada region. As considering survey of this crop that since last few years sunflower is subjected to various type of fungal diseases which may be soil borne, seed borne, airborne etc. The aim of present study was to find out the atmospheric concentration of *Nigrospora* and its correlation with meteorological parameters. It was with the aim to find out the important airborne pathogens, their distribution and seasonal variation in the concentration these investigations were undertaken, the prediction of airborne fungal disease could be attempted. If well in advance information of aerospora of this crop is made timely available. In view of the above fact using by continuous Volumetric Tilak Air Sampler carried out an aero mycological survey over sunflower field for one Kharif and one Rabi season. From 1<sup>st</sup> July to 30<sup>th</sup> September 2002 for first Kharif season and from 10<sup>th</sup> November 2003 to 29<sup>th</sup> February 2004 for First Rabi season.

### MATERIAL AND METHODS:

In the present investigation an exploration of airborne spores of *Nigrospora* (Tilak and Kulkarni 1970) was undertaken over the fields of sunflower field for one Kharif and one Rabi season. The sampling was carried out by operating Tilak Air Sampler in the center of crop field at a constant height of 1.5 meters from the ground level at Kada Tal Ashti Dist Beed (M.S.) for one Kharif and one Rabi season two Kharif season i.e. 1<sup>st</sup> July to 30<sup>th</sup> September 2002 for first Kharif season and from 10<sup>th</sup> November 2003 to 29<sup>th</sup> February 2004 for First Rabi season. While installing the air sampler lid is opened. The rotating drum is removed from the clock motor of the sampler. Cello tape is covered with a thin layer of petroleum jelly. Now the drum is fixed with start point S of the drum facing nozzle of orifice with a central screw. Sampler is started by putting the electric button on. The air was sampled at the rate of 5 liters/minutes which left traces of deposition over cellophane tape, affixed on the outer surface of drum. The slides were prepared every eight days. Before the scanning, the slides were marked with a ball pen point pen in the six equal parts, each part, indicating the spore catch of two hours of sampling period. Area of 9600 sq. micron of the total area of the trace obtained was scanned under 10Xx45X eye piece objective combination of binocular research microscope. The transformation of spore was done which was based on visual characteristics of spore such as size, shapes. The metrological data was recorded during period of investigation.

### RESULT AND DISCUSSION:

Spores one celled, globose to sub-globose or depressed globose, black and opaque, smooth, 14-23  $\mu\text{m}$  diameter. During the period of present investigation, spores of *Nigrospora* contributed as 3.31 and 4.83% which total concentration of 11270/ $\text{m}^3$  and 26726/ $\text{m}^3$  for first Kharif and first Rabi season respectively of air. Spores of *Nigrospora* occurred continuously throughout the period of investigation. The maximum monthly mean concentration (6160/ $\text{m}^3$  and 10472/ $\text{m}^3$ ) was recorded

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in the month of September 2002 and December 2003 respectively. The maximum daily mean concentration ( $364/m^3$  and  $980/m^3$  of air) was recorded on 23<sup>rd</sup> September 2002 and 13<sup>th</sup> December 2003 during Kharif season first and Rabi season first respectively. Mason (1927) reported this spore type. Panzer et al. (1937) reported and included this spore type to "DrySpora" with maxima between 08.00 hrs and 17.00 hrs. Pady (1957) collected occasionally these spores on exposed slides at Kansas. Meredith (1961) at Jamaica observed variation in the number of spores and showed their relevance with rainfall and humidity. Rees (1964) at Brisbane reported that the sunny and humid condition favor for high concentration of this spore type. Mishra and Shrivastav (1970) from Gorakhpur, Kulkarni (1971) from Aurangabad, Mishra and Kamal (1971) from Gorakhpur trapped the spore type from the air over different fields. Gaikwad (1974) reported these spores from air at Ahmedpur. Pande (1976) recorded 5.16% spores to the total airspora at Nanded. Mane (1978) reported 1.28% of the total airspora at Vaijapur. Varma (1979), Bhalke (1981) also reported these spores in the airspora. Bhagwan (1983) and Patil (1983) recorded 3.67% and 3.29% spores to the total airspora over sugarcane and banana fields at Nanded and Aurangabad respectively. Patil (1985), Venugopalchari (1986), Ramkrishna Reddy (1987), Minhaj (1988), Jagan Mohan Reddy (1988), Meghraj (1989) also reported these spores from the air in different localities of this region. Vaidya (1992) reported 3.22% contribution from the airspora over jowar fields at Aurangabad. Ahuja (1991), Bhadane (1991), Thube (1992), Goud (1993), Narsimha (1996), Shinde (1996), Thite (1998) and Pawar (1998) also reported these spores over different fields. Dhimdhime (1999) and Tuljapurkar (2000) reported these spore from airspora at Aurangabad. Garje (2000) recorded 3.52% spores to the total airspora over bajara

fields at Aurangabad. Mali (2002) and Banswadkar (2002) also reported this spore types at Kada and Udgir respectively. Dasi Meena (2008) reported 2.29% contribution to the total air spora over garbage area in the Ambernath and Ulhasnagar. Dere (2011) recorded *Nigrospora* spore in the ambient air of vegetable market at Aurangabad. During the period of present investigation the spores of *Nigrospora* were almost continuously found in the atmosphere over the sunflower field. Metrological parameters such as rain fall, relative humidity, wind velocity and temperature showed significant effect on liberation of spores of *Nigrospora* in the air spores composition qualitatively & quantitatively. The pathogenic fungi *Nigrospora* generally bring about leaf spot disease incidence, however very much significant in the atmosphere, nevertheless, they did not bring about leaf spot disease incidence to the sunflower crop. Therefore the entire sunflower crop in both Kharif and Rabi season was found healthy.

### REFERENCES:

- 1) Aher S.K., Thite S.V. & Pande B.N. (2002). Fungal air spora of a groundnut field. *Eco, Env. & Cons*, **8**: 283 -288
- 2) Ahuja, S.R. (1992) Air spora of Aurangabad, Ph.D. Thesis, Marathwada University, Aurangabad.
- 3) Bhalke, S.P (1981) Air spora over some fields. Ph.D. Thesis Marathwada University Aurangabad.
- 4) Bhadane, M.T. (1991) Aerobiological studies at Dhulia Ph.D. Thesis, Marathwada University, Aurangabad.

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**STUDIES ON COMPOSITION AND COMPONENTS OF AIRSPORA  
BELONGING TO PHYCOMYCETES OVER SUNFLOWER FIELDS.****G. M. Pathare**

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**E-mail. [gmpathare@rediff.com](mailto:gmpathare@rediff.com)****ABSTRACT**

Present paper deals with the aerobiological investigation over Sunflower fields by using Volumetric continuous Tilak Air Sampler was employed for exploring fungal airspora over a Sunflower field at Kada, Tal. Ashti and Dist. Beed from 1<sup>st</sup> July 2002 to 30<sup>th</sup> September 2002 for first kharif season and 5<sup>th</sup> July 2003 to 30<sup>th</sup> September 2003 for second kharif season. During the present studies composition & component of the spores belonging to phycomycetes over the Sunflower field was studied. For this study of spore catches were prepared, mounted and spore scanning was carried out regularly. Two types of fungal spores belonging to the phycomycetes were trapped during first Kharif and second kharif season. Apart from these various dust particles were also seen in abundance.

**Key Words:** Airspora, Phycomycetes, Air Sampler, Sunflower field.

**INTRODUCTION:**

Aerobiology is an interdisciplinary science which deals with the study of biological component like pollen grains, fragments of fungal spores, hyphal fragments, bacteria, viruses, algae, lichens, minute insects & insect parts, protozoan cyst, etc. In the atmosphere a biotic particulates & gases affecting living organisms have been recently included in the concept of aerobiology. The aerobiological studies are mainly concern with interrelationship between the biological component in the atmosphere, source of biological component, their release in the atmosphere, their deposition & impact on health of plants & animals including human beings. Airborne infections & the resulting diseases threaten the lives & productivity of plants. Airborne diseases still pose a challenge to mankind. The role of fungi in causing diseases to crop plants, man, domestic animal, in bringing deterioration of food grains in storage, valuable monuments has been subject of great interest for long time. Standing vegetation has a great influence of aerospora of any place and it changes with changes in weather. Aerobiological survey conducted in various part of India revealed richness of aerospora. Sunflower (*Helianthus annuus* L.) is one of the most important oil seed crops being grown all over the world. It is mainly grown for its oil, which is generally for culinary purposes in preparation of vanaspati and in manufacture of soaps and cosmetics. The sunflower oil is chemically a tri-glyceride. It contains 68% linoleic acid, so it is especially recommended for patients having heart troubles. Sunflower seed cake or meal is a protein rich feed and is used as a concentrate for cattle, animals like pig, sheep, goat and poultry feed. Sunflower is native of North America. In Germany and Russia it is grown on large scale. Now a day's sunflower crop cultivation has become more popular among the farmers of Marathwada region. As considering survey of this crop that since last few years sunflower is subjected to various type of fungal diseases which may be soil borne, seed borne, airborne. However detail studies on aerospora over the sunflower field in respect to the seasonal conditions are meagre. Considering these facts studies on aerospora belonging to phycomycetes over the sunflower field is carried out.

**MATERIALS AND METHODS:**

Continuous Volumetric Tilak air sampler (Tilak and Kulkarni 1970) was installed in the sunflower fields of a constant height at 1.5 meters above the ground level at Kada, Tal. Ashti, Dist. Beed from 1<sup>st</sup> July 2002 to 30<sup>th</sup> September 2002 for first kharif season and 5<sup>th</sup> July 2003 to 30<sup>th</sup> September 2003 for second kharif season. The air was sampled at the rate of 5 liters/minute which left traces of deposition over the cellophane tape, affixed on the outer surface of drum. The slides were prepared after eight days and scanned regularly. The identification of spores was done which was based on visual characteristic of spores such as shape, size, colours, wall structure and ornamentation etc. The daily record of meteorological data was regularly maintained.

**Results and Discussion:** Analysis of spore catches from the result presented in table I revealed that two types of fungal spores belonging to the phycomyces were trapped on the cellophane tape fixed on the drum of the sampler during first and second kharif season.

Enumeration of the identified spores of fungi belonging to the ascomycetes over the sunflower field for Second Kharif season and First Rabi season.

1) *Albugo Pers.*

Spores one celled, nearly globose, thick walled, smooth hyaline to light yellow coloured, 14-16  $\mu\text{m}$ , borne on non-septate club shaped conidiophores in chains. These are recorded maximum during rainy season. Their contribution to the total airspora was recorded as 1.24% and 2.43% during the first Kharif season and second Kharif season. The Maximum Monthly Mean Concentration (1792/ $\text{m}^3$  and 10892/ $\text{m}^3$ ) was recorded in the month of August 2002 & July 2003 during the first Kharif season and second Kharif season. The maximum daily mean concentration (182/ $\text{m}^3$  and 2100/ $\text{m}^3$ ) was recorded on 22<sup>nd</sup> September 2002 and 15<sup>th</sup> July 2002 during the first Kharif season and second Kharif season. The recent observation (Tilak and Patil 1987) indicated that the spores of *Albugo* were prevalent in the air during the months of August and September when humidity range is between 85 and 95% with lower temperature and associated rainfall. Patil (1985) recorded 0.2% spores of *Albugo* contributing to the total airspora over jowar fields at Parbhani. Jogdand (1987), Ahuja (1991) also reported this spore type over jowar fields at Aurangabad. Garje (2000) recorded 0.14% of spores of *Albugo* over jowar fields at Aurangabad. Mali (2002) recorded 0.42% of spores over bajara fields at Kada. Patel (2002) also reported these spores over vegetable fields. Banswadakar (2002) reported these spores over sunflower fields at Udgir.

- 2) *Rhizopus Ehrenbe:* Spores one celled unequal, round to oval, thin walled, smooth, striate, dark in mass,  $9.11 \times 7 \mu\text{m}$ . It is common saprophyte and facultative parasite on mature fruits, vegetables, and also on many other substrates. Their contribution to the total airspora was recorded as 1.05% during first Kharif season. The Maximum Monthly Mean Concentration (2240/ $\text{m}^3$ ) was recorded in the month of August 2002 during first kharif season only. The maximum daily mean concentration (322/ $\text{m}^3$ ) was recorded on 23<sup>rd</sup> August 2002 during the first Kharif season. *Rhizopus* spores were recorded in air by Sreeamulu and Ramalingam (1966) at Visakhapatnam. Mishra and Kamal (1971) at Gorakhpur, recorded two species of *Rhizopus* throughout the year. Gaikwad (1974) reported 0.56% spores from

Ahmedpurairspora. Tilak and Kulkarni (1975) reported 0.2% spores from Aurangabad airspora. Pande (1976) reported 0.4% spores from Nanded airspora. Patil (1985) and Jogdand (1987) from Aurangabad airspora, Kavishwar (1990) from Dhule reported these spores. Narsimha (1966) at Siddipet (A.P.), Pawar (1998) and Thite (1998) recorded these spores at Nanded and Shrigonda respectively. Garje (2000) reported 0.68% spores from Aurangabad airspora. Mali (2002) recorded these spores at Kada.

**References:**

- 1) Babu. M. (1983) : Aerobiological Studies at Aurangabad Ph.D. Thesis, Marathwada University, Aurangabad.
- 2) Bhalke S.P. (1981): Airspora over some field. Ph.D. Thesis, Marathwada University, Aurangabad.
- 3) Bembekar. S.K. (2005): Studies in airspora of cotton field. Ph.D. Thesis, Swami RamanandTirthMarathwada University, Nanded.
- 4) Chakre, O.J. (1979): Studies in microbial population of air at Aurangabad, Ph.D. Thesis, Marathwada University, Aurangabad.
- 5) Mehata K.C. (1952): Further studies of cereal rusts in India -II Sci. Monogr. Coun. Agric. Res. India. 18:1 -368.
- 6) Padmnabhan S.Y. (1953): Specialization in pathogenicity of *Helminthosporiumoryzae*. Proc. 40th Indian Sci. Congr. III: 18.
- 7) Ramlingum. A. (1966): A volumetric survey of the atmospheric pollen over paddy Fieldat Vishakhapatnam in 1960 and 1961. Palynol. Bull; 2 and 3:11-17.
- 8) Tilak, S.T. and Srinivasulu B.V. (1967). Ind. J. Microbiol., 7:168:170

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# Prevalance of Alternaria Spores Over Sunflower Field

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## ABSTRACT:

*Present paper deals with the aerobiological investigation over Sunflower fields by using Volumetric continuous Tilak Air Sampler was employed for exploring fungal airspora over a Sunflower field at Kada, Tal. Ashti and Dist. Beed. 1<sup>st</sup> July to 30<sup>th</sup> September 2002 for first Kharif season and 10<sup>th</sup> November 2003 to 29<sup>th</sup> February 2004 for first Rabi season the present paper deals with airborne concentration of Alternaria spores over sunflower fields. The concentration of airborne Alternaria spores was assessed and the roles of the metrological parameters over the spore concentration were discussed. The spore concentration was maximum (9030/m<sup>3</sup> and 12222/m<sup>3</sup> of air) in the month of September 2002 and February 2004 during first Kharif season and first Rabi season respectively.*

**Key Words:** Fungal spores, Sunflower field, Air Sampler, Air borne microbes.

## INTRODUCTION:

Aerobiology is an interdisciplinary science which deals with the study of biological component like pollen grains, fragments of fungal spores, hyphal fragments, bacteria, viruses, algae, lichens, minute insects & insect parts, protozoan, etc. In the atmosphere a biotic particulates & gases affecting living organisms have been recently included in the concept of aerobiology. The aerobiological studies are mainly concern with interrelationship between the biological component in the atmosphere, source of biological component, their release in the atmosphere, their deposition & impact on health of plants & animals including human beings. Airborne infections & the resulting diseases threaten the lives & productivity of plants. Airborne diseases still pose a challenge to mankind.

The role of fungi in causing diseases to crop plants, man, domestic animal, in bringing deterioration of food grains in storage, valuable monuments has been subject of great interest for

long time. Standing vegetation has a great influence of aerospora of any place and it changes with changes in weather. Aerobiological survey conducted in various part of India revealed richness of aerospora.

Sunflower (*Helianthus annus* L.) is one of the most important oil seed crops being grown all over the world. It is mainly grown for its oil, which is generally for culinary purposes in preparation of vanaspati and in manufacture of soaps and cosmetics. The sunflower oil is chemically a tri-glyceride. It contains 68% linolic acid, so it is especially recommended for patients having heart troubles. Sunflower seed cake or meal is a protein reach feed and is used as a concentrate for cattle, animals like pig, sheep, goat and poultry feed. Sunflower is native of North America. In Germany and Russia it is grown on large scale. Now a day's sunflower crop cultivation has become more popular among the farmers of Marathwada region. As considering survey of this crop that since last few years sunflower is subjected to various type of fungal diseases which may be soil borne, seed borne, airborne etc. The aim of present study was to find out the atmospheric concentration of *Alternaria* and its correlation with meteorological parameters. It was with the aim to find out the important airborne pathogens, their distribution and seasonal variation in the concentration these investigations were undertaken, the prediction of airborne fungal disease could be attempted. If well in advance information of airspara of this crop is made timely available. In view of the above fact using by continuous Volumetric Tilak Air Sampler carried out an aero mycological survey over sunflower field for Kharif and Rabi season.

### MATERAIL AND METHODS

In the present investigation an exploration of airborne spores of *Alternaria* (Tilak and Kulkarni 1970) was undertaken over the fields of sunflower field for Kharif and Rabi season. Tilak Air Sampler was installed at a constant height of 1.5 meters above the ground level at Kada Tal. Ashti, Dist Beed (M.S.) for first Kharif and first Rabi season i.e. 1<sup>st</sup>July to 30<sup>th</sup>September 2002 for first Kharif season and 10<sup>th</sup>November 2003 to 29<sup>th</sup> February 2004 for first Rabi season. The air was sampled at the rate of 5 liters/minutes which left traces of deposition over cellophane tape, affixed on the outer surface of drum. The slides were prepared every offer eight days.

Before the scanning, the slides were marked with a ball pen point pen in the six equal parts, each part, indicating the spore catch of two hours of sampling period. Area of 9600sq.micron of the total area of the trace obtained was scanned under 10Xx45X eye piece objective combination of binocular research microscope. The transformation of spore was done which was based on visual characteristics of spore such as size, shapes. The metrological data was recorded during period of investigation.

### RESULT AND DISCUSSION:

The spores of *Alternaria* were dark muriform, variously shaped, obclavate to elliptical ovoid, beaked or with simple or branched appendage, often in acropetal chains, and  $7.5-10 \times 37.5-117\mu\text{m}$ . spores of *Alternaria* occurred abundantly throughout the period of investigation. These are pathogenic responsible for leaf spot diseases. The spores contributed 4.91% and 7.00% during first Kharif season first Rabi season respectively. The maximum monthly concentration ( $9030/\text{m}^3$  and  $12222/\text{m}^3$ ) was recorded in the month of September 2002 and February 2004 during first Kharif season first Rabi season respectively. The maximum daily mean concentration ( $490/\text{m}^3$  and  $2800/\text{m}^3$ ) was recorded on 20<sup>th</sup> September 2002 and 27<sup>th</sup> February 2004 during first Kharif season first Rabi season respectively. Kramer et al, (1959) reported 3.4% to the total catches. Meredith (1962) from Jamaica reported 0.3% spores from air. Rees (1964) in Brisbane recorded 0.58% of *Alternaria* spores from air. Turner (1966) from Hong Kong, DeGroot (1968) and Derrick (1966) recorded from the air at various places. Tilak and Srinivasulu (1967), Shukla (1971), Mishra and Kamal (1971), Gaikwad (1974), Tilak and Vishwe (1975), Pande (1976), Mane (1978), Tilak and Bhalke (1979), Kulkarni (1979), Bhalke (1981), Babu (1983), Wankhade (1983), Patil (1985), Jogdand (1987), Meghraj (1989), reported these spores in the air over different crops. Sankaye (1989) reported 5.40% and 7.48% spores over groundnut and sunflower fields

respectively at Latur. Thube (1992) reported 7.25% incidence of these spores over wheat fields at Ahmednagar. Narsimha (1996) reported these spores over paddy fields at Siddipet (A.P.). Thite (1998) and Pawar (1998) reported these spores over ground fields and sunflower fields at Shrigonda and Nanded respectively. Tuljaputkar (2000) and Garje (2000) also recorded these spores from airspora at Aurangabad. Mali (2002) and Banswadkar (2002) also reported these spores at Kada and Udgir respectively. Gopan (2004) and Pathare (2004) reported these spores over sunflower fields at Beed and Kada respectively. During the period of present investigation the spores of *Alternaria* were almost continuously found in the atmosphere over the sunflower field. During the period of present investigation the spores of *Alternaria* were almost continuously found in the atmosphere over the sunflower field. Metrological parameters such as rain fall, relative humidity, wind velocity and temperature showed significant effect on liberation of spores of *Alternaria* in the air spores composition qualitatively & quantitatively.

The pathogenic fungi *Alternaria* generally bring about leaf spot disease incidence, however very much significant in the atmosphere, nevertheless, they did not bring about leaf spot disease incidence to the sunflower crop. Therefore the entire sunflower crop in Kharif season first and Rabi season first was found healthy.

#### REFERENCES:

Aher , S.K., Thite S.V. & Pande B.N. (2002) . Fungal airspora of a groundnut field.

Eco, Env. & Cons, 8: 283 -288

A.V.Karne & B.N.Pande.( 2005), Prevalence of *Alternaria* spores in the atmosphere over potato fields

Mane, D.A. (1978) Studies in airspora over some fields. Ph.D. Thesis Marathwada University, Aurangabad.

Pathare G.M. & Mali.V.P. (2008), "An aerobiological survey of fungal spores in two different season over sunflower fields". Life Science Bulletin, (5) (43-46)

Pawar, S.R. & Ahuja, S.R. (1988), Prevalence of *Alternaria* spores in the atmosphere over groundnut fields. Dr. B.A.M.U. J.Sci. 28:95-100.

Shastri S.D. (1996), an aerobiological survey of fungal spores in two different seasons over maize fields. Dr. B.A.M.U. J.Sci. 27:85-90

Sheehy, J & Hugellet J.E. (1967) Diurnal Periodicity in *Helminthosporium* & *Alternaria* Phytopathology, 57:830

Tilak, S.T. & Kulkarni R.L. (1970) A new air sampler *Experienta*. 26: 443-444



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## PREVALENCE OF SMUT SPORES OVER SUNFLOWER FIELDS

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### ABSTRACT

*Present paper deals with airborne concentration of Smut spores over the Sunflower fields by using Volumetric continuous Tilak Air Sampler was employed for exploring fungal airspora over a Sunflower field at Kada, Tal. Ashti, Dist. Beed. 1<sup>st</sup> July to 30<sup>th</sup> September 2002 for first Kharif season and from 10<sup>th</sup> November 2003 to 29<sup>th</sup> February 2004 for First Rabi season. The present investigation showed the presence of various pathogenic spores such as Alternaria, Cercospora, Curvularia, Helminthosporium, Rust and Smut spores over which were predominant over sunflower field. This paper deals with analysis of air borne Smut spores over sunflower field. The spore concentration was maximum (2058/m<sup>3</sup> and 15050/m<sup>3</sup> of air) in the month of August 2002 and November 2003 during first Kharif season and first Rabi season respectively. Metrological parameters such as Rainfall, Relative humidity, Wind velocity and temperature showed significant effect on liberation of Smut spores in the airspora composition qualitatively and quantitatively. The obtained data would be useful in establishing the disease forecasting system of Sunflower crop.*

**KEY WORDS:** Aerobiology, Sunflower field, Air Sampler, Smut Spores

### INTRODUCTION

Aerobiology is branch of science which deals with the study of biological component like pollen grains, fragments of fungal spores, hyphal fragments, bacteria, viruses, algae, lichens, minute insects & insect parts, protozoanycyst, etc. In the atmosphere a biotic particulates & gases affecting living organisms have been recently included in the concept of aerobiology. The aerobiological studies are mainly concern with interrelationship between the biological component in the atmosphere, source of biological component, their release in the atmosphere, their deposition & impact on health of plants & animals including human beings. Airborne infections & the resulting diseases threaten the lives & productivity of plants. Airborne diseases still pose a challenge to mankind.

Sunflower (*Helianthus annus* L.) is one of the most important oil seed crops being grown all over the world. Sunflower seed cake or meal is a protein rich feed and is used as a concentrate for cattle, animals like pig, sheep, goat and poultry feed. Sunflower is native of North America. In Germany and Russia it is grown on large scale. Sunflower is not season bounded; as such it can be grown throughout the year with little irrigation when necessary. Another good feature is its short of life cycle. Now a day's sunflower



crop cultivation has become more popular among the farmers of Marathwada region. As considering survey of this crop that since last few years sunflower is subjected to various type of fungal diseases which may be soil borne, seed borne, airborne etc. The aim of present study was to find out the atmospheric concentration of *Smut* and its correlation with meteorological parameters. It was with the aim to find out the important airborne pathogens, their distribution and seasonal variation in the concentration these investigations were undertaken, the prediction of airborne fungal disease could be attempted. If well in advance information of airspora of this crop is made timely available. In view of the above fact using by continuous Volumetric Tilak Air Sampler carried out an aero mycological survey over sunflower field for one Kharif and one Rabi season. From 1<sup>st</sup> July to 30<sup>th</sup> September 2002 for first Kharif season and from 10<sup>th</sup> November 2003 to 29<sup>th</sup> February 2004 for First Rabi season.

## MATERIAL AND METHODS:

In the present investigation an exploration of airborne spores of *Smut* (Tilak and Kulkarni 1970) was undertaken over the fields of sunflower field for one Kharif and one Rabi season. The sampling was carried out by operating Tilak Air Sampler in the center of crop field at a constant height of 1.5 meters from the ground level at Kada Tal Ashti Dist Beed (M.S.) for one Kharif and one Rabi season i.e. 1<sup>st</sup> July to 30<sup>th</sup> September 2002 for first Kharif season and from 10<sup>th</sup> November 2003 to 29<sup>th</sup> February 2004 for First Rabi season. While installing the air sampler lid is opened. The rotating drum is removed from the clock motor of the sampler. Cello tape is covered with a thin layer of petroleum jelly. Now the drum is fixed with start point S of the drum facing nozzle of orifice with a central screw. Sampler is started by putting the electric button on. The air was sampled at the rate of 5 liters/minutes which left traces of deposition over cellophane tape, affixed on the outer surface of drum. The slides were prepared every offer eight days. Before the scanning, the slides were marked with a ball pen point pen in the six equal parts, each part, indicating the spore catch of two hours of sampling period. Area of 9600sq.micron of the total area of the trace obtained was scanned under 10Xx45X eye piece objective combination of binocular research microscope. The transformation of spore was done which was based on visual characteristics of spore such as size, shapes. The metrological data was recorded during period of investigation.

## RESULT AND DISCUSSION:

*Smut* Spores one celled, round, shortly elliptical or angular, dark brown or black in mass, smooth or slightly echinulate, 10-12 $\mu$ m. They occurred throughout the period of investigation. During the period of present investigation, spores of *Smut* Contributed as 1.21% and 6.00% which total concentration of 4102/ $m^3$  and 33208/ $m^3$  for first Kharif and first Rabi season respectively of air. The maximum monthly mean concentration (2058/ $m^3$  and 15050/ $m^3$  of air) was recorded in the month of August 2002 and November 2003 respectively. The maximum daily mean concentration (252/ $m^3$  and 1260/ $m^3$  of air) was recorded on 4<sup>th</sup> September 2002 and 25<sup>th</sup> November 2003 during Kharif season first and Rabi season first respectively. Pady and Kapica (1956) observed smut spores in every month except December. Hirst (1957) observed *Ustilago* chlamydo spores more in June and July. Kramer et al. (1959) reported-5.9% smut spores from the airspora of Kansas. Meredith (1962) at Jamaica, recorded 1.2% *Ustilago* in the airspora. Rees (1964) observed smut spores during dry sunny periods. Kulkarni (1971) recorded smut spores over sugarcane fields at Aurangabad which contributed on an average 3.89% to the total airspora. Gaikwad (1974) recorded 7.23% these spores over jowar fields at Ahmedpur. Mane (1978) reported 3.43% smut spores over bajra fields at Vaijapur. Pande (1976) reported 0.31% smut spores over jower fields at Nanded. Bhalke (1981) also reported these spores in the airspora. Shastri (1981), Babu (1983), Patil (1983), Jogdand (1987), Ahuja (1992), reported these spores over different fields respectively. Thite (1998) recorded these spores over groundnut fields at Shrigonda. Garje (2000) recorded 1.63% smut



spores over bajara fields at Aurangabad. Mali (2002) and Banswadkar (2002) also reported this spore types at Kada and Udgir respectively. During the period of present investigation the spores of *Smut* were almost continuously found in the atmosphere over the sunflower field. Metrological parameters such as rain fall, relative humidity, wind velocity and temperature showed significant effect on liberation of spores of *Smut* in the air spores composition qualitatively & quantitatively. The pathogenic fungi *Smut* generally bring about leaf spot disease incidence, however very much significant in the atmosphere, nevertheless, they did not bring about leaf spot disease incidence to the sunflower crop. Therefore the entire sunflower crop in both Kharif and Rabi season was found healthy.

## REFERENCES:

- [1] Ahuja, S.R. (1992) Airspora of Aurangabad. Ph.D. Thesis Marathwada University Aurangabad.
- [2] Babu, M. (1983). Aerobiological studies at Aurangabad Ph.D. Thesis Marathwada University Aurangabad.
- [3] Banswadkar, V.R. (2002) Airspora over Oilseed crops. Ph.D. Thesis, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- [4] Bhalke, S.P. (1981) Airspora over some fields. Ph.D. Thesis Marathwada University Aurangabad.
- [5] Gaikwad, Y.B. (1974) Studies in airspora and taxonomy of Pyrenomycetes, Ph.D. Thesis, Marathwada University, Aurangabad.
- [6] Garje, P.M. (2000) Studies in extramural environmental bio pollution. Ph.D. Thesis, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- [7] Jogdand, S.B. (1987) Airspora at Aurangabad. Ph.D. Thesis, Marathwada University, Aurangabad.
- [8] Kulkarni, R.L. (1971) Studies in airspora over some fields Aurangabad. Ph.D. Thesis, Marathwada University, Aurangabad.
- [9] Kramer, C. Land S.M. Pady, (1959) Kansas aeromycology-IX. Ascomycetes. Trans. Kansas Acad. Sci. 63:53-60
- [10] Mali, V.P. (2002) Studies in Aerobiology over some crop fields. Ph.D. Thesis, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- [11] Mane, D.A. (1978) Studies in airspora over some fields. Ph.D. Thesis, Marathwada University, Aurangabad.
- [12] Meredith, D.S. (1962) Some components of the airspora in Jamaican banana plantation. Ann. Appl. Biol., 50:577-594
- [13] Pady, S.M. and Kapica, (1955) Fungi in air over the Atlantic Ocean. Mycology. 47:34-50,
- [14] Pande, B.N. (1976) Studies in airspora over some fields at Nanded. Ph.D. Thesis, Marathwada University, Aurangabad.
- [16] Patil, C.R. (1983) Aerobiological studies at Aurangabad. Ph.D. Thesis, Marathwada University, Aurangabad.
- [17] Shastri, S.D. (1981) Airspora over some fields. Ph.D. Thesis, Marathwada University, Aurangabad.
- [18] Thite, S.V. (1998) Studies in Environmental bipollution at Shrigonda. Ph.D. Thesis, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

# STUDIES ON COMPOSITION AND COMPONENTS OF AIRSPORA BELONGING TO PHYCOMYCETES OVER GREEN GRAM FIELDS.

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## ABSTRACT:

Present paper deals with the aerobiological investigation over Green gram fields by using Volumetric continuous Tilak Air Sampler was employed for exploring fungal airspora over a Green gram field at Kada, Tal.Ashti and Dist.Beed from 5<sup>st</sup> June 2007 to 28<sup>th</sup> August 2007 for one kharif season. During the present studies composition, & component of the spores belonging to phycomycetes over the Green gram field was studied. For this study of spore catches were prepared, mounted and spore scanning was carried out regularly. Two types of fungal spores belonging to the phycomycetes were trapped during one Kharif season. Apart from these various dust particles were also seen in abundance.

**Key Words:** Phycomycetes, Green Gram field, Air Sampler, metrological parameters.

## INTRODUCTION:

Aerobiology is an interdisciplinary science which deals with the study of biological component like pollen grains, fragments of fungal spores, hyphal fragments, bacteria, viruses, algae, lichens, minute insects & insect parts, protozoanycyst, etc. In the atmosphere a biotic particulates & gases affecting living organisms have been recently included in the concept of aerobiology. The aerobiological studies are mainly concern with interrelationship between the biological component in the atmosphere, source of biological component, their release in the atmosphere, their deposition & impact on health of plants & animals including human beings. Airborne infections & the resulting diseases threaten the lives & productivity of plants. Airborne diseases still pose a challenge to mankind. The role of fungi in causing diseases to crop plants, man, domestic animal, in bringing deterioration of food grains in storage, valuable monuments has been subject of great interest for long time. Standing vegetation has a great influence of aerospora of any place and it changes with changes in weather. Aerobiological survey conducted in various part of India revealed richness of aerospora. Green gram (*Phaseolus aureus* Roxb.) is one of the most important pulses crop in Marathwada region. Pulses are being grown India since ancient time. It is believed that Green Gram is native of India and Central Asia. Green gram is protein rich staple food it contains about 25% proteins, which almost three times that of cereals As

considering the survey of this crop that since last few years green gram is suffer with different types of pathogenic disease like Fungi, bacterial, viruses.

In India green gram is affected by various fungal diseases such as leaf spot caused by *Alternaria tenuissima*, *Cercospora conescens*, leaf web blight caused by *Rhizoctonia solani*, Powdery Mildew caused by *Erysiphe polygoni*, Dry root caused by *Macrophomina phaseoling*, Rust caused by *Uromyces phaseoli*, Anthracnose caused by *Glomerella lindemuthiana*. Seed and seedling root caused by *Rhizoctonia solani*, etc. Due to this disease plant yield and poor quality of pods and seeds. This decreases product and valuation. It has been reported that other legume crop diseases, G. Rangaswami (1966). It was with the aim to find out the important airborne pathogens, their distribution and seasonal variation in the concentration these investigations were undertaken, the prediction of airborne fungal disease could be attempted. If well in advance information of airspora of this crop is made timely available. In view of the above fact using by continuous Volumetric Tilak Air Sampler carried out an aero mycological survey over green gram field for kharif season. From 5<sup>th</sup> June to 28 August 2007.

#### MATERIAL AND METHODS:

Continuous Volumetric Tilak air sampler (Tilak and Kulkarni 1970) was installed in the green gram fields of a constant height at 1 meter above the ground level at Kada, Tal. Ashti, and Dist. Beed for one kharif season i.e. from 5<sup>th</sup> June to 28<sup>th</sup> Aug 2007. The air was sampled at the rate of 5 litres/minutes which left traces of deposition over cellophane tape, affixed on the outer surface of drum. The slides were prepared every after eight days & scanned regularly. The identification of spores was done which was based on visual characteristic of spores such as shape, size, colours, wall structure and ornamentation etc. The daily record of meteorological data was regularly maintained.

#### Results and Discussion:

Analysis of spore catches from the result presented in table revealed that two types of fungal spores belonging to the phycomycetes were trapped on the cellophane tape fixed on the drum of the sampler during one kharif season.

Enumeration of the identified spores of fungi belonging to the phycomycetes over the Green gram field for one Kharif season.

##### *Albugo Pers.*

Spores one celled, nearly globose, thick walled, smooth hyaline to light yellow coloured, 14-16  $\mu\text{m}$ , borne on nonseptate club shaped conidiophores in chains. These're recorded maximum during rainy season. Their contribution to the total airspora was recorded as 1.32% during the one Kharif season. The maximum monthly mean Concentration ( $910/\text{m}^3$ ) was recorded in the month of June 2007 and minimum ( $490/\text{m}^3$ ) in August 2007

during the one Kharif season. The maximum daily mean concentration ( $70 \text{ m}^{-3}$ ) was recorded on 22<sup>nd</sup> July 2007 during the one Kharif season. The recent observation (Tilak and Patil 1987) indicated that the spores of *Albugo* were prevalent in the air during the months of August and September when humidity range is between 85 and 95% with lower temperature and associated rainfall. Patil (1985) recorded 0.2% spores of *Albugo* contributing to the total airspora over jower fields at Parbhani. Jogdand (1987), Ahuja (1991) also reported this spore type over jower fields at Aurangabad. Garje (2000) recorded 0.14% of spores of *Albugo* over jower fields at Aurangabad. Mali (2002) recorded 0.42% of spores over bajara fields at Kada. Patel (2002) also reported these spores over vegetable fields. Banswadkar (2002) reported these spores over sunflower fields at Udgir.

#### *Rhizopus Ehrenbe:*

Spores one celled unequal, round to oval, thin walled, smooth, striate, dark in mass,  $9.11 \times 7 \mu\text{m}$ . It is common saprophyte and facultative parasite on mature fruits, vegetables, and also on many other substrates. Their contribution to the total airspora was recorded as 2.02% during one Kharif season. The maximum monthly mean Concentration ( $2058/\text{m}^3$ ) was recorded in the month of July 2007 and minimum ( $1134/\text{m}^3$ ) in August 2007 during one kharif season only. The maximum daily mean concentration ( $224/\text{m}^3$ ) was recorded on 21<sup>st</sup> July 2007 during the one Kharif season. *Rhizopus* spores were recorded in air by Sreeeamulu and Ramalingam (1966) at Visakhapatnam. Mishra and Kamal (1971) at Gorakhpur, recorded two species of *Rhizopus* throughout the year. Gaikwad (1974) reported 0.56% spores from Ahmedpur airspora. Tilak and Kulkarni (1975) reported 0.2% spores from Aurangabad airspora. Pande (1976) reported 0.4% spores from Nanded airspora. Patil (1985) and Jogdand (1987) from Aurangabad airspora, Kavishwar (1990) from Dhule reported these spores. Narsimha (1966) at Siddipet (A.P.), Pawar (1998) and Thite (1998) recorded these spores at Nanded and Shrigonda respectively. Garje (2000) reported 0.68% spores from Aurangabad airspora. Mali (2002) recorded these spores at Kada. Gopan (2004) and Pathare (2005) recorded 1.05% to the total airspora at Kada.

#### References:

- 1) Ahuja, S.R. (1992) Airspora of Aurangabad. Ph.D. Thesis Marathwada University Aurangabad.
- 2) Babu. M. (1983): Aerobiological Studies at Aurangabad Ph.D. Thesis, Marathwada University, Aurangabad.
- 3) Banswadkar, V.R., (2002) Airspora over Oilseed crops. Ph.D. Thesis, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- 4) Bhalke S.P. (1981): Airspora over some field. Ph.D. Thesis, Marathwada University, Aurangabad.
- 5) Bembrekar. S.K. (2005): Studies in airspora of cotton field. Ph.D. Thesis, Swami Ramanand Tirth Marathwada University, Nanded.

- 6) Gaikwad, Y.B., (1974) Studies in airspora and taxonomy of Pyrenomycetes, Ph.D. Thesis, Marathwada University, Aurangabad.
- 7) Garje, P.M., (2000) Studies in extramural environmental bio pollution. Ph.D. Thesis, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- 8) Jogdand, S.B., (1987) Airspora at Aurangabad. Ph.D. Thesis, Marathwada University, Aurangabad.
- 9) Kavishwar, A.D., (1991) Aerobiological studies at Dhule-I Ph.D. Thesis, Marathwada University, Aurangabad.
- 10) Mane, D.A., (1978) Studies in airspora over some fields. Ph.D. Thesis, Marathwada University, Aurangabad.
- 11) Mali, V.P., (2002) Studies in Aerobiology over some crop fields. Ph.D. Thesis, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- 12) Tilak, S.T. and Srinivasulu B.V. (1967). Ind. J. Microbiol., 7:168:170



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*continued on next page*



## RELEVANCE OF *ALTERNARIA* SPORES OVER GREEN GRAM FIELD

G.M. Pathare

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Dist. Beed - 414 202 (M.S.), India.

### Abstract

The present paper deals with airborne concentration of *Alternaria* spores over a green gram field for one kharif season i.e. season from 5<sup>th</sup> June to 28<sup>th</sup> August 2007 using continuous Volumetric Tilak Air Sampler concentration of airborne *Alternaria* spores was assessed and the role of the Metrological Parameters over the spore concentration were discussed. The spore concentration was maximum (5726/m<sup>3</sup>) in the month of August 2007 and minimum (4242/m<sup>3</sup>) in June 2007. Metrological parameters such as Rainfall, Relative humidity, Wind velocity and Temperature showed significant effect on liberation of spores of *Alternaria* in the airspora composition qualitatively and quantitatively.

**Key words:** Fungal spores, Green Gram field, Air Sampler, Air borne microbes.

### Introduction

Aerobiology is an interdisciplinary science which deals with the study of biological components like pollen grains fungal spores, hyphal fragments, viruses, algae, lichens, plant seeds and other propagules minute insects and insects' parts etc. in the atmosphere. The role of fungi in causing diseases to crop plants, man, domestic animals, in bringing about deterioration of food grain in storage, valuable monuments has been subject of great interest for long time. Standing vegetation has a great influence on airspora of any place and it change in weather. Aerobiological survey conducted in various parts of India revealed the richness of airspora. Greengram (*Phaseolus aureus* Roth) is one of the most important pulses crop in Marathiwada region. Pulses are being grown India since ancient time. It is believed that Green Gram is native of India and Central Asia. Green gram is protein rich staple food. It contains about 2.5% proteins. As considering the survey of this crop that since last few years green gram is suffer with different types of pathogenic disease like Fungi, bacterial, viruses.

In India green gram is affected by various fungal diseases such as leaf spot caused by *Alternaria tenuissima*, *Uromyces canescens*, leaf web blight caused by *Rhizoctonia solani*, Powdery Mildew caused by *Erysiphe polygoni*, Dry root caused by *Macrophomina phaseolina*, Rust caused by *Uromyces*

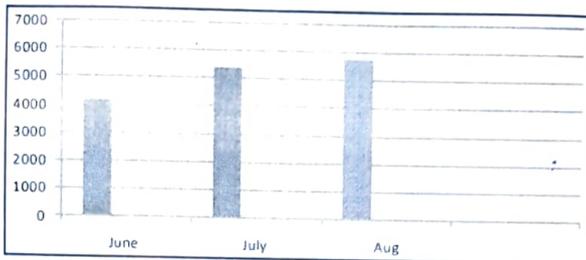
*phaseoli*, Anthracnose caused by *Glomerella lindemuthianum*, Seed and seedling root caused by *Rhizoctonia solani*, etc. Due to this disease plant yield and poor quality of pods and seeds. This decreases product and valuation. It has been reported that other legume crop diseases. G. Rangaswami (1966).

It was with the aim to find out the important airborne pathogens, their distribution and seasonal variation in the concentration these investigations were undertaken, the prediction of airborne fungal disease could be attempted. If well in advance information of airspora of this crop is made timely available. In view of the above fact using by continuous Volumetric Tilak Air Sampler carried out an aero mycological survey over green gram field for kharif season. From 5<sup>th</sup> June to 28 August 2007.

### Materials and Methods

In the present investigation an exploration of airborne spores of *Alternaria* (Tilak and Kulkarni 1970) was undertaken over the fields of green gram field for kharif season Tilak Air Sampler was installed at a constant height of 1 Meter above the ground level at Kada Tal Ashti Dist Beed (M.S.) for one kharif season i.e. from 5<sup>th</sup> June to 28<sup>th</sup> Aug 2007. The air was sampled at the rate of 5litres/minutes which left traces of deposition over cellophane tape, affixed on the outer surface of drum. The slides were prepared every offer eight days. Before the scanning, the slides were marked with a ball pen point pen in the six equal parts, each part, indicating the spore

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**Fig. 1:** Histograms Showing the monthly variations of *Alternaria* Spore type during kharif season.

catch of two hours of sampling period. Area of 9600sq.micron of the total area of the trace obtained was scanned under 10X×45X eye piece objective combination of binocular research microscope. The transformation of spore was done which was based on visual characteristics of spore such as size, shapes. The metrological data was recorded during period of investigation.

### Results and Discussion

During the period of present investigation, spores of *Alternaria* Contributed as 9.68% which total concentration of 15302/m<sup>3</sup> of air. Spores of *Alternaria* occurred continuously throughout the period of investigation spores eventually parasitic or saprophytic were collected on plant material, dead stem and leaves of *Phaseolus mungo*, *Dodonaea*. The maximum monthly mean concentration (5726/m<sup>3</sup>) was recorded in the month of August 2007 and minimum (4242/m<sup>3</sup>) of air in June 2007. Mane (1978) of Vijapur, Thube (1992) reported 7.25% incidence of these spores over wheat field at Ahmednagar. Thite (1998) and Pawar (1998) reported these spores over groundnut fields of Shrigonda and Nanded respectively. Mali (2002) and Pathare (2005) also reported these spore types at kada, while performing aerobiological survey obtained similar results.

Their daily maximum mean concentration (322/m<sup>3</sup>) was recorded on 23<sup>rd</sup> Aug 2007 Similar observation were

also recorded by Shashtri (1996) Pawar and Ahuja (1998) Aher *et al.*, (2002) Sheehly & Hugelot (1967).

During the period of present investigation the spores of *Alternaria* were almost continuously found in the atmosphere over the mung field. Metrological parameters such as rain fall, relative humidity, wind velocity and temp showed significant effect on liberation of spores of *Alternaria* in the air spores composition qualitatively and quantitatively.

The pathogenic fungi *Alternaria* generally bring about leaf spot disease incidence, however very much significant in the atmosphere, nevertheless, they did not bring about leaf spot disease incidence to the mung crop. Therefore the entire mung crop in Kharif season 2007 was found healthy.

### References

- Aher, S.K., S.V. Thite and B.N. Pande (2002). Fungal airspora of a groundnut field. *Eco, Env. and Cons.*, **8**: 283-288.
- A.V. Karne and B.N. Pande (2005). Prevalence of *Alternaria* spores in the atmosphere over potato fields.
- Mane, D.A. (1978). Studies in airspora over some fields. Ph.D. Thesis Marathwada University, Aurangabad.
- Pathare G.M. and V.P. Mali (2008). "An aerobiological survey of fungal spores in two different season over sunflower fields". *Life Science Bulletin*, **5**: (43-46).
- Pawar, S.R. and S.R. Ahuja (1988). Prevalence of *Alternaria* spores in the atmosphere over groundnut fields. *Dr. B.A.M.U. J. Sci.*, **28**: 95-100.
- Shastri, S.D. (1996). An aerobiological survey of fungal spores in two different seasons over maize fields. *Dr. B.A.M.U. J. Sci.*, **27**: 85-90.
- Sheehy, J. and J.E. Hugelot (1967). Diurnal Periodicity in *Helminthosporium* & *Alternaria* *Phytopathology*, **57**: 830.
- Tilak, S.T. and R.L. Kulkarni (1970). *A new air sampler*. *Experientia*, **26**: 443-444.

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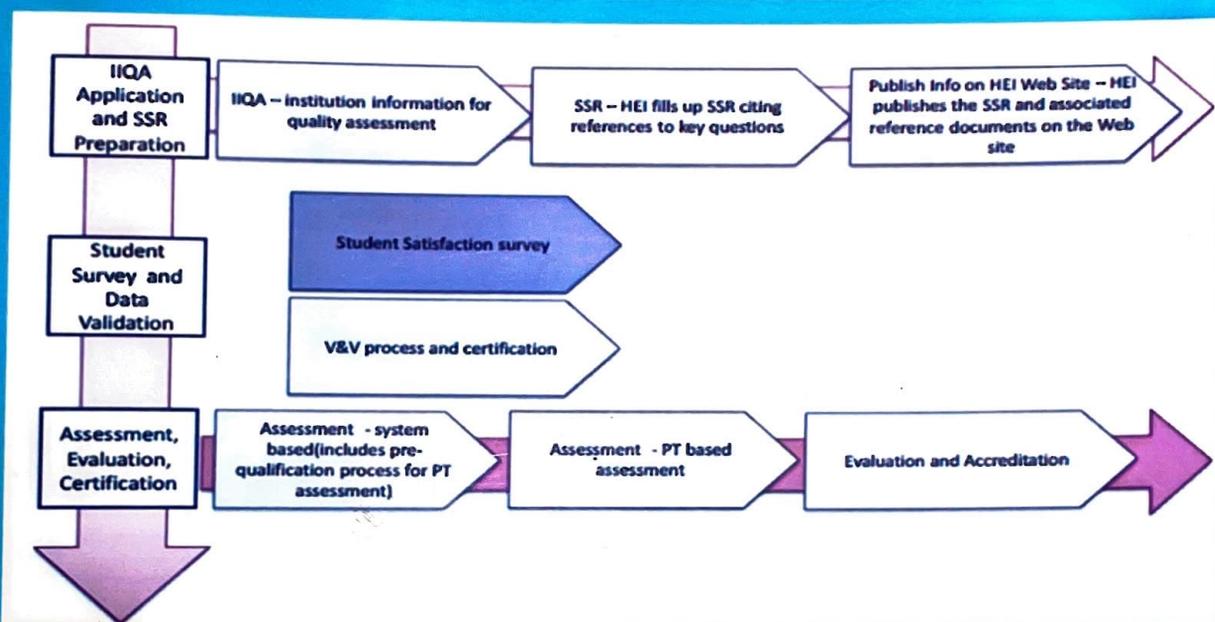
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SWATIDHAN PUBLICATIONS



## Role of ICT in Teaching -Learning and Evaluation

Suman A. Khedkar  
A. D. College, Kada.  
Tal. Ashti Dist. Beed.

### Abstract:

Information and Communication Technology (ICT) has become, a very short time and of the basic blocks of modern society. The importance of ICT in Many countries now a understanding and mastering the basic skills and concepts as a part of core education. The educational improvement and reform different activities carried organizations, practitioners and experts in the educational sector increasing recognising seminars and conferences. This Paper gives the convergenx of ICT and education. When two technologies are covering to each other, together they will generate some important opportunities and challenges. It explains the ICT education and ICT enhanced education, relationship between ICT and education of teaching and learning process. ICT is a part of lives for the last few decades affecting our society as well as individual life. Now a days ICT by Teachers, students and administrator and every people related to 'edd. A competent teacher has several skills and technology for providing successful teaching and more interesting. The ICT knowledge also required for pre-service teacher during training programme, because this interested technical knowledge helps a prospective teacher to know the World of technology in better way by which it can be applied in future for the betterments of the students. This ICT continuous and comprehensive education helps students as well as teachers. The teacher acts as a communicator for giving facts of ideas, skills and at attitudes to learners and good teaching requires interaction i6 the classroom or Inter-communication between teacher and students. In education it has helped not both of them participate in teaching learning process. The ICT concepts which change the process of learning and also different devices like computers, digital, televisions cellphones, robots come under the concepts of ICT. These divices can store, manipulate and receive information and used in education is making teaching learning process easier. ICT offers much more easy way to learner's as well as Teacher's. Learning through computers becomes to attracts students and use technology with fun and has ability to think, to create and to make decision at certain points like E-mails, chat, video conferences are useful for the improvement of reading and writing skills. The journey from traditional classrooms in which trained teachers use technology has proved very important for the teaching and learning process. There should be a good combination of tradition and technology and use of technology to allow students to learn on their own and if they need teachers help them.

20th century is the age of technology. Scientists contributed various inventions since 19th century and at present the crowd of technology and scientific in almost every field.

**Keywords:**-- Information, technology, ICT, communication, teaching, learning, society, education, prospective, comprehensive, E-mails, chat, video conferences,

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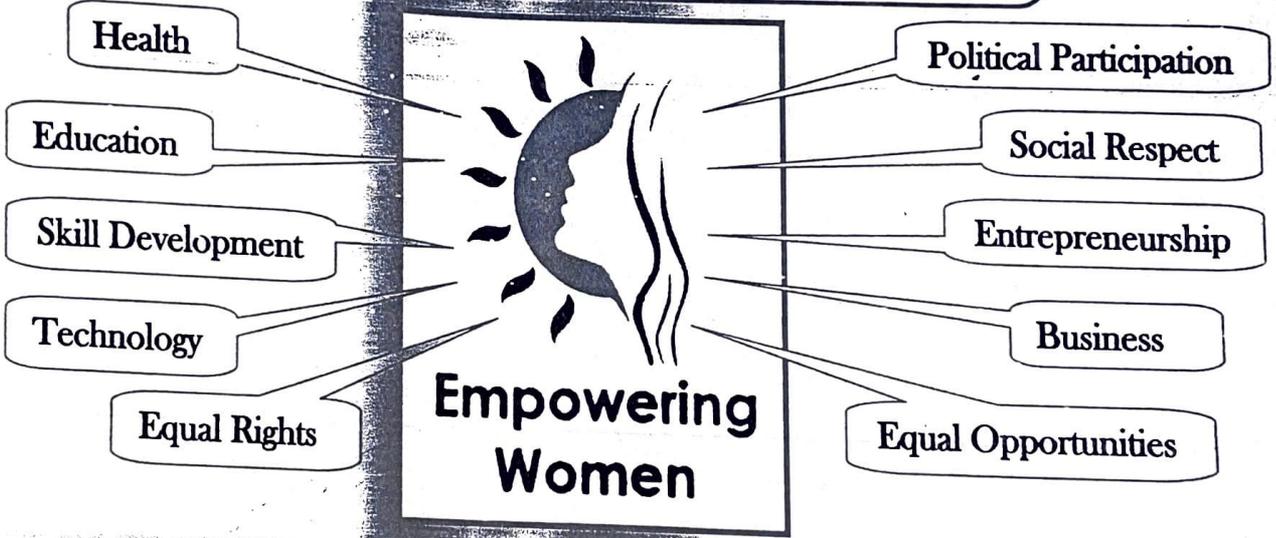
# RESEARCH JOURNEY

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## Women Empowerment Through Entrepreneurship & Skill Development



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## Skill-based Schemes for Women

Suman A. Khedkar  
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 A.D. College Kada.Tal-Ashti,  
 Dist. Beed.

### Abstract:--

*Skill development has to be an integral part of education and is not an isolated phenomenon. Government of India efforts, especially recent pasts, in the arena skill development through various schemes and programmes management structures and processes, and challenges encountered within these initiatives are discussed. If we have promote the development of our country then our mission to be skill development (skill India) initiated by the Indian government. Countries having higher and better skilled women can easily face challenges and grab opportunities in their work. Skill development refers to imparting an individual with required set of skills. Knowledge and skills are important factors for economic growth of the Country. The main aim of skill development is to achieve well growth of the India. Indian government implemented long Term and Short Term Training.*

**Keywords:--** Government, skill, development, Country, challenges, opportunities, economic, implemented.

### Introduction :--

Women constitute about 48% of the total population of the country. Women constitution of India's are legal citizens and have equal rights with men. empowerment and skill development refers to increasing the spiritual, political, social, educational, economic strength of individuals and communities. Women are integral part of every economy. All round skill development harmonious growth of a nation would possible only when women are considered as equal partners in process with men. Women particularly in rural areas have proportionately least possessions, skills, education, social status, leadership qualities and capabilities for mobilization, which determines the degree of decision making and power, and as a result dependence of women on men

The main aim of skill India (development) is to achieve growth through some points are mentioned below:

- Enhancing individuals employability to meet labour market demands.
- Strengthening competitiveness of country.
- Attracting investment in skill development.
- Improve productivity and living standards of people.

India has potential to skill labour force from organized unorganized sectors increasingly important the country should focus on advancement of skill. The skill up-gradation is fundamental to personal development, employment and employability.

Our prime minister says that "only a gradation certificate is not enough, we need skills and concentrate on skill development".

Skill India programme focuses on many schemes for women.

At present the capacity of skill development around 3.1 million persons per year. India has capacity to 15 million annually. India has target creating 500 million workers by 2022. There is a need for increasing capacity of skill development programs. The skill development initiatives

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## Ecological Studies On Weeds Of Sugarcane Fields

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Anandrao Dhonde Alias Babaji Mahavidyalaya Kada

### Abstract

A survey was conducted in the Sugarcane fields of Ahmednagar district of Maharashtra during 2019 to 2020 with an objective to predict potential and candid weed species that could dominate sugarcane fields. Among the weed species observed *Cyperus rotundus* Linn. Was found to be with a high relative dominance, relative density and relative frequency and importance value index of 25.44, 9.89, 11.11, and 15.48 and *Trianthem portulacastrum* Linn. Follows next in order with a relative dominance, relative density, relative frequency and importance value index of 10.45, 4.74, 9.50 and 8.23.

**KEY WORDS** : Sugarcane fields, weed species, Cuddalore district.

### INTRODUCTION

Sugarcane is the leading cash crop of India with an area of 5.15 million hectares, and a cane production of 355.2 million tonnes. In Maharashtra, it is cultivated over an area of 0.39 million hectares with annual production of 41.12 million tonnes (anon, 2007). It is multiple product commodity crops. Hundred tonnes of cane produce 10 tonnes of sugar, 4 tonnes of molasses, 3 tonnes of bagasse, 1.5 KW surplus power and 30 tonnes of cane tops and leaves (Yadav, 2000), Therefore it has a unique agro-industrial potential which is not found in any other crop.

With the adoption of new technologies in farmer's fields, it is possible to increase the average productivity to the maximum extent. Crops pests (insects, diseases, weeds, etc.) are reported to cause nearly 18 percent loss in crop production which at current price is estimated at 60000 crores annually. Weeds unlike other pests are Omni present and account for at least one third of this loss. They cause enormous losses and sufferings to human beings by way of reduction in crop yields and increases cost of cultivation (Gurbachan Singh, 2005).

Therefore, weed management becomes necessary to increase the sugarcane production and productivity to meet the burgeoning population. Hence, in view of prevention of weeds, present investigation of surveying of sugarcane fields are taken up to have a systematic account of weeds as a first step towards controlling them with any affective method.

# Investigation of Ethno-Medico Weeds From Marathwada Region, Maharashtra, India

Suman A. Khedkar

Department of Botany

Anandrao Dhonde Alias Babaji College, Kada

**Abstract:** The present paper reveals the importance about 45 ethno -medicinal weeds used by local people of Marathwada region. The local names in vernacular or in marathi, Botanical names and Botanical families are recorded. Weeds are commonly unwanted and undesirable plants. They grow rapidly in areas such as crop fields, gardens, lawns, parks, orchards, road sides, landscaped areas and human construction sites also. Generally weeds are unattractive and adapted ecologically to grow aggressively to capture available land. These weeds reduce air flow, causes health problems. It also affects the quality of products and income of farmers. On the other hand, the weeds are used as human food, animals' food and have medicinal values also. The claims are on remedies for common cough and cold, fever, cuts and wounds, burns, asthma, jaundice and diabetes etc. Some weeds and crop are used as insect repellent, mosquito repellent and also in snakes' bites.

**Keywords:** Weeds, Ethno- medico botany, Marathwada, vernacular, Marathi.

## I. INTRODUCTION

Weeds have been main source of food, medicine and many necessities of life since ages. Tribal people even today depend on all their food, medicine and other needs of life on the surrounding flora. Weeds are naturally grown plants, have significant value in ethanol botany and are group of plants very aggressive competitive noxious and troublesome to man. The weeds like parthenium hysterophorus L. is troublesome and causes allergic diseases but on the other hand they are useful in neuralgia and dysentery and also act as a tonic, the naturally occurring many plants are not really unwanted in the light of traditional herbal medicines (Pantnaik, 1956 and Govindiah 1981). Traditional drugs are receiving great emphasis in the recent years. Marathwada region is basically a tropical climate type containing three Seasons, summer, winter and monsoon. The arid region is to marginally semiarid ecoclimatic zone forming the western peninsula of Marathwada Tribes of this area Jalna Aurangabad Beed Parbhani Osmanabad Latur and Hingoli. Some indigenous plants for the various needs, especially medicines, personal literature revealed that they are only a few records on ethano-medicobotany from Marathwada region. The Ehnobotanical knowledge of this was known through, Jain (1991), Shastri (1996), Dastur (1996), Bhatt et al. 2001) and Jadeja (2005). some efforts have been made for the studies despite on ethnobotanical but the fact that aborigines exist in millions in this country. The present work is keeping in view that an attempt to report the traditional medicines in the region of different areas. The present investigation is to draw attention of physiochemists and pharmacologists.

## II. MATERIALS AND METHODS

During this investigation usually botanical collection tours, for recording of Ethanolmedicinally data were made by taking interviews with village Dr vaidya's Bhagat, seniors and elder persons were also interviewed for getting knowledge of Ethanol botany. These consists of information which has been traditionally passed on from one generation to the next generation in the tribal communities. Identification was done by referring references Karthikeyan et al. (1981), toshet al. (1988), it all Dane cooke (1901-1908) Santapau (1988). The local names were collected, from local inhabitants and checked for their genuine but these names should be taken in local relevance. Importance and

# Toxic Plants Diversity in Ashti Taluka of Marathwada and their Properties

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**Abstract:** A survey of Toxic plants diversity belonging to various families and toxic plants in Ashti taluka of Marathwada region. The present paper deals with total of toxic plants are Twenty-Five (25) belonging to sixteen (16) families were recorded and their toxic properties, toxic parts studied in detail. Based on the available literature traditional information and clinical symptoms, about 25 plants belonging to different angiospermic families have been identified and recorded as toxic plants. Regarding diversity family Solanaceae appeared to be dominant with 3 species like that, Euphorbiaceae and papilionaceae with three species each.

**Keywords:** Toxic plants, Diversity, Ashti taluka, Marathwada.

## I. INTRODUCTION

Some plants toxins act as general protoplasmic poisons and affect many species of plants representing different families (Agrios, 2000). Since ancient civilization, the plants were used for the fulfilment of food, clothing and shelter. Human being explored and exploited plants for fulfilling their various fundamental needs. Cases of poisoning with plants in date back to prehistoric ages when man of past ages started experimenting with plants for satisfying his basic needs (Chopra et al., 1984). With the modern man, in this modern world phytotoxicity is relatively less frequent, ranks third next to grunges and household chemicals (Frohne, 1983).

Still acute cases of poisoning were filled in hospital record, pertaining to death of man and animals either deliberately or accidentally. Toxic plants perhaps accord to with the fruit of poison, enumerating the course of evolution and signifying parallel evolutionary pathways in plants and animals (Chopra et al., 1984). Different toxic plants exhibited varied range of toxicity, in some plants the whole plant or some part of plant are toxic.

A survey of literature indicates that several works have been done or-carried out on toxic plants in all part of the word by Bernard (1988), Turner (1991), Campbell (2000), Knight (2001) etc. toxic plants found in all over the world, like that the in Ashti taluka of Marathwada have toxic plants. However, no investigation has made on diversity toxic plants of Ashti Taluka. The objective of this study is to trace out the availability and also highlighted toxic properties and principles of plant species.

## II. MATERIALS AND METHODS

Ashti taluka is in Beed subdivision of Beed district in Maharashtra state. It is located in southern region of Marathwada. The temperature of this region varied out 20°C to 35° C. The present information has been collected by survey during the months of January 2019 to October 2019. An intensive survey was conducted in the rural areas of Ashti, and plants with toxic property to man and animals were documented. Based on the ethnobotanically scrutinized data, a taxonomic list of toxic plants with their toxic properties was also provided. The voucher specimens of toxic plants were identified with the use of floras like Flora of the presidency of Madras (Gamble & Fischer, 1953). The specimen of the toxic plants was preserved in the form of herbarium. Finally, all the properties identified plants were alphabetically arranged in accordance with their botanical names and the information was tabulated along with the poisonous parts, local name, properties.

# Traditional Medicinal Uses of Neem in Human Life

**Khedkar Suman Ambadas**

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**Abstract:** *Neem is very important plant belonging to Meliaceae and Botanical name is Azadirachta indica is derived from the Persian. Azad means "Free" dirakht means "Tree". Hence it literally means "the free tree of India". This plant is very important which is medicinal property and therefore, commercially exploitable. In Ancient period it is also used in the treatment of Unani, Ayurveda, Homeopathic medicine, therefore considered as cynosure of modern medicine. It is now considered as a valuable source of unique natural products for development of industrial products. The use of traditional medicine and medical plants in most developing countries, as a normative basis for the maintenance of good health, has been widely observed. In the last century approximately 130 pharmaceutical products discovered based on the information obtained from the traditional scientist and physician. The importance of Neem tree has been recognized by the US National Academy of sciences, and publish a report in 1992, entitled 'Neem -a tree for solving global problems' Neem used to development of new drugs from medicinal plants and because of these facts the domain market for plant derived chemicals, pharmaceutical, fragrances, flavours and colour ingredients. The main purpose of this paper was to evaluate medicinal applications of Neem in human life.*

**Keywords:** Neem, Meliaceae, Azadirachta indica, Pharamaceutical

## I. INTRODUCTION

Neem is most important tree found wild and often cultivated in India and a sacred gift of nature. Neem tree is mainly cultivated in the Indian subcontinent, Neem is a member of the mahogany family, Maliaceae. The height of the tree is about 12m to 2.75m with spreading branches. Bark is dark grey and rough, leaves are green in colour, bluntly serrate and alternate. The flowers are white, having a scented odour especially at night. Its fruit is smooth, oblong and small in size and called, Nimboli. Unripe fruit is green and bitter in taste while the ripe is yellow in colour and somewhat sweetish in taste.

Neem provides shades, ornamental look, shelter belt, fuel wood and construction material and also helps in degraded land reclamation and soil conservation activities. Neem has been used extensively by humankind to treat various ailments before the availability of written records which recorded the beginning of history. Since prehistoric times, Neem has been used by humankind (Venugopalana, 2013). The Neem tree is an incredible plant that has been declared the "Tree of the 21<sup>st</sup> century" by the United Nations (United Nations Environment /programme, 2018). The US National Academy of Science published a report in 1992 entitled "Neem: A tree for solving global problems" (National Academy of Science, 1992).

## II. METHODOLOGY

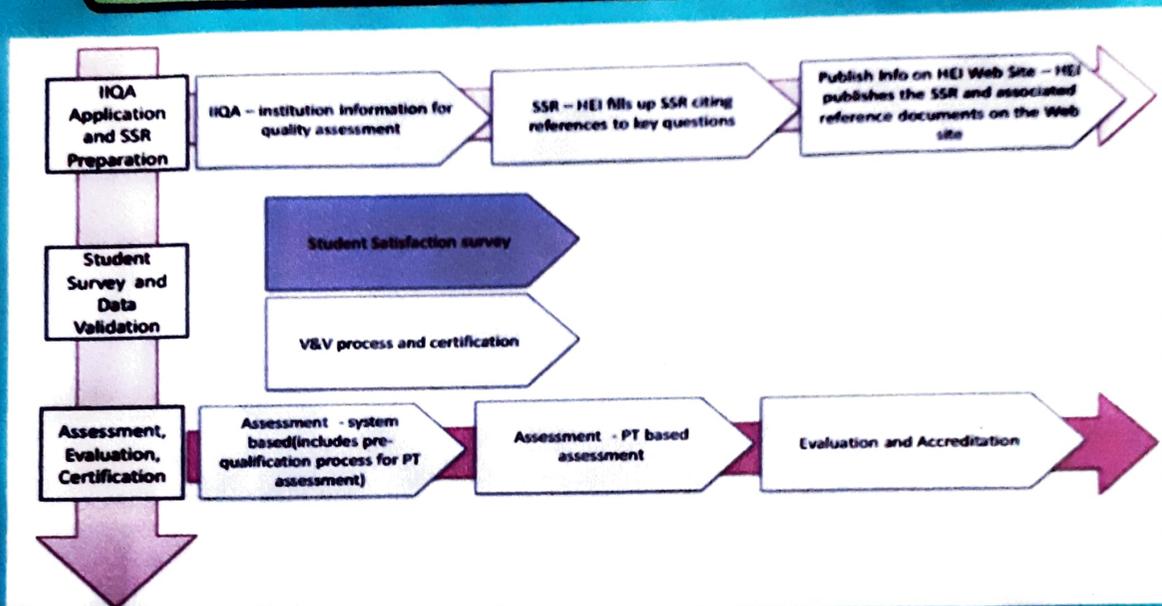
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### A) Medicinal uses of Neem in Humankind

#### a) Antiviral

Galhardi et al. studied the in vitro antiviral property of Azadirachta indica polysaccharides for poliovirus. The research of Xu et al. Showed the in vitro antiviral activity of neem seed kernel extracts against duck plague virus

## NAAC : Revised Accreditation Framework and Quality Improvement Strategies in Higher Education



Guest Editor :

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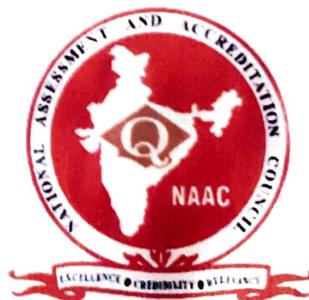
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## An Effective Use of ICT in Teaching & Learning Evaluation

**Dr. D. S. Bodkhe**

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Anandrao Dhonde Alias Babaji College, Kada

Tq- Ashti, Dist- Beed-414202 (MH)

### Abstract-

*This essay describes some benefits of implementing ICT in classroom, especially within the area of collaborative and self-managed learning. However, implementing ICT in classroom is not an easy and simple matter. There are many issues which should be addressed. Those range from the school culture, teachers barriers, finance, leadership, curriculum, and ethical issues. Those problems are experienced by both developed and developing countries. This also refutes a widespread assumption that developed and developing countries experience more barriers for implementing ICT than developed countries.*

**Key words:** ICT, Education, Learning, Drawing, Worldwide, Knowledge, Research, Experience

### Introduction:-

Recently, the development of ICT gradually replaces the traditional teaching pedagogy. Face to face classroom interaction is getting replaced by on-line communication, traditional white or blackboard is getting replaced by interactive whiteboard, and books or printed resources are getting replaced by on-line resources.

It is believed that technology can bring our education sector from the dark age to the light age. This is because the implementation of ICT in schools can bring about some potential benefits. However, to obtain those benefits we have to overcome its enormous difficulties may vary from school to school, from region to region, and from country.

It is frequently firmly believed by the developing countries that the most essential prerequisite of building prosperous nations is technological access, skills, and managements. We often assumed that what makes the developed countries developed is because they have good technological access, skills, and managements. This makes many developing countries see and learn what the developed countries do with their technology.

In reality, not only we as the developing countries face difficulties in integrating ICT into our schools sector, but also the developed countries. In some respects, we have similar difficulties, but in some others we face different difficulties. The above phenomena will be the main discussion in this essay. The discussion in this

Information and communication technologies (ICT) have become commonplace entities in all aspects of life. Across the past twenty years the use of ICT has fundamentally changed the practices and procedures of nearly all forms of Endeavour within business and governance. Within education, education is a very socially oriented activity and quality education has traditionally been associated with strong teachers having high degrees of personal contact with learners. The use of ICT in education lends itself to more student-centered learning settings. But with the world moving rapidly into digital media and information, the role of ICT in education is becoming more and more important and this importance will continue to grow and develop in the 21st century. In this paper, a literature review regarding the use of ICTs in education was provided. Effective use of ICT for Education, along with ICT use in teaching learning process:

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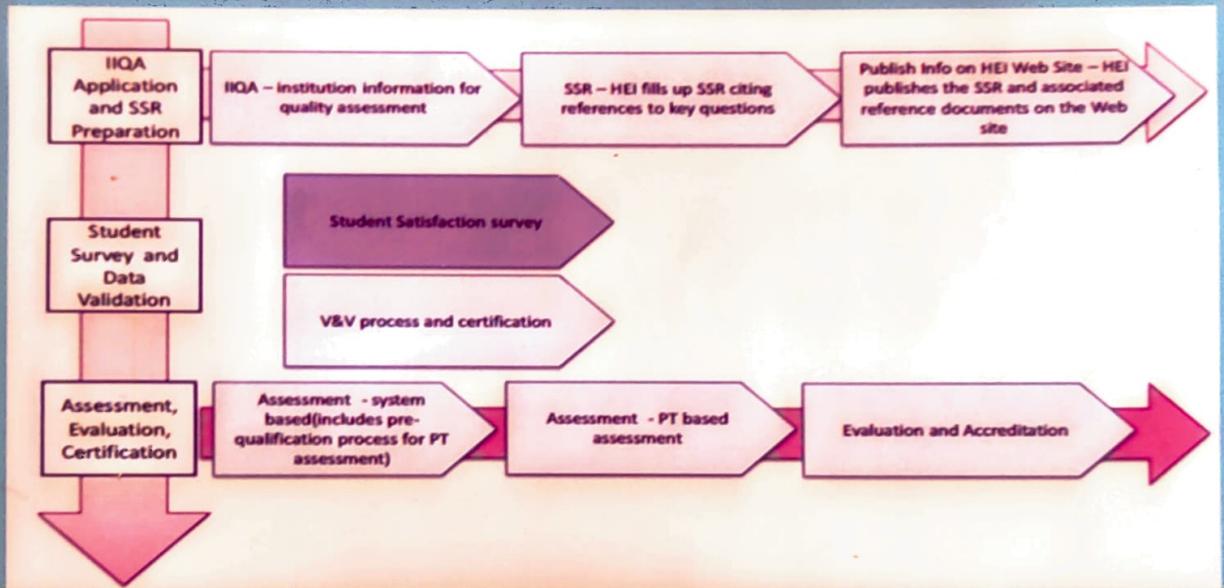
# RESEARCH JOURNEY

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NAAC : Revised Accreditation Framework and  
Quality Improvement Strategies in Higher Education



Guest Editor :

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SWATIDHAN PUBLICATIONS



## Survey of NAAC Framework with Reference to Criteria II

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### Abstract :

Recently the NAAC (National Assessment and Accreditation council) have revised the Assessment and Accreditation Process launched in July 2017. The Higher Education Institution will now be assessed with the new process whose online submission has started from Nov. 2017. The new process represents an clear paradigm shift making it ICT enabled, objective and healthy. Since the process is going to be in complemented first time, many institutes are facing many queries to fulfill with the mandatory requirements of NAAC. This paper tries to address the above issue and provide a look of the Revised and Accreditation Process there by guiding the institutes to apply for NAAC with the special reference to criteria II: Teaching Learning and Evaluation.

**Key Words:** NAAC, Assessment, Accreditation, Teaching Learning and Evaluation.

### Introduction:

In line with the philosophy of open and distinct learning, Criterion II pertains to the efforts of an Open University (OU) to reach out to large segments of the society and serve the learners of different backgrounds and abilities, through effective teaching-learning experiences. In today's world where ICT has penetrated into every aspect of teaching learning, the instructional design adopted by the institution for transaction of curricula, is a suitable mix of interactive media components. Further, learners need to be engaged in activities such as discussions and interaction through face to face tutorial/counseling sessions, seminars, project work, presentations, experiments, practicum, internship, webinars, etc. that develop their knowledge and skills in cognitive, affective and psychomotor domains. The criterion also probes into the adequacy, competence as well as the continuous professional development of the human resource that handles the programmes of study, i.e, the teachers and other academics. The efficiency of the techniques used to continuously evaluate the performance of teachers, other academics and learners is also a major concern of this Criterion. The focus of Criterion II:

**Teaching Learning and Evaluation** is captured in the following Key Indicators.

### Key Indicators :

- 2.1 > Learner Enrolment
- 2.2 > Catering to Learner Diversity
- 2.3 > Teaching-Learning Process
- 2.4 > Teachers and other Academics- Profile and Quality
- 2.5 > Evaluation Process and Reforms
- 2.6 > Learner Performance and Learning Outcomes
- 2.7 > Learner Satisfaction Survey

### 2.1 Learner Enrolment:

OUs have a mandate to reach out to large segments of society and promote educational opportunity and social justice, by providing access to higher education to persons who might

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# Women Empowerment

Through Entrepreneurship & Skill Development



Guest Editor :

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## Role of Ngos and Most Successful Womens Entrepreneurs in Osmanabad District

Smt. G. S. Jagtap

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### Abstract :

*Women Entrepreneurship is the process of obtaining basic opportunities for marginalized people, or through the help of non-marginalized others who share their own access to these opportunities. Empowerment also includes encouraging and developing the skills for self-sufficiency with a focus on eliminating the future need for charity or welfare in the individuals of the group. The role NGOs plays an important role in supporting women's entrepreneurial cause. This paper deals with most successful Women Entrepreneurship in the Osmanabad district through NGOs. .*

**Key Words:** Women, Entrepreneurship, Empowerment, NGOs, Development.

### Introduction:

Traditional culture perception perceived the roles of women to be confined within the four walls of the house, but in modern times with economic reforms there is a traditional tread that observed in terms of women's participation in economic growth and in business. Women establish their enterprise for economic independence and empowerment. In this paper to identify the factors that promote women entrepreneurship in Maharashtra state of India. Even though women have the potential to become entrepreneurs but they do not have the right opportunities to explore it. Therefore the NGOs plays an imminent role in supporting women's entrepreneurial cause. Swayam Shikshan Prayog (SSP) is one such non-government organizations (NGOs) in Pune (India). It was founded by Prema Gopal and Sheela Patel in 1998. The vision of this NGO is "To build a robust partnership ecosystems that enable grassroots women's network to access skills training, financial and digital literacy and technology and marketing platforms". While the mission is "To promote inclusive, sustainable community development by empowering women in low income climate threatened communities/region .SSP repositions women's collectives by training them as farmers and entrepreneurs and thereby increasing their economic and social resilience."

Backed by SSP five women of Osmanabad district have taken to entrepreneurship, be it organic farming or rearing an indigenous breed of poultry. In the parched and cracked lands of Marathwada region, where water, land, and income are scarce, a few women have braved the odds. Mentored and supported by SSP in Pune, these women are using newer farming techniques to earn a living and charting inspiring tales of success. But it difficult to select them.

The area of this region is 64,590 square kilometers, of which nearly 32% of its area comes under rain shadow region. 57 lakh hectares of land is suitable for agriculture, about which 98% of agriculture is dry land farming. But as many as 3,500 villages here recorded low yield. The eight districts of this region are Aurangabad, Jalna, Parbhani, Hingoli, Beed, Nanded, Latur, and Osmanabad are in the list of the 100 poorest districts in the country. The farmer's suicides and crop failure are common. Against this backdrop, the following five women stand tall with stories of hope and inspiration.

### Most Successful Womens And Their Journey:

(1)Name: Shailaja Sreekanth Narode ( Musla village)

Age: 36 yr.

Founder of: Growing organic vegetables from 2 kg to 25 varieties

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RTEB - 2020

## Influence Of Cisplatin On Glycogen Contents In Freshwater Bivalve, *Indonaiacaeruleus* In Godavari River, Maharashtra.

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### ABSTRACT

The present paper deals with the effect of Cisplatin on glycogen contents in freshwater bivalve, *Indonaiacaeruleus*. Cisplatin is one of the ingredients of anticancer drug. *Indonaiacaeruleus* were exposed to acute dose of Cisplatin one of the ingredients of anticancer drug (1.884 PPM). Acute toxicity studies for 96 h showed that *I. caeruleus* more sensitive to Cisplatin in summer, at times of high temperature, pH and total carbonate content of the water used, than in monsoon and winter. The various tissues such as the mantle, gills, foot, ovary, testis, digestive glands and whole body of the bivalves were separated, dried in the oven and their glycogen contents were estimated. Most of the tissues except the gills of *I. caeruleus* observed reduction in the glycogen. The digestive gland observed most affected tissue.

**Key words:** *Indonaiacaeruleus*, Cisplatin, Glycogen content, Godavari river.

### INTRODUCTION

Godavari is second longest river in India. Pravara Sangam is located 65 kms north of Ahmednagar. Contamination of fresh water due to increased population density, heavy industrialization and agricultural activities with a wide range of pollutants has become a matter of concern over last few decades. (Vutukuru, 2005). Heavy metals bring adverse effects on diversity of aquatic organisms. Fresh water bivalve shell fishes play an important role as bio-indicators of bio-detectors to detect various environmental fluctuations and aquatic characteristic changes due to natural and manmade calamities. In order to evaluate the adverse effect of the pollutants on aquatic organisms, there is a worldwide trend to complement physical and chemical parameters with bio markers in aquatic pollution monitoring (Abdel *et al.* 2012).

Cisplatin is the anticancer chemotherapy drug used to treat various types of cancer. The excess dose of Cisplatin are harmful or injurious to molluscs, induced nephrotoxicity is well-known side effect. The evaluation of LC<sub>50</sub> concentrations of anticancer drugs or toxicant is the first step before carrying further studies on physiological changes in animals. Cisplatin, cis-diamminedichloroplatinum II (Cis- DDP), Platinum containing co-ordination complex are effective antitumor agents utilized in the treatment of a wide variety of malignancies but antibiotics and anticancer drugs affect the bivalve or increase the death rate because they deplete the physiological ions and glycogen and other content.

### MATERIALS AND METHODS

Attempts will be made in this study to select fresh water bivalves, *Indonaiacaeruleus*. These were collected from Godavari River at Pravara Sangam which is about at the distance of 65 kms away from Ahmednagar. Mollusc shells were collected by hand picking methods. First they are made acclimatized to laboratory conditions and then washed with cold tap water. The cleaned

# WOMEN EMPOWERMENT STRATEGIES FOR DEVELOPMENT

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## ABSTRACT:

Women's empowerment and economic development are closely interrelated. Does this imply that pushing just one of these two levels would set a virtuous circle in motion? This article reviews the literature on sides of the empowerment-development nexus, and argues that the inter-relationships are probably too weak to be self-sustaining, and that continuous policy commitment to equality for its own sake may be needed to bring about equality between men and women. In view of the critical role of women in the agriculture and allied sectors, as producers, concentrated efforts will be made to ensure that benefits of training, extension and various programmes will reach them in proportion to their numbers. The programmes for training women in 'Women and Economy' are connected with each other. Women's perspectives will be included in designing and implementing macro-economic and social policies by institutionalizing their participation in such processes. Their contribution to socio-economic development as producers and workers will be recognized in the formal and informal sectors (including home based workers) and appropriate policies relating to employment and to her working conditions will be drawn up. In order to enhance women's access to credit for consumption and production, the establishment of new, and strengthening of existing micro-credit mechanisms and micro-finance institution must be undertaken so that the outreach of credit is enhanced. Other supportive measures would be taken to ensure adequate flow of credit through financial institutions and banks, so that all women below poverty line access to credit.

## Education for women

Equal access to education for women and girls will be ensured. Special measures will be taken to eliminate discrimination, universalize education, eradicate illiteracy, create a gender-sensitive educational system, increase enrolment and retention rates of girls and improve the quality of education to facilitate life-long learning as well as development of occupation/vocation/technical skills by women. Reducing the gender gap in secondary and higher education would be a focus area. Sectoral time targets in existing policies will be achieved, with a special focus on girls and women, particularly those belonging to weaker sections including the Scheduled Castes/Scheduled Tribes/Other Backward Classes/Minorities.

Sensitive curricula must be developed at all levels of educational system in order to address sex stereotyping as one of the causes of gender discrimination. A holistic approach to women's health which includes both nutrition and health services must be adopted and special attention will be given to the needs of women and the girl at all stages of the life cycle. The reduction of infant mortality and maternal mortality, which are sensitive indicators of human development, is a priority concern. To effectively meet problems of infant and maternal mortality, and early marriage the availability of good and accurate data at micro level on deaths, birth and marriages is required. Strict implementation of registration of births and deaths would be ensured and registration of marriages would be made compulsory. In accordance with the commitment of the National Population Policy (2000) to population stabilization, this Policy recognizes the critical need of men and women to have access to safe, effective and affordable methods of family planning of their choice and the need to suitably address the issues of early marriages and spacing of children.



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### Seasonal Fluctuations in Zooplankton Dynamics and their Correlations with Physicochemical Characteristics of Sina Dam in Maharashtra (India)".

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**Key words :-** Zooplankton dynamics, Physico-chemical characteristics, Correlation coefficient ( $r$ ).

**Abstract:**

The Present paper deals with study of monthly variations in the zooplankton dynamics and their correlations with some physicochemical characteristics of Sina dam during June 2017 to May 2018. The diversity and population dynamics of zooplankton is under the control of numerous physico-chemical factors, trophic status pollution influence etc. A study revealed that 17 genera of zooplanktons belonging to four major groups were observed. The population of zooplankton fluctuates along with the physicochemical factors. Highest zooplankton populations were recorded in winter months i.e. in December and January. The parameters like Dissolved Oxygen, free CO<sub>2</sub>, transparency showed significant positive correlations, whereas water temperature, pH, alkalinity, showed negative correlation with zooplankton dynamics.

#### Introduction :

The Present paper deals with study of monthly variations in the zooplankton dynamics and their correlations with some physicochemical characteristics of Sina Dam located near Nimgangardavillage in Ahmednagar districts of Maharashtra (INDIA). It is an earthfill dam on Sinariver. It lies between latitude 18°49' - 28.79' North and Longitude - 74° 56' - 26.89" East.

Fresh water ecosystems are highly diversified and having with wide range of physicochemical conditions. The occurrence and abundance of zooplankton in the waterbody depends on its productivity. The diversity of the zooplanktons in reservoirs is controlled by several physicochemical factors of water. The pattern of algal distribution and its density is the main biological factor affecting the diversity of the zooplankton dynamics, Bhowmick et al. (1993). The zooplankton acts as primary consumers. They transfer the energy from producers to higher consumers. They occupy an intermediate position in the food web between producers (algae), secondary consumers (carnivores fishes) and act as links in the food of aquatic ecosystems. The zooplankton is an important group of micro-organisms which indicates the trophic status of water body and some of them are also acting as bio-indicators of organic and inorganic pollution of water body. The seasonal fluctuations of zooplankton in relation

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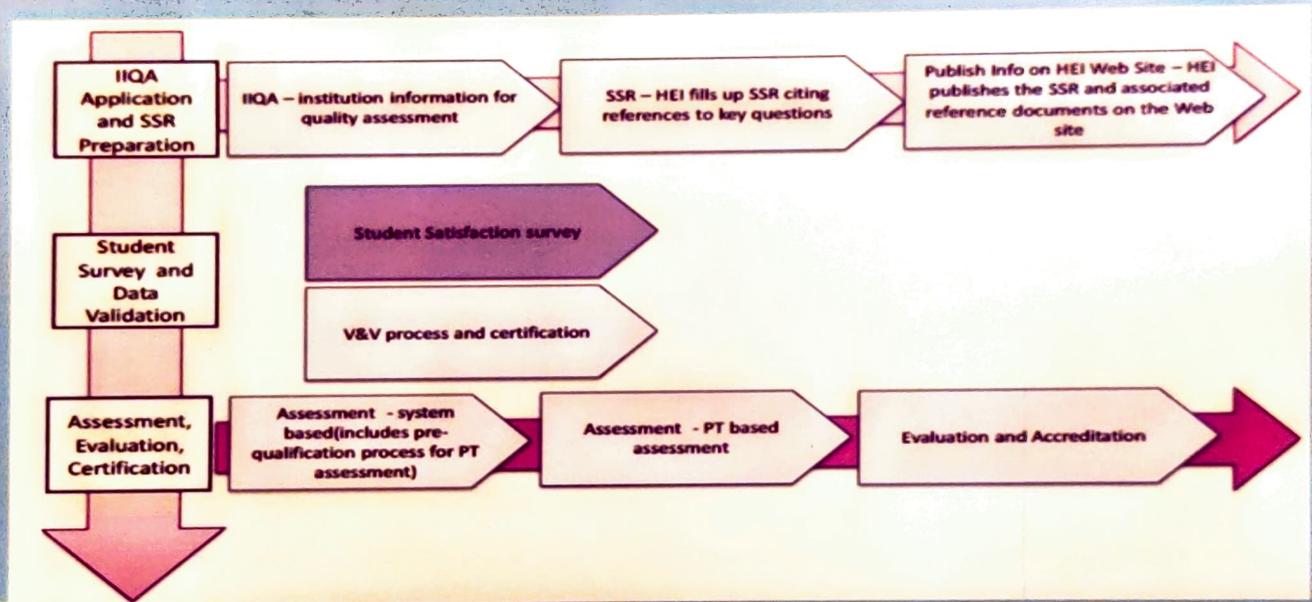
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**NAAC : Revised Accreditation Framework and Quality Improvement Strategies in Higher Education**



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## Best Practices in Higher Education : A special Emphasis on Students Support and Progression

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### Abstract:

*Student support and services is the department or division of services and support for student success at institutions of higher education to enhance student growth and development. The range and quality of student support services may be differ from institution to institution. Many factors contribute to development of student support services. Many institutions believe that student support is limited to making available good teachers, good classrooms, good library and spacious grounds. But along with this students and parents except other support services in addition to the routine services which are limited to learning and studying. The support services provided may be depend upon the heterogeneity of student population in regard to their socio-economic-geographical backgrounds, language and cultural differences. The best practices related to student support and progression should result in change for the better and help students to realize their full potential during and after their studies. They should lead to optimum performance of students in all activities such as academic, personal, co-curricular and extension.*

**Key word :** Student, Support and progression, best practices

### Introduction:

The holistic development of the student depends on intellectual capital and effective functioning of required support services along with infrastructure. Student support and services is the department or division of services and support for student success at institutions of higher education to enhance student growth and development. Student support is the gamut of all activities that help in the progression of students in their studies acquisition of skills for employability, inculcation values and overall development of personality. The range and quality of student support services may be differ from institution to institution. Many factors contribute to development of student support services. Many institutions believe that student support is limited to making available food teachers, good classrooms, good library and spacious grounds. But along with this students and parents except other support services in addition to the routine services which are limited to learning and studying. (KuppaswamyRao K a& Jagannath Patil 2004)

The Institution's concern for student progression to higher studies or employment is a pertinent issue. The range and quality of student support service have a direct bearing on student progression such as successful completion of programme, reduced rate of failures and dropouts, performance in extracurricular and curricular activities. Sustainable good practices which effectively support the students facilitate optimal progression. The institutional provisions facilitate vertical movement of students from one level of education to the next higher level or towards gainful employment. The NAAC helps to higher educational instructions by provides systemic approach to quality assurance in learning resources and supportive services.

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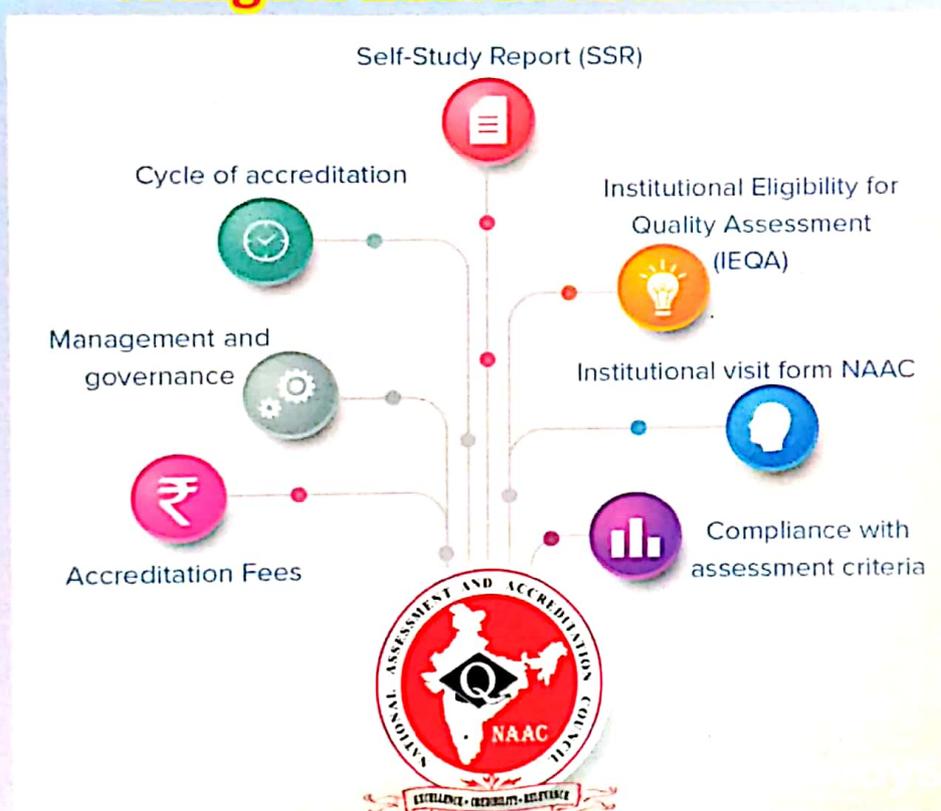
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## Role of NAAC in the Educational Development of Higher Education in India



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SWATIDHAN PUBLICATIONS



## **Innovative Practices in Infrastructure and Learning Resources in Higher Education**

**B. S. Khaire, H. G. Vidhate**

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### **Abstract:**

*The infrastructure is not just a space and premise but it is the sum total of the utility of space, structure equipment, learning resources and knowledge sharing devices. The optimal use of available infrastructural facilities are essential to maintain the quality of academic and other programmes. The supportive facilities contribute effectively curricular, co-curricular, extracurricular and other activities. Good institutions take care about optimum use of the campus facilities. Comfortable shifts are one way to optimum use of available infrastructure. The well ventilated and well equipped learning resources in classrooms and laboratories are most important in teaching learning process. A library is life line of higher education and is a curated collection of sources of information and similar resources made accessible to a defined community for the reference or borrowing. Computers are being used actively in educational institutes to improve teaching - learning process. Along with adequate classrooms, laboratories, library with enough holdings, computer center , sport facilities , the health care center, hostel and redressal cell also are also important for holistic development of the learner.*

**Key words :** Innovative infrastructure. Learning resources Campus Laboratories, Library, Higher Education

### **Introduction:**

Quality in education is the cumulative product of human and material resources in the educational institutions. The holistic development of the learner depends on intellectual capital and effective functioning of required thing along with enabling infrastructure. The infrastructure is not just a space and premise but it is the sum total of the utility of space, structure equipment, learning resources and knowledge sharing devices.

Adequate infrastructure facilities are keys for conducting effective and efficient academic programmes. The optimal use of available infrastructural facilities are essential to maintain the quality of academic and other programmes. The supportive facilities contribute effectively curricular, co-curricular, extracurricular and other activities. The NAAC helps to higher educational institutions by providing systemic approach to quality assurance in infrastructure and learning resources. (Prasad V. S. , Antony Stella (2004).

### **Quality Indicators:**

Following are the quality indicators suggested by NAAC for the infrastructure and learning resources.

1. Adequate infrastructural facilities
2. Maintenance and optimal use of infrastructure
3. Infrastructural growth matching with academic growth
4. Well-equipped laboratories
5. A good and well laid - out library
6. Computers and other learning aids


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# “RESISTIVITY AND MAGNETON NUMBER STUDY OF INDIUM SUBSTITUTED YTTRIUM IRON GARNET”

Vidhate R. G.\*

\*Anandrao Dhonde Alias Babaji Mahavidyalaya, Kada, Beed.

## Abstract

$\text{In}^{3+}$  was added in to yttrium iron garnet (YIG) samples, with a nominal composition of  $\text{Y}_3\text{In}_x\text{Fe}_{5-x}\text{O}_{12}$  with  $x = 0.0, 0.2$  and  $0.6$  were prepared by a solid-state sintering method. The samples were characterized by X-ray diffraction technique. The X-ray diffraction studies of compositions revealed the formation of single phase cubic structure with lattice constant ranging from  $12.37$  to  $12.44 \text{ \AA}$ .

The D.C. electrical resistivity  $\rho_{\text{d.c.}}$  was measured in the temperature range  $300-725 \text{ K}$ . We have studied that, the variation of magneton number ' $n_B$ ' with  $\text{In}^{3+}$  content  $x$ .

**Keyword:** Yttrium iron garnet, indium, electrical and magneton number study.

## Introduction:

Mixed metal oxides with iron (III) oxides as their main component are known as ferrites. Historically ferrites represent an important category of materials, which are in great demands due to their numerous applications in many fields. The electrical and magnetic properties of ferrites are strongly dependent on their chemical composition and their method of preparation [1, 2]. It is important to optimize the electrical and magnetic properties of ferrites, for desired applications. Due to their interesting properties scientists, researchers and engineers are still interested in designing the various types of ferrites material substituted with different cations with different valencies and prepared by different techniques.

In the various types of ferrites rare earth garnet especially yttrium iron garnet (YIG) is of great importance for scientist and technologist because of their applications in microwave communication devices such as circulators, oscillators, gyrators and phase shifters because of its small ferromagnetic resonance linewidth, high electrical resistivity and low dielectric loss in microwave regions in many fields [3]. Yttrium iron garnet (YIG) is microwave ferrite, which in polycrystalline form has specific characteristics. The magnetic and crystallographic properties of the magnetic iron garnet have been studied by many workers [4-7]. Substituted iron garnets have found extensive use in wide band non reciprocal microwave devices [8].

## Experimental:

The samples of  $\text{In}^{3+}$  substituted  $\text{Y}_3\text{In}_x\text{Fe}_{5-x}\text{O}_{12}$  garnets with  $x = 0.0, 0.2$  and  $0.6$  were prepared by well known double sintering ceramic method in which a molar ratio of analytical  $\text{Y}_2\text{O}_3$ ,  $\text{Fe}_2\text{O}_3$  and  $\text{In}_2\text{O}_3$  (all 99.99% pure AR grade chemicals, Mumbai) were mixed thoroughly in stoichiometric proportions and then



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## EFFECTS OF POLLUTIONS ON HUMAN HEALTH

R. G. Vidhate<sup>1</sup>, R.B.Kavade<sup>2</sup> N.N.Waghule<sup>2</sup><sup>1</sup>Department of Physics, Anandrao Dhonde Mahavidyalaya, Kada Dist. Beed (M.S)<sup>2</sup>Department of Physics, Bhagwan Mahavidyalaya, Ashti Dist. Beed

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**Abstract:**

Pollution is the introduction of contaminants into the natural environment that cause adverse change. Pollution can take the form of chemical substances or energy, such as noise, heat or light. Carbon monoxide (CO), excess carbon dioxide ( $\text{CO}_2$ ), oxides of sulfur, phosphorous, nitrogen, and carbon dioxide are the poisonous gases which cause death. Excess carbon dioxide causes global warming and greenhouse effect and oxide of sulfur. These are harmful chemicals and these chemicals enter the body when the leaves or fruits of plant sprayed with the pesticide are consumed by human beings or animals. These pesticides and insecticides even lead to the cause of diseases like cancer. Sound pollution damages the hearing facilities and temperature affects the usual metabolic processes. Pollutants, the components of pollution, can be either foreign substances/energies or naturally occurring contaminants. Pollution is often classed as point source or nonpoint source pollution.

Major forms of pollution include: Air pollution, light pollution, littering, noise pollution, plastic pollution, soil contamination, radioactive contamination, thermal pollution, visual pollution, water pollution

**Keywords:** Pollution, chemical substances or energy, soil, noise, water.

**INTRODUCTION:**

**POLLUTION:** Environmental pollution can be defined as a change that is not wished or desired in the chemical, physical, or biological characteristics of any component of the environment (air, water, and soil) which can cause harmful effects on various or many forms of life. Pollution is of different kinds depending on the nature of pollutants and pollutions. For example, industry, automobiles, thermal power plants, forming nuclear reactors generates distinct types of pollutants causing pollution of air, water bodies and land. Some of these pollutants are biodegradable which decomposes rapidly by natural processes and the other is non-degradable which decompose slowly in the environment. The kinds of air pollution, water pollution, soil pollution, noise pollution, and thermal pollution are explained below with the examples of pollution

**Air Polluting Factors**

- **Gases:** Carbon monoxide (CO), excess carbon dioxide ( $\text{CO}_2$ ), oxides of sulfur, phosphorous, nitrogen, and carbon dioxide are the poisonous gases which cause death. Excess carbon dioxide causes global warming and greenhouse effect and oxide of sulfur.
- **Pesticides and insecticides:** These are harmful chemicals and these chemicals enter the body when the leaves or fruits of plant sprayed with the pesticide are consumed by human beings or animals. These pesticides and insecticides even lead to the cause of diseases like cancer.
- **Metals:** The metals like lead, mercury, zinc, and radioactive elements such as radium, uranium, and thorium enter the body and leads to the poisoning of the body as they are toxic.

**"Causes of Sound Pollution and Its Effects on Human Health"**

R. B. Kavade<sup>1</sup>, R. G. Vidhate<sup>2</sup>, K. M. Jadhav<sup>3</sup>.

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<sup>2</sup>A. D. College, Kada, Tal. Ashti, Dist. Beed.

<sup>3</sup>Dr. B. A. M. University, Aurangabad.

*Abstract: Sound pollution or noise disturbance is the excessive noise that may harm the activity of human or animal life. Sound pollution affects both health and behavior. Sound pollution means any sound that is undesired by the recipient. The noise is generated by the human through various ways such as machines and transportation systems, motor vehicles, aircraft, and trains. The effects of sound on human depends upon its frequency. Human ear are known to be sensitive to an extremely wide range of intensity varied from 0 to 170 dB. Noise must be controlled and prevented by using various effective techniques at the source itself is today's need. The objective of this work is to know about the various ways of generation of noise, their effects on human, its prevention and control.*

*Keywords: Sound Pollution, Human health, dB scale.*

### 1. INTRODUCTION:

Sound pollution is one of several environmental pollutions across the world. Noise or sound pollution is usually not studied compared with other forms of pollution such as air [1, 2, 3], water [4], soil [5]. The reason is that effects of these forms of pollution on humans are more pronounced. But the sound pollution produces harmful impact on the physiological and psychological lives of humans or animals [6]. Sources of noise pollution include electrical appliances, TV and music systems, public address systems, electricity generating sets, religious buildings, noise emitting generators [7], political rallies, road advertisement, traffic [8] and air transportation [9], railway, sporting events, construction and industrial activities. The standards and limits of allowable noise levels are set by World Health Organization (WHO). Noise pollution occurs when it is observed that those standards are exceeded [10, 11]. The most common manifestation of noise pollution is hearing loss or impairment [12]. Hearing impairment is mostly classified as occupational hazards especially when the individual is affiliated with industry that propagates loud sound or noise. Moreover, several physiological and psychological effects of noise pollution exist. The combination of noise and air pollution is associated with respiratory ailments, dizziness and tiredness in school children [13, 14]. In adults, noise pollution has been found to be associated with high blood pressure [15] and cognitive difficulties [16].

### 2. CAUSES OF NOISE POLLUTION:

**2.1 Industrialization:** Machines used in most of the industries produces large amount of noise. Addition with this various equipments like exhaust fan, generator, grinding mills, compressors also participate in producing big noise. Therefore, you must have seen workers in these factories and industries wearing ear plugs to minimize the effect of noise.

**2.2 Transportation:** Large number of vehicles on roads and horn used in vehicle, airplanes flying over houses, underground trains produce heavy noise. The high noise leads to a situation where in a normal person lose the ability to hear properly.

**2.3 Social Events:** Noise is at its peak in most of the social events, like marriage, parties, pub disc or place of worship, people normally flout rules set by the local administration and create large sound pollution. People play songs on full volume and dance till midnight which makes the

**Kyoto protocol and potential carbon sequestration in India**S.P Pawar<sup>1</sup>, N.N.Waghule<sup>1</sup>, R.G.Vidhate<sup>2</sup>Bhagwan Mahavidyalaya, Ashti.Dist . Beed- 414203 (M.S) India<sup>1</sup>.A.D.College, Kada, Tal.Ashti, .Dist . Beed- 414203 (M.S) India<sup>2</sup>**ABSTRACT:**

In 1992, the United Nations Earth Summit in Rio de Janeiro produced a landmark treaty on climate change that undertook to stabilize greenhouse gas concentrations in the atmosphere. This treaty is called the "Kyoto Protocol" and came into force by placing restrictions on the industrial economies. Developing countries, including India, have ratified the agreement but have not taken on any responsibilities for reducing emissions except those that emerge from mechanisms such as the carbon sequestration and storage (CSS) occurs when CO<sub>2</sub> is absorbed by trees, plants, and crops through photosynthesis and stored as carbon in biomass, such as tree trunks, branches, foliage, and roots, as well as in the soil. According to the IPCC, carbon sequestration by forestry and agriculture alone significantly helps offset CO<sub>2</sub> emissions that contribute to global warming and climate change. Regarding global sequestration, the IPCC has estimated that 110 billion tons of carbon over the next 50 years could be sequestered through forest preservation, tree planting, and improved, conservation-oriented agricultural management. The climate change and environmental conservation is the main issue of the world. This manuscript describes processes for carbon (CO<sub>2</sub>) sequestration and discusses abiotic and biotic technologies

**Key words:** The Kyoto Protocol, Carbon sequestration, Greenhouse gas(GHG), Soil sequestration.

**INTRODUCTION:**

The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change (UNFCCC). In response to the global warming crisis, in **Rio de Janeiro** of Brazil, the 1992 (UN) conference was held on the Environment and Development. The concept of "sustainable development" is in focus. UNFCCC is the first convention to take full control of Greenhouse gas (GHG) emissions including, Carbon dioxide discharge and is an international convention to fight global warming which causing a lot of and adverse effect to the development of society and economy. India signed the United Nations Framework Convention on Climate change (UNFCCC) on June 10, 1992 and ratified it on November 1, 1993. It is ratified as Kyoto Protocol in on August 26, 2002, at Kyoto in Japan [1].

The Kyoto Protocol was adopted in 1997 and entered into force on February 16, 2005. It implements the objective of the UNFCCC to stabilize GHG concentrations "at a level that would prevent dangerous anthropogenic (human induced) interference with the climate system", setting a heavier burden on developed nations under the principle of "common but differentiated responsibilities", because of their historical responsibility for current levels of greenhouse gases in the atmosphere[2].

**GHG EMISSIONS IN INDIA**

It may be useful to begin by briefly reviewing the nature and composition of GHG emissions in India. India has the world's second largest population and is the world's sixth largest emitter of carbon dioxide (CO<sub>2</sub>). It is estimated that India emitted 908 million tons of CO<sub>2</sub> in 1998, four percent of the world's total (UNEP 2002). However, per capita emissions of CO<sub>2</sub> are 0.93 MT

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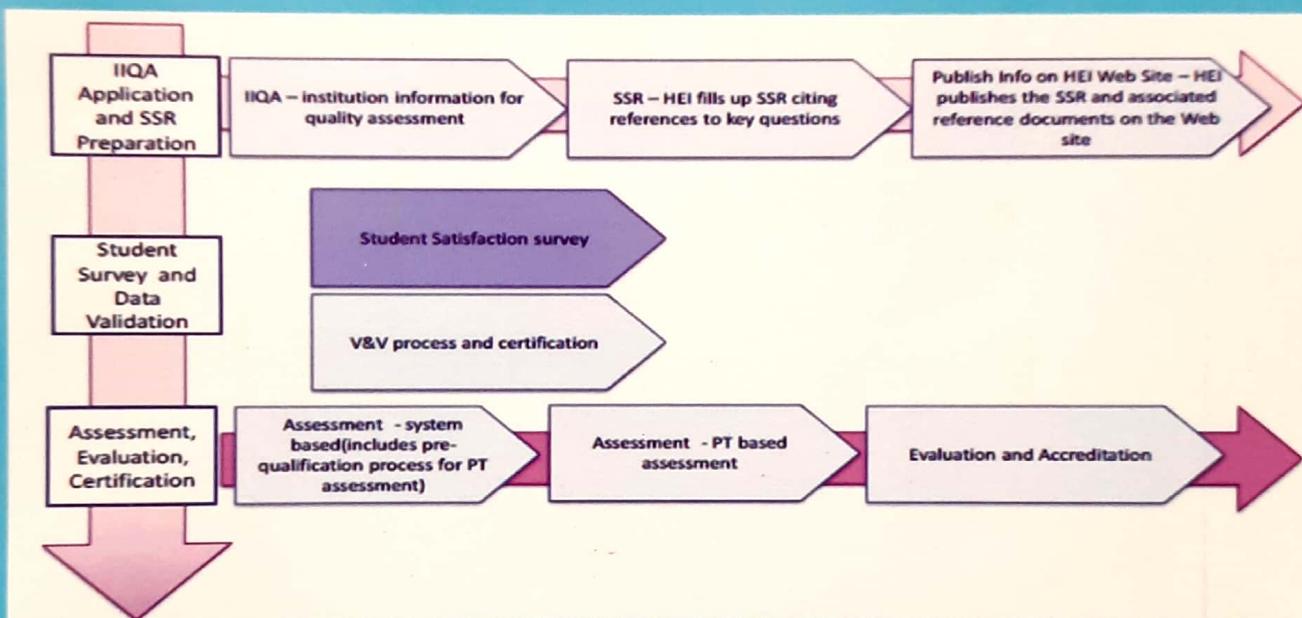
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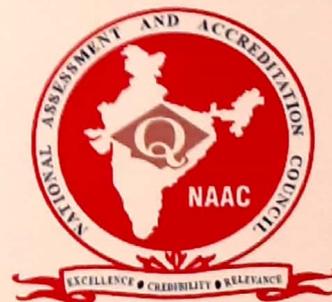
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## ICT : Its Uses and Abuses

R. G. Vidhate

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### Abstract:

*The aim of this paper is to examine the role of Information and Communication Technology (ICT) in higher education in India. Technological advantages have resulted in the substantial increase in the use of ICT in teaching courses over the last twenty years. The emergence of ICT has fundamentally changed the practices of not only business and governance but education as well. While the world is moving rapidly towards digital media, the role of ICT in education has become increasingly important. There has been an unprecedented growth in the use of ICTs in teaching, research and extension activities. Basically teaching must include two major components sending and receiving information. Ultimately, a teacher tries his best to impart knowledge as the way he understood it. So, any communication methods that serve this purpose without destroying the objective could be considered as innovative methods of teaching. The use of innovative methods in educational institutions has the potential not only to improve education, but also to empower people, strengthen governance and galvanize the effort to achieve the human development goal for the country. To make physics understandable, perceivable and enjoyable we have make use of computer in teaching Physics.*

### 1. Introduction

The Information and communication technology has made many innovations in the field of teaching and also made a drastic change from the old paradigm of teaching and learning. In the new paradigm of learning, the role of student is more important than teachers. The use of computers may be very well practiced in the environment where the use of such technology is highly possible, but there must be some sort of innovation which can also be practiced in an environment where such use of technology is on its way to growth.

The demand for education in developing countries like India has skyrocketed as education is still regarded as an important bridge of social, economic and political mobility. India has innumerable challenges in terms of infrastructure, socio-economic, linguistic and physical barriers for people who wish to access education. However, it is hoped that ICT can transform the educational scenario in the country. But then, can it address these needs and perform multiple roles in higher education to benefit all stakeholders? The emancipatory and transformative potentials of ICT in higher education in India has helped increase the country's requirement of higher education through part-time and distance-learning schemes. It can be used as a tool to overcome the issues of cost, less number of teachers, and poor quality of education as well as to overcome time and distance barriers states that differentiated ICT based education can be expected to provide greater reliability, validity, and efficiency of data collection and greater ease of analysis, evaluation, and interpretation at any educational level. While the world is moving rapidly towards digital media, the role of ICT in education has become increasingly important. It has transformed the way how knowledge is disseminated today in terms of how teachers internet

**"STUDY OF STRUCTURAL PARAMETERS AND CATION DISTRIBUTION OF  $Cu^{2+}$  IONS SUBSTITUTED NICKEL FERRITES"**

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**ABSTRACT**

**Objective:** To prepare and study the  $Cu^{2+}$  ion substituted nickel ferrites with reference to structural parameters and cation distribution

**Materials and Methods:** The samples of  $Cu^{2+}$  substituted nickel ferrites having the composition formula  $Ni_{1-x}Cu_xFe_2O_4$  ( $x = 0.0, 0.4, 0.8$ ) were prepared by solid state reaction technique using AR grade oxides. The formation of mono phase cubic spinel structure of all the samples under investigation have been carried out using XRD technique at room temperature. X-ray diffraction data were used to calculate structural parameters and X-ray intensity ratios were calculated for selected planes (220), (400), (440) and compared with the observed intensity ratios in order to obtain cation distribution.

**Results:** The results of the cation distribution indicate that  $Cu^{2+}$  and  $Fe^{3+}$  occupy both sites whereas  $Ni^{2+}$  occupy octahedral B site. In this work we report our results on structural parameters and cation distribution of mixed Ni-Cu spinel ferrites.

**Conclusion:** The structural parameters of nickel-copper system increases with Copper ions.

**Keywords:** XRD, structural parameters, cation distribution.

**INTRODUCTION**

Excellent electrical and magnetic properties of spinel ferrites make them commercially important materials. Interesting physical and chemical properties of ferrites arises from ability of those compounds to distribute cations amongst the available tetrahedral A-site and octahedral B-site and magnetic A-A, B-B and A-B interactions. Ferrites fulfill the wide selection of applications from microwave to radio frequencies and are of importance from both fundamental and applied research point of view. [1,2]. The dual property of electrical insulator and magnetic conductor makes ferrites useful in many devices like transformer cores, antenna rod, and memory chips, microwave devices, magnetic recording etc. Compared to other magnetic materials ferrites can be easily prepared, low cost and highly stable. The important electrical and magnetic properties of ferrites rely upon various factors which include method of preparation, type, nature and amount of dopants etc [3, 4]. Usually, spinel ferrites are prepared by ceramic technique. The electrical and magnetic properties are greatly influenced by the occupancy of cations at tetrahedral (A) and octahedral [B] sites. Thus, the study of cation distribution is very important in order to know the essential structural, electrical and magnetic properties of spinel ferrites. Among the spinel ferrites, nickel ferrite has special attraction due to their useful properties like inverse spinel nature, high saturation magnetization and Curie point, high electrical resistivity and chemically most stable. Copper may be Jahn Teller ion with magnetic moment one within the literature only few studies on copper substituted nickel ferrite is reported. We have prepared a series of copper substituted nickel ferrite with the formula  $Ni_{1-x}Cu_xFe_2O_4$  ( $x = 0.0, 0.2, 0.4, 0.6, 0.8$  and  $1.0$ ) using ceramic technique. Here, we report our results on structural and cation distribution studies for  $x = 0.0, 0.4$  and  $0.8$  samples.

**MATERIALS AND METHODS**

The polycrystalline samples of  $Ni_{1-x}Cu_xFe_2O_4$  ( $x = 0.0, 0.4, 0.8$ ) were prepared by solid state reaction technique [5]. A.R. grade oxides of corresponding ions ( $NiO$ ,  $CuO$  and  $Fe_2O_3$ ) were mixed in stoichiometric proportion. Grinding using agate mortar (4 h) was dispensed for every sample. The samples were pre-sintered at 1293 K

for 12 h. The sintered powder is again reground and sintered at 1353 K for 14 h. Then the powder of samples compressed into pellets of 10 mm diameter and about 1gm mass mechanical press with pressure 6 ton/inch<sup>2</sup> and sintered at 1273K for 12 h. The samples were furnace cooled to room temperature. The prepared samples were characterized by X-ray powder diffractometer within the 2θ range 20°-80° at room temperature to substantiate single phase spinel structure. The cation distribution studies were carried out using diffraction method.

**RESULTS AND DISCUSSION**

**XRD (X-ray diffraction):** Mixed spinel ferrites system of  $Ni_{1-x}Cu_xFe_2O_4$  ( $x = 0.0, 0.4, 0.8$ ) under investigation has been structurally investigated by diffraction. The XRD patterns showed in fig. 1 indicate that the samples have single phase cubic spinel structure. The Bragg's peaks are sharp and intense. The lattice parameters are calculated using XRD data and are given in Table-1. It's observed from Table-1 that lattice constant increases very slowly with increase in copper content 'x'. The little variation within the lattice parameter with copper substitution will be explained on the idea of very close ionic radii of nickel (0.69Å) and copper (0.72Å) [6]. The ionic radii of nickel and copper are approximately near one another and hence there's not much variation in the lattice constant.

**Hopping length**

The distance between magnetic ions, hopping lengths ( $L_A$  and  $L_B$ ) in tetrahedral A-sites [7] and octahedral B-sites [8] is estimated and values are given in Table 1. Fig.2 shows the relation between the hopping lengths in tetrahedral (A) and octahedral [B] sites as a function of Cu content x. The distance between the magnetic ions increases because Cu content x increases. This may be explained on the idea of difference in ionic radii of constituent ions  $Ni^{2+}$  and  $Cu^{2+}$ .

**Bond length**

The bond length  $R_A$  (is the shortest distance between A site cations and oxygen ion) and  $R_B$  (is the shortest distance between

"STRUCTURAL AND IR STUDY OF  $\text{In}^{3+}$  SUBSTITUTED YTTRIUM IRON GARNET"

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ABSTRACT

**Objective:** To prepare and study the  $\text{In}^{3+}$  substituted yttrium iron garnet with reference to structural parameters and IR spectra

**Materials and Methods:**  $\text{In}^{3+}$  was added in yttrium iron garnet (YIG) with a nominal composition of  $\text{Y}_3\text{In}_x\text{Fe}_{5-x}\text{O}_{12}$  with  $x = 0.0, 0.2$  and  $0.6$ . The samples were prepared by a solid-state sintering method. The samples were characterized by X-ray diffraction technique. The X-ray diffraction studies of compositions revealed the formation of single phase cubic structure with lattice constant ranging from  $12.37\text{\AA}$  to  $12.44\text{\AA}$ . The FTIR spectra of typical samples are taken in the range of  $500\text{--}4000\text{cm}^{-1}$ .

**Results:** IR spectra show typical absorption bands indicating the garnet nature of samples.

**Conclusion:** Magneton number ' $\eta_B$ ' decreases with increasing  $\text{In}^{3+}$  content  $x$ .

**Keywords:** Yttrium iron garnet, indium, structural properties and magneton number.

INTRODUCTION

Mixed metal oxides with iron (III) oxides as their main component are known as ferrites. Historically ferrites represent an important category of materials, which are in great demands due to their numerous applications in many fields. The electrical and magnetic properties of ferrites are strongly dependent on their chemical composition and their method of preparation [1, 2]. It is important to optimize the electrical and magnetic properties of ferrites, for desired applications. Due to their interesting properties scientists, researchers and engineers are still interested in designing the various types of ferrites material substituted with different cations with different valencies and prepared by different techniques.

In the various types of ferrites rare earth garnet especially yttrium iron garnet (YIG) is of great importance for scientist and technologist because of their applications in microwave communication devices such as circulators, oscillators, gyrators and phase shifters because of its small ferromagnetic resonance line-width, high electrical resistivity and low dielectric loss in microwave regions in many fields [3]. Yttrium iron garnet (YIG) is microwave ferrite, which in polycrystalline form has specific characteristics. The magnetic and crystallographic properties of the magnetic iron garnet have been studied by many workers [4-7]. Substituted iron garnets have found extensive use in wide band non reciprocal microwave devices [8].

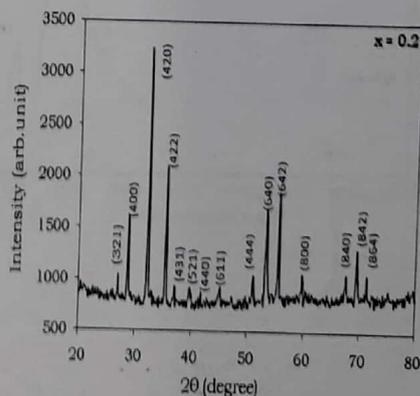
Experimental

The samples of  $\text{In}^{3+}$  substituted  $\text{Y}_3\text{In}_x\text{Fe}_{5-x}\text{O}_{12}$  garnets with  $x = 0.0, 0.2$  and  $0.6$  were prepared by well-known double sintering ceramic method in which a molar ratio of analytical  $\text{Y}_2\text{O}_3$ ,  $\text{Fe}_2\text{O}_3$  and  $\text{In}_2\text{O}_3$  (all 99.99% pure AR grade chemicals, Mumbai) were mixed thoroughly in stoichiometric proportions and then ground to very fine powder by using agate mortar for about 3 hr. These mixtures in powder form were pre-sintered in a Indfur Programmable muffle furnace at  $1200^\circ\text{C}$  for 24 hr and cooled to room temperature slowly at the rate of  $2^\circ\text{C}/\text{min}$ . The samples were reground and re-fired at  $1350^\circ\text{C}$  for 30 hr and slowly cooled to room temperature at the rate of  $2^\circ\text{C}/\text{min}$ , and then reground for 1 hr. The fine powdered sample was pelletized under the pressure  $5\text{ ton}/\text{inch}^2$ .

RESULT AND DISCUSSION

Mixed garnet ferrites system under investigation has been structurally investigated by X-ray diffraction technique. The typical

XRD pattern shows the reflections namely (321), (400), (420), (422), (431), (521), (611), (444), (640), (642), (800), (842). No extra peaks other than cubic structure have been observed in the XRD pattern. The Bragg peaks are sharp and intense. The lattice parameters are calculated using XRD data and are given in table-1. It is observed from table-1 that lattice constant increases with increase in indium content 'x'. The ionic radii of yttrium ( $0.89\text{\AA}$ )  $\text{Fe}^{3+}$  is ( $0.67\text{\AA}$ ) and indium ( $0.81\text{\AA}$ ) hence we observe variation in the lattice parameter with indium substitution. The bulk density of all samples was measured using Archimedes principle and values are tabulated in table-1. Bulk density increases with increase in indium content 'x'. Using the values of molecular weight and volume of the sample X-ray density was calculated. The values of X-ray density are also listed in Table-1. X-ray density increase with composition 'x'. The observed variation in X-ray density is attributed to increase in volume of the samples. The crystallographic parameters (lattice constant, X-ray density) are in good agreement with reported values [9]. The most intense peak (420) of XRD pattern was used to evaluate particle size of the samples. The particle size was calculated by using Scherer's formula, the values of particle size for all the composition is listed in Table 1.



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Aurangabad. (M.S.)

## 19. Environmental Application of Nanotechnology

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### Abstract

Nanotechnology is an upcoming technology that can provide solution for combating pollution by controlling shape and size of materials at the Nanoscale. Global deterioration of water, soil, and atmosphere by the release of toxic chemicals from the on-going anthropogenic activities is becoming a serious problem throughout the world. This poses numerous issues relevant to ecosystem and human health that intensify the application challenges of conventional treatment technologies. Therefore, this review sheds the light on the recent progresses in nanotechnology and its vital role to encompass the imperative demand to monitor and treat the emerging hazardous wastes with lower cost, less energy, as well as higher efficiency. Essentially, the key aspects of this account are to briefly outline the advantages of nanotechnology over conventional treatment technologies and to relevantly highlight the treatment applications of some nanomaterial.

**Keywords:** Nanotechnology, Nanomaterial application, Water, Air pollution, Soil pollution.

### Introduction

The term "Pollution" has many definitions, one being "the presence of a substance in the environment whose chemical composition or quantity prevents the functioning of natural processes and produces undesirable environmental and health effects". With growing urbanization and increasing population, pollution has become the biggest environmental challenge. Environmental pollution is undoubtedly one of the main problems that society faces today. New technologies are constantly being explored for the remediation of contaminants of the air, water,

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## 21. Non-Conventional Energy Sources in Indian's Aspect

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### Abstract

Ongoing concerns about climate change have made nonconventional sources of energy an important component of the world energy consumption portfolio. Nonconventional sources of energy technologies could reduce CO<sub>2</sub> emissions by replacing fossil fuels in the power generation industry and the transportation sector. Because of some negative and irreversible externalities in conventional energy production, it is necessary to develop and promote renewable energy supply technologies and demand for nonconventional sources of energy. Power generation using nonconventional sources of energy should be increased in order to decrease the unit cost of generation. Energy consumption depends on several factors including economic progress, population, energy prices, weather, and technology.

**Keywords:** Renewable Energy Source, Smart Grid, Technology, Distribute Energy Resource

### Introduction

The primary and most universal measure of all kinds of work by human beings and nature is energy. Everything what happens the world is the expression of flow of energy in one of its forms. Energy is the major input to drive the life cycle and improve it. Consumption of energy is done for the development of the mankind. In future, improvement in the living standard of the mankind, industrialization of the developing countries and the global demand for energy will increase with the every growing population. The development of infrastructure plays a significant role to sustain economic growth. The power sector is one of the major significant

## 9. Role of Renewable Energy Sources in Maharashtra

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### Abstract

Maharashtra has been one of the most industrialized and urbanized states in the country. The role of electric energy in our daily life is increasing exponentially. There is a rapid increase of productivity in industrial as well as agricultural sectors. It is of paramount importance to provide an economical as well as well-managed substitute of electric energy to the society. The renewable energy can be the only solution for energy crisis in this new millennium. It is critical that Maharashtra should implement a comprehensive renewable energy policy with a focus on promoting large scale solar projects in both urban and rural areas of the state. In this paper an attempt has been made to cover the present renewable energy sources available in Maharashtra.

**Keywords:** Renewable Energy, Solar, Wind, Hydro, Biomass.

### Introduction

Renewable energy sources also called non-conventional energy are sources that are continuously replenished by natural processes. For example, solar energy, wind energy, bio-energy, hydropower etc., are some of the examples of renewable energy sources. A renewable energy system converts the energy found in sunlight, wind, falling-water, sea waves, geothermal heat, or biomass into a form, we can use such as heat or electricity. Most of the renewable energy comes either directly or indirectly from sun and wind and can never be exhausted, and therefore they are called renewable.

However, most of the world's energy sources are derived from conventional sources- fossil fuels such as coal, oil, and natural gases. These fuels are often termed non-renewable energy sources. Although, the available quantity of these fuels is extremely large, they are

## 21. Renewable Energy Sources and its Applications

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### Abstract

Energy is that the basic requirement for human life. Actually agriculture, industry, transportation, communication and every one other economic activity consume an outsized amount of energy. Overall development of a nation is judged from the quantity of energy it produces and consumes in reference to its size & population. Most of the world's energy sources are derived from conventional sources-fossil fuels like coal, oil, and natural gases. These fuels are often termed non-renewable energy sources. The available quantities of those fuels are extremely large but finite then within the future renewable energy sources should be used. A renewable energy system converts the energy found in sunlight, wind, falling-water, sea waves, geothermal heat, or biomass into a form, we'll use like heat or electricity. Most of the renewable energy comes either directly or indirectly from sun and wind and should never be exhausted, and thus they're called renewable..

**Keywords:** Renewable Energy, Solar, Wind, Hydro, Biopower.

### Introduction

Present energy consumption patterns are unsustainable leading to a large scale destruction of environment and natural capital resources of earth. At present most of the energy needs are met through fossil fuels and oil. Therefore developing countries are dependent on oil imports for their energy needs. The Electricity supply in rural areas of India is abysmal. Though the govt has succeeded in providing electricity to large groups of Indian villages through Grid based electricity, the availability has its limitations. Indian villages suffer with rampant power cuts and illegal power usages. At present there are about two billion people

## A review of Nanoparticles their role in Cancer Drug Delivery

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### Abstract

Nanotechnologies are having huge potential benefits in many areas of research and application, in the field of nanotechnology nonparticles are at the leading edges. Nanotechnology has much more future-potential because of their unique size-dependent properties; these properties make these materials greater and indispensable. Nanomaterials or nanoparticles are the rapidly developing areas of nanotechnology. Currently these nanoparticles are emerging as good drug delivery carrier. New applications are being explore in cancer drug delivery using nanoparticles. In this review, we concern about nanoparticles and their structure, functional properties (Size, Application and Toxicity of Nanoparticles in Cancer Treatment) and biomedical nanoparticles, Nanodevices for Detection and Cure using nanoparticles.

### Introduction

Nanotechnology is a construction and utilization of nanomaterials, nanodevices, and systems to control material on the nanometer-length, i.e. at the level of atomic or molecular. This nanotechnology used to upgrade drug delivery system and to overcome from the complications of drug delivery for cancer treatment [1]. In the past, cancer treatment is dependent on the method of drug delivery; anticancer drugs where used for cancer patients but these drugs had major side effects on cancer patients.

Mostly Nanobiotechnologies is based on nanoparticles, these nanoparticles are used for drug delivery in the treatment of cancer. The magic of nanoparticles mesmerize everyone because of their multifunctional character and they have given us hope for the recovery from cancer disease and eradicate cancer from our society.

### Structure and Functional Properties of Nanoparticles

Nanomaterial is specify as a material of any dimension or surface structure in the nanoscale, with a range of length approximately from 1 nm to 100 nm. A nanometer is one-billionth part of a meter scale ( $10^{-9}$ m). In cancer disease, we use “Nano scale devices” for drug delivery [2]. Nanoscale devices much small than human cells but are similar in size of receptors and enzymes. Nanoscale devices small size than 50 nm can comfortably enter in most cells, and those in small size than 20 nm can pass form blood vessels as they circulate through the body. Nanodevices are suitable for targeted, customized drug delivery vehicles to bear large doses of therapeutic genes or chemotherapeutic agents into harmful cells while saving healthy cells, significantly reducing or eliminating offensive side effects in many current cancer therapies.

### Nanoparticles in Cancer Treatment: Size, Toxicity and Application

Nanoparticle size, application and toxicity [3] given in below Table.

Nanoparticle	Size	Application	Toxicity
Liposome	100-200nm	Delivery	Low
Small polymer	~200kDa	Delivery	Low
Dendrimer	2-6nm depending on generation number	Delivery	Variable depending on cell type
Virus	30-100nm	Delivery	High
Metal core dendrimers	2- 4 nm for gold	Delivery	-
Nanoshells	60-400nm	Imaging, treatment	Non-toxic
Quantum Dots	2-10nm	Sensing, Imaging	Toxic

[21] T. Abbas, M.U. Islam, M.A. Chaudhry, Mod. Phys. Lett. B 9 (22) (1995) 1419.

[22] N. Rezlescu, E. Rezlescu, Phys. Status Solidi A 23 (1974) 575.

## Influence of ammonium dihydrogen phosphate on optical traits of zinc tris-thiourea sulphate crystal

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### Abstract

The present article is focused to examine the doping effect of 0.1 mole% of ammonium dihydrogen phosphate (ADP) on linear optical properties of zinc thiourea sulphate (ZTS) single crystal. The UV-visible optical transmittance of pure and ADP doped ZTS crystal has been investigated in the range of 200 to 900 nm. The band gap of pure and doped ZTS crystal has been calculated using the transmittance data. The technological device applications of the studied crystals have been discussed in light of results.

**Keywords:** Growth from solution, UV-visible study

### 1. Introduction

The progress in nonlinear optical (NLO) materials has facilitated large revolution in the fabricating optically active technological devices. The NLO materials are currently demanded in ample amount in optical switching, telecommunications systems, optical data storage and laser frequency conversion devices [1-4]. The semi organic material contribute the properties of both organic and inorganic part which favors increased mechanical strength, high chemical stability, large nonlinearity and high induced laser damage threshold. In last decade, different metal complexes of thiourea with better nonlinear optical properties have been reported [5-6]. The zinc thiourea sulphate (ZTS) crystal has been under extensive study by many research groups due to its outstanding properties vital for device applications [5, 7-8]. The amino acids occur in zwitter ionic form in aqueous solution; also the chiral symmetry and flexible bonding network are essentially required to obtain enhanced optical performance in crystals. The influence of different amino acids (glycine, L-Lysine, L-Threonine, L-Arginine and L-Alanine) on nucleation kinetics, morphology, structural, UV-visible, dielectric, mechanical and thermal properties of ZTS crystal has been investigated [9-12]. However studies on doping of ammonium dihydrogen phosphate in ZTS crystal have not been reported. Therefore in present investigation the influence of ammonium dihydrogen phosphate on optical properties of ZTS crystal has accomplished to explore possible NLO device applications.

### 2. Experimental

The ZTS material was synthesized by dissolving zinc sulphate and thiourea in 1:3 molar ratio. The synthesized ZTS material was then gradually dissolved in distilled water to obtain the supersaturated ZTS aqueous solution. Later the measured quantity of 0.1 mole% of AR grade ammonium dihydrogen phosphate was dissolved in supersaturated solution of ZTS and allowed to agitate for eight hours to achieve the homogeneous doping of ADP in ZTS solution. The ADP doped ZTS solution was filtered in a rinsed beaker and kept for slow solution evaporation in a constant temperature surrounding. The pure and ADP doped ZTS (ADP-ZTS) crystals shown in Fig. 1 were harvested in a period of 2 weeks.

# Rectangular and Circular Microstrip Patch Antenna

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**Abstract:** While the revolution in antenna engineering leads to the fast-growing communication systems, Microstrip Patch Antennas (MPA) have proven to be the most unconventional discovery in the epoch of miniaturization. This paper incorporates the designing, simulation, and analysis of rectangular & circular microstrip patch antennas. The resonating frequency of the proposed patch antennas is 9 GHz, lying in the X band region and are designed on Rogers RT/duroid 5880 material having dielectric constant 2.2, using Ansys HFSS software.

The proposed MPAs were compared on the basis of five performance parameters (Return loss, Bandwidth, VSWR, Gain and HPBW). It was observed that rectangular MPA has a higher value of return loss, VSWR and HPBW than circular MPA. Whereas, circular MPA has greater bandwidth and gain than rectangular MPA. The proposed antennas can be used in radar, wireless and satellite applications.

**Keywords:** Circular, rectangular, microstrip patch antenna, stripline feeding

## I. INTRODUCTION

During the past few years, the urge for small antennas has expanded the attentiveness of researchers towards the scheming of microstrip patch antenna for wireless communication. Antennas are primarily specialized transducers that transform one form of energy (RF fields to AC: receiver antenna) to another (AC to RF fields: transmitter antenna) or conversely. Antennas are classified into various categories according to the physical structure and functionality.

An MPA has a base of ground plane over which a substrate having some relative permittivity of  $\epsilon_r$  is there, which consists of a patch that could be of any shape and size. These antennas are fabricated using microstrip techniques on a printed circuit board (PCB) and are mostly operated at microwave frequencies. They not only have an advantage of being small in size, but also their ease of fabrication, low cost, lightweight, and conformity have increased their use extensively. Microstrip patch antennas have progressively emerged themselves in various RF fields. [1].

The type of MPA is determined by the patch which could be of any shape, most likely to be of square, dipole, elliptical,

rectangular, triangular and circular. But the most accepted microstrip patch antennas are circular and rectangular [2]. Feeding is used to excite the antenna. Amongst the various feeding techniques, microstrip line, coaxial probe feed, proximity coupling, and aperture coupling are in demand [3]. The technique which we have used is microstrip line feeding.

The circular and rectangular microstrip patch antenna is so well accepted because they offer linear and circular polarization, compatibility to array configuration, feed line flexibility and multiple frequency operation [4].

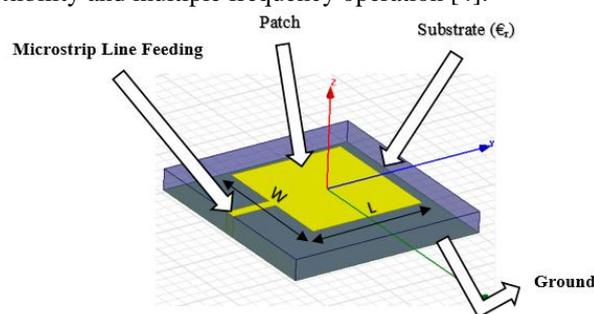


Fig. 1: Microstrip Patch Antenna.

## II. RELATED WORK

In [2] different shapes of microstrip patch antenna were implemented using Ansoft HFSS. A multiband microstrip patch antenna was designed in [4] which covers a wide range of frequencies from 2 GHz to 9 GHz using a microstrip line feeding technique. This range of frequency is used for wireless and radar applications. [5] Include the designing of rectangular and circular microstrip fed antenna for Bluetooth application, operating at a frequency of 2.45 GHz. In [6] two different configurations of rectangular microstrip fed patch antenna parameters are analyzed at 9-15 GHz and 20-32 GHz frequency ranges, for 5G applications. The author in [7] has designed rectangular and circular MPA for 5G applications for a particular frequency of 28.5 GHz. Better results were obtained for rectangular MPA as compared to circular MPA. In [8] designing of circular sector antenna for C-band (4 GHz-8GHz) is achieved along with their comparison. They have concluded that resonance frequency and radiation pattern do not change with change in feeding technique. But the antenna nature can be altered by using different substrates. In [9] major study is done to scrutinize the effect of dielectric superstrates on various parameters. The study concluded that the frequency of the antenna will move to the lower side and parameters of the antenna will alter if the superstrate is placed over the substrate.

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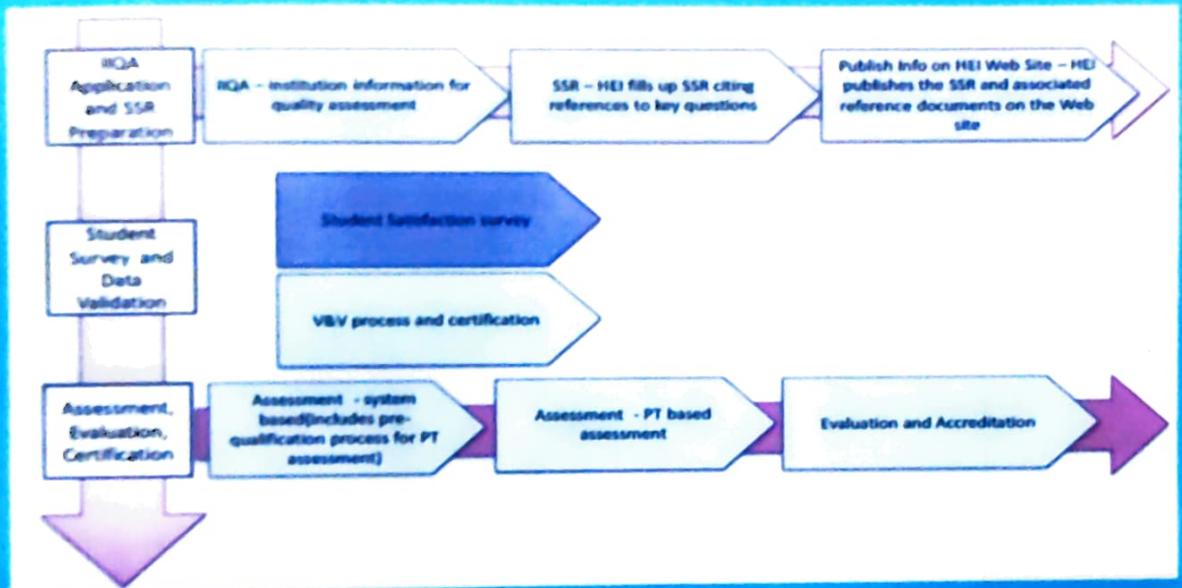
# RESEARCH JOURNEY

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**NAAC : Revised Accreditation Framework and Quality Improvement Strategies in Higher Education**



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## Information Communication Technology in Language Teaching

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### Abstract:

*Development in science and technology has solved problems in almost every field. In education it has helped not only learners but also teachers. Both of them have to participate in the teaching-learning process. Both face the different problems. But their problems have been solved at every level by the use of technology in teaching-learning process.*

*Information Communication Technology (ICT) is one of the concepts which is changing the process of learning. The devices like computers, digital televisions, cell phones, robots etc come under the concept of ICT. These devices can store, retrieve, manipulate, and receive information. Use of these devices in education in making teaching and learning process easier.*

*Traditional classrooms can not offer the comfortable atmosphere for learners which results in improper construction of learners. On the contrary, ICT offers much more easy way of learning as well as teaching. Learning through computers becomes interesting for the students. They can learn with fun as use of technology attracts them. Original experiences can build their ability to think, to create and to make decisions at certain points.*

*Teachers have to play the role of instructor; they need not participate in the activities but make the students participate in the classroom activities. Use of technology create interest and they participate without any burden. They learn through experiences. Though teachers need not participate in the procedure they have to play an important role. They can play their role perfectly only if they get a necessary training. Trained teachers can act wisely and offer the situations and experiences to help students. Their duty is only to help students if they met any difficulty.*

*Software program used in teaching and learning of language can bring comfortable and interesting atmosphere. Emails, chats, video-conferencing are useful for the improvement of reading and writing skills. The journey from the traditional classrooms to the Modern classrooms in which trained teachers use technology has been proved very important for the teaching and learning process. There should be a good combination of tradition and technology. Teachers should allow students to learn on their own, if needed they should be helped.*

*"I never teach my pupils, I only attempt to provide the conditions in which they can learn."*

**-Albert Einstein**

Twentieth century is marked as the age of technology. Scientists have contributed various inventions since 19<sup>th</sup> century and there has been the crowd of technology and scientific inventions in almost every field.

New trends in any area must be known to the nation. For that it becomes necessary to include these new elements in the academic education. This will help the children get familiar with the new discoveries in each area.



Information Communication Technology is one of the new concepts included in every field and without which some of the things can be incomplete forever. This concept cannot be defined in universally accepted definition because it has provided new communication capabilities.

Three words- information, communication and technology, each of the words can be defined separately. Information Technology (IT) is sometimes considered as ICT. IT has vast meaning and explanation.

The products like personal computers, digital television, e-mails, robots, which can store, retrieve, manipulate, receive information electronically are included under ICT. We can define ICT loosely as technologies in information and communication. ICT refers to technologies that provide access to information through telecommunications. It includes internet, wireless networks, cell phones, etc. The use of these contemporary devices for the purpose of human welfare and comfort is can be called as ICT.

Recently technologies have been used in every field. It is much of use as it helps to store and manage the information. Need of managing information for the future generation is fulfilled by the technologies. ICT is used in education at all levels. Both formal and informal education can be taught through the use of technology. Web-based learning is also called as e-learning which refers to learn the use of internet.

Students in traditional classes can be provided printed material as well as online information. This use of technology in education helps students to get updated knowledge. Online information can provide complete knowledge about recent discoveries and inventions in every field. Skills, attitudes, beliefs of the learners are considered individually. Individual attention makes each learner learn individually, considering their weaknesses and strengths. Thus knowledge and experience enable individuals to build their mental personality.

They can transfer information, make decisions using their mental ability. Teachers can play the role of instructor, facilitators or guide by helping learners to know the concepts which they are unable to understand on their own.

ICT has become tool of education in the modern society. Learner's personality is built by such type of learning which enables them to think, to make decision, to handle critical situations, to perform effectually. Traditional learning in the classroom has some limitations as it cannot provide personal attention to the learners. This need of paying personal attention is fulfilled by e-Learning in which ICT plays a vital role. It gives ability to the learners to run with fast changing world. With the help of ICT learners' personality is built in such a way that they can use their knowledge to use the opportunity they get.

The latest technology provides access to enhance and develop the relevant knowledge in every field. They can acquire more opportunities at global level. Their vision and ability to prove themselves at international or universal level expands, as their knowledge through ICT increases. Technology plays an important role in educational activities.

ICT has been developing rapidly. The learners must go with this rapid change. The process of education with the use of ICT allows learners to balance the change without any difficulty. The learners meet the opportunities in their future. Opportunities in almost every field have the technology. To get these opportunities learners must know the use of technology. ICT gives them knowledge about technology.



Parents do not get enough time to spend with their children. So children can utilize their time by spending time with internet. The knowledge about technology proves useful to improve their knowledge using internet. They can also share their poems, articles or any writings on the internet. Purpose of education and information is fulfilled by the use of ICT.

New methods of learning in classroom provide learners to learn with enjoyment and knowledge. ICT can work as a new method and makes the learning interesting. Educational programs can be extended and the skills can be developed with use of ICT. But for this teachers should be trained. This can be the limitation in the use of ICT in education. Training can be given to them which can be useful for the learners to get the advantages of the trained teachers. Traditional material used with well planned activities can be effective in language learning. Combination of the educational tools in the language learning fulfills the learners' need. Use of ICT can allow teachers and learners to extend their access to educational resources. It can be helpful in improving the understanding of language including styles, registers, texts etc. It can develop the creativity in teachers and students and they can communicate and produce original works related to language. Language teachers can offer their students new method to use a language.

English is the language used in the devices like internet. It is the media of communication used in the technologies. The good knowledge about the language can also create interest in the other subjects in which media of instruction is English. English language becomes a means to communicate. While communicating and interacting through language, teachers and learners are able to build learning environment in the classroom. During this process situations are created in which children participate using their own passion. Teachers are only instructors which can allow learners to create and experience the works on their own.

In the process of language learning technology plays much important role. In the task based learning, computers offer the software programs like word processor, graphic programs etc. Reading and writing skills are also improved by the programs like reading/writing workshop in which video conference, e-mail, chat etc. these softwares are used. Teachers' instructions will help learners to use these technologies. Using these technologies with the help of instructor learners can be experienced the technologies and the problems they face during the workshops will help them to build their knowledge. Use of technology also becomes fun as it is different from the traditional classroom teaching and learning.

It can be seen that when teacher introduce computers or ICT to their learners in the teaching-learning process they are updating learners' knowledge as well as their own. Teaching communication skills in language teaching through ICT involves change in selecting language materials, giving tasks. The traditional one-way process of teaching and learning cannot offer vast material, experience and knowledge to the learners. There are many limitations. But in the modern classrooms use of ICT has changed the situation and the horizons of the knowledge and experience have been expanded.

Teachers' activities have lessened but their responsibilities have increased. Before introducing technologies to the learners' teacher must be aware of the role of language, teaching activities, syllabus design, learning tasks and most of all the knowledge of technologies he is going to use in his classrooms. He also has to be aware of the fact that the teachers' role in this process is only of the instructor and learners' active participation is expected. This learning should make the learners able to work individually and use their abilities in the creative works.



Though teacher's role is only as an instructor he has a lot of responsibilities. He has to work so hard in order to prepare himself for his new role in the process of teaching. He has to create more opportunities for the learners so that they can learn on their own and have the ability to build their personality.

ICT plays a vital role in language teaching. It can create interesting situations in the learning process. Teaching aids like pictures, books and some other objects are now not of use. Use of computer has made the learning process 'learning with fun'. Students can enjoy learning, and learning with fun can grow their interest in learning.

Combination of technology and traditional teaching by the trained teacher will help the learners learn with fun. Experiences in learning activities and comprehension through technology create the proper situation for learning. Modern century offers discoveries and inventions which are very much of use for the learners. This technology with trained teachers can create perfect reason for learning to the learners.

#### References:

- ❖ Abbott, Chris. ICT: Changing Education. London and New York: Routledge Falmer, (2001)
- ❖ Jesson, Jill, Peacock, Graham. Cambridge ICT Starters: Initial Steps. Delhi: Cambridge University Press, (2013)
- ❖ Kanvaria, Vinod Kumar. ICT for Education: A New Concepts and Researches. Delhi: New Delhi Publishers, (2018)
- ❖ Schmidt, Eric. The New Digital Age. Great Britain: An Hachette UK Company, (2013)
- ❖ Shortis, Tim. Language of ICT: Information and Communication Technology. London and New York: Routledge, (2001)

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जागतिकीकरणाचा भाषा व साहित्यावरील प्रभाव  
वैश्वीकरण का हिंदी भाषा और साहित्यपर प्रभाव  
Impact of Globalization on Language & Literature

अतिथी संपादक :

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## Impact of Globalization on Modern Indian Fiction

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Globalization is the process of interaction throughout the world. In this process goods, ideas and cultures are spread. This is particularly an economic process of interaction. It also includes the social and cultural aspects. The main reason behind the increasing the process of globalisation is the advances in transportation and communication technology. It mainly affects business, economics and socio-cultural resources. Globalization is roughly divided into three types. They are economic, cultural and political globalisation.

Though Globalization is a term related to trade and commerce it accupys some other areas. Language is one of the tools that connects the world. Language crosses the boundaries and shares the information throughout the world. As it is the advanced world there are so many tools of sharing information like social media, television, internet. But the fact can not be denied that literature also participates in Globalization and shares information.

As Globalization affects various areas of human life it also affects the literature. Literature is a tool of entertainment. Entertainment depends on current situation and current likes and dislikes of the human mind. Today's is the world of Globalization. Technology is making it more advanced.

Literature is the written work having aesthetic excellence. It is not only for entertainment, but also for giving the sense of human values. It even gives the understanding of the life in its highest sense. Everyone lives life but the man who has studied or read literature has the better understanding of life with enjoyment.

Literature and Globalization meet due to technology. Various literary works are shared through social media across the boundaries. Technology serves literature to the farthest place of the world. It can be said that there is the Globalization of literature. It has reached allover the globe. Thus the literature and Globalization are interrelated.

Globalization has affected every field. Literature also has no exception. Modern writers are writing with technological terms. Technology has accupied a large part of literature. The issues discussed in the novels are changing. Themes, plots, characters and the interaction between them are changing. Contemporary writers are now expanding the subject-matters from family and society to the international issues. International characters are included in the stories. The interaction among them is changed.

The relationship in the old stories was informal. They were attached emotionally. But today the relationships have changed. They maintain formal interaction. There is no emotional attachments. People meet each other only to have personal benefits. These changing interactions are presented in the modern novels. To show this change the writers are using technological devices.



Chetan Bhagat uses SMS, emails and telephonic conversation to convey the interaction among the characters. Globalization has forced the modern writers to insert such innovative methods in their writings. The characters he has chosen are from technological fields. They relate to the international issues and the international characters through SMS, emails and telephonic conversation.

Shashi Tharoor uses international characters and international issues in his novel *Riot*. He uses an American woman as a central character. So the main theme becomes an international issue. The author has used journals and news items to present the story and to interact with the readers. In his *Show Business* Tharoor uses 'takes' to narrate the story. The film industry is one of the favourite areas of modern generation. So the characters and stories are chosen from this area.

Modern writers use the current and very sensitive issue of castism. Tharoor's characters are from different castes and religions. The issue of Hindu-Muslim conflict is handled throughout the novel. Chetan Bhagat also uses the theme Hindu-Muslim conflict in *The Three Mistakes of My Life*. Current political issues, religious conflicts and social classes are presented in the modern fiction as a part of Globalization.

Modern fiction has gone through various transformations since the beginning. Contemporary writers are trying their hands in the experiments in this area:

Indian writing in English initially emerged as an offshoot of English literature but soon it established itself as different from all other literatures. It gradually became a powerful medium of expression in the hands of the Indian writers to relate their native feelings in alien medium. Today it holds a place of its own in World Literatures and appears perfectly as indigenous literature. (*New Perspectives on Indian English Writings*, "Editorial" Malti Agarwal, Ed.)

Indian writers began to write in English and it became a different form of literature. Indian writers with their skilful presentation expressed their views through their writings. In the course of time it became one of the powerful media of expressing the native feelings through foreign language and Indian writers created their own place the world literature.

Globalization has affected literature and specially fiction. Modern Indian writers have created the novels which clearly shows the impact of Globalization on it. Modernization of Indian fiction is creating new trends in this area. Thus the Indian modern fictions are the products of Globalization.

#### References:

- Agarwal, Malti. "Editorial". *New Perspectives on Indian English Writings*. Ed. New Delhi: Atlantic Publishers and Distributors Pvt. Ltd., 2007.
- Chandra, N. D. R. *Modern Indian Writing in English: Critical Perceptions*. Vol. 1, New Delhi: Swarup and Sons, 2004.
- Dodiya, Jaydipsingh. *Perspectives on Indian English Fiction*. India: Swarup and Sons, 2006.
- Gupta, Suman. *Globalization and Literature*. UK: Polity Press, 2008.
- Jha, Gauri Shankar. *Current Perspectives in Indian English Literature*. New Delhi: Atlantic, 2006.
- Naik, M. K. *Perspectives on Indian Fiction in English*. Ed. Delhi: Abhinav Publications, 1985.
- Shortis, Tim. *Language of ICT: Information and Communication Technology*. London and New York: Routledge, 2001.
- Singh. Avadhesh Kumar. "Towards a Theory of Indian Novel", *Of Narratives*. Jaipur and New Delhi: Rawat Publications, 2004.

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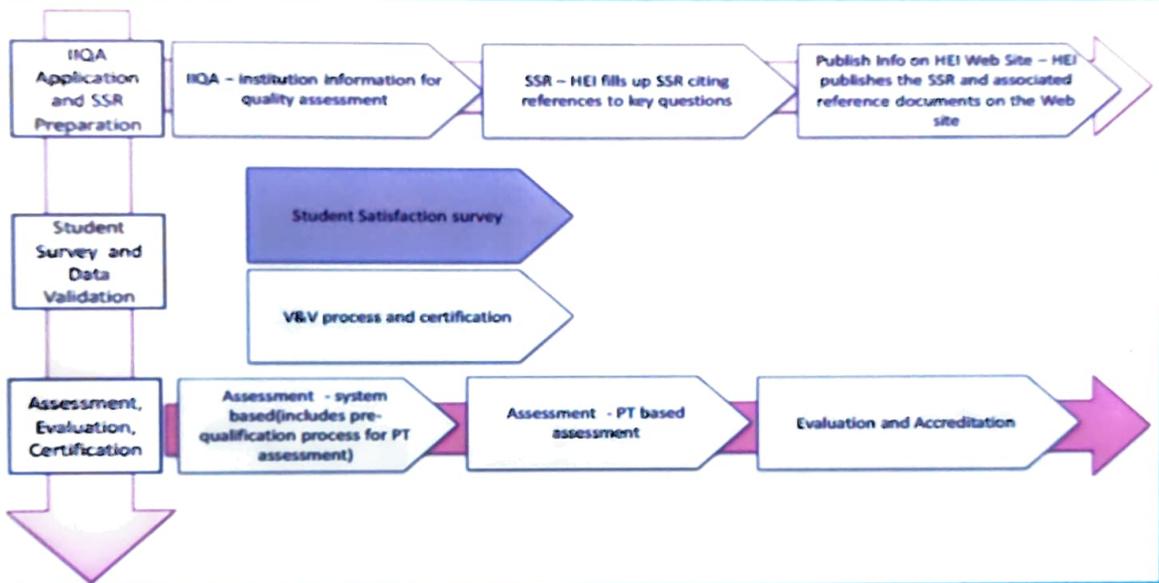
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## Information Communication Technology in Language Teaching

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### Abstract:

*Development in science and technology has solved problems in almost every field. In education it has helped not only learners but also teachers. Both of them have to participate in the teaching-learning process. Both face the different problems. But their problems have been solved at every level by the use of technology in teaching-learning process.*

*Information Communication Technology (ICT) is one of the concepts which is changing the process of learning. The devices like computers, digital televisions, cell phones, robots, etc. Come under the concept of ICT. These devices can store, retrieve, manipulate, and receive information. Use of these devices in education in making teaching and learning process easier.*

*Traditional classrooms can not offer the comfortable atmosphere for learners which results in improper construction of learners. On the contrary, ICT offers much more easy way of learning as well as teaching. Learning through computers becomes interesting for the students. They can learn with fun as use of technology attracts them. Original experiences can build their ability to think, to create and to make decisions at certain points.*

*Teachers have to play the role of instructor; they need not participate in the activities but make the students participate in the classroom activities. Use of technology create interest and they participate without any burden. They learn through experiences. Though teachers need not participate in the procedure, they have to play an important role. They can play their role perfectly only if they get a necessary training. Trained teachers can act wisely and offer the situations and experiences to help students. Their duty is only to help students if they met any difficulty.*

*Software program used in teaching and learning of language can bring comfortable and interesting atmosphere. Emails, chats, video-conferencing are useful for the improvement of reading and writing skills. The journey from the traditional classrooms to the Modern classrooms in which trained teachers use technology has been proved very important for the teaching and learning process. There should be a good combination of tradition and technology. Teachers should allow students to learn on their own, if needed they should be helped.*

*"I never teach my pupils. I only attempt to provide the conditions in which they can learn."*

**-Albert Einstein**

*Twentieth century is marked as the age of technology. Scientists have contributed various inventions since 19<sup>th</sup> century and there has been the crowd of technology and scientific inventions in almost every field.*

*New trends in any area must be known to the nation. For that it becomes necessary to include these new elements in the academic education. This will help the children get familiar with the new discoveries in each area.*



Information Communication Technology is one of the new concepts included in every field and without which some of the things can be incomplete forever. This concept cannot be defined in universally accepted definition because it has provided new communication capabilities.

Three words- information, communication and technology, each of the words can be defined separately. Information Technology (IT) is sometimes considered as ICT. IT has vast meaning and explanation.

The products like personal computers, digital television, e-mails, robots, which can store, retrieve, manipulate, receive information electronically are included under ICT. We can define ICT loosely as technologies in information and communication. ICT refers to technologies that provide access to information through telecommunications. It includes internet, wireless networks, cell phones, etc. The use of these contemporary devices for the purpose of human welfare and comfort is can be called as ICT.

Recently technologies have been used in every field. It is much of use as it helps to store and manage the information. Need of managing information for the future generation is fulfilled by the technologies. ICT is used in education at all levels. Both formal and informal education can be taught through the use of technology. Web-based learning is also called as e-learning which refers to learn the use of internet.

Students in traditional classes can be provided printed material as well as online information. This use of technology in education helps students to get updated knowledge. Online information can provide complete knowledge about recent discoveries and inventions in every field. Skills, attitudes, beliefs of the learners are considered individually. Individual attention makes each learner learn individually, considering their weaknesses and strengths. Thus knowledge and experience enable individuals to build their mental personality. They can transfer information, make decisions using their mental ability. Teachers can play the role of instructor, facilitators or guide by helping learners to know the concepts which they are unable to understand on their own.

ICT has become tool of education in the modern society. Learner's personality is built by such type of learning which enables them to think, to make decision, to handle critical situations, to perform effectually. Traditional learning in the classroom has some limitations as it cannot provide personal attention to the learners. This need of paying personal attention is fulfilled by e-Learning in which ICT plays a vital role. It gives ability to the learners to run with fast changing world. With the help of ICT learners' personality is built in such a way that they can use their knowledge to use the opportunity they get.

The latest technology provides access to enhance and develop the relevant knowledge in every field. They can acquire more opportunities at global level. Their vision and ability to prove themselves at international or universal level expands, as their knowledge through ICT increases. Technology plays an important role in educational activities.

ICT has been developing rapidly. The learners must go with this rapid change. The process of education with the use of ICT allows learners to balance the change without any difficulty. The learners meet the opportunities in their future. Opportunities in almost every field have the technology. To get these opportunities learners must know the use of technology. ICT gives them knowledge about technology.



Parents do not get enough time to spend with their children. So children can utilize their time by spending time with internet. The knowledge about technology proves useful to improve their knowledge using internet. They can also share their poems, articles or any writings on the internet. Purpose of education and information is fulfilled by the use of ICT.

New methods of learning in classroom provide learners to learn with enjoyment and knowledge. ICT can work as a new method and makes the learning interesting. Educational programs can be extended and the skills can be developed with use of ICT. But for this teacher should be trained. This can be the limitation in the use of ICT in education. Training can be given to them which can be useful for the learners to get the advantages of the trained teachers. Traditional material used with well planned activities can be effective in language learning. Combination of the educational tools in the language learning fulfills the learners' need. Use of ICT can allow teachers and learners to extend their access to educational resources. It can be helpful in improving the understanding of language including styles, registers, texts etc. It can develop the creativity in teachers and students and they can communicate and produce original works related to language. Language teachers can offer their students new method to use a language.

English is the language used in the devices like internet. It is the media of communication used in the technologies. The good knowledge about the language can also create interest in the other subjects in which media of instruction is English. English language becomes a means to communicate. While communicating and interacting through language, teachers and learners are able to build learning environment in the classroom. During this process situations are created in which children participate using their own passion. Teachers are only instructors which can allow learners to create and experience the works on their own.

In the process of language learning technology plays much important role. In the task based learning, computers offer the software programs like word processor, graphic programs etc. Reading and writing skills are also improved by the programs like reading/writing workshop in which video conference, e- mail, chat etc. these softwares are used. Teachers' instructions will help learners to use these technologies. Using these technologies with the help of instructor learners can be experienced the technologies and the problems they face during the workshops will help them to build their knowledge. Use of technology also becomes fun as it is different from the traditional classroom teaching and learning.

It can be seen that when teacher introduce computers or ICT to their learners in the teaching-learning process they are updating learners' knowledge as well as their own. Teaching communication skills in language teaching through ICT involves change in selecting language materials, giving tasks. The traditional one-way process of teaching and learning cannot offer vast material, experience and knowledge to the learners. There are many limitations. But in the modern classrooms use of ICT has changed the situation and the horizons of the knowledge and experience have been expanded.

Teachers' activities have lessened but their responsibilities have increased. Before introducing technologies to the learners' teacher must be aware of the role of language, teaching activities, syllabus design, learning tasks and most of all the knowledge of technologies he is going to use in his classrooms. He also has to be aware of the fact that the teachers' role in this process is only of the instructor and learners' active participation is expected. This learning should make the learners able to work individually and use their abilities in the creative works.



Though teacher's role is only as an instructor he has a lot of responsibilities. He has to work so hard in order to prepare himself for his new role in the process of teaching. He has to create more opportunities for the learners so that they can learn on their own and have the ability to build their personality.

ICT plays vital role in language teaching. It can create interesting situations in the learning process. Teaching aids like pictures, books and some other objects are now not of use. Use of computer has made the learning process-'learning with fun.' Students can enjoy learning, and learning with fun can grow their interest in learning.

Combination of technology and traditional teaching by the trained teacher will help the learners learn with fun. Experiences in learning activities and comprehension through technology create the proper situation for learning. Modern century offers discoveries and inventions which are very much of use for the learners. This technology with trained teachers can create perfect reason for learning to the learners.

#### References:

- ❖ Abbott, Chris. ICT: Changing Education. London and New York: Routledge Falmer. (2001)
- ❖ Jesson, Jill. Peacock, Graham. Cambridge ICT Starters: Initial Steps. Delhi: Cambridge University Press. (2013)
- ❖ Kanvaria, Vinod Kumar. ICT for Education: A New Concepts and Researches. Delhi: New Delhi Publishers. (2018)
- ❖ Schmidt, Eric. The New Digital Age. Great Britain: An Hachette UK Company, (2013)
- ❖ Shortis, Tim. Language of ICT: Information and Communication Technology. London and New York: Routledge, (2001)

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जागतिकीकरणाचा भाषा व साहित्यावरील प्रभाव  
वैश्वीकरण का हिंदी भाषा और साहित्यपर प्रभाव  
Impact of Globalization on Language & Literature

अतिथी संपादक :

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Swapnali Korhale-Pawar



## **Impact of Globalization on Modern Indian Fiction**

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Globalization is the process of interaction throughout the world. In this process goods, ideas and cultures are spread. This is particularly an economic process of interaction. It also includes the social and cultural aspects. The main reason behind the increasing the process of globalisation is the advances in transportation and communication technology. It mainly affects business, economics and socio-cultural resources. Globalization is roughly divided into three types. They are economic, cultural and political globalisation.

Though Globalization is a term related to trade and commerce it accupys some other areas. Language is one of the tools that connects the world. Language crosses the boundaries and shares the information throughout the world. As it is the advanced world there are so many tools of sharing information like social media, television, internet. But the fact can not be denied that literature also participates in Globalization and shares information.

As Globalization affects various areas of human life it also affects the literature. Literature is a tool of entertainment. Entertainment depends on current situation and current likes and dislikes of the human mind. Today's is the world of Globalization. Technology is making it more advanced.

Literature is the written work having aesthetic excellence. It is not only for entertainment, but also for giving the sense of human values. It even gives the understanding of the life in its highest sense. Everyone lives life but the man who has studied or read literature has the better understanding of life with enjoyment.

Literature and Globalization meet due to technology. Various literary works are shared through social media across the boundaries. Technology serves literature to the farthest place of the world. It can be said that there is the Globalization of literature. It has reached allover the globe. Thus the literature and Globalization are interrelated.

Globalization has affected every field. Literature also has no exception. Modern writers are writing with technological terms. Technology has accupied a large part of literature. The issues discussed in the novels are changing. Themes, plots, characters and the interaction between them are changing. Contemporary writers are now expanding the subject-matters from family and society to the international issues. International characters are included in the stories. The interaction among them is changed.

The relationship in the old stories was informal. They were attached emotionally. But today the relationships have changed. They maintain formal interaction. There is no emotional attachments. People meet each other only to have personal benefits. These changing interactions are presented in the modern novels. To show this change the writers are using technological devices.



Chetan Bhagat uses SMS, emails and telephonic conversation to convey the interaction among the characters. Globalization has forced the modern writers to insert such innovative methods in their writings. The characters he has chosen are from technological fields. They relate to the international issues and the international characters through SMS, emails and telephonic conversation.

Shashi Tharoor uses international characters and international issues in his novel *Riot*. He uses an American woman as a central character. So the main theme becomes an international issue. The author has used journals and news items to present the story and to interact with the readers. In his *Show Business* Tharoor uses 'takes' to narrate the story. The film industry is one of the favourite areas of modern generation. So the characters and stories are chosen from this area.

Modern writers use the current and very sensitive issue of castism. Tharoor's characters are from different castes and religions. The issue of Hindu-Muslim conflict is handled throughout the novel. Chetan Bhagat also uses the theme Hindu-Muslim conflict in *The Three Mistakes of My Life*. Current political issues, religious conflicts and social classes are presented in the modern fiction as a part of Globalization.

Modern fiction has gone through various transformations since the beginning. Contemporary writers are trying their hands in the experiments in this area:

Indian writing in English initially emerged as an offshoot of English literature but soon it established itself as different from all other literatures. It gradually became a powerful medium of expression in the hands of the Indian writers to relate their native feelings in alien medium. Today it holds a place of its own in World Literatures and appears perfectly as indigenous literature. (*New Perspectives on Indian English Writings*, "Editorial" Malti Agarwal, Ed.)

Indian writers began to write in English and it became a different form of literature. Indian writers with their skilful presentation expressed their views through their writings. In the course of time it became one of the powerful media of expressing the native feelings through foreign language and Indian writers created their own place the world literature.

Globalization has affected literature and specially fiction. Modern Indian writers have created the novels which clearly shows the impact of Globalization on it. Modernization of Indian fiction is creating new trends in this area. Thus the Indian modern fictions are the products of Globalization.

#### References:

- Agarwal, Malti. "Editorial". *New Perspectives on Indian English Writings*. Ed. New Delhi: Atlantic Publishers and Distributors Pvt. Ltd., 2007.
- Chandra, N. D. R. *Modern Indian Writing in English: Critical Perceptions*. Vol. 1, New Delhi: Swarup and Sons, 2004.
- Dodiya, Jaydipsingh. *Perspectives on Indian English Fiction*. India: Swarup and Sons, 2006.
- Gupta, Suman. *Globalization and Literature*. UK: Polity Press, 2008.
- Jha, Gauri Shankar. *Current Perspectives in Indian English Literature*. New Delhi: Atlantic, 2006.
- Naik, M. K. *Perspectives on Indian Fiction in English*. Ed. Delhi: Abhinav Publications, 1985.
- Shortis, Tim. *Language of ICT: Information and Communication Technology*. London and New York: Routledge, 2001.
- Singh, Avadhesh Kumar. "Towards a Theory of Indian Novel", *Of Narratives*. Jaipur and New Delhi: Rawat Publications, 2004.

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**- Chief & Executive Editor**

## Narrative Techniques in Chetan Bhagat's 'One Night At The Call Centre'

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Indian English Literature has been attracting people around the world. Experimental and innovative works have been making Indian English Literature more attractive and readable. Plays, fictions, short stories and poetry are changing as aliterary forms. Dramatists, writers and poets are using their new ideas in their works. Thus the innovative and experimental writing is being created.

Fiction is one of the literary forms which is read and liked right from the seventeenth century. Even today fiction is read all over the world with interest. Fiction has been changing since its beginning. Fiction writers are making it different and more beautiful with their new ideas. Modern writers are creating wonderful pieces of literary works. They are changing in presentation, structure, style and technique. New experiments have been made in this area. Conventional structures and methods are getting changed and innovative methods and techniques are being used in modern Indian fictions.

There are many writers who are contributing in fiction writing. Each one has his own place in Indian English literature. Each one has been making his fiction different in style and technique. Shashi Tharoor, Vikas Swarup, Arundhati Roy, Rohinton Mistry, Salman Rushdie, etc. have created their own place in Indian English literature. Chetan Bhagat is among them who has contributed to the world of English fiction. He has created his fictions with inovative ideas. He has been attracted a large number of readers for reading his fictions.

Newly entered novelist has contributed his novels to English literature. Being a modern writer he has included every intetesting element in his fictions as his imagination and intelligence allowed him. Being modern literature his works have to be innovative and experimental. Chetan Bhagat has fulfilled every necessity of the modern writing. Characterization, way of story telling, reflection of contemporary social picture, narrative techniques, these aspects are presented in a different manner as to suit to the modern writing.

Chetan Bhagat's novels have been the interesting literary pieces among the Indian English literature. His novels represent the youth and their world with their ambitions, dreams, failure, success, struggle and the world around them. His stories are full of new and interesting issues. The newness in them creates interest in reading. His characters are very much like real world, yet interesting. There is no exaggeration or unacceptable characters or incidents in his novels, which makes it very much like real world and seems that we know them. Still there are some of the incidents which are totally out of the world. Readers do not really understand the relation between these unreal incidents and the real world. But readers become interested as to find out the reality about it. Bhagat satisfies the readers as the novel travels towards the end. Thus readers close the last page of the novel without getting disappointed.



Chetan Bhagat writes his novels using narrative techniques like the first person narration, conversation, flashback, etc. But with these conventional techniques he uses some of the innovative techniques like SMS, emails, fax, prologues and epilogues. His prologues always make readers think that his novels are based on true events. He himself is involved in the prologue and has some connection with one of the characters of the novel. His novels are his experiences. He himself has agreed that he shares his real life experiences through his novels.

The prologues always force to accept his novels as the true story. The epilogue following the last chapter again forces to think it as the reality. The story may be the truth or the imagination, the fact can not be denied that his stories arise interest in novel reading.

Chetan Bhagat follows the chronological order, though he uses flashback technique and takes the readers in the past. In *One Night @ the Call Centre*, under the title 'My past dates with Priyanka', Bhagat covers the past incidents with the flashback technique. This technique takes the readers in the past. Bhagat uses the flashback technique to present the past events which may answer the questions aroused in the readers' minds. Bhagat takes the readers in the past using flashback technique. He tells the past events related to the characters and the story.

The story begins with Shyam's dream and he introduces himself in the first chapter using first person narration. Shyam goes on narrating the happenings around him. Most of the story is revealed through conversation. Readers automatically have some questions in their minds. He also uses conversation in such a way that the conversation makes readers curious about the characters. Some questions about the characters and the story are aroused in readers' minds after reading the conversation. Bhagat presents his characters by making them to talk each other. It is Bhagat's technique to create suspense and make them curious about the novel.

Bhagat also adds conversation which helps to present the characters' opinions in their own words. Shyam speaks to the readers and informs about his call center job as well as about his family. Bhagat presents Shefali's character and her relationship with Shyam through conversation. First Person Narration helps to express inner thoughts of the narrator and his feelings about the other characters.

Bhagat has used new techniques like telephonic conversation, SMS, emails, FAX, in his novel which reveals the character and suits the story as the characters are the employees in the call-centre, where telephone, mobile, computer, internet, email and other technologies are used. Thus it seems relevant to the story and the characters using narrative technique like SMS. The author uses FAX as a narrative technique. As letter is one of the narrative techniques developing the story, FAX also develops the story. It is one of the innovative narrative techniques used by the author. Shyam – the lead character – reveals his thoughts with the descriptive paragraphs. Other characters' feelings are presented through Shyam's point of view. Bhagat chooses some incidents to present the characters. It is Bhagat's style to present the characters through their behaviour.

Different generations can easily understand the stories by Bhagat because of his style of presentation. His choice of words is so proper that readers can easily understand his thoughts. life at call center, secularism, pressure in today's education system, inter – community marriages, corruption. the current trends - be it marriage, work, relationships, or any other issue related to youth.

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## सूत्रसंचालनाचे स्वरूप आणि तंत्र

प्रा. डॉ. गोपीनाथ पा. बोडखे  
संशोधन मार्गदर्शक, मराठी विभाग  
आनंदराव धोंडे ऊर्फ बाबाजी महाविद्यालय  
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## प्रस्तावना

मराठी भाषा ही आपली मायबोली भाषा होय. समाजव्यवहारामध्ये मराठी भाषेचा साधा उल्लेख निघाला तरी आपला ऊर अभिमानाने भरून येतो. आपणास माहिती आहे, संत ज्ञानेश्वरांच्या 'माझा मन्हाटाचि बोलु कवतिके' यापासून ते माधव ज्यूलियन यांच्या मराठी असे आमची मायबोली इथपर्यंतच्या अनेक काव्यपंक्तींनी आमृताशी पैज लावणाऱ्या आपल्या मराठी भाषेमध्ये महाराष्ट्रातील अनेक विद्यापीठांनी पदवी स्तरावर उपयोजित मराठीचा प्राधान्याने समावेश केलेला आहे. त्यामुळे अनेक व्यक्तींना दैनंदिन व्यवहारात मराठी भाषेचे उपयोजन कौशल्य आत्मसात होण्यास मदतच होय असते. सूत्रसंचालन हे एक भाषेतील कौशल्य होय. सूत्रसंचालनाची प्राचीन परंपरा आहे प्राचीन नाटकातील सूत्रधाराच्या परंपरेकडे ती जाते पूर्वीच्या काही नाटकामध्ये विदूषक सूत्रसंचालनाचे काम करीत होता विदूषक किंवा तो सूत्रधार नाटकातील कथानकाचा सारांश कथन करीत असतो व पुढे काय घडणार आहे हे ऐकण्यासाठी, पाहण्यासाठी प्रेक्षकांना सावध करीत असतो. परंतु आधुनिक कालखंडामध्ये नाटकात असे सूत्रधार किंवा विदूषक दिसत नाहीत तरी ही सूत्रधाराचे परंपरा आधुनिक कालखंडामध्ये सूत्रसंचालकाकडे गेली आहे इंग्रजी भाषेत सूत्रसंचालकास अँकर म्हणतात व सूत्रसंचालनास अँकरिंग म्हणतात. अलिकडील कालखंडात लग्नविधी पासून ते दूरदर्शन सूत्रसंचालनास व्यक्तीसमयिक स्वरूप प्राप्त झालेले आहे. मोठमोठ्या कार्यक्रमांमध्ये उत्कृष्ट संचालनासाठी सूत्रसंचालकास मान्यता दिले जाते. सूत्रसंचालक प्रभावी वक्तृत्वशैली समयसुचकता बाळगणारा असतो त्यामुळे त्याच्या सूत्रसंचालनास जीवंतपणा येतो त्यामुळे श्रोत्यांना सूत्रसंचालन कंटाळवाणे वाटत नाही

## व्याख्या -

सूत्रसंचालन म्हणजे काय? सूत्रसंचालन शब्दाचा अर्थ पुढीलप्रमाणे सांगितला जातो. सूत्र म्हणजे धागा, सूत, नियम व तत्व असा होतो, तर सूत्र या शब्दाचा दुसरा अर्थ संबंधित माहितीगार व्यक्ती असा होतो. संचालन शब्दाचा अर्थ धोरण अमलात आणणे असा होतो. प्रा. राजशेखर सोलापूरे यांनी सूत्रसंचालनाची व्याख्या करतांना म्हणतात - 'सूत्रसंचालन म्हणजे माहितीगार व्यक्तीद्वारे नियम व तत्वाने एखाद्या कार्याचे धोरण अमलात आणण्यासाठी केलेली मार्गदर्शनाची एक क्रिया होय.' तर शेवटी थोडक्यात सांगावयाचे तर सूत्रसंचालन म्हणजे सूत्रबद्ध कार्यक्रमांची व्यवस्था होय.

## सूत्रसंचालन एक कौशल्य-

वर्तमान काळात सूत्रसंचालनास भाषिक कौशल्ये म्हणतात आहे व त्याला कलेचा दर्जा प्राप्त झाला आहे. सूत्रसंचालक हा बहुभाषिक, काव्यात्मक प्रकृतीचा, गोड वाणीचा, आकर्षक व्यक्तीमत्वाचा, चौफेर ज्ञान असलेला, समयसूचक व कार्यक्रमात प्राण ओतणारा असला तर कार्यक्रम अधिक उठावदारपणे संपन्न होतो. अधिक काळ स्मरणातही रहातो.

प्रभावी सूत्रसंचालनामध्ये काही तरी बोलायचे म्हणून चालत नाही. श्रोत्यांना नको असलेले रटाळ वक्तव्ये करायचे. सूत्रसंचालनात चुकीचे संदर्भ द्यायचे व ऐन वेळी वक्तव्ये नाव विसरायचे असे झाल्यास सूत्रसंचालकाची तारांबळ होते व कार्यक्रमातील प्राण निघून जातो. म्हणून सूत्रसंचालनामध्ये समयसूचकता हवी आहे. सूत्रसंचालन एक शैली कला आहे सूत्रसंचालन कौशल्य आत्मसात करण्यासाठी त्याने आपले मधाळ, माधुर्य व प्रसादगुणांचे लेखन करून भाषाशैली निर्माण केली पाहिजे आपल्या पहिल्या वाक्याने श्रोत्यांना आपल्याकडे खेचून घेता आले पाहिजे. श्रोता सावध झाला पाहिजे. वक्त्यालाही आपले मनोगत व्यक्त करण्यास प्रोत्साहन देऊन, उत्साह वाढविला पाहिजे सूत्रसंचालनास अचूकता नेटकेपणा व बिनचूकपणा या गोष्टी आवश्यक असतात. सूत्रसंचालनाची कला व त्यामधील कौशल्य अवगत केल्यास व्यावसायिक, जाहिरात, रेडिओ व दूरचित्राणी क्षेत्रात संधी मिळू शकते तसेच सामाजिक, राजकीय, धार्मिक, शैक्षणिक व सांस्कृतिक कार्यक्रमात सूत्रसंचालकास म्हणून सन्मानाने बोलावले जाऊ शकते. व्यावसायिक सूत्रसंचालक म्हणून तो आपले स्थान निर्माण करू शकतो.

## सूत्रसंचालनाची पूर्वतयारी-

सूत्रसंचालकाचे वाचन चौफेर असावे, ज्ञानकोश, शब्दकोश विविध विषयावर माहिती देणारे पुस्तके, इंटरनेटवरून मिळणारी माहिती, चालू घडामोडी, संताची वचने, चारोळ्या, कवितेच्या चांगल्या ओळी, सुभाषिते, शब्दकोटीचे ज्ञान, कल्पकता या सर्व

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## “मराठी विज्ञानकथेतील कल्पनाविश्व”

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### प्रस्तावना

माणसाने आदिम कालखंडापासून वैज्ञानिक प्रगती हळुहळु साधलेली आपणास दिसून येते. मानव ज्याप्रमाणे वैज्ञानिक प्रगती करू लागला त्याप्रमाणे त्याचे फायदे आणि तोटेही त्याच्या लक्षात आले. आदिम कालखंडातील माणूस निसर्गाच्या सानिध्यात राहत होता. राना-वनात, जंगलामध्ये फिरत असताना झाडांच्या घर्षणातून 'ज्वाला' निर्माण होणारा शोध त्याला लागला. पिकलेले फळे व कंद-मुळ्यापासून तो आपली उपजिविका भागवत असे पण ज्वाला (अग्नी) चा शोध लागल्यानंतर त्याच्या लक्षात असे आले की, अन्न रुचकर पध्दतीने भाजणे, शिजवणे या प्रक्रियेतून त्याला सुविधा उपलब्ध करून घेता आली. तसेच सुरुवातीला लज्जारक्षणासाठी झाडांची पाने मानवाला कमरेभोवती गुंडाळावी लागत असे पण कापसापासून कापडनिर्मिती साधण्याचा उद्योग चरखा ते जलदगतीच्या यंत्रापर्यंत त्याने प्रगती साधली आणि विविध प्रकारची उंची वस्त्रे तो परिधान करू लागला. अनेक प्रकारचे शोध मानवी जीवनाला सु-साह्य करू लागले. अन्न, वस्त्र व निवारा या मुलभूत गरजा पूर्ण होऊ लागल्या. स्व सुखासाठी व वेळेची बचत करण्यासाठी माणूस विकसीत साधनांचा विकास करू लागला. रात्रीच्या अंधारात दिव्यांच्या माध्यमातून प्रकाशाचा झगमगाट करणे, उष्णतेपासून बचाव करण्यासाठी विद्युत पंख्याचा वापर करणे. भ्रमंतीसाठी सायकल पासून हवाई जहाजांची निर्मिती करणे, रेल्वे, दूरदर्शन, मोटारगाड्या, दूरध्वनी, मोबाईल, शेतीतील विविध पिके, रसाळ फळे अशा प्रकारच्या अनेक सुविधा विज्ञानामुळे माणूस साध्य करू शकला आहे.

वर्तमान कालखंडामध्ये अनेक घरातून स्कूटर, मोटारसायकल किंवा गाडी वापरली जाते. त्याप्रमाणे बहुतांश घरातून हेलिकॉप्टर वापरले जाण्याची शक्यता नाकारता येत नाही किंवा अजून पन्नास वर्षांनंतर रॉकेटपेक्षा जलदगतीने धावणाऱ्या यंत्रांचा शोध लागेल. भारतात राहणारा माणूस सायंकाळचा फेरफटका मारण्यासाठी अमेरिका, जपान, चीन, रशिया किंवा इंग्लंड या देशात जाऊन १५ ते २० मिनिटात फिरून येईल. मंगळ, बुध, गुरु, शनि या ग्रहावर मानव वस्ती असेल. आज वाटणाऱ्या कल्पना कदाचित उद्या विज्ञानाच्या प्रगतीमुळे सत्यात उतरण्याची शक्यता नाकारता येत नाही. अशा अधिक शोधाच्या तृष्णा निर्माण होऊन यापुढील शोधाची गरजही विज्ञानाला भासू लागेल. कल्पना आणि वास्तव याचा मेळ घालून अप्रुप, आश्चर्य वाटणाऱ्या अनेक कथा मराठी साहित्यात लिहिल्या जात आहेत. याविषयी भाष्य करताना डॉ. सु.प्र.कुलकर्णी म्हणतात, “विज्ञान ही आमची सामुग्री आहे. या सामुग्रीच्या आधारे आम्ही एक कलात्मक जग पाहतो. त्यादृष्टीने त्यांची मांडणी करतो. त्याचा संबंध माणसाशी-मानवी भाव-भावनांशी जोडून एक कथा निर्माण करतो. ही कथा भविष्यदर्शी असते. वर्तमानातील स्वप्न हे उद्याचे



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# मराठी साहित्यातून व्यक्त होणाऱ्या स्त्री जाणिव

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कडा ता. आश्टी जि. बीड

## प्रस्तावना

भारतीय समाजव्यवस्थेमध्ये शिक्षणाचा जस-जसा प्रसार झाला, समाजामध्ये स्थित्यंतर होऊन निरनिराळ्या प्रदेशातील तसेच खेड्यातील, सर्वसामान्य, भटके-विमुक्त आणि आदिवासी लोक शिक्षणाच्या प्रसारामुळे जागृत होऊ लागले. पेतकरी, पेतमजूर, कामगार आणि स्त्री वर्गापर्यंत शिक्षणाचे लोण पोहचले. शिक्षणाचे लोकषाहीकरण सुरु झाल्यामुळे समाजातील प्रत्येक घटक सन्मानाने जीवन जगण्याचा प्रयत्न करू लागला. पण तरीही सामाजिक परिस्थिती विशम होतीच. समता, स्वातंत्र्य, न्याय बंधूता आणि स्वाभिमान या मानवी मूल्यांची जाण होऊन समाजातील वेगवेगळ्या पातळ्यावरील विशमतेचे समुच्च उच्चाटन झाले असे नाही. विशमव्यवस्था आणि त्याविरुद्धचे असमाधान यामुळे समाजमनातील वेदना व्यक्त होऊ लागली. कथा, कादंबरी, कविता आणि आत्मचरित्र वाङ्मयातून ही संवेदना व्यक्त झालेली आपणास पहावयास मिळते.

जन्माला आलेल्या स्त्रीला आयुष्यात मुलगी, पत्नी, आई, सून, मावषी, मामी अशा अनेक वेगवेगळ्या पातळीवर भूमिका पार पाडाव्या लागतात. लहानपणी तिला वडिलांच्या छायेत, तरुणपणी पतीच्या छायेत आणि म्हातारपणी मुलाच्या छायेत आपले जीवन जगावे लागते. पुरुशसत्ताक स्त्रीला पाहिजे तेवढे निर्णय स्वातंत्र्य दिलेले नाही. स्त्रीने कुटुंबासाठी स्वतःचे सुख, दुःख नव्हे तर अस्तित्व विसरून दुसऱ्याची सेवा करायची, त्याग करत आपले जीवन जगत रहायचे. असे जीवन जगायचे, असे असले तरीही मराठी भाषिक स्त्रीयांनी स्वातंत्र्यपूर्व व स्वातंत्र्योत्तर काळात आपल्यावर होणाऱ्या अन्यायाविरुद्ध लिहिण्यास सुरुवात केली याचे चित्र मराठी वाङ्मयात आपणास मिळते. बदललेल्या परिस्थितीचा अविश्कार स्त्रीयांच्या लेखनात जाणवू लागला.

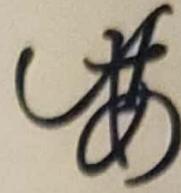
## कविता

आधुनिक कालखंडात सन 1920 ते 1950 या काळातील स्त्रीयांच्या कविता गीतांच्या स्वरूपातून निर्माण झालेल्या दिसतात. तरीही त्या गीतामधून त्यांच्या धार्मिक व कौटुंबिक त्यागाची भावना व्यक्त झाल्या आहेत. आधुनिक कालखंड (1950) पर्यंतच्या प्रमुख कवियत्री म्हणून संजीवनी मराठे यांचे नाव पुढे येते. त्यांचे 'काव्यसंजीवनी' (1932), 'राका' (1939), 'संसार' (1943) व 'छाया' (1949) असे काव्यसंग्रह प्रकाशित झालेले दिसतात. त्यानंतर बांता षेळके यांच्या 'वर्शा' हा कवितासंग्रह (1947) मध्ये प्रकाशित झाला. 1951 मध्ये लक्ष्मीबाई टिळक व बहिणाबाई चौधरी यांचे संपादित काव्यसंग्रह प्रकाशित झाले. इंदिरा संताचा 'षेला' (1951) हा प्रकाशित झालेला दिसतो. त्यानंतर पुढे अनेक कवयित्री लिहू लागल्याचे दिसतात.

वडील, मुलगा, पती आणि प्रियकर ही स्त्री जीवनातील परीरनिश्ट अशी नाती आहेत. विशेष म्हणजे पती व प्रियकर ही नाती अत्यंत नाजूक आहेत. साहित्य हे त्या लेखक किंवा कवीच्या जीवनाचा आरसा मानण्याचा प्रघात आहे. त्यामुळे काही स्त्री कवयित्रींनी आपल्या पूर्वायुष्यातील 'प्रेम' व 'प्रियकर' उघडकिस येऊ नये म्हणून पुरुशमुखी कविता लिहित्याची जाणिव होते. त्यांच्या कवितेमध्ये पतीलाच प्रियकराच्या रूपात पाहिले जाते. कुठल्याही साहित्यकृतीची उंची ही त्या

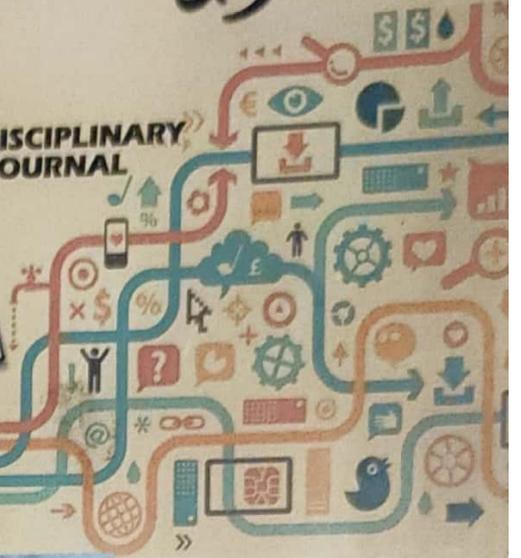


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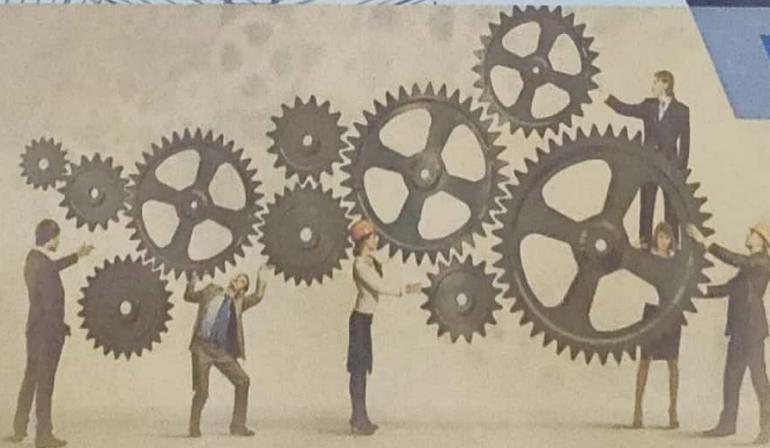
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**Ajanta Prakashan**

## १०. समाज निर्मितीसाठी मराठी संताची शिकवण

प्रा. डॉ. गोपीनाथ पा. बोडखे

आनंदराव धोंडे ऊर्फ बाबाजी महाविद्यालय, कडा. ता. आष्टी जि. बीड.

### प्रस्तावना

मराठी संताचे साहित्य हे मराठी भाषेच्या प्रारंभकाळातील साहित्य आहे. मराठी भाषेच्या वाङ्मय इतिहासांमध्ये ज्याप्रमाणे संतसाहित्याचे योगदान जसे महत्त्वाचे आहे. त्याप्रमाणे समाज निर्मितीसाठी ते मोठे प्रेरक आहेच. महाराष्ट्रातील भागवत संप्रदायाच्या संतानी 'संतसाहित्य'-निर्माण केलेले साहित्य होय. तेराव्या शतकांमध्ये संत ज्ञानदेवांनी 'ज्ञानेश्वरी' हा ग्रंथ लिहिला ते सोळाव्या शतकातील संत रामदासांच्या साहित्यापर्यंत संत साहित्याचा समावेश केलेला आहे विठ्ठलभक्तीच्या परंपरेत निर्माण झालेले संताचे साहित्य असले तरी, अखंड मानव जातीला समतेच्या एका धाब्यात गुंफवले हे साहित्य होय. तेराव्या शतकात संत ज्ञानेश्वरांनी 'हे विश्वची माझे घर' हा विचार व्यक्त करून मानवजातींमध्ये समानतेचा विचार रूजविण्याचा प्रयत्न केला.

संत ज्ञानेश्वरांनी ज्या कालखंडामध्ये साहित्य निर्मिती केली. त्याकालीन सामाजिक परिस्थिती विषम होती. धर्म-कांड, जातीवाद, अंधश्रद्धा इत्यादी गोष्टींचे प्राबल्य होते. तसेच ग्रंथरचना सामान्यतः संस्कृतमध्ये किंवा संस्कृतप्रचुर वळणाची होती त्यामध्ये सर्वसामान्य बहुजन समाजापासून साहित्य दूरच होते. वाचनाने माणसाची ज्ञानवृद्धी होते. असे आज सर्वमान्य झाले आहे. संत ज्ञानेश्वर कालखंडामध्ये अक्षर वाङ्मयाचा व सर्वसामान्य माणसाचा तीळमात्र संबंध नव्हता. नव्हे तर तो संबंध जाणिवपूर्वक येऊ दिला जात नव्हता. अशा परिस्थिती मध्ये संत ज्ञानदेवांनी मात्र सर्वांना समजेल अशा सुबोध मराठी भाषेतील, स्त्री-शूद्रांसह सर्वांना समजेल अशी गीताटीका 'ज्ञानेश्वरी' ग्रंथाद्वारे सर्वासाठी निर्माण केली. व त्यांनी या ग्रंथाद्वारे दाखवून दिले की, साहित्य हे सर्वासाठी आहे. साहित्यरचना करणे किंवा साहित्याचा आस्वाद घेणे हे फक्त विशिष्ट धर्मातील किंवा जातीतील लोकांची मक्तेदारी नाही. तसेच विद्वान पंडितांचे क्षेत्र नाही अशी जाणिव संत ज्ञानदेवांनी करून दिली.

महाराष्ट्रांमध्ये भागवतधर्माचा पाया संत ज्ञानदेवांनी घातला. पंढरीचा विठ्ठल हे या संप्रदायाचे दैवत होय. या दैवतांमध्ये हरी आणि हर यांचे ऐक्य झाल्याने शैव आणि वैष्णव संप्रदाय एकत्र आले.

'संत कृपा झाली । इमारत फळा आली  
ज्ञानदेवे रचिला पाया । उभारिले देवालया  
नामा तयाचा किंकर । तेने केला विस्तार  
जनार्धन एकनाथ । ध्वज उभारिला भागवत  
भजन करा सावकाश । तुका झालासे कळस'

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हिंदी विभाग,

आनंदराव धोडे उर्फ बाबाजी महाविद्यालय  
कडा, ता. आप्ती, जि, बीड

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मध्ययुगीन महाराष्ट्र में धार्मिक एवं सामाजिक जीवन का अधः पतन हो रहा था। वैदिक पंडित आडंबर से ग्रसीद थे। समाज जादु टोना, भुत-भविष्य, तंत्र मंत्र में शामिल था। इस वैदिक धर्म के विरुद्ध वारकरी संप्रदाय ने विद्रोह किया। आखिर में वारकरी पंथीय महाराष्ट्रीयन संतों ने समाज जीवन को गृह दिखायी।

महाराष्ट्र में वारकरी संप्रदाय के संत एक महा समन्वय है, एक संगम है, जैसे गंगा, जमुना, सरस्वति एकाकार हो जाती है। ठिक इसी प्रकार ज्ञान, कर्म और भक्ति आदि का संतों के जीवन में संगम हुआ है। उन्होंने कर्म को कभी नहीं छोड़ा संतो के पास उनका महान सत्य है। उनमें मानवीय संवेदनाओं का अपरिमित भंडार रहा है। उनका मानवतावादी होना सहज है। उनके अभंगों में समाजकल्याण की भावना उनकी सहज वृत्ति है। समाज की विकृतावस्था को देखकर संत विचलित हो उठे। मानव हृदय में परिवर्तन करने के लिए उन्होंने 'अभंग' लिखे। साथ ही बाहयाडंबर तथा रुढियोंपर कुठाराघात किया और समाज में आदर्श व्यवस्था के लिए मानवतावादी सुझाव भी दिये।

संसार में सबकुछ परिवर्तनशील है किंतु मानवीय मूल्य अपरिवर्तनशील है। इन मूल्यों में भी संत साहित्य में संतों का एक महनीय समुदाय इकठ्ठा हुआ, जिसे 'संतमेळा' अर्थात् संतों की टोली कहा गया। ये सभी संत विठ्ठल के परम भक्त थे। इस संत समुदाय में

संत ज्ञानेश्वर, संत नामदेव, संत गोग कुंभार, संत नरहरी सोनार, संत सावता माळी, संत चोखामेळा, संत जनाबाई, संता कान्होपात्रा, संत सोयगबाई, संत तुकाराम, संत एकनाथ आदि आते हैं सभी संत विठ्ठल पांडुरंग का जयघोष करते हुए, भक्तिरस में आकंठ डुबे हुए विठ्ठल भक्ति की ऐसी ज्योति जगाते थे कि सुध-बुध विसरकर 'जय-जय गम कृष्ण हरि' का मंत्र जपते हुए, नाचते-गाते, सहस्रों हरिभक्त उनके साथ अंभंग गाकर झुमते थे। आज सैंकड़ों वर्षोंवाद भी महाराष्ट्र के ग्राम-ग्राम में, नगर-गली में, पांडुरंग भक्ति के स्वर मृदंग, करताल की ध्वनि से सामान्य जन के हृदयों को आल्हादित कर रहे हैं।

यह संत समुदाय न तो जातिय वाचक, न पुरूषोत्तक, न व्यवसायतक सीमित रहा। इन में कुछ स्त्रियाँ भी हैं, कुछ संत कुनबी, सुनार, माली, कुम्हार, मराठा, दर्जी, चुडीसाज, महार तो कोई ब्राहमण भी है। विठ्ठल भक्ति का सुत्र सभी में समान है। उच-नीच, ज्ञानी-अज्ञानी, स्त्री-पुरूष आदि सभी भक्ति के आनंद में नाचने लगते। जाति एवं कुल के झुठे अभिमान से वे कासों दूर थे। सभी संत घर-गृहस्थी जन थे। अपना-अपना व्यवसाय था, लेकिन उन्होंने हरिभक्ति के प्रति अपना सर्वस्व निछावर कर डाला था। मानों अपनी घर-गृहस्थी को ही उन्होंने ब्रह्मरूप में विलिन किया था। कभी भी जाति-कुल का विचार न करनेवाले 'हरि को भजै, सो हरिका होई,' यही मराठी संतो का विश्वास था। इस सिध्दान्त की प्रतिष्ठापना करके संतोंने सामान्य दीन-दलित, उपेक्षित जनों की एक बड़ी आवश्यकता की पूर्ति की। संतों के स्वभाव, आचरण, सिध्दांत उद्देश्य आदि से यही स्पष्ट होता है कि संत काव्य भक्ति से परिपूर्ण है। ओत-प्रोत है। संतों की महिमा थी कि समाज में परायापन, भिन्नता का भाव नष्ट होकर मानवता निर्माण हो। उनकी तीर्थ यात्रा क्या थी - सदाचार की शिक्षा थी, आचरण का पाठ था। संत शुध्द एवं सात्विक भावों की सजीव मूर्ती थे। क्रोध इनके पास फटकता नहीं था। लोभ, द्वेष, मत्सर इनसे वे कोसों दूर थे। वे एक - दुसरे के सामने नत-मस्तक होकर सभी में विठ्ठल के दर्शन पाते थे। भले ही जाति व्यवसाय से वे अलग हो, लेकिन स्वयं

# नागाफनी

अस्मिता, चेतना और स्वाभिमान जगाने वाला कथा साहित्य



**जन्मनायक**

डॉ. बी.आर. अम्बेडकर



प्रथम शिक्षिका  
सावित्रीबाई फुले

**(विश्वविद्यालयों के शोध छात्रों के लिए विशेष सामग्री)**

# नागफनी

(अस्मिता, चेतना और स्वाभिमान जगाने वाला कथा साहित्य)

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## “संपादक”

सपना सोनकर

## “कार्यकारी संपादक”

डॉ० एन.पी.प्रजापति

डॉ० बलिराम धापसे

सह-संपादक

डॉ० अखिलेन्द्र प्रताप सिंह

डॉ० दिलीप मेंहरा, गुजरात

सलाह कार मंडल

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डॉ० एम.डी.इंगोले, महाराष्ट्र

प्रो० संजय एल मादार धारवाड़, मद्रास

डॉ० वी.व्ही.महालिंगे माटुंगा मुंबई

डॉ० सुधीर सागर

प्रतिनिधि मंडल

कमल सिंह (उत्तराखण्ड) डॉ. भुरेला (उत्तर प्रदेश) हीरा लाल राजस्थानी (दिल्ली) संजीव खुदशाह (छत्तीस गढ़) सुरेश मूले (कर्नाटक) प्रो० आर.एच. वणकर (गुजरात) प्रो. एस.एस.सावंत (सांगली) प्रो. इसपाक अली (बंगलौर) डॉ. सुनीता साकरे (मुंबई) अरुणा लोखण्डे (महाराष्ट्र) कमर मेवाडी (राजस्थान) डॉ. उल्लस राजाराम (कोल्हापुर) रामयतन यादव (बिहार) दीनानाथ साहनी रामश्रेष्ठ दीवाना (पटना)।

मुख्य पृष्ठ कलाकृति-असलम, अब्दुल कलाम अंसारी (मुन्ना)

डिजाईन एवं ले आउट-अजय नेगी

स्वामी, प्रकाशक, मुद्रक व संपादक सपना सोनकर द्वारा भास्कर प्रेस 13-कोर्ट रोड देहरादून-248001 उत्तराखण्ड, फोन:09412054426से मुद्रित व दून कांटेज सिंग रोड, मंसूरी -248179, उत्तराखण्ड से प्रकाशित।

## संपादकीय/व्यवस्थापकीय कार्यालय

1. दून यू कांटेज सिंग रोड, मंसूरी -248179, उत्तराखण्ड दूरभाष-0135-6457809 मॉ० 09410778718एव

2. पी.डब्ल्यू डी आर-62 ए. ब्लाक कालोनी बैडन, जिला-सिंगरौली म.प्र.486886, मॉ० 09752998467

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पत्रिका की किसी भी सामग्री का उपयोग करने के पहले संपादक की अनुमति लेना आवश्यक है। संपादन संचालन पूर्णतया अद्वैतनिक एवं अव्यवसायिक है। 'नागफनी' में प्रकाशित शोध-पत्र एवं लेख, लेखकों के विचार उनके स्वयं के हैं, जिनमें संपादक की सहमति अनिवार्य नहीं। 'नागफनी' से संबंधित सभी विवादास्पद मामले केवल देहरादून न्यायालय के अधीन होंगे। अंक में प्रकाशित सामग्री के पुनःप्रकाशन के लिए लिखित अनुमति अनिवार्य है। सारे भुगतान मनी आर्डर/चेक/बैंक ट्रांसफर/ई-पेमेन्ट आदि से किये जा सकते हैं। देहरा दून से बाहर के बैंक में बैंक कमीशन 25/- अतिरिक्त जोड़ दें।

## अनुक्रम

पृष्ठ सं.

### संपादकीय

डॉ० एन.पी.प्रजापति

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प्राध्यापक

आनंदराव धोंडे महाविद्यालय कडा

तह. आष्टी जि. बीड

साहित्य और समाज का हमेशा से ही गहरा संबंध रहा है। सन 60 के बाद हिन्दी कविता में विविध आंदोलन दिखायी देते हैं। इन में आधुनिक कविता, अकविता, सहज कविता, विचार कविता, समांतर कविता, ठोस कविता आदि, जनवादी चेतना का विकास भी समय की माँग के अनुसार हुआ है। 'जनवादी' शब्द के बारे में डॉ.कुँवरपाल सिंह लिखते हैं, "जनवादी का वास्तविक अर्थ है साम्राज्यवादी, पूँजीवाद, सामंतीय व्यवस्था और उसके जीवन मूल्यों का सक्रिय विरोध, श्रमिक वर्ग और पीड़ित जन के साथ वास्तविक हमदर्दी, देशभक्त क्रांतिकारी शक्तियों की एकता और उसके संकल्प का नाम है जनवाद।" अर्थात् जनवादी चेतना का लक्ष्य सामंतीय व्यवस्था का विरोध करते हुए सामान्य वर्ग के प्रति मानव मात्र में सहानुभूति पैदा करना, आम जनता को शिक्षित करते हुए उनके सांस्कृतिक विकास के लिए प्रयास करना और उनके संघर्ष तक जीवन मूल्यों में परिवर्तन निर्माण करना रहा है। निर्विवाद रूप से कहा जा सकता है कि जनवादी साहित्य सर्वहारा वर्ग से जुड़ा साहित्य है।

स्वातंत्र्योत्तर हिन्दी कविता में जनवादी कवि नागार्जुन का महत्वपूर्ण स्थान रहा है। जनवादी धारा को इस कवि ने पुरी तरह आत्मसात करते हुए उस अपनी कविताओं में चित्रित किया है। कवि का साहित्य संसार देश से संबंधित है। जनता के जीवन में हर दिन, हर क्षण घटनेवाला यथार्थ उनकी कविता का यथार्थ है। कवि नागार्जुन में जीवन के प्रति संघर्ष शील दृष्टि है, इसलिए उनके काव्य में आशा और विश्वास का स्वर अधिक शक्तिशाली है। कवि का विश्वास है कि हरिजन, गिरिजन, आदिवासी, भूखें-नंगे, पीड़ित, किसान, मजदूर लोग जिस दिन अपनी शक्ति जान जाएंगे उसी दिन हिंदुस्तान की धरती पर सच्ची क्रांति होगी। विजय बहादुर सिंह लिखते हैं, "उनकी कविता का वास्तविक संसार वस्तुतः पारिभाषिक अर्थों में सर्वहाराओं का संसार कहा जा सकता है। पिछली दुनिया वह है जिसे वे नष्ट करना चाहते हैं। यह दुनिया वह है जिसको नये सिर से संगठित और विकसित करना चाहते हैं। बचपन से ही गरीबी की मार खाने जीवन-संघर्ष और असुविधा का जीवन जीने वाले इस कवि की सहानुभूति उस कवि की सहानुभूति से कई कदम आगे हैं, जो ग्रामीण विश्व को बौद्धिक दृष्टि से देखता चला आ रहा है। यह कवि सिर्फ गाँव में पैदा भर नहीं हुआ है, गाँव से जुड़ा हुआ भी है। गाँव की सरल और अकुंठित बिरादरी का प्रेमी है। वे लोग जो गाँव छोड़कर नगरों-महानगरों और उपनगरों की ओर चल गये हैं। इस कवि की निगाह उनका पीछा भी निरंतर करती रहती है। यह वहाँ भी जाता है। उनके साथ रहता है। उनके जीवन संघर्ष को देखता है और उनके भविष्य के लिए कविता को जुटाता है।" अर्थात् कवि नागार्जुन ने कविता का सृजन ही जनसामान्य के जीवन की वास्तविकता का चित्रण करने के लिए किया है।

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## ६. हिन्दी भाषा और वैश्वीकरण

प्रा. डॉ. महमूद पटेल

वैश्वीकरण अर्थात् संपूर्ण विश्व में स्थित मनुष्य जाति का अपने क्षेत्र, जाती, धर्म, संस्कृति तथा राष्ट्र के सीमित दायरे से निकलकर 'विश्वमानव' के रूप में विस्तार वैश्वीकरण की 'विश्ववाद' भी कहा जाता सकता है। भारतीय संस्कृति में 'वसुधैव कुटुंबकम्' को एक आदर्श माना गया था। जिसके कारण राष्ट्रीयता से बढ़कर अंतरराष्ट्रीयता को बल मिल रहा है। आज विविध भेदों को त्यागकर मनुष्य परस्पर बंधुभाव रखकर उन्नति कर रहा है, जिसके कारण विश्व के कोने में घटित छोटी सी घटना का असर भी दुसरे कोने में बैठे व्यक्ति, समाज या राष्ट्रपर होता है। अर्थात् मानवता का विस्तार ही वैश्वीकरण है। इस प्रक्रिया में देश एक दुसरे पर निर्भर हो जाते हैं। और लोगो के बीच की दुरियाँ घट जाती हैं।

आज 'वैश्वीकरण' हमें भले ही आकर्षित कर रहा है, किन्तु यह उसका यथार्थरूप नहीं है। वैश्वीकरण नवपूँजीवाद का ही नामकरण है। जिसे आर्थिक उदारीकरण या नीजिकरण भी कह सकते हैं। वर्तमान संदर्भ में वैश्वीकरण का अर्थ व्यापक तौरपर बाजारीकरण ही है। यह एक आर्थिक प्रक्रिया भी है, जिसके अभाव में इक्कीसवीं सदी में मनुष्य जाति का कल्याण असंभव है। मुक्त बाजार की अर्थव्यवस्था के कारण ही अमेरिका जैसे देश संपन्न हो चुके हैं और अन्य देशों में संपन्न होने की होड़ - सी लगी है। इस प्रकार वैश्वीकरण को 'बाजारीकरण' के ही रूप में देखा जा रहा है। आज वैश्वीकरण पश्चिमी देशों - विशेषकर अमेरिका के आर्थिक साम्राज्यीकरण की नीति है।

वैश्वीकरण भारत के लिए एक सांस्कृतिक आक्रमण भी है। विश्वबाजार के साथ एक नयी उपभोक्ता संस्कृति का प्रचार - प्रसार बड़ी तीव्र गति से हो रहा है, जिसका सीधा प्रभाव अपने देशों की संस्कृति, समाज, भाषा आदिपर देखा जा सकता है। वैश्वीकरण का सबसे बड़ा खतरा भारतीय संस्कृति को है। पहले आधुनिकता के नामपर भारतीय संस्कृति पाश्चात्तीकरण हुआ, अब वैश्वीकरण के नामपर अमेरिका की उपभोक्तावादी संस्कृति से संस्कासि एक नयी सभ्यता का विकास देखा जा रहा है। वैश्वीकरण की असलियत स्पष्ट करते हुए डॉ. लोकेशचंद्र लिखते हैं, 'वैश्वीकरण का अर्थ विश्वजिय है। इसके लिए मनुष्य जाति की आर्थिक लिप्सा और विलासिता की मोहमाया को उपभोक्तावाद, उदारीकरण और फैशन की लुभावनी नग्नता, उपयोगिता और उदारता के आकर्षक शब्दों से भडकाया जा रहा है।

वैश्वीकरण के इस दौर में भाषा की भूमिका महत्वपूर्ण है। भारत विश्व का सबसे बड़े बाजार का देश है, और इस बाजार की माध्यम भाषा हिन्दी है। वैश्वीकरण के इस नाटकीय, दौर में जहाँ तक हिन्दी भाषा के प्रयोक्ता का सवाल है, वहाँ तक हिन्दी के भविष्य को भी देखना जरूरी होता है।

वैश्वीकरण के दौर में आज हिन्दी भाषा बाजार और व्यापार की भाषा बन गयी है। कोई भी बड़ी विदेशी कंपनी हिन्दी जाने बिना मध्य एशिया में व्यापार नहीं कर सकती। आज आपने माल के प्रचार - प्रसार, पैकिंग, गुणवत्ता कंपनियों



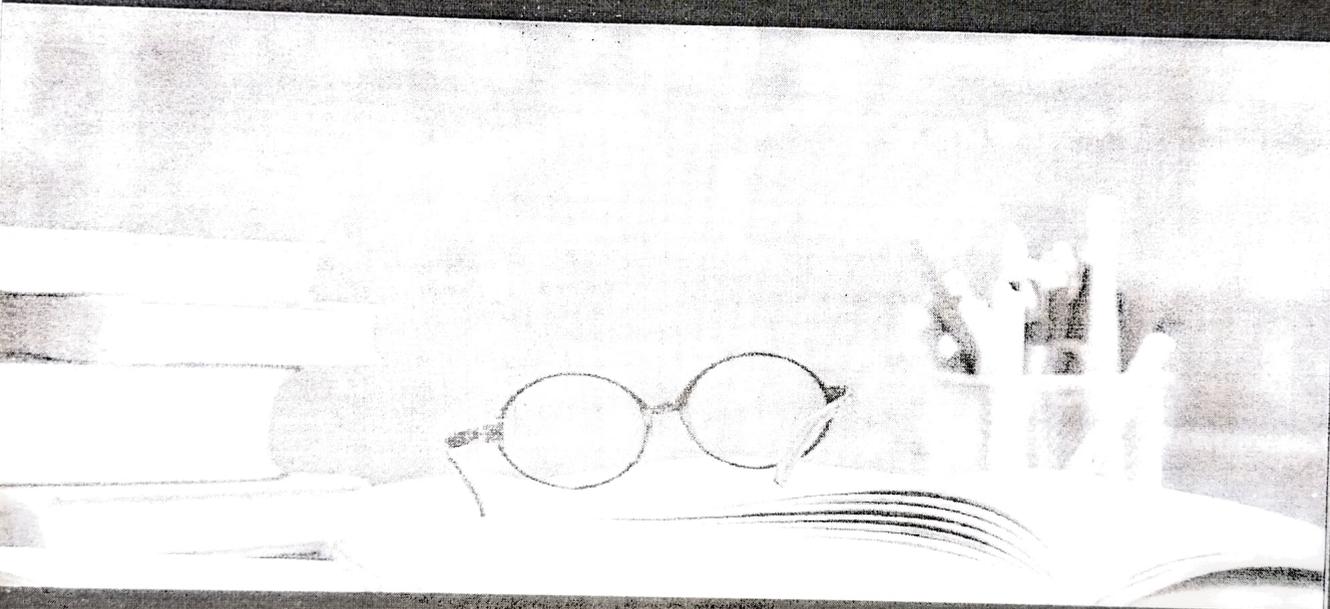
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## **MEDICAL TOURISM IN INDIA**

**Dr. M.G. Rajpange**

A.D. College, Kada

### **INTRODUCTION**

Tourism is the second largest growing business area after information technology in the global economy. Many of the economies are successful in marketing their country as destination and generating a substantial amount of foreign exchange from tourism sector. Even countries with poor level of infrastructure and facilities are able to attract investors to invest money in their country for tourism promotion. Tourism promotion, like other forms of marketing, largely depends on the customer traffic- If there is a growing customer traffic trend then more and more money shall flow to an economy in the form of gross revenue earnings and also as foreign direct investments for tourism destination marketing. The rich cultural heritage of India has always evoked a sense of great awe among people all over the world. Preserving this heritage should be an integral part of modern tourism management. People and customs, myths and legends, rites and rituals, festivals, pilgrim centers, Ayurvedic medicine and Yoga of India have rich potentials for achieving diversification of tourism products packages and circuits. Proper researches conducted on these will provide new insights to those who are actively involved in tourism industry and other industries related to tourism, which will help them to introduce qualitative and quantitative changes in their packages.

### **MEDICAL TOURISM:**

Medical tourism is a term that has risen from the rapid growth of an industry where people from all around the world are traveling to other countries to obtain medical, dental, and surgical care while at the same time touring, vacationing, and fully experiencing the attractions of the countries that they are visiting. Medical tourism (also called medical travel, health tourism or global healthcare) is a term initially coined by travel agencies and the mass media to describe the rapidly growing practice of traveling across international borders to obtain health care. Such services typically include elective procedures as well as complex specialized surgeries such as joint replacement (knee/hip), cardiac surgery, dental surgery, and cosmetic surgeries. However, virtually every type of health care, including psychiatry, alternative treatments, convalescent care and even burial services are available. Over 50 countries have identified medical tourism as a national industry. Factors that have led to the increasing popularity of medical travel include the high cost of health care, long wait times for certain procedures, the ease and affordability of international travel, and improvements in both technology and standards of care in many countries.

### **MEDICAL TOURISM IN INDIA:**

India is known in particular for heart surgery, hip resurfacing and other areas of advanced medicine. The government and private hospital groups are committed to the goal of making India a leader in the industry. The industry's main appeal is low-cost treatment. Most estimates claim treatment costs in India start at around a tenth of the price of comparable treatment in America or Britain. India is becoming the destination of choice for US citizens seeking complicated, high-end medical procedures. India has one of the best pools of qualified professionals in every field of health care domain combined with world class Medical facilities comparable with any of the western countries. India has state of the art hospitals and the best-qualified doctors.



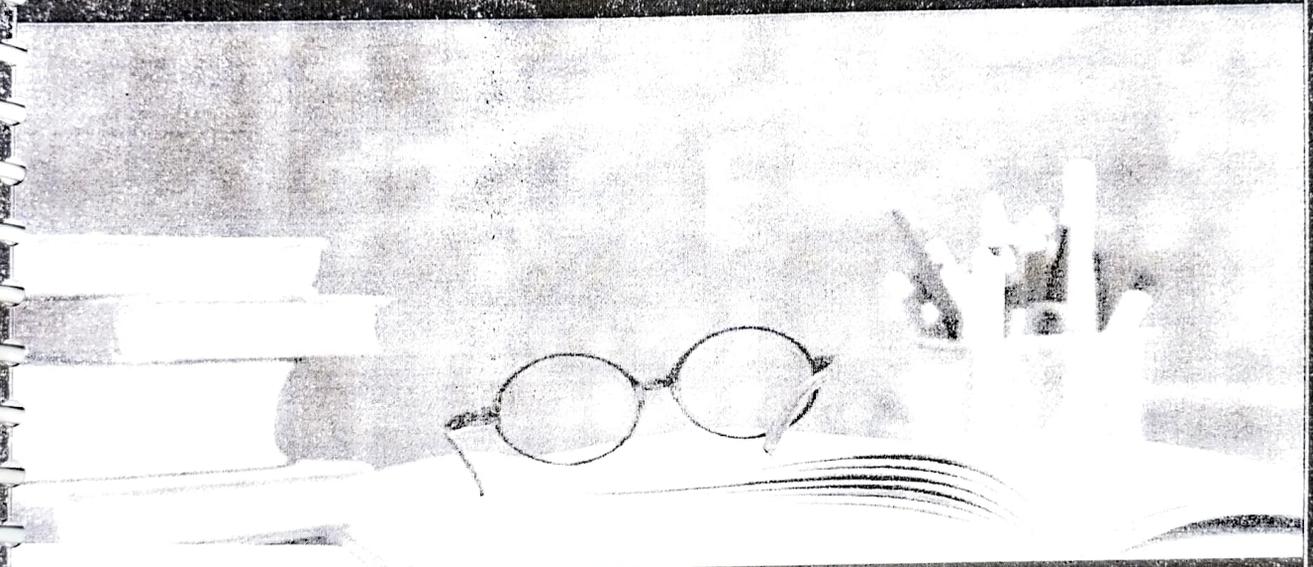
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## **TOURISM – AN EPITOME OF INCENTIVES**

**Dr. M.G. Rajpange**

A.D. College, Kada

The League of Nations defined the word tourist as “any person visiting another place other than that in which he usually resides for a period of at least 24 hours”. The reasons of visit may be for pleasure, domestic reason, health, business, religious or diplomatic or on sports”. This definition is confirmed by United Nations and adopted by many countries for travel statistics. Nearly 80% of the countries use this definition. World has seen several organizations emerging for the purpose of tourist information. The European Travel Commission (ETC), International Union of official Travel Organizations (IUOTO), World Tourism Organization (WTO) and others prepared a Digest of Tourist Statistics. In 1963 U.N. Conference on

International Travel and Tourism in Rome tries to distinguish a visitor from a day’s visitor and excursionist but overall the word ‘tourist’ hold good for all people whose stay is beyond 24 hours/ in initial days stay away from home was basically for food gathering food production and later for shelter. The urge of mobility led him to earn a livelihood. He became a trader. This trade led to establishment of cartels. Over a period of time the boundaries of cartels crossed the oceans too. The adventure and heroic. “MAYFLOWER” travels made man to discover new countries and continents. Very soon the adventure travels turned into trips of pleasure and sightseeing visits. The need for spending money, comfortable stay and transport arose. The most important channel of tourist is the communication network. The Renaissance of tourist was an outpour of Education, Economics and Politics. Form individual travel it transcended into group travel or mass tourism. People mostly preferred ‘Holy-day’ or Holidays to travel.

A large number of tourists preferred organized tours, and hence people who take care of organized tours came to lime light. It may vary from pilgrimage to islands, backwater beaches, places of prostitution, Commerce etc. these tourists are employment generated both in organized and un-organised sections. Normally the private sector dominates the public sector. It includes transport accommodation, entertainment, employment, administrator research, global link, finance, exchange etc. all said and done to fulfill and satisfy a tourist the role of money either for payment of services or transport arose.

In terms of employment about 200 million jobs are created in tourism. These jobs can be categorized into 2 sectors 1) Direct 2) Indirect employment. Under direct employment about 1/3 i.e., nearly 70 million are employed. These include Hotels, Travels, Tour operators etc. Under indirect employment about 2/3 are employed who are mostly labour intensive. 8% of the jobs worldwide depend on tourism. Every year an addition of 5.5 million jobs climbup.

In smooth flow of infrastructural facilities roads, airports, water supply, public utilities, shops, health care add as an epitome of incentives. The average wage rate is higher than the urban and rural labor. This may be called as Tourism Income Multiplier (TIM). The Manila declaration considers tourism as an activity essential, for the life of nations because of its effects on social, cultural, educational and economic sectors of national societies. In addition to that the technical contribution made by specialized professionals led to harmonious and sustained development of Tourism.

The share of Tourism in national economies and in international trade market is notable factor of development. People became aware of their annual paid holidays, and



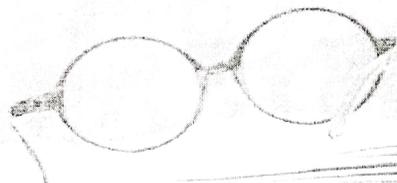
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# PROMOTION OF ECOTOURISM – A VITAL NEED OF THE SOCIETY

**Dr. Madhav.G. Rajpange**  
Ananrao Dhonde Alias Babaji Mahavidyalaya,  
Kada

## INTRODUCTION

'Tourism' basically means travel for "Leisure's sake". But for some people, there is something irreplaceably satisfying about journeying to a new place: the sense of being in completely novel situations and surroundings; seeing things never before seen; engaging in new and different activities. "Ecotourism", a fast growing segment of tourism started catching up in the last quarter of the 20th century with a new reason to travel i.e., to see natural habitats and their harbored wild life before they vanish from the face of the earth. Ecotourism encompasses travel to usually exotic places with specific purposes of enjoying and admiring wild life and to have first-hand experience of encountering undeveloped, relatively undisturbed natural areas as well as indigenous cultures. The increasing popularity of ecotourism is a clear indication of increasing concern and commitment for conservation of world's natural resources and biodiversity. Thus ecotourism is a nature-based and responsible travel involving education, interpretation of the natural environment and management of ecological sustainability, with a holistic purpose of conservation and promotion of welfare of the people. In a nut shell, ecotourism is "Saving the Environment and Preserving the Natural luxuries and Forest life".

### How to Start Ecotourism?

With the realization of the imperative need for environmental protection, efforts were made in this direction by way of identification, declaration and/or adoption of areas with unique, natural environmental conditions and biodiversity and their development as National Parks and Sanctuaries. Presently, in India, there are about 75 National parks and 425 sanctuaries located across the length and bread of mother India. To minimize the human interference, legislations have been made and attempts were made for their strict enforcement. But all these efforts did not prove to be as effective as they were expected to be. This necessitated the development of novel strategies like "Ecotourism" which has latent potential for integrating conservation with development, especially of local people who were actually responsible for the disturbances in the environment just for the sake of earning their livelihood.

### Principles of Ecotourism

Activities of Ecotourism are based on simple principles like they must be nature-centered, ecologically sustainable; provide education and benefits to local people etc.

### Purpose of Ecotourism

This is twofold: provide exciting, challenging educational trips to exotic locations like wet tropical forest, wind-blown deserts, high mountain passes, mid ocean coral reefs for admiring for admiring and enjoying the scenery, the animals and the nearby located culture; conserve the vast, natural habitats and wild life; the second purpose is unconsciously promoted by Eco- tourists through small deeds like paying for park admissions, engaging local guides, staying at local lodges and dormitories, eating at local restaurants, using local transportation services etc. These small activities of Eco- tourists do significantly contribute to the economic development of local people also because their needs are satisfied with the income earned in serving the Eco -travellers and hence do not resort to "harvesting" the



Changing Trends in  
**MAN**  
&  
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**Dr. B. G. Rashinkar**  
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**14. भारतातील जलसिंचन आणि जलसंवर्धन : एक चिंतन**

*डॉ. नरसाळे दत्तात्रय वसंतराव (PP-113-120).*

**15. जलप्रदूषण एक भौगोलिक अभ्यास**

*प्रा. गायकवाड काकासाहेब सर्जेराव (PP-120-124)*

.....

भारतातील जलसिंचन आणि जलसंवर्धन : एक चिंतन  
डॉ. नरसाळे दत्तात्रय वसंतराव  
भूगोल विभाग, आनंदराव धोंडे महाविद्यालय कडा ता. आष्टी, जि.  
बीड.

सारांश :

पृथ्वीवर तिसरे महायुद्ध होईल ते फक्त आणि फक्त पाण्यामुळे पाणी म्हणजे जीवन, पाणीच आपले जीवन फुलविते या पाण्याचा एकमेव स्रोत म्हणजे गगनातून धरतीवर आपोआप बरसणारा निर्भेळ पाऊस होय. निसर्गामध्ये पडणारा पाऊस हा पृथ्वीवरील जीवसृष्टी जिवंत ठेवणारा एकमेव झरा आहे. पाण्याचा वापर व अपव्यय अशा अनेक कारणांनी पाण्याचा प्रश्न निर्माण झाला त्याला कारणही मानवच आहे. निसर्गाची देन असणाऱ्या पाण्यावर प्रबोधन व जागृती करण्याची वेळ आपल्यावर आली आहे. पाणी वापरातील लोकांची मानसिकता बदलणे महत्वाचे आहे.

बीजसंज्ञा : जलसिंचन, व्यवस्थापन, जलसंवर्धन.

प्रस्तावना :

पाणी हे दरवर्षी मिळणारी निसर्ग संपदा आहे. जगाच्या एकूण भूपृष्ठभागावर दरवर्षी ७० मि.मी. पाऊस पडतो. तर महाराष्ट्रात ९२० मि.मी. पाऊस पडतो. दिवसाला दरडोई ६७०० लिटर पाणी मिळते. घरगुती वापर शेती, मनोरंजन अशा विविध गजासाठी पाणी लागते सध्या आपण दरडोई ८०० लिटरपेक्षा कमी पाणी वापरतो गरजेपेक्षा आठपट जास्त पाणी दिले आहे. तरी ही पाणी टंचाई कशी.

भारतात कृषीची सुरुवात सिंधू खोऱ्यात झाली. कृषी हा भारतीय अर्थव्यवस्थेचा पाठीचा कणा आहे. १९६० नंतर कृषी क्षेत्रात

हरित क्रांतीमुळे नवीन युग आले. २००७ मध्ये भारतीय अर्थव्यवस्थेत कृषी व त्यासंबंधित क्रियाचा जी.डी.पी. मध्ये हिस्सा 16.6 टक्के होता. 1960 नंतर जास्त उत्पादन देणाऱ्या बियाणांचा, रासायनिक खतांचा व कीटक नाशकांचा उपयोग वाढत गेला. त्यामुळे त्यामुळे जलसिंचनाची अधिक आवश्यकता लागू लागली. भारतात ६४ टक्के शेती मान्सूनवर अवलंबून आहे. भारतात जलसिंचनाला आर्थिक महत्व आहे. एकूण भारताचे क्षेत्रफळ ३२८७२६३ चौ.कि.मी. ज्यामध्ये ९२.2 टक्के भूमी उपयोगाचे आकडे उपलब्ध आहेत. त्यात एकूण क्षेत्रफळापैकी ९१ टक्के क्षेत्र कृषी खाली येते. 4 टक्के बन्जर जमीन यातील केवळ २८ टक्के म्हणजेच 4.5 करोड हेक्टर जमिनीवर जलसिंचन उपलब्ध आहे. बाकी 72 टक्के भाग पावसावर आधारित आहे. पावसाच्या अभावामध्ये कृत्रिम साधनांद्वारे शेतीला पाणी पुरवठा करणे. म्हणजे जलसिंचन होय.

उद्दिष्टे - 1) भारतातील जलसिंचन व्यवस्थेचा अभ्यास करणे. 2) भारतातील जलसिंचनाची आवश्यकता जाणून घेणे. 3) भारतातील जलसिंचनाच्या पद्धतीचे विश्लेषण करणे.

अभ्यास क्षेत्र: भारताचे एकूण क्षेत्रफळ ३२८७२६३ चौ. कि.मी. हे अभ्यास क्षेत्रासाठी घेतले आहे. भारतामधील जलसिंचनाची साधन

जल सिंचनाची साधने	एकूण जलसिंचित क्षेत्र (टक्केवारी मध्ये)
कालवे	४०.००
विहिरी	३७.०८
तलाव	१४.०५
इतर	०७.०७

वरील तक्त्यामध्ये संपूर्ण देशामधील सिंचनाच्या विविध साधनांचे प्रमाण दर्शविले आहे. यामध्ये पंजाब, हरियाणा, उत्तरप्रदेश, मध्यप्रदेश, पश्चिम बंगाल, आसाम, इत्यादी राज्यामध्ये कालव्याद्वारे सर्वाधिक जलसिंचन केले जाते. तसेच गुजरात, उत्तरप्रदेश, राजस्थान, महाराष्ट्र इत्यादी मध्ये कुपनलिका व विहिरीद्वारे जलसिंचन केले जाते. तर दक्षिण भारतात आंध्र, कर्नाटक, तामिळनाडू व उडीसा राज्यात पाझर तालावाद्यारे जलसिंचन केले जाते. कालवे सिंचन उत्तरभारतामध्ये जलसिंचनाचे प्रमुख साधन कालवे आहेत.

राज्य	कालवे
उत्तरप्रदेश	उर्ध्व गंगा, निम्न गंगा, पूर्वी यमुना, आग्रा, शारदा, बेतवा कालवा इ.
पंजाब/हरियाणा	पश्चिम यमुना, सर हिंद, बारी दोआब, भाखडा, विस्तदुवाब, पूर्वी कालवा.
राजस्थान	बिकानेर, गंगानहर, बखडा, इंदिरा गांधी, चंबळ.
बिहार	पूर्वी पश्चिमी शोन, कोशी, गंडक, त्रिवेणी, कनाडा.
पश्चिम बंगाल	मेंदिनिपूर, एडण, तीळपाळा, दामोदर
महाराष्ट्र	गोदावरी, मुठा, भादारदरा, भाटगर, गंगापूर, कोयना, उजनी, राधानगरी.
तामिळनाडू	कावेरी, पेरियार, मैदूर, भवानी योजना
आंध्र प्रदेश	गोदावरी, कृष्णा, रापद, तुंगभद्रा, पेनार नागार्जुन

मध्य प्रदेश

वरना, हलाली, चंबळ.



विहीरी व कुपनलिका :- विहीरी व कूपनलिकासाठी उत्तर व पश्चिम भारतात महत्वपूर्ण स्थान आहे. यामध्ये गंगा, सतलज मैदानी प्रदेशात विहीरीसाठी आदर्श स्थिती आहे. विहीरी द्वारे जलसिंचन उत्तर प्रदेश, आंध्र प्रदेश, तामिळनाडू, मध्यप्रदेश, पंजाब व राजस्थान इत्यादी ठिकाणी केले जाते.

कूपनलिद्वारे जलसिंचन उत्तर प्रदेश, पंजाब, हरियाना व गुजरात मध्ये सर्वाधिक होते. यात खाजगी व सरकारी क्षेत्रात कुपनलिका आढळतात.

भारतात जलसिंचनाची आवश्यकता

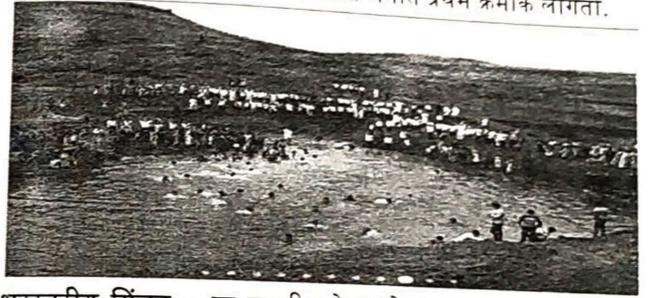
- 1) प्रर्जन्याची अनियमितता
- 2) प्रर्जन्याची विभंगता
- 3) लोकसंख्या वाढ
- 4) पिकांना अधिक पाणी
- 5) मृदा
- 6) व्यापारी पिके

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7) कुपी उत्पादन वाढविण्यासाठी

भारतातील जलसिंचनाच्या पद्धती

भारतात जलसिंचनाच्या खालील पद्धती आहेत. भारतामध्ये पारंपारिक आधुनिक पद्धतीने जलसिंचनाचा वर केला जातो. भारताचा जलसिंचनाखालील क्षेत्राच्या वाढतीत जगात प्रथम क्रमांक लागतो.



- 1) भुरस्तरीय सिंचन - या पद्धतीमध्ये धरणे व कालव्याच्या सहाय्याने शेतीला चहुवाजूनी वांध घालुल मोकळ्या स्वरूपात पाण्याचा पुरवठा केला जातो. उत्तर भारतात या पद्धतीला कटवा व तोड विधी असे म्हणतात. शेतीचे चर पद्धतीत रुपांतर करून मोठ्याप्रमाणात पाण्याचा अपव्यय केला जातो. ही पारंपारिक पद्धत आहे.
- 2) स्थानिक सिंचन - या मध्ये विहीरी, तलाव व सरोवरातील पाणी विद्युत उपकरणाच्या सहाय्याने शेतीला पुरविले जाते. यात वापा पद्धत लहान आकाराचे दंड फळवाग शेतीला वर्तुळाकार चर (आळे) या पद्धतीला नखवार व थाला विधीम्हणून संबोधले जाते. याच बरोबर शेतीमध्ये लहान लहान आकाराचे दांड बांधून सिंचन केले जाते.
- 3) ठिबक सिंचन - जलसिंचनामध्ये सर्वात आधुनिक पद्धत या मध्ये पाणी आणि पोषक तत्व झाडांच्या मुलांशी पोहचवले जातात. यामुळे

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जमिनीतळा ओलावा टिकून राहतो. पाण्याची ४० टक्के बचत होते, उत्पादन क्षमता वाढते. क्षारयुक्त जमीन, रेताड जमीन, डोंगराळ जमीन या पद्धतीची जमीन उपजाऊ बनवता येते.

4) तुषार सिंचन - या पद्धतीमध्ये स्वयंचलित यंत्राच्या सहाय्याने शेतीला पाणी पुरविले जाते. पर्जन्या प्रमाणे या पद्धतीमध्ये पिकांना पाण्याचा पुरवठा होतो. यामध्ये वेगवेगळ्या यंत्राचा वापर केला जाऊ शकतो. या पद्धतीमध्ये स्पिंकलर सिंचनाचाही मोठ्या प्रमाणात वापर केला जातो. पाण्याची २५ ते ३५ टक्के बचत होते. सम प्रमाणात पाणी सर्व ठिकाणी पुरविले जाते. रासायनिक खते या सिंचनाद्वारे पिकांच्या मुळशी पडतात. इतर सिंचन पद्धतीपेक्षा खर्च कमी येतो.

5) रेन गण पद्धत - ठिबक सिंचन व तुषार सिंचन पद्धतीनंतर रेनगण पद्धत ही आधुनिक पद्धत वापरली जाते. नैसर्गिक पावसामध्ये सिंचन केले जाऊ शकते. यामध्ये कमी पाण्यामध्ये जास्तीत जास्त क्षेत्र सिंचित करता येते. हि मायक्रो स्पिंकलर पद्धत आहे.

अशाप्रकारे कृषीसाठी सिंचनाची अत्यंत आवश्यकता आहे. शेती कृत्रिम रूपाने पाण्याची उपलब्धता करून देणे व उपलब्धता करून देणे व उत्पादन वाढवणे. हा मुख्य उद्देश आहे. ब्रिटीश प्रशासक चार्ल्सट्रिविलीयन च्या मते भारतात जमिनीपेक्षा अधिक



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महत्त्वपूर्ण पाणी आहे. कारण जमीन सिंचनाचा पुरवठा शक्य करू शकतो. उत्पादन क्षमता काही पलीने वाढते. जमीन माध्यम परंपरागत अर्थव्यवस्था न राहता. प्रत्येक देशाच्या पाण्याचा पुरवठा आणि वापरात भारत सरकारने प्रधानमंत्री जलसिंचन योजना राबविली आहे. या योजनेमध्ये तीन मंत्रालयांचा जलसमाधान नधी विकास कृषी मंत्रालयाचा समावेश करण्यात आला. पाण्याचा उपयोग वाढवण्यासाठी गुप्त जलसिंचन कृषि सिंचक, रेन गण अदी पद्धतीचा वापर मोठ्याप्रमाणात करण्यात आला.



जलसंवर्धनासाठी - वाढत्या पाण्याला थांबवण्याचे काम आपणाम करावे लागणार आहे.

- 1) जलपुनर्भन.
  - 2) पाणी पातळी जमिनी खाली असली पाहिजे.
  - 3) कतुरबांध घालणे.
  - 4) तलावाची सरण्या वाढवणे.
  - 5) आपल्या गावातील पाणी वाहून जाऊ न देणे.
  - 6) प्रत्येक गावाने जलचळवळीत भाग घेऊन गाव पाणीदार बनवणे.
- संदर्भ ग्रंथ :-
- 1) माजित हुसेन, मानवी भूगोल

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### "भारतातील ग्रामीण स्त्री जीवनाच्या बदलांचा अभ्यास"

सौ. नरसाळे दत्तात्रय वसंतराव  
(मुगोल विभाग)  
आनंदराव धोंडे महाविद्यालय, कडा  
ता. आरही जि. बीड

सारांश:

"एखाद्या राष्ट्रद्राकडून स्त्रीला विद्या जाणाऱ्या सामाजिक व राजकीय महत्वावरून त्या राष्ट्राला सांस्कृतिक उंची मोजता येते." भारत विकसनक्षेत्र फ्रीडमचा देणू आहे. देशातील 78 टक्के जनता ग्रामीण भागात राहते. त्यामुळे ग्रामीण भागातील स्त्री शिक्षणाच्या विकासाला गरज येणाला जास्त आहे. अन्वया देशाच्या लोकसंख्येची अर्ध्याहून अधिक हिस्सा अधिभूत राहिल आणि राश्ट्र विकासात त्यांचा अडसर निर्माण होईल.



प्रस्तावना:

जीव्या हाती पाळण्याची होणे। सौ जगाला उरुभाते।

महाराष्ट्राच्या ग्रामीण भागातील स्त्रीयांच्या जीवनाचा अभ्यास पाहिला असता तर किती खरतर आणि कष्टदायू जीवन जगणाऱ्या आपला स्त्रीला आपणाल दिसतात. ग्रामीण भागातील स्त्रीयांचे प्रश्न आजही सुटते आहेत असे नाही. परंतु पूर्वीच्या किती तरी परिस्थिती बदलत गेलेली आहे. गावातील स्त्री जीवनातील दरी फली करणे ही आज काळाची गरज आहे. महिला चळवळीच्या मार्गाचा आग्रह घेताना असे दिसते जे काही संघर्ष आणि लढे झाले ते पडही मागातून झाले. त्यामुळे त्या लढ्याचा वणिगाय ग्रामीण भागावर फारसा झाला नाही हे लढे पडपापूर्तेच मर्यादीत राहिले.

स्त्री अभ्यास ही एक नग्न भटत असलेली आंतरराष्ट्रीय स्वरूपाचा आपय विकसीत करू पाहणारी अथी ज्ञान पाळा आहे. स्त्रीयाची दृष्टीकोनातून सामाजाचा राजकीय, आर्थिक, सामाजिक इतिहासाचा अभ्यास केला जातो आणि त्यात

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## ग्रामीण महिलांच्या समस्या:



पाटीपाट मुले सोप्यामुळे विरगळे आलेल्या सोप्यात येते.

5000 वर्षांपासूनचा इतिहास आहे पुरुशांना स्त्री पेक्षा श्रेष्ठ ठरवून त्यांना अनेक हक्क देण्यात आले तेव्हापासून स्त्रींना मात्र कनिष्ठ ठरवून हक्कांपासून वंचित ठेवण्यात आले व त्याचा परिणाम म्हणजे स्त्रीयांवरील होणारे अत्याचार वाढले. कुटुंबप्रमुख म्हणून पुरुशांना केंद्रस्थानी ठेवण्यात आले. घरातील कर्ता पुरुश हा कुटुंब प्रमुख असतो. कुटुंबव्यवस्थेत स्त्रीला नगण्य स्थान आहे. मुलांचा जन्म झाल्यावर जितका आनंद होतो तितका आनंद मुलीच्या जन्माने होत नाही. काही कुटुंबात तर मुलगी झाल्यास चिंतेचे वातावरण निर्माण होते. 1901 साली तर 927 पर्यंत घसरले हे घटते प्रमाण ही देशापुढील एक महत्वाची समस्या बनली आहे.

2011 च्या जनगणनेनुसार पुरुशांच्या शिक्षणाचे प्रमाण 82 टक्के असून स्त्रीयांच्या शिक्षणाचे प्रमाण 65 टक्के इतके आहे. भारतामध्ये हुंडा पध्दत अस्तित्वात आहे. प्रत्येक प्रांतात जातीत. धर्मांमध्ये सुध्दा हुंडा पध्दत अस्तित्वात आहे. यामुळे वैवाहिक जिवनात एका भयानक समस्येस स्त्रीला तोंड द्यावे लागते.

लैंगिक अत्याचार, अनैसर्गिक संभोग करणे, अप्लील फोटो काढणे, जबरदस्ती करणे या घटना स्त्री बाबत घडत असतात. अशा अनेक प्रकारानी भारतीय समाजातील स्त्रीया कौटुंबिक आणि सामाजिक अत्याचाराना बळी ठरत असते. उपाययोजना राबवता येतील.

## कायदेशिर उपाय योजना:

- 1- 2005 पासून कौटुंबिक हिंसाचारापासून महिलांचे संरक्षण अधिनियम कायदा 26/10/2006 पासून लागू करण्यात आला. या कायद्यात एक वर्षाची कैद आणि 20000 रुपये दंड होऊ शकतो.
- 2- कलम 498 (अ) नुसार हुंडा किंवा अन्य हिंसाचार करणाऱ्या व्यक्तीवर कारवाई केली जाते.
- 3- महिला संघटनांची स्थापना करून स्त्री शक्तीकडून पिडीत महिलांना मदत करण्यात येते.
- 4- हुंडा प्रतिबंध कायदा 5 वर्षे कैद व 15000 रुपये दंड ही शिक्षा होऊ शकते.
- 5- कलम 306 नुसार पती किंवा नातेवाईकांनी छळ करणे गुन्हा ठरतो.

6- अक्ट 1956 नुसार स्त्रीला कुटुंबाच्या मालमत्तेत वाटा देण्यात आला आहे.

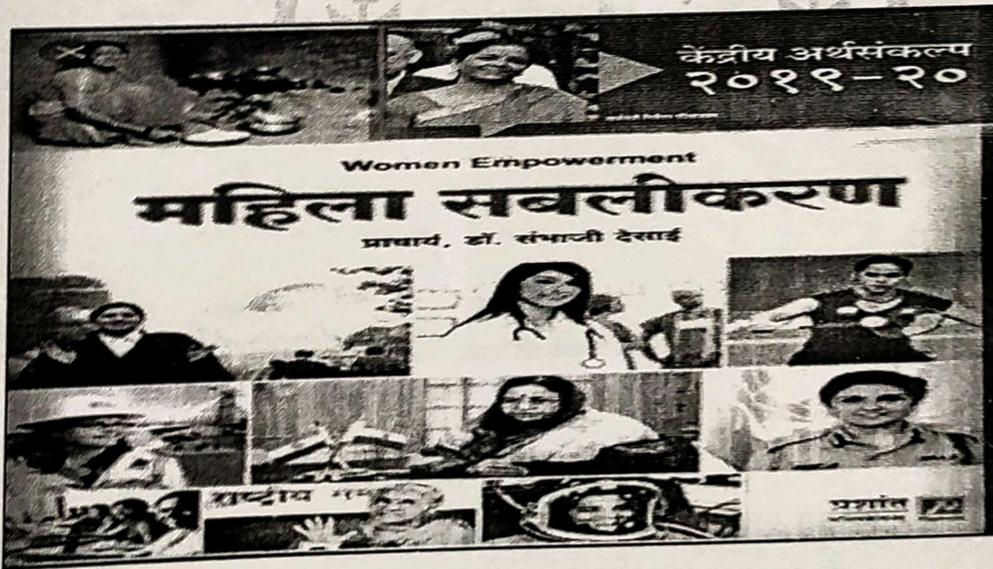
7- अक्ट 1955-56 नुसार बालविवाहास बंदी व पुनर्विवाह करता येतो.

### महाराष्ट्रातील स्त्रीवर झालेले अत्याचार (2010 ते 2013)

अत्याचार	2010	2011	2012	2013
हुंडाबळी	131	134	107	329
कौटुंबिक छळ	7434	7136	7415	7451
बलात्कार	1599	1701	1839	1140
विनयभंग	3661	3794	3935	3935
अपहरण	1124	1252	1440	329
लैंगिक अत्याचार	1180	1071	1294	1290

### बदलती स्त्री: (महिलाच्या संघटीत षक्तीचा प्रयत्न)

षेतीवर कश्टाचे कामे करणे, षेळी पालन, कोंबडी पालन, दुग्ध व्यावसायात गायी म्हसीची व्यवस्था पाहणे ही कामे पूर्वीपासून स्त्रीया करीत आहेत. नेहमीच स्त्रीयांना पुरुशापेक्षा कमी मजूरी मिळते. काळाच्या ओघात ही परिस्थिती बदलाचे अनेक प्रयत्न झाले. त्यात ग्रामीण स्त्रीचा महत्वाचा वाटा आहे. त्या काही घटनांचा मागोवा.



### महाराष्ट्रातील संघटीत होत जाणारी स्त्री:

1972 ते 1974 च्या भीषण दुश्काळातच झाली. त्यावेळी ग्रामीण भागातील स्त्रीयानी मोर्चे काढून रोजगार हमीयोजना पासनाला हाती घेण्यास भाग पाडले. 1986 मध्ये षेतकरी संघटने तर्फे षरद जोषींच्या नेतृत्वाखाली चांदबंड येथे दोन दिवसाचे महिला षिबीर घेण्यात आले. त्यात एक लाख स्त्रीयांनी सहभाग नोंदवला. 1990 मध्ये स्थानिक स्वराज्य संस्थामध्ये प्रथमच स्त्रियांना 30 टक्के आरक्षण देण्यात आले. 1993 मध्ये 33 टक्के आणि 2009 मध्ये 50 टक्के राखीव जागा मिळाल्या त्यामुळे तळागाळातल्या स्त्रीयांना गावच्या व्यवस्थेत काम करण्याची संधी मिळाली. त्यामुळे 14 लाख स्त्रीया

प्रवाहात आले आहेत. त्यामुळे नगरपरिशद, जिल्हा परिशद, पंचायत समिती, ग्रामपंचायत, मार्केट कमिटी मध्ये पदावर येवून खुर्चीवर बसू लागले. स्त्रीच्या आर्थिक परिस्थितीत सुधारणा झाली. बदलत्या काळात बचत गट, स्त्री षेतकरी गट याच्या स्थापना करुन मुख्य प्रवाहात येत आहे. बचत गटानंतर मोठी बाजारपेठ काबीज केली आहे. स्त्री संघटनानी मोठी चळवळ उभारुन स्त्रीयांना निर्भय बनवले.

- अल्पवयातील लग्नाचे प्रमाण घटले.
- मुलीच्या शिक्षणातील प्रमाण वाढले.
- महिला अधिक सबलीकरण
- स्त्री सक्षमीकरणाच्या अनेक योजना राबवण्यास षासनास भाग पाडले.
- राजकिय क्षेत्रात, अनेक स्त्रीया उच्च पदापर्यंत गेलेल्या दिसतात.
- सामाजिक, आर्थिक क्रिडा, साहित्य, क्षेत्रामध्ये भारतीय स्त्रीयानी आपले कार्याचा ठसा उमठवला आहे. एकदरीत सर्वच क्षेत्रामध्ये महिला वाढता सहभाग वाढत आहे.



#### संदर्भ:

1. महिला सबलीकरण – डॉ. संभाजी देसाई
2. ग्रामीण महिलाच्या मुलभूत समस्या आणि उपाय – डॉ. सय्यद तब्बसूम सुलतान
3. महिला बचतगट – संजयबाबा घाडगे
4. स्त्री प्रश्नांची वाटचाल परिवर्तनाच्या दिषेने प्रतिमा प्रकाषन, पुणे

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## दहशतवाद

डॉ. बी. एम. चव्हाण

सहयोगी प्राध्यापक, लोकप्रशासन विभाग  
आनंदराव धोंडे ऊर्फ बाबाजी महाविद्यालय  
कडा ता. आष्टी जि. बीड मो.९४२३११३४५६  
Email-Id : bhaskarc449@gmail.com

### सारांश :

दहशतवादाच्या समस्येचे आनेक पैलू आहेत. दहशतवादी अनेक प्रकारचे आहेत. दहशतवादी कृत्यात अनेक निष्पापांचे बळी गेले. दहशतवादी कृत्यांची काही समान वैशिष्य आपणाला दिसून येतात. आपली उद्दिष्ट्ये साध्य करण्यासाठी हिंसेचा मार्ग आवलंबविण्याशिवाय अन्य मार्ग नाही शस्त्रांच्या हिंसेच्या धाकाने कोणासही नमविता येवू शकते असा त्यांचा विश्वास असतो. दहशतवादी होण्यासाठी अशा प्रकारचा बौद्धिक अहंकार ही प्रथम पायरी आसते. दहशतवादी गट उधिष्ठपूर्तीसाठी अत्याधुनिक संहारक शस्त्रांमध्ये प्राप्त करीत असतात. धन व संपत्तीची लूट करण्यासाठी दडपशाहीचा मार्ग स्वीकारण्यात आला. स्थानिक दहशतवादी गटांना प्रोत्साहन देण्यासाठी महासत्तांनी सुरुवात केली. स्थानिक प्रश्नांसाठी संघर्ष करणाऱ्या दहशतवादी गटांना महासत्तांकडून अद्यावत शस्त्रांमध्ये मिळत गेली व त्यामुळे हे दहशतवादी गट प्रबळ होत गेले.

**सुचक शब्द :** अणुयुद्ध, हिंसात्मक गुन्हेगारी, मुलतत्त्ववादी, कट्टर दहशतवादी, धार्मिक कट्टरवादी.

### प्रस्तावना :

२१ वे शतक हे युग प्रत्येक क्षेत्रात प्रगती करणारे युग आहे. ज्ञानाचा विज्ञानाचा, तंत्रज्ञानाचा झालेला प्रचंड स्फोट त्याच बरोबर अत्यंत गुंतागुतीचे असलेले मानवी संबध प्रत्येक क्षेत्रात एक जीव घेणी स्पर्धा, अनुयुद्धाचा धोका, सर्वत्र अराजकता हिंसाचार, भ्रष्टाचार अंतर्गत संघर्ष अशा अनेक समस्यांना आपण तोंड देत आहोत. दहशतवादाच्या समस्येचे अनेक पैलू आहेत अनेक अयाम आहेत व अनेक कारणे आहेत. दहशतवादी अनेक प्रकारचे आहेत. दहशतवादी कृत्यात अनेक निष्पापांचे बळी गेले. करोडो रुपयांच्या मालमत्तेचे नुकसान झाले. सगळ्याच दहशतवादी कृत्यात हे कमी अधिक प्रमाणात घडून आले. दहशतवादी कृत्यांची काही समान वैशिष्य आपणाला दिसून येतात.

सदरील लेखात दहशतवादाच्या व्याख्या, दहशतवादाचा इतिहास, दहशतवादाची कारणे, दहशतवादाचे परिणाम व काही उपाय सुचवलेले आहेत तसेच काही घटनांचा आढावा घेतलेला आहे.

### दहशतवादाच्या व्याख्या :

१) “आपली राजकिय उद्दिष्ट्ये साध्य करण्यासाठी समाजाच्या किंवा त्याच्या एखाद्या स्तरात भीती किंवा दहशत निर्माण करण्याच्या उद्देशाने केलेली हिंसात्मक गुन्हेगारी म्हणजे दहशतवाद होय.”

२) जॉन क्रेटमची व्याख्या : “आपल्या राजकीय मागण्या जबरदस्तीने मान्य करून घेण्यासाठी विशिष्ट समूहात आत्यंतिक भीती निर्माण करण्याच्या हेतूने एखादी व्यक्ती किंवा गट यांनी प्रस्थापित सत्तेच्या बाजूने किंवा विरोधात चालविलेला हिंसाचार किंवा निर्माण केलेला धाक म्हणजे दहशतवाद होय.”

### दहशतवादाचे स्वरूप :

आपली उद्दिष्ट्ये साध्य करण्यासाठी हिंसेचा मार्ग आवलंबविण्याशिवाय अन्य मार्ग नाही शस्त्रांच्या हिंसेच्या धाकाने कोणासही नमविता येवू शकते असा त्यांचा विश्वास असतो. कमी वेळात उद्दिष्ट्य साध्य करण्यासाठी हिंसा हे

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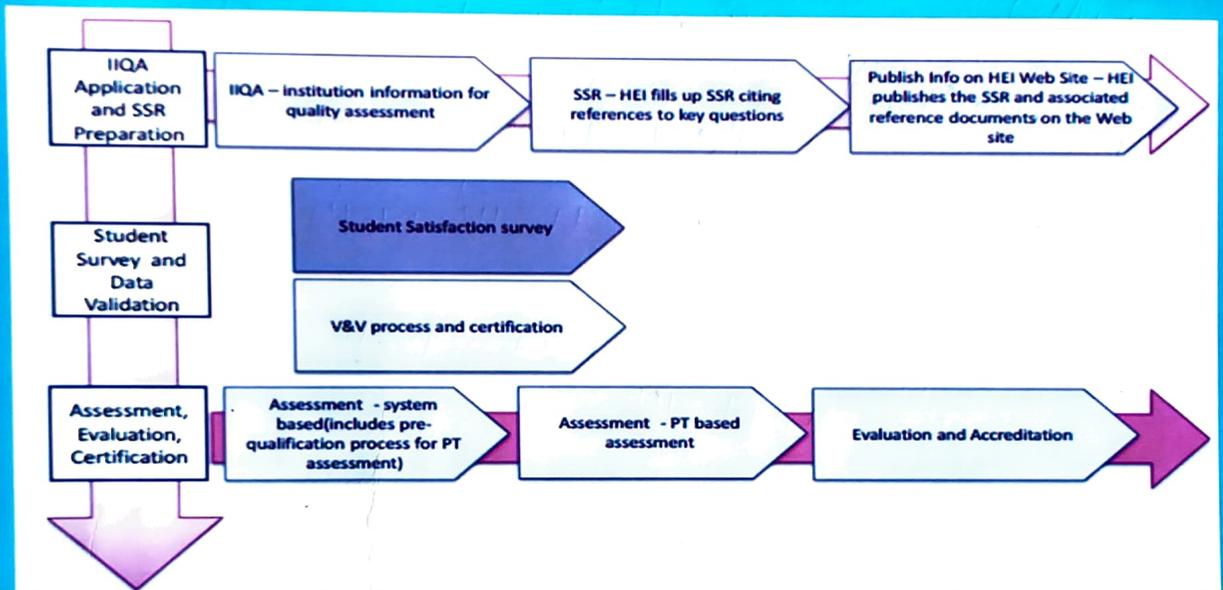
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NAAC : Revised Accreditation Framework and  
Quality Improvement Strategies in Higher Education



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## Evaluation Process and Reforms in Higher Education

**Dr. B. M. Chavan.**

Professor & Head, Department of Public Administration  
Anandrao Dhonde Alias Babaji College, Kada  
Tq- Ashti: Distt- Beed-414202

### Abstract-

*With the development of learning technologies in the late 20th century, education system has changed rapidly. This is due to the capability of technology to provide a proactive, easy access and comprehensive teaching and learning environment. Nowadays, Ministry of education in all over the world has provide a lot of facilities and training in order to enhance the use of advanced technologies in the countries' teaching and learning process. A high budget has been placed in order to provide the equipment needed by teachers to improve the education system. Despite all the efforts, most of the countries are facing similar problem whereby the teachers are not maximizing the usage of the technology provided. This has become a serious matter as many previous researches have proven the usage of ICT in teaching and learning process could improve students' achievement. Many, researchers have taken an effort to analyze the factors that affecting teachers' acceptance of ICT usage in the classrooms. It shows that, the major barrier of the implementation was the teachers' belief as the teachers are the person who implements the change in their teaching and learning process.*

### Introduction

The previous chapters have demonstrated that the concept of excellence implies different things in different contexts and is often applied without a clear specification of its meaning. Excellence can be both a description of current provision and also a goal or aspiration for institutions, academics and students.

A common understanding of the term is as a mark of distinction, describing something that is exceptional, meritocratic, outstanding and exceeding normal expectations. It is a form of commendation commonly linked to the reputation of institutions and to the achievements of students. If some provision is recognised as excellent, it implies that the majority of other providers are simply satisfying standards. The concept has no meaning if all are excellent and there is no way of distinguishing the performance of individual institutions and departments.

However, not all would subscribe to this elite view of excellence. It can be seen as both a relative and an absolute concept. All students may have the opportunity to strive for excellence in what they do and the achievement of excellence may be measured in terms of added value and personal development.

### Research Methodology

In this research, quantitative methodology was used to collect and analyze the data obtained from all the respondents. The researchers developed the questionnaire and finalized it before being distributed to the targeted group of respondents. Few sections on the questionnaire were designed specifically to address research objectives in regard with the effectiveness of ICT integration for students in learning and effective elements of ICT integration in public school in Maharashtra.

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## ICT Education : Its Benefits and Difficulties

**Dr. B. M.Chavan**

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Anandrao Dhonde Alias Babaji College, Kada  
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### Abstract-

*This essay describes some benefits of implementing ICT in classroom, especially within the area of collaborative and self-managed learning. However, implementing ICT in classroom is not an easy and simple matter. There are many issues which should be addressed. Those range from the school culture, teachers barriers, finance, leadership, curriculum, and ethical issues. Those problems are experienced by both developed and developing countries. This also refutes a widespread assumption that developed and developing countries experience more barriers for implementing ICT than developed countries.*

**Keywords-**Collaborative Learning, Self-managed Learning Process, Technological Competition, Constructive Change, Technological Culture.)

### Introduction:-

Recently, the development of ICT gradually replaces the traditional teaching pedagogy. Face to face classroom interaction is getting replaced by on-line communication, traditional white or blackboard is getting replaced by interactive whiteboard, and books or printed resources are getting replaced by on-line resources.

It is believed that technology can bring our education sector from the dark age to the light age. This is because the implementation of ICT in schools can bring about some potential benefits. However, to obtain those benefits we have to overcome its enormous difficulties may vary from school to school, from region to region, and from country.

It is frequently firmly believed by the developing countries that the most essential prerequisite of building prosperous nations is technological access, skills, and managements. We often assumed that what makes the developed countries developed is because they have good technological access, skills, and managements. This makes many developing countries see and learn what the developed countries do with their technology.

In reality, not only we as the developing countries face difficulties in integrating ICT into our schools sector, but also the developed countries .in some respects, we have similar difficulties, but in some others we face different difficulties.

The above phenomena will be the main discussion in this essay .the discussion in this essay is divided into four main parts. The first part covers the discussion of the benefits of ICT in teaching and learning area. The second part covers the discussion of the difficulties in western countries.in third part some examples of ICT implementation in western and eastern countries will be discussed. The last part covers the organizational issue in implementing ICT.

### **Difficulties in Implementing ICT Experienced by Western Countries / Developed Countries.**

The development countries, which are mostly generally perceived as high- tech countries and have good technological management by many developing countries, may also experience some difficulties in implementing ICT in schools. Those difficulties may range from teacher's readiness, school supports, and finance.



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Abstract

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## “ग्रामीण महिला सक्षमीकरण आणि सामाजिक विकास”

डॉ. चव्हाण बी. एम.  
लोकप्रशासन विभाग प्रमुख,  
आनंदराव धोंडे ऊर्फ बाबाजी महाविद्यालय,  
कडा ता. आश्टी जि. बीड

**गोशवारा:** अलीकडील काळामध्ये महिला सक्षमीकरण हा विशय एक महत्वाचा मुद्दा म्हणून समोर आला आहे. वास्तविक पाहता स्त्री-पुरुष यांच्यामध्ये नैसर्गिक प्रकृती भिन्नता वगळता इतर विशेष असा फरक नाही. एकमेकांना पुरक अशी समाज जिवनातील ती दोन अंग आहेत. तरी परंतु स्त्री ही जीवनभर पुरुषाच्या अश्रीत कषी राहिल हेच पाहण्यात आले. प्राचीन काळापासून महिलांचे अस्तीत्व जाणून घेतल्यास असे दिसून येते की, महिलांच्या वाटयाला आलेल्या मर्यादित भूमिका, अज्ञानामुळे आत्मविश्वासाचा अभाव व ठराविक स्वरूपाचे सरकार या सर्व बाबी त्यांच्या विकासातील अडसर ठरल्या. आधुनिक काळात स्त्री सक्षमीकरणासाठी जागतिक पातळीवर, देशपातळीवर, राज्यपातळीवर, गावपातळीवर, शासकीय, प्रशासकीय, सामाजिक, राजकिय घटनात्मक अशा अनेक क्षेत्रात तरतुदी करून त्यांची काटकोरपणे अंमलबजावणी करून स्त्री ही पुरुषाच्या बरोबरीने कार्य करण्यासाठी सक्षम आहे हे त्यांच्या अलीकडील काळात दिसून येत आहे.

**प्रास्तावना:** प्राचीन काळापासून पुरुषप्रधान संस्कृतीच्या वरवंटयाखाली भरडल्याजाणाऱ्या महिलांना सामाजिक आर्थिक व राजकीय स्वातंत्र्य समता आणि प्रतिश्ट प्राप्तकरून देण्यासाठी स्वातंत्र्यपूर्वकाळात भारतीय समाजसुधारणा करणे व स्वातंत्र्यानंतर भारत सरकारने मोलाची भूमिका पार पाडली आहे. भारतीय राज्यघटनेतील तरतुदींना अनुसरून देशातील ग्रामीण महिलांच्या सबलीकरणासाठी विविधयोजना तयार करून त्यांची अंमलबजावणी केली आहे. त्यामुळेच आज काही प्रमाणात महिलांच्या सामाजिक, आर्थिक व राजकिय सक्षमीकरणास चालना मिळत असल्याचे दिसून येते.

**ग्रामीण महिला आणि पंचायत राज:** स्त्रीयांसाठी सर्वात मोठा अडथळा म्हणजे पुरुषवर्गाचे अधिकारगाजवण्याची वृत्ती हा आहे. त्यामुळे स्त्रीयांना राजकिय अधिकार सत्तापदे मिळाली नाही आणि स्त्रीवर्गाच्या विकासाला पुरुषवर्गाच्या मनापासून पाठिंबा मिळाला नाही. स्थानिक प्रशासनात महिलांच्या परिस्थितीत बदल घडवण्यासाठी 1993 मध्ये 73 वी घटनादुरुस्ती झाली. या घटनादुरुस्तीनुसार भारतात पंचायतराजसंस्थामध्ये महिलांसाठी 1/3 म्हणजेच 33 टक्के पेशा कमी नाही इतक्या जागा आरक्षित ठेवण्यात आल्या आणि स्त्रियांचा राजकारणात कायदेशीर प्रवेशाचा मार्ग मोकळा झाला. तर दुसऱ्या बाजूने त्यांच्यातील उदासिनता, निश्क्रियता यांचे उच्चाटण होवून महिलांमध्ये एक प्रकारची जाणीव-जागृती निर्माण झालेली आहे. महाराष्ट्रात जिल्हापरिशदांमध्ये 1962 पासून पंचायतराज कार्यान्वित आहे. स्थानिक प्रशासनाच्या उद्देशाने प्रेरित होऊनही लोकषाही विकेंद्रीकरणातून या पंचायतराज्यातील त्रिस्तरीय रचनेमध्ये जिल्हापरिशद, पंचायत समिती आणि ग्रामपंचायत या संस्थामधून अनेक विविध उपक्रम महाराष्ट्रातील पंचायतराज राबवित आहे तर महिलाही काही उपक्रम राबवित आहेत. व स्वतंत्रपणे कार्य करीत आहेत. केवळ चुल आणि मुल न सांभाळता त्या राजकारण आणि प्रशासनाकडे वळत आहेत. महिलांचा हा दर्जा 73 व्या घटनादुरुस्तीनुसार सुधारलेला दिसून येतो. उदा. महानगरपालिकेचे अध्यक्षस्थान तसेच पंचायत समिती सभापती. ग्रामपंचायतीच्या सरपंच, शिक्षणाच्या क्षेत्रातही महिलांनी गोठी झेप घेतलेली आहे.

**भारतीय राजकारणात महिलांचा सहभाग:** स्वातंत्र्यपूर्व काळापासून भारतीय राजकारणात महिलांचा सहभाग दिसून येतो उदा. महाराणीलक्ष्मीबाई, झाषीचीराणी, अहिल्याबाईहोळकर, रझियासुलतान, राणीताराबाई, चांदबीबी या महिला आपल्या प्रयत्नातून स्वातंत्र्यपूर्व काळात सत्तेवर आल्या होत्या. यांचीच प्रेरणा घेवून भारतीय राजकारणात भारतीयमहिला यामध्ये सरोजनी नायडू, कमला नेहरू, राजकुमारी अमृता कौर, उशामेहता, अरुणा असफअली यासारख्या महिला भारतीय आंदोलनात अग्रभागी होत्या.

# Modern Methodic Pf Power Cardio Training In Students' Physical Education

**Dr. B.M. Dhonde**

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## ABSTRACT

*Significant increase of students' physical condition and health level at the account of application of modern power cardio training methodic. Participated in the research. The age of the tested was 19 years. The research took one year. We used methodic of power and functional impact on trainees' organism. Such methodic is some system of physical exercises with weights to be fulfilled under accompaniment of specially selected music. We showed control tests showed experimental group students achieved confidently higher physical indicators. Boys demonstrated increase of physical strength and general endurance. Increase of control group students' body mass can be explained by students' insufficient physical activity at trainings, conducted as per traditional program.*

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**Keywords :** health, physical condition, students, physical education, power-cardio training.

## INTRODUCTION

Recent years there has been observed negative tendency to noticeable worsening of modern young people: students' and pupils' physical condition and health. K. Hardman in his works expresses serious trouble about significant falling of students' physical health standards and growth of obesity of obesity in developed European countries and developing countries of Africa and Asia. It was found that young people's excessive involvement in internet activity and computer games was a serious threat to their physical and psychic health. For correction of this negative situation scientists note that physical functioning level of most of young people does not correspond to optimal parameters. As per the data of D. Basset most of USA youth do not realize the recommended 60 minutes a day of physical functioning. it is also noted that youth of Russian Federation has insufficient level of motor.

The key to this problem's solution can be changes in physical education programs for students. Besides, it is necessary to raise the quality of young people's training. Rather important are modern training methodic, permitting for teachers to use new effective forms and methods of physical education in educational process. Scientists throughout the world discuss new styles of teaching in higher educational establishments. The authors note that new styles of teaching permit for a student to actively participate in educational process and achieve the set targets with high effectiveness.

Specialists also note the absence of students' right for choosing the most favorable training programs in many higher educational establishments. General orientation of physical education programs in higher educational

**SPORTS SURROUNDINGS IN SOCIETY A HEALTH PERSPECTIVE****DR. DHONDE B.M.****A.D. COLLEGE KADA**

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**ABSTRACT**

Physical education includes exercises, play, and games; depending on the setting, it may be organized or spontaneous, competitive or noncompetitive, required or optional, job related or job excluded, and a diversion or a compulsion. As you can readily determine, defining physical education, at least to the satisfaction of a diverse audience, is not an easy task. The following definition seeks to encompass the various outcomes experienced by all people in its various programs: physical education is a process through which an individual obtains optimal physical, mental, and social skill and fitness through physical activity.

*Key words : Physical Education, Sports & Games, physical activity, health*

**INTRODUCTION**

Just as physical education and sport have been variously labeled and have faced seeming identity crises, they also have been described in a multitude of ways. What do physical education and sport mean to you? Are they synonymous with exercise, play, games, leisure, recreation, or athletics? Before physical education and sport can be defined, each of these terms needs to be understood. Exercise, in the physical dimension, means using or exerting the body. Play refers to the resultant action, or what the participants do during physical exertion. Games range from amusements or diversions to competitions with significant outcomes governed by rules. Freedom from work or duties describes leisure, which may or may not be used for physical activity. Similarly, recreation refreshes or renews one's strength and spirit after toil, again with or without activity. Athletics are organized, competitive activities in which skilled individuals participate.

**Purpose of sport**

Purposes and objectives are often used interchangeably although they differ somewhat in meaning. A purpose is a stated intention aimed at determining to make the dean's list this semester and aiming to earn Phi Beta Kappa recognition as a senior are examples. Historically, physical educators have been challenged to impact significantly the lives of those they teach. Physical education and sport experiences have provided opportunities to learn motor skills and to dynamically affect students' physical, psychological, and emotional well-being, thereby enhancing the quality of their lives. Thus, the aim of physical education and sport is to increase every individual's physical, mental, and social benefits from physical activities and to develop healthy life-style skills and attitudes. To help each person make these attitudinal and behavioral changes, physical education's purpose is to optimize quality of life through a long-term commitment to an enjoyable, personal exercise program that will meet varied needs in a changing world.

**Society Determines the place of Physical Education**

Whether an item of physical education or sport is popular in colleges and schools depends largely upon public interest, spectator approval and media popularity. That is how the major and minor sports

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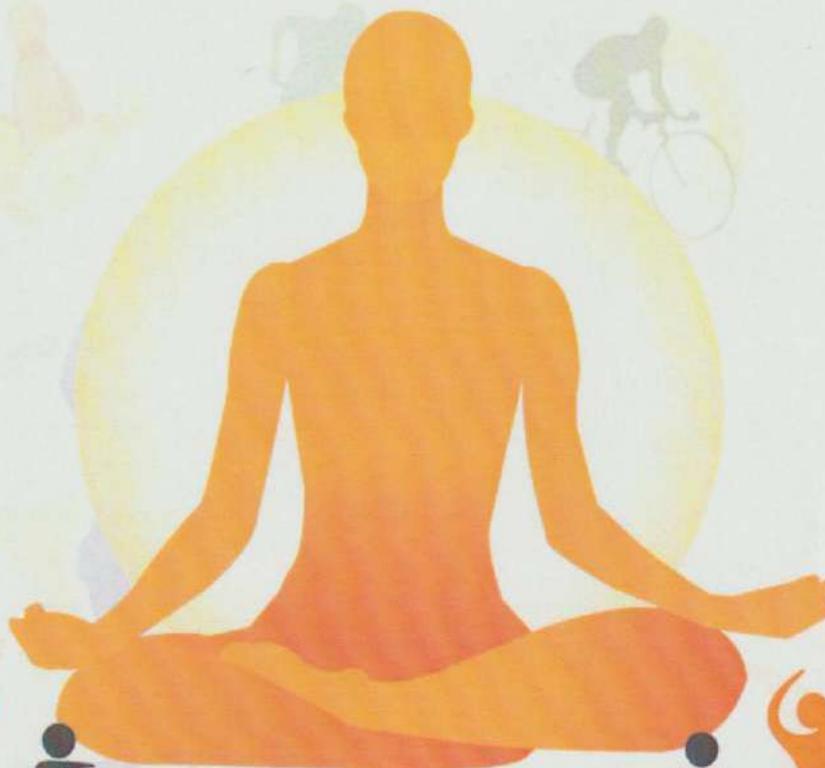
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## Physical Education, Sports, Yoga & Psychology



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**SWATIDHAN PUBLICATIONS**



## Benefits of Yoga in Sports–A Study

Dr. B.M. Dhonde

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### Abstract:

*Yoga has been practiced for around 5,000 years. Several schools and organizations of yoga have emerged over time to time. It can be overwhelming at first to find a style of yoga that resonates with you. If you are a competitive athlete, it is best to tailor your yoga practice to your training schedule because a particular sport can develop certain muscle groups while ignoring others. Over time, this process causes imbalances in the muscles and joints, leading to overuse injuries. Yoga helps the muscles, tendons, and ligaments move through a full range of motion, thus cultivating balance and core strength which is a huge benefit to athletes in their chosen sports. A tri-athlete from San Diego, Heidi Resort said, "I'm glad I found yoga and added it to my weekly workout routine. Not only do I feel more confident that I will continue to be injury free." Another essential element in yoga is breath work. The attention to breath during yoga can be considered one of the most important benefits to athletes. Learning to stay focused and centred through uncomfortable poses by concentrating on even inhalations and exhalations sets up the athlete to stay focused during a race or challenging workout. The mind-body connection in yoga is essential to helping athletes develop mental acuity and concentration. In addition, yoga helps you to relax not just tight muscles, but also anxious and overstressed minds. Yoga works not just in the sagittal plane, but in the frontal and transverse planes as well, ensuring well-rounded development. Being more relaxed will also aid in athletic performance. So, why not enhance your game performance and prevent injury by adding yoga to your training plan now.*

**Keywords:** Athlete, yoga, injury, muscle, performance.

### Introduction:

Many international football clubs, American footballers and rugby, golf & cricket clubs in Australia, South Africa, New Zealand & the US have used this centuries-old practice from India as a progressive training technique for some time. Yoga is both preventive and therapeutic and has shown to offer both physical and mental benefits to the body and mind. Yoga is distinctly different from other kinds of exercise as it generates motion without causing strain and imbalances in the body. Therefore the practice is an ideal complement to other forms of exercise and an extreme advantage to any sport. The "postures" are the physical positions that coordinate breath with movement and we hold these positions to stretch and strengthen different parts of the body. They systematically work all the major muscle groups, including the back, neck, and shoulders, deep abdominals, hip and buttock muscles and even ankles, feet, wrists and hands. Although most poses are non aerobic in nature, they do in fact send oxygen to the cells in the body by way of conscious deep breathing and sustained stretching & contraction of different muscle groups. Yoga can help to check any imbalance in muscular development and will enable the body to function more efficiently. If the body is flexible and supple, it will be less prone to sports injuries as the joints will be kept lubricated. "When the surface of a lake is still, one can see to the bottom very clearly" this is impossible when the surface is agitated by waves. In the same way, when the mind is still we can control mental agitation by focusing on perfect concentration. When a player, in any sport, is trying to fulfil thousands, hundreds of thousands or if playing for their country, millions of people's expectations their minds are completely stressed and their natural efficiency diminishes. No amount of coaching or training can prepare for doubt or worry entering the mind of a player during a game. By holding steady postures and concentrating on deep abdominal breathing we can increase body awareness, relieve chronic stress patterns in the body, relax the mind, centre ones attention, sharpen concentration and "stay in the zone!" Many athletes are having more injuries that require surgery because of the increased focus on

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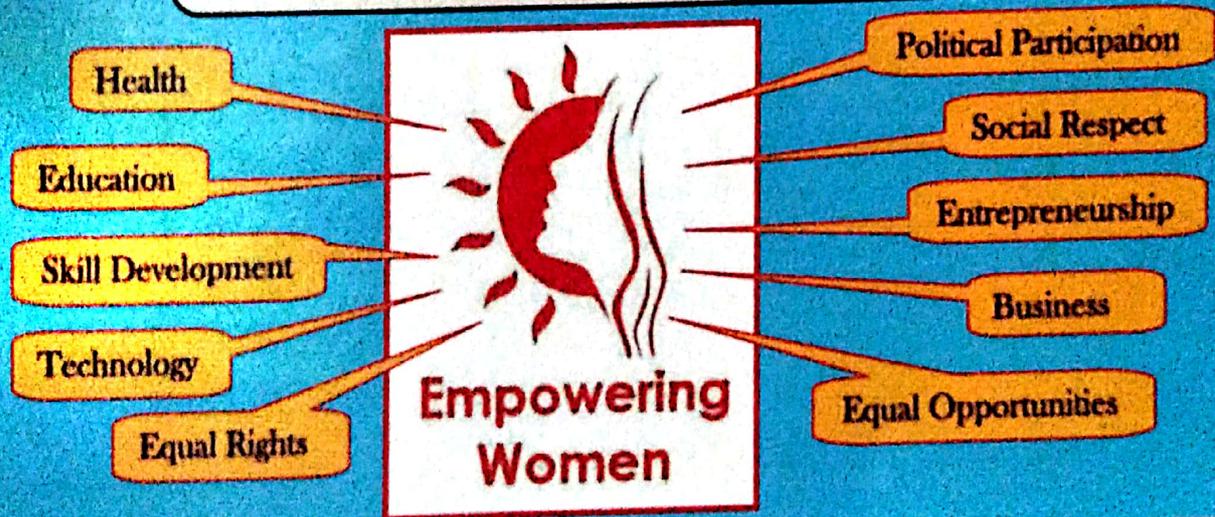
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**Women Empowerment**

Through Entrepreneurship & Skill Development



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*- Chief & Executive Editor*

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## Role of Women Entrepreneurs in Economic Empowerment of Rural Areas

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Dept. Economics

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### Abstract:

*In this globalized era, economic growth of a country highly depends on the participation of women in the development of that country. But for a male dominated society like India where majority of population lives in rural areas, it is very difficult for a woman to think about to establish their own business. Entrepreneurship amongst women has been a recent concern in rural India. Woman Entrepreneur is a person who accepts challenging role to meet her personal needs and become economically independent. In India around three million women entrepreneurs are working and mainly they are skewed towards smaller sized firms, as almost 98 percent of women-owned businesses are micro-enterprises. This paper mainly concerned with the women entrepreneurship situation in rural areas of India. This is a conceptual paper and uses secondary data from books, journals, articles, web sites and government reports. This study highlighted the current scenario of women entrepreneurs and their contribution in economic empowerment of rural areas of India. This paper also focuses on the future prospects of women entrepreneurs and government initiatives for making women entrepreneurs more successful. This study suggests some strategies for empowering rural women.*

**Key Words:** Women Entrepreneurs; Economic Growth; Government Schemes; Rural India.

### Introduction :

India, formally called Republic of India, is a country of South Asia. In terms of its population, India is the second most populous nations in the world and falls slightly behind China. As per the census statistics, 2016 India occupies 2.4% of the world's land area but over 17.85% of the world's population lives in India. Total population of India is approximately 1.32 billion out of which 48.36% are females and 51.64 are males. 72.2% of the population lived in about 638,000 villages and the remaining 27.8% lived in 5480 towns and urban agglomerations. The statistics of India Census, 2011 reveals that majority of population of India lives in villages. People living in villages are facing the problem of low investment, low saving and low production. In case of women in rural areas situation become worst because women continue to struggle the dual responsibilities. In villages females are illiterate, less contribution in decision making, high health risk, less financial resources access etc. Majority of decisions of family are taken by the male. In such type of environment, it is very difficult for a female to think about their career. In rural areas, where there is shortage of big industries then self-employment or entrepreneurship works only an alternative for employment. Self-employment is an employment generator for rural masses. Entrepreneurship is a process of creating something new by assuming the risk and rewards and an individual who takes risks and starts something new is known as an entrepreneur (Robert D Hisrich, 2007). Government of India has defined women entrepreneurs based on women participation in equity and employment of a business enterprise. Accordingly, a woman run an enterprise is defined as "an enterprise owned and controlled by a women having a minimum financial interest of 51% of the capital and giving at least 51% of the employment generated in the enterprise to women". Thus women entrepreneur is a person where risk and benefits are owned by women. Women Entrepreneurs in India represent a dynamic group of women who have broken away from the beaten track, where demands at home, family oppositions & cultural inhibitions, have led to lack of support, resources and opportunities; are now exploring new vistas of economic participation with an all new vigor. A great many of them have chosen the Entrepreneurs World

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Causes, Effects and Remedies



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## Business Cycle: Effects and Causes

**Prof. Dr. A. B. Malshikhare**  
 Anandrao Dhonde Alias Babaji College, kada Ashti, Beed.

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 Dist.: Ahmednagar.

### Introduction:

A trade cycle refers to fluctuations economic activities especially in employment output and income, prices, profits etc. It has been defined differently by different economists. According to Mitchell, "Business cycles are of fluctuations in the economic activities of organized communities. The objective business restrict the concept of functions restrict the concept of fluctuations in activities which are systematically conducted on commercial basis the noun 'cycle' are out fluctuations which do measure of regularity. In a Business cycle there is Wave like fluctuations in aggregate employment, income, output and price level.

### Definition:

A trade cycle is composed of period of good trade characterised by rising prices and low unemployment percentages. Altering with periods of bad trade Characterised by falling prices and high unemployment percentages. Has thus specified two indices, namely prices and unemployment, for measuring the upswing. And down swing of the business Cycles. "The business Cycle in the general sense may be define as on alternation of period prosperity and depression of good and bad trade"

Business Cycles are species of Fluctuations in the Economic activities of organised communities. The adjective business restricts the concept of fluctuations in activities. Which are systematically conducted on a commercial basis? The noun cycle. Bars out Fluctuations which do not recur with a measure of regularity. Prof. Mitchell thus insists upon a measure of regularity in cyclical fluctuations.

### Causes of Economic cycle:

Monetary policy interest rates. House prices effect Consumer/ business confidence- Irrational exuberance' of market's, Credit Cycle - Minsky moment changes in real wages Multiplier/ accelerator effect. Exchanges rate movements. Real business Cycle theories of technological shocks Changes in the rate of productivity Population/ demographics Inventory cycle.

### Causes of Business Cycle:

- 1) **Interest Rate:** changes in the interest rate effect Consumer spending and economic growth. For example. If interest rates are cut. This reduces borrowing costs and therefore in creases disposable income for consumer this leads to higher Spending and economic growth. However, if the Central Bank increase interest rates to inflation, this will tend to reduce consumer and investment, leading to an economic downturn and recession see interest rate cycle. High - interest rates in 1991-92 were a major factor in the recession of that year. The cut in interest rates post 1992 helped the Economic to recover.

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Sponsored National Seminar on

# Black Money and Its Impact on Indian Economy

## Black Money Outflows (in US\$ bn avg)



# Black Money

Black Money  
In  
Indian economy

Editor

**Dr. Abasaheb Hange**



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**IMPACT OF BLACK MONEY ON INDIAN ECONOMY****Dr. Waghule B. M.**

Asso- Prof in Economics

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**Abstract :-**

In India black money is one of the major issues like any other countries. This issue is not a new in India but it has been in continuation since long time. This means it is better to understand the meaning of black money The definition of the black money is "Black money is money earned through any illegal activity controlled by country regulations". By various activities money is earned and it is not declared by paying tax. In the early 20s the concept of black money came. Now the black money has become a dominative issue in moulding the national policies, determining new economic activities and sometimes determining the law of the country.

In the modern world, the term black money is used for the money which is unaccounted and no statutory taxes are paid to the authorities hidden from the eyes of the authorities. Black money can also be termed as production of goods and service whether done legally or illegally but which is not taken into account for the official estimation of the country's Gross Domestic product. Because it is neither detected by the authorities nor is declared by its creator's just consider what will India's position among the richest people in the world if the amount of black money is also take into consideration.

**Black money's effect on Indian Economy :-**

The impact of black money on the Indian Economic is explained as follows :

- 1) The direct effects of black money income is the loss of revenue to the state.
- 2) Black money has resulted in transfer of funds from India to foreign countries through black way.
- 3) Black money and Tax evasion are even otherwise encouraging over financing of business which is as dangerous as under financing.
- 4) Black money encourages investment in precious stones and jewelry.
- 5) The direct effect of black money is the loss of revenue to the state exchequer.
- 6) Black money with businessmen and capitalists and the consequent inequalities of income of income place of large amount of funds.
- 7) Black money income has been causing underestimation of GDP in India.
- 8) A part of the black income is held in cash and as a result there is abundance of liquidity which becomes available through the addition of savings held in the form of cash, silver, gold and bullion.

**What are the effects of Black money?**

Black money is a socio economic evil. The existence of rapidly growing black money, in our economy has grave and disastrous consequences The major effects of black money are discussed below

**1) Dual Economy :-**

The increase in the amount of black money in India over a period of time lead to the perpetual growth of economic dualism which consists of parallel economy operating side by side with the official or Reported economy on the country. The black money economy represents not less than one fifth of the aggregate economic transactions.

**2) Under - estimation :-**

A large underground economy and growth of black income lead to under - estimation of the true size and in correct picture of the economy by the officially compiled national income data.

**3) Loss of Revenue to the Government :-**

# शेतकरी आत्महत्या

प्रा. डॉ. अशोक बापुराव देवकर

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### महाराष्ट्रातील शेतकऱ्यांच्या आत्महत्या कारणे व उपाय

प्रा. डॉ. अशोक माळशिखरे

आनंदराव धोंडे ऊर्फ बाबाजी महाविद्यालय, कडा ता. आष्टी  
जि. बीड, महाराष्ट्र.

#### प्रस्तावना :

भारत कृषीप्रधान देश म्हणुन ओळखला जातो. कृषीप्रधान अर्थव्यवस्थेतील शेतकरी पुर्वीपासुन शेतीसाठी योग्य अशा प्रदेशातच वस्ती करुन रहात आहे. भारतातील एकुण लोकसंख्येपैकी 70 टक्के लोकसंख्या प्रत्यक्ष व अप्रत्यक्ष शेती क्षेत्रातच गुंतलेली आहे. एकुण राष्ट्रीय उत्पन्नात शेतीक्षेत्राचा वाटा 22 टक्के एवढा आहे, एकुण निर्यातीत 10 टक्के एवढा आहे. असे असतांना देखील शेतकरी कर्जात जन्मतो, कर्जात जगतो व कर्जातच मरतो. 1991 नंतर 49 टक्के शेतकरी कर्जात बुडालेले आहेत व त्यामुळेच शेतकऱ्यांच्या आत्महत्या होत आहेत. उत्तम शेती, मध्यम व्यापार, कनिष्ठ नौकरी या म्हणी ऐवजी उत्तम नौकरी, मध्यम व्यापार व कनिष्ठ शेती असे सुत्र तयार झाले आहे.

ब्रिटीश काळात शेतकऱ्यांचे मोठया प्रमाणात शोषण झाले व आता नैसर्गिक आपत्ती दुष्काळ, अतिवृष्टी, वीजपुरवठयातील अनियमित पाणी पुरवठयाचा अभाव, कर्जपुरवठयाचा अभाव यामुळे शेतकऱ्यांच्या आत्महत्या ही एक मोठी समस्या बनली आहे.

#### महाराष्ट्रातील शेतकऱ्यांच्या आत्महत्या :

1991 नंतर जागतीकीकरणाला सुरुवात झाली जागतीकीकरणानंतर शेती क्षेत्रात मोठया प्रमाणावर बदल घडुन आले.



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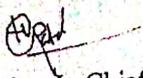
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## महिला सबलीकरण व योजना

डॉ. अशोक भाऊराव माळखरे  
अर्थशास्त्र विभाग  
आनंदराव धोंडे ऊर्फ  
बाबाजी महाविद्यालय, कडा  
ता. आरटी जि. बीड

### सारांश (गोशवारा):

संपूर्ण जगामध्ये महिला सबलीकरण हा विशय महत्वाचा विशय म्हणून समोर आला आहे. स्त्री सबलीकरणासाठी जागतिक पातळीवर, राज्यपातळीवर, गावपातळीवर, शासकीय, प्रशासकीय, सामाजिक, राजकीय क्षेत्रात घटनात्मक तरतुदी करुन त्याची अंमलबजावणी केल्यास स्त्री सबलीकरणाला चालना मिळेल. महात्मा फुले आणि सावित्रीबाई फुले यांच्या विचारांचा वारसा असलेल्या महाराष्ट्रात महिलांना स्थानिक स्वराज्य संस्थामध्ये 50 टक्के आरक्षण प्रदान करुन महिलांना सबलीकरणाच्या माध्यमातून समाजाच्या मुख्यप्रवाहात आणण्याचा प्रयत्न केला आहे.

### प्रस्ताविक:

भारत कृषी प्रधान देश म्हणून ओळखला जातो. कृषीप्रधान देशात गावागावामध्ये पहरामध्ये महिला घरातील कामाबरोबरच पुरुशांबरोबर नोकरीमध्ये काम करतांना दिसून येतात. परंतु महिलांना स्वायत्तता सुरक्षा व संरक्षण देण्यासाठी सबलीकरणाचे अभियान राबविण्यास सुरुवात करण्यात आली परंतु महिला खरोखरच अबला आहेत का व त्यांना सबला बनविण्याची गरज आहे का?

जगामध्ये भारत देश विविध परंपरा, संस्कृती यामुळे ओळखला जातो. पुरातन काळापासून महिलांना देवीचे रूप मानुन पुजनीय मानले आहे. परंतु देशात महिला समाजाच्या बंधनात अडकून पडल्या आहेत. त्यांना दुय्यम स्थान दिले जाते त्यांचे अधिकार हिरावून घेतले जातात, तरीसुद्धा समानतेच्या गोष्टी बोलल्या जातात. असे असतानाही निर्भया कंठ किंवा कोपर्डीसारख्या अमानुश घटना घडतांना दिसून येतात. यावर उपाय म्हणुन महिलांना स्वायत्तता सुरक्षा व संरक्षण देण्यासाठी सबलीकरण अभियान राबवले जाते. प्रत्येक यषस्वी पुरुशामागे स्त्रीचा सहभाग असतो. अनेक महापुरुश स्त्रीमुळे घडले. राजमाता जिजाऊ, राणी लक्ष्मीबाई, अहिल्यादेवी होळकर, सावित्रीबाई फुले, रमाबाई आंबेडकर, मदर टेरेसा, सरोजिनी नायडू, इंदिरा गांधी, कल्पना चावला, सुनीता विल्यम्स, पी.टी. उशा, मॅगसेस पुरस्कार प्राप्त मंदा आमटे यांचे आदिवासी भागातील आरोग्य सेवेचे कार्य, भारतरत्न पुरस्कार प्राप्त ख्यातनाम गायिका लता मंगेशकर, अनाथांची माय सिंधुताई अपकाळ अशा कितीतरी महिलांनी देशाचा नावलौकिक वाढविला आहे. मुळातच महिलांमध्ये निसर्गतः काही देणग्या पुरुशापेक्षा जास्त आहेत. सहनशिलता, स्मरणशक्ती, बचतवृत्ती, वात्सल्याची जाणीव हे गुण निसर्गतःच अधिक आहेत. त्यामुळे स्त्री मुळातच सबला आहे. जरी संविधानाने स्त्री व पुरुश यांना समान अधिकार दिले असले तरी भारताच्या पुरुशप्रधान संस्कृतीमुळे स्त्री आज समाज व कुटुंबाच्या बंधनात अडकून पडली आहे. महिला सबलीकरणाच्या दृष्टीने महिलांना त्यांच्या क्षमतांची जाणीव करुन वैयक्तिक स्वातंत्र्य व निर्णय घेण्याचा अधिकार मिळणे आवश्यक आहे.

देशातील अर्धी लोकसंख्या ही महिलांची आहे. महिला सबलीकरणासाठी मातृदिवस, महिलादिन, बालिकादिन, जननी सुरक्षा अभियान असे कार्यक्रम राबविले जातात. त्यातून स्त्री जागृतीचे काम केले जाते. महिला सबलीकरण करतांना हुंडा प्रथा स्त्री भुणहत्या, निरक्षरता, अत्याचार अशा विघातक प्रवृत्तीचा नाश करणे आवश्यक आहे. तसेच सामाजिक धरगुती अन्याय व अत्याचार या विरुद्ध कठोर कायदे करणे, महिलांना शारीरिक, सामाजिक, आर्थिक व मानसिक स्वरूपात



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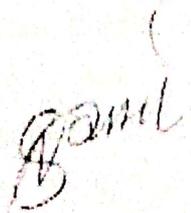
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## Agricultural Entrepreneurship Development

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### Abstract

Traditionally, agriculture is seen as a low-tech industry with limited dynamics dominated by numerous small family firms which are mostly focused on doing things better rather than doing new things. Over the last decade, this situation has changed dramatically due to economic liberalization, a reduced protection of agricultural markets, and a fast changing, more critical, society. Agricultural companies increasingly have to adapt to market changes.

These changes have spurred new entrants, innovation, and new cycles of entrepreneurship within existing firms. It is recognized by politicians, practitioners, as well as scientists that farmers and growers increasingly require entrepreneurship, besides sound management and craftsmanship, to be sustainable in the future. Recent studies show that agricultural entrepreneurship is not only wishful thinking or a new hype: it has a profound impact on business growth and survival.

### Introduction

What is exactly meant by agricultural entrepreneurship? To start, there is no fixed definition of entrepreneurship; a wide diversity of definitions can be found. In daily language, the term "entrepreneur" is often interchangeably used with business owner, starter, someone who is self-employed, sole-trader, or farmer. Agricultural literature is in this perspective not helpful since it provides a multitude of operational definitions of the agricultural entrepreneur. Definitions about entrepreneurship are fuelled by disciplinary inheritance, for instance, building further on the classic economist Schumpeter (1934), or departing from the personal psychologist McClelland (1967).

Many attempts have been made to establish some clarity in this semantic confusion in order to provide the field of entrepreneurship its own distinct signature. Over the last decade, there has been a growing consensus that a fundamental, distinctive feature of entrepreneurship is the identification, evaluation, and pursuit of replace business by entrepreneurial opportunities. Entrepreneurial opportunities differ from normal possibilities to optimize the efficiency of existing products in the sense that the former involves new means-ends relationships. There are several arguments that can be put forward why the opportunity definition as an overarching definition is attractive for agricultural entrepreneurship.

1. It does not limit the study of agricultural entrepreneurship to specific situations such as new venture creation (e.g., a large group of the agricultural businesses are already in existence for decades).

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# SOCIO-ECONOMIC & EDUCATIONAL EMPOWERMENT OF RURAL WOMEN IN INDIA

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## Abstract.

Women's empowerment in India is heavily dependent on many different variables that include geographical location, educational status, social status, and age. Policies on women's empowerment exist at the national, state, and local levels in many sectors, including health, education, economic opportunities, gender-based violence, and political participation. Implementation of laws and policies to address discrimination, economic disadvantages, and violence against women at the community level is the largely patriarchal structure that governs the community and households in much of India. Rural women in country face inequality at much higher rates, and in all spheres of life. Urban educated women enjoy relatively higher access to economic opportunities, health and education, and experience less domestic violence. Women who have some level of education have higher decisionmaking power in the household and the community. The level of women's education also has a direct implication on maternal mortality rates, and nutrition and health indicators among children.

## Introduction

Women's empowerment is a movement involving respect, honor and recognition toward all Women. Empowerment can be defined in many ways, however, when talking about women's empowerment, empowerment means accepting and allowing people (women) who are on the outside of the decision-making process into it. "This puts a strong emphasis on participation in political structures and formal decision-making and, in the economic sphere, on the ability to obtain an income that enables participation in economic decision-making." Empowerment is the process that creates power in individuals over their own lives, society, and in their communities. People are empowered when they are able to access the opportunities available to them without limitations and restrictions such as in education, profession and lifestyle. Feeling entitled to make your own decisions creates a sense of empowerment. Empowerment includes the action of raising the status of women through education, raising awareness, literacy, and training. Women's empowerment is all about equipping and allowing women to make life-determining decisions through the different problems in society.

Entire nations, businesses, communities and groups can benefit from the implementation of programs and policies that adopt the notion of women empowerment. Empowerment of women is a necessity for the very development of a society, since it enhances both the quality and the quantity of human resources available for development. Empowerment is one of the main procedural concerns when addressing human rights and development. Therefore, scholars agree that women's empowerment plays a huge role in development and is one of the significant contributions of development. Without the equal inclusion of women in development, women would not be able to benefit or contribute to the development of the country.

## Economic empowerment

Economic empowerment increases women's agency, access to formal government programs, mobility outside the home, economic independence, and purchasing power. Policy makers are suggested to support job training to aid in entrance in the formal markets. One recommendation is to provide more formal education opportunities for women that would allow for higher bargaining power in the home. They would have more access to higher wages outside the home; and as a result, make it easier for women to get a job in the market. Strengthening women's access to property inheritance and land rights is another method used to economically empower women. This would allow them better means of asset accumulation, capital, and bargaining power needed to address gender inequalities. Having a right to their land gives women a sort of bargaining power that they wouldn't normally have; in turn, they gain more opportunities for economic independence and formal financial institutions.

Race has a huge impact on women's empowerment in areas such as employment. Employment can help create empowerment for women. Many scholars suggest that when we discuss women's empowerment, discussing the different barriers that underprivileged women face, which makes it more difficult for them to obtain empowerment in society, is important when examining the impact of race in connection to employment. Significantly examining how opportunities are structured by gender, race, and class can transpire social change. Work opportunities and the work environment can create empowerment for women. Empowerment in the workplace can positively affect job satisfaction and performance, having equality in the work place can greatly increase the sense of empowerment. In connection to power, feminist perspectives look at empowerment as a form of resistance within systems of unequal power relations. When talking about women's empowerment, many scholars suggest examining the social injustices on women in everyday organizational life that are influenced by race, class, and gender.

Another popular methodology for women's economic empowerment also includes microcredit. Microfinance institutions aim to empower women in their community by giving them access to loans that have low interest rates without the requirement of collateral. More specifically, they (microfinance institutions) aim to give microcredit to women who want to be entrepreneurs. Microcredit doesn't relieve women of household obligations, and even if women have credit, they don't have the time to be as active in the market as men.

## Education

It is said that education increases "people's self-confidence and also enables them to find better jobs and they can work shoulder to shoulder with men". They engage in public debate and make demands on government for health care, social security and other entitlements". Furthermore, it empowers women to make choices that can improve their welfare, including marrying beyond childhood and having fewer children. Crucially, education can increase women's awareness of their rights, boost their self-esteem, and provide them the opportunity to assert their rights. Despite significant improvements in recent decades, education is not universally available and gender inequalities persist. A major concern in many countries is not only the limited numbers of girls going to school but also the limited educational pathways for those that step into the classroom. More specifically, there should be more efforts to address the lower participation and learning achievement of girls in science, technology, engineering and mathematics (STEM) education.

Equal access to education for women and girls will be ensured. Special measures will be taken to eliminate discrimination, universalize education, eradicate illiteracy, create a gender-sensitive educational system, increase enrolment and retention rates of girls and improve the quality of education to facilitate life-long learning as well as development of occupation/vocation/technical skills by women. Sectoral time targets in existing policies will be achieved, with a special focus on girls and women, particularly those belonging to weaker sections including the Scheduled Castes/Scheduled Tribes/Other Backward Classes/Minorities. Gender sensitive curricula would be developed at all levels of educational system in order to address sex stereotyping as one of the causes of gender discrimination.

## **Nutrition**

In view of the high risk of malnutrition and diseases that women face at all the three critical stages viz., infancy and childhood, adolescent and reproductive phase, focused attention would be paid to meeting the nutritional needs of women at all stages of the life cycle. This is also important in view of the critical link between the health of adolescent girls, pregnant and lactating women with the health of infant and young children. Special efforts will be made to tackle the problem of macro and micro nutrient deficiencies especially amongst pregnant and lactating women as it leads to various diseases and disabilities.

Intra-household discrimination in nutritional matters vis-à-vis girls and women will be sought to be ended through appropriate strategies. Widespread use of nutrition education would be made to address the issues of intra-household imbalances in nutrition and the special needs of pregnant and lactating women. Women's participation will also be ensured in the planning, superintendence and delivery of the system.

## **Environment**

Women will be involved and their perspectives reflected in the policies and programmes for environment, conservation and restoration. Considering the impact of environmental factors on their livelihoods, women's participation will be ensured in the conservation of the environment and control of environmental degradation. The vast majority of rural women still depends on the locally available non-commercial sources of energy such as animal dung, crop waste and fuel wood. In order to ensure the efficient use of these energy resources in an environmental friendly manner, the Policy will aim at promoting the programmes of non-conventional energy resources. Women will be involved in spreading the use of solar energy, biogas, smokeless chulahs and other rural application so as to have a visible impact of these measures in influencing eco system and in changing the life styles of rural women.

## **Violence against women**

All forms of violence against women, physical and mental, whether at domestic or societal levels, including those arising from customs, traditions or accepted practices shall be dealt with effectively with a view to eliminate its incidence. Institutions and mechanisms/schemes for assistance will be created and strengthened for prevention of such violence, including sexual harassment at work place and customs like dowry; for the rehabilitation of the victims of violence and for taking effective action against the perpetrators of such violence. A special emphasis will also be laid on programmes and measures to deal with trafficking in women and girls.

## **Resource Management**

Availability of adequate financial, human and market resources to implement the Policy will be managed by concerned Departments, financial credit institutions and banks, private sector, civil society and other connected institutions. This process will include:

- (a) Assessment of benefits flowing to women and resource allocation to the programmes relating to them through an exercise of gender budgeting. Appropriate changes in policies will be made to optimize benefits to women under these schemes;
- (b) Adequate resource allocation to develop and promote the policy outlined earlier based on (a) above by concerned Departments,
- (c) Developing synergy between personnel of Health, Rural Development, Education and Women & Child Development Department at field level and other village level functionaries'

(d) Meeting credit needs by banks and financial credit institutions through suitable policy initiatives and development of new institutions in coordination with the Department of Women & Child Development.

The strategy of Women's Component Plan adopted in the Ninth Plan of ensuring that not less than 30% of benefits/funds flow to women from all Ministries and Departments will be implemented effectively so that the needs and interests of women and girls are addressed by all concerned sectors. The Department of Women and Child Development being the nodal Ministry will monitor and review the progress of the implementation of the Component Plan from time to time, in terms of both quality and quantity in collaboration with the Planning Commission.

Efforts will be made to channelize private sector investments too, to support programmes and projects for advancement of women.

### **Gender Sensitization**

Training of personnel of executive, legislative and judicial wings of the State, with a special focus on policy and programme framers, implementation and development agencies, law enforcement machinery and the judiciary as well as non-governmental organizations will be undertaken. Other measures will include:

- (a) Promoting societal awareness to gender issues and women's human rights.
- (b) Review of curriculum and educational materials to include gender education and human rights issues
- (c) Removal of all references derogatory to the dignity of women from all public documents and legal instruments.
- (d) Use of different forms of mass media to communicate social messages relating to women's equality and empowerment.

### **Partnership with the voluntary sector organizations**

The involvement of voluntary organizations, associations, federations, trade unions, non-governmental organizations, women's organizations, as well as institutions dealing with education, training and research will be ensured in the formulation, implementation, monitoring and review of all policies and programmes affecting women. Towards this end, they will be provided with appropriate support related to resources and capacity building and facilitated to participate actively in the process of the empowerment of women.

### **International Cooperation**

The Policy will aim at implementation of international obligations/commitments in all sectors on empowerment of women such as the Convention on All Forms of Discrimination Against Women (CEDAW), Convention on the Rights of the Child (CRC), International Conference on Population and Development (ICPD+5) and other such instruments. International, regional and sub-regional cooperation towards the empowerment of women will continue to be encouraged through sharing of experiences, exchange of ideas and technology, networking with institutions and organizations and through bilateral and multi-lateral partnerships.

1. Pandey, Geeta (2017-08-09). *"Why Indian women are no Cinderellas"*. Archived from the original on 2019-01-16. Retrieved 2019-02-15.
2. *"Ain't no Cinderella: Women hit out at BJP leader for blaming Chandigarh stalking victim"*. *The News Minute*. 2017-08-08. Archived from the original on 2019-03-31. Retrieved 2018-10-01.
3. Kabeer, Naila. "Gender equality and women's empowerment: A critical analysis of the third millennium development goal 1." *Gender & Development* 13.1 (2005): 13-24.

4. Jump up to:<sup>a b c d</sup> Mosedale, Sarah (2005-03-01). "Assessing women's empowerment: towards a conceptual framework". *Journal of International Development*. 17 (2): 243–257. doi:10.1002/jid.1212. ISSN 1099-1328.
5. Rahman, Aminur (2013). "Women's Empowerment: Concept and Beyond" (PDF). *Global Journal of Human Social Science Sociology & Culture*. 13 (6): 9. Archived (PDF) from the original on 10 August 2017. Retrieved 11 December 2018.
6. Jump up to:<sup>a b</sup> Bayeh, Endalcachew (January 2016). "The role of empowering women and achieving gender equality to the sustainable development of Ethiopia". *Pacific Science Review B: Humanities and Social Sciences*. 2 (1): 38.
7. Oxfam (Forthcoming), "Women's Economic Empowerment Conceptual Framework"
8. Jump up to:<sup>a b c d</sup> Deneulin, Séverine; Lila Shahani, eds. (2009). "An Introduction to the Human Development and Capability Approach: Freedom and Agency" (PDF). Sterling, VA: Earthscan. Archived (PDF) from the original on 2016-06-16. Retrieved 2016-09-01.
9. Gupta, Kamla; Yesudian, P. Princy (2006). "Evidence of women's empowerment in India: a study of socio-spatial disparities". *GeoJournal*. 65 (4): 365–380. doi:10.1007/s10708-006-7556-z.
10. Shah, M.M. "Sustainable Development". *Science Direct. Encyclopedia of Ecology*.
11. Jump up to:<sup>a b</sup> Kabeer, Naila. "Contextualising the Economic Pathways of Women's Empowerment: Findings from a Multi-Country Research Programme." (2011).

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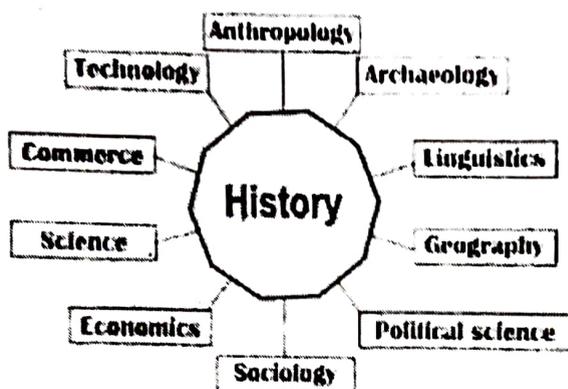
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## आधुनिक भारतातील महिलांची बदलती स्थिती: एक समाजशास्त्रीय अभ्यास

प्रा.डॉ.आव्हाड भगवान भानुदास

आनंदराव धोंडे महाविद्यालय, कडा.

### गोषवारा

भारताला स्वातंत्र्य मिळाल्यानंतर, भारत सरकारने विकास कार्यक्रमांच्या माध्यमातून महिलांना व्यक्ती म्हणून समान दर्जा देण्याची योजना आखली. परंतु, बरेच प्रयत्न करूनही भारतीय महिला आजही पुरुषांच्या तुलनेत दर्जाने कमी आहेत. हा पेपर आधुनिक भारतातील महिलांच्या बदलत्या स्थितीचे विश्लेषण करण्याचा प्रयत्न करतो. हा पेपर प्राथमिक आणि दुय्यम सामग्री वर आधारित आहे. या अभ्यासावरून असे दिसून आले आहे की आधुनिक भारतातील महिलांनी जीवनाच्या प्रत्येक क्षेत्रात महत्त्वपूर्ण प्रगती केली असली तरी त्यांना अजून समाजातील खोलवर रुजलेल्या पुरुषप्रधान मानसिकते विरुद्ध संघर्ष करावा लागला आहे. भारतीय राज्यघटना स्त्रियांना पुरुषांइतके समान हक्क प्रदान करते परंतु आधुनिक महिलांच्या स्थितीत उल्लेखनीय बदल घडवून आणण्यासाठी ते कधीही प्रभावी ठरले नाहीत. पुरुषांरोबर समान पाऊल ठेवणे अद्यापहि महिलांसाठी एक संघर्ष आहे कारण समाजात अजूनही पुरुषप्रधान संस्कृतीचे वर्चस्व कायम आहे.

कीवर्ड: महिलांची सामाजिक स्थिती, अनेक क्षेत्रात सहभाग, पुढाकार

### परिचय

महिलांशिवाय जगामध्ये काहीही शक्य नाही. स्त्री हा समाजाची मूलभूत घटक आहे. महिलांच्या त्यागावर कुटुंब, घर, समाज आणि देश बनतो. म्हणून जोपर्यंत महिला विकास कामांसाठी पुढाकार घेत नाहीत तोपर्यंत देश प्रगती करू शकत नाही. थोडक्यात महिलांची प्रगती झाल्याशिवाय जगाच्या कल्याणाचा विचार करणे अशक्य आहे. गेल्या काही वर्षात भारतातील महिलांच्या स्थितीत बदल होत आहेत. प्राचीन, मध्ययुगीन काळांपेक्षा आज महिलांमध्ये सामाजिक, आर्थिक, राजकीय आणि सर्वसाधारण स्थितीत बदल झाला आहे. कायद्यांच्या दृष्टीने जरी महिलांचा दर्जा उंचावला गेला असला तरी पुरुषांच्या तुलनेत त्या अजूनही दूर आहेत. सैद्धांतिकदृष्ट्या आधुनिक महिलांची स्थिती किती व्यावहारिक-दृष्ट्या कमी होती हे वास्तव होते. आधुनिक भारतीय समाजात अजूनही महिलांचे शोषण आणि अपमान होत आहे. ऐतिहासिक दृष्ट्या, १८ वे शतक हे आधुनिक काळ म्हणून ओळखले जाते. या काळात स्त्रियांची स्थितीत आमूलाग्र बदल झाला. पुढील दोन चरणांत त्यांचा अभ्यास केला जाऊ शकतो.

भारतात ब्रिटीशांच्या काळातील महिलांची स्थिती

मोगल साम्राज्याचा नाश झाल्यानंतर इंग्रजांनी भारतीय लोकांवर आपले वर्चस्व प्रस्थापित केले. ब्रिटीशांच्या कारकिर्दीत आमच्या समाजातील आर्थिक आणि सामाजिक संरचनांमध्ये बरेच बदल करण्यात आले. या काळात महिलांचे जीवनमान कमी-अधिक समान राहिले, तरीही पुरुष आणि महिलांमधील असमानता दूर करण्यात काही महत्त्वपूर्ण प्रगती साधली गेली. बालविवाह, सती प्रथा, देवदासी पध्दती, विधवा पुनर्विवाह बंदी इत्यादी सामाजिक दुष्कर्म, एकतर राजा राम मोहन रॉय आणि विद्या सागर या सुधारकांच्या प्रयत्नांनी नियंत्रित केले गेले किंवा योग्य कायदे करून काढले. पंडिता रमाबाई सारख्या अनेक महिला सुधारकही महिलांच्या

# ग्रामीण महिला आणि शिक्षण

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समाजशास्त्र विभाग  
आनंदराव धोंडे ऊर्फ बाबाजी महाविद्यालय  
कडा,ता-आष्टी जि.वीड

**गोषवारा:-** भारतातील लोकसंख्येचा विचार केल्यानंतर एक वस्तुस्थिति लक्षात येते की, एकूण लोकसंख्येच्या जवळपास ५०% स्त्रियांची संख्या आहे. आणि या निम्न्या लोकसंख्येला आजही शिक्षण, आरोग्य, नोकरी या क्षेत्रांमध्ये मागे ठेवले जाते. स्त्रियांना भारतीय समाजात दुय्यम स्थान आहे. आपल्या समाजामध्ये स्त्रीची भूमिका ही एकाच पद्धतीने रंगविलेली दिसते. स्त्रीही कुटुंबासाठी त्याग करणारी तसेच इतरांसाठी स्वतःच्या गरजा बाजूला मागणारी असावी ही अपेक्षा आजही आढळते. ही मुस्वात तिच्या जन्मापासूनच झालेली आढळते. मुलींना आशीर्वाद देण्याऐवजी ओझे समजले जाते. त्यामुळे घरातील मंडळीच्या आनंदामध्ये विरजण पडल्यासारखे होते असे दिसून येते. काही भागामध्ये अशी परिस्थिती नसेल पण बहुसंख्य कुटुंबांमध्ये विशेषतः ग्रामीण भागामध्ये हेच चित्र आजही दिसून येते. किंवा मुलगी जन्मालाच येऊ नये यामाठी प्रयत्न केले जातात. त्यामुळेच लिंगपरीक्षा केली जाते. मुलीकडे परक्याचे धन म्हणून पहिले जाते त्यामुळे अजूनही ग्रामीण भारतातील पुरुष आणि स्त्रीया यांच्या शैक्षणिक पातळीवर मोठी तफावत आढळते, केवळ भारतीयच नव्हे तर जगात महिलांना शिक्षणाच्या, व्यवसायाच्या आणि त्या अनुषंगाने विकासाच्या संधी फार कमी प्रमाणात उपलब्ध होतात. पूर्वापार महिलांऐवजी पुरुषांना प्राधान्य मिळण्याची शक्यता सर्व ठिकाणी, सर्वकाळी दिसून येत असे आणि आजही त्याचे प्रमाण फारसे कमी झालेले नाही. म्हणून संशोधकाने ग्रामीण भागातील महिला शिक्षण, कारणे आणि शिफारसी यावर लक्ष केंद्रित केले आहे.

**कीवर्ड:-** स्त्री शिक्षण, महिला स्वायत्तता, सामाजिक परिणाम

**परिचय:-** भारतीय समाजाचे निरीक्षण केल्यानंतर असे लक्षात येते कि, समाजातील कोणत्याही क्षेत्राचा विचार केला तर मुलांनाच प्राधान्य दिले जाते याला शैक्षणिक क्षेत्रही अपवाद नाही. ग्रामीण भागातील मुलींना-मुलांच्या तुलनेत कमी शिक्षण मिळते. तसेच कुटुंबातील आई-वडील दोघांनाही आपण काही चुकीचे करत आहोत असे वाटत नाही असे निरीक्षणानंतर आढळून आले. ग्रामीण महिलांमध्ये प्रजनन व मृत्यूचे प्रमाण उच्च आहे. पौष्टीकतेची कमतरता आहे. कमाईची क्षमता कमी आहे आणि घरात थोडीच स्वायत्तता आहे. तसेच एखाद्या महिलेच्या शिक्षणाअभावी तिच्या मुलाच्या आरोग्यावर नकारात्मक परिणाम होतो. या खालच्या पातळीचा केवळ महिलांच्या जीवनावरच नव्हे तर त्यांच्या कुटुंबावर आणि देशाच्या आर्थिक विकासावरही नकारात्मक प्रभाव पडतो. तसेच बालमृत्यू हा विपरीतपणे आईच्या शैक्षणिक पातळीशी संबंधित आहे. म्हणूनच महिलांच्या स्वायत्ततेत महत्त्वपूर्ण सुधारणा करण्यापूर्वी शिक्षणाच्या किमान उंबरठ्याची गरज आहे. भारतातील साक्षर महिलांपैकी ५९% व्यक्तीकडे फक्त प्राथमिक शिक्षण आहे किंवा त्याहून कमी शिक्षणाची ही पातळी अर्थपूर्णपणे या महिलांची स्थिती सुधारण्यासाठी पुरेशी नाही. लहान मुला-मुलींना शाळेतून बाहेर काढले जाते जसे कि लहान भावंडांची काळजी घेणे इत्यादी कौटुंबिक जबाबदाऱ्या यामुळे मुलींना शाळेतून बाहेर काढले जाण्याची शक्यता असते. जगात बालवधूचे प्रमाण भारतात सर्वाधिक आहे. शाळेच्या उपस्थितीवरील आकडेवारीवरून असे दिसून येते कि वयानुसार शाळेत जाणाऱ्या या मुलींचे प्रमाण कमी होते. साधारणपणे कुटुंबे आर्थिक निर्बंधामुळे मुलीपेक्षा मुलाला शिक्षण देतात. मुलींना शिक्षित करण्याविषयी पालकांचा नकारात्मक दृष्टिकोन देखील मुलींच्या शिक्षणातील अडथळा आहे. बरेच पालक मुलांचे शिक्षण गुंतवणूक म्हणून पाहतात कारण वृद्ध आई-वडिलांची काळजी घेण्यास ही मुले जबाबदार असतील. दुसरीकडे विवाहानंतरचे लोक जिवंतपणीच मुलींचे पैसे वायाघालवतांना पालक पाहतात. त्यांच्या पतीच्या कुटुंबासह आणि पालकांना त्यांच्या शिक्षणाचा थेट लाभ मिळत नाही. याव्यतीरीक्त उच्च शिक्षणासह मुलींना हुंडा ज्ञान द्यावा लागतो कारण त्यांना तुलनेने शिक्षित पती हवा आहे. तसेच मुलींच्या शिक्षणामध्ये महिला शिक्षकांचा अभाव हा एक आणखी एक अडथळा आहे. जर महिला शिक्षक असतील तर मुली शाळेत जाण्याची शक्यता जास्त असते. सध्या प्राथमिक स्तरावरील शिक्षकांपैकी केवळ २९% महिलांचा वाटा आहे. शिक्षक असलेल्या महिलांचे प्रमाण विद्यापीठ पातळीवर अगदी कमी म्हणजेच २२% आहे. हे प्रमाण शिक्षक असण्याची शैक्षणिक पात्रता असलेल्या महिलांची ऐतिहासिक कमतरता दर्शविते. भारतीय अभ्यासक्रमाच्या अभ्यासानुसार असे आढळले कि बहुतेक घड्यांमध्ये पुरुष हेच मुख्य पात्र आहे. पुरुषांना मजबूत, धाडसी, साहसी

७. आणि बुद्धिमान म्हणून दर्शविले गेले. याउलट स्त्रीया दुर्बल आणि असहाय्य म्हणून चित्रित केल्या गेल्या बहुतेक वेळा अत्याचार आणि मारहाणीच्या बळी म्हणून ही चित्रे समाजातील स्त्रीयांची स्थिती सुधारण्यासाठी मजबूत अडथळे आहेत. ग्रामीण मुलांना आधुनिक सुविधांचा लाभ नसतो जसे कि वाहतूक, वीज, स्वच्छता, आरोग्य, सेवा, शिक्षणप्रवेश, ग्रामीण मुली-मुलस्वयंपाक, साफसफाई, लाकूड व पाणी आणण्यात, मुलांची काळजी घेण्यास आणि शेतातील कामे करण्यात वेळ घालवतात. मुलींनी घरातील एकूण कामात २५% पेक्षा जास्त योगदान दिले आहे. ग्रामीण भागामध्ये मुलींचा एकच फायदा म्हणजे दृश्यमानता. सर्वात मोठा गैरफायदा म्हणजे स्वतःकडे दुर्लक्ष करणाऱ्या तीची आईतिच्याविरुद्ध भेदभाव करते. घरकामाबरोबरच मुली इतर कामे करून उत्पन्न मिळून देतात. ग्रामीण भागातील मुलींच्या शिक्षणासाठी मागणी निर्माण करणे आवश्यक आहे. धोरणात्मक चौकट, महिला आणि मुलींसाठी शैक्षणिक संधीची तरतूद ही शिक्षणाच्या क्षेत्रात राष्ट्रीय प्रयत्नांचा एक महत्वाचा भाग आहे.

१९९४ मध्ये भारताने एक सार्वत्रिक स्त्री शिक्षण विधेयक मंजूर केले जे पालकांना मुलीला शाळेत न ठेवण्यासाठी प्रवेश आणि शिक्षेसाठी प्रोत्साहन देते. या प्रयत्नांना महत्वपूर्ण परिणाम मिळाला असला तरी, ग्रामीण भागात आणि वंचित समाजात लिंगभेद कायम आहेत. आता बऱ्याच महिला सरकारी आणि निमसरकारी संस्थामध्ये कार्यरत आहेत. या संस्थाकडून बऱ्याच मुलींच्या जीवनात कायापालट होत आहे. परंतु अजूनही असंख्य इतर कामाच्या प्रतिक्षेत आहेत. ते विशिष्ट शाळा वाटप करतात. मुलांची प्रगती आणि त्यांच्या कृत्याकडे काळजीपूर्वक निरीक्षण करतात. सरकारचे उद्दिष्ट अतिरिक्त गावामध्ये उपक्रम वाढविणे आणि शाळा सुरु करणे हे आहे. राष्ट्रीय माध्यमिक शिक्षण अभियान सर्व मुलींचे शाळेपासून अंदाजे ठिकाण (माध्यमिक शाळा ५ कि.मी. मध्ये आणि उच्च माध्यमिक ०७-१० कि.मी.) अंतर्गत कुशल व सुरक्षित वाहतूक व्यवस्था, निवासी सुविधा यावर अवलंबून असलेल्या माध्यमिक शालेय प्रवेशात सुधारणा करण्यावर भर देते. खुल्या शालेय शिक्षणासह स्थानिक परिस्थिती आणि कोणत्याही मुलास लिंग, सामाजिक, आर्थिक, अपंगत्व आणि इतर अडथळ्यामुळे समाधानकारक गुणवत्तेच्या माध्यमिक शिक्षणापासून वंचित ठेवल्याची खात्री मिळते.

**संशोधन पद्धती :-** हा अभ्यास सर्व्हेवर आधारित आहे. शाळा, सरकारी कार्यालये, शिक्षक, वेबसाईट, वर्तमानपत्रे आणि मासिके यांच्या माध्यमातून माहिती जमा करून त्याचे विश्लेषण केलेले आहे. एकूण ५ टेबल तयार केले आहेत. टेबल एक मध्ये जगाच्या तुलनेत भारतीय स्त्रीयांचा शैक्षणिक दर्जा विशद केला आहे. टेबल दोन मध्ये एकूण साक्षरता आणि पुरुषांच्या तुलनेत स्त्रीशिक्षणामध्ये असलेला फरक विशद केला आहे. टेबल तीन मध्ये निवडक राज्यातील स्त्रीयांची साक्षरता लक्षात घेतली आहे. टेबल चार मध्ये वस्तुस्थितीवर प्रकाश टाकण्यासाठी आनंदराव धोंडे महाविद्यालयाचा २०१२-२०२० पर्यंतचा विद्यार्थीपट माहितीस्तव घेऊन ग्रामीण मुलींच्या शिक्षणाच्या स्थितीसंबंधी माहिती मांडली आहे आणि टेबल पाच मध्ये शाळा सोडण्यासंबंधीची माहिती दर्शविले आहे.

तक्ता नं.०१

भारतीय स्त्रीयांचा शैक्षणिक दर्जा : जागतिक तुलना

अनु	देश/विभाग/प्रदेश	स्त्रीयांची साक्षरता १९९५	माध्यमिक शाळेतील मुलींची पटावरील नोंदणी	दर १०० मुलांमार्गे शाळेतील मुलींची नोंदणी
१.	संपूर्ण जग	६४%	५९%	९०%
२.	विकसित राष्ट्रे	९९%	१०२%	१०३%
३.	आशिया	६०%	५२%	८२%
४.	भारत	३८%	३८%	६५%

(स्रोत-Women of our world Report 1998, World Population Research Bureau, Washington, 1998)

तक्ता नं.०२

भारतातील महिलांची शैक्षणिक स्थिती

वर्ष	एकूण	पुरुष	स्त्रीया	फरक
१९०१	५.३५	९.८३	०.६०	९.२३
१९११	५.९२	१०.५६	१.०५	९.५१
१९२१	७.१६	१२.२१	१.८१	१०.४०

१९३१	९.५०	१५.५९	२.९३	१२.६६
१९४१	१६.१०	२४.९०	७.३०	१७.६०
१९५१	१८.३३	२७.१६	८.८६	१८.३०
१९६१	२८.३०	४०.४०	१५.३५	२५.०५
१९७१	३४.४५	४५.९५	२१.९७	२३.९८
१९८१	४३.५७	५६.३८	२९.७६	२६.६२
१९९१	५२.२१	६४.१३	३९.२९	२४.८४
२००१	६५.३८	७५.८५	५४.१६	२१.६९
२०११	७४.०४	८२.१४	६५.४६	१६.६६

तक्ता नं. ०३ निवडकराज्य साक्षरता दर (१९५१-२००१)

क्र.	राज्य	१९५१	१९६१	१९७१	१९८१	१९९१	२००१
१.	केरळ	४०.७०	५५.१०	६०.४०	७०.४०	८९.८०	९०.९२
२.	दिल्ली	३८.४०	६२.००	५६.६०	६१.५०	७५.३०	८१.८२
३.	पंजाब	१५.२०	३१.५०	३३.७०	४०.९०	५८.५०	६९.९५
४.	कर्नाटक	१९.३०	२९.८०	३१.५०	३८.५०	५६.००	६७.०४
५.	बिहार	१२.२०	२१.८०	१९.९०	२६.२०	३८.५०	४७.५३
६.	भारत	१८.३०	३४.४५	४३.५७	५२.२०	६५.३८	५४.१६

(सरासरी भारतातील स्त्रीयांचे शिक्षणातील प्रमाण कमीच आहे हे

वरील आकडेवारीवरून लक्षात येते)

तक्ता नं. ०४

आनंदराव धोंडे ऊर्फ बाबाजी महाविद्यालय कडा, २०११-२०२० ची मुला-मुलींची पटावरील शैक्षणिक स्थिती

वर्ष	एकूण	मुले	मुली	मुलांचे प्रमाण	मुलींचे प्रमाण	शिक्षणातील फरक
२०११-२०१२	११५९	८८७	२७२	७६.५३	२३.४७	५३.०६
२०१२-२०१३	१४६१	१०७७	३८४	७३.७२	२६.२८	४७.४४
२०१३-२०१४	१५४७	११२१	४२६	७२.४६	२७.५४	४४.९२
२०१४-२०१५	१६९५	१२.२३	४७२	७२.१५	२७.८५	४४.३०
२०१५-२०१६	१७७५	१२६७	५०८	७१.३८	२८.६२	४२.७६
२०१६-२०१७	१७९४	१३०५	४८९	७२.७४	२७.२६	४५.४८
२०१७-२०१८	१५६६	१०८८	४७८	६९.४८	३०.५२	३८.९६
२०१८-२०१९	१४५०	९७९	४७१	६७.५२	३२.४८	३५.०४
२०१९-२०२०	१४६६	१०११	४५५	६८.९६	३१.०४	३७.९२

(वरील माहितीचा विचार केला तर आजही मुलींच्या शिक्षणामध्ये म्हणावी तशी प्रगती झालेली दिसत नाही )

तक्ता नं. ०५

ग्रामीण महिलांचे शिक्षण बंद करण्याची कारणे

अ.क्र.	कारणे	स्त्रीयांची% वारी
१	मुलाला प्राधान्य देणे	३७
२	पालकांचा नकारात्मक दृष्टिकोन	३३
३	कौटुंबिक जबाबदारी	४३
४	लवकर विवाह	३९
५	महिला शिक्षणाचा अभाव	२१
६	आर्थिक समस्या	६२
७	वाहनाची समस्या	३६
८	शिक्षणाबद्दलची अनिच्छा	२८

**शिफारसी:-** भारतीय समाजाने मुलींच्या शिक्षणाबद्दलचा दृष्टिकोन बदलण्याची गरज आहे. अन्न, वस्त्र आणि निवारा याप्रमाणे शिक्षण आवश्यक आहे हे आपण मान्य केले पाहिजे. सुशिक्षित मुलींच्या आई-वडिलांचा समाजाने मान-सन्मान केला पाहिजे. समाजातील नवीन व्यवस्थेत मुलींनीही विवाहानंतर त्यांच्या पालकांची काळजी घ्यावी. वयाप्रमाणेच विवाहासाठी किमान शिक्षणाची अट असायला पाहिजे. सरकार ग्रामीण भागात मुलींच्या शिक्षणाला प्रोत्साहन देत आहे. शिष्यवृत्ती, मध्यान्ह भोजन, वाहतुकीसाठी सायकल, गणवेश, पुस्तक आणि स्टेशनरी साहित्य शिक्षणाच्या सोयीसाठी पुरवत आहेत. दुर्गम भागात चांगल्या पायाभूत सुविधांसह नवीन शाळा उघडल्या जातात. शासकीय क्षेत्रात ग्रामीण मुलींना प्राधान्य दिले पाहिजे. रोजगारगावे व शहर यांच्यातील अंतर दूर करण्यासाठी वाहतुकीचा विकास देखील आवश्यक आहे. याबरोबरच संवादामध्ये सातत्य असावे.

**निष्कर्ष :-** ग्रामीण भागातील मुलींच्या शिक्षणावर विशेष भर देणे आवश्यक आहे. युवावस्थेतील मुलींचे शिक्षण अनेक कारणामुळे मर्यादित आहे. त्यापैकी सर्वात प्रमुख कारण म्हणजे शाळांमध्ये योग्य पायाभूत सुविधांची कमतरता. दुसरे म्हणजे शाळेत जाण्यासाठी लागणारा प्रवासाचा वेळ, गुन्हेगाराची भीती आणि अपरिचित घटनेमुळे केवळ मुलीसाठी सार्वजनिक वाहतुकीची तरतूद करणे आवश्यक आहे. कायदेशीर तरतुदीमुळे मुलींना विवाहापासून वाचविण्यात आणि त्यांच्यासाठी विकासाचे दरवाजे उघडण्यास मदत होते. जागरूकता कार्यक्रमाची आवश्यकता आहे जी सर्वांगीण गरजांवर लक्ष केंद्रित करेल. यासाठी कुटुंब आणि समाजाची भूमिका महत्त्वपूर्ण आहे.

संदर्भ:

- १) महिला सबलीकरण स्वरूप व समस्या डॉ. शुभांगी गोटे-गव्हाणे "वरद पब्लिकेशन्स औरंगाबाद प्रथम आवृत्ती २००४
- २) भारतातील उच्च शिक्षण : महिलांसाठी सुसंधी महाराष्ट्र टाईम्स दि. ०२.०९.२०१८
- ३) इंटरनेट
- ४) महिला सबलीकरण का सच, मीनाक्षी निशांत सिंह "ओमेगा पब्लिकेशन्स" नई दिल्ली
- ५) आधुनिक समाज में स्त्री आशाराणी व्होरा "श्री नटराज प्रकाशन" दिल्ली २००५
- ६) महिला सशक्तिकरण, "कमलेश कुमार गुप्ता" बुक एनक्लेव जयपूर, २००५
- ७) <https://mr.wikipedia.org/s/6he>

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# अहमदनगर शहरातील घटस्फोटीत स्त्रियांना भेडसावणाऱ्या समस्या : एक समाजशास्त्रीय अभ्यास

डॉ.आव्हाड भगवान भानुदास  
आनंदराव धोंडे ऊर्फ बाबाजी महाविद्यालय कडा,  
ता-आष्टी, जि-बीड

## गोषवारा:

घटस्फोटाचा सामाजिक विषय म्हणजे विवाहाचे कायदेशीर विघटन होय. जो विवाहितांना वेगळे करतो. कौटुंबिक समस्येमुळे पती-पत्नीने एकत्र न राहण्याचा निर्णय घेतल्यानंतर घटस्फोट होईल. ते कायदेशीर कागदावर स्वाक्षरी करण्यास सहमत आहेत. जे त्या प्रत्येकास एकल बनवते आणि जर त्यांना तसे करायचे असेल तर त्यांना इतर लोकांशी पुन्हा लग्न करण्याची परवानगी द्या. या व्यतिरिक्त, घटस्फोटाचा स्त्रियांच्या जीवनावर होणाऱ्या समस्यांचा अभ्यास या शोधनिबंधात करण्यात आला. शोधनिबंधासाठी माहितीसाठी प्राथमिक आणि दुय्यम स्रोत वापरले गेले आहेत. प्राथमिक माहिती मुलाखतीद्वारे मिळविली. शोधनिबंधाचे क्षेत्र अहमदनगर शहरातील घटस्फोटीत स्त्रिया आहेत. मुलाखतीसाठी प्रत्येक घटस्फोटितेशी संपर्क साधणे शक्य नव्हते. त्यामुळे अहमदनगर जिल्ह्यातील कौटुंबिक न्यायालयातून प्रकरणे एकत्रित करण्याचा निर्णय घेतला. कौटुंबिक न्यायालयातून 50 घटस्फोटीत स्त्रियांची माहिती मिळाली. त्यापैकी केवळ 25 महिलांशी संपर्क साधला गेला. या अभ्यासातून असा निष्कर्ष काढू शकतो की घटस्फोट घेणाऱ्या स्त्रियांना सामाजिक, कौटुंबिक, आर्थिक, भावनिक आणि मानसिक समस्यांशी संबंधित विविध समस्यांचा सामना करावा लागला. ज्या घटस्फोटीत स्त्रियांना कुटूंबाचा पाठिंबा मिळत नाही. त्यांना भरमसाट समस्यांना सामोरे जावे लागले.

**कीवर्ड:** स्त्रिया, घटस्फोटाची आव्हाने: सामाजिक, कौटुंबिक, आर्थिक, भावनिक, मानसिक

**परिचय:** घटस्फोट म्हणजे 'सामाजिक आणि कायदेशीररित्या मान्यताप्राप्त वैवाहिक संबंधांचे कायदेशीर विघटन जो त्यात गुंतलेल्या दोन व्यक्तींच्या जबाबदाऱ्या आणि विशेषाधिकारांमध्ये बदल करतो. हा मोठा जीवन प्रवास आहे. ज्याचे वैयक्तिक, सामाजिक, आर्थिक परिणाम आहेत. सर्वसाधारण भाषेत घटस्फोट म्हणजे वैवाहिकनाते संपुष्टात आणणे होय. वैवाहिक नात्यात अंतर पडणे ही सर्वात भयंकर परिस्थिती असते. 'घटस्फोटामुळे स्त्रियांमध्ये मानसिक, शारीरिक आरोग्यावर वाईट परिणाम होतात.' निरीक्षनामध्ये असे दिसून आले आहे की, घटस्फोटानंतर स्त्रियांच्या मानसिक आरोग्यावर परिणाम झाला आहे. घटस्फोट ही एक गंभीर समस्या बनली आहे.

**घटस्फोटाची व्याख्या :** पती-पत्नी यांनी समाजमान्य व कायदेशीर पध्दतीने वैवाहिक संबंध संपुष्टात आणणे म्हणजेच घटस्फोट होय. हे संशोधन विशिष्ट परिस्थितीत घटस्फोटाची कारणे ओळखण्यासाठी केंद्रित केले गेले आहे. सामाजिक, आर्थिक, व्यावसायिक, कौटुंबिक, स्वभाव, भूमिकेचा संघर्ष, शारीरिक दोष या अनुषंगाने अभ्यास केला आहे.

**अभ्यासाचे कार्यक्षेत्र:** हा अभ्यास अहमदनगर शहरापुरता मर्यादित आहे. अहमदनगरमध्ये शैक्षणिक वातावरण चांगले आहे. हे ग्रामीण आणि शहरी निरंतरतेचे प्रतिनिधित्व करते.

**विश्व व नमुना:** अभ्यासाचे विश्व अहमदनगर शहरातील घटस्फोटीत स्त्रिया आहेत. अहमदनगर जिल्ह्यातील

# महात्मा फुले

## चिंतन आणि चर्चा

• संपादक •

डॉ. भगवान डोंगरे

डॉ. गोवर्धन मुळक



प्रा. डॉ. आम्हाड भगवान भानुदास

आनंदराव धोडे ऊर्फ बाबाजी महाविद्यालय कडा,  
ता.आष्टी.जि.बीड

### प्रास्ताविक :

महात्मा जोतीबा फुलेहे समाजसुधारक, विचारवंत होते. त्यांनी आपले आयुष्य समाजाच्या उध्दारासाठी खर्च केले. सामाजिक विषमतेविरुद्ध बंड पुकारले. स्त्रियांच्या आणि अस्पृश्यांच्या उध्दारासाठी ते अहोरात्र झटले. समाजसुधारणेचे कार्य करित असतांना ते कधीही विचलित झाले नाही. कृतीशील, कर्तेसमाज सुधारक, स्त्रियांचा उध्दारकर्ता, दलितांचा कैवारी अशा वेगवेगळ्या नावांनी ते परिचित आहेत.

### जीवन परिचय :

महात्मा जोतीबा फुले हे महाराष्ट्रातील थोर सामाजिक क्रांतिकारक होते. त्यांनी दलित वर्ग, स्त्रिया यांच्या उध्दाराचे कार्य केले. त्यांचा जन्म ११ एप्रिल १८२७ रोजी सातारा जिल्ह्यातील कटगुण या गावीमाळी कुटुंबात झाला. जोतीबांचे कुटुंब हे गोन्हे आडनावाने ओळखले जाई. हे कुटुंब पेशव्यांना फुले पुरवीत असे. त्यामुळेतेपुढे फुले या आडनावाने ओळखले जाऊ लागले. प्राथमिक शिक्षण पूर्ण केल्यानंतर जोतीबांनी वडिलांना त्यांचा व्यवसायात मदत करण्यास सुरुवात केली. तत्कालीन प्रथेप्रमाणे त्यांचा विवाह वयाच्या बाराव्या वर्षी सावित्रीबाईशी झाला. एक मुस्लीम व एकख्रिस्ती सदगृहस्थ हे दोन शेजारी होते व या शेजाऱ्यांच्या प्रोत्साहनामुळे जोतीबांना पुण्यातील एका स्कॉटीश मिशनरी शाळेत प्रवेश घेतला. विवाहानंतर त्यांनी शिक्षणाला नव्याने सुरुवात केली. ख्रिस्ती मिशनऱ्यांच्या प्रभावामुळे जोतीबांना शिक्षण, सामाजिक सुधारणाव मानवतावाद यांचे महत्व पटले. थॉमस पेन या विचारवंताच्या "मानवाचे हक्क" (Rights of Man) यापुस्तकातील विचारांचा जोतीबावर मोठा प्रभाव पडला. त्यांनी सामाजिक जागृतीचा ध्यास घेतला. याच काळात लहुजीबुवा यांच्याकडून त्यांनी तलवार, दांडपट्टा व निशाणबाजीचे शिक्षण घेतले. सैनिक शिक्षणाचे लहुजीबुवा हे एक आदर्श गुरुजी होते. जोतीबांनी याशिक्षणात मोठी प्रगती केली. शालेय शिक्षण घेत असताना जोतीबांच्या आयुष्यात घडलेला एक प्रसंग त्यांच्या जीवनाला कलाटणी देणारा ठरला. एका ब्राम्हण मित्राच्या लग्नाला गेले असता काही सनातनी ब्राम्हणांनी लग्नाच्या मिरवणुकीत त्यांचा अपमान केला. या घटनेमुळे त्यांनी समाजजागृती करण्याचा निश्चय केला, समतेसाठी कार्यकरण्याचे ठरविले.

१. महात्मा फुले यांचे सामाजिककार्य :- केवळ जाती धर्मांमध्ये सुधारणा घडवून आणणे हे जोतीबांचे उदिष्टा नव्हते तर या जातीची उन्नती घडवून आणणे यामध्येही त्यांना विशेष रस होता. त्यावेळी बालविवाह, विधवा विवाह बंदी, अस्पृश्यता पालन, निरक्षरता, स्त्रिया व कनिष्ठ जातीचे शोषणया सारख्या अनेक प्रथा समाजात होत्या. या सर्वप्रथा नष्ट करण्यासाठी त्यांनी सामाजिक कार्यक्रम हाती घेतले ते असे

स्त्रियांची उन्नती :- भारतीय समाजाचा अभ्यास केल्यानंतर लक्षात येते की, भारतीय समाजात स्त्रियांना पुरुषापेक्षा दुय्यम स्थान आहे. भारतीय समाजाने स्त्रियांना समतेपासून व शिक्षणापासून वंचित ठेवले होते. अशा विधवांची स्थिती अत्यंत दयनीय होती. अशावेळी महात्मा फुले यांनी स्त्रियांच्या उध्दाराचे कार्य हाती घेतले. महात्मा फुलेंनी बालविवाह व विधवा विवाह बंदी

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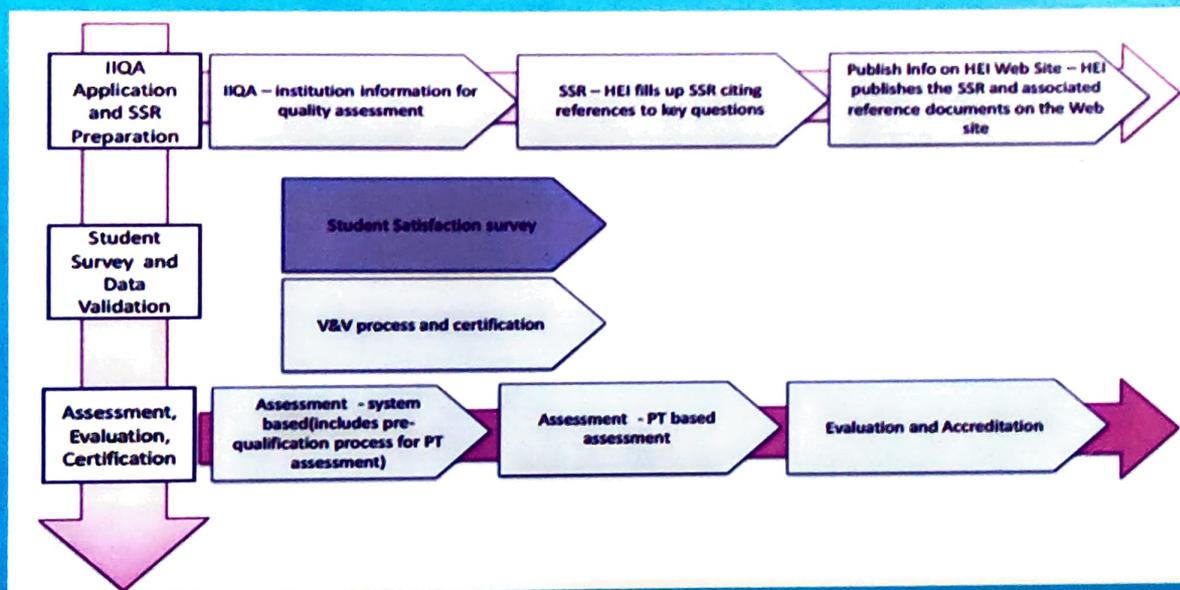
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## Role of Leadership and Management in Higher Education

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### Abstract:

*"The conduct" of an academic institution has suffered a permanent change under external pressure and criticism for its failure to adapt to current social and economic requirements. The degradation of quality in the Romanian education system is a current affairs subject. Successive and rather incoherent reforms suggest the lack of a long-term vision, as well as that of a political consensus on the role and place of education within the Romanian economy and society. The reference points identified as a result of the needs analysis and the student opinion polls have indicated the necessity to focus the academic teaching and learning activities on the student, on their level of development, using active-participative strategies, using a specific academic group management and applying various evaluation techniques focused on the student's performance and his acquired competences. All of these elements signal, at the level of institutional strategic decisions, a direction towards the improvement of professional development of the teaching staff, one concentrated on education quality and performance. The modern school of leadership is based on applied methods, the delegation of responsibilities, regulation of centralized-decentralized relations, research and creativity development and the reinforcement of psychological and social aspects. Unlike management, considered to be a formal and institutionalized type of leadership, leadership is perceived as a process carried out at an informal group level, while the leader as a boss is someone who leads this group.*

**Key words:** Academic institution, successive refers leadership, strategic decisions.

### Introduction

In the paper Management : Theory and Practice, published in 1990. Gerard A. Cole presents one of the most synthetic and clear definitions of the leadership activity as "a dynamic process within a group, in which an individual influences other to voluntarily contribute to the fulfillment of the groups' tasks, in a given situation In other words, this position refers to the promotion of behaviors nurturing the achievement of organizational objectives, motivating the staff by: using various leadership styles, a quality of interpersonal relationships, the manner in which communication and cooperation are favored within the organization and the staff is engaged in the decision-making process.

Leadership and management represent separate dimensions of the people in charge. Leadership is about the capacity to determine people to act; the manager, however, is the person who makes sure that the organizational objectives are achieved, by Planning, organizing and directing the work towards its conclusion. Unlike management, considered to be more of a formal, institutionalized type of leading, leadership is perceived as leading at an informal group level, and the leader as the one who leads this group; it represents the ability to influence others towards the fulfillment of the tasks. B. P. Smith defines "leadership" as "that part of a manager's activity by which he influences the behavior of individuals and groups in order to achieve the desired outcome".