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

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Innovative Practices in Infrastructure and Learning Resources in Higher Education

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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 resourcesCampus 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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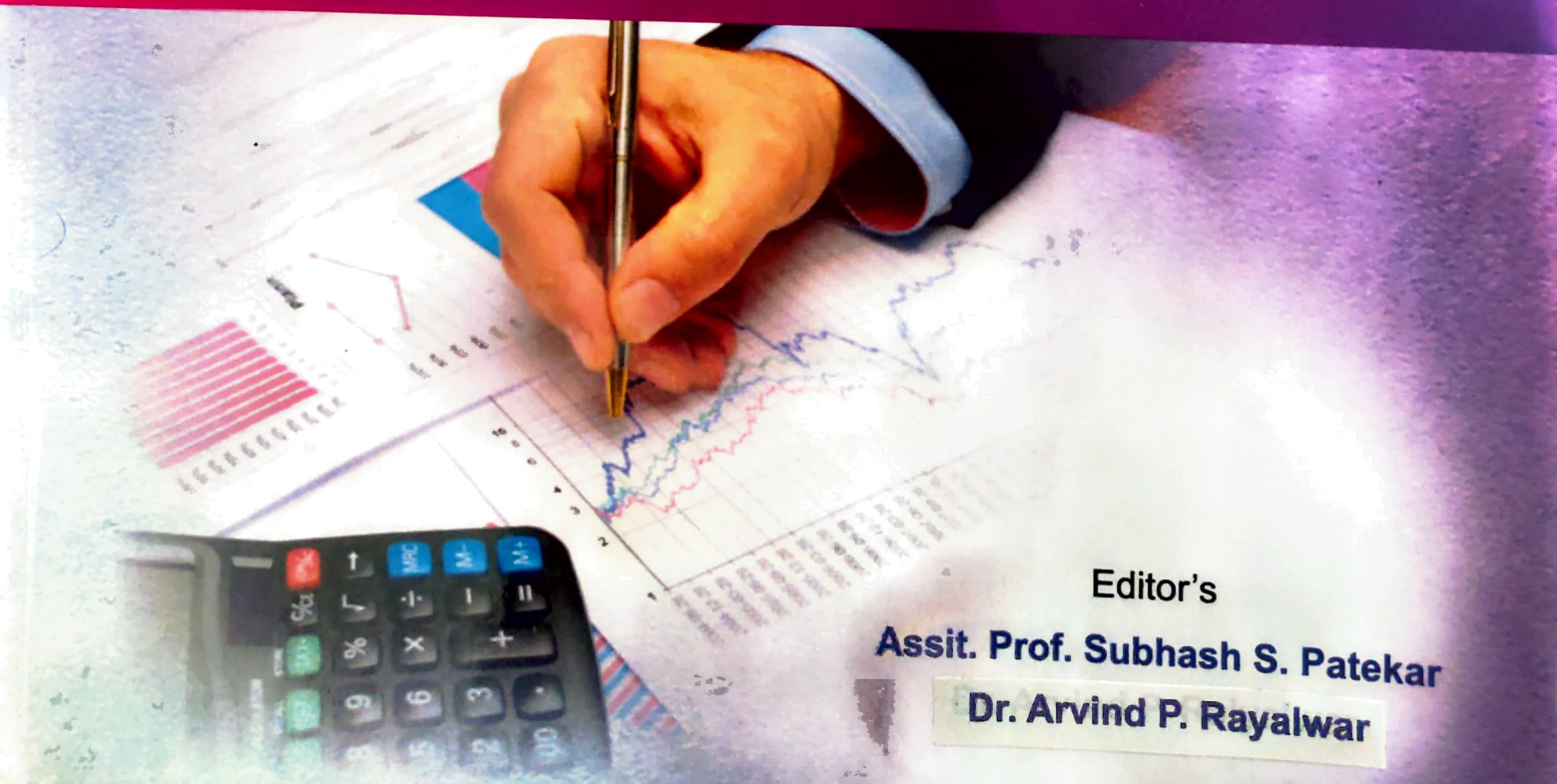

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01

Recent Trends in E-Banking

Dr. H. G. Vidhate
Principal & Research Guide,
Anandrao Dhonde Alias Babaji College
Kada,Tal-Ashti-Beed
Member of Management Council,
Dr.B.A.M.U. Aurangabad

Abstract-

Information Technology and Communication is commanding banking field. In 1980s itself Reserve Bank of India advised all banks to go massive computerization at branch level. For this purpose, Reserve Bank of India constituted a Working Group to examine different issues relating to I-banking and recommend technology, security, legal standards and operational standards keeping in view the international best practices. The Group is headed by the Chief General Manager-in-Charge of the Department of Information Technology and comprised experts from the fields of banking regulation and supervision, commercial banking, law and technology. The Bank also constituted an Operational Group under its Executive Director comprising officers from different discipline in the bank, who would guide implementation of the recommendations.
(Keywords-Information Technology, E-banking, Benefits of E-Banking, Reserve Bank of India.**)**

INTRODUCTION

Advances Technology brought a lot of changes in all fields in performing their activities. Banking sector is not exemption to it. So banks have been using electronic and telecommunication networks for delivering a wide range of their services. The delivery channels include direct dial – up connections, private networks, public networks etc. and the devices include telephone, Personal Computers including the Automated Teller Machines, etc. With the popularity of PCs, easy access to Internet and World Wide Web (WWW), Internet is increasingly used by banks as a channel for receiving instructions and delivering their products and services to their customers. This form of banking is generally referred to as Internet Banking or Electronic banking. Both computer and telephone banking cover the terms electronic banking.

Objectives of the Study

1) To study advantages and disadvantages of E-banking

2) To identify recommendation of E-banking

3) To know recent trends in information and technology in banking

Research Methodology

The present study is of descriptive type. The entire study is based on secondary sources of data. These secondary data has been collected from books and websites. In order to fulfill constructed objectives of the present study the secondary data has been assembled.

ADVANTAGES OF E-BANKING

The following advantages occur from E-Banking

- For small businesses banks offer favorable interest rates and low charges when using electronic banking which leads to cost effectiveness.

- Business customers can regularly monitor their cash flow with electronic banking.

- This system is very convenient to deposit and withdrawal of money.

- It is very easy to pay and transfer money one account to another account.

- Time can be saved by e-banking.

DISADVANTAGES OF E-BANKING

The following are disadvantages of E-Banking.

- Speed of internet connection may give

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5

Contribution of GST in National Income

Dr. H.G.Vidhate
Principal,
Anandrao Dhonde Alias Babaji College,
Kada, Dist. Beed

Research Paper - Commerce

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

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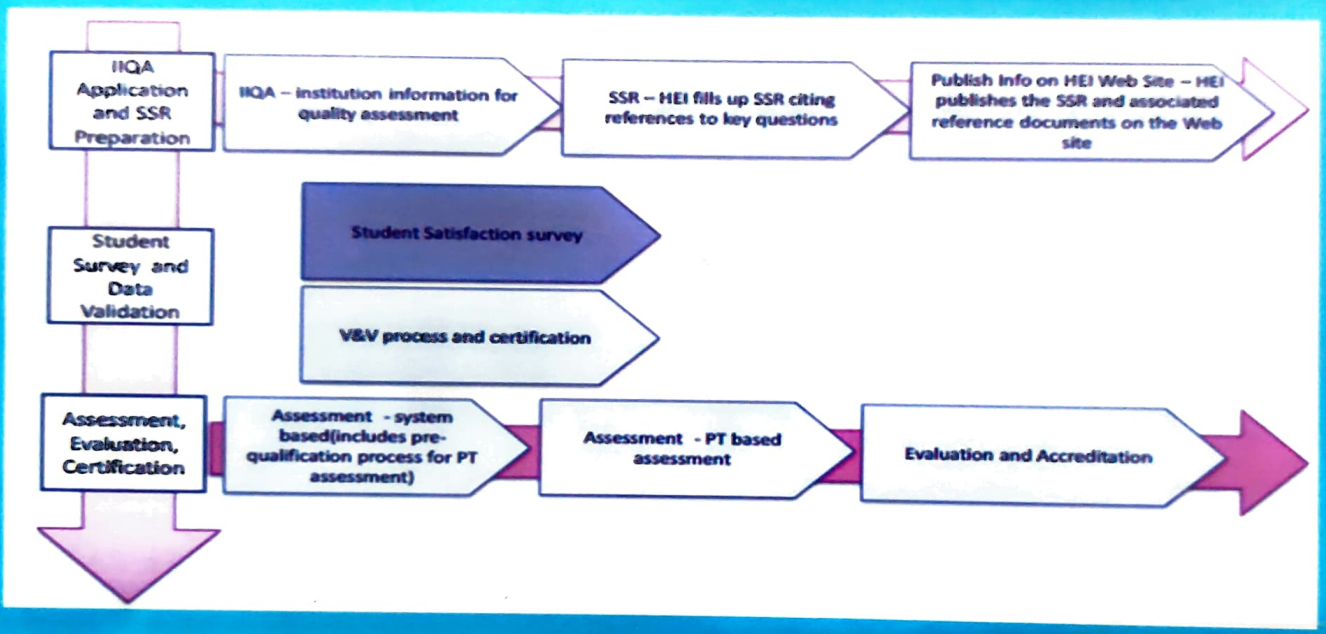

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Best Practices in Higher Education : A special Emphasis on Students Support and Progression

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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 specious 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 specious 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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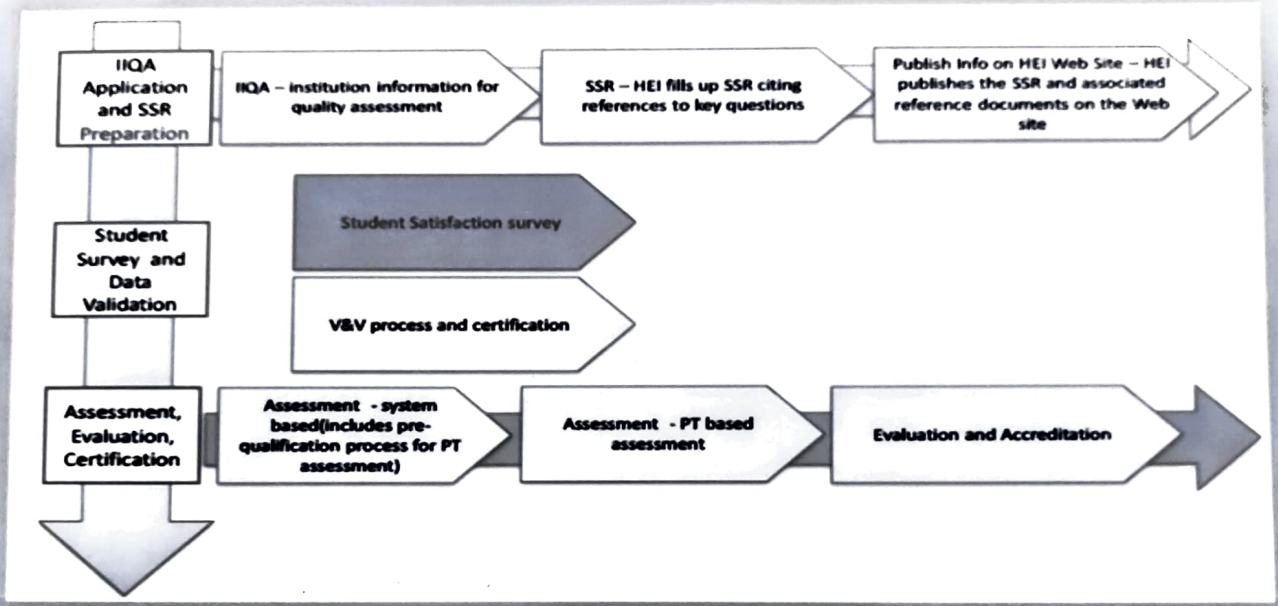

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Information Communication Technology in Higher Education

Prin. Dr. H. G. Vidhate.
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Abstract:

Information communication technologies (ICT) At Present Are Influencing Every Aspect of Human Life. They are playing salient roles in work places, business, education, and entertainment. Moreover, many people recognize ICTs as catalysts for change: change in working conditions, handling and exchanging information, teaching methods, learning approaches, scientific research, and in accessing information communication technologies. In this digital era, ICT use in the classroom is important for giving students opportunities to learn and apply the required 21st century skills. ICT improves teaching and learning and its importance for teachers in performing their role of creators of pedagogical environments. ICT helps of a teacher to present his teaching attractively and able to learn for the learners at any level of educational programmers. Today in India teaching training programmes making useful and attractive by the term of ICT. Information and communication technologies. (ICTs) exemplified by the internet and interactive multimedia are obviously an important focus for future education and need to be effectively integrated into formal teaching and learning – especially in a teacher education institution

Keywords: Communication, technologies, education.

Introduction:

ICT stands for "Information and communication technology". It refers to technologies that provide access to information through telecommunication. It is similar to information technology (IT) but focuses primarily on communication technologies. This includes the internet, wireless networks, cell phones and other communication mediums. It means we have more opportunities to use ICT in teacher training programmes now days and improve quality of teacher for teach effectively. According to UNESCO "ICT is a scientific, technological and engineering discipline and management technique used in handling information, its application and association with social, economic and cultural matters". Teacher is the main part of the educational field in our society. He more works for the improvement level of our society in the every field. Skilled teachers can make the create students in form of the good social worker, politician, poet, philosopher etc. for the society. Teachers can play a friendly role with the learner. The rapid development in technology has made creatively changes in the way we live, as well as the demands of the society. Recognizing the impact of new technologies on the workplace and everyday life, today's teacher education institutions try to restructure their education programs and classroom facilities, in order to minimize the teaching and learning technology gap between today and the future. ICTs are making dynamic changes in society. They are influencing all aspects of life. The influences are felt more and more at schools. Because ICTs provide both students and teachers with more opportunities in adapting learning and teaching to individual needs, society, is, forcing schools, aptly respond to this technical innovation.

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Digital Payment System: Uses of Mobile Banking

Dr. S. N. Waghule
Associate Prof. & Head, Dept. of Comm., Anandrao Dhonde Alias Babaji College Kada.

Abstract

Mobile banking is an electronic system that provides most of the basic services available in daily, traditional banking, but does so using a mobile communication device, usually a smart phone. In some cases, a well-developed mobile banking system can actually provide point-of-sale ability similar to an ATM or credit card, except the purchaser buys by using their phone instead. With the ease of mobile smart phones and their wide variety of applications today, it's not surprising the mobile banking is now coming into full vogue. However, the concept and ability is not a new concept. Mobile banking is growing yet there are numbers of issues and threats in mobile banking system and the major problem of mobile banking is its non-adoption by the customers. This research focuses on the barriers in adoption of mobile banking.

(**Keywords**- "Digital Payment System: Mobile Banking, uses, Net Banking.")

Introduction

The report of Cellular Operators Association of India (COAI), the mobile users' base in India is expected to zoom to 893 million by 2012. This is a 150 million increase of what was projected earlier. India is now the second largest mobile market in the world after China, which has over 650 million subscribers, with India having 400 million mobile users. According to COAI's projection, there will be 1.24 billion mobile users in 2015 - which means one phone for every Indian. With this strong base Mobile banking is expected to be successful if the Banks convince the customers with security. Mobile banking as a financial tool has been seeing its time of acceptance occur very much thanks to increasing mobility offered by smart phones. Phones essentially pack the capability of a basic computer and Internet access into a communication device.

Objectives of the Study

- To study the barriers in using Mobile banking services.

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Performance of Rural Entrepreneurship Development Programs

Dr. S. N. Waghule
Asso. Prof. & Head, Department of Commerce Anandrao Dhonde Alias Babaji College Kada.

Abstract

Enterprises in rural environments are operating in an arena of extreme and rapid change. However, despite the recognition that entrepreneurship is one of the primary facets through which rural economic development can be achieved, empirical research on rural entrepreneurship is relatively sparse and this concept remains largely unknown. Appreciating the need for and relevance of understanding conceptual paradigm of rural entrepreneurship, Rural Entrepreneurs and the role plays by the selected Developmental institutions in the creation of Micro and small village enterprises has been proved very much significant. Rural entrepreneurship is currently at the focus of much theoretical, practical and political interest. This paper examines and evaluate the performance of select government sponsored self employment generating programs for rural people as well as the performance of developmental institutions and their role in developing and fostering rural enterprises in the state of India. The appraisal of these entrepreneurship development Institutions in Haryana will certainly provide a comprehensive picture of various institutional set up to promote the growth of entrepreneurship in rural areas as well as the programs and activities that help promoting potential entrepreneurs specially in rural areas and foster rural entrepreneurship.

Introduction

Entrepreneurship is a typical global phenomenon attracting millions of economists, Politicians and social workers. In developed countries, entrepreneurship has gained attention in the last century. But in developing countries, it has been gained original consideration only in recent decades. In these countries, entrepreneurship development is considered as the way to promote self-employment- the panacea not only for chronic unemployment among the educated youth but also to sustain economic development and to augment the competitiveness of industries in the eve of globalization and liberalization. Social scientist and economists are in search of this factor as a component agency for the coherent integration of resources to stimulate sustainable and balanced socio-economic development. In the Industrial and agricultural sectors, threshold of new generation entrepreneurs has been welcomed for they carry out radical and tremendous changes in the arena of production and distribution. In the academic scenario, special importance is being given for the entrepreneurial lessons as a part of curriculum plan and a number of research studies are being conducted to learn the stimulants and inhibitors of entrepreneurship development. Rural development is more than ever before linked to entrepreneurship.

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CONTRIBUTION OF GST IN DEVELOPMENT OF INDIAN ECONOMY

In collaboration with
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CONTRIBUTION OF GST IN DEVELOPMENT OF INDIAN ECONOMY

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IMPACT OF GST ON MICRO, SMALL & MEDIUM ENTERPRISE

Dr. S. N. Waghule
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Anandrao Dhonde Alias Babaji College Kada, Tq-Ashti:Distt-Beed-414202

Abstract

GST - A broad based and single comprehensive tax system was most awaited bill, which passes on 6th may 2015. It was debated that.GST will remove the cascading effect of tax by giving input tax credit to SME, and lead to economic integration'. With broad debate on GST, country's most important sector, ME, also feel the heat of GST. SMEs are the model of socio – economic policies of Government of India. India has second largest number of SMEs in the world next to china, and they are the next best sector which provides largest employment after agriculture in the economy. It is been argued that GST will enhance the SME efficiency. Thus, it has been a focus of study about the impact of GST on SME sector. In this paper , concentrates on the GST model, to learn the basics of GST implementation in India and extend the topic to the SME sector's growth.

Keywords: GST model, efficiency, input, tax credit, SMEs.

Introduction:-

GST Bill has described as a reform measure of unparalleled importance in independent India. A Much delayed bill, passed on 6th may 2015, took its birth in 2000 by Vajpayee Government. Since then GST hass was in the news for numerous reasons. It is expected that GST will transform the India's indirect tax system by simplifying it at both centre and state level. A Very important point to be noted here is, there would be 'no tax on tax,. On the destination principle, the tax is at the last stage. The Small and medium enterprises (SMEs) are the major sector which is promoting Indian economic growth by contributing 40 % Indian workforce and nearly 17 % to the GDP growth rate. Thus, it is inevitable to study the major change in the tax system which is going to occur in 2016.

To begin the discussions let us know the meaning and basic model of GST. Goods and Service Tax – GST is a tax levied on manufacture, Sale and consumption of goods and services, with comprehensive and continuous chain of set – off benefits from the producer's point and service provider's point up to the retailer's Level. GST is basically a well designed destination – based value added tax.

Objectives of study

(a) The present paper study GST on the basis on fo[illegible] objectives

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Digital Economy Boosting Economy

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Abstract

Consumers and business people no longer need to be near a computer to send and receive information. All they need is a cellular phone or personal digital assistant. While they are on the move, they can connect with the Internet to check stock prices, the weather, sports scores, or send and receive email messages. They can place online orders by simply using a phone or a PDA. A whole field called telemetric involves placing wireless Internet-connected computers in the dashboards of cars and trucks, and making more home appliances wireless so that they can be used anywhere in or near the home. Many see a big future in what is now called m-commerce. Consider the fast growth of Internet-connected phones.

(Keywords- "Marketing for the new Economy: M-Commerce Opens Up New Opportunities for Marketers.")

Introduction

A survey by Jupiter Communications found that most Americans wouldn't use or way for m-commerce because they didn't see a "killer application," because the mobile Internet is slow, and because the appliance screens are too small. In contrast, Europe and Japan have and are using better wireless service. M-commerce entrepreneurs need in focus on converting specific groups to m-commerce; they will make faster inroads by marketing separate service packages for, teenagers, mothers, investors, and executives than by trying to attract the mass market.

The new technological capabilities have led thousands of entrepreneurs to launch a dot-comes in the hope of striking gold. The amazing success of early online dot-cams such as Amazon, Yahoo, eBay, E-trade, and dozens of others struck terror in the hearts of many established manufacturers and retailers. For example, Compaq had its hands tied because it sold its computers through retailers, whereas Dell Computer grew faster by trying to sell online.

Established store-based retailers-notably bookstores, music stores, agents, stockbrokers, and car dealers-began to doubt their future as more business went into direct online marketing. They feared, and rightly so, being disinter mediated the new e-trailers. But disintermediation was only half the story. Although some established middlemen lost their businesses, new middlemen sprang up to supply Internet services to both businesses and consumers. Reinter mediation took place on a grand scale. New online middlemen appeared such as mySimon.com, Evenbetter.com, Buy.com, ShopBest.com, Bestbook.com, Smartshop.com, and StreetPrices.com.

Scope of the study:

The present paper is related to the study Digital Economy. It is also related to the study E-commerce.

Methodology:

Secondary data has been used for the study. The secondary data is collected from the internet,

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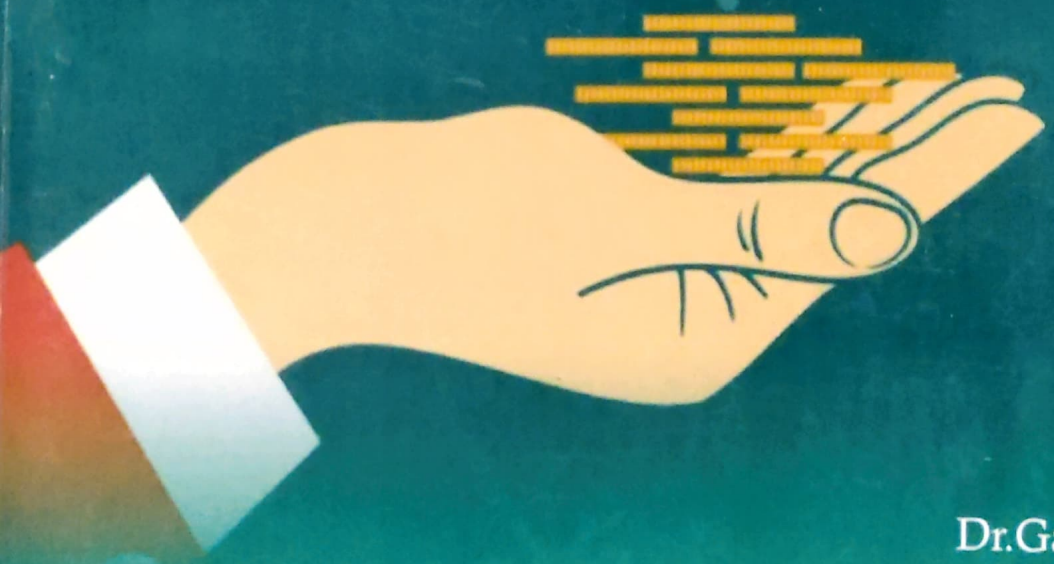

Editor
Dr.Ganesh Deshmukh
Dr.Bapu G.Gholap

6. Increased investments in manufacturing sectors and reduced cost will result in increased volume of exports.

7. Distribution of burden of tax between goods and service industries.

Conclusion:

India's historic and bold move towards integrated tax structure is viewed by most economists as an answer to regressive indirect tax structure. It is believed that GST would put India s indirect tax structure at par with more than 140 countries and would be productive for all the sectors. Implementation of such reforms does face surmountable challenges; however this is expected to bring in benefits in the form of higher GDP and also transparency in the tax system. The GST would be imposed on the value –addition and thus would leave lesser scope for tax evasion.

References

1. Bird Richard M. The GST/HST: Creating an integrated Sales Tax in a Federal Country. The School of Public Policy, SPP Research Papers, 2012; 5(12):1-38

2. Empowered Committee of Finance Ministers First Discussion Paper on Goods and Services Tax in India, The Empowered Committee of State Finance Ministers, New Delhi, 2009.

3. Garg Girish. Basic Concepts and Features of Good and Services Tax in India. International Journal of scientific research and Management. 2014; 2(2):542-549

4. Indirect Taxes Committee, Institute of Chartered Accountants of India (ICAI) Goods and Services Tax (GST). 2015. Retrieved from: http://idtc.icai.org/download/Final-PPT-on-GSTICAI.pdf

5. Kumar Nitin. Goods and Services Tax in India: A Way Forward. Global Journal of Multidisciplinary Studies, 2014; 3(6):216-225

6. Parkhi, Shilpa. Goods and Service Tax in India: the changing. Financial Management Sharma and Shashi K. Gupta Kalyani Publishers Noid 2015

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Impact of GST on Import and Export of India

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Abstract

Vajpayee Government in 2000 first started the discussion on GST by forming an empowered committee. They thought of implementing GST which has various advantages like end of cascading effect, increase in GDP rate by 2 to 2.5%, increase in exports by 8 to 10%, by eliminating the multiplicity of taxation and also it create unified market. GST will help in setting off for input tax by the importer; it will also subsume major indirect taxes like sales tax, service tax, excise duty and also CVD & SAD. There are three main categories under GST there are SGST, CGST & IGST. IGST includes both SGST & CGST government has estimated IGST rate to 16%. GST implementation is only approved in Lok Sabha but in Rajya Sabha due to lack of majority it still in process of implementation. Only when it is implemented clear picture will be available. The main objective of GST is to maintain common tax rate structure between the states. This article will start with Introduction, History of GST and mainly concentrates on the impact of GST on imports and also how IGST works.

Key words - Central Goods & Service Tax (CGST), State Goods & Service Tax (SGST), Integrated Goods & Service Tax(IGST), Central Excise Duty(CED), Central Sales Tax(CST), Value Added Tax(VAT).

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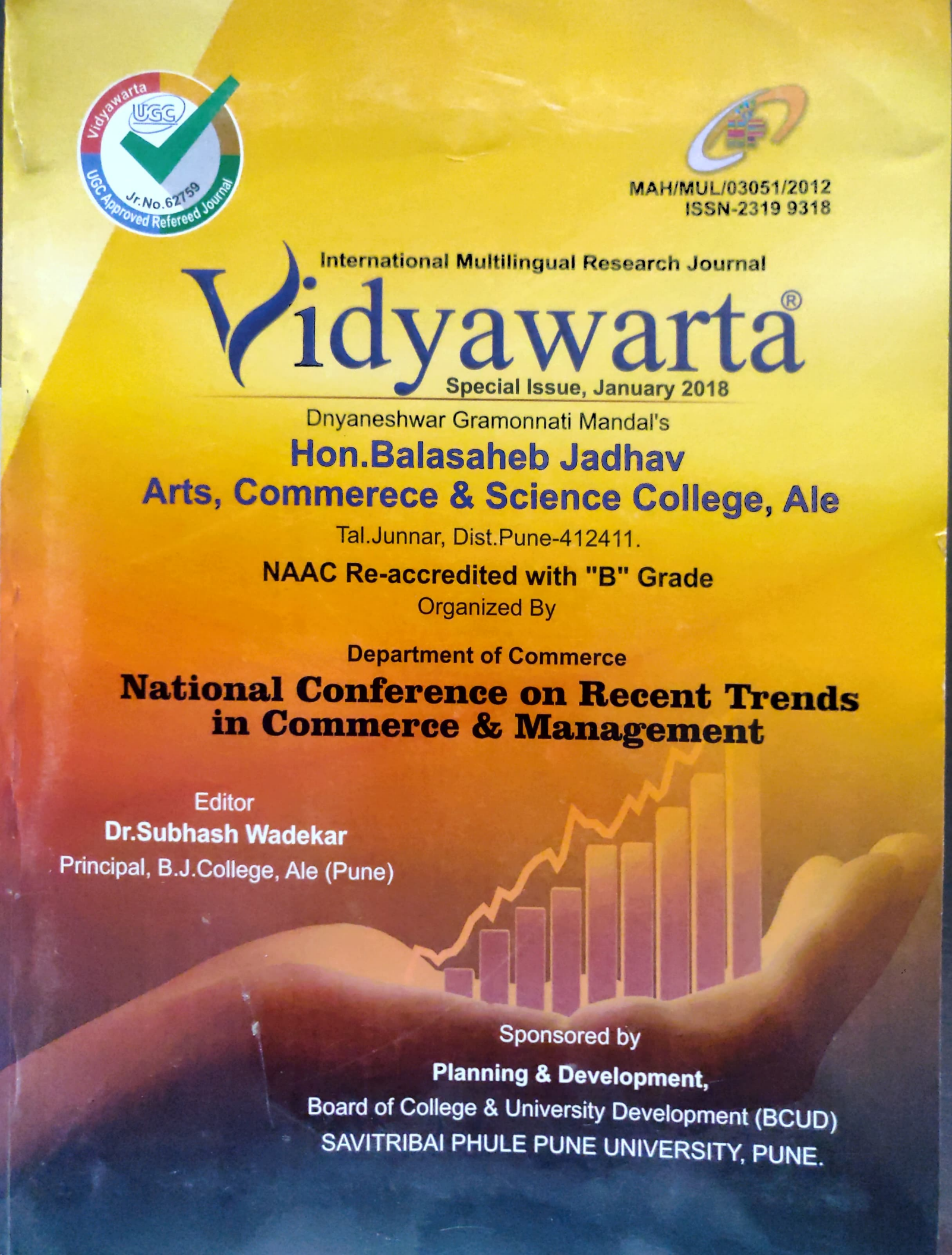

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Conclusion

As the usage of Information Technology is growing very fast, Indian government is making many efforts to provide services to its citizens through e-Governance. Although Indian government is spending a lot of money on e-Governance projects but still these projects are not successful in all parts of India. Unawareness in people, local language of the people of a particular area, privacy for the personal data of the people etc. are main challenges which are responsible for the unsuccessful implementation of e- Governance in India. Government must take some actions to make the people aware about the e-Governance activities so that people may take full advantage of these activities and e- Governance projects can be implemented successfully. The participation of people can play a vital role in implementation of e-Governance in India.

References

1. Bhatnagar Subhash (2004), e-government from vision to implementation, sage publications, New Delhi.

2. Dey, Bata K. (2000), "E-governance in India: Problems, Challenges and Opportunities – A Futures Vision", Indian Journal of Public Administration, Vol. XLVI, No. 3.

3. Diwedi S.K., Bharti A.K. "E-GOVERNANCE IN INDIA – PROBLEMS AND ACCEPTABILITY, Journal of Theoretical and Applied Information Technology available at www.jatit.org.

4. E-Readiness Ranking 2012, The Global Information Technology Report 2012 by Economist Intelligence Unit.

5. Gupta, M.P. (2004). Towards E-Government Management Challenges, Tata McGraw-Hill Publishing Company Limited, New Delhi.

6. Kochhar Sameer and Gursharan Dhanjal, (2005). Egovernment Report Card, Yojna, Vol.49, August, New Delhi.

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E- Commerce and Its Impact on Indian Market

Dr. S. N. Waghule

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Abstract:

As 1991, once economic reforms unambiguously obtain place in India as a result of opening-up of the economy with a analysis to incorporate itself with the global economy, the require to assist international deal both during policy and procedure reform has become the base one of India's trade and fiscal policies. Electronic commerce as part of the information technology insurrection became broadly use in the world deal in general and Indian economy in exacting. The Paper discovers the economic and social impact of e-commerce. E-commerce is currently rising at 30% .shopping site e-Bay Inc. is growing at 60%. The number of customers of the company has augmented from one million users to 2.5 million in India in the last four years. Some of the popular imported items imported by Indians include home decor, branded and unbranded apparel, accessories, and technology products like laptops.

(**Keywords**- "Marketing for the E-commerce: E-Commerce Opens up New Opportunities for Marketers. E-Buy")

Introduction

One of the most important issues to be addressed in the area of Services is that of electronic commerce. In order to begin a policy dispute on the subject, it would be useful to present some of the key questions and emerging issues in this area. The WTO associated issues

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Dr.D.N.Ganjewar

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wrongs, self-Sacrificing towards suppliants in distress and sanguinary to death with any who treated them insultingly.

5. CONCLUSION:

The backbone of Shivaji's army was composed of the peasantry, who belonged to two low castes, named Maratha and Kunbi. The Maratha caste, a name which should not be applied to all Marathi-spelling people in general, numbered five millions and the Kunbis of the Bombay presidency alone, two and a half millions, in 1911, and they bear the following character in our times:

"As a class, Marathas (i.e., the caste so called) are simple, frank, independent and liberal, courteous, and when kindly treated, trusting. They are a manly and intelligent race, proud of their former greatness, found of show, and careful to hide poverty.... Stringer, more active, and better made than the Kunbis, may of the Marathas, even among the poorer classes, have an air of refinement. (They take animal food, including fowls, and drink toddy and other liquors, like the Kunbis.) No caste supplies the Bombay army with so many recruits as the Ratnagiri Marathas. Other go into the police or find employment as messengers. Like the Kunbis, orderly, well-behaved, and good tempered, the Marathas surpass them in courage and generosity. Very frugal, unassuming, respectable and temperate, they are a very religious class."

BIBLOGRAPHY

- ENGLISH RECORDS OF SHIVAJI [1659-1682], ed. By B.G Paranjape, 2vols,[Poona,1931] useful compendium for those who cannot consult the original records in England
- `Dutch factory records preserved in the india office, London. vols 23-29, covering 1659-70 are in Dutch .
- Records of fort st. gertoge; dairy and consultation book, for 1672-78 and 1678-79, printed at madras,[1910 and 1911] .
- Dairy of W. Hedges, ed by Yule, [Hakluyt

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MODERN INNOVATIVE ON HUMAN RESOURCE MANAGEMENT

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==========**********==========

ABSTRACT

This paper highlights the Modern innovative impact factors on human resource management. Human resource is the most important asset for any organization and it is the source of achieving competitive advantage managing human resources . is very challenging as compared to managing technology or capital and for its effective management organization requires effective human resource management system. Human management system should be backed up by sound human resource practices. Human resource practices refer to organizational activities directed a managing pool of human resources and ensuring that the researches are employed towards the fulfillment of organizational goals. This paper has been designed to identified and existing of modern innovative factors impact on human resource management. The purpose of this paper is to identified, understanding and develop of human resource practices and to examine the unique human resource implemented by different companies.

Keywords: Human resource management practices, Innovative human resource management, Innovative leadership, Technology, Mobility,

Introduction:

In the wave of liberalization,

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Ante P.N.

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Research Paper 5 Commerce

Farmer Suicide in India

Dr. P. N. Aute
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Introduction:-

National Crime Records Bureau of India reported 5,650 Farmers suicides in 2014. In 2014 the highest number of 18,241 farmers committed suicide. The farmers suicide rate in India has ranged between 1.4 & 1.8 per 1, 00,000 total Population, over a 10 year period through 2005 As India is an agricultural country 70% of its people depending directly and indirectly upon agriculture. Farmer suicide account for 11.2% of all suicides in India. Scholars have offered a number of conflicting reasons for farmer suicides, such as monsoon failure, high debt burdens, government policies, public mental health, personal issues and family problems.

Historical records relating to frustration, revolts and high mortality rates among farmers in India, However, suicides due to the same were rare. The British government enacted the Deccan Agriculture is its Relief Act in 1879, to limit the interest rate charged by money lenders to Deccan cotton farmers, but applied to selectively to areas that served British cotton trading interests. Rural Mortality rates, in predominantly agrarian British India's, were high between 1850 and the 1940s. The death rate classified under injuries in, 1897, was 79 per 1,00000 people in central provinces of India and 37 per 1,0000 people in Bombay Presidency.

There are some scholars who were analyed. suicides. Ganapati and vankobo rao in Tamil Nadu, in 1966 analysed suicides. The recommended the distribution & agricultural organo. Phosphorus compounds be restricted. Similarity, Nandi in 1979 noted the role of freely available agricultural insecticides in suicides in rural suicides in rural west Bengal and suggested that their availability regulated. Hegde studied rural suicides in villages of northern Karnataka over 1962 to 1970. He stated the suicide rate to 5.7 per 1,00000 population. In 1993 Reddy, reviewed

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Prakashan

16. An Overview of GST in India

Dr. Aute Pandit N.
Anandrao Dhonde Alias Babaji College Kada, Tal.:- Ashti, Dist:- Beed.

Abstract

GST is a tax on Goods & Services with comprehensive & continuous Chain of Set off benefit from producers to retailer point. In other words, GST is an Indirect tax which is levy on manufacture, sale & consumption of all goods & services. It substitute mostly all the indirect taxes like excise, VAT, Service Tax, Entertainment Tax, Luxury Tax, CVD as well as SAD. It is based on the VAT principles .It was implemented on 1st April 2017. It is expected to be levied only at a destination level/Real Consumption Place not at a various points. Taxation power lies with both in the hands of CG as well as SG also. There is no distinction between goods & services. After Introduction of GST, all the traders including manufacturer are paying both the type of taxes (CGST & SGST). GST leads to immense scope, Opportunities as well as some challenges also. Centre is empowered to levy GST on Goods & Services upon the Production stage, while State have the power to tax on sale of goods. India implemented dual GST. It subsumes a large no. of central & state taxes into a single tax. GST also mitigate the cascading effect of taxes. In the mean time, it also helps in terms of uniformity like in case of chargeability, definition of taxable services or person, measure of levy, basis of classification etc.

Key words: Indirect Tax, Goods & Services Tax, Component of GST, SGST, CGST. IGST.

Introduction

The introduction of GST in India is not an entirely new initiative, but it is to rectify certain basic implementation shortcomings of VAT. So, this is an attempt to improve the existing VAT system further and also the tax system of India.VAT was introduced in the Indian taxation system from April 1, 2005 in an effort to address the with the earlier Sales Tax. The States have switched over from a multiple point Sales tax to a Value Added Tax (VAT) covering all transactions of sale of goods within the State The essence of GST is to correct certain shortcomings of VAT like, the way it taxes inputs and outputs, bringing services under tax net, which is not possible under the VAT system. Hence, GST has been modeled as an extension of

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AnOverview ofState AndMarginalised Groups

Dr. Aute P. N.
Dept. of commerce. A. D College Kada

Introduction :-

This paper looks marginalisationof the state. It is of key relevance and touches upon key domains areas interconnected spheres and disciplines. including politics. Social movement .governce and acadamin There is a profound interconnectedness of all these debates. which adds and to the complexities of issues. concerns and demands. The attempt here is to simplity the important reference points of these debates in India

The content is divided into three sections : the first section explores various understandings of marginalization. the second section gives an overview of marginalized groups in India and in the third sections we deal with specific cases like marginalization of Scheduled Castes and Woman in India.

1. Locating Marginalization

As per popular dictionary definition. like the given in Oxford Dictionary. marginalization is understood as ' Treatment of a person . groups. or concept as insignificant or peripheral'. Such definition do not cover the complexities associated with term marginalization. To have a better understanding. we move towards academic definitions.

As per Marshall, marginalization refers to 'a social process of becoming or being made marginal (especially as a group within the larger society) It is 'a process by which a group or individual is denied access to important positions and symbols of economic. religious or political power within any society: (Marshall 1998.)

As per UNESCO definitions. we understand that marginalization is a " form of acute and persistent disadvantage rooted on underlying social inequalities" (UNESCO,2009).

From these definitions. we understand that marginalization is located as p process. a social process which is linked to inequalities in the economic. cultural as well as the political domains.

2. Marginalised Groups in India: An Overview

Before attempting an overview of various marginalized groups In India . we will try to provide a brief overview of the Indian context of human development and inequalities.

As per Encyclopedis Britannias. a state is a political organization of society...or . more narrowly. the institutions of government The state is a form of human association distinguished from other social groups by its purpose, the establishment of order and security. its methods, the laws and their enforcement: its territory. the of jurisdiction or geographic boundaries: and finally by its sovereignty.

Placed within this larger idea of the state. We locate the Indian state a one which is home to more than 1.6" of the world's population. This is perhaps the most diverse of the population in the world people belong to diverse ethnicities. Speak hundreds of languages,.Pratices many difficult religions, and face varried developmental challenges. Governed under a robust parliamentary democracy key traits associated with the state are its federal nature representativeness, firm fairh in a progressive and secular constitutional frameworksrooted to equality and enquiry.

These traits notwithstanding. ever since its independence from colonial rule, India has to deal with significant challenges These include including poverty. Accesses to education, accesses to healthier food security etc. While as India has come a long way since 1947. some of these challenges persist.

Now we will attempt an overview of marginalizationfaced disadvantaged groups in India. These groups are identified with markers relevant to Caste. Tribe. Minority status, Gender, Age, Disability, Migration etc.

1. Caste based Marginalization, Among the most disadvantaged groups in India are the populations which suffer acute discriminations on the basis on caste. Prominent among this groups is the Schedule Caste population which constitutes more than 17 percent of India's population. Even though there are constitutional provisions against caste based discriminations. The schedule castes or Dalitscontinuos to face marked marginalisations in socio-cultural. economic, and political domains.
2. Schedule Tribes: The Scheduled Tribes or ST, form around 8 percent of India's population. And alongside Schedule Casters are among the most disadvantaged groups in India.
3. Marginalization of Religions Minorities : The Constitution of India provides for freedom of religion and protects against discrimination based on religion Alongside this , India is a pluralistic, multi-religions and multi-ethnic democracy However many religious minorities in India continue to suffer from marginalization linked to their religious identity
4. Women : Women continue to be at serious disadvantages due to the deep rooted particularities in India. There marginalization becomes visible in increasing incidence of crimes and violence against women.

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4

Economic Development and Corporate Responsibility

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Research Paper - Commerce

ABSTRACT

The objective of this paper is to reflect on the consequences of the current economic and financial crisis on Corporate Social Responsibility (CSR), a concept of great importance nowadays. The core approach is the possible link between CSR and the crisis, if both elements can be combined. After an introduction to the current economic and financial situation, some conceptualizations about CSR are made to clarify the perspective used for this complex and incompletely defined concept. The last part of the paper presents an approach to the combination of both concepts, concluding with the idea that CSR in crisis periods can be converted from being a threat to an opportunity.

Introduction:

A great number of economic and financial experts agree in considering the current world-wide economic and financial crisis to be the worst since the Second World War. The crisis began in the United States with the burst of the subprime mortgage housing bubble, after governmental, supervisory and regulatory authorities undervalued the real

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English Part - I

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Ajanta Prakashan

3. Role of International Tourism Policy and Indian Tourism

DR. D. B. Borade
Associate Professor, Department of Commerce, Anandrao Dhonde Alias Babaji College Kada Tal Ashti, Dist Beed.

Abstract

Tourism industry is on a high in the 21st century. There is a shift of international tourists from developed economies to the developing ones. India being a part of the latter must channelize its tourism policies to be able to take advantage of this opportunity. The paper attempts to review the tourism policies, tourism promotional campaigns and initiatives by the government of India since independence and the competitiveness of Indian tourism industry at the global level. The findings conclude that India is lacking on the issues of security & safety, maintenance and cleanliness, information & communication, infrastructure, facilities, man made attractions, behavior of country residents, tourism infrastructure, corruption, terrorism and excessive begging and cheating and has a sound position only on the issue of natural resources, prices historical monuments, festivals and multi cultural heritage.

Keyword: competitiveness, Indian tourism, tourism policies

Introduction

In the year 2011 the global FTA were 983 million, the Asia – Pacific region witnessed 217 million out of which India's share was 6.29 million. The statistics clearly show that India accounts for a minimal of 0.63% of the world FTA which is quite low as the top most preferred destination – France got 79.5 million FTA in the same year accounting to 36.6% of the world FTA.

Similarly, the FEE globally in the year 2011 were 1030 billion US $ whereas in Asia Pacific region were 289.4 billion US $. USA topped in this list claiming 116.3 billion US $. It is further heartbreaking to view India's position from this perspective as India accounted only 1.66% of the world's FEE which being 17158 US $ million.

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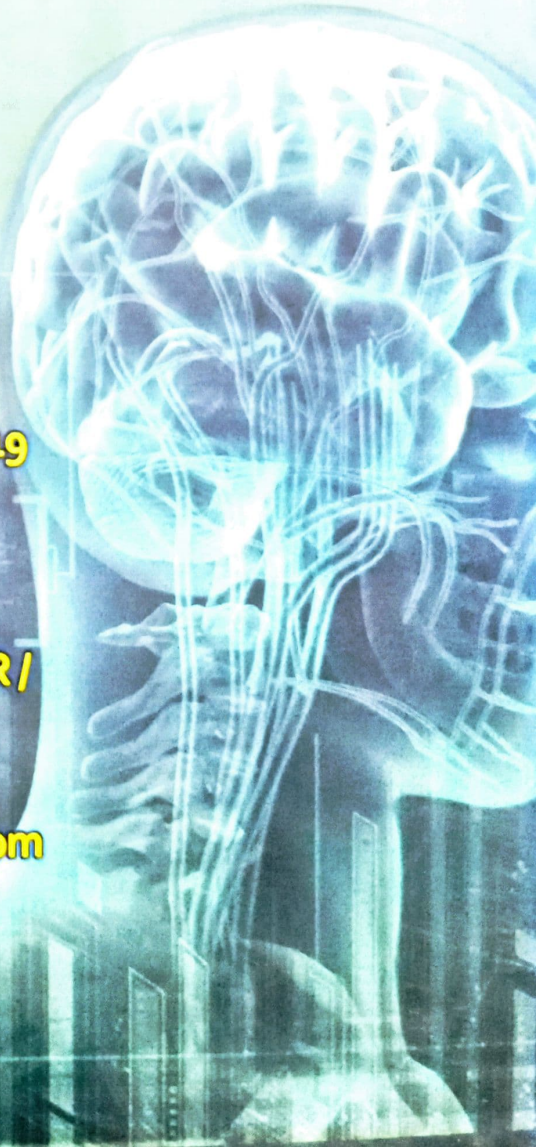

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7. GST- A Catalyst for Economic Development

Dr. D. B. Borade
Assist. Prof. in Commerce, Anandrao Dhonde Alias Babaji College, Kada
Tq- Ashti: Distt- Beed.

Abstract

Goods and service tax being a broad based, single comprehensive system of tax is in its birth stage in India. Therefore the understanding of the concept of GST is important. The paper therefore studies the concept of GST and also examines the mechanism of it. The paper also focuses on analyzing the SWOT of GST implementation in India. 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

Key words: GST, SWOT, Mechanism

Introduction

GST is broad based, single, comprehensive tax levied on goods and services at each point of sale of goods or provision of service, in which, the seller or service provider may claim the input credit of tax which he has paid while purchasing the goods or availing the service; the final consumer will thus bear only the GST charged by the last dealer in the supply chain. With the introduction of GST at the state level, the additional burden of CENVAT and services tax would be comprehensively removed and major central and state taxes will get subsumed into GST which will reduced the multiplicity of taxes.

Significance of the Problem

Since India hasn't implemented GST, a study of this kind besides creating awareness would also help in analyzing the prose and cons of GST and the important points that has to be kept in mind before its implementation as it would affect different stakeholders differently.

Objective of the Study

- To study the concept of Goods and service tax
- To examine the mechanism of Goods and service tax
- To analyze the SWOT of GST implementation in India

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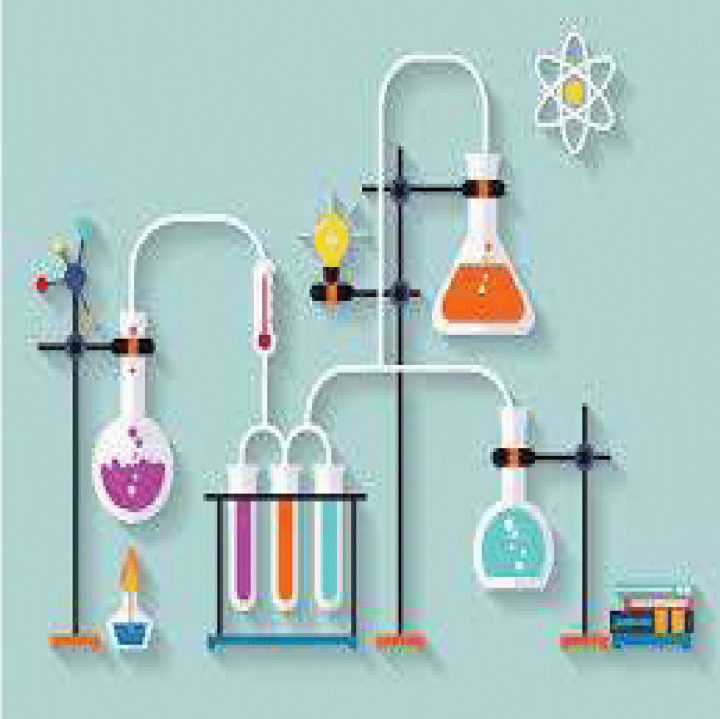

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Ph Metric Investigation of Mixed Ligand Complexes of Zinc Metal Ion With Ceftriaxone Drug and Amino Acids in Aqueous Medium

Shailendrasingh Thakur1, D.B.Jirekar2, Mazahar Farooqui3, P.P.Ghumare2, Ramesh Ware1
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Abstract:

*In the present investigation we study the stability constant of the mixed ligand complexes of zinc(II) with antibacterial drug Ceftriaxone as primary ligand and eight aminoacids viz. glycine, alanine, glutamic acid, isoleucine, methionine, β-phenyl alanine serine and valine as secondary ligands were determined pH metrically in 20% (v/v) ethanol-water medium at 25 °C and at an ionic strength of 0.1 M NaClO4. The formation of complex species has been evaluated by SCOGS computer program and disc*ussed in terms of various relative stability parameters.

Keywords: stability constant,Ceftriaxone drug, amino acids, pH metry, mixed ligand complexes.

Introduction:

According to world health organization (WHO) drug is a substance or that is used to modify or explore physiological systems or states for benefits of the recipient. Now a day the medicinal drug is supposed to be "an elixir of human life" though it has so many side effects. Drugs have various functional groups present in its structure, which can bind to metal ions present in human body. Metal complexes of drugs are found to be more potent than parent drugs. The metal complexes involving antibacterial drugs / biologically active compounds are receiving more attention because of their vital role in analytical chemistry, coordination chemistry, catalysis, metalloproteins and metalloenzymes. In the mixed ligand system, the molecules of different ligands are bound to same metal ion and the complex formed is known as mixed ligand complex. The presence of metal ions in biological fluids could have a significant effect on the therapeutic action of drugs. Ternary complexes play an important role in biological processes. Ternary complexes have also been implicated in the storage and transport of active substances through biological membranes. Metal complexes play a significant role in naturally occurring biological systems or as pharmacological agents, such as antitumor, anticandida, antimycobacterial, antimicrobial activity etc. In a number of biochemical processes metal ion is involved in mixed ligand complex formation and ligand catalyzed complex formation reactions.

After literature survey and In continuation of earlier work with complexation of medicinal drug[1-25], we study ternary complexes of zinc metal ion with antibacterial drug Ceftriaxone (CFT) as primary ligand and a series of eight aminoacids viz. glycine, alanine, glutamic acid, isoleucine, methionine, β-phenyl alanine, serine and valine as secondary ligands in ethanol-water media.

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Estimation of Metal and Phytochemical Analysis of Aqueous Extract of Selected Medicinal Plants

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Abstract:

The present investigation deals with the phytochemical studies and estimation of metal of leaves of different medicinal plants like Feronia limonia, Bauhinia racemosa, Pongamia pinnata, Dalbergia sissoo, Terminalia arjuna, Ailanthus excelsa, Morinda tinctoria, Moringa oleifera, Cordia dichotoma are collected from Mahadeodara, District Beed. Aqueous extracts of leaf powders have been screened for qualitative determination of different secondary metabolites like carbohydrates, alkaloids, flavonoids, tannins, phenol, glycosides, phytosterols, saponin, protein and amino acid tests. Essential heavy metals such as Fe, Cu, Ni and Cr were estimated by using inductive coupling plasma spectroscopy. Plants showed different metal concentration in the range of 721.5 - 14448.4 ppm for Fe, 26.5-300 ppm for Cu, 6.7-638.9 ppm for Ni, 0.6-10 ppm for Co. High contents of Fe and Cu were found in all nine plants. Other heavy metals were present in low quantity. The purpose of this study was determination of different secondary metabolites and to identify each type of metal associated with a given plants and also to highlight the heavy metals present in these plants.

Keywords- Medicinal plants, secondary metabolite, metal estimation.

Introduction:

Medicinal plants are of great importance to the health of individuals and communities. Medicinal plants contain some organic compounds which provide definite physiological action on the human body and these bioactive substances include tannins, alkaloids, carbohydrates, terpenoids, steroids and flavonoids [1,2]. A large number of phytochemicals belonging to several chemical classes have been shown to have inhibitory effects on all types of microorganisms in vitro [3]. Plant products have been part of phytomedicines since time immemorial. This can be derived from barks, leaves, flowers, roots, fruits, seeds [4]. Knowledge of the chemical constituents of plants is desirable because such information will be value for synthesis of complex chemical substances [5-7].

Phytochemical are very important in medicine and constitute most of the valuable drugs. Alkaloids are rich in medicine and constitute most of the valuable drugs. They have physiological effect on animals [8]. Malnutrition is major concern for many tropical developing countries. Deficiency or excess of elements may cause a number of disorders. For example, Iron deficiency anemia affects one third of the world population. Low levels of Zn can induce the pathogenesis of lung cancer . Breast cancer patients had low levels of Ca, Mg, Fe, Cu, Mn and Zn in their hair. Therefore, it is of major interest to establish the levels of some metallic elements in common used plants because, at elevated levels, these metals could be dangerous and toxic [9].

Determination of metals in medicinal plants is a part of quality control to establish their purity, safety and efficacy according to the World Health Organization (WHO) [10]. Most of the

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Black Gram Seed Husk Waste As A Novel Low-Cost Bio-Adsorbent

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Abstract:

Adsorption techniques are being widely used by various researchers for the removal of hazardous heavy metals from waste streams. The adsorption behaviour of low-cost adsorbent such as black gram seed husk (BGSH) with respect to hazardous heavy metals has been studied in order to consider its application to the removal of metals. The batch method was employed: parameters such as effect of contact time, effect of metal ion concentration, effect of adsorbent dose, effect of pH and effect of zero point pH were studied. The effect of the pH of the metal ion solution on the uptake levels of the metal ions by the adsorbents used was carried out between pH 2.0 to 11.00. The optimum pH for copper removal was 7.0 in the case of BGSH. Adsorption parameters were determined using both Langmuir and Freundlich isotherms, but the experimental data were better fitted to the Freundlich isotherm model than Langmuir adsorption isotherm. The adsorption data of metal was well fitted by the pseudo-second-order kinetic model. The results showed that black gram seed husk can be fruitfully used for the removal of heavy metals.

Key words: Black gram seed husk, Heavy metals, Cu(II), Adsorbent; Adsorption Low-cost materials.

Introduction:

Water is a basic source of life, energy and thus is essential element to all living things on earth. The purest form of water is tasteless, odourless, and colourless in nature. Safe drinking water is necessary for every living organism on earth. It is known that from among the total amount of water, only 2.5% is fresh water and 98.8% of that water is either groundwater or is in the form of ice, of this small amount of freshwater, < 0.3% is in lakes, rivers, and atmosphere and provides the useable sources. Water plays a important role in the world economy. It is widely used in agriculture and in industry as a solvent and helps for transportation and cooling.Many industries, especially plating and those manufacturing batteries, pigments and ammunition, release heavy metals such as lead (Pb), cadmium (Cd), and copper (Cu) into wastewaters. Pb and Cd are potent neurotoxic metals. The permissible limits for Pb and Cd in drinking water are 0.05 and 0.01 mg l−1, respectively, in most countries [1]. For Cu, which is generally considered non-toxic, the recommended upper limit for discharge is approximately 2 mg l−1. These metals are non-degradable in the environment and if not be processed, they could be harmful to a variety of living species. Therefore, the removal of these metals from industrial wastewaters is important in order to protect public health and environment.A number of methods are available for the removal of pollutants from aqueous solution. These methods include chemical precipitation, ion exchange, membrane separation process, biological degradation, chemical oxidation, solvent extraction, and adsorption [2-3]. Among all these methods,

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Adsorption of Cr (VI) using Low-Cost Adsorbent as a Black Gram Seed Husk (*Vignamungo*) Powder

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Abstract:

The adsorption of Cr(VI) by Black Gram Seed Husk (Vignamungo) Powder
adsorption is investigated in present study. Batch adsorption studies demonstrate that the Black Gram Seed Husk (BGSH) has a significant capacity for adsorption of Cr(VI) from aqueous solution. The parameters are investigated in this study included contact time, adsorbent dosage, initial Cr(VI) concentration, temperature and pH.Adsorption of Cr (VI) metal ion decreased with increasing temperature, with maximum adsorption of Cr (VI) metal ion (94.83%) at 306.5 K. Adsorption parameters were determined using both Langmuir and Freundlich isotherms, the experimental data were better fitted to the Freundlichisotherm as well as Langmuir adsorption isotherm.The maximum adsorption of Cr(VI) was found to be at low pH 6.The adsorption data of metal was well fitted by the pseudo-second-order kinetic model. The results showed that black gram seed husk can be fruitfully used for the adsorption of Cr (VI) metal ions.
Keywords: Adsorption; Adsorption capacity; Cr(VI); Black Gram Seed Husk; Langmuir isotherm.

Introduction:

Water is essential for survival. But today about 200 million people in India do not have access to pure drinking water due to water pollution. The effluents from mining, metal polishing, cleaning, paint manufacturing ore processing, and battery manufacturing industries and acid rain contribute for the increasing metal loads in thewater bodies. Chromium is found in rocks, animals, plants, soils, and in volcanic dusts and gases. Different industrial processes such as steel production, anodizing of aluminum,textile industries, electroplating, and chromate preparation discharge chromium-containing wastes into the environment, which contaminates soil and water. Cr (III) is an essential element in humans and is much less hazardous than Cr(VI) which is recognized as a carcinogenic and mutagenic agent. Nowadays pollution due to hazardous heavy metal contaminants from aqueous solutions is one of the most important environmental concerns due to their high toxicity and impact on human health. Cr (VI) is known to be one of the heavy metal and is widely used in many industries including leather tanning, dye, cement,electroplating, and photography industries. The effluents from these industries usually contain remarkable amount of chromium, which ultimately spreads into the environment through soils and water streams and finally accumulates along the food chain which causes human health hazards. As per the World Health Organization standard, the maximum contaminant level goal of chromium for the safe drinking water is 0.05 mg/L, but usually effluent discharged from the industries contained levels above this [1]. Ingestion of chromium may causeepigastric pain, nausea, vomitingand severe diarrhoea. Due to carcinogenic and teratogenicasset of Cr (VI), it has become a serious healthconcern.Chromium metal ions are usually removed by precipitation although ion exchange and adsorption are also used forits removal. The hydroxides of heavy metals are usually insoluble, so lime is commonlyused for precipitating them. There are various methods to remove Cr (VI) including chemical precipitation, membrane process, ion exchange, liquid extraction and electro dialysis [2]. These methods are non-economical and have many disadvantages such as incomplete metal removal, high reagent and energy requirements, generation of toxic sludge or other waste products that require disposal or treatment. In contrast, the adsorption technique is one of the preferred methods for removal of heavy metals because of its efficiency and low cost [3]. Utilizing the waste material from industriesand agriculturecan make treatment process economical and solve the solid waste disposal problem. The present study was aimed at selection of a low cost adsorbent, which can adsorb chromium from the wastewater. The researchers were oriented towards no expensive adsorbents which are the vegetable wastes such as: husk of gram seeds [4],Grape fruit peel [5], rice husk [6], jackfruit leaf powder [7], black gram seed husk [8], ginger waste [9], etc. have been found to be highly effective, cheap & biologically safe adsorbents. Keeping this in view we tried to know the adsorption capacity of black gram seed husk for the adsorption of Cr (IV) metal ions.

The present study aimed to investigate the efficiency of black gram seed husk as adsorbents for the adsorption of Cr (VI) from aqueous solutions. Experiments were conducted to investigate the effect of contact time, effect of initial concentration, effect of adsorbent dose, effect of temperature, effect of pH etc. on adsorption efficiency of Cr (VI) by black gram seed husk. Adsorption equilibrium and pseudo-first-order as well as pseudo-second-order kinetics had been studied under the optimum adsorption conditions. The Langmuir and Freundlich adsorption isotherms models were applied to evaluate the adsorption properties in the batch technique. In addition, the pseudo-first and pseudo-second order kinetic model were also applied to examine the kinetics of the adsorption process.

Black gram (*Vignamungo)* is an erect densely hairy, annual herb. It is extensively cultivated all over the India. Green pods of Udid are occasionally used as a vegetable. The black ripe pulse is split into dal and is most fattening food. Pure black gram cake baked on steam (idli) with ghee is a night diet for diabetics. It has been used for various medicinal

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Traditional Uses Phytochemical Characterization Of *Moringaoleifera*

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ABSTRACT :-

Moringaoleifera(Moringaceae) is high valued plant distributed in many countries of tropic and subtropics. It has an impressive range of medicinal uses with high nutritional value. *Moringaoleifera*is very important for its medicinal value. Various part of this plant such as leaves, roots, seeds, bark, fruit, flower & immature pods acts as cardiac and circulatory stimulants, possess antipyretic, antiepileptic, anti-inflammatory, antiulcer, anti diuretic, antihypertensive, cholesterol lowering, antioxidant, anti diabetics, hepatoprotective , antibacterial, and antifungal activity and are being employed for the treatment of different aliments in the indigenous system of medicine, particularly in south Asia. The purpose of this study was determination of different secondary metabolites such as carbohydrate, alkaloid, phenol,glycosides, flavanoids, tannin, saponin, protein and amino acid.

Key words:-*Moringaoleifera*leaves, Phytochemical and Traditional use.

INTRODUCTION :-

About the 80% population of the developing world is still dependent upon the traditional medicine [1]. *MoringaOleifera* is a small, fast growing evergreen or deciduous tree that usually grows upto 10 to 12 m. in height, open crown of dropping fragile branches, feathery toliage of tripinnate leaves andthicky corky, whitish bark. *MoringaOleifera* is used as a highly nutritive vegetable in many countries. Its young leaves, flowers, seeds & tender pods are commonly consumed and they are having same medicinal properties. Traditionally its roots are applied as plaster to reduce the swelling & rheumatism. The root, flower, fruit & leaf have analgesic & anti-inflammatory activity. *Moringa* leaves contain phytochemical having potent anticancer and hypotensive activity and are considered full of medicinal properties and used in siddha medicine [2]. The whole plant of *MoringaOleifera* is used in the treatment of psychosis, eye diseases, fever & as an aphrodisiac, aqueous extract of root & bark were found to be effective in preventing implantation , aqueous extract of fruit have shown significant anti inflammatory activity, methanolic extract of leaves have antiulcer activity and ethanolic extract of seed exhibited antitumor activity [3].*MoringaOleifera* is used as drug in many ayurvedic practitioners for the treatment of asthama and evaluate the anthelmentic activity of methanolic extract of *MoringaOleifera* in adult Indian earthworms pheretimaposithuma at different doses [4].The *Moringa*plant provides a rich and rare combination of zeatin, quarcetin, kaemferon and many other phytochemicals. Various parts of the plant such as leaves, root, seed, flower, fruits and immature pod acts as cardiac and circulatory stimulant, posses antitumor, antipyretic, antiepileptic, anti inflammatory , antiulcer. [5]. Other important medicinal properties of the plant includes antispasmodic [6], diuretic [7], antihypertensive [8], cholesterol lowering [9], antioxidant, anti diabetic , hepatoprotective [10], antibacterial and antifungal activity [11].

MATERIAL AND METHOD:

The fresh leaves of *Feronialimonia, Bauhinia racemosa, Pongamiapinnata, Dalbergiasissoo, Terminaliaarjuna, Ailanthus excelsa, Morindatinctoria, Moringaoleifera, Cordiadichotoma*are 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 water, ethanol, chloroform, acetone and petroleum ether by Soxhlet apparatus.Phytochemicalanalysis were carried out for all the extract as per the standard methods [12].

RESULTS AND DISCUSSION:

Some common medicinal uses of different parts of *MoringaOleifera*are given in in Table-1.Phytochemical screening of leaves*Moringaoleifera*are shown in Table-2. It revealed the presence of carbohydrates, alkaloids, glycosides, phytosterols, saponins, phenolic compounds, tannins and proteins in aqueous and alcoholic extract.

TRADITIONAL USES OF *MORINGA OLEIFERA*

Table.1: Some common medicinal uses of different parts of *MoringaOleifera.*[13]

Plant part	Medicinal uses
Leaves	Purgative, applied as poultice to sores, rubbed on the temples for headaches, used for piles, fevers, sore throat, bronchitis, eye and ear infections, scurvy and catarrh, leaf juice is believed to control glucose level, applied to reduce glandular swelling.
Root	Antilithic, rubefacient, vesicant, carminative, antifertility, anti inflammatory, stimulant in paralytic afflictions; acts as cardiac, circulatory tonic, used as a laxative, abortifacient, treating rheumatism, inflammations, articular pain, lower back of kidney pain and

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Formation of transition metal complexes with Efavirenz drug in ethanol-water media

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Abstract:
The stability constant of Efavirenz drug with transition metal ions Co, Ni, Cu, Zn and Cd using potentiometric titration technique in 20%(v/v) ethanol-water mixture at 27 °C temperature and at an ionic strength of 0.1M $NaClO_4$.{Metal to ligand ratio=1:5 & 1:1}were investigated. The method of Calvin - Bjerrum as adopted by Irving - Rossotti has been used to determine proton ligand pKa and metal-ligand stability constant logK values.

Keywords: transition metal ions, Efavirenz drug, stability constant, potentiometric.

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. These metal complexes like cisplatin and auranofin are used as drugs on the treatment of genitourinary, head and neck tumours and rheumatoid arthritis respectively. Jannik Bjerrum developed the general method for determination and calculation of stability constants of metal amine complexes. Further studies were carried by Neil Bjerrum on kinetics and equilibrium study to explain stepwise formation constants. Martell et.al carried work on stability constant of metal complexes of inorganic, organic, biological ligands and significantly contributed towards coordination chemistry.

To understand the complex formation ability of the ligands and the activity of complexes, it is essential to have the knowledge about solution equilibria involved in the reactions. The extent to which the ligand binds to metal ions is normally expressed in terms of stability. Potentiometric titration is accepted as a powerfuland simple electro analytical technique for determination of stability constants. There are different kinds of ligand used for complexation. The drug Efavirenz, it is a non-nucleoside reverse transcriptase inhibitor (NNRTI) and is used as a part of highly active anti-retroviral therapy for the treatment of human immune deficiency 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. Efavirenz is never used alone, but always given in combination with other drugs. It is white to slightly pink crystalline powder and soluble in various organic solvents but practically insoluble in water. Chemically it is (4*S*)-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, but in some cases they can persist for months or not resolve at all.

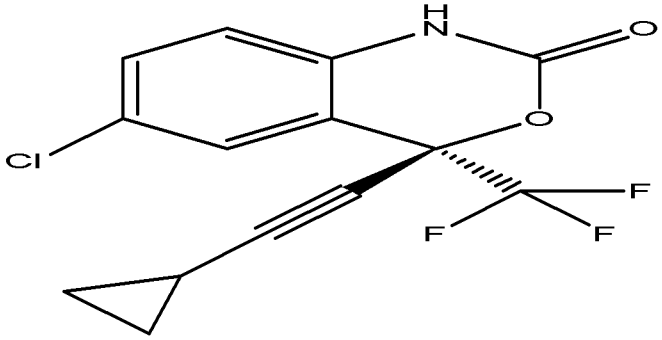

Figure 1: Efavirenz (molecular formula $C_{14}H_9ClF_3NO_2$)

In continuation of our earlier work with complexation of medicinal drugs[1-25] and after a review of literature survey and we have carried out a solution study on the complexation of Efavirenz drug with transition metal ions Co^{2+}, Ni^{2+}, Cu^{2+}, Zn^{2+} and Cd^{2+} potentiometrically in ethanol-water mixture at constant ionic strength of 0.1M $NaClO_4$.

Experimental Section: I. Materials and Solution: The drug Efavirenz is soluble in ethanol-water mixture. $HClO_4$, NaOH, $NaClO_4$ and all metal salts were of AR grade. The solutions used in the potentiometric 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 $HClO_4$. All the metal salt solutions were standardized using EDTA solution. The measurements were made at 27 °C in ethanol-water mixture at constant ionic strength of 0.1M $NaClO_4$.The thermostat model SL-131 was used to maintain the temperature constant. The potentiometric measurement were 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 4.00 ,7.00 and 9.18 using the standard buffer solutions .

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Mixed ligand complexes of Cadmium metal ion with amino acids and Topiramate in aqueous media

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Abstract:
In the present investigation we study the stability constant of the mixed ligand complexes of Cd(II) with anticonvulsant (antiepilepsy) drug Topiramate as a primary ligand and the amino acids viz. glycine, alanine, glutamic acid, isoleucine, methionine, valine, β-phenyl alanine, serine as secondary ligands were determined pH metrically in 20%(v/v) ethanol-water medium at 27 °C and at an ionic strength of 0.1 M NaClO4. The formation of complex species has been evaluated by SCOGS computer program and discussed in terms of various relative stability parameters.
Keywords:stability constant, Topiramate drug, amino acids, pH metry, mixed ligand complexes.

Introduction:

pH metric measurement is successfully used for the study of mixed ligand chelates in the solution. Recently it has been used for the study of complexes between metal and biologically active ligands. The formation of mixed ligand complexes is favorable in living tissues and fluid as the total concentration of ligand exceeds metal concentration and competes for the metal ion present. The stability of metal complexes with medicinal drugs plays a major role in the biological and chemical activity. Metal complexes are used in biological processes, pharmaceuticals, separation techniques, analytical processes etc. Topiramate (TPM) is an anticonvulsant (antiepilepsy) drug. It is a fructose derivative (2,3,4,5- bis –*O* - (1- methyl ethylidene) - D – fructopyranose sulfamate, structurally unrelated to existing anticonvulsants. It was most recently approved for weight loss by the FDA in combination with phentermine. Topiramate is used to treat epilepsy in children and adults. In children, it is indicated for the treatment of Lennox-Gastuat Syndrome, a disorder that causes seizures. TPM may have therapeutic effects in some neuropsychiatric conditions, such as bipolar and schizoaffective disorders, bulimia, neuropathic pain syndromes and cluster headache prophylaxis and essential tremor. Psychiatris have used topiramate to treat bipolar disorder. It is also widely used to treat migraines due to the effect it has on the blood vessels in the brain and clinical trials to treat post traumatic stress disorder.

In continuation of earlier work with complexation of medicinal drug[1-25] and after literature survey and we study ternary complexes of cadmium metal ion with medicinal drug Topiramate as primary ligand and a series of eight aminoacids viz. glycine, alanine, glutamic acid, isoleucine, methionine, valine, β-phenyl alanine, serine as secondary ligands in ethanol-water media.

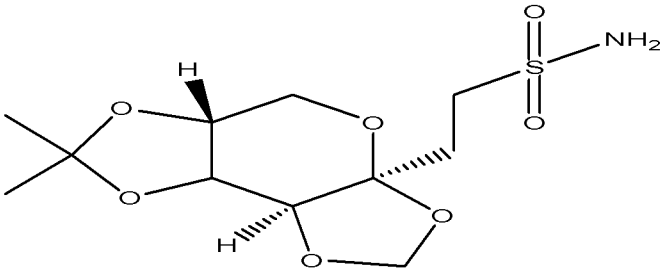

Figure 1: Topiramate (molecular formula $C_{12}H_{21}NO_8S$)

Experimental:Materials and Solution: The anticonvulsant / antiepilepsy drug Topiramate is soluble in ethanol-water mixture. NaOH, $NaClO_4$, $HClO_4$ & metal salts were 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 $HClO_4$. The metal salt solutions were standardized using EDTA titration. All the measurements were made at 27 °C in ethanol-water mixture at 0.1M $NaClO_4$ strength. Thermostat is used to maintain the temperature constant. The pH measurements were made using a digital pH meter model Elico L1-120 in conjunction with a glass and reference calomel electrode. The pH-meter was adjusted with buffer of pH 4.00, 7.00 and 9.18.

pH metric procedure: The protonation constant of the ligand & the formation constant of the complexes in ethanol-water mixture with different metal ions were calculated by using the following sets of solutions.

(i) $HClO_4$ (A)
(ii) $HClO_4$+ Topiramate drug (A+ L)
(iii) $HClO_4$+ Topiramate drug + Metal (A+ L+ M)
(iv) $HClO_4$+Amino acid (A+ R)
(v) $HClO_4$+Amino acid + Metal (A+ R+ M)
(vi) $HClO_4$+ Topiramate drug +Amino acid + Metal (A+L+R+ M)

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FT-IR Screening of Phytochemicals in Leaf Aqueous Extract of *Abrus precatorius* Linn. Plant

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ABSTRACT

The present screening is aimed to focus on the phytochemical analysis of leaf aqueous extract of *Abrus precatorius* Linn. by FT-IR Spectral analysis technique. The aqueous extract from 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, phosphoramide, phosphine, amine oxides, aromatic substituted compounds, nitroso, sulphate ester, disulfide, phosphonic acid and silane compounds, which showed major characteristic bands. 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: Phytochemical, *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 phytochemical 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 leaf of *Abrus precatorius* Linn. plant.

MATERIAL AND METHODS

Collection of Plant leafs

A leafs of *Abrus precatorius* Linn. were collected from the local area. The collected plant leafs were washed with distilled water to remove the dirt and other impurities. The plant leafs 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 leafs were milled to coarse powder and stored in air tight container for screening.

Extraction of leafs material

A 20g of powdered material of leafs were extracted with aqueous solvent by Soxhlet apparatus. The extracts were evaporated to dryness on a water bath and yielded quantities of leaf extracts in aqueous solvents were obtained and stored at 5^0C for further studies taken to screen the phytochemicals.

FT-IR screening of aqueous extract

FT-IR is the most powerful tool for identifying the types of functional groups present in 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 plant leafs extract was used for FT-IR screening [7].

RESULTS AND DISCUSSION

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

FT-IR spectral data interpretation of aqueous extract

The leafs aqueous extract exhibited characteristic absorption band at 3427.51 cm^{-1} related due to stretching vibrations of alcoholic O-H and phenolic ArO-H groups. The bands at 3375.43 cm^{-1}, 3304.06 cm^{-1}, 3192.19 cm^{-1} and 3178.69 cm^{-1} due to stretching vibration carboxylic acids RCO-OH, C=C-CO-OH dimer of OH, phenolic ArO-H bond, alkynes C-H. The bands at 3128.54 cm^{-1} and 3053.32 cm^{-1} would be related to alkenes =C-H and carboxylic acids RCO-OH, C=C-CO-OH dimer of OH and aromatic Ar-H stretching vibrations. The band 2920.23 cm^{-1} and 2852.72 cm^{-1} due to stretching vibration in alkanes C-H of $-CH_3$, alkanes $-CH_2-$ group and carboxylic acids RCO-OH, C=C-CO-OH dimer of OH; at 2673.34 cm^{-1} due to (O=)PO-H phosphonic acid. The band at 2316.51 cm^{-1} would be due to P-H of phosphine and Si-H of silane. The 1998.99 cm^{-1} band due to N=C in R-N=C=S stretching vibration. The bands

Adsorption Studies of Crystal Violet from Aqueous Solution Using Low Cost Material: Equilibrium and Kinetics Studies

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Abstract:

Crystal violet (CV), one of the toxic dyes which are extensively used for dyestuffs, textile, paper and plastics industries. CV does not easily biodegrades in aqueous medium and show harmful effect on aquatic as well as human life. In the present work adsorption studies of CV onto husk powder of Red gram crop (*Cajanuscajan*) seed was examined in aqueous solution at 27.8ºC. The effects of initial concentration, adsorbent dose, temperature, and contact time etc were determined. Highest 81.49% adsorption efficiency recorded was for 50 mg/L solution concentration onto 2.5g of husk powder of Red gram crop seed. The applicability of Langmuir and Freundlich isotherm model was investigated, and the Langmuir adsorption isotherm model exhibited the best fit than Freundlich isotherm model with the experimental data. The adsorption follows pseudo-second-order kinetics.

Keywords: Crystal Violet; Red gram crop seed husk; Isotherm; Thermodynamics; Kinetics.

Introduction:

In recent years, environmental contamination by synthetic dyes is a serious problem due to rising existence of dyes in the aqueous bodies and their negative eco-toxicological effects and bioaccumulation in wildlife[1].Usually the industrial wastewater contains important group of chemicals and toxic substances which are harmful to fish and other aquatic life. Synthetic dyes are extensively used in paper, textile, food, leather, paint, acrylic, cosmetics, plastics, and pharmaceutical industries. About 40,000–50,000 tons of dyes are continuously entering the water systems due to improper processing and dying methods from industries [2]. It has been investigated that the decolourisation of dyes is an important aspect of wastewater treatment before discharge. The color removal was extensively studied with various techniques such as coagulation, chemical precipitation, membrane filtration, solvent extraction, reverse osmosis, photo catalytic degradation, cation exchange membranes,

Electro-chemical degradation, integrated chemical–biological degradation, solar photo-Fenton and biological processes, and adsorption have been checked and evaluated for the treatment of dye bearing effluents. Out of these several techniques employed for dye removal, the most experimental technique was found to be the use of adsorption to adsorb the dye from waste water [3]. Several agricultural by-products have been used as adsorbents for the removal of different organic compounds. The major advantage of adsorption techniques for water pollution control is low investment for terms of cost, simple design, easy and cheap operation.Many low cost adsorbents (agricultural, domestic or plant biomass waste) have been used for removal of CV dye such from waste water BaelBark [4], rice husk [5], jackfruit leaf powder [6], ginger waste [7], black gram seed husk [8] etc. In the present work a waste material like husk powder of red gram crop seed was appliedas an adsorbent for the removal of Crystal Violet (CV) dye, from aqueous solutions. The main cause of the research is to investigate the adsorption efficiency of red gram crop seed husk powder (RGSH) for Crystal Violet (CV). Red gram crop seed husk is a low cost adsorbent, easily available and biodegradable. The effects of initial solution, effect of

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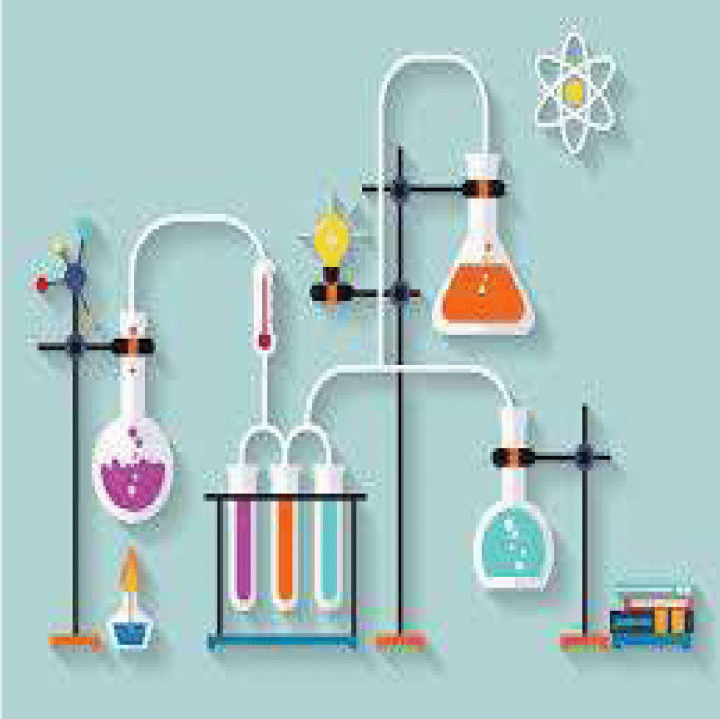

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Ph Metric Investigation of Mixed Ligand Complexes of Zinc Metal Ion With Ceftriaxone Drug and Amino Acids in Aqueous Medium

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Abstract:

*In the present investigation we study the stability constant of the mixed ligand complexes of zinc(II) with antibacterial drug Ceftriaxone as primary ligand and eight aminoacids viz. glycine, alanine, glutamic acid, isoleucine, methionine, β-phenyl alanine serine and valine as secondary ligands were determined pH metrically in 20% (v/v) ethanol-water medium at 25 °C and at an ionic strength of 0.1 M NaClO4. The formation of complex species has been evaluated by SCOGS computer program and disc*ussed in terms of various relative stability parameters.

Keywords: stability constant,Ceftriaxone drug, amino acids, pH metry, mixed ligand complexes.

Introduction:

According to world health organization (WHO) drug is a substance or that is used to modify or explore physiological systems or states for benefits of the recipient. Now a day the medicinal drug is supposed to be "an elixir of human life" though it has so many side effects. Drugs have various functional groups present in its structure, which can bind to metal ions present in human body. Metal complexes of drugs are found to be more potent than parent drugs. The metal complexes involving antibacterial drugs / biologically active compounds are receiving more attention because of their vital role in analytical chemistry, coordination chemistry, catalysis, metalloproteins and metalloenzymes. In the mixed ligand system, the molecules of different ligands are bound to same metal ion and the complex formed is known as mixed ligand complex. The presence of metal ions in biological fluids could have a significant effect on the therapeutic action of drugs. Ternary complexes play an important role in biological processes. Ternary complexes have also been implicated in the storage and transport of active substances through biological membranes. Metal complexes play a significant role in naturally occurring biological systems or as pharmacological agents, such as antitumor, anticandida, antimycobacterial, antimicrobial activity etc. In a number of biochemical processes metal ion is involved in mixed ligand complex formation and ligand catalyzed complex formation reactions.

After literature survey and In continuation of earlier work with complexation of medicinal drug[1-25], we study ternary complexes of zinc metal ion with antibacterial drug Ceftriaxone (CFT) as primary ligand and a series of eight aminoacids viz. glycine, alanine, glutamic acid, isoleucine, methionine, β-phenyl alanine, serine and valine as secondary ligands in ethanol-water media.

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Estimation of Metal and Phytochemical Analysis of Aqueous Extract of Selected Medicinal Plants

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Abstract:

The present investigation deals with the phytochemical studies and estimation of metal of leaves of different medicinal plants like Feronia limonia, Bauhinia racemosa, Pongamia pinnata, Dalbergia sissoo, Terminalia arjuna, Ailanthus excelsa, Morinda tinctoria, Moringa oleifera, Cordia dichotoma are collected from Mahadeodara, District Beed. Aqueous extracts of leaf powders have been screened for qualitative determination of different secondary metabolites like carbohydrates, alkaloids, flavonoids, tannins, phenol, glycosides, phytosterols, saponin, protein and amino acid tests. Essential heavy metals such as Fe, Cu, Ni and Cr were estimated by using inductive coupling plasma spectroscopy. Plants showed different metal concentration in the range of 721.5 - 14448.4 ppm for Fe, 26.5-300 ppm for Cu, 6.7-638.9 ppm for Ni, 0.6-10 ppm for Co. High contents of Fe and Cu were found in all nine plants. Other heavy metals were present in low quantity. The purpose of this study was determination of different secondary metabolites and to identify each type of metal associated with a given plants and also to highlight the heavy metals present in these plants.

Keywords- Medicinal plants, secondary metabolite, metal estimation.

Introduction:

Medicinal plants are of great importance to the health of individuals and communities. Medicinal plants contain some organic compounds which provide definite physiological action on the human body and these bioactive substances include tannins, alkaloids, carbohydrates, terpenoids, steroids and flavonoids [1,2]. A large number of phytochemicals belonging to several chemical classes have been shown to have inhibitory effects on all types of microorganisms in vitro [3]. Plant products have been part of phytomedicines since time immemorial. This can be derived from barks, leaves, flowers, roots, fruits, seeds [4]. Knowledge of the chemical constituents of plants is desirable because such information will be value for synthesis of complex chemical substances [5-7].

Phytochemical are very important in medicine and constitute most of the valuable drugs. Alkaloids are rich in medicine and constitute most of the valuable drugs. They have physiological effect on animals [8]. Malnutrition is major concern for many tropical developing countries. Deficiency or excess of elements may cause a number of disorders. For example, Iron deficiency anemia affects one third of the world population. Low levels of Zn can induce the pathogenesis of lung cancer . Breast cancer patients had low levels of Ca, Mg, Fe, Cu, Mn and Zn in their hair. Therefore, it is of major interest to establish the levels of some metallic elements in common used plants because, at elevated levels, these metals could be dangerous and toxic [9].

Determination of metals in medicinal plants is a part of quality control to establish their purity, safety and efficacy according to the World Health Organization (WHO) [10]. Most of the

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Black Gram Seed Husk Waste As A Novel Low-Cost Bio-Adsorbent

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Abstract:

Adsorption techniques are being widely used by various researchers for the removal of hazardous heavy metals from waste streams. The adsorption behaviour of low-cost adsorbent such as black gram seed husk (BGSH) with respect to hazardous heavy metals has been studied in order to consider its application to the removal of metals. The batch method was employed: parameters such as effect of contact time, effect of metal ion concentration, effect of adsorbent dose, effect of pH and effect of zero point pH were studied. The effect of the pH of the metal ion solution on the uptake levels of the metal ions by the adsorbents used was carried out between pH 2.0 to 11.00. The optimum pH for copper removal was 7.0 in the case of BGSH. Adsorption parameters were determined using both Langmuir and Freundlich isotherms, but the experimental data were better fitted to the Freundlich isotherm model than Langmuir adsorption isotherm. The adsorption data of metal was well fitted by the pseudo-second-order kinetic model. The results showed that black gram seed husk can be fruitfully used for the removal of heavy metals.

Key words: Black gram seed husk, Heavy metals, Cu(II), Adsorbent; Adsorption Low-cost materials.

Introduction:

Water is a basic source of life, energy and thus is essential element to all living things on earth. The purest form of water is tasteless, odourless, and colourless in nature. Safe drinking water is necessary for every living organism on earth. It is known that from among the total amount of water, only 2.5% is fresh water and 98.8% of that water is either groundwater or is in the form of ice, of this small amount of freshwater, < 0.3% is in lakes, rivers, and atmosphere and provides the useable sources. Water plays a important role in the world economy. It is widely used in agriculture and in industry as a solvent and helps for transportation and cooling.Many industries, especially plating and those manufacturing batteries, pigments and ammunition, release heavy metals such as lead (Pb), cadmium (Cd), and copper (Cu) into wastewaters. Pb and Cd are potent neurotoxic metals. The permissible limits for Pb and Cd in drinking water are 0.05 and 0.01 mg l−1, respectively, in most countries [1]. For Cu, which is generally considered non-toxic, the recommended upper limit for discharge is approximately 2 mg l−1. These metals are non-degradable in the environment and if not be processed, they could be harmful to a variety of living species. Therefore, the removal of these metals from industrial wastewaters is important in order to protect public health and environment.A number of methods are available for the removal of pollutants from aqueous solution. These methods include chemical precipitation, ion exchange, membrane separation process, biological degradation, chemical oxidation, solvent extraction, and adsorption [2-3]. Among all these methods,

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Adsorption of Cr (VI) using Low-Cost Adsorbent as a Black Gram Seed Husk (*Vignamungo*) Powder

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Abstract:

The adsorption of Cr(VI) by Black Gram Seed Husk (Vignamungo) Powder
adsorption is investigated in present study. Batch adsorption studies demonstrate that the Black Gram Seed Husk (BGSH) has a significant capacity for adsorption of Cr(VI) from aqueous solution. The parameters are investigated in this study included contact time, adsorbent dosage, initial Cr(VI) concentration, temperature and pH.Adsorption of Cr (VI) metal ion decreased with increasing temperature, with maximum adsorption of Cr (VI) metal ion (94.83%) at 306.5 K. Adsorption parameters were determined using both Langmuir and Freundlich isotherms, the experimental data were better fitted to the Freundlichisotherm as well as Langmuir adsorption isotherm.The maximum adsorption of Cr(VI) was found to be at low pH 6.The adsorption data of metal was well fitted by the pseudo-second-order kinetic model. The results showed that black gram seed husk can be fruitfully used for the adsorption of Cr (VI) metal ions.
Keywords: Adsorption; Adsorption capacity; Cr(VI); Black Gram Seed Husk; Langmuir isotherm.

Introduction:

Water is essential for survival. But today about 200 million people in India do not have access to pure drinking water due to water pollution. The effluents from mining, metal polishing, cleaning, paint manufacturing ore processing, and battery manufacturing industries and acid rain contribute for the increasing metal loads in thewater bodies. Chromium is found in rocks, animals, plants, soils, and in volcanic dusts and gases. Different industrial processes such as steel production, anodizing of aluminum,textile industries, electroplating, and chromate preparation discharge chromium-containing wastes into the environment, which contaminates soil and water. Cr (III) is an essential element in humans and is much less hazardous than Cr(VI) which is recognized as a carcinogenic and mutagenic agent. Nowadays pollution due to hazardous heavy metal contaminants from aqueous solutions is one of the most important environmental concerns due to their high toxicity and impact on human health. Cr (VI) is known to be one of the heavy metal and is widely used in many industries including leather tanning, dye, cement,electroplating, and photography industries. The effluents from these industries usually contain remarkable amount of chromium, which ultimately spreads into the environment through soils and water streams and finally accumulates along the food chain which causes human health hazards. As per the World Health Organization standard, the maximum contaminant level goal of chromium for the safe drinking water is 0.05 mg/L, but usually effluent discharged from the industries contained levels above this [1]. Ingestion of chromium may causeepigastric pain, nausea, vomitingand severe diarrhoea. Due to carcinogenic and teratogenicasset of Cr (VI), it has become a serious healthconcern.Chromium metal ions are usually removed by precipitation although ion exchange and adsorption are also used forits removal. The hydroxides of heavy metals are usually insoluble, so lime is commonlyused for precipitating them. There are various methods to remove Cr (VI) including chemical precipitation, membrane process, ion exchange, liquid extraction and electro dialysis [2]. These methods are non-economical and have many disadvantages such as incomplete metal removal, high reagent and energy requirements, generation of toxic sludge or other waste products that require disposal or treatment. In contrast, the adsorption technique is one of the preferred methods for removal of heavy metals because of its efficiency and low cost [3]. Utilizing the waste material from industriesand agriculturecan make treatment process economical and solve the solid waste disposal problem. The present study was aimed at selection of a low cost adsorbent, which can adsorb chromium from the wastewater. The researchers were oriented towards no expensive adsorbents which are the vegetable wastes such as: husk of gram seeds [4],Grape fruit peel [5], rice husk [6], jackfruit leaf powder [7], black gram seed husk [8], ginger waste [9], etc. have been found to be highly effective, cheap & biologically safe adsorbents. Keeping this in view we tried to know the adsorption capacity of black gram seed husk for the adsorption of Cr (IV) metal ions.

The present study aimed to investigate the efficiency of black gram seed husk as adsorbents for the adsorption of Cr (VI) from aqueous solutions. Experiments were conducted to investigate the effect of contact time, effect of initial concentration, effect of adsorbent dose, effect of temperature, effect of pH etc. on adsorption efficiency of Cr (VI) by black gram seed husk. Adsorption equilibrium and pseudo-first-order as well as pseudo-second-order kinetics had been studied under the optimum adsorption conditions. The Langmuir and Freundlich adsorption isotherms models were applied to evaluate the adsorption properties in the batch technique. In addition, the pseudo-first and pseudo-second order kinetic model were also applied to examine the kinetics of the adsorption process.

Black gram (*Vignamungo)* is an erect densely hairy, annual herb. It is extensively cultivated all over the India. Green pods of Udid are occasionally used as a vegetable. The black ripe pulse is split into dal and is most fattening food. Pure black gram cake baked on steam (idli) with ghee is a night diet for diabetics. It has been used for various medicinal

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Traditional Uses Phytochemical Characterization Of *Moringaoleifera*

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ABSTRACT :-

Moringaoleifera(Moringaceae) is high valued plant distributed in many countries of tropic and subtropics. It has an impressive range of medicinal uses with high nutritional value. *Moringaoleifera*is very important for its medicinal value. Various part of this plant such as leaves, roots, seeds, bark, fruit, flower & immature pods acts as cardiac and circulatory stimulants, possess antipyretic, antiepileptic, anti-inflammatory, antiulcer, anti diuretic, antihypertensive, cholesterol lowering, antioxidant, anti diabetics, hepatoprotective , antibacterial, and antifungal activity and are being employed for the treatment of different aliments in the indigenous system of medicine, particularly in south Asia. The purpose of this study was determination of different secondary metabolites such as carbohydrate, alkaloid, phenol,glycosides, flavanoids, tannin, saponin, protein and amino acid.

Key words:-*Moringaoleifera*leaves, Phytochemical and Traditional use.

INTRODUCTION :-

About the 80% population of the developing world is still dependent upon the traditional medicine [1]. *MoringaOleifera* is a small, fast growing evergreen or deciduous tree that usually grows upto 10 to 12 m. in height, open crown of dropping fragile branches, feathery toliage of tripinnate leaves andthicky corky, whitish bark. *MoringaOleifera* is used as a highly nutritive vegetable in many countries. Its young leaves, flowers, seeds & tender pods are commonly consumed and they are having same medicinal properties. Traditionally its roots are applied as plaster to reduce the swelling & rheumatism. The root, flower, fruit & leaf have analgesic & anti-inflammatory activity. *Moringa* leaves contain phytochemical having potent anticancer and hypotensive activity and are considered full of medicinal properties and used in siddha medicine [2]. The whole plant of *MoringaOleifera* is used in the treatment of psychosis, eye diseases, fever & as an aphrodisiac, aqueous extract of root & bark were found to be effective in preventing implantation , aqueous extract of fruit have shown significant anti inflammatory activity, methanolic extract of leaves have antiulcer activity and ethanolic extract of seed exhibited antitumor activity [3].*MoringaOleifera* is used as drug in many ayurvedic practitioners for the treatment of asthama and evaluate the anthelmentic activity of methanolic extract of *MoringaOleifera* in adult Indian earthworms pheretimaposithuma at different doses [4].The *Moringa*plant provides a rich and rare combination of zeatin, quarcetin, kaemferon and many other phytochemicals. Various parts of the plant such as leaves, root, seed, flower, fruits and immature pod acts as cardiac and circulatory stimulant, posses antitumor, antipyretic, antiepileptic, anti inflammatory , antiulcer. [5]. Other important medicinal properties of the plant includes antispasmodic [6], diuretic [7], antihypertensive [8], cholesterol lowering [9], antioxidant, anti diabetic , hepatoprotective [10], antibacterial and antifungal activity [11].

MATERIAL AND METHOD:

The fresh leaves of *Feronialimonia, Bauhinia racemosa, Pongamiapinnata, Dalbergiasissoo, Terminaliaarjuna, Ailanthus excelsa, Morindatinctoria, Moringaoleifera, Cordiadichotoma*are 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 water, ethanol, chloroform, acetone and petroleum ether by Soxhlet apparatus.Phytochemicalanalysis were carried out for all the extract as per the standard methods [12].

RESULTS AND DISCUSSION:

Some common medicinal uses of different parts of *MoringaOleifera*are given in in Table-1.Phytochemical screening of leaves*Moringaoleifera*are shown in Table-2. It revealed the presence of carbohydrates, alkaloids, glycosides, phytosterols, saponins, phenolic compounds, tannins and proteins in aqueous and alcoholic extract.

TRADITIONAL USES OF *MORINGA OLEIFERA*

Table.1: Some common medicinal uses of different parts of *MoringaOleifera.*[13]

Plant part	Medicinal uses
Leaves	Purgative, applied as poultice to sores, rubbed on the temples for headaches, used for piles, fevers, sore throat, bronchitis, eye and ear infections, scurvy and catarrh, leaf juice is believed to control glucose level, applied to reduce glandular swelling.
Root	Antilithic, rubefacient, vesicant, carminative, antifertility, anti inflammatory, stimulant in paralytic afflictions; acts as cardiac, circulatory tonic, used as a laxative, abortifacient, treating rheumatism, inflammations, articular pain, lower back of kidney pain and

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Formation of transition metal complexes with Efavirenz drug in ethanol-water media

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Abstract:
The stability constant of Efavirenz drug with transition metal ions Co, Ni, Cu, Zn and Cd using potentiometric titration technique in 20%(v/v) ethanol-water mixture at 27 °C temperature and at an ionic strength of 0.1M $NaClO_4$.{Metal to ligand ratio=1:5 & 1:1}were investigated. The method of Calvin - Bjerrum as adopted by Irving - Rossotti has been used to determine proton ligand pKa and metal-ligand stability constant logK values.

Keywords: transition metal ions, Efavirenz drug, stability constant, potentiometric.

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. These metal complexes like cisplatin and auranofin are used as drugs on the treatment of genitourinary, head and neck tumours and rheumatoid arthritis respectively. Jannik Bjerrum developed the general method for determination and calculation of stability constants of metal amine complexes. Further studies were carried by Neil Bjerrum on kinetics and equilibrium study to explain stepwise formation constants. Martell et.al carried work on stability constant of metal complexes of inorganic, organic, biological ligands and significantly contributed towards coordination chemistry.

To understand the complex formation ability of the ligands and the activity of complexes, it is essential to have the knowledge about solution equilibria involved in the reactions. The extent to which the ligand binds to metal ions is normally expressed in terms of stability. Potentiometric titration is accepted as a powerfuland simple electro analytical technique for determination of stability constants. There are different kinds of ligand used for complexation. The drug Efavirenz, it is a non-nucleoside reverse transcriptase inhibitor (NNRTI) and is used as a part of highly active anti-retroviral therapy for the treatment of human immune deficiency 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. Efavirenz is never used alone, but always given in combination with other drugs. It is white to slightly pink crystalline powder and soluble in various organic solvents but practically insoluble in water. Chemically it is (4*S*)-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, but in some cases they can persist for months or not resolve at all.

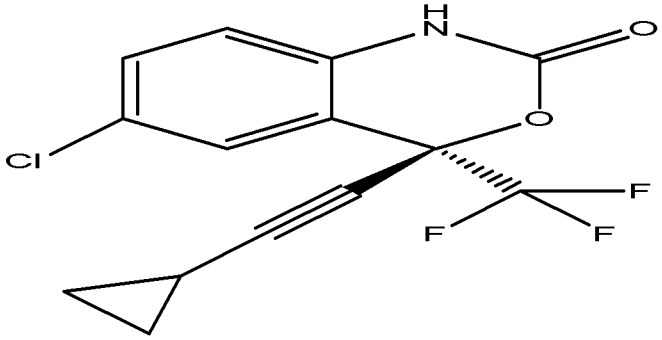

Figure 1: Efavirenz (molecular formula $C_{14}H_9ClF_3NO_2$)

In continuation of our earlier work with complexation of medicinal drugs[1-25] and after a review of literature survey and we have carried out a solution study on the complexation of Efavirenz drug with transition metal ions Co^{2+}, Ni^{2+}, Cu^{2+}, Zn^{2+} and Cd^{2+} potentiometrically in ethanol-water mixture at constant ionic strength of 0.1M $NaClO_4$.

Experimental Section: I. Materials and Solution: The drug Efavirenz is soluble in ethanol-water mixture. $HClO_4$, NaOH, $NaClO_4$ and all metal salts were of AR grade. The solutions used in the potentiometric 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 $HClO_4$. All the metal salt solutions were standardized using EDTA solution. The measurements were made at 27 °C in ethanol-water mixture at constant ionic strength of 0.1M $NaClO_4$.The thermostat model SL-131 was used to maintain the temperature constant. The potentiometric measurement were 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 4.00 ,7.00 and 9.18 using the standard buffer solutions .

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Mixed ligand complexes of Cadmium metal ion with amino acids and Topiramate in aqueous media

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Abstract:
In the present investigation we study the stability constant of the mixed ligand complexes of Cd(II) with anticonvulsant (antiepilepsy) drug Topiramate as a primary ligand and the amino acids viz. glycine, alanine, glutamic acid, isoleucine, methionine, valine, β-phenyl alanine, serine as secondary ligands were determined pH metrically in 20%(v/v) ethanol-water medium at 27 °C and at an ionic strength of 0.1 M NaClO4. The formation of complex species has been evaluated by SCOGS computer program and discussed in terms of various relative stability parameters.
Keywords:stability constant, Topiramate drug, amino acids, pH metry, mixed ligand complexes.

Introduction:

pH metric measurement is successfully used for the study of mixed ligand chelates in the solution. Recently it has been used for the study of complexes between metal and biologically active ligands. The formation of mixed ligand complexes is favorable in living tissues and fluid as the total concentration of ligand exceeds metal concentration and competes for the metal ion present. The stability of metal complexes with medicinal drugs plays a major role in the biological and chemical activity. Metal complexes are used in biological processes, pharmaceuticals, separation techniques, analytical processes etc. Topiramate (TPM) is an anticonvulsant (antiepilepsy) drug. It is a fructose derivative (2,3,4,5- bis –*O* - (1- methyl ethylidene) - D – fructopyranose sulfamate, structurally unrelated to existing anticonvulsants. It was most recently approved for weight loss by the FDA in combination with phentermine. Topiramate is used to treat epilepsy in children and adults. In children, it is indicated for the treatment of Lennox-Gastuat Syndrome, a disorder that causes seizures. TPM may have therapeutic effects in some neuropsychiatric conditions, such as bipolar and schizoaffective disorders, bulimia, neuropathic pain syndromes and cluster headache prophylaxis and essential tremor. Psychiatris have used topiramate to treat bipolar disorder. It is also widely used to treat migraines due to the effect it has on the blood vessels in the brain and clinical trials to treat post traumatic stress disorder.

In continuation of earlier work with complexation of medicinal drug[1-25] and after literature survey and we study ternary complexes of cadmium metal ion with medicinal drug Topiramate as primary ligand and a series of eight aminoacids viz. glycine, alanine, glutamic acid, isoleucine, methionine, valine, β-phenyl alanine, serine as secondary ligands in ethanol-water media.

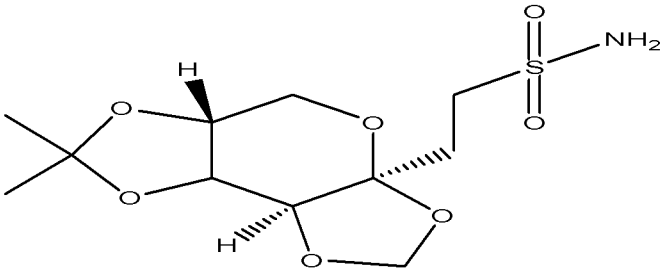

Figure 1: Topiramate (molecular formula $C_{12}H_{21}NO_8S$)

Experimental:Materials and Solution: The anticonvulsant / antiepilepsy drug Topiramate is soluble in ethanol-water mixture. NaOH, $NaClO_4$, $HClO_4$ & metal salts were 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 $HClO_4$. The metal salt solutions were standardized using EDTA titration. All the measurements were made at 27 °C in ethanol-water mixture at 0.1M $NaClO_4$ strength. Thermostat is used to maintain the temperature constant. The pH measurements were made using a digital pH meter model Elico L1-120 in conjunction with a glass and reference calomel electrode. The pH-meter was adjusted with buffer of pH 4.00, 7.00 and 9.18.

pH metric procedure: The protonation constant of the ligand & the formation constant of the complexes in ethanol-water mixture with different metal ions were calculated by using the following sets of solutions.

(i) $HClO_4$ (A)
(ii) $HClO_4$+ Topiramate drug (A+ L)
(iii) $HClO_4$+ Topiramate drug + Metal (A+ L+ M)
(iv) $HClO_4$+Amino acid (A+ R)
(v) $HClO_4$+Amino acid + Metal (A+ R+ M)
(vi) $HClO_4$+ Topiramate drug +Amino acid + Metal (A+L+R+ M)

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FT-IR Screening of Phytochemicals in Leaf Aqueous Extract of *Abrus precatorius* Linn. Plant

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ABSTRACT

The present screening is aimed to focus on the phytochemical analysis of leaf aqueous extract of *Abrus precatorius* Linn. by FT-IR Spectral analysis technique. The aqueous extract from 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, phosphoramide, phosphine, amine oxides, aromatic substituted compounds, nitroso, sulphate ester, disulfide, phosphonic acid and silane compounds, which showed major characteristic bands. 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: Phytochemical, *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 phytochemical 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 leaf of *Abrus precatorius* Linn. plant.

MATERIAL AND METHODS

Collection of Plant leafs

A leafs of *Abrus precatorius* Linn. were collected from the local area. The collected plant leafs were washed with distilled water to remove the dirt and other impurities. The plant leafs 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 leafs were milled to coarse powder and stored in air tight container for screening.

Extraction of leafs material

A 20g of powdered material of leafs were extracted with aqueous solvent by Soxhlet apparatus. The extracts were evaporated to dryness on a water bath and yielded quantities of leaf extracts in aqueous solvents were obtained and stored at 5^0C for further studies taken to screen the phytochemicals.

FT-IR screening of aqueous extract

FT-IR is the most powerful tool for identifying the types of functional groups present in 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 plant leafs extract was used for FT-IR screening [7].

RESULTS AND DISCUSSION

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

FT-IR spectral data interpretation of aqueous extract

The leafs aqueous extract exhibited characteristic absorption band at 3427.51 cm^{-1} related due to stretching vibrations of alcoholic O-H and phenolic ArO-H groups. The bands at 3375.43 cm^{-1}, 3304.06 cm^{-1}, 3192.19 cm^{-1} and 3178.69 cm^{-1} due to stretching vibration carboxylic acids RCO-OH, C=C-CO-OH dimer of OH, phenolic ArO-H bond, alkynes C-H. The bands at 3128.54 cm^{-1} and 3053.32 cm^{-1} would be related to alkenes =C-H and carboxylic acids RCO-OH, C=C-CO-OH dimer of OH and aromatic Ar-H stretching vibrations. The band 2920.23 cm^{-1} and 2852.72 cm^{-1} due to stretching vibration in alkanes C-H of $-CH_3$, alkanes $-CH_2-$ group and carboxylic acids RCO-OH, C=C-CO-OH dimer of OH; at 2673.34 cm^{-1} due to (O=)PO-H phosphonic acid. The band at 2316.51 cm^{-1} would be due to P-H of phosphine and Si-H of silane. The 1998.99 cm^{-1} band due to N=C in R-N=C=S stretching vibration. The bands

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Working Women and Their Issue

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Abstract:

The apportunitiesabout women is the most important in discussion about working women issue.She has some inborn abilitiesand desire are expressed as naturallyas a chieldshows it through its actions and movements. So it is obvious that if she learns something she strongly feels to express it in other way. Today there is a scope for womens individual talent. Service sector are creating comfortable atmosphere for women and they are actively participating in the work. The right focus can always leads to positive solution. So the focus about working women should be on their ability as well as their needs.

Keywords - Empowerment of women, Working women, Balancing work-family life

Introduction

It is seen that, men do not have much contribution in the household chores.Women who have to cook, clean the house, do the dishes, wash clothes, get their children ready for school etc. Men just took care of few chores that are to be dealt outside the house. So the major burden of running the family is on the shoulders of women. It was alright for women to handle all the chores as long as they were homemakers. Now with their increasing need for getting some income for the family, they have to work all the more harder. They have to take up a 9 to 5 job plus handle all the household chores that they handled as a homemaker. Men's role has not changed much.The status of Indian women has undergone considerable change. Though Indian women are far more independent and aware of their legal rights, such as right to work, equal treatment, property and maintenance, a majority of women remain unaware of these rights. There are other factors that affect their quality of life such as age of marriage, extent of literacy, role in the family and so on. In many families, women do not have a voice in anything while in several families; the women may have a dominating role. The result is that the empowerment of women in India is highly unbalanced and with huge gaps. Those who are economically independent and literate live the kind of life that other women tend to envy about. This disparity is also a cause for worry because balanced development is not taking place.

Acceptance As Working Professionals:

Men are yet to come to terms with the fact that women are also capable of working with them, shoulder to shoulder, in any field or professional sphere. They still visualize women as individuals who should be in charge of the kitchen and other domestic affairs.Work is either seen as a temporary evil for women whose husbands do not earn enough, or the domain of women who do not "know their place." As a result, Indian working women do not get the respect they require from their male colleagues in the workplace.

Balancing Work-Family Life:

No matter how high their position or designation is in the office, women in India are still viewed as the family manager back home. They are expected to return home at a certain time, cook, clean and take care of family affairs.In fact, men who help out around their house are often the butt of jokes by their male friends. This makes life extremely stressful for women who have little help around the house and have to do it all.

Travelling For Work Is Not Acceptable:

One of the problems faced by married working women is that they cannot travel or go on tours without having to answer uncomfortable questions by most of their friends and family. This is especially

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Nanomaterial's Application in Communication Sectors and in Sustainable Environment

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Abstracts

There was an earlier saying that history cannot be changed. But the technology especially nanotechnology makes the revolutions in the history. In communication sector always the major factor was the medium. The change was so rapid. It is really thought provoking that how nanotechnology brings out revolutions in telecommunication as well as computing and networking industries. Increase in population causes rising demands for food, water, energy, education, healthcare, and employment. Nanotechnology reduces the impact of human activities on Earths global environment. The Nano products are rapidly increasing as more and more. The Nano engineered materials are reaching the global market. The continuous revolution in nanotechnology will result in the fabrication of nanomaterial which will enhance the living standard of citizens.

Keywords:- *Nanotechnology, Nano devices, Electronic communication, Communication in bacteria, Quantum Information Processing, drug delivery*

Introduction:-

The Nano science and nanotechnology involve the ability to see and to control individual atoms and molecules. Researchers are finding a large variety of ways to make materials at the Nano scale to take advantage of their enhanced properties such as higher strength, lighter weight, and greater reactivity than their larger counterpart. Nanotechnology is the act of preparation of materials at very tiny scales – at the level of atoms and molecules [1]. When materials are less than 100 nanometers, the normal rules of physics and chemistry will not apply and many materials start to show unique or surprising properties. They become very stronger or very reactive. For Ex. Solid like gold turn into liquid at room temperature liquid gold act as a catalyst, liquid silver has antimicrobial property or stable materials like aluminum becomes combustible. Like energy adequacy or climate change nanotechnology also helps in solving serious humanity problems such as fatal diseases –ex; in brain tumors and Alzheimer's disease. Nanotechnology is used extensively to provide targeted drugs therapy, diagnostics, tissue regeneration, cell culture, biosensors, and other tools in the field of molecular biology [2].

The Electronic communication can be defined as a communication by means of guided or unguided electromagnetic energy, or it is the all forms of communication via electronic means such as internet, satellite, cable, television, computers, networks, etc. A coherent technology will be required to continue the performance improvements in communication and informatics. The Nanotechnology interphases with biological, physical and chemical sciences can bring much faster and powerful information handling equipment [3]. The sudden leap to the nano regime will result in single-molecule and single-electron based transistors. And special devices can be made out of these kinds of

transistors. The developments in nanotechnology through which the impossible can be made possible with help of nanomaterial's with novel optical, electrical, and magnetic properties, compact as well as fast non-silicon based chipsets for processors, quantum computing and DNA computing, development of telecom switches which are fast and reliable, micro-electro-mechanical systems and above all the development [4].

Informatics mainly has a processor which translates one programme to another which can be accessed and used. Hence it is the backbone of the communication sector. Each processor will contain definite number of transistors with specific functions associated with it. The first microprocessor only had 22 hundred transistors. Now we are looking for the processors with a billion transistors so that the flexibility of designing devices will be enormous. The present communication systems are based fully on the silicon technology. The number of transistors on a chip doubles about every two years. Recently Intel has introduced 65 nm generation logic technology which helps in improving performance and reducing power. They introduced sleep transistors which conserve power by allowing transistors to sleep when not in use, similar to the human brain. Intel strained silicon enables faster transistors by physically stretching the lattice structure of silicon atoms, allowing electrons to flow faster with less resistance [5]. As can be seen, the silicon technology is entering into a near molecular regime as the current size has gone down to 25 nm. This scenario can even slowdown or even curtail the progress of silicon microelectronics where not only the manufacturing technology but also the fundamental science changes [6].

Medical and Healthcare studies:-

In diagnosis and treatment nanotechnology plays a major role. The effective health care is a challenge for millions of peoples living in remote areas. Highly sensitive, portable point-of-care test kits are of great use for diagnostic functions of a medical laboratory. Depending upon how they are designed and manual application, the hand held kits is used to test for viruses, bacteria or hormones [7]. Thus the hand held kits is used for testing infectious diseases such as malaria, cholera, HIV/AIDS and also other sexually transmitted diseases. Thus being low cost available in remote areas and government hospitals. Nanotechnology based inventions can be designed to detect the hazardous pollutants present in air. Also remediation of these toxic materials and leaks reduce fossil fuel emissions and separate gases. Nanotechnology in biomedical imaging will readily improve medical imaging techniques. Nanoparticles of gold, silver are very reactive and have optical properties which make them effective in medical field [8]. When this biomedical imaging is used in conjugation with magnetic resonance imaging can produce better image of tumor sites. Specific size of nanoparticles is used in drug delivery system. In this technique the active agents are injected on the affected area lowering side effects. This is highly selective and also cost effective technique.

Nanostructures can be used to recognize diseased cells and to inject drugs to the diseased cells or affected area to combat cancerous tumors without harming healthy cells .In obesity Nano particles can target and inhibit the growth of fat cells or deposits. Nanotechnology drugs delivery system possess multiple desirable attributes. Nanotechnology has a size such that it can be injected without occluding needles and capillaries which enables targeted drugs delivery causing affected area. Pancreatic cancer has a low survival rate (less than 5%), because this cancer is diagnosed in final stage. Scientists have manufactured tools for early diagnosis of pancreatic cancer by attaching a affected cancer cell to iron oxide Nano particles that are clearly visible under magnetic

resonance imaging (MRI). Nanotechnology in Dental Care millions of people suffer through dental problems. Nano robotics will ensure better dental health. Tooth repairing can be done by Nano dental techniques. Lost tooth can be repaired by using nanotechnology [9].

Energy and Environment Approach:-

Nanotechnology plays a crucial role in protecting the environment and producing energy for growing world. Modern technologies of Nano science helps in storage of energy, its conversion in other forms, ecofriendly manufacturing of materials, production of energy by renewable energy sources also known as Green energy. Nanotechnology increases the efficiency of fuel production from crude oil through better catalysis [10]. It also increases efficiency by reducing fuel consumption in vehicles and power plants through higher combustion and decreased friction. Nanotechnology can be used for less expensive energy production in solar technologies, fuel cells, hydrogen technology and Nano catalysis. In solar panels nanotechnology is used to convert solar energy into electric energy more efficiently decreasing cost of solar power in future world. By using nanotechnology solar panels can be in flexible rolls rather than discrete panels. In future instead of solar panels solar converters might even be paintable.

Nanotechnology is used in batteries which are quick chargeable, more efficient, longer life, light weight and have a high power density. Various Nano science based options are being pursued to convert waste heat in vehicles in agricultural equipment, homes, automobiles, power stations, computers to usable electric power. Energy efficiency and energy saving capacity is increasing due to nanotechnology in lighting systems, lighter and stronger vehicle parts to make easy transportation and light response smart coating for glass. In making all these nanotechnology helps in ecofriendly and green technologies that can minimize hazardous pollution [11].

In Vivo Communication:-

Communication inside the body is happening in two ways. One is Natural triggering second is Induced triggering. In Natural triggering contain reflex action, antibody generation etc. where the neurons are the carriers for the information transfer. Whereas in induced triggering the targeted drug delivery and isotropic activation analysis are there where the nano materials are having very significant role, where as in first case bio macro molecules are playing the significant role. In isotropic activation analysis a particular isotopic substitution will be responsible for the communication. The medium of communication will be always an aqueous system inside the body [12]. Hence not only the size but shape also matters. Nano devices to be used in vivo should be designed in such a way that there will be minimum amount of friction. Even though nanotechnology is in its infancy, scientists & technologists will make use of it in all phases of life like never before.

In future, they hope to mould quantum dots to track specific chemical reactions inside nuclei, such as how proteins assist repair DNA after irradiation. They have already visualized the 'dots' journey from the area surrounding the nucleus to inside the nucleus, an achievement that opens the door for real-time scrutiny of nuclear trafficking mechanisms. They also anticipate targeting other cellular organelles as well the nucleus, such as mitochondria and golgi bodies. Since, quantum dots emit different colors of light based on their size; they can be used to observe the transfer of material between cells. When a particular threshold concentration is reached, the signaling molecules will bind to the receptors in the bacterial cell, which lead to the changes in gene expression in the

responding cell. For intra-species quorum sensing, the emitter and responder are usually the same type of cells. Often, but not always, the genes that are involved in synthesis and response activate their own expression thus acting as an auto inducer. A signaling molecule is considered to act at low concentrations and not to be involved in primary metabolism [13].

Optical communication and Quantum Information processing:-

As devices become smaller the principles of quantum mechanics become more and more imperative. Many new theoretical ideas have come into view and fundamental quantum Communication physics researches have progressed in leaps and bounds over the last few years. Consequently, features of genuine Quantum Information Processing could soon begin to be feasible commercially. Quantum Information Processing (QIP) is a major area for research materials such as Gallium Nitride (GaN) or diamond-like-Carbon which can be potentially renovated into efficient devices. Quantum computing which was suggested in 1970s completely relies on quantum physics, which permits the atoms and nuclei to work together as quantum bits or qubits and to be the computers processor and memory [14].

Qubits can execute calculations exponentially faster than conventional computers. One important aspect of the communication sector is the security of information exchange. As the life is going to be networked in all sectors it is crucial to give more emphasis on the confidentiality of the official as well as personal mails. Quantum computing provides us unlimited processing power and secure communications. Those days have come to reality, when we can decode the encrypted conversations by terrorists or others. The compactness and the rapidness were the main achievements that the new developments in this era have brought out. The miniaturization as well as fast and rapid satellite communications, wireless LAN systems, cellular phones etc. are possible only because of the smart nano materials. Now the science and technology has developed to such an extent that a group of scientists were able to flip the electron and they noticed a current change associated with it. They have tried to flip a single electron upside down in an ordinary commercial transistor chip. That was the beginning of the quantum computers where a single electron spin represents a quantum bit, the fundamental building block of a quantum computer. It was amazing that the conventional silicon technology was sufficient and powerful enough to accommodate the future electronic requirements like quantum computing, which will depend on spin. Another recent approach was that to shine microwave radio frequency to flip the spin of electron. The experiments last but a fraction of second, but required years of work to reach this point. With 100 transistors, each containing one of these electrons, we could have the implicit information storage that corresponds to all of the hard disks made in the world, multiplied by the number of years the universe has been around.

As we have discussed quantum computation makes use of atoms as a basis for computation. Recently developed DNA computing provides an example of long term information storage [15]. It is very compact and replicable; however it is not very fast. So its use as a model for information processing seems to be limited. Even in biological systems short term information storage is an energy consuming process. One example is the brain activity. This information storage timescales are very low when compared with microelectronics. Quantum structure electronic devices (QSDs) can confine electrons into regions of less than 20 nm, enhancing their performance. A principal aim of nanotechnology is to produce three dimensionally confined quantum structure electronic

devices such as quantum wire and quantum dot devices. Some successful devices in this direction are quantum well lasers for telecommunications; High Electron Mobility Transistors (HEMTs) for low noise, high gain microwave applications; and Vertical Cavity Surface Emitting Lasers (VCSELs), for data communications, sensors, encoding and so on [16].

Optical communication is any form of telecommunication that uses light as the transmission medium. An optical communication system consists of a transmitter, which encodes a message into an optical signal, a channel, which carries the signal to its destination, and a receiver, which reproduces the message from the received optical signal. Optical fiber is the most universal type of channel for optical communications; still other types of optical waveguides are used within communications kit, and have even formed the channel of very short distance (e.g. chip-to-chip) ties in laboratory testing. The transmitters in optical fiber linkages are commonly light-emitting diodes (LEDs) or laser diodes. Infrared light, rather than visible light is utilized more frequently, because optical fibers transmit infrared wavelengths with less attenuation and dispersion. LEDs are mainly restricted to low data rates, up to about 100 Megabits per second (Mb/s). Lasers are exploited for higher data rates. These devices are often directly transformed which means that the light output is controlled by a current applied directly to the device. They have the potential to store lots of information in a tiny space. This could force technologies from computers and portable electronics such as cell phones and MP3 players, to radio frequency identification devices [17].

Satellite Communication:-

A satellite is a radio relay station in orbit above the earth that receives, amplifies and redirects analog and digital signals contained within a carrier frequency[18]. They are of three types. Geostationary (GEO) satellites are in orbit 22282 miles above the earth and rotate with the earth, thus appearing stationary. The downlink from GEOs to earth can be localized into small regions or cover up as much as a third of the earth's surface [19]. Low-earth orbit (LEO) satellites reside 1000 miles above the earth and revolve around the globe every couple of hours. They are in view for a few minutes, and multiple LEOs are required to keep continuous coverage. Medium-earth orbit (MEO) satellites are in the middle, taking about six hours to orbit the earth and can be viewed for a couple of hours [20]. The first communications satellite was launched in 1960 and it was an instrumented inflatable sphere which just reflected radio signals back to the earth [21]. Semiconductor quantum dots, which cover almost completely the entire spectral region from the ultraviolet to the far infrared, with a small number of substrate materials are communication suitable candidates in satellite communications.

Conclusions: -

Nanotechnology will be helpful to develop and improve the environment in various ways. It has brought a new era in science and technology, but the challenges is to overcome various difficulties it is possible to manipulate materials at small scales, photonic technologies will take over silicon technology. Smart molecules can be integrated into devices for specific applications. So, further research is necessary in this field to fulfill increased needs of peoples. Rapidly progressing research reveals that lot of development seems today are possible in the future. Nanomaterial has excellent physicochemical and biological properties as compared to other counterparts. Because of their peculiar size, shape chemical composition, surface structure, charge, solubility nanoparticles have applications in various fields.

References:-

1) Rapson WS (1996) Gold Bull 29:143
2) E. Klarreich, "Biologists join the dots," Nature, vol. 413, no. 6855, pp. 450– 452, 2001. View at Publisher
3) Mason MG (1983) Phys Rev B 27:748
4) http://home.hccnet.nl/ja.marquart/BasicSPR/BasicSpr01.htm
5) Schulte P, Behrens V (1998) Chem Commun 633
6) Henglein AJ (1993) J Phys Chem 97:5457
7) Cao G (2004) Nanostructures and nanomaterials Synthesis properties and applications
8) https://www.researchgate.net/publication/274837597-Nanotechnology-and- its-Applications-in Medicine
9) https://www.omicsonline.org/open-access/nanotechnologyand-its- applications-2157-7439-1000502-101920.html
10) Valden M, Lai X, Goodman DW (1998) Science 281:1647
11) Link S, Mohamamed MB, E-Sayed MA (1999) J Phys Chem B 103:3073 Gold, Silver and Platinum Nanomaterials
12) Sun Y, Xia Y (2003) The Analyst 12896:686
13) S.Navaladian et al. (Unpublished results)
14) Cortie M (2004) Gold Bull 37:12
15) Dick M, Dhanasekaran T, Xhang Z, Meisel D (2002) J Am Chem Soc
16) https://www.nano.gov/you/nanotechnology-benefits
17) Turkevich J, Stevenson PC, Hillier (1951) J Disc Faraday Soc 11:55
18) Jana NR, Gearheart L, Murphy CJ, (2001) J Phys Chem B 10:4065
19) C. Zandonella, "Cell nanotechnology: the tiny toolkit," Nature, vol. 423, no. 6935, pp. 10–12, 2003. View at Publisher
20) E. Klarreich, "Biologists join the dots," Nature, vol. 413, no. 6855, pp. 450– 452, 2001. View at Publisher
21) Curtis and C. Wilkinso "Nantotechniques and approaches in biotechnology," Trends in Biotechnology, vol. 19, no. 3, pp. 97–101, 2001. View at Publisher

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Carbon Based Nanomaterials for Advanced Energy Conversion and Storage

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ABSTRACT:

The carbon nanomaterial's have been attracted imaginable attention for many researches and scientists worldwide. The small dimensions, strength & the remarkable physical properties of these structures make them a very unique material with whole range of promising application. The advances in energy conversion&energy storages are having great importance in world of Nano science.

KEYWORDS: -Carbon nanotube,Graphene, Energy Source, energy storage, energy conversion (solar cells, fuel cell, supercapacitors and batteries, fullerenesNanomaterial's

Introduction:

Nanotechnology has opened up new frontiers in materials science and engineering to meet this challenge by creating new materials, particularly carbon nanomaterials, for efficient energy conversion and storage. Comparing to conventional energy materials, carbon nanomaterials possess unique size-/surface-dependent (e.g., morphological, electrical, optical, and mechanical) properties which are useful for enhancing the energy-conversion and storage performances, therefore considerable efforts have been made to utilize the unique properties of carbon nanomaterials, including fullerenes, carbon nanotubes, and graphene, as energy materials, and tremendous progress has been achieved in developing high-performance energy conversion (e.g. , solar cells and fuel cells) and storage (e.g. , supercapacitors and batteries) devices.

The importance of developing new typesofenergy is evident from the fact that the global energy consumption has been accelerating at an alarming rate due to the rapid economic expansion worldwide, increase in world population, and increasing human reliance on energybased appliances. It was estimated the world will need to double its energy supply by 2050 [1]. The advanced technologies for both energy conversion(e.g.solar cells and fuel cells) and storage (e.g. , supercapacitors and batteries) are being extensively studied around the world. Nanotechnology has opened up new frontiers in materials science and engineering to meet this challenge. [2]. The Nano technologies have been demonstrated to be an enabling technology for creating high-performance energy-conversion and storage devices. [3, 4] Like all other devices, performances of the energy-related devices depend strongly on the properties of the materials they employ. Recent development in materials science, particularly carbon nanomaterials, has facilitated the research and developmentof energy technologies. Comparing to conventional energy materials, carbon nanomaterials possess some unusualsize-/surface-dependent (e.g., morphological, electrical, optical, and mechanical) properties useful in enhancing energyconversion and storage performance. [5-8] Specifically, considerable efforts have been made to utilize the unique properties of fullerenes, carbon nanotubes (CNTs), and graphene as energy materials, and tremendous progress has been achieved in developing carbon nanomaterials for high-performance energy-conversion and storage devices.

Carbon Nanomaterials

Carbon has long been known to exist in three forms, namely, amorphous carbon, graphite, and diamond. [9] Depending on how the carbon atoms are arranged, their properties vary. For example, graphite is soft and black and the stable, common form of carbon with strong covalent bonding in the carbon plane and the much weaker van der Waals interactions in the transverse direction between the layers. Diamond is hard and transparent with each carbon atom bound to four other carbon atoms in a regular lattice.It was the Nobel Prize-winning discovery of buckminsterfullerene C60 [10] that has created an entirely the branch of carbon chemistry [11, 12]. The subsequent discoveryof CNTs by Iijima [13] opened up a new era in materials science and nanotechnology. [14] These elongated nanotubes consist of carbon hexagons arranged in a concentric manner with both ends often capped by half fullerene like structures. Graphene is the most recent addition to members of the carbon family [15]. As the building blocks for CNTs and other carbon nanomaterials, the graphene that is the 2D single-atom-thick carbon nanosheets, has emerged as a new class of promising materials attractive for a wide range of potential applications, [16,17] including energy conversion and storage.

Carbon Nanotubess

Using transmission electron microscope to examine carbon samples generated by an arc-discharge method similar to that used for the fullerene synthesis, Iijima found the needlelike tubes now popularly known as carbon nanotubes. The discovery of CNTs opened up a new era in material science and nanotechnology. Since Iijima's report on these microtubules of graphitic carbon in 1991, CNTs have attracted considerable attention as a new member of carbon family with novel electronic, optoelectronic, and electrochemical properties. At the molecular level, CNTs can be viewed as a graphene sheet rolled up into a nanoscale tube form to produce a single-walled carbon nanotube. There

may be additional graphene coaxial tubes around the SWCNT core to form a multiwalled carbon nanotube. These elongated nanotubes usually have a diameter in therange from few angstroms to tens nanometers and a lengthof several micrometers up to centimeters with both ends ofthe tubes often capped by fullerenelike structures containing pentagons. Depending on their diameter and helicity of the arrangementof carbon atoms in the walls, CNTs can exhibit semiconductingor metallic behavior with an electricalconductivity as high as 5000 S cm −1. [18] The highly conductivenature of the CNTs ensures their high charge transportcapability. Single wall carbon nanotube have a higher theoretical specific surfacearea of 1315 m2 g − 1 than that of Multi wall carbon nanotube [19]. At the macroscopic level, CNTs can be produced, eitherin aligned and non-aligned forms [20]. They can be synthesizedby a wide range of methods including, carbonarc-discharge, [21] pyrolysis of hydrocarbons, pulsed laservaporization, pyrolysis of carbon monoxide, [22] chemicalvapor deposition [23] and plasma-enhancedCVD. [24] Although unaligned CNTs are good enough formany materials applications, aligned or patterned CNTsare highly desirable for most device-related applications,including various energy-related devices.Various growth and fabrication methods have been developedto produce vertically aligned MWNTs,in a patterned or nonpatterned form, on a large variety ofsubstrates. [25]. Multicomponentmicropatterns of MWNTs interposedwith nanoparticles, self-assembledunaligned CNTs, or SWNTs have alsobeen produced [26]For unaligned CNTs, a reasonablyhigh surface area (≈400 m2 g − 1) has beenobtained for a CNT electrode. Due to the entanglement of tubes, CNTshave a porosity in themesopore range (≈ 2–50 nm). [27]The high surface area and unique mesoporosity of CNTsmake them highly electrochemically accessible to the electrolyte.Apart from the good electrical conductivity andporosity, CNTs also possess a high thermal conductivity(6000 W mK − 1), high thermal stability (stable up to 2800 °C in vacuum), and good mechanical properties (tensile strength45 billion Pascals). [28] These interesting properties makeCNTs very attractive for a variety of potential applicationsin, sensors, [29]hydrogen-storage systems, piezoelectricand thermoelectric energy-harvesting devices, [30]organic photovoltaic cells, fuel cells, batteries, [31] andsupercapacitors. Furthermore, the aligned structure ofCNTs could offer opportunities to develop simple, butversatile, approaches for chemical modification of CNTs,even in an asymmetrical manner.

Graphene

Graphene is the one-atom-thick planar sheets of sp 2 –bondedcarbon atoms that are densely packed in a honeycomb crystallattice, is a recent addition to the carbon family. Graphenewas first discovered in 2004. Thisdiscovery was recognized by Nobel Prizein Physics for 2010 and led to an explosion of interest in graphene[32-35] As the mother of all graphitic forms,graphene is a building block for carbonmaterials of all other dimensionalities,such as 0D buckyballs, 1D nanotubes, and3D graphite. Having many similarities toCNTs in structure and property, including its high aspect ratio (the ratio of lateralsize to thickness), large surface area, rich electronic states, and good mechanicalproperties, graphene is an attractive candidatefor potential uses in many areas[36].

EnergyConversion by Solar Cells:

Carbon nanomaterials, including nanotubes,grapheneand fullerenes,as well as their N-doped derivatives, have beenstudied for a wide range of applications in energy conversionsystems, such as solar cells and fuel cells. The global energy consumption has been accelerating atan alarming rate. Because of the limited supply oftoday's main energy sources (i.e., oil, coal, uranium) andtheir detrimental long-term effects on the environment, hasmade it more important than ever to develop renewableenergy sources. The sun does provide us with renewableenergy sources, which neither run out nor have any significant harmful environmental effect. The Frenchscientist Alexandre-Edmond Becquerel discovered thephoto voltaic effect in 1839 [37]. The scientists and engineers havedevoted considerable effort to realize the dream that humanbeings can one day convert the energy of sunlight directlyinto electricity by the photovoltaic effect to meet our dailyenergy needs. [38] After more than 170 years, however,this dream still has yet to be realized. Nevertheless, tremendoussuccess has been made since the development of thefirst single-junction inorganic (Si) solar cell. [39]. Although a power-conversion efficiency upto 35% has now been achieved for inorganic semiconductor multijunction solar cells in a lab scale [40]. The widespreaduse of the conventional silicon-based photovoltaicdevices is still limited due to the difficulties in modifyingthe band gap of Si crystals and the high cost associated withthe elaborate fabrication processes involving elevated temperature, these inorganic solar cellsare still too expensive to compete with conventional electricity [41]. Thus, alternative approaches using organicmaterials, including organic dyes and conjugatedpolymeric semiconductors, have received considerableattention in the search for novel photovoltaic cells becauseof their potential benefits over the inorganic materials,including low cost, lightweight, flexibility, and versatility for fabrication[42]. The photoinduced charge transfer of fullerenes is of importancefor the development of polymeric photovoltaic cells,which can be used to store light energy as electron relays forproducing electricity.The photovoltaic effect involves the generation of electronsand holes in a semiconducting device under illumination,and subsequent charge collection at opposite electrodes.Inorganic semiconductors, such as amorphous silicon, galliumarsenide, and sulfide salts, have been widely used in conventionalphotovoltaic cells, in which free electrons and holeswere produced directly upon photon absorption [43].The observation of photovoltaic effects arisingfrom the photo-induced charge transfer at the interfacebetween conjugated polymers as donors and C60 film asan acceptor suggests interesting opportunitiesfor improving energy-conversion efficiencies of photovoltaiccells based on conjugated polymers. Indeed,increased quantum yields have been obtained by theaddition of C 60 to form heterojunctions with conjugatedpolymers, [44]. Inthese conjugated polymer–C60 systems, excitons generatedin either layer diffuse towards

the interface between thelayers. Although the photoinduced charge transfer between the excited conducting polymer donor and a C 60 acceptorcan occur very rapidly on a sub picosecond timescale with a quantum efficiency of close to unity for charge separation from donor to acceptor. The conversion efficiency of a bilayer heterojunction device is still limited the photoexcitations produced far from theinterface recombine before diffusing to the heterojunction. Miscibility between the electron acceptor and donorat the interface, either caused by a cosolvent effect or post fabricationdiffusion, also creates problems in a bilayerdevice.

Solar Cells Containing Graphenes:

Compared with CNTs, the one-atom thickness and 2D carbonnetwork of graphene lead to a much higher specific surfacearea and a reduced possibility for the short circuit through thephotovoltaic active layer even in a bulk heterojunctiondevice [45]. Along with the 0D fullerenes and 1D CNTs, the2D graphenenanosheets have also been explored as a newclass of transport materials and acceptors in solarcells. Graphene oxide sheets were found to be soluble in commonorganic solvents, facilitating the structure/property characterizationand device fabrication by solution processing. A bilayer photovoltaic devicebased on the solution-cast Graphene polymer C 60 heterostructures showed increase in the power-conversion efficiency. While thesignificantly improved device performance can be attributedto the strong electronic interaction and good bandgapmatching between the chemically bonded graphene, therefore graphene can also beused as an efficient hole transporting material in solar cells.

Fuel Cells:

Instead of burning fuel to create heat, fuel cells convert chemicalenergy directly into electricity. Although many differenttypes can be constructed depending on the nature of theElectrolytematerials used. They all work on principle of an electrochemicalcell. By pumping, hydrogen gas onto one electrode(the anode), hydrogen is split into its constituent electronsand protons[46].Whilethe protons diffusethrough the cell toward a second electrode (the cathode), theelectrons flow out of the anode to provide electrical power.Electrons and protons both end up at the cathode to combinewith oxygen to form water.The oxygen reduction reaction (ORR) at cathode canproceed either through a four-electron process to directlycombine oxygen with electrons and protons into water as theend product or a less efficient two-step, two-electron pathwayinvolving the formation of hydrogen peroxide ions as anintermediate [47]. The reduction would naturally happen veryslowly without catalyst on the cathode to speed up the ORR,leading to insignificant production of electricity. Platinumnanoparticles have long been regarded as the best catalyst for the ORR, though the Pt-based electrode suffers fromits susceptibility to time-dependent drift[48].Fuel Cells with Carbon Nanomaterials as the CatalystSupportWhile carbon nanomaterials have been studied as newelectron-acceptors for improving the energy conversion efficiency of organic solar cells, their initial use in fuel cells are mainly as catalyst supports for lowering theload of precious metals and enhancing the catalyst activity with prolonged catalyst durability. Properties of these carbon supports, including their specific surface area, pore structure, electrical conductivity,mechanical strength, and corrosion resistance, determine the performances of the catalysts. The mechanical property and corrosion behavior of the carbon supports also affect the durability of the catalysts. Carbon black is known to undergo electrochemical oxidation to produce surface oxides, and eventually to CO 2 at the cathode of a fuel cell [49]. As carbon is corroded away, precious metal nanoparticles will be lost from the electrode or aggregated to larger particles, resulting in the activity degradation of the catalysts. Therefore, mechanically strong and corrosion-resistant carbon supports are needed to improve the durability of the catalysts. In order to develop high-performance catalyst electrodes with low precious metal loading, high catalytic activity and long durability, there is a need for new support materials with superior properties over the currently used carbon blacks. The high specific surface area, high mesoporosity, high electrical conductivity, high mechanical strength, and high corrosion-resistance of CNTs make them a class of very promising catalyst support materials. These superior properties, along with their higher electrical conductivity, allow CNTs for significantly improving the catalytic activity and electrochemical utilization for the CNT-supported catalys. The higher catalytic activity was thereby attributed to the larger surface area of CNT architectureand the lower overpotential for methanol oxidation. Furthermore, the high mechanical strength and superb corrosion-resistance of CNTs provide an excellent durability for the nanotube electrode.

Carbon Nanotubes for Energy Storage:

Supercapacitors and batteries are two important electrochemical energy storage devices that have been extensively developed for many applications. CNTs and graphene have been explored as both electrode materials and electrode additives for developing high-performancesupercapacitors and batterie. Supercapacitorsare electrochemical energy storage devices that combine the high energy-storage capability of conventional batteries with the high power-delivery capability of conventional capacitors [50]. The supercapacitor concept was first described in a patent filed by Becker in 1957 and the firstsupercapacitor products were commercialized by Panasonic (Matsushita) in 1978.Being able to achieve higher power and longer cycle life than batteries, supercapacitors have been developed to provide power pulses for a wide range of applications. In advanced electric transportation technologies, for example, supercapacitors are used as power assists for hybrid electric vehicles and plugin hybrids, where the supercapacitor is operated to provide peak power during acceleration and hill-climbing, and it can be recharged during regenerative braking[51].Supercapacitors have been realized with three principal types of electrode materials, namely high-surface-area activated carbons , transition metal oxides [52] and electroactiveconjugated polymers . Properties of electrode materials play an important role in determining the performances of the supercapacitors. Charge storage capability of these materials is usually

evaluated by their capacitance[53].Overall performance of the supercapacitor is determined by the physicalproperties of both the electrode and the electrolyte materials. Having the advantages of relatively low cost, commercial availability, and well-established electrode production technologies, high-surface-area activated carbon have been the major electrode materials for commercial supercapacitors.Charge storage capability of these materials is usually evaluated by their capacitance, which is associated with the electrode/solutioninterface that varies with the type of carbon and its conditions of preparation.Supercapacitorswith Carbon Nanotube ElectrodesOwning to their high electrical conductivity, high chargetransport capability, high mesoporosity, and high electrolyteaccessibility, CNTs are attractive electrode materials fordeveloping high-performance supercapacitors, research has been performaned to develop different types of CNTelectrode materials and combine them with various electrolytes to improve the performance, safety, and lifetimes for supercapacitors. Randomly entangled CNTs are the first type of CNT materials that were studied for supercapacitor applications. Comparing with high-surface-area activated carbons, CNTs possess a moderate specific surface area. Nevertheless, higher capacitance has been reported for CNTs (e.g., 102 F g − 1 for MWNTs and 180 F g − 1 for SWNTs) in contrast to that of only tens of F g − 1 for activated carbons. Based on the commonly realizable charge densities of 20–50 μ F cm − 2 for electrical double-layer capacitorsestimated the theoretical capacitance for their CNTs (specific surface area: 357 m 2 g − 1) to be 71–178 F g − 1 , in good agreement with the observed values (180 F g − 1) in the upper bound, indicating a perfect electrolyte accessibility for the CNTs. The unique mesoporosity induced by the tube entanglement is responsible for the high electrolyte accessiblity, and hence high capacitances observed for the CNT electrodes [54].In recent years, CNTs have been demonstrated to be advantageous over their randomly entangled counterparts for supercapacitor applications. First, CNTs are betterstructured materials for supercapacitors. Unlike the irregular pore structures of random CNTs, the vertically aligned structures and the well-defined tube spacing in a CNTarray provide a more electrolyte-accessible surface [55]. The aligned structures should also provide improved charge storage/delivery properties as each of the constituent aligned tubes can be connected directly onto a common electrode to allow them to effectively participationin the charge/discharge process. This indicates a combined charge capacity from all individual tubes of the CNT electrode, and thus enhanced energy density for the capacitor. In turn, the stored energy can be delivered rapidly through each tube of the electrode, and hence an excellent power density for the capacitor. Consequently,recent research has demonstrated the improved rate capability for vertically aligned CNTs over random CNTs. [56]

Lithium-Ion Batteries:

lithium-ion (Li-ion) batteries have become the premier rechargeable battery. Li-ion batteries offer significant benefits over conventional rechargeable batteries, including the reduced weight and higher energy storage capability. They have been displacing Nickel Metal Hydride (NiMH) batteries in the consumer electronics market and have begun to displace NiMH or Nickel–Cadmium (NiCd) batteries in the power tool market. In recent years, Li-ion batteries are actively being developed for advanced transportation technologies (e.g., electric vehicles, hybrid electric vehicles, and plug-in hybrids). To satisfy the rapidly increasing performance demanded for these applications, however, the currently available Li-ion batteries need to be improved. A Li-ion battery consists of three essential components, namely the Li + intercalation anode and cathode as well as the electrolyte, in which Li+ ion move from the cathode to the anode during charging, and back when discharging [57]. Properties of the electrodes play an important role in determining not only the energy and power densities but also the safety and cycle life of the batteriesGraphite has been the preferred anode material for Li-ion batteries due to its relatively high capacity, good cyclability, and low redox potential versus lithium metal intercalation/ deintercalation of Li+. To achieve higher energydensity for advanced Li-ion batteries, new anode materialswith higher capacity is needed. Besides, an optimal anode material for advanced Li-ion batteries should have a higher reversible capacity and higher charge/discharge rate than graphite[58].Transition metal oxides are commonly used cathode materials for Li-ion batteries having a large specific-surface-area and facilitated ion diffusion, nanostructured electrode materials have been extensively studied for Li-ion batteries. Owning to theirnovel properties of high electrical conductivity, high charge transport capability, high specific surface area, high mesoporosity, and high electrolyte accessibility, CNTs are also attractive materials for Li-ion batteries [59].For anode applications, CNTs have been studied as host materials andas conductive additives. CNTs are attractive host anode materials for Li + intercalation. There have been several reports on successful intercalation of Li + into both SWNTs and MWNTs.It has been assumed that a large amount of Li + can be stored in the central core, the interlayer space, or the empty space between the nanotubes when they are assembled in bundles. Higher capacities of CNTs than that of graphite is believed to be due to the higher specific surface areas of CNTs. The capacity of CNTs can be further increased by opening or cutting theCNTs.

Conclusion:

Nanotechnology has opened up new frontiers in materials science and engineering to meet this challenge by offering unique enabling technology to create new materials for energy generation and storage, they are particularly attractive for advanced energy conversion and storage. Just like C 60 has been widely used as an electron acceptor in polymer solar cells, controlled growth and functionalization of CNTs have opened up new frontiers for energy-relevant research.Continued research efforts in this embryonic field could give birth to a flourishing area of photovoltaic

technologies. Further development in this exciting field will surelyrevolutionize the way in which future energy systems aredeveloped.

References:

1]T. G. Doung , "2002 Annual Progress Report for Energy StorageResearch and Development", Freedom Car & Vehicle TechnologieProgram, **2003** .
2] P. V. Kamat , G. C. Schatz , J. Phys. Chem. C **2009** , 113 , 15437 .
3] U. Sahaym , N. M. Grant , J. Mater. Sci. **2008** ,43 , 5395 .
4] P. J. F. Harris , Carbon Nanotubes and Related Structures - NewMaterials for the T wenty-First Century , Cambridge UniversityExpress , Cambridge **2001** .
5] A. Arico ,Nat. Mater. **2005** ,4 , 366 .
6] Y. G. Guo , J. S. Hu , L. J. Wan , Adv. Mater. **2008** ,20 , 2878 .
7] D. R. Rolison , J. W. Long , J. C. Lytle , A. E. Fischer , C. P. Rhodes ,T. M. McEvoy , M. E. Bourg , A. M. Lubers , Chem. Soc. Rev. **2009** ,
8] J. Liu , G. Cao , Z. Yang , D. Wang , D. Dubois , X. Zhou , G. L. Graff , L. R. Pederson J. G. Zhang , ChemSusChem**2008** , 1 , 676 .
9] H. Marsh ,Introduction to Carbon Science , Butterworths , London**1989** .
10] H. W. Kroto , J. R. Heath , S. C. O'Brien , R. F. Curl , R. E. Smalley ,Nature **1985** , 318 ,162 .
11] A. Hirsch ,The Chemistry of the Fullerenes , Thieme , Stuttgart**1994** .
12] R. Taylor ,The Chemistry of Fullerenes , World Scientifi c ,Singapore **1995** .
13]S. Iijima ,Nature **1991** , 354 , 56 .
14] M. S. Dresselhaus , G. Dresselhaus , P. Eklund , Science of Fullerenesand Carbon Nanotubes , Academic , San Diego **1996** .
15] K. Novoselov , A. Geim , S. Morozov , D. Jiang , Y. Zhang ,S. Dubonos , I. Grigorieva , A. Firsov , Science **2004** , 306 , 666 .
16]M. Z. Jacobson ,Energy Environ. Sci. **2009** ,2 , 148 .
17] R. M. Dell , D. A. J. Rand , J. Power Sources **2001** , 100 , 2 .
18] M. Dresselhaus ,Physics World **1996** , 9 , 18 .
19] A. Peigney , C. Laurent , E. Flahaut , R. R. Bacsa , A. Rousset ,Carbon **2001** , 39 , 507 .
20] H. Chen , A. Roy , J.-B. Baek , L. Zhu , J. Qu , L. Dai , Mater. Sci. Eng. Rep. **2010** ,70 , 63 .
21] T. W. Ebbesen , P. M. Ajayan , Nature **1992** , 358 , 220 .
22] B. Zheng , C. Lu , G. Gu , A. Makarovski , G. Finkelstein , J. Liu , NanoLett. **2002** ,2 , 895 .
23] L. Dai , A. Patil , X. Gong , Z. Guo , L. Liu , Y. Liu , D. Zhu , ChemPhysChem**2003** , , 1150 .
24] L. Qu , L. Dai , J. Mater. Chem. **2007** ,17 , 3401 .**1999** ,121 , 10832 .
25] A. Patil , T. Ohashi , A. Buldum , L. Dai , Appl. Phys. Lett. **2006** ,89 ,103103 .USA **2005** ,102 , 16141 .Phys. **2006** ,45 , L.720 .
26] J. Yang , L. Qu , Y. Zhao , Q. H. Zhang , L. Dai , J. W. Bauer ,B. Maruyama , R. A. Via , E. Shin , P. T. Murray , H. X. Luo , Z. X. Guo J. Nanosci. Nanotechnol.**2007** , 7 , 1573 .
27] R. H. Baughman , A. A. Zakhidov , W. A. De Heer , Science **2002** ,297 , 787 .
28]P. G. Collins , P. Avouris , Sci. Am. **2000** , 283 , 62 .
29] L. Dai , P. Soundarrajan , T. Kim , Pure Appl. Chem. **2002** , 74 ,1753 .
30] A. Kumar , S. Choudhury , S. Saha , S. Pahari , D. De ,S. Bhattacharya , K. P. Ghatak , Physica B: Condensed Matter**2010** , 405 , 472 .
31] D. T. Welna , L. Qu , B. E. Taylor , L. Dai , M. F. Durstock , J. PowerSources**2010** , 1 96 , 1455 .
32] T. Enoki , K. Takai , V. Osipov , M. Baidakova , A. Vul , Chem. AsianJ. **2009** , 4 , 796 .
33] J. Liang , Y. Xu , Y. Huang , L. Zhang , Y. Wang , Y. Ma , F. Li , T. Guo ,Y. Chen , J. Phys. Chem. C **2009** ,113 , 9921 .
34] X. Wang , L. Zhi , K. Mullen , Nano Lett. **2008** ,8 , 323 .
35]G. Eda , G. Fanchini , M. Chhowalla , Nat. Nanotechnol. **2008** ,3 ,270 .
36] W. Yang , K. R. Ratinac , S. P. Ringer , P. Thordarson , J. J. Gooding , F. Brat ,Angew. Chem. Int. Ed. **2010** ,49 , 2114 .
37] O. C. Compton , S. T. Nguyen , S mall **2010** , 6 , 711.
38] P. Sutter ,Nat.Mater. **2009** ,8 , 171 .
39] J. Kedzierski , P. L. Hsu , P. Healey , P. W. Wyatt , C. L. Keast ,M. Sprinkle , C. Berger , W. A. de Heer , IEEE Transactions on ElectronDevices**2008** , 55 , 2078 .
40] L. W. C. Ren , L. B. Gao , L. P. Ma , H. M. Cheng , New Carbon Mater.**2011** ,26 , 71 .

41] I. Pletikosic , M. Kralj , P. Pervan , R. Brako , J. Coraux , A. N'Diaye ,C. Busse , T. Michely ,Phys. Rev. Lett. **2009** ,102 , 056808 .
42] K. S. Kim , Y. Zhao , H. Jang , S. Y. Lee , J. M. Kim , J. H. Ahn , P. Kim ,J. Y. Choi , B. H. Hong , Nature **2009** , 457 , 706 .
43]S. Bae , H. Kim , Y. Lee , X. Xu , J. S. Park , Y. Zheng , J. Balakrishnan ,T. Lei , H. R. Kim , Y. I. Song , Nat. Nanotechnol. **2010** ,5 , 574 .
44] L. Qu , Y. Liu , J. B. Baek , L. Dai , ACS Nano **2010** , 4 , 1321 .
45] X. Li , W. Cai , J. An , S. Kim , J. Nah , D. Yang , R. Piner ,A. Velamakanni , I. Jung ,E. Tutuc , Science **2009** , 324 , 1312 .
46] D. R. Lenski , M. S. Fuhrer , J. Appl. Phys. **2010** , 110 , 013720 .[47] Z. Sun , Z. Yan , J. Yao , E. Beitler , Y. Zhu , J. M. Tour , Nature **2011** ,471 , 124 .
48] M. Choucair , P. Thordarson , J. A. Stride , Nat. Nanotechnol. **2008** ,4, 30 .
49]W. S. Hummers , R. E. Offeman , J. Am. Chem. Soc. **1958** , 80 ,1339 .
50] J. Shen , Y. Hu , M. Shi , X. Lu , C. Qin , C. Li , M. Ye , Chem. Mater.**2009** , 21 , 3514 .
51] G. Brumfiel ,Nature **2009** , 10 , 1038 .
52] D. V. Kosynkin , A. L. Higginbotham , A. Sinitskii , J. R. Lomeda ,A. Dimiev , B. K. Price , J. M. Tour , Nature **2009** , 458 , 872 .
53] L. Jiao , L. Zhang , X. Wang , G. Diankov , H. Dai , Nature **2009** , 458 ,877 .
54] Y. Xu , H. Bai , G. Lu , C. Li , G. Shi , J. Am. Chem. Soc. **2008** , 130 ,5856 .
55] H. A. Becerril , J. Mao , Z. Liu , R. M. Stoltenberg , Z. Bao , Y. Chen ,ACS Nano **2008** , 2 , 463 .
56] Z. S. Wu , S. Pei , W. Ren , D. Tang , L. Gao , B. Liu , F. Li , C. Liu ,H. M. Chen , Adv. Mater.**2009** ,21 , 1756 .
57] X. L. Li , G. Y. Zhang , X. D. Bai , X. M. Sun , X. R. Wang , E. Wang ,H. Dai , Nat. Nanotechnol.**2008** ,3 , 538 .
58] D. S. Su , J. Zhang , B. Frank , A. Thomas , X. Wang , J. Paraknowitsch ,R. Schlogl , ChemSusChem**2010** , 3 , 169 .
59] C. Ewels , M. Glerup , J. Nanosci. Nanotechnol.**2005** ,5 ,1345 .

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Research Article

SCREENING OF PHYTOCHEMICALS AND *IN VITRO* ANTIDIABETIC ACTIVITY OF *BAUHINIA RACEMOSA* LAM. LEAVES

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ABSTRACT

Objective: In this study, the leaves of medicinal plant *Bauhinia racemosa* Lam. with different pharmacological activities were subjected to phytochemical screening and assessment of their *in vitro* inhibitory potential with porcine pancreatic α-amylase enzyme to treat and management of diabetes.

Methods: Plant leaves were extracted sequentially with ethanol solvent. A modified 3,5-dinitrosalicylic acid method was adopted to screen α-amylase inhibition assay. The ethanol extract was analyzed qualitatively and gas chromatography–mass spectrometry analysis technique for the active phytoconstituents according to the standard protocols.

Results: A phytochemical screening of leaves extract reveals the presence of carbohydrate, alkaloids, saponin, glycosides, steroids, tannins, flavonoids, triterpenoid, and phenolic compounds. The ethanol extract reported inhibition of α-amylase enzyme activity at IC_{50} value 61.72 ± 0.03 µg/mL and acarbose as a standard drug at IC_{50} value 28.07 ± 0.02 µg/mL.

Conclusion: The results of the study indicate that *B. racemosa* Lam. leaves contain some of bioactive phytochemicals might to be exhibiting *in vitro* antidiabetic activity, which was leading to decreases the rate of starch digestion.

Keywords: *Bauhinia racemosa* Lam., Pharmacological, α-amylase, Phytochemical, Antidiabetic.

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INTRODUCTION

A chronic metabolic disorder of insulin deficiency or ineffectiveness is resulted into diabetes mellitus. It causes a global health burden on public and predictions of it estimate that India, China, and the United States will have the highest number of diabetic people up to the year 2030 [1]. Antidiabetic agents synthetically prepared could be produced serious side effects [2]. The search for plant-based medicine for control of diabetes mellitus continues, and the World Health Organization has also recommended about herbal treatment on diabetes mellitus [3].

Medicinal plants were reporting traditionally antidiabetic activity [4]. These contain active chemical constituents are inhibited α-amylase enzyme, and it prevents dietary starches from being digested and absorbed by the body. Antinutrient acting α-amylase inhibitors are responsible to control rate of starch digestion and absorption. Furthermore, potentially become useful in control of obesity and diabetes like disorders. Hence, they are useful for treating diabetes mellitus Type-II.

The *Bauhinia racemosa* Lam. plant is exhibits various pharmacological activities reported as analgesic, antipyretic, anti-inflammatory [5], antispasmodic [6], anthelmintic, antimicrobial activity [7], and antioxidant [8,9] as well. Due to the presence of several active phytoconstituents [10], this synthesizes primary and secondary metabolites having benefits in traditional system of medicine [11].

Various scientific studies have confirmed the beneficial effect of plants with antidiabetic activity in the traditional management of diabetes mellitus [12] on streptozotocin and alloxan-induced diabetic animal models [13].

The study has been reported that different plant isolates possess vast potentiality of leaves ethanol extract *in vitro* antidiabetic activity. Therefore, the leaves ethanol extract of *B. racemosa* Lam. plant was subjected to study phytochemical screening and assessment of their *in vitro* antidiabetic potential.

METHODS

Collection of plant material

The *B. racemosa* Lam. plant leaves were collected from local area identified and authenticate with the help of botanist from our institute. The plant leaves rinsed with distilled water and dried in shade at room temperature.

Preparation of extract

The air-dried leaves of *B. racemosa* Lam. were finely crushed and powdered. 10 g of powdered plant material was dissolved in 100 mL of ethanol and kept on a magnetic stirrer for 2 h. Thereafter, it was extracted using a Soxhlet apparatus sequentially with ethanol. The extract was collected and the solvent was evaporated out to dryness. The obtained material was stored at 4°C in airtight bottles for further screening studies.

In vitro α-amylase inhibitory assay screening

A modified 3,5-dinitrosalicylic acid (DNSA) method was adopted to screen α-amylase inhibition activity, by quantifying the reducing sugar (maltose) liberated under the assay conditions. The enzyme inhibitory activity was expressed as a decrease in units of maltose liberated [14,15].

Phytochemical screening

The ethanol extract of *B. racemosa* Lam. was screened qualitatively for the active phytoconstituents such as alkaloids, carbohydrate, protein, amino acids, glycoside, tannins, saponin, flavonoids, steroids, terpenoids, and phenolic compounds according to the standard protocol [16,17].

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Screening of Antioxidant Property and Phytochemical Constituents of Ethereal Extract of *Vitex nigundo* Linn Leaves

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Abstract : *Vitex negundo* belongs to the family Verbenaceae. Literature survey of the plant reveal that the *vitex negundo* possess antimicrobial, anti-inflammatory, analgesic, antibacterial, antifungal, anti-insects activities. In the present study the phytochemical compounds present in the ether extract of *vitex negundo linn* leaves extract analyzed and the free radical scavenging capacity of the extract. The experimental data showed that the ether extract of *vitex negundo linn* contain alkaloids, carbohydrate, glycosides, amino acids, proteins, tannins and phenolic compounds. The free radical scavenging capacity of the sample was measured by DPPH (2, 2-diphenyl-1-picrylhydrazyl) method. The IC_{50} value of the ascorbic acid which is used as the standard is 14.97 while for sample is 46.84. the ether extract of *vitex negundo* leaves shows good antioxidant property.
Keywords : Nirgudi, phytochemical, antioxidant, Ether extract.

Introduction :

Plants having great potential to produce new drugs, through which humans can take benefit for the good healthy life [1]. Several infectious diseases can be treated with the traditional remedies [2]. The drugs which are used in the last 20 years to cure different type of diseases from which more than 25% are directly drive from plants [3]. The medicinal plants have been characterized for their bioactive compounds, which have been separated and subjected for their detailed structural analysis in the area of phytochemistry [4]. Naturally occurring drugs are easily available, less expensive, safe and having very less side effects [5].

Vitex negundo which belongs to the Verbenaceae commonly known as Nirgudi in India [6, 7]. It is having large and aromatic shrub with bluish purple flowers [8] spared in the region of Himalaya. It is genus tree and *vitex* have near about 800 species [9]. *Vitex* species are traditionally used in Indian system of medicine [10].

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In Vitro Antidiabetic Activity Study of Abrus precatorius Linn. Leaves Aqueous Extract

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Abstract:

In vitro antidiabetic activity of Abrus precatorius Linn. leaves aqueous extract studied by α-amylase enzyme inhibition assay collected from local area. The porcine pancreatic α-amylase enzyme assay study shows that fractionation of the extract led to be significant inhibition activity and has potent enzyme inhibitor contents. The inhibitory mode of extract against porcine pancreatic α-amylase was a mixed inhibition. The study reported the aqueous extract of Abrus precatorius Linn. leaves shows in vitro antidiabetic activity by α-amylase inhibitory assay.

Keywords: Antidiabetic, Abrus precatorius Linn., Porcine pancreatic α-amylase, inhibitor.

Introduction:

A metabolic disease characterized by hyperglycaemia resulting from irregular secretary action of insulin as a diabetes mellitus. There are many existing therapeutics for the treatment of diabetes. The traditional usage of medicinal plants for the treatment of diabetes lack scientific validation. However, plant based drugs are generally considered much effective and safe.

Enzyme inhibitors have plays important role in many areas of disease control and treatment. The literature reviews found that the medicinal plants possess antidiabetic property which could be possibly investigated further for the presence of α-amylase inhibitor [1].

The synthesised hypoglycaemic agents can produce various side effects and are not suitable for use during pregnancy [2]. Therefore, the search of new more effective and safer hypoglycaemic agents has been important area of 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 this study.

The chloroform-methanol extracts of Abrus precatorius Linn. seed was studied antidiabetic effect in alloxan diabetic rabbits [4]. Several bioactive compounds are identified in the leaves of Abrus precatorius Linn. [5].

More information not reported on the in vitro α-amylase inhibition activity of the Abrus precatorius Linn. leaves aqueous extract.

Therefore, we consider vast potentiality of Abrus precatorius Linn. plant leaves as a source of α-amylase inhibitor study for characterizing their biological activities and chemical constituents.

Material and Methods:

Plant material: Abrus precatorius Linn. plant leaves were collected from local area, identified and authenticate with the help of our institute botanist.

Extraction: The plant leaves were dried under shade and then powdered. In 50 ml of distilled water 5 gm of powdered plant material was dissolved and kept on a magnetic stirrer for 1 hrs. After that, it was sequentially extracted using a soxhlet apparatus with aqueous solvent. The

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FT-IR Screening of Phytochemicals in Leaf Aqueous Extract of *Abrus precatorius* Linn. Plant

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ABSTRACT

The present screening is aimed to focus on the phytochemical analysis of leaf aqueous extract of *Abrus precatorius* Linn. by FT-IR Spectral analysis technique. The aqueous extract from 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, phosphoramide, phosphine, amine oxides, aromatic substituted compounds, nitroso, sulphate ester, disulfide, phosphonic acid and silane compounds, which showed major characteristic bands. 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: Phytochemical, *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 phytochemical 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 leaf of *Abrus precatorius* Linn. plant.

MATERIAL AND METHODS

Collection of Plant leafs

A leafs of *Abrus precatorius* Linn. were collected from the local area. The collected plant leafs were washed with distilled water to remove the dirt and other impurities. The plant leafs 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 leafs were milled to coarse powder and stored in air tight container for screening.

Extraction of leafs material

A 20g of powdered material of leafs were extracted with aqueous solvent by Soxhlet apparatus. The extracts were evaporated to dryness on a water bath and yielded quantities of leaf extracts in aqueous solvents were obtained and stored at 5^0C for further studies taken to screen the phytochemicals.

FT-IR screening of aqueous extract

FT-IR is the most powerful tool for identifying the types of functional groups present in 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 plant leafs extract was used for FT-IR screening [7].

RESULTS AND DISCUSSION

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

FT-IR spectral data interpretation of aqueous extract

The leafs aqueous extract exhibited characteristic absorption band at 3427.51 cm^{-1} related due to stretching vibrations of alcoholic O-H and phenolic ArO-H groups. The bands at 3375.43 cm^{-1}, 3304.06 cm^{-1}, 3192.19 cm^{-1} and 3178.69 cm^{-1} due to stretching vibration carboxylic acids RCO-OH, C=C-CO-OH dimer of OH, phenolic ArO-H bond, alkynes C-H. The bands at 3128.54 cm^{-1} and 3053.32 cm^{-1} would be related to alkenes =C-H and carboxylic acids RCO-OH, C=C-CO-OH dimer of OH and aromatic Ar-H stretching vibrations. The band 2920.23 cm^{-1} and 2852.72 cm^{-1} due to stretching vibration in alkanes C-H of $-CH_3$, alkanes $-CH_2-$ group and carboxylic acids RCO-OH, C=C-CO-OH dimer of OH; at 2673.34 cm^{-1} due to (O=)PO-H phosphonic acid. The band at 2316.51 cm^{-1} would be due to P-H of phosphine and Si-H of silane. The 1998.99 cm^{-1} band due to N=C in R-N=C=S stretching vibration. The bands

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05

To study the effect of phosphorus sources on the production of cellulase enzyme by Alternariaalternata on Brinjal

Pathare G. M.
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Abstract:-

It is reported that the action of hydrolytic enzyme are extremely important in pathogenesis, as because they provide necessary nutrients to the pathogens.Enzymes are secreted by the infecting pathogens are activated in the host tissues during infection and this determines the ability of pathogen to cause disease spots that are available.Several pathogenic fungi species of Alternariaalternataproduce cellulolytic enzymes which degrade plant cell wall. Alternariaalternatawere capable to producing pectinase and cellulase type of enzymes which results in post-harvest biodeterioration pectolytic, cellulolytic and proteolyticenzymes secreted by pathogen have been reported to be involved in pathogenesis.Present paper reports secreation of enzyme cellulose by Alternariaalternatia a pathogen causing leaf spot diseases of brinjal.

Keywords: Brinjal, Phosphorous, Cellulase, Fungus,

Introduction:-

Brinjal (solanummelongena.L.) is a popular and widely cultivated vegetable crop grown almost worldwide. India is considered to be the centre of origin of cultivated brinjalfrom where of it spread to other parts of world. Through it is suffered by different viral and

fungal diseases,and then also we are using this vegetable for best diet. It contains different vitamin sources and also contains many cellulase enzymes such as phosphorus and many others. Cellulase activity has been reported in bean hypocotyls tissue infected by Alternariaalternate.The maximum production of CMcase was achieved in the culture containing lactose or wheat bran as phosphorous source reported by Moharrametal. (2004).

Komarajah and Reddy (1984) reported the production ofcellulases by C.cassiicola, the seed borne fungi of methi. The fungus penetrates the host cell wall and by destroying the nativecellulase (kanotoraetal, 1988).

Material and method:-

For the study of phosphorus sources of cellulose by Alternariaalternataofbrinjal the experiment were conducted in the laboratory and we have taken six phosphorous sources on cellular enzyme for our work. They are such as Sodium hydrogen phosphate, Disodium hydrogen phosphate,Potassium hydrogen phosphate, Ammonium phosphate, Ammonium bi phosphate and KH_2 $(PO4)_2$(control)Nema, (1992) reported that Alternariaalternatawere capable of producing phosphorus and cellulase type of enzymes. Hydrolysis of phosphorus ultimately yields glucose which is an important energy source for pathogenic microorganisms. Wilkie, (1975). The optimum effect of phosphorous onCellulase produced by Chaetomiumglobosum. (El- Said 2001). Enzyme was also achieved in culture medium supplemented with starch, pectin and cellulase as phosphorous sources observed by Amir Ijazetal, (2011)

Result and Discussion:

During the study of effect of phosphorus sources on cellulase production 0.1 % concentration of phosphorus sources were selected as basal medium by replacing KH_2PO_4 and effect was studied. The result noted in table.

It is clear from table Ammonium Phosphate source of Phosphorus showed influence the cellulase production in Alternariaalternata and Aspergillusniger fungi.

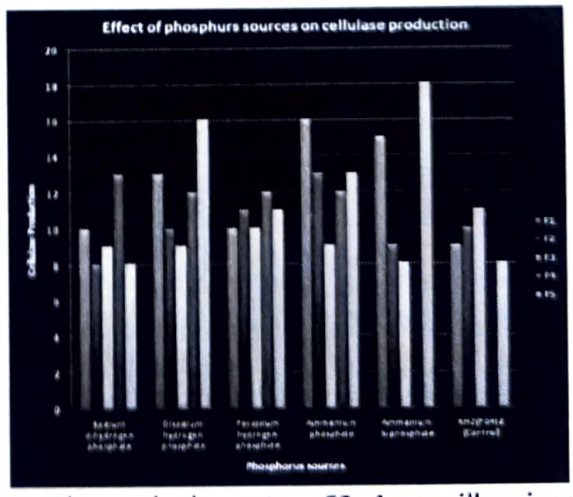
Fusariumsolani shows highest cellulase production in ammonium biphosphate, Curvularialunata fungal enzyme production was lowered in phosphorus sources. Phomo phsisvexans showing highest enzymes production in sodium dihydrogen phosphate medium.

Effect of phosphorus sources on cellulase production

Phosphorus sources	Name of Fungi				
	F1	F2	F3	F4	F5
Sodium hydrogen phosphate	10	8	09	13	08
Disodium hydrogen phosphate	13	10	09	12	16
Potassium hydrogen phosphate	10	11	10	12	11
Ammonium phosphate	16	13	09	12	13
Ammonium bi phosphate	15	9	08	-	18
$KH_2(PO_4)_2$ (Control)	9	10	11	-	08

Enzyme activity expressed in mm

F1: Alternariaalternata, F2: Aspergillusniger, F3: Curvularialunata **F4:** Phomophsisvexans, **F5:**Fusariumsolani



F1: Alternariaalternata, F2: Aspergillusniger, F3: Curvularialunata

F4: Phomophsisvexans, F5:Fusariumsolani

References:

1.Amir Ijaz, Anwar Z., Zafar Y., Hussaini I., Muhammad A., Irshad M. And Mehmood S. (2011). Optimization of cellulase enzyme production from corn cobs using Alternariaalternataby solid state fermentation. Journalof Cell and Molec. Biology. 9 2: 51-56.

2. El-Said A. H. M. (2001).Phyllosphere and phylloplane of banana cultivated in Upper Egypt and their cellulolytic ability. Mycobiology. 29: 210-217.

3. Kanotra S. and Mathur, R.S.(1995). Simple cultural test for relative cellulolytic activity of fungi. Indian Phytopathology. 48(4): 483-488.

4. Nema A.G. (1992). Studies of pectinolytic and cellulolytic enzymes produced by Fusariumudum, causing wilt of pigeon pea. Indian Journalof Forestry. 15(4):353-355.

5. Reddy, S.M. and Laxminaraygna, P. (1984) Post-infection changes in ascorbic acid contents of mango and annonacaused by two fruit rot fungi. CurrentScience 53(17): 927-928.

6.WilkieC.R. (Ed.) (1975) Cellulose as a chemical and energy source: Biotechnology and Bioengineering symposium. 5. New York; JournalWiley: 361.

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08

Global Warming'sandIts Impacts

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Abstract

Global warming impact on the environment is the most important issue. Global warming is an atmosphericphenomenon of increased earth's surface temperature. It is characterized by increase in the concentrations of the greenhouse gases suchas carbon dioxide, methane, chlorofluorocarbon, nitrousoxide. Global warming is perhapsthe most significant environmental problem facing the world today. Global warming refers to the increase of earth's average temperature. One of the major causes of global warming is population growth that stresses the entire environment. Global warming means the rising temperature over the world. This global warming is caused by anumber of factors such as changes in earth's orbit, changes in sun's intensity, volcanic eruptions, aerosol emissions, changes in ocean currents.Global warming was to be prevented and gradually stopped if the human race has to survive.

Keywords: fossil fuels, global warming flood, droughts,

Introduction:

Global warming is perhaps the most significant environment problem facing the world today. Greenhouse gas levels are increasing in the atmosphere because of human activities & the changing the composition of the atmosphere &warming the earth. Global warming is now considered most probably to be due to the earth's natural green house effect. Measurement of temperature taken by in instrument all over the world onland &at sea have revealed that during the 20th century there is an increasing in the average temperature of the earth's surface leading to widespread impacts ranging fromchange in rain fall patterns to extinction of certain species. The International Intergovernmental Panel on climate change (IPCC)has concluded that global warming is occurring & is linked to human activities. There a latest reportstated that "There is new & stronger evidence that most of the warming observed over the last 50 years is attributable to human activates". Global warming is an atmospheric phenomenon on of increased earth's surface temperature.

Sources Responsible For Global Warming:

· Carbon dioxide emitted from cars about 33% of U.S CO_2 emissions comes from the burning of gasoline in internal combustion engines of cars & light trucks (minivans, pickup and jeeps)

· In 2002 about 40% of U.S CO_2 emissions stem from the burning of fossil fuels for the purpose of electricity generation .

· Co_2 from Air planes. :- The UN'S Intergovernmental panel on climate change estimates that aviation causes 3.5% of global warming, & that the figure could rise to 15% by 2050.

· Carbon Dioxide from Buildings. Building Structure account for about 12% of CO_2 emissions.

· Deforestation is responsible for 25% of all carbon emissions entering the atmosphere, by burning & cutting of about 34 million acres of trees each year.

· Methane is second most important according to the IPPC. Methane is more than 20 times as effective as CO_2 at trapping heat in the atmosphere.

· CFCs- found in fridges, air conditioners, aerosols are extremely effective greenhouse

gases. Methane molecules survive for 10 years in the atmosphere & CFCs for 110 years.

· CO_2 contributes maximum to the greenhouse effect on earth. The greenhouse effect is due to impermeablyof long wave length radiations through CO_2 of the atmosphere. They act as glass in the green house which lets in the sunlight but trap outgoing thermal radiations.

· The Tundra (Treelessplain) is beginning to become a source of CO_2 about 50 billion tons of carbon are estimated to be hold in a frozen state in the Tundra.

Impacts of Global Warming:

The IPCC's Third Assessment Report finds that in the last 40 years, the global average sea level has raised, Ocean heat content has increased, & show cover & ice extent have decreased. The impacts of global warming are as follows.

More floods: Projected adverse impacts based on models include a widespread increase in the risk of flooding for human settlements. Fromboth increased heavy precipitation events & sealevel rise.

Degraded Water quality: Projected climate change will tend to degrade water quality through higher water temperature&increased pollutant load from runoff & over flows of waste facilities.

Rising sea level: Rise in sealevels due to melting glaciers & thermal expansion of oceans as global temperature rise. Over the last 100 years the level of has risen about 6-8 inches worldwide. When the sea level rises, the tide goes further up the bench.

Human health: Climate change can affect people's health. An increase in the number of people exposed in vector borne disease & an increase in heat stress mortality.For instance, heat stress & other heat related health problems are caused by very warm temperature& high humidity. Indirectly ecological disturbances, air pollution, changes in food & Water supplies affect human health.

Changing Ecological System: Climate change can alter the places depend on a delicate balance of rainfall, temperature & soil type. A rapid change in climate could upset this balance seriously.

Natural Systems: Including glaciers, coral reefs, mangroves, alpine ecosystems, arcticeco systems,and tropical forest will be severely threatened.

· More frequent & more intense heat waves, droughts& tropical cyclones.

Temp Increased: From 1961 to 2003, the global ocean temperature hasraised by 0-10^{0c} from the surface to a depth of 700 m. the temp of Antarctica 1980. As well as having effects on ecosystem warming reduces the ocean ability to absorbed CO_2.

Extreme Weather: Global warming may be responsible in part for some trends in natural disasters suchas extreme weather. Kerry Emanuel writes that hurricane power dissipation is highly correlated with temperature,reflecting global warming.

Change In Rainfall Pattern :- The major impact of global warming on rain fall pattern is that there is increase in rain fall by 5% in summer & 15% in winter in the cool temperature regions and also in tropical regions where as the rain fall in decreasing by 5% to 10% in winter season at warm temperate regions . In the regions where there is increase in rainfall cause higher surface runoff, more soil erosion less percolation of the water similarlydecrease in rain fall causes the decrease in available soil moisture reduction in rates of soil water recharge & accelerate ground water depletion.

· Global warming is destroying nature more & more species of wild life are becoming extinct flying foxes, butterflies, Polar Bears &Penguins are dying due to rising temperature & loss of habitat.

Greenhouse effect : The emission of various gases such as CO_2, Chlorofluorocarbon,

methane, nitrous oxide which are heat trapping results in increased earth's temperature. These gases has created hole in ozone layer which is the most serious impact of global warming affecting human planktons as well as crops some other impacts of global warming are melting of polar ice, effect on fishery, effect on agriculture & forest. In this way global warming is the environmental destruction.

Conclusion:

Global warming is justbeginning now butif care is not taken then we can easily imagine alleffects after some years. It is climatechange that is closely related to the energy crisis with alternateenergy sources. The severe global warming effects might be largely forestalled. Global warming has to be prevented &gradually stopped if the human race has to survive. Our role is to minimize the activities which lead to global warming. For this organic farming, plantation, use of renewable energy sources, solar energy, afforestation, less fuel consumption would become the useful steps. The human being who thinks that the only animal on earth with rational thinking power & noneelse is a selfish one. The level of its selfishness has reached to the extreme. This selfishness itself will destroy the earth & at last the entire biosphere or the earth.COPENHEGAN summit was the step towards the fighting against global warming butit has gain less success. Final step for lowering global warming is to change our way of life.

References:

1. Farmer J. C., Fix D.V., Mack G.V., Pekala R.W. and Poco J.F., Capacitive deionization of NH_4ClO_4 solutions with carbon aerogel electrodes, Journal of Applied Electrochemistry 26, 1007-1018 (1996)

2. Tran Tri. D., Farmer Joseph C. and Murguia Laura, Method and apparatus for Capacitive deionization electrochemical purification, and regeneration of electrodes, United States Patent, 6, 309,532(2001) .

3. Johnson A.M. and Newman J., / Electrochem. Soc. 118,510(1971)

4. Lin. C., Ritter J.A. and Popov B.N., J., / Electrochem. Soc. 146,3639(1999)

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Prevalence Of Helminthosporium *Spores* 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 *Rhizoctonia solani*.Due to this 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*Helminthosporium*spores over a green gram field for one kharif season i.e. season from 5thJune to 28th August 2007 using continuous volumetric Tilak Air Sampler. The concentration of airborne *Helminthosporium*spores was assessed and the role of the meteorological parameters over the spore concentration was discussed.Their contribution to the total airspora was recorded 5.74 % .The maximum monthly mean concentration (4760/m^3) was recorded in the month of August 2007 and minimum (2002/m^3) in June 2007 . The maximum daily mean concentration (182/m^3) was recorded on 30thJuly 2007.

The aerobiological investigations therefore are of great helpful 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: *Helminthosporium*, Green gram field, Air sampler, metrological parameters.

INTRODUCTION

Aerobiology is an interdisciplinary science which deals with the study of biological components like pollen grains fungal spores, hypal fragments, viruses, algae,lichens,plant seeds and other prop gules 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 invarious parts of India revealedthe 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 *Rhizoctonia*solani, Powdery Mildew caused by *Erysiphe*polygoni, Dry root caused by *Macrophominaphaseoling*, Rust caused by *Uromycesphaseoli*, Anthracnose caused by *Glomerellalindemuthiana* . 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).

The aim of present study was to find out the atmospheric concentration of *Helminthosporium* and its correlation with meteorological parameters. Itwas 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 5th June to 28 August 2007.

MATERAIL AND METHODS:

In the present investigation an exploration of airborne spores of *Helminthosporium*(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 AshtiDist Beed (M.S.) for one kharif season i.e. from 5th June to 28th 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.

RESULT AND DISCUSSION:

Spores obclavate to cylindrical, slightly curved or bent, apex somewhat rounded, sub-hyaline to dark brown, with three to many pseudosepta,with prominent scar,39-95x11-18um.
Spores occurred continuously. Their contribution to the total airspora was recorded as 5.74%

The maximum monthly mean concentration (4760/m^3) was recorded in the month of August 2007 and minimum (2002/m^3) in June 2007.

The maximum daily mean concentration (182/m^3) was recorded on 30thJuly 2007.Kramer et al. (1959) reported 0.3% spores at Kansas. Kramer and Pady (1960) at Kansas, reported these spores more frequently during growing season. Dransfield (1966) in Samaru, reported these spores with 0.85% with maximum incidence in the air between September and November months. In Hong Kong, Turner (1900) recorded 0.2% spores.Kulkarni (1971) at Aurangabad, Reported 2.83% spores. Gaikwad (1974) at Ahmednagar, reported 9.38%; Kamal and Singh (1975) also reported two species of *Helminthosporium* at Gorakhpur.Pande (1976) ,tilak and Bhalke (19780, Verma (1979), Shastri (19810, Saibaba (1982), Patil (1983), Bhagwan (1983), Venugopalachari (1986), Ramakrishna Reddy (1987), Minhaj (1988), Meghraj (1989), Vaidya (1900), Ahuja (1992), Patil (1992), Zahid (1994),Thite (1998) and Pawar (1998),Tuljapurkar (2000) and Garje (2000) also encountered these spores from different fields in this region.Dhimddhime (1999) reported these spores from airspora at Aurangabad. Mali (2002) and Banswadkar (2002) also reported these spores at Kada and Udgirrespectively.Gopan (2004) and Pathare (2005) reported these spores over Sunflower fields at Beed and Kada respectively.

*Helminthosporium*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 *Helminthosporium*are facultative pathogen of soil, plants.*Helminthosporium* is mostly parasitic and saprophytic forms, being liberated from infected wood stored in forest, lumber yards and sawmill compounds. 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 proned, 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:

Aher, S.K., Thite S.V. &Pande B.N. (2002) . Fungal airspora of a groundnut field. Eco, Env. & Cons, 8: 283 -288

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

Pawar, S.R. &Ahuja, S.R. (1988), Prevalence of *Alternaria*spores in the Atmosphereover groundnutfields.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 &Hugelet 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

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)

Kamal and Singh,N.P. 1975.Fungal airspora over cowpea and maize Fields at Gorakhpur.Proc.Nat.Conf. Acad.Sci. India 45:53-60

Banswadkar, V. R.2000 .Airspora over oil seed crops.Ph. D.Thesis, Dr.B. A, M. University Aurangabad.

Tilak,S.T. 1998). A text book of Aerobiology (Biology of air borne organism). Edited by Dr. J.G. Vaidya.SatyajeetPrakshan Pune

Pathare G.M., V.P.Mali and B.N. Pande (2012),Atmospheric Mycoflora Over Sunflower Fields at Kada (M.S.)India Bionano Frontier Special Issue: 162-164.Garje,P.M. (2002).Studies in Extramural Environmental Bipollution.Ph. D. thesis Dr. B. A. M. University Aurangabad.

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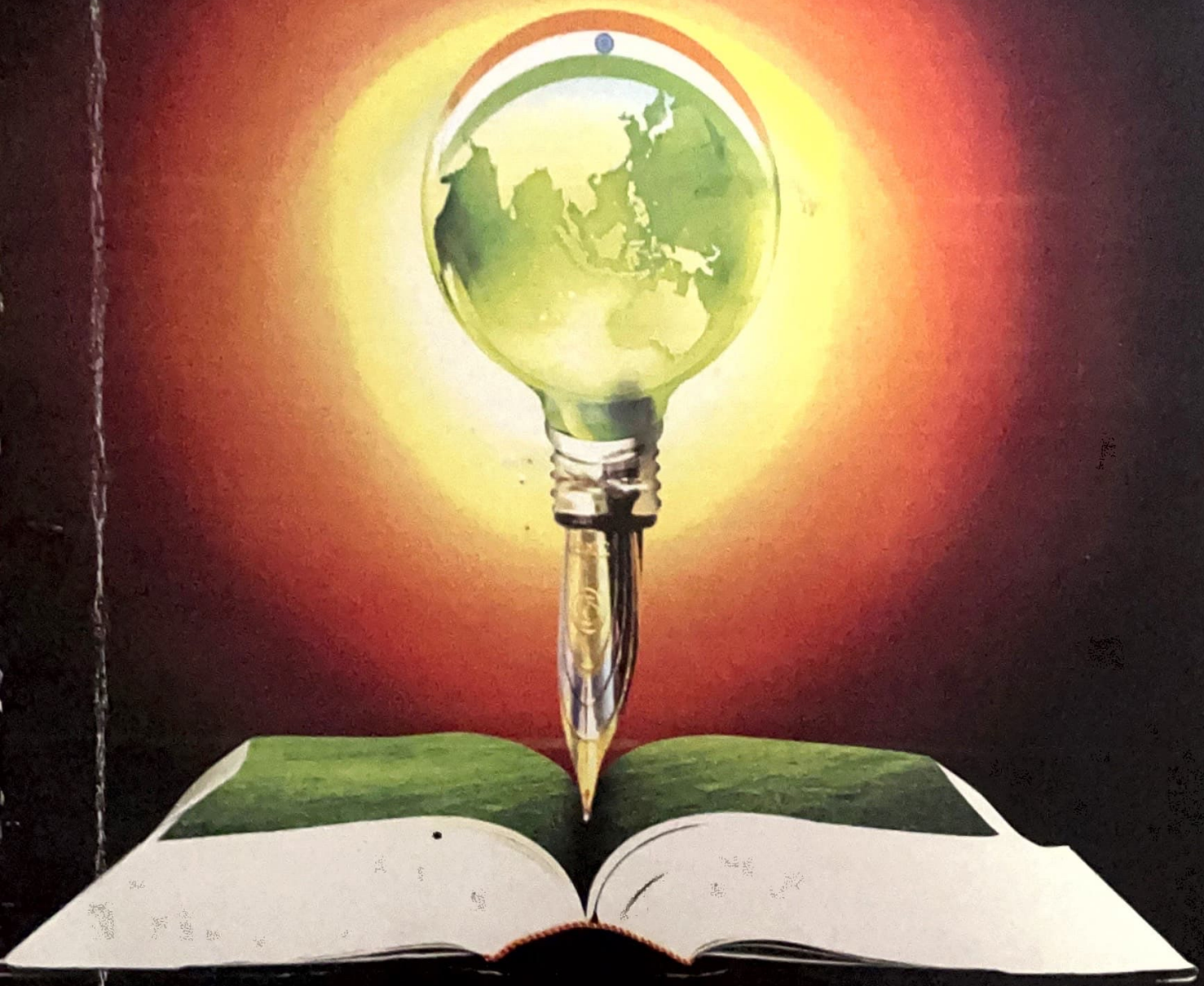

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Effects Of Plant Powders On Spore Germination, Growth And Sporulation Of Aspergillus Flavus Link Ex Fr.

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ABSTRACT

During the present studies, the Aspergillusflavus Link ex Fr. Isolated from the seeds of Cotton(Gossypiumhirsutum L.), Ground (Arachis hypogea L.) nut and Maize (Zea mays L.) were grown separately on Glucose Nitrate medium (GN medium) supplemented with one gram of root, Shoot and leaf powders of seven different plants at room temperature. The spore germination was studied after twenty four hours of incubation period. The growth in terms of dry mycelial weight and sporulation was studied after seven days of incubation period. The GN medium without supplementation of root, shoot and leaf powders served as control. Powder of Holarrhenaantidysentrica Wall, Plumbagozeylanica L., Wrightiatrinctoria (R.Br.) and MucanaPuriens (L.) DC. Were found to be inhibitory for the growth of Aflatoxin producing fungi.

INTRODUCTION

It Is observed fact that seeds of different crops showed association of seed mycoflora (Panachal,) 1984; Khairnar, 1987; Bhikane, 1988; Waghmare,1996; Bodke et al., 2005; Kagne R.M., 2005; Khairnar and Gambir, 1985 and Aglave, 2003). It is also observed form theliterature that good number of species of Aspergillus have been isolated and recorded from the seeds of different crops. The seed borne fungi of many crops have been found interesting in affecting the quality and seed of different crops. The seed borne fungi are known to produce poisonous substances called mycotoxins as secondary metabolites on variety of agricultural commodities that became poisonous, elicit a toxic response known as mycotoxicoses when food and feed containing them is eaten by human beings (Manoharachari, 1986). The genus Aspergillus with its different species is known to attack variety of seeds in the fields. In the area of Marathwada the crops of Cotton, Groundnut and Maize are badly affected by Aspergillus species.

In the recent times seed plants have emerged as an important antimicrobial agents and antifungal agents. In the present study potentialities of certain angiosperm plants in prevent

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Biodiversity of Aquatic Macrophytes of a Sindhphana River of Beed dist.

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Abstract:

The pattern of distribution of aquatic Macrophytes in depending on the chemistry of water. These aquatic macrophytes are important for maintaining ecological balance. This article reveals that aquatic macrophytes diversity in the Sindhphana river in Beed district (Maharashtra). The total of 42 different macrophytes were recorded during the course of study from different sites in river. The present study deals with the macrophytes biodiversity of river during "5th July 2018 to 31st July 2019". 42 species were recorded which includes free floating, submerged, rooted floating and emergent species, such as Eichornia, Crassipes, Vallisneria Spirals, Ceratophyllumdemursum, Hydrilla Verticillata Ipomoea aquatica.The plant density and abundance depend upon season and locality.

Keyword: Aquatic, Macrophytes, Sindphana, Biodiversity.

Introduction:

The importance of aquatic macrophytes orhydrophytes, is the key of biological quantity elements in the assessment of ecological status of running water. The aquatic species depends on the water carry out its vital functions and is constituent of aquatic plant life. And most important natural resource. The aquatic plants are important component of aquatic ecosystem as they participate in natural purification of water and mainly act as primary producer. Aquatic macrophytes play a vital role in healthy ecosystem. These plants, provide a substrate for algae and shelter for many invertebrates. Aquatic macrophytes are also respond to the changes in water quality and have been used as indicator of pollution in several cases. (Westtake, 1881 and Best, 1982). The marshy plants form the best breeding ground for aquatic Birds and Amphibians.

There are certain macrophytes Which are not hydrophytes but mostly prefer the river habitat. Some macrophytes grow in other habitats but mostly prefer river beds. The macrophytes, particularly shrubs and trees provide shelter for the birds.

During the last few decades considerable studies on aquatic macrophytes from different fresh water bodies of India and abroad have carried out by researchers like.Mirashi (1954), Sen and Chatterjee (1959), Subramanyam (1962), Vyas (1964), Unni(1971), Crowder et. al. Zutshi et. al. (1980), Billore and Vyas (1981), Kodarkar (1996), Thangadurai (2004), Bhaumic et. al. (2004), Ghavzan et. al. (2006), Devi and Sharma (2007), Dhote and Dikxit (2007), Kar and Barbhuiya (2007), Adhikari (2008), Chandra et. al. (2008), Deshkar (2008), Mishra and Narain (2010), Muttulingam et.al. (2010), Udaikumar and Ajithadass(2010), Tijare (2011), Nath (2012), Pawar and Sonwane (2012), Rohankar et. al. (2012), Parshuramkar et. al. (2013). Sindhphana is minor tributary of Godavari river that originates around the Chinchali hill in Patoda taluka, Beed district, Maharashtra. Crossing from West to East. Coordinates is 19° 23'N 76°26'E. Its dranaige basin covers nearly 80% of Beed district, making it the most important river within the district. The Majalgaon Dam, constructed across the river, irrigates 9,3885 hectores of land in Beed, Parbhani, and Nanded district, its elevaton is 407 meters (1335 ft), and its length is 122

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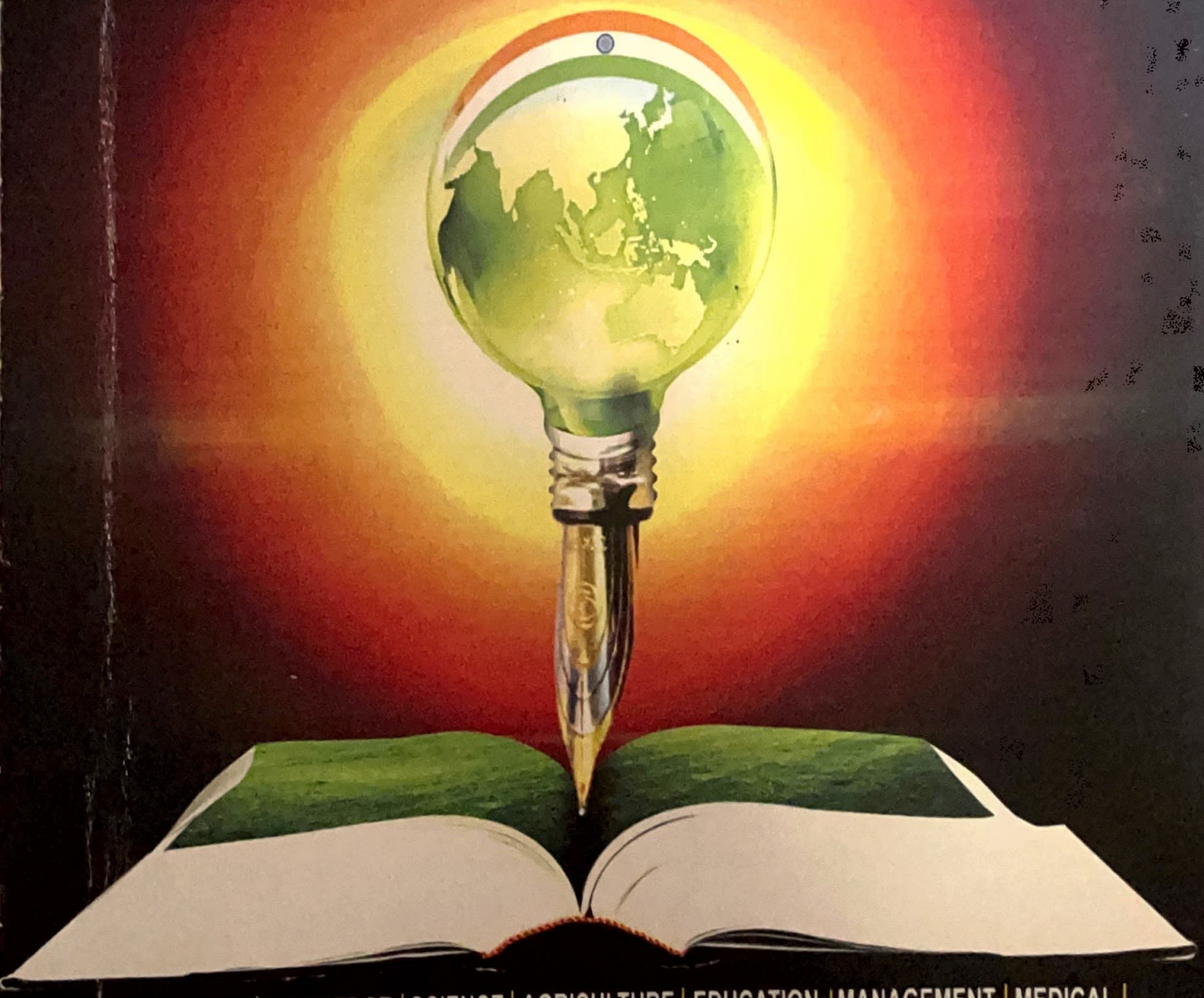

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Mineral Composition Of Dalbergia Sissoo Roxb.Infected With Erysiphe Hedwg.Ex. Fr.

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ABSTRACT :

The mineral composition of the leaves of DalbergiasissooRoxb. Infected with ErysipheHedwg. Ex. Fr. was studied. The Pathogen stimulated accumulation of mineral elements like Calcium, Copper, Iron and Manganese. However the contents of nitrogen and phosphorus decreased, while magnesium content remained unaffected in infected leaves.

KEYWORDS :DalbergiasissooRoxb, ErysipheHedwg. Fr.

The DalbergiasissooRoxb.Is well known for high quality wood, commonly used for the construction of house and furniture. During winter, the plant gets affected with powdery mildew caused by Erysiphe, Which cause defoliaton and loss of wood wealth. An attempt was made during present investigation to study the changes in mineral composition in the leaves of Dalbergiasissoo infected with ErysipheHedwg. Ex Fr.

The infected and healthy leaves of Dalbergiasissoo were collected form the college campus during November 2018. Five Hundred mg of dried leaf samples were acid digested (Tothet al, 1948) and the elements viz. Potassium, Calcium, Copper and Magnesium were estimated using Atomic Absorption Spectrophotometer model Parkin Elmer 3030. The contents of nitrogen (N) and Phosphorus (P) were determined following Jackson (1971).

The Potassium content in infected leaves increased to 1.60% which may be due to its transport form healthy to infected site (Roberts and Jensen, 1970). Ghorpade and Joshi (1981) reported increased

Potassium content in sugarcane infected with sugarcane mosaic virus. There was also increase in Calcium content from 0.75 to 1.19 ppm due to increase in the Iron content as also experienced by Philip and Devadath (1981) in rice affected by bacterial blight. Manganese and Copper contents also enhanced in the infected leaves. Bamberg (1976) showed increased manganese content in potato infected by virus. The nitrogen and Phosphorus content was less in infected leaves in comparison to healthy leaves.

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"Recent Trends in Material Science and Nanotechnology"

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The solution of differential equation by means of someIntegral transforms

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ABSTRACT

In this paper we discusses connection between some integral transform that is relationship between Laplace, Tarig and Elzaki transforms. We solve ordinary differential equations of first and second order with constant and variable coefficients, using Laplace, Tarig,and Elzaki transforms.

Key Words: Elzaki transforms, Tarigtransforms,Laplacetransforms, differential equation.

Introduction: The differential equations have played a central role in every aspects of applied mathematics for very long time and with the advent of the computer their importance has increased further. The integral transform method is an efficient method to solve differential equations, system of differential equations, integral equations, system of integral equations and so on A lot of work has been done on the theory and applications of transforms such as Laplace-Fourier-Melin- and Sumudu, to name a new, very little on the Elzaki and Tarig transforms.

Defination :The Laplace is defined by following formula

$$L[f(t)] = \int_0^\infty e^{-st} f(t)\, dt \quad , \ Re(s) \rangle 0 \quad \text{----------(1)}$$

While Tarig transformis defined by the following formula

$$T[f(t)] = \frac{1}{v}\int_0^\infty f(t)\, e^{t/v^2} dt \quad , \ v \neq 0 \quad \text{---------(2)}$$

The sufficient conditions for the existence of Tarig transform are that f(t) be piecewise continuous and of exponential order.This means that the Tarig transform may or may not exist.

And Elzaki transform is defined by the following formula

$$T[v] = E[f(t),v] = v\int_0^\infty f(t) e^{-t/v^2} dt \quad , \ v \in [-k_1,k_2] \quad \text{----------(3)}$$

Or

$$T[v] = E[f(t)] = v^2\int_0^\infty f(vt) e^{-t} dt \quad , \ k_1,k_2>0 \quad \text{----------(4)}$$

The sufficient conditions for the existence of the Elzaki transform are that of exponential order. This means that the Elzaki transform may or may not exist.

Theorem 1 : Let

$$F(t) \in A = \{ f(t) \mid \exists\ M,k_1,k_2>0, \text{such that } |f(t)| < Me^{\frac{r}{kj}}, \ \text{if } t \in (-1)^{j\times}[0,\infty) \}$$

With Laplace transform F(s).

Then (i) Tarig transform G(v)of f(t) is given by

$$G(v) = \frac{1}{v} F\left(\frac{1}{v2}\right) \quad \text{----------(−5)Type equation here.}$$

(ii)Elzaki transform T(v) of f(t) is given by

$$T(v) = v\, F\left(\frac{1}{v}\right) \quad \text{----------(6)}$$

Note : We have G(1) = F(1) = T(1) so that both Tarig, Elzaki and Laplace transforms must coincide at v = s = 1.–

Tarig transform of Derivatives :

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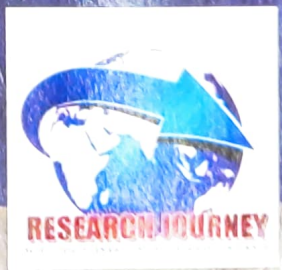

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Effect Cisplatin On Glycogen Contents In Freshwater Bivalve, *Lamellidens Marginalismarginalisin Godavari River*

Bapu Khaire, Sandip Anarse, S. D. Ovhal
Anandro Dhonde College Kada.Tal-Ashti Dist-Beed (M.S) India- 414203 .

ABSTRACT

The present paper deals with the effect Cisplatin on glycogen contents in freshwater bivalve, lamellidens marginalis.Samples were collected from the Godavari river at Pravara Sangam district Ahmednagar, Maharashtra.Biochemical estimation of cisplatin induced nephrotoxicity well known side effects in freshwaterbivalve Lamellidens marginaliswere exposed to acute dose of cisplatin one of the ingredients of anticancer drug.Acute treatment of 24 and 96 hours and chronic treatment 7, 14 and 21 days. Tissues such as the mantle, gills, foot, digestive glands testis, ovaries, and whole body were separated, then dried in the ovenand their glycogen contents were estimated. Except gills, cisplatin reduced the glycogen contents from most of the tissues of lamellidens marginalis. Overall reduction in the glycogen depot was observed. Themost affected tissue in which the great depletion observed was digestive glands.

Key words: Glycogen,Cisplatin , *lamellidens marginalis;*

INTRODUCTION

Godavari is second longest river in the country measuring 1465Km long and flows from western to southern 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 brings adverse effects on diversity of aquatic organisms. 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). Bivalves occur in various habitats. Many of them are proven food for aquatic animals and man. These are also been used to produce pearls. Shells of some of the bivalves are used for making buttons (Subba Rao &Dey,1989). The freshwater bivalves also play a significant role in aquatic ecosystems. These are used in monitoring programmes due to their ability to concentrate pollutants to several orders of magnitude above ambient levels in sea water.

Biochemical modulation is a special type of combination chemotherapy which aims to selectively improve the therapeutic index by increasing the antitumor effect and protecting against toxic side effects.Cisplatin are the anticancer drug induced nephrotoxicity is well-known side effect which is excess dose are harmful or injurious molluscs. The evaluation of LC50 /10 concentrations of anticancer drugs or toxicant are 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 are affect the bivalve or increase the death rate because the depleted the physiological ions and glycogen and other content.

MATERIALS AND METHODS

Attempts will be made in this study to select fresh water bivalves, *Lamellidens marginalis.*Thesewere collected from Godavari River at Pravara Sangam which is about at the distance of 65 kms away from Ahmednagarr City of Maharashtra state. First they are made acclimatized to laboratory conditions and then washed.The cleaned animals were then kept for depuration for 12hrs in laboratory conditions under constant aeration. For biochemical analysis, bivalves were dissected and soft body tissues like mantle, gill, foot, digestive glands ovaries, testis, whole body etc. were removed. 100mg of each wet tissues were taken for biochemical analysis. Glycogen was determined by the anthronreagent.Impact of Cisplatin on glycogen content of *Lamellidens marginalis* were calculated after acute as well as chronic dose ofexposure.

a) Acute exposure to Cisplatin:

The healthy bivalves, *Lamellidens marginalis*were exposed to acute treatment (LC50/10) of Cisplatin (1.884 PPM).

b) Chronic exposure to Cisplatin:

After the acclimatization, bivalves, *Lamellidens marginalis* were divided into two groups with equal numbers of animals.The acclimatized *Lamellidens marginalis*were exposed to LC50/10 concentration of Cisplatin(1.884 PPM) up to 21 days.During exposure periods, no special food was provided and the water with required concentrationof Cisplatin was changed daily in the experimentalset and also from control. Control set was providedwith dechlorinated water only without addition of any antibiotics.After 24 and 96 hours of acute and after 7, 14and 21 days of chronic

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Biodiversity and It's Conservation for Sustainable Development

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Frequence Of Incidence Of Malarial Parasite In Beed District, Marathwada Region (M.S.) India.

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ABSTRACT

During the period of one year 143735 blood samples were examined out of which 896 were positive for malarial infection. The man harbored two species of Malaria. The frequency of incidence is analyses and discussed.

Key words: Malaria, Beed.

INTRODUCTION

Several species of Malaria cause extensive clinical and pathological damage of human being, it is because of this reason Malaria having attracted the attention of many workers. The study of ultrastructure of Malaria has made this group one of the immense biological and medical importance. In view of this the present study was initiated to record the frequency of Malaria in Beeddivision.

MATERIAL AND METHODS

The techniques used during the present study are from the manual for laboratory technician published by Directorate General of Health Services (1985), which is a modification of the manual of basic techniques for Health Laboratory published by WHO (1980), it is revised version of an earlier manual by Etienne Levy Lambert (1974).

The material for the study of Malaria of Man was obtained from different places, talukas in around the Beed District.

OBSERVATION AND DISCUSSION

For a period of October 2013 to September 2014 a total number of 143735 samples were examined for malarial infections, out of this 896 were positive, the percentage prevalence being about 0.64%.

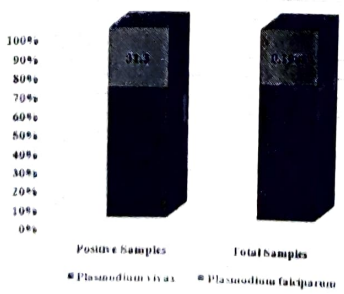
A month-wise analysis of the prevalence showed that the maximum prevalence was during September (36.81%) followed by October (10.42%) and November (0.985%). The lowest prevalence was in March (0.335%) followed by June (0.321%).

The pattern of prevalence suggests that the maximum was soon after monsoon rains, while during the rest of the year it was relatively lower. The details of the number of samples examined and the percentage of frequency is shown in Table – 1.

Table – 1.**Showing frequency of the Malarial species in Man in Beed District**

Species	Positive Samples	Total Samples
Plasmodium vivax	70.09	0.4963
Plasmodium falciparum	31.30	0.1988

Graphical representation Showing frequence of the Malarial Species in Man in Beed District



Reporting a New Species of Cestode, *Uncibilocularis Dasyatisii* Sp. Nov. From Marine Water Fish *Dasyatis Walga* in Ratnagiri District (M.S.) India

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ABSTRACT *Fish is economically beneficial to human population and fish has good market value and is consume by many people. Fishes are largely infected by Cestodes (Tapeworms), which causes commercial losses in both reasons the aquaculture, fishery industries and may have human health, as well as socio-economic implication both in developing and developed countries. The present paper deals with the systematics study of a Cestode parasite a new species Uncibilocularis dasyatisii from intestine of Dasyatis walga.Uncibilocularis dasyatisii differ from all known species of the genus is having scolex almost square in shape with tubercle on inner prong of hooks, presence of neck, mature segment broader than long, testes 165-170 in number, cirrus pouch is in the middle of the segment, ovary bilobed marginal in position, dumb-bell shaped and vitellaria follicular.*

Keywords: *Cestode, Dasyatisii walga , Marine water,Uncibilocularis dasyatisii.*

INTRODUCTION

The genus *Uncibilocularis* was established by Southwell (1925) with its type species *U. trygonis* (Shipley et Hornell 1906), as *prosthecobothriumtrygonis* in *Trygonwalga* and *Trygonsephen* at Ceylon. Southwell (1927) reported *U. mandley* from *Hemigaleusbalfouri* at Ceylon but Baer and Euzet (1962) have made this species as new genus *Magalanochos* with *M. mandleyi* as its type species. Subhapradha (1955) reported *U.indicaChiloscyllliumgriseum* in India. Deshmukh and Shinde (1975) reported *U. aurangabadensis* from *stromateus* sp. In. India. Shinde and Chincholikar (1975) described *U. ratnagiriensis* and *U. southwelli* from *Trygon* sp. in India. Later on Deshmukh (1979) reported. Three new species of this genus are *U. thapari*from *Trygonsephen,U. shindei* from *Trygonzugei* and *U. somnathii* from pteroplatamicrura at veraval (West Coast of India). Later on in 1981 Jadhav and Shinde reported *U. veravalensis* from a marine fish, *Trygonzugei* at veraval. In 1984 Jadhav, et.al.Added *U. bombayensis*, from *Trygonsephen* at Bombay.Jadhav et al in 1989 described two new species of the same genus *U. indiana* from *Trygonzugei* at Ratnagiri and *U. shashtri* from *Chiloscyllium*griseum at Ratnagiri (M.S.) in India Later on Pawar et.al., (2005) reported *U ranuae* from *Trygonzugei* (Muller and Henle, 1841) at Bhagwati, Ratnagiri (west Coast of India) Pathan et.al., 2007 made a review of the genus *Uncibilocularis*. Later on four new species are added in 2008 jenaes&cairaare *U.loreni, U.okei, U.squireorum,&U.sidocymba*. In 2011 Pathan et.al.Described *U.osmanabadensis.*

The present communication deals with *Uncibilocularisdasyatisii*Sp.Nov. from the spiral valve of *DasyatisWalga (*Muller and Henle, 1841) from West Coast of Maharashtra, India in the period of June. 2009 to May. 2011.

MATERIAL AND METHODS

Cestode parasites were collected from the intestine of *Dasyatis walga* at Burundi Ratnagiri district (M.S.) India during the period of June. 2009 to May. 2011. These cestodes preserved in hot 4% formalin and stained with Harris haematoxylin, passed through various alcoholic grades, cleared in xylene, mounted in D.P.X. and drawings are made with the aid of camera lucida. All measurements are given in millimeters. The identification is made with the help of Systema Helminthum.

DESCRIPTION

Fifteen specimens of the cestode parasites were collected from the intestine *of Dasyatis walga* (Muller and Henle, 1841) at Burundi Ratnagiri district(West coast of Maharashtra state India) in the period of June. 2009 to May. 2011.

These cestodes were flattened preserved in 4% formalin, stain with Harris haematoxylin passed through the various alcoholic grades, cleared in xylene, mounted in DPX and whole mount slides were prepared for further anatomical studies. Sketches are drawn with the help of Camera Lucida and all

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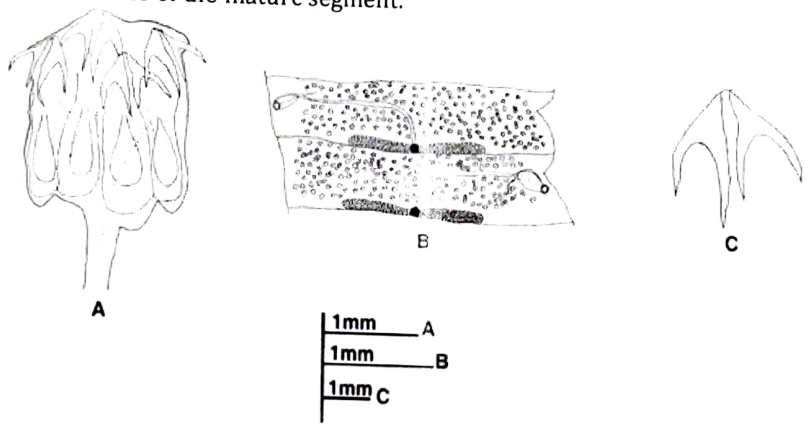
measurements are in millimeters.The worms are long, with scolex and mature segment scolex is squarish in shape with bothridia which bears, bifurcated, marginal hooks and scolex measures 4.74 (4.53-4.95) in length and 3.71 (3.62-3.81) in width the bothria measures 2.78 (2.74-2.82) in length and 0.99 (0.95-1.03) in width. Each bothridia is divided into two oval lobular measures 0.271 (0.218-0.32) in length and 0.27 (0.24-0.31) in width. Accessory suckers are absent. Each *bothridium* bears a pair of bifurcate hook and measures 3.124 (3.359-2.890) in length and 1.83 (2.18-1.48) in width. The inner prong of the hook is larger than the outer prongs the powerful inner longitudinal muscles bundles are attached to each bothridium becomes seperated from each other posteriorly and disappear completely in mature segment. The scolex issquarish, followed by a long neck, scolex measure 1.964 (1.907-2.022) in length and 0.6667 (0.572-0.763) in width. The mature segment are broader than long and measures 1.399 (1.38-1.419) in length and 10.5 (10.4-10.6) in width. The testes are oval in shape, pre-ovarian and 165-170 in numbers and measures 0.049 (0.033-0.066) in length and 0.033 (0.033-0.033) in width. The cirrus pouch is large, oval in shape measures 0.808 (0.792-0.825) in length and 0.379 (0.330-4.29) in width. The cirrus is thin, straight measure 0.808 (0.792-0.825) in length and 0.0495 (0.033-0.066) in width. The cirrus and vagina opens through a common pore which is known as genital pore. The genital pores are small, oval marginal irregularly and measures 0.181 (0.165-0.198) in length and 0.099 (0.066-0.132) in width. Vagina starts from the common genital pores. Vagina is a long narrow tube, posterior to the cirrus pouch. The ovary is bilobed, elongated dumb-bell shaped measures 0.313 (0.297-0.330) in length and 1.501 (1.485-1.158) in width. The vitellaria are granular placed at the both lateral sides of the mature segment.



A) Scolex B) Mature Proglottid C) Hook

Fig. ***Uncibilocularis dasyatisii*** **Sp.Nov.**

DISCUSSION

1. The worm under discussion is having scolex almost square in shape with tubercle on inner prong of hooks, presence of neck, mature segment broader than long, testes 165-170 in number, cirrus pouch is in the middle of the segment, ovary bilobed marginal in position, dumb-bell shaped and vitellaria follicular.The present worm differ *U. trygonis*Southwell 1925, which is having scolex square, testes 30-40 in number and vesicle absent.
2. The present cestode differs from *U. indica*Subhapradha, 1955 in the shape of scolex narrow anteriorly and broad posteriorly, accessory suckers present, absence of neck, testes 56-60 in numbers and genital pores middle of the segments.
3. The present parasite differs from U. *aurangabadensis*, Deshmukh and Shinde, 1975, with the scolex quadrangular in shape accessory suckers are present, tubercle on outer prong of hooks absence of neck and testes 75 in numbers.
4. The present worm resembles *U. ratnagiriensis*, Shinde and Chincholikar, 1975 in the scolex is square and testes 114 in number.
5. The present worm differs from *U. southwelli*Shinde and Chincholikar 1976, in the tubercle present on outer prong of hooks, testes 220-230 in numbers and cirrus pouch placed at the middle of the segments

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This certificate confirms that **"Sandeep A Anarse"** has published manuscript titled **"A new species of *Oncodiscus jadhavii* sp. nov. in *Trygon sephen*, from Shrivardhan, Alibaug at Raigad district, West cost of Maharashtra, India"**.

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A new species of *Oncodiscus jadhavii* sp. nov. in *Trygon sephen*, from Shrivardhan, Alibaug at Raigad district, West cost of Maharashtra, India

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Abstract
The worm under discussion is having scolex flower shaped and absence of the accessory suckers, presence of hooks, mature segments longer than broad, testes 45-50 in number, cirrus pouch is in the middle of the segment, common genital pore sub-marginal, irregularly alternate, ovary, U shaped and vitellaria granular comes closer to *Oncodiscus saurus, O. saurus, O. fimbriatus, O. waltairensis, O. maharasht.*

Keywords: *Oncodiscus jadhavii* sp. nov., intestine., *Trygon sephen*, Shrivardhan Alibaug, Maharashtra

Introduction
Yamaguti, 1934 erected the genus *Oncodiscus* for a new species *O. saurus* from the small intestine of *Saurida argyro* sephanes (Synodontidae) from the sea of Japan and later (1952) [14] from the same host in East China sea and Tosa Bay. Subhapradha (1955) described *O. fimbriatus* from *S. tumbil* from Madras coast, Bay of Bengal, India and later Devi (1975) reported the same species from the same host and locality. The present form deals with description of a new species as *Oncodiscus jadhavii* sp. nov.

Material and Method
Twenty five specimens of the cestode parasites were collected from the intestine of *Trygon sephen*. These parasites were taken for taxonomical studies. These cestodes were flattened in 4% formalin then washed in distilled water and passed the dehydrated different alcoholic grades stained with Harris haematoxyline or Borax carmine slides were mounted, under D.P.X and observed under microscope for identification.

Description
The scolex is large, flower shape, apical disc is petal like in the anterior end. The scolex measures, 8.788 (8.749-8.827) in length and 8.862 (5.625-12.10) in width. The apical disc armed with hooks, arranged along the margin of the apical disc and measures 0.117(0.078-0.156) in length and 0.078(0.078-0.078) in width.
The bothria with crenulated border and measures 7.42 (7.03-7.812) in length and 1.874(1.76-1.95) in width Accessory suckers are absent. The hooks measured 0.117 (0.078-0.156) in length and 0.078(0.078-0.078) in width. Neck absent. The mature segments are medium in size longer than broad rectangular in shape and measures 13.16 (12.56-13.67) in length and 6.702(6.875-6.953) in width. The testes are oval in shape, situated in the anterior half of segment 45-50 in numbers and measures 0.606(0.312
-0.390) in length and 0.273(0.234-0.312) in width. The cirrus pouch is large, oval in shape and measure 1.91 (1.875-1.953) in length and 0.898 (0.859-0.937) in width and situated in the middle of the segment. The cirrus is thin straight tube and measures 2.539 (2.5-2.57) in length and 0.117(0.78-0.15) in width, the cirrus and vagina opens through a common pore which is known as genital pore.
The genital pores are small, sub marginal middle of segment, irregularly alternate and measures 0.742(0.703-0.781) in length and 0.594 (0.078-0.156) in width. Vagina starts from the common genital pore, it is long narrow tube, posterior to cirrus pouch, takes a curve and forms receptacle seminis and measures 4.605(4.531-4.68) in length and 0.117 (0.078-0.156)in width. The ootype which is small rounded and measures 0.273 (0.234-0.312) in length and 0.273(0.234-0.312) in width. The ovary is large and compact situated in posterior end of the segment and measures, 2.465 (2.421-2.5) in length and 4.33(4.296-4.375) in width. The vitellaria are granular in 4-5 rows arranged at lateral sides of the segment.

Type species	***Oncodiscus jadhavii* sp. nov.**
Host	*Trygon Sephen*
Habitat	Intestine
Locality	Shrivardhan, Alibaug at Raigad district (West cost of Maharashtra, India)
Period of Collection	June2009 to May2011

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Effect of biochemical alterations in DNA content of gill and gonad tissues of *Lamellidens marginalis* in Godavari River due to 5-fluorouracil toxicity

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Abstract
The present research paper deals with the study of the effect of biochemical alterations in DNA content of gill and gonad tissues of the freshwater bivalve *Lamellidens marginalis*. Samples were collected from the Godavari river at Pravara Sangam district Ahmednagar, Maharashtra. The study of DNA contents of gill and gonad tissues in *L. marginalis* shows significant decrease in Gill from 4.38 ±0.145 to 3.61 ± 0.246 for 15th day and on 30th day, there is significant decrease from 3.61 ± 0.451 to 2.86 ± 0.351 whereas Gonad shows significant decrease from 3.87 ±0.246 to 3.21 ±0.126on 15th days and on 30th days there is a significant decrease from 3.54 ±0.369 to 2.52 ±0.214, this is due to toxicity of 5- Fluorouracil and mobilization of tissue in the metabolism.

Keywords: DNA content, *Lamellidens marginalis*, 5- Fluorouracil

Introduction
Godavari River is an important river in India. It is second longest river in the country measuring 1465Km long and flows from western to southern India. Pravara Sangam is located 65 kms north of Ahmednagar. In last few decades increase in population density, heavy industrialization and agricultural activities have resulted in more and more waste entering in river. Contamination of fresh water with a wide range of pollutants has become a matter of concern over last few decades. (Vutukuru, 2005) [9]. Heavy metals have devastating effects on ecological balance environment and diversity of aquatic organisms. In order to evaluate the adverse effect of the pollutants on aquatic organisms, there is a worldwide trends to complement physical and chemical parameters with bio markers in aquatic pollution monitoring. (Abdel *et al*. 2012) [1]. Bivalves are used in monitoring programmes due to their ability to concentrate pollutants to several orders of magnitude above ambient levels in sea water. Biochemical modulation is a special type of combination chemotherapy which aims to selectively improve the therapeutic index by increasing the antitumor effect and protecting against toxic side effects. In the past decade a number of biochemical modulation approaches have been tested to improve the activity of 5-fluorouracil. 5FU itself has only modest anticancer activity but has been shown to be a very attractive target for biochemical modulation. The main conclusion is that properly applied biochemical modulation schedules may lead to successful use in the clinic (Peter, 1991) [5]. Excess of one of the deoxyribonucleotide precursors increases the frequency of miscorporation of that deoxyribonucleotide and inhibits the proof reading mechanisms. Increase in the sensitivity to alkylating DNA damaging agents has been observed when the deoxyribonucleotide pools are unbalanced (Phear *et al*. 1987) [6].

It has been observed that heavy metals can cause biochemical alterations such as inhibition of enzymes, metabolic disorder, genetic damage, hypertension and cancer. (Underwood, 1971; Lucky and Venugopal, 1977) [8, 3]. Effects of heavy metals on gills showed lamellar degeneration, epithelial lifting and necrotic changes in epithelial cells. The gills of heavy metal expose group show some epithelial lesions when exposed to heavy metals. The nephrotoxicity, ototoxicity and neurotoxicity of 5- fluorouracil may be due to reactions with cellular molecules other than DNA. The rate of replicative DNA synthesis was unexpectedly increased and the deoxyribonucleotide pools unbalanced (Skog, *et al.,* 1994) [7].

Materials and Methods
Attempts will be made in this study to select Fresh water bivalves, *Lamellidens marginalis* were collected from Godavari river at Pravara Sangam which is about at the distance of 65 kms away from Ahmednagarr City of Maharashtra state. First they are made acclimatized to laboratory conditions and they are washed. The water in the aquarium was changed regularly after every 24 hours. After the acclimatization, bivalves, *Lamellidens marginalis* were divided into two groups with equal numbers of animals. They were kept in separate aquarium for 15 and 30 days. Out of remaining one groups treated by chronic Concentration ($LC_{50/10}$ value of 96 hrs.) of 5-flurouracil (3.716 ppm) on 15th and 30th day of exposure, bivalves from each experimental group were sacrificed and gills, and gonads, were removed. These tissues were dried in oven at 75 ^{0}C to 80 ^{0}C till constant weight was obtained and blended into dry powder. These powders were used for the estimation of biochemical components of DNA to observe Efficacy of 5- fluorouracil. All the precautions recommended by ATSDR, 2003 to minimize risks of sample contamination were followed during collection and treatment.

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Seasonal changes in the protein content of *Corbicula regularis* from Jayakwadi dam, Paithan dist – Aurangabad, (M.S.) India

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Abstract
The current study was achieved by measure the total protein concentrations on variations of ecological conditions or impact of natural conditions on various seasons in the protein content in soft body tissues of Corbicula Regularis of were collected from Jayakwadi dam, at Aurangabad district was observed during different seasons. It was variations of the climatic change in environment. Fluctuation of the protein content on its impact on various types of tissues, such as like, Mantle, Hepatopancreas, Gonad and foot. The Protein content maximum found in gonads tissues throughout all the three seasons, whereas mantle shows minimum values of protein. There are great variations in the values of protein during different seasons in ecological conditions.

Keywords: *corbicula regularis*, protein, different seasons, jayakwadi dam

Introduction

Mollusca are very important for many reasons. Apart from their commercial value for use as a human food stuff and in the feeding of several crustaceans. (Ekinand Bashan, 2010) The aquatic ecosystem of freshwater bivalve mollusks are hermaphrodite filter feeder animals on primary stage of food chains, hence they notably influences the organization and fluctuating of ecosystems. It is the efficient role in transformation of energy in food chains coupled with their sessile made of life. Seasonal variation in biochemical composition have been reported many workers. Gabbott and Bayne (1973) [7] determined seasonal changes in biochemical composition of adductor muscle, mantle, siphon and foot in Mytilus edulis from India. Proteins in an important organic constituent which play important role in metabolism in organism and metabolic activity. Modulation is a special type of combination chemotherapy which aims to selectively improve the therapeutic index by increasing the antitumour effect and protecting against toxic side effects. The main conclusion is that properly applied biochemical modulation schedules may lead to successful use in the clinic (Peter, 1991) [2]. Proteins are involved in anchor role in almost all physiological and metabolic activity. They extremely versatile in their action and interaction during metabolism of protein, amino acids, enzymes and co enzymes as a biological calatyst with the regulate the chemical or biochemical reaction in the body. The source of proteins all nutritious plants of vegetables, eggs and fruits. Proteins are useful and important role of tissue repair and action of drugs such drugs heavy metals lead, calcium magnesium in aquatic medium. (Harper 1977) [3].

Materials and Methods

The aquatic fauna of freshwater bivalve molluscs, *Corbicula Regularis* were collected from Jayakwadi dam which is about at the distance of 50 K.M. away from Aurangabad City of Maharashtra state., during monsoon (August to September), Winter (December to January) and Summer (April to May) over a period one year were selected for laboratory experiments. Immediately after bringing to laboratory, the shells of these bivalves were brushed and washed with fresh and clean water to remove algal biomass, mid and other waste material. The cleaned animals were then kept for depuration for 12hrs in laboratory conditions under constant aeration. For biochemical analysis, animals were dissected and soft body tissues like Matle, Hepatopancreas, Gonad and Foot tissues were removed. 100mg of each wet tissues were taken for biochemical analysis. Protein was determined by the method **proposed by Lowry's** *et al.* (1951) [9]. Using Bovine serum Albumin (BSA) as standard. The results are expressed as milligram content per 100 mg wet tissue. Triplicate values of each biochemical constituents were subjected for ststical **confirmation using student 't' test** (Dowdeswell, 1957) [1]. Standard deviatins were calculated during variations of seasons.

Method of protein Estimation

Total protein contents of the tissues were estimated by **Lowry's method** (Lowry *et. al.*, 1951) [9]. 10 mg of dry powder was homogenized in small amount of 10% TCA and the homogenate was diluted to 10 ml by 10% TCA. Then it was centrifuged at 3000 rpm for 15 minutes. The supernatant was removed which was used for ascorbic acid estimation. The protein precipitate at the bottom of centrifuged tubes was dissolved in 10 ml 1.0 N NaOH solution. 0.1 ml of this solution was taken test tube and 0.9 ml distilled water was added to **make one ml. 4.0 ml. freshly prepared Lowry's** 'C' and 0.5 ml **Folin phenol Ciocaltieu's** reagent were added in each test tube, the test tubes were incubated in dark at 37 ^{0}C for 30 minutes. The O. D. of blue colour developed was read at 530 nm. The blank was prepared in same way using 1ml distilled water instead of protein extract. The protein content in different tissues was calculated referring to standard graph prepared and is expressed in terms of mg protein/100 mg of dry tissue. The Bovine serum albumen was used as a standard.

Limnological Status of Imangaon Freshwater Reservoir of Asthi Tahsil, Beed District. (MS), India.

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Abstract : The present study deals with the physico-chemical investigation of the freshwater reservoir from Imangaon, Aasthi Tahsil of Beed district (M.S) India. The study was administered throughout the year 2013 to 2014 and 2014 to 2015 to analyze the monthly physico-chemical parameters includes Air temperature, water temperature, transparency, pH, free CO_2, total hardness, Alkalinity, chlorides and dissolved oxygen. The water is employed for irrigation of the sphere. The results discovered that each one the parameters are within the permissible limit and monthly variation was detected throughout the study period. As all parameters are within the acceptable limit, The monthly analysis over the period of two years suggests that the Imangaon Reservoir water is appropriate for drinking, agriculture, fish culture, and domestics functions.

IndexTerms -freshwater, reservoir, Imangaon, physico-chemical, parameters.

I. INTRODUCTION

The physicochemical analysis is that the prime thought to assess the standard of water for its best utilization like drinking, irrigation, fisheries, and industrial purpose and useful in understanding the complicated processes, an interaction between the environmental condition and biological processes within the water (Salve and Hiware. 2006). Pollution of water is measured by assessing the physiochemical Parameters of water (Ramachandra Mohan et al., 2014). Modernization and industrial enterprise in cities influence the standard of water directly or indirectly (Van Leeuwen CJ. 2013). The notable necessary physico-chemical parameters are transparency, dissolved oxygen, temperature, suspended solids and dissolved ions (Karr and Dudley, 1981). There are trends in developing countries to use waste matter effluent as fertilizer has gained abundant importance because it is taken into account a supply of organic matter and plant nutrients and is smart plant food (Riordan 1983). However, the usage of water by man for survival is as necessary as that of fish. Since 'good' water quality will manufacture healthier humans than one with 'poor' water quality. Limnological investigations of reservoirs are necessary to evaluate potential fish production and to supply information that might be helpful in fisheries developmental designing. Keeping these aspects in sight several limnological studies are carried out on reservoirs everywhere the country (CIFRI. 2000). individuals on the globe are below tremendous threat because of unwanted changes within the physical, chemical and biological characteristics of air, water, and soil. These are associated with animal and plants and eventually affecting that (Misra and Dinesh 1991). Industrial development (Either new or existing trade expansion) leads to the generation of industrial effluents, and if untreated results in water, sediment and soil pollution (Fakayode and Onianwa 2002, Fakayode 2005).

II. RESEARCH METHODOLOGY

2.1. Study Area:

During this study, Imangaon reservoirs were chosen from the Ashti Tehsil of Dist: Beed. (M.S). Water samples were collected on a monthly basis throughout 8 am to 11 am in the morning, from three different sampling sites of the reservoir and delivered to the laboratory with the assistance of airtight plastic containers of ten liters capability. Water samples were analyzed for numerous Physio-chemical parameters. (Kodarkar et al; 1998, Trivedy and Goel, 1984 and APHA, 1985).

2.2. Temperature (^{0}C):

The atmospherical temperature and water temperature was recorded by Centrifuge mercury-in-glass thermometer (Graduated from 0 ^{0}C to 110 ^{0}C).

2.3. pH scale (Hydrogen ion Concentration):

The water pH scale determined by field pH scale meter (Hanna –Model Champ).

2.4. Light Transparency (cms):

Light Transparency of water was measured by a Secchi disc.

2.5. Chlorides (mg/l):

Chlorides were determined by the method represented by Trivedi and Goel (1988).

2.6. Free carbon dioxide (mg/l):

Chlorides were titrated by the method described by Trivedi and Goel (1986).

2.7. Total Dissolved Solids (mg/l):

Total Dissolved Solids (TDS) and total suspended solids (TSS): the whole dissolved solids (TDS) were analyzed in the laboratory because the residue left after evaporation of the filtered water samples whereas suspended solids were analyzed by calculating the distinction between total solids and total dissolved solids (TSS= TS- TDS).

2.8. Total hardness (mg/l):

The total hardness was analyzed by using the standard technique as described by APHA (1992).

III. RESULTS AND DISCUSSION

3.1. Air Temperature:

Temperature plays the most role within the physico-chemical and physiological characters of biotic elements of the aquatic system. The atmospherical temperature and water temperature values lie between 18^{0}C to 30^{0}C and 15^{0}C to 25^{0}C respectively. in the present study the Air temperature was ascertained minimum average in the months of January 20.3 ^{0}C, and maximum average air temperature in the months of may ranging 32.8 ^{0}C throughout the study period in the year 2013-14 and Minimum average air

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ABSTRACT *Fish is economically beneficial to human population and fish has good market value and is consume by many people. Fishes are largely infected by Cestodes (Tapeworms), which causes commercial losses in both reasons the aquaculture, fishery industries and may have human health, as well as socio-economic implication both in developing and developed countries. The present paper deals with the systematics study of a Cestode parasite a new species Uncibilocularis dasyatisii from intestine of Dasyatis walga.Uncibilocularis dasyatisii differ from all known species of the genus is having scolex almost square in shape with tubercle on inner prong of hooks, presence of neck, mature segment broader than long, testes 165-170 in number, cirrus pouch is in the middle of the segment, ovary bilobed marginal in position, dumb-bell shaped and vitellaria follicular.*

Keywords: *Cestode, Dasyatisii walga , Marine water,Uncibilocularis dasyatisii.*

INTRODUCTION

The genus *Uncibilocularis* was established by Southwell (1925) with its type species *U. trygonis* (Shipley et Hornell 1906), as *prosthecobothriumtrygonis* in *Trygonwalga* and *Trygonsephen* at Ceylon. Southwell (1927) reported *U. mandley* from *Hemigaleusbalfouri* at Ceylon but Baer and Euzet (1962) have made this species as new genus *Magalanochos* with *M. mandleyi* as its type species. Subhapradha (1955) reported *U.indicaChiloscylliumgriseum* in India. Deshmukh and Shinde (1975) reported *U. aurangabadensis* from *stromateus* sp. In. India. Shinde and Chincholikar (1975) described *U. ratnagiriensis* and *U. southwelli* from *Trygon* sp. in India. Later on Deshmukh (1979) reported. Three new species of this genus are *U. thapari*from *Trygonsephen,U. shindei* from *Trygonzugei* and *U. somnathii* from pteroplatamicrura at veraval (West Coast of India). Later on in 1981 Jadhav and Shinde reported *U. veravalensis* from a marine fish, *Trygonzugei* at veraval. In 1984 Jadhav, et.al.Added *U. bombayensis*, from *Trygonsephen* at Bombay.Jadhav et al in 1989 described two new species of the same genus *U. indiana* from *Trygonzugei* at Ratnagiri and *U. shashtri* from *Chiloscyllium*griseum at Ratnagiri (M.S.) in India Later on Pawar et.al., (2005) reported *U ranuae* from *Trygonzugei* (Muller and Henle, 1841) at Bhagwati, Ratnagiri (west Coast of India) Pathan et.al., 2007 made a review of the genus *Uncibilocularis*. Later on four new species are added in 2008 jenaes&cairaare *U.loreni, U.okei, U.squireorum,&U.sidocymba*. In 2011 Pathan et.al.Described *U.osmanabadensis.*

The present communication deals with *Uncibilocularisdasyatisii*Sp.Nov. from the spiral valve of *DasyatisWalga (*Muller and Henle, 1841) from West Coast of Maharashtra, India in the period of June. 2009 to May. 2011.

MATERIAL AND METHODS

Cestode parasites were collected from the intestine of *Dasyatis walga* at Burundi Ratnagiri district (M.S.) India during the period of June. 2009 to May. 2011. These cestodes preserved in hot 4% formalin and stained with Harris haematoxylin, passed through various alcoholic grades, cleared in xylene, mounted in D.P.X. and drawings are made with the aid of camera lucida. All measurements are given in millimeters. The identification is made with the help of Systema Helminthum.

DESCRIPTION

Fifteen specimens of the cestode parasites were collected from the intestine *of Dasyatis walga* (Muller and Henle, 1841) at Burundi Ratnagiri district(West coast of Maharashtra state India) in the period of June. 2009 to May. 2011.

These cestodes were flattened preserved in 4% formalin, stain with Harris haematoxylin passed through the various alcoholic grades, cleared in xylene, mounted in DPX and whole mount slides were prepared for further anatomical studies. Sketches are drawn with the help of Camera Lucida and all

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A new species of *Oncodiscus jadhavii* sp. nov. in *Trygon sephen*, from Shrivardhan, Alibaug at Raigad district, West cost of Maharashtra, India

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Abstract
The worm under discussion is having scolex flower shaped and absence of the accessory suckers, presence of hooks, mature segments longer than broad, testes 45-50 in number, cirrus pouch is in the middle of the segment, common genital pore sub-marginal, irregularly alternate, ovary, U shaped and vitellaria granular comes closer to *Oncodiscus saurus*, *O. saurus*, *O fimbriatus*, *O. waltairensis*, *O. maharashi*

Keywords: *Oncodiscus jadhavii* sp. nov., intestine, *Trygon sephen*, Shrivardhan Alibaug, Maharashtra

Introduction
Yamaguti, 1934 erected the genus *Oncodiscus* for a new species *O. saurus* from the small intestine of *Saurida argyro* sephanes (Synodontidae) from the sea of Japan and later (1952) [14] from the same host in East China sea and Tosa Bay. Subhapradha (1955) described *O. fimbriatus* from *S. tumbil* from Madras coast, Bay of Bengal, India and later Devi (1975) reported the same species from the same host and locality. The present form deals with description of a new species as *Oncodiscus jadhavii* sp. nov.

Material and Method
Twenty five specimens of the cestode parasites were collected from the intestine of *Trygon sephen*. These parasites were taken for taxonomical studies. These cestodes were flattened in 4% formalin then washed in distilled water and passed the dehydrated different alcoholic grades stained with Harris haematoxyline or Borax carmine slides were mounted, under D.P.X and observed under microscope for identification.

Description
The scolex is large, flower shape, apical disc is petal like in the anterior end. The scolex measures, 8.788 (8.749-8.827) in length and 8.862 (5.625-12.10) in width. The apical disc armed with hooks, arranged along the margin of the apical disc and measures 0.117(0.078-0.156) in length and 0.078(0.078-0.078) in width.
The bothria with crenulated border and measures 7.42 (7.03-7.812) in length and 1.874(1.76-1.95) in width. Accessory suckers are absent. The hooks measured 0.117 (0.078-0.156) in length and 0.078(0.078-0.078) in width. Neck absent. The mature segments are medium in size longer than broad rectangular in shape and measures 13.16 (12.56-13.67) in length and 6.702(6.475-6.953) in width. The testes are oval in shape, situated in the anterior half of segment 45-50 in numbers and measures 0.606(0.312-0.390) in length and 0.273(0.234-0.312) in width. The cirrus pouch is large, oval in shape and measure 1.91 (1.875-1.953) in length and 0.898 (0.859-0.937) in width and situated in the middle of the segment. The cirrus is thin straight tube and measures 2.539 (2.5-2.57) in length and 0.117(0.78-0.15) in width, the cirrus and vagina opens through a common pore which is known as genital pore.
The genital pores are small, sub marginal middle of segment, irregularly alternate and measures 0.742(0.703-0.781) in length and 0.594 (0.078-0.156) in width. Vagina starts from the common genital pore, it is long narrow tube, posterior to cirrus pouch, takes a curve and forms receptacle seminis and measures 4.605(4.531-4.68) in length and 0.117 (0.078-0.156)in width. The ootype which is small rounded and measures 0.273 (0.234-0.312) in length and 0.273(0.234-0.312) in width. The ovary is large and compact situated in posterior end of the segment and measures, 2.465 (2.421-2.5) in length and 4.33(4.296-4.375) in width. The vitellaria are granular in 4-5 rows arranged at lateral sides of the segment.

Type species	***Oncodiscus jadhavii* sp. nov.**
Host	*Trygon Sephen*
Habitat	Intestine
Locality	Shrivardhan, Alibaug at Raigad district (West cost of Maharashtra, India)
Period of Collection	June 2009 to May 2011

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On a New Species of Cestode Parasite from Marine Water Fish *Rhychobatus Djeddensis* in Ratnagiri District (M.S.) India

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ABSTRACT:

Fish is economically beneficial to human population and fish has good market value and is consume by many people. Fishes are largely infected by Cestodes (Tapeworms), which causes commercial losses in both reasons the aquaculture, fishery industries and may have human health, as well as socio-economic implication both in developing and developed countries. The present paper deals with the systematics study of a Cestode parasite a new species *Anthobothrium ambadasii* from intestine of *Rhychobatus djeddensis*. *Anthobothrium ambadasii* differ from all known species of the genus is having scolex flower like with four bothridia, mature proglottids are longer than broad, testes cortical upto 100-110 in numbers, ovary bilobed, ootype rounded and vitellaria follicular.

Keywords: - *Anthobothrium ambadasii,* Cestode, Marine water, Ratnagiri, *Rhychobatus djeddensis*

INTRODUCTION:

Benden in the year 1850 erected the genus *Anthobothrium* cornucopia recovered from galeus cain musteluss ularis collected from the Belgian water. Mola (1908) synonymised *Anthobothrium* with *Phyllobothrium*. but (1943) redescribed *A. auriculatum* Rhydolphi, (1891) and gave his opinion that the name of genus given by Benden is corrected. Linton (1819) described *A. variable* from *Trygon centura* from Massachusetts *A. crispum* molin described in (1858), in (1890) *A. laciniatum* described linton , *A.variable* (Linton, 1889) southwell, 1925 and *A.panjadi* Shipley and hornell,1906 from rays of Ceylon waters. southwell ,(1912) from *Rhychobatus djeddensis* collected from ceylon water described *A. lintoni*, Yamaguti (1934) estabilished *A. parvum* from *Alopias vulpinus* collected from Japan. *A karuatayl* woodland described in 1934 , in 1947 *A. hickmanini* described in (1974).Yamaguti in (1952) three species described *A. rajat A. Pteroplateae, A. bifidum*, later on subhapradha (1955) descriebed three more species *A. septum* from *Rhynchobatus djeddensis* and *Trygon imbricatus, A. crenulatum Rhinobatus ,haivi* and *A. spinosum* from *caracharias acutus* collected from the Madras coast described species *A. taeniuri* is (1963), in (1968), *A. veravalensis* is another new species described by Shinde *et. al* in (1981) from *Rhinobatus djeddensis* collected from veraval, India. Butter (1987) described *A. amulatum* from *Rhinobatu armatus* collecting from Australia srivastava and srivastava (1988) found a new species *A. sassonense* from *Rhinobatu granulates* in (2002) *A. altavelae* species described by Lassad naifar another species in the same year *A. galeornini* descrbed by suriano in (2002), Ruhnke & Caira two new spcies *A. caseyi* , and *A. lyndoni* described in (2009).

MATERIAL AND METHODS:

For the taxonomical study of cestode parasites, the fishes were collected through different sources in each annual cycle. The intestine of the fishes were removed and cut open in normal saline water in petridishes these organs tested and observe under binocular microscope (recorded infected and non-infected hosts) the collected worms were. washed in distilled water to render them free from intestinal contents. The cestodes were preserved in 4 % formalin. The worms were passed through various alcoholic grades i.e. 30 %, 50 %, 70 %, 90 % and 100 % cleared in xylene stained in

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3 Papers,

THE ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN TEACHING AND LEARNING

R. G. VIDHATE
AnandraoDhonde Alias Babaji Mahavidyalaya,
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ABSTRACT

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.Today's students are often portrayed in the literature as enthusiastic and wholehearted users of the Internet for school purposes, in contrast with today's schools, in which the situation is of high ICT access and low use. ICT has become an integral part of today's teaching learning process. Effective use of technology can motivate students, make our classes more dynamic and interesting and renew teacher enthusiasm as they learn new skills and techniques. The role of ICT in higher education is becoming more and more important and this importance will continue to grow and develop in 21st century. The use of ICT in education not only improves classroom teaching learning process, but also provides the facility of e-learning. The adoption and use of ICTs in education have a positive impact teaching, learning and research. The use of ICT will not only enhance learning environment but also prepare next generation for future lives and careers Students were revealed to be ambivalent: they considered the Internet to be easy to use, reducing workload and "fun", but at the same time "unreliable", not "serious" enough, and not containing what they "need to know". Thus, they primarily used it for "unimportant" assignments such as routine homework. Students described their learning goal as getting required "material" into their heads and saw the teachers as an (almost) exclusive authority regarding this required body of information, in line with schooling's information-focused agenda and teacher-centered practices.

INTRODUCTION

Information and Communications Technology (ICT) can impact student learning when teachers are digitally literate and understand how to integrate it into curriculum.Schools use a

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STRUCTURAL, MAGNETIC AND INITIAL PERMEABILITY PROPERTIES OF $Ni_{0.33}Zn_{0.63}Fe_2O_4$ SPINEL FERRITE

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Abstract: *Spinel ferrite having composition $Ni_{0.33}Zn_{0.63}Fe_2O_4$ was prepared by ceramic method and characterized by X-ray diffraction technique. The magnetic and initial permeability properties were investigated by standard method. X-ray diffraction pattern analysis confirms the formation of single phase cubic spinel structure. The saturation magnetization, coercivity and remenance magnetization properties obtained in the present work are suitable for multilayer chip inductors applications (MLCI). Temperature dependence of initial permeability show decreasing trend.*

Keywords: *Ni-Zn ferrite, Initial permeability, magnetic properties.*

1 Introduction

Polycrystalline ferrite consisting of iron oxide and metal oxide has a wide range of applications in the field of electronics, computer, and telecommunications. Ferrites are commercially important class of magnetic materials due to their combined electrical and magnetic properties. These properties of ferrite changes with respect to type and amount of dopant, synthesis methods, sintering time and temperature, synthesis parameters and distribution of cations over the available sites [1-4]. However, the properties of the ferrite materials prepared by ceramic techniques are exhibits good electrical and magnetic properties which are useful in many industrial and biomedical applications [5].

In the family of ferrites, spinel ferrites are important from research and academic point of view. Spinel ferrites are recognized by the formula AB_2O_4, where A stands for divalent cation such as Ni, Zn, Cd, Cu, Co, Mn etc and B stands for trivalent Fe ions. The structure of spinel ferrite is cubic and consists of two interstitial sites namely tetrahedral (A) and

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INFLUENCE OF CADMIUM SUBSTITUTION ON DIELECTRIC PROPERTIES OF NI-Cu FERRITES

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Abstract: The Cd^{2+} ions substituted samples of mixed nickel- copper ferrites having the compositional combination $Ni_{0.5}Cu_{0.5-x}Cd_xFe_2O_4$ (x = 0.0, 0.1, 0.3, 0.5) have been synthesized using AR grade oxides by standard solid state reaction technique. The formation of single phase cubic spinel structure of all the samples under investigation have been carried out using X-ray diffraction technique at room temperature. Using LCR–Q meter the dielectric constant (ε'), dielectric loss (ε''), dielectric loss tangent ($\tan\delta$) was measured as a function of frequency. The frequency dependence of dielectric parameters measurements was carried out within the range 100 Hz to 1 MHz. The values of dielectric parameters (ε', ε'' and $\tan\delta$) are much higher at lower frequencies but decreases with increase in frequency. At very high frequencies, its values become so small that it becomes independent of frequency. The decrease in dielectric parameters with increase of frequency may be due to the fact that beyond a certain frequency the external electric field, the electronic exchange between ferrous and ferric ions cannot follow the alternating field. It is observed that dielectric constant (ε'), dielectric loss (ε'') and dielectric loss tangent ($\tan\delta$) appreciably increases with cadmium concentration x but decreases with increases in frequency.

Keywords: Mixed spinel ferrites, XRD, dielectric properties.

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"Study Of Xrd And Electrical Properties Of Indium (In^{3+})Substituted Yttrium Iron Garnet."

R. G. Vidhate[1], R. B. Kavade [2], J. M. Bhandari[3],N.N.Waghule[2], A. N. Vidhate[1], K. M. Jadhav[4],
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Abstract

The yttrium iron garnet series having the general formula $Y_3In_xFe_{5-x}O_{12}$ (x = 0.0, and 0.2) were synthesized by using double sintering solid state reaction method. The samples were characterized by X-ray diffraction technique (XRD). The X-ray diffraction studies of compositions revealed the formation of single phase cubic structure with lattice constant ranging from 12.37 to 12.40 Å to x =0.0 and 0.2. The dielectric properties were investigated using LCR-Q meter (hp HEWLETT) in the frequency range 100 Hz to 1 MHz. The dielectric constant (ε'), dielectric loss (ε") and dielectric loss tangent (tan δ) were measured as a function of frequency by using LCR-Q meter. The frequency dependence of dielectric measurements was carried out for both the samples.The D. C. electrical resistivity (ρ) measurements for above given samples of $Y_3In_xFe_{5-x}O_{12}$ garnet system were carried out in the temperature range of 300-725 K. From plots it is observed that, D.C. electrical resistivity decreases with increase in temperature.

Keyword: *Garnet, YIG, XRD, dielectric and d. c. resistivity.*

Introduction:

Ferrite is 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 ferries material substituted with different cations with different valences and prepared by different techniques.

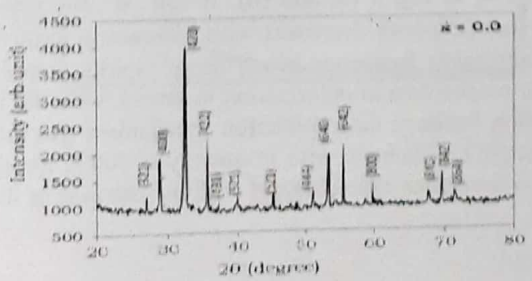
Among the various types of ferrites rare earth garnet especially yttrium iron garnet (YIG) is of great importance for scientist and technologist because of their applications in microwave communication devices such as circulators, gyrators and phase shifters because of its small ferromagnetic resonance 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 In^{3+} substituted $Y_3In_xFe_{5-x}O_{12}$ garnets with x = 0.0 and 0.2 were prepared by well known double sintering ceramic method in which a molar ratio of analytical Y_2O_3, Fe_2O_3 and In_2O_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 ^{0}C for 24 h and cooled to room temperature slowly at the rate of 2 ^{0}C/min. The samples were reground and re-fired at 1350 ^{0}C for 30 h and slowly cooled to room temperature at the rate of 2^0 C/min., and then reground for 1 h. The fine powdered sample was pelletized under the pressure 5 ton/inch^2.

Results and Discussion:

Mixed garnet ferrites system under investigation has been structurally investigated by X-ray diffraction technique. The XRD patterns for x = 0.0 and 0.2 samples as shown in figure 1.



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"Influence Of Cadmiumsubstitution On Dielectric Behavior Of Mixed Ni-Cu Ferrites"

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Abstract:

The samples of Cd^{2+} ions substituted mixed nickel- copper ferrites having the generic formula $Ni_{0.5}Cu_{0.5-x}Cd_xFe_2O_4$ (x = 0.0, 0.1, 0.3, 0.5) have been synthesized using AR grade oxides by standard solid state reaction method. The formation of mono phase cubic spinel structure of all the samples under investigation have been carried out using X-ray diffraction technique at room temperature. Using LCR–Q meter the dielectric constant (ε'), dielectric loss (ε''), dielectric loss tangent (tan□) was measured as a function of frequency. The frequency dependence of dielectric parameters measurements was carried out within the range 100 Hz to 1 MHz. The values of dielectric parameters (□□,□□and tan□)are much higher at lower frequencies but decreases with increase in frequency. At very high frequencies, its values become so small that it becomes independent of frequency. The decrease in dielectric parameters with increase of frequency may be due to the fact that beyond a certain frequency of the external electric field, the electronic exchange between ferrous and ferric ions cannot follow the alternating field. It is observed that dielectric constant (□□), dielectric loss (□□) and dielectric loss tangent (tan□) appreciably increases with cadmium concentration x but decreases with increases in frequency.

Keywords: Mixed spinel ferrites, XRD, dielectric properties.

1. INTRODUCTION:

Ferrites are ferrimagnetic materials with good magnetic, dielectric properties and a large number of technological applications in satellite communication, memory device, computer, components, filter components, antenna rods, transformer core etc, because of their excellent electrical and magnetic properties [1].The high electrical resistivity, low eddy current and dielectric losses, moderate saturation magnetization, easy and low cost of preparation, high Curie temperature and high permeability are the remarkable characteristics of a ferrite material which makes them useful in variety of applications. The properties of ferrite depends on magnetic interaction, cation distribution in the two sub lattice, method of preparation, preparative parameters, type and amount of dopant [2-4]. The dielectric properties of ferrites are dependent upon several factors including the method of preparation, chemical composition and grain structure. Among the spinel ferrites, nickel ferrite is having special attraction because of their useful properties such as inverse spinel nature, high saturation magnetization and Curie temperature, high electrical resistivity and chemically most stable. In the literature very few studies on cadmium substituted nickel-copper ferrite are reported. Here, we report our results on dielectric studies of $Ni_{0.5}Cu_{0.5-x}Cd_xFe_2O_4$ for x = 0.0, 0.1, 0.3, 0.5samples.

2. EXPERIMENTAL:

The polycrystalline samples of $Ni_{0.5}Cu_{0.5-x}Cd_xFe_2O_4$ (x = 0.0, 0.1, 0.3, 0.5) were prepared using the standard ceramic technique [5]. A.R. grade oxides of corresponding ions (NiO, CuO, CdO and Fe_2O_3) were mixed in stoichiometric proportion. Grinding using agate mortar (4 h) was carried out for each 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 using a hydraulic press with pressure 6 ton/inch^2 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 in the 2□ range 20□-80□at room temperature to confirm single phase spinel structure. Dielectric constant (□□) dielectric loss (□□) and loss tangent (tan□) as a function of frequency at room temperature were measured by LCR Meter. For dielectric measurements the pellets were coated with silver paste for good ohmic contact.

3. RESULTS AND DISCUSSION:

3.1 XRD (X-Ray Diffraction):

The XRD patterns of mixed spinel ferrites system $Ni_{0.5}Cu_{0.5-x}Cd_xFe_2O_4$ (x = 0.0, 0.1, 0.3, 0.5) under investigation shows that the samples have single phase cubic spinel structure. The figure 1 shows typical XRD pattern for x = 0.2.The Bragg's peaks are sharp and intense. Lattice constant calculated using XRD data increases with increase in cadmium content 'x'. The variation in the lattice constant with cadmium substitution can be explained on the basis of

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Study of Structural and Magnetic Properties of Ni-Zn Ferrite Nanoparticle

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Abstract:

The present work deals with structural and magnetic properties of $Ni_{0.37}Zn_{0.63}Fe_2O_4$powder. The conventional ceramic method was used to synthesize present investigated sample. The powder sample was characterized by X-ray diffraction (XRD) technique to study its structural properties. The cubic spinel monophase was revealed by XRD patterns. The structural parameters such as lattice constant, X-ray density as well as the bulk density and porosity were obtained from XRD data. The magnetic properties were investigated using pulse field hysteresis loop technique.

Keywords: Ni-Zn ferrite, Ceramic; XRD; M-H loop; Saturation.

Introduction:

Polycrystalline ferrite materials have a wide range of applications in the field of electronics, computer, and telecommunications. Ferrites are commercially important magnetic materials due to their combined structural, electrical, dielectric and magnetic properties. These properties of ferrite changes with respect tothe type and amount of dopant, synthesis methods, sintering time and temperature, synthesis parameters and distribution of cations over the available sites [1-4]. In the recent years, researchers were attracted toward wet chemical methods like sol-gel, precursor method and others have gained tremendous importance as they produce particles in nano-size dimensions. The structural, morphological and magnetic properties of spinel ferrite are influenced strongly by the nano-sized particles. The properties exhibited by nanoparticles are different than that of bulk materials. However, the properties of the ferrite materials prepared by ceramic technique are exhibited good electrical and magnetic properties which are useful in many industrial and biomedical applications [5].

In the literature, nickel ferrite and substituted nickel ferrite have been studied by number of researchers [6-8]. The structural, magnetic, electric and dielectric properties of nickel - zinc ferrite have been studied to know the effect of observed modification.

Experimental

The $Ni_{0.37}Zn_{0.63}Fe_2O_4$ powder sample was synthesized by using a conventional ceramic method using starting material NiO, ZnOand Fe_2O_3 were of highly chemically pure A.R. grade (99.99 %). Stoichiometric proportions of these starting materials (Oxides) were accurately weighed and mixed thoroughly. Then first pre-sintering of powder was carried out at 1225 K for 12 hr. The sintered powder is again reground and sintered at 1375 K for 12 hr. The mixture was ground using agate mortar pestle to obtain a very fine homogeneous powder.The prepared $Ni_{0.37}Zn_{0.63}Fe_2O_4$ powder sample were characterized by XRDto obtainedstructural properties.The magnetic properties were measured by pulse field hysteresis loop technique at room temperature.

Results and Discussion

X-ray diffraction

The room temperature X-ray diffraction (XRD) patterns of prepared $Ni_{0.37}Zn_{0.63}Fe_2O_4$ spinel ferrite sample under investigation are represented in Fig. 1. The X-ray diffractions pattern showed intense, clear, and sharp peaks which are indexed using Bragg's law.The Miller indices (220), (311), (222), (400), (422), (511), (440) and (533) belong to spinel ferrite was observed in the X-ray diffraction pattern, in which (311) is the high-intensity plane.

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The Fourier transforms infrared (FTIR) spectroscopystudy of $x(CoMn_{0.2}Zn_{0.2}Fe_{1.6}O_4)+(1-x)\ BaTiO_3$ Magnetoelectric Composites

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ABSTRACT:
Magneto electric composites with composition$xCoMn_{0.2}Zn_{0.2}Fe_{1.6}O_4$ + (1-x) $BaTiO_3$ were prepared by were prepared by standard double sintering ceramic method using composition x=0.0, 0.25, 0.50, 0.75, 1.00. Presence of two phases in the composites was confirmed using X-ray diffraction. The results of XRD pattern shows cubic spinel structure for ferrite phase and tetragonal perovskite structure for ferroelectric phase. The lattice constant(s) for Mn-Zn substituted ferrite and ferroelectric phase are in good agreement with the reported data .The Fourier transform infrared (FTIR) spectroscopy technique has been used for the structural characterization of composites. FTIR spectroscopy exploits the fact that molecules absorb specific frequencies that are characteristic of their structure.
KEYWORDS: Ferrite, ferroelectric composite, The Fourier transform infrared (FTIR) spectroscopy, magnetoelectric composites.

1. INTRODUCTION

The magnetoelectric (ME) effect is a coupled two-field effect in which an electric field (E) induces a magnetization and a magnetic field (H) induces an electric polarization [1, 2]. It is well known that this ME effect in the composites is a product property deriving from the coupling between the piezoelectric effect in the ferroelectric phase and the magnetostrictive effect in the ferromagnetic phase. Magnetoelectric composites are used as sensors, isolators, phase shifters, modulators, wave-guides, transducers etc. Materials showing ME conversion can also be used as thin film wave-guides in integral optics and fiber communication technology [3].
In this paper, ME composites $xCoMn_{0.2}Zn_{0.2}Fe_{1.6}O_4$ +(1-x) $BaTiO_3$ where x=0.0, 0.25, 0.50, 0.75, 1.00 were synthesized by conventional mixed-oxide processing. The phase structure, microstructure characteristic of the ceramic composites was studied systemically.

2. EXPERIMENTAL PROCEDURE

2.1. PREPARATION

The $(xCoMn_{0.2}Zn_{0.2}Fe_{1.6}O_4$+ (1-x)$BaTiO_3$ where x=0.0,0.25,0.50,0.75,1.00composite materials were prepared by the standard ceramic method. The ferrite phase $CoMn_{0.2}Zn_{0.2}Fe_{1.6}O_4$ was prepared by using CO, MnO_2, ZnO and Fe_2O_3 in molar proportion as starting materials and their mixture was presintered at 1100^0C for 10h. The polycrystalline $BaTiO_3$ was prepared by using AR grade $BaCO_3$ and TiO_2 as starting materials in the molar proportions and presintered at 1000^0C for 8h.

2.2 PREPARATION OF ME COMPOSITES.

ME composites were prepared by mixing ferrite and ferroelectric phases using formula $(CoMn_{0.2}Zn_{0.2}Fe_{1.6}O_4)$+1-x $(BaTiO_3)$where x=0.00,0.25,0.50,0.75,1.00 respectively. The mixture of composite was thoroughly ground for 2-3 hr and pelletized using hydraulic press by applying suitable pressure of 6 ton/inch^2. Polyvinyl alcohol in small amount was used as a binder to make the cylindrical pellets of approximately 10mm diameter 3mm thickness. The pellets of composites were sintered at high temperature of 1150^0C for 10 hr in a programmable muffle furnace and finally cooled slowly to room temperature. The crystal structures of composites and their constituent phases were determined by XRD technique using Philips X-ray diffractometer (Model PW-3710) using CuKα radiations (λ=1.5418A°).Infrared absorption spectroscopy is an important and non-destructive characterizing tool, which provides qualitative information regarding structural details of crystalline materials. A Fourier transformation is a mathematical operation, whence a infrared spectrum can be calculated. Identified materials of the FTIR library are necessary to analyze the FTIR spectral pattern[4]. The KBr pellets of samples were prepared by mixing (1.5–2.00) mg of samples, finely grounded, with 200 mg KBr. Fourier transform infrared(FTIR) spectroscopy(PerkinElmer spectrum 100) technique is used which is based on Michelson's interferometer. Infrared light is guided through an interferometer and then passed through the sample. A moving mirror inside the apparatus alters the distribution of infrared light that passes through the interferometer. The signal directly recorded, called an "interferogram", represents light output as a function of mirror position. The sample's spectrum is always compared to a reference. FTIR spectrum also supports the structural evolution of the samples, as observed from the XRD spectrum.

3. RESULTS AND DISCUSSION

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Marxist Literary Criticism : An Approach

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Objectives –

1) To introduce Marxism.
2) To discuss Low Karl Marx relates to literature.
3) To discuss Low early Marxists like Russian Marxists relate to literature.
4) To discuss the response of early Marxists to Modernism.

The objective of the research paper is to introduce Marxism to you, and discuss the various ways in which Marxists relate to literature, culture and criticism my paper is divided in two parts :-

The first part is about Karl Mark and early 20th century Orthodox Marxists and the second part will be about new – Marxism or Western Marxism in the 20th century.

I began with the assumption that behind every approach to literature and criticism, underlines a philosophy of life, perspective on life, that is, a way of looking at the world. I may add here that it is possible to use certain Marxist concepts, even if one disagrees with the overall Marxist world view.

Introduction –

Marxism, as the word itself suggests, it is not associated with the writings of Karl marts, from 1818 to 1883 and his friend and collaborator Friedrich Engels, who lived from 1820 to1895. Karl Marx himself once said that he was not a Marxist.

Karl Marx's writing career spans over than forty years, and as such, one finds in him, in every other great thinkers. He has written a number of works, the major ones, be Economic and Philosophic Manuscripts in 1844. A contribution to the critique of Political Economy in 1859, The German Ideology in 1867 and capital in three volumes, with the first volume published in 1867. The one work, however, that I feel, everyone, including a non-specialist, should be familiar with is The Communist Manifesto to written jointly with Engels in 1848, a must read for anyone, who wants to understand Marxism. Interpretations apart, I think, the Key Marxism ideas are contained in the Manifesto, which opens with the oft-quoted line "The History of all hitherto existing society is the History of class struggles." Though born in the 19th century, they share the 18th century Enlightenment world-view with focus on science, reason and progress. I will try to identify a few chosen ideas that, I believe, are essential to Marx and Marxism. These are Materialism, a progressive view of history, and the dialectical process, which sees conflict as a necessary and integral part of man's social evolution.

Materialism-

Marx was a confirmed materialist, concerned with this world and this life. Consciousness was seen as not primary but an attribute of highly developed State of Matter that Man was. "We know that Renaissance on words, Western Civilization moved from God-entered world to a Man

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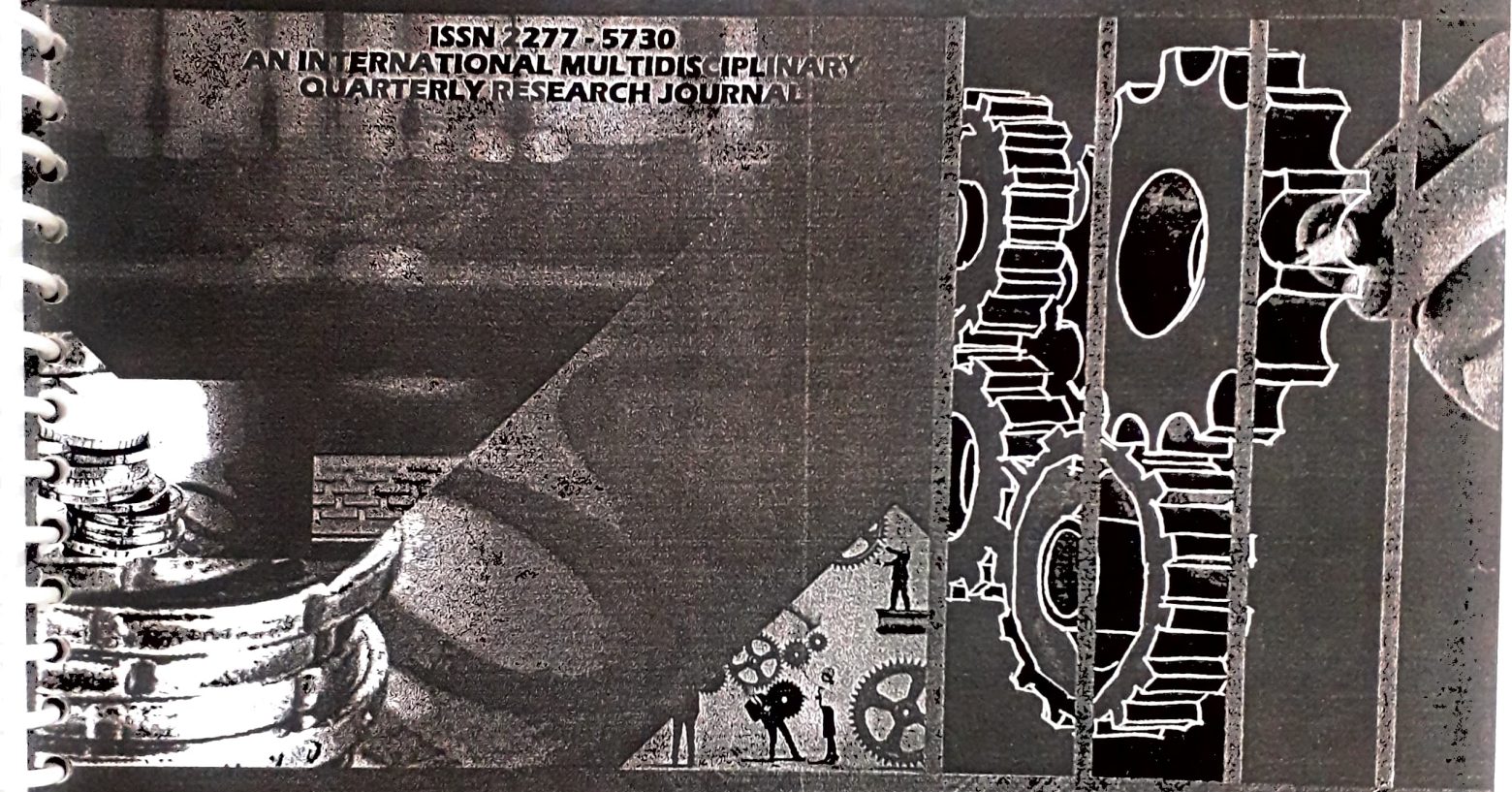

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7. Partition Literature

Prof. Randive Babu Ankush
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Abstract

As a English teacher I am going to write research paper about the Partition Literature. In this paper I am writing how cultural narratives contribute to nation formation particularly in partitioned contexts. Some ways of accessing and representing the past and in particular Partition. To perceive the role of historical narratives in the Indian context and note the changing Partition historiography Partition literature as an alternative discourse about the event of Partition. Partition of India in 1947 was a momentous event in the history of the subcontinent whose discussions are felt even today. Its damaging legacy shapes contemporary India and Pakistan, affecting the whole South Asia.Historical narratives have tried to capture this event and have illustrated a shift in their approach over the decades. Historical narratives history highlighted the freedom struggle and the grand achievement of Indias freedom. Oral and subaltern histories called attention to ordinary people and how their lives were impacted by the event. Creative writers too have responded to Partition and contributed to the collective understanding of the event. Partition literature has attempted to represent the traumas involved and verbalized the silences and omissions of nationalist narratives Partition literature can thus be read as an alternative discourse, which stands witness to its horror and aids in its memorialization.

Nation formation and culturel narratives

State and nation building processes are not simply political events in the narrow sense but involve the construction of national education systems and national literature and involve cultural struggles. Partitioned cultural of narratives play a number of important functions. They represent how Partition is subsequently remembered and understood by peoples involved.

In the Indian context some of the finest literature has been written on and around Partition. Some of the most innovative historical research on the topic has been carrid out. Partition literature included political histories, novels and collections of short-stories and some personal memories. Partition literature amplifies and supplements these historical narratives for it recreates the horror of Partition as experienced by common people.

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Colonial Theory Writer and Narrative Writer

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Introduction

Colonialism is not a modern phenomenon. World history abounds with examples of one nation extending its rule over a territory beyond its borders and then occupying and exploiting it economically. In fact, both the western world and the Eatern world have witnessed a series of empires extending over other territories in the guise of bringing culture and civilization to the subject peoples who were regarded as barbarians. Some of the most famous examples would include the Chines empires, the Egyptian and Persian empires, the ancient Greeks, the Romans, the Moors, and the Ottomans. M. A. R. Habib offers a brief historical perspective of the three major phases of colonialism in modern times. He writes:"Between 1492 and the mid-eighteenth century, Spain and Portugal, England, France and the Netherlands established colonies and empires in the Americas, the East Indies and India Then, between the mid-nineteenth century and World War I, there was an immense scrable for imperialistic power between Britain, France, Germany, Italy, and other nations. Germany, Italy, and Japan also entered the race for colonies. In 1855 Belgium established the Belgian Congo in the heart of Africa.... Finally, the periods during and after World War saw a struggle involving the countries just mentioned as well as conflict between America and the communist Soviet Union for extended control, power and influence."

The term 'colonialism' has been defined in the Oxford dictionary as "the policy or practice of acquiring full or partial political control over another country, occupying it with settlers, and exploiting it economically." Collins English dictionary defines the term in the following words; "Colonialism is the practice by which a powerful country directly controls less powerfull countries and uses their resources to increase its own power and wealth."

The difference between Colonialism and Imperialism.

The term Colonialism is often used interchangeably with the term "imperialism" Therefore in order to distinguish between the two, it is important that we go to the etymology of both these terms. The term colony has its origin in the Latin word colonus that means farmer. As such the practice of colonialism involved the migration of a population to a new practice of colonialism involved the migration of a population to a new territory where these new arrivals lived as permanent settlers but maintained their political allegiance with their home country. Imperialism, however, has its roots in the Latin word, imperium which has various meanings like power, authority, dominion, command and empire. The word 'imperialism' therefore connotes the way one country exercises power over another.Edward Said offers the following distinction between colonialism and imperialism"imperialism" means the practice, the theory, and the attitudes of a dominating metropolitan centre ruling a distance territory; "colonialism" which is almost always a consequence of imperialism, is the implanting of settlements on distantterritory.

Colonialism as a distinctive kind of political ideology

Notwithstanding Said'S distinction between colonialism as practice and imperialism as ideology, European colonialism in the post-Renaissance world become a distinctive kind of political ideology. The variations of colonialism that emerged was a result of the way In which colonies were looked upon as mere sources of raw material to found the flourishing enterprises in the metropolis. Notable in the economic critique of colonialism was DadabhaiNaoroji who wrote a book poverty and the Un-British Rule that kick-started the intellectual revolution against the British empire.

Theory of Colonial discourse and the inequitable relationship between the colonizer and the colonized

The unequal from of intercultural relationship the colonizer and the colonized referred to earlier was further strengthened in colonies where the subject people were of a different race or where indigenous people existed in a minority. That has been very aptly rendered by Bill Ashcrof, Gareth Griffiths and Helen Tiffin in the following words

The idea of the colonial world become one of a people intrinsically inferior, not just outside history and civilization, but genetically pre-determined to inferiority. Their subjection was not just a matter of profit and convenience but also could be constructed as a natural state. The idea of the 'evolution of mankind' and the survival of the fittest 'race' in the crude application of Social Darwinism, went hand in hand with the doctrinces of imperialism that evolved at the end of the nineteenth century."

Euro-centrism:

The term Euro-centrism denotes a world view which implicitly or explicitly posits European to produce and justify Europe's dominant position within the global capitalist world system. By the 18th century this conception of Europe as superior as against the rest of the world's cultures had become firmly established through the imperial displays of power, both in the metropolis and at the colonial peripheries. Edward Said's Orientalism examines the ways in which Euro-centrism not only influences and alters but actually produces other cultures.

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Rural Community Development through Literature

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Tal. Ashti, Dist. Beed.

India has been facing various problems regarding society, economy, politics and religion. Social workers and the government has been trying to demolish or at least reduce these problems. For that the government has been planning various schemes in order to develop the Indian society.

It is said that India is the country of villages. Much of the part of the country consists of rural area. Villages in India are not developed and so India also comes under the undeveloped countries. It is necessary to develop the rural area in order to develop the nation.

Development of rural community depends on various factors. These factors include education, health as well as social reforms. And this is not possible for any one person to change the society and develop the villages. People have to work in groups and change the mindset of the rustic people. It can be done with various means - literature is just one of them!

Literature includes dramas, novels and poetry. Through these literary pieces social reform is possible with its main aim that is - entertainment. Entertainment is one of the aims of the literature. It is also one of the tools of the social change as well. Right from the times of independence Gandhiji and Pandit Jawaharlal Nehru have used this tool of writing for social awareness. Patriotism was the feeling and sense which was to be arisen in the minds of people in those days. Gandhiji and Nehru could succeed in changing the mindsets in some extent. Even Sarojini Naidu, Swatantryaveer Sawarkar, Raja Rammohan Roy also wrote to make people aware of their rights about independence.

Literature helped these freedom fighters to awake people and let the Britishers leave our country. Poetry is one of the literary forms which does not only give the aesthetic pleasure to the listener but also the sentimental attachment about the theme. Poets choose the proper theme and present the subject in such a way that it touches the readers heart. Drama also plays the same purpose of entering the reader's heart with its dialogues and the characters. Novel, being a new literary form is also helpful to convey the message the novelist intended to. Thus all the literary forms are tools of conveying the social messages to the society.

Rural areas can be developed through literature as it is one of the effective tools of social reform. Indian society has been facing various social problems. Eradication of these problems needs a well organised plan. Literature should be used initially as to introduce a social problem. Then it should be used as a promoter of that problem. Literature is the means of entertainment so it can be easily reached to and accepted by the common people.

Common man in a rural area has limited expectations and limited facilities. But sometimes they face problems like superstition, child labour, child marriage etc. These problems play a role of hindrance in any type of development. So these problem have to be removed. Through street plays such issues can be presented to the rural people and make them aware of the consequences these issues can be responsible for. Not only plays, poetry also has its role in the development of the rural area. Ballads are effective literary form through which people can get aware of the social issues and it's effects on the society. Marathi novelist and poet Annabhau Sathe has composed ballads and tried to make low caste people aware of their rights.

Position of women in rural India is also one of the issues which affects the development of India. Rural women are not allowed to get education and be independent. They have so many limitations in personal as well as social life. Lack of education and influence of superstition makes them face health problems as well as some other problems. There are some novels depicting women's position and her inner conflict. Rama Mehta's *Inside the Haveli* presents a woman's loneliness and the journey towards the end when she overcomes the problem.

Not only social problems but the inner conflicts of human mind are also represented through literature. Right from Virginia Woolf and James Joyce the inner conflict of the human mind has been presented through literature. Anita Desai also concerns a loneliness of a woman in her novel *Cry the Peacock*.

The literary works help to put forth the problems the rustic people come across. People who have the ability to understand, think about the situation and they try to solve the problems on their levels. In fact, a problem presented through literature is the first step towards the problem solving. Rural areas are not given much importance for the development. Limitations for social, political, economical as well as cultural areas become hindrance in the development. So it becomes necessary to know about the hindrances. Literature plays an important role of making responsible people aware of the situation and take the proper step towards problem solving.

India's social, cultural, economical and political development is closely associated with the rural area. Development of rural area is the development of India. Peots and writers have tried to make people aware of their rights and their duties at various levels. So literature has great responsibility of shaping people's mindset as well as shape the society.

References:

1. Iyengar, K. R. Srinivasa. (2006) *Indian Writing in English*, Sterling Publishers Private Limited, New Delhi.
2. Singh, Katar. *Rural Development: Principles, Policies and Development*, (1986) Sage Publications, New Delhi.
3. Sonar, Gangadhar B. *Rural Community Development in India*, (2017) Lap Lambert Academic Publishing, India.

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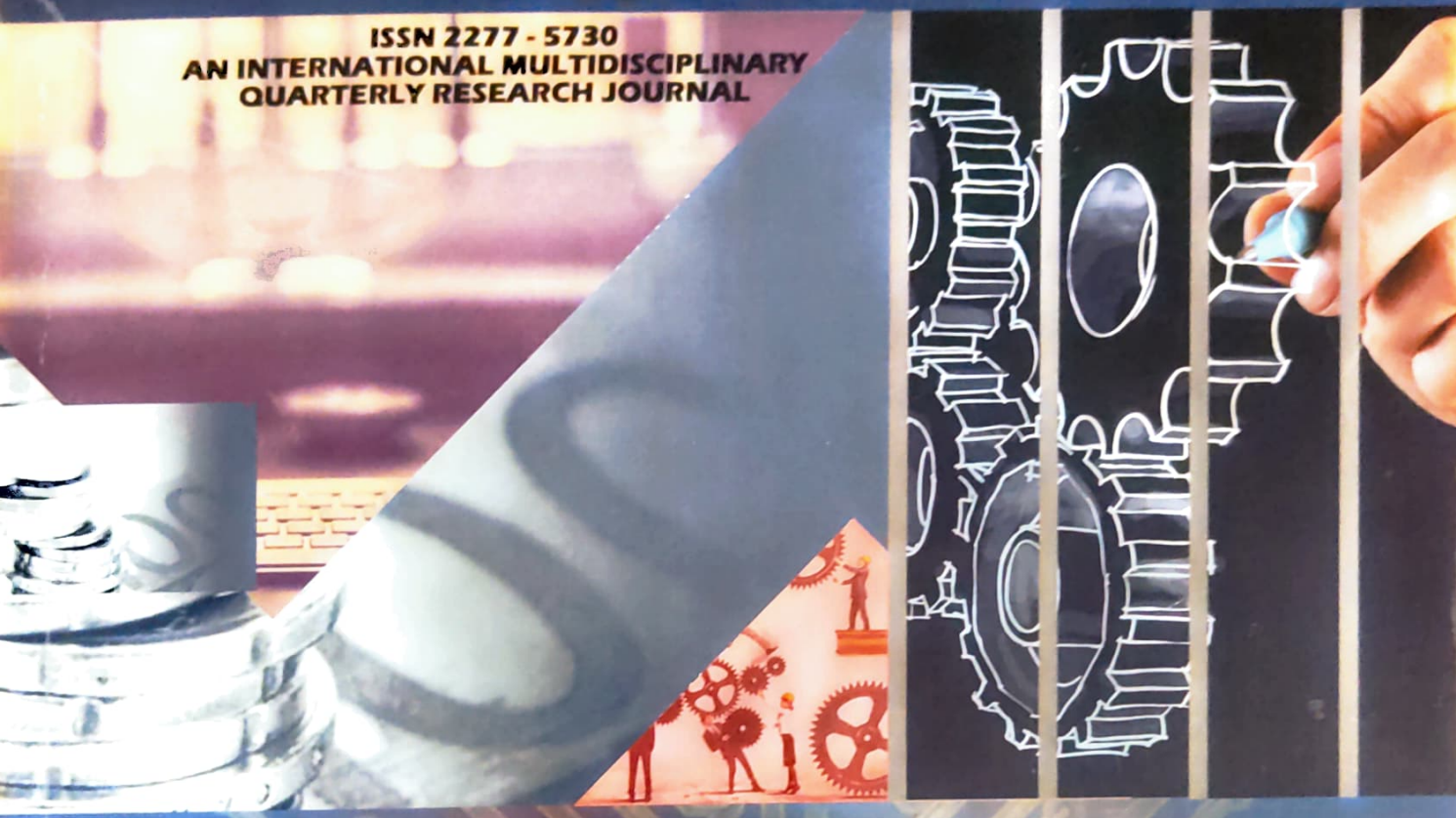

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21. Indianness in Tharoor's the Great Indian Novel

Kuchekar Shailaja Baburao
Assistant Professor, Anandrao Dhonde Alias Babaji Mahavidyalaya, Kada, Tal. Ashti, Dist. Beed.

Shashi Tharoor, the acclaimed writer has authored more than fifteen books. Among them three are fictions which present India at various levels. Being an Indian, though born and brought up in distant England Tharoor has always expressed his deep feelings for India, it's culture, tradition, heritage and different religions. He always depicts India in his fictions. His characters represent Indianness through their behaviour, language, dressing style, likes-dislikes and through the way they take decisions. As a Diasporic writer Tharoor has included the identity of Indians in his novels. He not only deals with the social and political issues but personal issues as well. In this regard H. S. Komalesha has stated:

"The term "Diaspora" signifies the political as well as individual consequences of cultural alienation, a strong sense of exile and a terrible reality of homelessness resulting in the loss of geo (physical) boundaries… In [the] Diaspora□s desperate attempt to grapple with the truth and extent of the loss, there is always a constant effort to build the lost boundaries in the host space". (*Issues of Identity in Indian English Fiction: A Close Reading of Canonical Indian English Novels* by H. S. Komalesha)

Tharoor's novels include each and every issue related to human life. Human relationships, their interaction with each other are presented in his novels. He does not only deal with the India and it's culture but also foreigners are included in his novels.

The title *The Great Indian Novel* in itself suggests the very Indianness. Tharoor borrows it's theme from the epic the *Mahabharata*. He actually, satirises the Indian politics. So he replaces the characters from the *Mahabharata* with the Indian political personalities. Indian and British characters form the story of the novel. The author has presented characters from the Indian politics and events from the Mahabharata in such a way that readers go on reading the book with interest. He combines the past and the present, as well as the mythology and the politics very skillfully. Readers don't think of mythology or politics, they go on reading and enjoying the characters and the events.

His second novel Show Business also has Indianness in it. He chooses the characters from politics as well as from the film industry. He tries to present India through all the fields. He deliberately chooses the lead character from such a glamorous field, so that he can present this area with making the readers getting involved in the story. The Hindi film industry looks very attractive but Ashok Banjara had such experiences that he realises the gaudiness in this field. No one helps him and no one sympathises him when he is in ICU, fighting for his life. The people with whom he behaved nice and the people with whom he behaved bad; both of them blamed him for his situation. He was in need of sympathy and love. But everyone - including her father and brother criticise him and his decisions.

Indian wife thinks his husband as God. She worships him and accepts every decision he has taken for her. Her life revolves around her husband's life. He has no life without her husband. Maya represents the typical Indian woman who leaves film industry and her career in spite of being a good actress. It was because her husband Ashok Banjara wants this. Thus the Indianness is seen through the character of Maya.

Ashok's father and brother didn't want him to enter in the film industry, they want him to be a politician. He joins politics at a point when he was at the highest pick of his career. He couldn't become a successful politician. No one accepts him in the politics and finally he leaves politics and rejoins film industry. Now, a looser Ashok couldn't get any film. The producers do not want to take any risk and sign him as a lead character. Finally he signs a religious movie which he never want to do. Thus life takes new turns and it makes a lot of changes. He looses his loves ones only because of his boasting nature. Thus the Indian Bollywood is presented in this novel.

Riot is his third novel. This novel also deals with Indianness. He has been dealing with Indian Culture and tradition in his novels. His characters belong tovarious parts of India as well as from abroad. As in *The Great Indian Novel*, their are some British characters, Riot also has American character.

The novel begins with the death of an American woman in India. The story is narrated through news, diary, letters, scrapbook, interviews, dialogues etc. Each chapter leads to a new information related to the death. In the course of the novel it is told to the readers that the dead American woman was doing research on population control awareness. Population is one of the

problems India is facing currently. Thus, Tharoor presents India by taking the problem as one of the themes of the novel.

Some of the characters in the novel belong to Muslim community. In this community population control is not allowed. The central character of the novel, Prescilla encourages a Muslim woman for abortion. This makes the husband of the lady get angry. Here, the author inserts one more emerging problem in India, that is the Hindu-Muslim conflict. To highlight this problem he has chosen characters from Muslim community and created the situations which are responsible for the conflict.

Prescilla's developing and secret love-affaire with the south Indian district magistrate Lakshman was also known by the Muslim people, which was making them more angry with Prescilla.

One more reason behind the riot was that there was a religious procession by Hindu militants. The route of procession was near the abandoned fort where Prescilla happened to present. Some of the Muslims were angry with the district magistrate and they knew that he visits the place often. Some of them have planned to kill him. Some Muslims were angry with the lady as well. As the procession was passing by the fort, Muslims attacked it and unfortunately Prescilla was killed in a riot happened during the precession.

Prescilla used to go for a shopping sometimes. Once she went the the market in Zalilgarh. She sees there answerpapers of school exams, which were used to pack the nuts by the steeet vendor. The author here touches the issue of corruption. There is corruption everywhere, even in the field of education. Those papers were unchecked and this makes to understand the corruption in this field. Then again there is a mention of atmosphere of Zalilgarh. There is no cleanliness around the town. People spit after eating the *paan*.

Thus religious conflicts, population-controll awareness, corruption in various fields, social and health issues in India are discussed in the novel. But these discussions are combined with the story and the characters in such a way that every issue is understood by the readers without diverting their attention from the main storyline.

Tharoor, being a diasporic writer has created his novels by depicting Indianness through the story and the characters. He has presented India at various levels. Different cultures and communities, different areas and issues are represented so skillfully that everything is involved in the story very smoothly.

References

- Dodiya, Jaydipsinh. (2006) *Perspectives on Indian English Fiction*, Swarup and Sons, India.
- Jha, Gauri Shankar. (2006) *Current Perspectives in Indian English Literature*, Atlantic, New Delhi.
- Komalesha, H. S. (2004) *Issues of Identity in Indian English Fiction: A Close Reading of Canonical Indian English Novels,* Peter Lang, New York.
- Mishra, Binod and Kumar, Sanjay. (Ed.) (2006) *Indian Writing in English*, Atlantic, New Delhi.
- Sharma, Diksha. *Shashi Tharoor's Novels: A Postcolonial and Postmodern Perspective*, B. R. Publishing Corporation, Delhi.
- Shaik Iliyas Ali, Dr. V. Anitha Devi. "Progress of India in the Matrix of Diaspora: a Study of Shashi Tharoor's Fiction", *IOSR Journal Of Humanities And Social Science* (IOSR-JHSS), Volume 14, Issue 5 (Sep. - Oct.) 2013.

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"मानवतावादी विचाराचा पुजारी : कर्मवीर भाऊराव पाटील"

प्रा.डॉ. चौधरी एन. डी.

मराठी विभागप्रमुख, आनंदराव धोंडे महाविद्यालय, कडा, ता.आष्टी जि. बीड

प्रस्तावना :

अखील भारतातील १९ वे शतक म्हणजे नवजागृती, नवचैतन्य आणि नवनाविण्यपूर्ण उर्जा निर्मितीच्या स्त्रोताचे शतक होय. भारतातील श्रध्दा, भक्ती, भावना, अंधश्रध्दा, धर्मभोळेपणा, कर्मकांड यांना तिलांजली देत नव विचार बुध्दीनिष्ठता आणि लौकिक परिस्थितीचे भान याविषयी आत्मभान निर्माण करणारा काळ होय. पेशवाईचा अस्त, इंग्रजी सत्तेचा उदय आणि सत्ता टिकवण्यासाठी इग्रजांनी भारतात घडवून आणलेल्या सुधारणा यांचा परिपाक म्हणजे समाजातील उपेक्षित, तळागाळातील, पिढया न पिढया अन्याय अत्याचार सहन करणाऱ्या पिचलेल्या लोकांचा निःश्वास टाकण्याचा हा काळ होय. जीवन जगण्यातील भयानकता, भेसूरता, दैन्य, दारिद्रय यास क्षणभर बाजूला सारुन जगण्याचा आनंद ओठावर हसू आणून व्यक्त करावा असा हा काळ होय. म. जोतिबा फुले यांनी बहुजन समाजाच्या उत्थापनासाठी केलेले कष्ट, सोसलेले दुःख, सहन केलेला अत्याचार अर्धशतकात सर्वव्यापक बनून बहुजनांच्या आशेचा किरण उदयास आला.

हजारो वर्षापासून चालत आलेला पारंपरिक तात्विक बैठकीवर समाज प्रवाहीत रहात आला होता. पण इंग्रजी साहित्याच्या परिचयाने आणि धर्मभावनेपेक्षा बुध्दिनिष्ठता श्रेष्ठ मानून मानवी जीवन हे निरपेक्ष वृत्तीने जगण्याचे होय असे स्पष्ट करुन मानवतावादी दृष्टिकोन रुजवण्यासाठी म. फुले यांनी सत्यशोधक चळवळ उभारली. या चळवळीचा मुख्य उद्देश सामाजिक क्षमता, बंधुत्व, जातिभेद विरहित समाजनिर्मिती हा होता. तत्काळात करण्यात आलेल्या ब्राह्मण – ब्राह्मणेतर चळवळीमुळे सत्यशोधक चळवळीस बळ मिळाले. समाज जागृती, समाज प्रबोधन आणि लोकशिक्षण ही तत्त्वमयी जोपासून समाजात कार्यास प्रारंभ केला. ब्राह्मणेतर आणि सत्यशोधक चळवळीचे काही उद्देश समान असले तरी दोन्ही चळवळीचे मार्ग भिन्न ठरले. म. फुले यांनी व्यक्त केलेल्या सामाजिक विचाराच्या बैठकीवर ही चळवळ कार्य करु लागली.

" सत्यशोधक चळवळ राजकारणापासून अलिप्त होती. राजकारणाशी त्यांनी कसलाही संबंध ठेवला नाही. सत्यशोधकाचे धोरण प्रामुख्याने सामाजिक, सांस्कृतिक परिवर्तन घडवून आणणे एवढेच होते. ब्राह्मणेतर चळवळीचे नेते राजकारणात रस घेणारे होते. त्यांची राजकीय महत्त्वाकांक्षा कधीच लपून राहिली नाही. बहुजन समाजाच्या फायद्यासाठी सत्तेत भागीदार करणे आवश्यक आहे असे ते मानत असत."[१]

डॉ. बाबासाहेब आंबेडकर यांनी बहुजन समाजाच्या जीवनात परिवर्तन घडवून आणण्यासाठी म. फुले यांच्या विचारधारेत कार्य करण्यास प्रारंभ केला. याच प्रवाहात स्वतःला झोकून देऊन समाजोध्दाराचे महान कार्य करणाऱ्या कर्मवीर भाऊराव पाटील यांच्या मानवतावादी विचारांचे दर्शन प्रस्तुत शोधनिबंधाद्वारे करण्याचा मानस आहे.

संशोधन विषयाची व्याप्ती :

सदरील शोधनिबंधाची मांडणी करत असताना विषय स्पष्टीकरणाच्या मर्यादा लक्षात घेता संशोधन विषयाची व्याप्ती कर्मवीर भाऊराव पाटील यांच्या मानवतावादी आणि समाज कल्याणपर धोरणांचा विचार अशी मर्यादित स्वरुपात निश्चित करण्यात आलेली आहे.

संशोधन विषयाचे स्पष्टीकरण :

कर्मवीर भाऊराव पाटील यांनी बहुजन समाजोध्दाराजे कार्य केले. कर्मवीर भाऊराव पाटील यांनी संपूर्ण महाराष्ट्रात परिवर्तन घडवून आणण्याचा निर्धार केला. सामान्य माणसापर्यंत शिक्षणाची सोय कशी करता येईल यासाठी प्रयत्न आणि कार्य केले. या दृष्टिकोनातून कर्मवीर भाऊराव पाटील यांच्या सामाजिक समता,न्याय,नीती या तत्त्वांबरोबर श्रम, स्वावलंबन आणि स्वाध्याय ही तत्त्वे स्वीकारुन समाजास जातीयतेच्या चौकटीतून बाहेर काढण्याचा प्रयत्न केला.

"बहुजन समाजात शिक्षण प्रसार झाल्याशिवाय त्यांची उन्नती होणार नाही हे भाऊरावांनी ओळखले. त्यामधूनच त्यांना शैक्षणिक कार्याची प्रेरणा मिळाली. 'बहुजन हिताय

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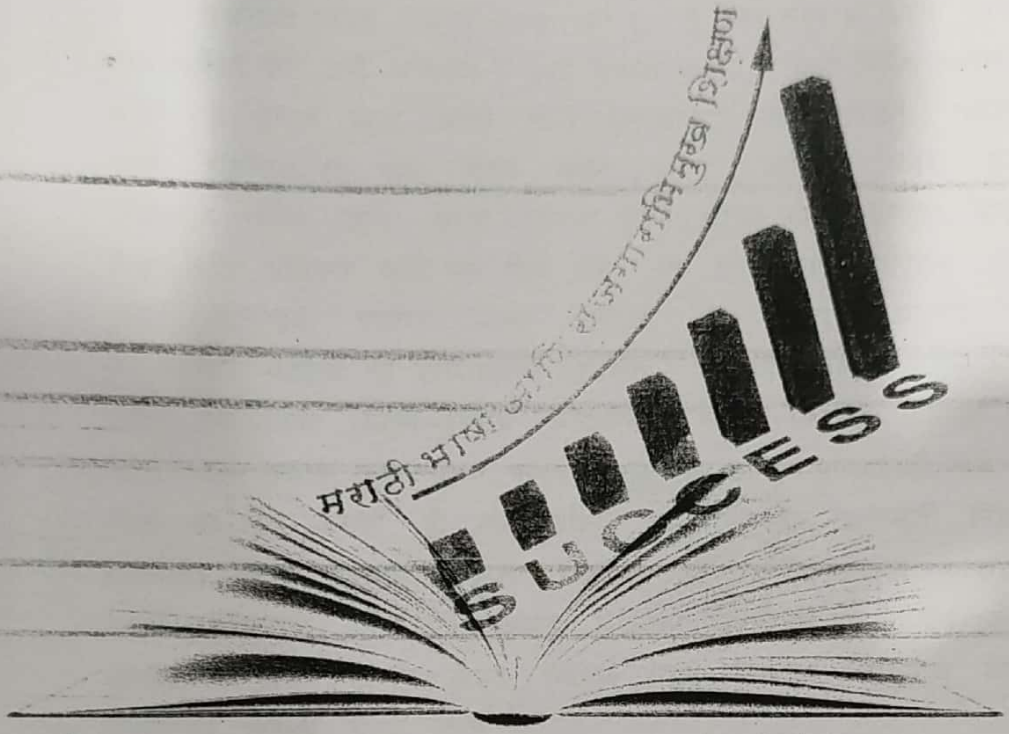

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साहित्यकृतीचे माध्यमांतर स्वरुप आणि चिकित्सा

प्रा.डॉ.एन.डी. चौधरी
मराठी विभाग प्रमुख आनंदराव धोंडे महाविदयालय कडा

प्रस्तावना :–

मानव हा प्राणी समाजशील प्राणी आहे. समाजाचे अस्तित्व भाषेमुळे टोकून राहते. भाषा ही मानवाची, मानवेत्तर प्राण्यांची संवाद साधण्याचे साधन असते. मानव हा भाषेद्वारे एकमेकांशी संवाद साधत असतो. समाजाची परंपरा, संस्कृती, श्रध्दा, ज्ञान इ. चे जतन करुन हा वारसा पुढच्या पिढीकडे वहन करण्याचे कार्य भाषेद्वारे केले जाते. भाषेमध्ये जे ध्वनी वापरले जातात ते मानव निर्मित असतात. या ध्वनींना चिन्ह दिलेले असते. ते समाज मान्य असते. ध्वनी समुच्चयाद्वारे शब्द बनतात. शब्दापासून अर्थ युक्त वाक्य बनते. बोलणारा दुस–यास बोलून संवाद साधतो. आपल्या भावना इतरांपर्यंत पोहचवतो यास संदेशवहन म्हटले जाते. संदेश वहनामध्ये ऐकणे, बोलणे, वाचने, लिहिणे, यापासून श्रवण, संवाद, वाचन, लेखन आणि आकलन यांनी भाषा सिध्द होते. या द्वारेच सर्व व्यवहार चालू असतात. भाषा ही दुतर्फी चालणारी प्रक्रीया असते. साहित्य हा समाजाच्या अनुभव विश्वाचा आविष्कार असतो. समाज–भाषा–साहित्य या परस्परावलंबी असतात. कलावंत समाजाचा घटक असतो. समाजाशी समरस होऊन समाजातील घटना–प्रसंगाचे आवलोकन करुन आपल्या कल्पना शक्तीच्या जोरावर साहित्य निर्मिती करत असतो. कथा, काव्य, कादंबरी, नाटक या साहित्य प्रकारासाठी जसे अनुभव विश्व असेल तसे त्यास रुप देत असतो. ही शाब्द प्रक्रिया असते. लेखक कलाकृती निर्माण करतो आणि वाचक कलाकृती वाचून आत्मसात करतो. लेखकाने साहित्य निर्मितीसाठी वापरलेली भाषाही व्यवहाराच्या आणि साहित्याच्या पातळीवरील असते. लेखकाने कलाकृती द्वारे व्यक्त केलेला आविष्कार समाजाचे आभासात्मक जीवन चित्रणच असते. त्यामुळे त्यास सार्वत्रिक अनुभवाचे रुप प्राप्त होऊन कलाकृती विश्वात्मक पातळी धारण करते.

कला कृतीद्वारे मनोरंजन, ज्ञानप्राप्ती, माहितीची देवाण घेवाण होते. आधुनिक काळात समाजास माहिती, ज्ञान पुरवणा–या प्रसार माध्यमाचा भरपूर प्रसार झाला आहे. त्यातली त्यात चित्रपट या द्रक श्राव्य प्रसार माध्यमाचा ग्रामीण भागापर्यंत प्रसार झालेला आहे. समाजाच्या अभिरुचीनुसार साहित्यातील उत्कृष्ट कलाकृतीवर आधारीत मराठीमध्ये अनेक चित्रपट तयार जसे झाले तसे अजरामर ही ठरले. साहित्य प्रकारातील कथावस्तूचे माध्यम जरी बदलले तरी त्याचे महत्व कमी झाले नाही. असा त्रिवेणी संगम भाषेतील साहित्य प्रकाराच्या आविष्काराचा आहे म्हणून सदरील शोधनिबंधामधून साहित्य प्रकाराचे माध्यमांतर स्वरुप आणि चिकित्सा करण्याचा प्रयत्न केला आहे. यासाठी काही उदिष्ट्ये निश्चित केली आहेत.

शोधनिबंधाची उद्दीष्टये :–

१. भाषा आणि समाज यांचा परस्पर संबंध व्यक्त करणे.
२. समाज आणि साहित्य यांचा समन्वय अभ्यासणे.
३. कलाकृती निर्मिती आणि आस्वादाचे स्वरुप व्यक्त करणे.
४. प्रसार माध्यमाचा प्रवाह निश्चित करणे.
५. साहित्याचे माध्यमांतर आणि स्वरुप व्यक्त करणे.

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राज्यस्तरीय मराठी चर्चासत्र

* अतिथी संपादक *

प्रा.डॉ.निलेश खरात
प्रा.अमोल गुंड

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मराठी नाटय रंगभूमीची प्रायोगिक मूल्ये आणि स्वरुप

प्रा. डॉ. चौधरी एन. डी.
सहयोगी प्राध्यापक व मराठी विभाग प्रमुख,
आनंदराव धोंडे महाविद्यालय कडा,
ता. आष्टी, जि. बीड

प्रस्तावना: भारतीय रंगभूमीची वाटचाल भरतमूनींच्या नाटयशास्त्र ग्रथांपासून सुरु झाल्याचे मानले जाते. नाटयशास्त्र या ग्रथांस पाचवा वेदही मानले जाते. भरतमूनींनी या ग्रंथामध्ये नाटयसाठी आवश्यक असणा—या सर्व गोष्टीचा सविस्तर परमार्थ घेतेलेला आहे नाटक हा कलाप्रकार साहित्य प्रकार म्हणून सर्वमान्य आहे. नाटक हा प्रकार दृश्य आणि श्राव्य अशा माध्यामाद्वारे आविष्कत होत असल्यामुळे नाटका मध्ये विविध घटकांचा समावेश प्रयोगासाठी केला जातो. ''नाटक लिहिले जाते आणि ते प्रयोग रुपाने सादर केले जाते'' भरतमुनींनी नाटयशास्त्र ग्रथांत संहिता आणि प्रयोगाच्या दोनही अंगाचा विचार व्यक्त केलेला आहे. कोणत्याही ललीत कलेचा मुख्य उद्वेश निर्भेळ आनंद प्राप्ती असा मानला जातो. नाटसंहिता लेखक कलावंताकडून निर्माण केली जाते. नाटय प्रयोग दिग्दर्शक अभिनेत्याद्वारे लेखकांचा संहितेचे प्रगटरुप व्यक्त करतो. श्राव्य आणि दृश्य ही दोन मूल्ये नाटयामध्ये महत्वाची असतात. भरतमुनींनी नाटयाचे प्रयोजन व्यक्त करताना लोकधर्मी आणि नाटयधर्मी भावाचा उल्लेख केलेला आहे.

''समाज जीवनातुनच नाटयसृष्टीला तिचे पोषक रस मिळत असतात. अर्थात समाज जीवन जितके भव्य, वैचित्रपूर्ण तितकेच त्याचे नाटयही रसोत्कट निपजत असते''२ यावरुन नाटय आणि समाज जीवन यांचे जवळचे नाते मानले जाते.

भारतीय नाटयपरंपरा अत्यंत प्राचीन असली तरी प्रत्यक्ष नाटय कला प्रकार रंगभूमीवर व्यक्त होण्यास उशीर झाला. तरीही लोकजीवनात लोकरंगभूमीवर नाटयास अविष्कार होतच होता.

साहित्याचे लक्षण सांगताना लोकधर्मी अनुभवाचे नाटयधर्मी रुपात कसे आविष्करण होते याचे विश्लेषण करणे आवश्यक वाटते. नाटक हा साहित्य प्रकार मानला जातो. नाटयाचे विषय लेखक कलावंताचे समाजातील घटना प्रसंगावरुन आपल्या कल्पना चातुर्याच्या जोरावर व्यक्त केलेले असतात. नाटयकलाकृती स्वायत आणि स्वतंत्र कलाकृती असते. नाटयातील भाव प्रेक्षकापर्यत प्रदर्शित करण्यासाठी लेखक कलावंतास विविध घटकांचा एकसंधतेतून ''रस'' प्रक्रियेपर्यंत जाणे आवश्यक असते.

नाटयकलाकृतीला साहीत्यमूल्य असते. नाटक शब्द प्रधान असले तरी शब्दाद्वारे दृश्यमूल्ये नाटक धारण करते. त्यामूळे कलावंताने निर्माण केलेल्या व्यक्तिरेखा नाटकातील विषयाचे वाहक म्हणून कार्य करतात.

''नाटकाच्या स्वत:च्या जगण्यात घडणा—या घटना त्याचे अनुभव इतर माणसाच्या जगण्यात घडणा—या घटना, मानसाच्या क्रिया प्रतिक्रिया, विचारसरणी, अभिनिवेश, राग, लोभ, प्रेम, मत्सर, सूड इ. सर्व हा कलावंताला उपलब्ध असलेला कच्चा माल असतो. कलावंत यातुन आपली कलाकृती येथे नाटयकृती घडवतो''

नाटककाराने तयार केलेल्या नाटकातील संवाद शब्द उच्चारतो. येथेच कलाकृतीतील शब्द प्रक्रियेचे संहितेत रूपांतर झाालेले असते. अभिनय करणारा अभिनेता आपल्या कौशल्यानुसार प्रसंगास जीवंतपणा आणण्याचा प्रयत्न करत असतो. नाटक एकाच वेळी पहायचे जसे असते तसे ऐकायचेही असते.

भरतमुनींनी नाटक (कलाकृती) आणि नाटकाचा प्रयोग यांना एकाच पातळीवर आणून त्यांचा एकत्र विचार व्यक्त केलेला आहे. कलाकृतीतील भाव जागृती आणि नाटयप्रयोगातील भव जागृती यांचा एकाच वेळी विचार केल्याशिवाय नाटयानुभव येणार नाही असे त्यांचे मत होते.

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भाषा संप्रेषण आणि संवाद कौशल्ये

प्रा. डॉ. चौधरी एन.डी.
समन्वयक, मराठी भाषा संशोधन, केंद्र, मराठी विभाग प्रमुख, आनंदराव धोंडे महाविद्यालय, कडा.

प्रस्तावना :—

भाषा मानवास मिळालेली ईश्वरदत्त देणगी म्हणावी लागेल. भाषा शास्त्रज्ञ हॉर्न्बे यांनी ''जी बोलली जाते ती भाषा'' अशी भाषेची व्याख्या करून मानवी पंचज्ञानेंद्रिया मार्फत भाषेची निर्मिती होते असे म्हटले आहे. मानवी विचार भावना, कल्पना व्यक्त करण्याचे प्रभावी साधन म्हणजे भाषा होय. बोलणे आणि लिहिणे आणि वाचणे या क्रिया भाषेद्वारे उदयास आल्या आहेत. भाषा संदेश वहनाचे प्रमुख साधन मानले जाते. मनुष्य आणि पशू, प्राणी इतर जीवजंतू यांचे संदेशन त्यांच्या आर टन द्वारे होत असते. मानवाचे मूल जन्मास आल्याबरोबर जो आर टन स्वर बाहेर पडतो तो मानवी भाषेचा मूळपाया असतो. इतर प्राण्यापेक्षा मनुष्यास ध्वनीयुक्त भाषा विकासावस्थेत प्राप्त झाली. मुखावाटे उच्चारलेल्या ध्वनीस मानवाने आपल्या बौध्दिक कौशल्याच्या आधारे विकास घडवून आणला. त्यांना संकेत चिन्ह दिले. त्याद्वारे लिपी निर्माण झाली. एक किंवा अनेक ध्वनी एकत्र आणून शब्द तयार झाले. शब्दापासून अर्थ युक्त वाक्य तयार झाले. नंतर उच्चारलेल्या वाक्याचा अर्थ ऐकणाराने समजून घेतला. त्यानुसार विचाराची देवाण घेवाण झाली. एकमेकांच्या भावभावना एकमेकांना कळल्यामुळे संप्रेषण पूर्ण झाले.

ध्वनी युक्त भाषा निर्माण होण्यापूर्वी मानवाने संदेश वहनासाठी अनेक युक्त्या, प्रयुक्त्या अमलात आणल्या. त्यात हावभावाची भाषा ही ध्वनी युक्त भाषा निर्मितीच्या पूर्वीचे संदेश वहनाची प्राथमिक अवस्था मानली जाते.

भाषा दैनंदिन व्यवहाराचे प्रभावी साधन होय. दोन किंवा अधीक व्यक्ती एकमेकांसमोर बोलत असतात. विचार व्यक्त करत असतात. ध्वनीयुक्त भाषेचा शोधलागण्यापूर्वी मनुष्याने चिन्ह, चित्र, हावभाव, या भाषेचा वापर केला असावा. मानवी जीवनातील काही व्यवहार आजही या भाषेद्वारे पारपाडले जातात.

चिन्ह, चित्र, हावभावाची भाषा :—

आज आपण विज्ञान युगात वावरत असलो तरी या भाषेचा वापर मनुष्य आवर्जुन करतो आहे. पूर्वीच्या काळी ध्वनीचा शोध लागण्यापूर्वी मनुष्य जंगलात रहात असे. हिंस्त्र पशूपासून आपले संरक्षण करण्यासाठी हिंस्त्र प्राण्याचे चित्र तयार केले जात असावे. आपल्या भावना व्यक्त करण्यासाठी त्याने चिन्हाचा वापर केला असावा आजही ही चिन्हे आपण वापरताना आढळतो. रस्ता असेल तर चिन्ह आपण वापरताना आढळतो. रस्ता असेल तर चिन्ह, रस्त्याच्या कडेने लावलेले विविध फलक त्यावर तयार करून चिकटलेले चिन्ह आपणास दिशा दर्शक ठरतात. या प्रमाणे आपले विचार, भावना काही अंशी व्यक्त करण्यासाठी यांचा वापर केला जातो. हावभावाद्वारे मानवाने आपल्या भावना व्यक्त केल्या. मानवी हावभाव आजही व्यवहारात वापरले जातात. अंगठा दाखवणे, करंगळी दाखवणे, मान हलवणे, डोळा मारणे, ओठ चावणे, मूठी आवळणे अशा अनेक अंगविक्षेपापासून भाषा संदेशन पार पडते. आधुनिक काळात रंग, कपडे याद्वारेही माहितीचे प्रसारण होताना आढळते काळा, पिवळा, हिरवा, पांढरा असे रंग विविध वृत्तीचे प्रतीक मानले जाते. याद्वारेही संदेशन किया पार पडते. भाषिक संदेशन पार पाडत असताना कौशल्ययुक्त व्यक्तीच अशा चिन्हांचा, हावभावांचा वापर करून आपल्या भावना व्यक्त करत असतो.

ध्वनीयुक्त भाषा :—

मनुष्याला आपल्या भावभावना व्यक्त करण्यासाठी चिन्ह, चित्र, हावभाव या साधनांची उणीव भासू लागली. हे दूरवर ऐकू जात नसत. अंधारात दिसत नसत. यांच्या स्वरूपात काहीही बदल झाला नाही. भाव व्यक्त करण्यासाठी मनुष्यास ध्वनीचा शोध लागला मानवी मुखेंद्रियामध्ये हे ध्वनी निर्माण करण्याचे सामर्थ्य होते. मानवी मुखेंद्रियातील सर्व अवयव ध्वनी निर्मितीस मदत करतात हवा, श्वासनलिका, नाक, जीभ, पडजीभ, खालचे ओठ, वरचे ओठ, ३ स्वरतंत्री अशा शरीर अवयवाद्वारे ध्वनी निर्मिती होते.

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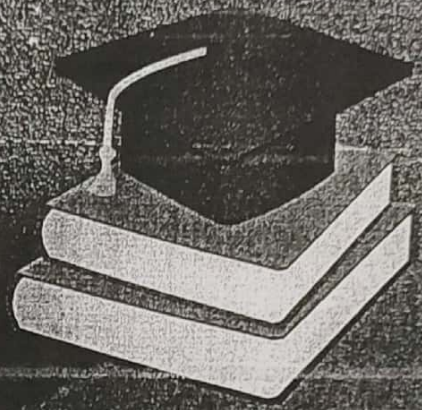

Editor
Dr.Bapu G.Gholap

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मध्ययुगीन मराठी साहित्य आणि जागतिकीकरण

प्रा.डॉ.चौधरी एन.डी.
मराठी विभाग प्रमुख
आनंदराव धोंडे महाविदयालय
कडा.ता.आष्टी जि.बीड

प्रस्तावना:—

मध्ययुगीन मराठी साहित्याचा समाजावर प्रामुख्याने प्रभाव पडला. अशिक्षित पणं प्रभावी संस्काराने संस्कारीत असलेल्या समाजामध्ये ज्ञान प्रसार करणे लोकजागृती घडवून आणणे आणि लोकशिक्षणाचा प्रचार आणि प्रसार करणे आवश्यक होते. संस्कृती प्रवाहातील साचलेपण नष्ट करुन साचेबंद समाज प्रवृत्तीला प्रवाहीत करुन सामाजिक परिवर्तनासाठी पोषक स्थिती निर्माण करणे गरजेचे होते. समाजामध्ये, कर्मकांड, धर्म भोळेपणा चार्तुवर्ण्यव्यवस्था, सोवळे ओवळे, संस्कृत भाषेचे वाढते महत्व लोकभाषेचा अनादर अशा अनिष्ट बाबींना उत आला होता. ब्राम्हण्यविचारामधून समाजाची सोडवणूक होणे गरजेचे होते.संत ज्ञानेश्वरांनी ही कोंडी फोडण्याचा प्रयत्न केला. अखिल मानवजातीला जीवन प्रवाहामध्ये सामावून घेवून समाजातील लोकांना नवी दृष्टी दिली. तत्काळपूर्वी महाराष्ट्रात धर्मप्रचार आणि प्रसार करणारे पंथ किंवा संप्रदाय लोकांपासून दूर गेले होते. पंथाचा कडक आचार धर्म, संन्यासवाद, कठोर नीती नियम यामुळे लोकांना ते आकर्षित करु शकले नाही. "धार्मिक क्षेत्रात अज्ञान, स्वार्थ आणि अंधश्रध्दा यांचे राज्य चालू' होते.त्यामुळे लोकांच्या 'मनात उच्च विचाराची बैठकच निर्माण झाली नाही. "या समाजात यौवणास मानाचे स्थान होते.शुद्र लोक गावाबाहेर अन्यायाचे व पशूसारखे दीनवाणे जीवन जाणत होते."

समाजात निर्माण झालेले वर्णभेद, जातीभेद, धर्मा धर्मातील विसंगती यामुळे मानवी मूल्यांचा किंवा सत् विचार, नीतीनियम, सुसंस्कार यांना महत्वच राहिले नाही. यासाठी सत्विचाराची समाजात जीवन जगण्यासाठी आवश्यकता होती. भारतीय संस्कृती धर्मग्रंथांनी सजली आहे. पौराणिक ग्रंथांनी मानवी जीवनात सद्भाव, दया, माया, माणुसकी व्यक्त केलेली आहे. भारतीय संस्कृती धर्म ग्रंथानी सजली आहे. पौराणिक ग्रंथांनी मानवी जीवनातील सद्भाव, दया, माया, प्रेम, माणुसको व्यक्त केलेली आहे. भारतीय संस्कृतीत भगवद्गीता, भागवत अशा ग्रंथांचा ठेवा संपुर्ण जगासमोर आजही अभिमानाने ठेवते आहे. भागवत ग्रंथातील श्री विष्णू यांनी व्यक्त केलेले विचार संपुर्ण विश्वकल्याणाची मार्गदर्शनाचा प्रयत्न करतात. रामायण, महाभारत, भागवत या ग्रंथांतील मानवीमुल्यांना भारतियांनी स्वीकारलेले आहे. भागवत हा ग्रंथ विष्णू या देवतेच्या उपदेशावर आणि कर्तृत्वावर आधारीत असून रामकृष्णाच्या कथांनी भारतियांना नवीन उर्जा निर्माण करण्याचे कार्य केलेले आहे. समाजाच्या अवनतीच्या काळात याच पौराणीक ग्रंथांनी समाज तारलेला आहे.

प्राचीन वाङ्:मय परंपरा:— प्राचीन वाङ्:मयाचा विचार केला असता असे लक्षात येते की, बहुतांश साहित्य संस्कृत भाषेतील असून वेद, उपनिषदे, पुराणे यांची भाषा सर्वसामान्य माणसांना न समजणारी होती. संस्कृतीतील देवदेवतांच्या कथा सर्व सामान्यांना शास्त्री, पंडीत यांचे शिवाय समजत नसत.व्रत वैकल्ये, पूजाविधी, जप, तप, यज्ञयाग

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दीर्घ कालानंतरही हे रंग अद्याप स्पष्टपणे जाणवतात. येथेही बौद्ध संस्कृतीचा समृद्ध वारसा प्रखरपणे दिसून येतो. त्यामुळे अनेक बौद्ध अनुयायाबरोबरच देश-विदेशातील पर्यटकही अजिंठा लेणीला भेट देत असतात.

याशिवाय लातूर जिल्ह्यातील खरोसा येथे लातूर-निलंगा रस्त्यापासून ४ कि. मी. अंतरावर अतिशय सुंदर अशा कोरिव बौद्ध लेणी आहेत.

अशा रितीने भारताला बौद्धधर्मिय ऐतिहासिक स्थंळाचा समृद्ध वारसा लाभलेला दिसून येतो.

- **निष्कर्ष**

१) भारतातील ऐतिहासिक पर्यटन स्थळांमध्ये बौद्धधर्मिय स्थळांना वैभवशाली प्राचिन वारसा आहे.

२) महात्मा गौतम बुद्धाच्या जन्मापासून ते महापरिनिर्वाणा पर्यंतच्या सर्व स्थळांना ऐतिहासिक महत्व आहे.

३) महात्मा गौतम बुद्धाच्या महापरिनिर्वाणा नंतर इ. स. पूर्व तिसऱ्या शतकामध्ये सम्राट अशोकांने बौद्धधर्माचा प्रचार व प्रसार करण्यासाठी अनेक ठिकाणी चैत्य, विहार, स्तुप बांधले व सारनाथ येथे अशोक स्तंभ उभारला. ज्यातून बौद्ध संस्कृतीचा वारसा आपल्याला दिसून येतो.

४) भारतातील अनेक बौद्धधर्मीय स्थळांना भेटी देण्यासाठी जपान, चीन, श्रीलंका, ब्रम्हदेश, कम्बोडीया, तैवान, व्हियतनाम, थायलंड इत्यादी देशातील बौद्ध अनुयायी व पर्यटक येत असतात.

५) भारतीय पर्यटन व्यवसायाच्या दृष्टिने बौद्धधर्मिय ऐतिहासिक स्थळांना अनन्य साधारण महत्व आहे.

६) बौद्धधर्मिय ऐतिहासिक स्थळांना भेटी देणाऱ्या देश-विदेशातील अनेक पर्यटकांना व बौद्ध अनुयायांना महात्मा गौतम बुद्धाचा अहिंसेचा व शांततेचा संदेश मिळतो.

- **संदर्भग्रंथ सूची**

१) अनुपम पाण्डेय : 'पर्यटनका स्वरूप', डिस्कवरी पब्लिशिंग हाऊस, नई दिल्ली, २००७.

२) डॉ. विठ्ठल घारपुरे : 'पर्यटन भूगोल', पिंपळापुरे ॲण्ड कं. पब्लिशर्स, नागपूर, २००१.

३) भाऊराव सोमवंशी : 'बुद्धांचे आठ पवित्र विहार', अनुप प्रकाशन, सोलापूर, २०१८.

४) डॉ. सोमनाथ रोडे : 'मराठवाड्याचा इतिहास', विद्या बुक्स पब्लिशर्स, औरंगाबाद, १९९९.

५) डॉ. एस. एस. गांठाळ : 'भारताचा इतिहास व संस्कृती', कैलाश पब्लिकेशन्स, औरंगाबाद, २००७.

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ग्रामीण कथा स्वरूप आणि दिशा

प्रा. डॉ. चौधरी एन. डी.
सहयोगी प्राध्यापक व मराठी विभाग प्रमुख
आनंदराव धोंडे महाविद्यालय,
कडा, ता. आष्टी,जि. बीड

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प्रस्तावना:— मराठी साहित्यातील कथा या प्रकारास जवळ जवळ दीडशे वर्षांची परंपरा आढळते. मराठी कथेने नेहमी समाजाच्या जीवनपध्दतीचा, परंपरांचा आविष्कार केलेला आढळतो. समाज स्थिती गतीचे चित्रण काल परिस्थितीपरत्वे लेखक कलावंतानी केलेले आढळते. स्वातंत्र्योत्तर काळात दलितशाहि त्याचे आगमन सामाजिकतेचे भान निर्माण करणारे ठरले. शाहीर आण्णाभाऊ साठे यांनी ज्या नव्या दिशा निर्माण करून शोषित, वंचिताचे जीवन कथेव्दारे चित्रित करण्याचा प्रयत्न केला. तो नवा प्रवाह निर्माण करण्यास कारणीभूत ठरला. स्वातंत्र्योत्तर काळात अनेक कथाकार उदयास आले. नियतकालिकांची संख्या वाढली. समाजाची विविध क्षेत्रे विस्तारात आहेत. महिलांना आत्मभान आले आहे त्यामुळे कथेचे क्षेत्रही विस्तारत आहे. अशा स्थिती मध्ये आपणास साठोत्तरी कथेच्या प्रेरणेतून प्रवाह निश्चित करत पुढे जावे लागणार आहे. कथा मासिके, वर्तमानपत्रे यामधूनही प्रकाशीत होत आहेत. या मुळे कथा जीवन वास्तवा बरोबर प्रबोधन, रंजन, लोक शिक्षण यांना व्यक्त करणारी ठरू लागली. १९७० च्या नंतर मराठी साहित्यात जी. ए. कुलकर्णी, विद्याधर पुंडलीक, रा. रं. बोराडे, आनंद यादव यांनी मराठी कथाकार म्हणून आपला नावलौकीक वाढवून

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२३. मराठी भाषा आणि देहबोलीचे स्वरूप

प्रा. डॉ. चौधरी एन. डी.
समन्वयक मराठी भाषा संशोधन केंद्र, प्रमुख मराठी विभाग सहयोगी प्राध्यापक, आनंदराव धोंडे महाविद्यालय, कडा, ता. आष्टी, जि. बीड.

प्रस्तावना

प्रत्येक व्यक्तीला मातृभाषा असते. लहाणपणापासून भाषा ही बाळाच्या ओठावर रूळू लागते. लहाणपणी मुलं भाषा शिकण्यास प्रारंभ करतात. त्याची सुरूवात आईपासून होते. आपल्या आईची जी भाषा तीच आपली भाषा असते. भाषेने प्राथमिक धडे आईकडूनच मिळतात. आपण लहाणपणी अवगत केलेली भाषा प्राथमिक असते. भाषा आणि कुटुंब गाव–भूप्रदेश–देश अशी शृंखला असते ''मराठी असे आमुची मायबोली'' या प्रमाणे समाजाकडून मिळालेला वारसा जतन करत भाषेचे अधीक ज्ञान अवगत करून प्रत्येकजण भाषिक व्यवहार पार पाडत असतात. प्रत्येक व्यक्तीला अनेक भाषा अवगत करता येतील पण यापासून मातृभाषा वेगळी असते. मातृभाषा ही कुटुंब–प्रदेश–देशाशी जोडते. मी ज्या समाजातील कुटुंबाचा घटक आहे त्यां कुटुंबाची भाषा व्यक्तीची मातृभाषा असते. ज्ञान गृहण करत असताना इतर भाषाशी आलेला संपर्क किंवा अवगत केलेली परभाषा व्यक्तीला ज्ञान जरूर मिळवून देईल पण मातृभाषेचे स्थान ती कधीच घे□ शकत नाही. भाषिक व्यवहार पार पाडत असताना भाषिक कौशल्ये अवगत असावी लागतात. या दृष्टीकोणातून प्रस्तूत शोध निबंधाद्वारे भाषा–व्यक्ती–बोली आणि देहबोली यांचा आविष्कार व्यक्त करणार आहे. त्यासाठी काही उद्दीष्ट्ये निश्चित केलेली आहेत.

मानवी भाषिक उद्दीष्टये

१. मराठी भाषा व्यवस्था समजून घेणे.
२. भाषेतील संभाषण मानवेत्तर भाषा जाणून घेणे.
३. मानवी भाषा आणि मानवेत्तर भाषा जाणून घेणे.
४. भाषिक कौशल्याचा आविष्कार व्यक्त करणे.
५. भाषिक व्यवहारात ध्वनीयुक्त भाषा जाणून घेणे.
६. शाब्दभाषेव्यतिरिक्त इतर माध्यमांचा विचार करणे.

'भाषा संरचना

''जी बोलली जाते ती भाषा'' अशी भाषेची व्याख्या केली जाते. भाषा ध्वनींची बनलेली असते. ध्वनी संकेतरूप असतात. ते समाज मान्य असतात. मराठी भाषेने संस्कृत मधील ध्वनीसंकेत स्वीकारलेले आहेत. एक किंवा अनेक ध्वनी एकत्र येवून त्यांचे सामान्यरूप बनवून शब्द तयार होतो. एक किंवा अनेक शब्द एकत्र येवून वाक्य तयार होते. हे वाक्य अर्थयुक्त असते. व्यक्ती शिक्षित असो किंवा अशिक्षित असो

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पद्मभूषण कर्मवीर भाऊराव पाटील : बहुआयामी व्यक्तित्व

प्रा.डॉ. जी.पी. बोडखे

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

पद्मभूषण कर्मवीर भाऊराव पाटील हे महाराष्ट्राच्या जडणघडणीचे प्रमुख शिल्पकार आहेत, असे म्हटले तरी वावगे ठरु नये. त्यांनी महाराष्ट्रातील शैक्षणिक क्षेत्रात अभूतपूर्व क्रांती घडवून आणली आहे. समाजातील गरीबातील . गरीब, सर्वसामान्य माणसापर्यंत शिक्षण पोहचविण्यासाठी त्यांनी पूर्ण आयुष्यभर अविरत प्रयत्न केले. म्हणुनच त्यांच्या व्यक्तित्वाविषयी भाष्य करतांना डॉ.ए.के.मंजुळकर लिहितात. "ग्रामीण शिक्षण चळवळीचे जनक कर्मवीर भाऊराव पाटील हे एक आधुनिक महाराष्ट्रात किंबहुना भारत देशात एक आदर्श व्यक्तिमत्त्व होते.''डॉ.मंजुळकर यांनी कर्मवीर भाऊराव पाटील यांच्या आदर्श व्यक्तित्वाकडे लक्ष केंद्रीत केले आहे. कर्मवीरांनी बहुजन समाजाला शिक्षणाची संधी उपलब्ध करुन दिली. त्यासाठी इ.स.१९१० साली दूधगाव शिक्षण प्रसारक मंडळ या संस्थेची स्थापना केली.दूधगाव विदयार्थी आश्रम हे वसतिगृह चालविले. या वसतिगृहामध्ये सर्व जाती धर्माचे विदयार्थी एकत्र राहतात.इ.स.१९१९साली सातारा जिल्हयातील कार्ले या ठिकाणी रयत शिक्षण शिक्षण संस्थेची स्थापना केली. इ.स.१९२४ मध्ये रयत शिक्षण संस्थेच्या वतीने सातारा येथे छत्रपती शाहू महाराज बोर्डिंग हाऊस हे उघडले . शैक्षणिक कार्याद्वारे समाजपरिवर्तनाचे कार्य त्यांनी केले. श्रम, स्वावलंबन व समतेचें ते पुजारी होते. संपुर्ण हिंदू समाज जातीयतेच्या बंधनात अडकला होता. त्याला बाहेर काढण्यासाठी त्यांनी शिक्षण प्रसारकाचे कर्म हाती घेऊन पूर्णत्वाकडे नेण्यासाठी प्रयत्न केले. त्यासाठी आयुष्यभर काम केले त्यामुळे कर्मवीरांचे व्यक्तित्व देशामध्ये आदर्श होय.

भाऊरावांच्या आयुष्याला वेगळे वळण :

मिस क्लार्क या दलितांच्या वसतिगृहाच्या उद्घाटन समारंभाहून सर्वांनी आंघोळ केली तरच त्यांना जेवन दिले जाईल असे अण्णासाहेब लट्ठे यांनी जाहिर केले. भाऊरावांनी तो नियम तोडला परिणामी त्यांना वसतिगृह सोडावे लागले. त्यामुळे त्यांच्या जीवनाला वेगळी कलाटणी मिळाली. अभ्यासात भाऊरावांचे म्हणावे तेवढे लक्ष नसले तरी कुस्ती, मल्लखांब यासारख्या खेळात ते नेहमी आघाडीवर असायचे. त्यामुळेच त्यांना शाहू महाराजांच्या वाडयात आश्रय मिळाला. त्यांच्या वाडयात भाऊरावांनी सामाजिक सुधारणेचे धडे घेतले. त्यांचे वयाच्या आठराव्या वर्षी लग्न झाले. पत्नीचे नाव लक्ष्मीबाई होते.

कर्मवीरांची नोकरी व व्यावसाय :

शिक्षण बंद झाल्यामुळे भाऊराव पाटलांना पोटाची खळगी भरण्यासाठी व्यावसाय किंवा नोकरी शोधने गरजेचे वाटू लागले. त्या कालखंडात त्यांनी काही दिवस जवाह–याच्या दुकानात काम केले.संस्कृत विषयाच्या शिकवण्या सुरु केल्या. किर्लोस्कर व ओगले कारखान्यातील उत्पादनाचे फिरते एजंट म्हणून त्यांनी काम पाहिले. हे काम करतांना सर्व भारतभर प्रवास केला. भारत भ्रमणात त्यांना एक गोष्ट कळून आली की विचार, उच्चार व आचार याचे उगमस्थान म्हणजे शिक्षण होय. जोपर्यंत बहुजन समाजापर्यंत शिक्षणाचा प्रचार होत नाही तोपर्यंत आपल्या देशाचे पाऊल पुढे पडणार नाही. शिक्षण म्हणजे जनजागृती हे सुत्र त्यांनी या काळात आपल्या मनात पक्के केले. ही त्यांच्या विचाराची बैठक पक्की होत असतानाच छत्रपती शाहू व फुले यांच्या कार्याचा प्रभाव त्याच्यावर जाणवत होता. याविषयी प्रा. अजित जाधव म्हणतात, '' कर्मवीरांना महात्मा फुले

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साठोत्तरी ग्रामीण कादंबरीतील सामाजिकता

डॉ. जी.पी. बोडखे
आनंदराव धोंडे ऊर्फ बाबाजी
महाविद्यालय, कडा
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प्रस्तावना :

मराठी साहित्यामध्ये १९४५ ते १९६० हा कथेचा कालखंड मानला जातो. तर १९६० नंतरचा कालखंड कादंबरीचा आहे असे म्हटले जाते कारण या कालखंडातील कांदबरी लेखनाविषयी भाष्य नोंदवताना नागनाथ कोतापल्ले म्हणतात ''१९६० नंतरच मराठी कादंबरी ही ख–याखु–या अर्थाने प्रौढ आणि कादंबरी या वाड.मय प्रकाराचे स्वरुप आणि सामर्थ्य समजावून घेवून लिहिली जाऊ लागली. तिने अनेक प्रयोग केले आणि अंगांनी ही कादंबरी बहरुन आली ही बाब आता सर्वमान्य झाली आहे.'' मराठी कादंबरीचा चेहरामोहरा बदलून टाकणारी कादंबरी १९६० नंतर लिहिली गेली. उध्दव शेळके, भाऊ पाध्ये, मनोहर शहाणे, हमीद दलवाई, वामन इंगळे, चंद्रकांत खोत, अनंत कदम, शंकर पाटील, वि. ह. पिटले, आनंद यादव, रा.र. बोराडे असे कितीतरी नवे कांदबरीकार या काळात लेखन करु लागले. याच कालखंडात पेंडसे, दांडेकर, माडगूळकर इत्यादी लेखकांच्या कांदब–याही प्रकाशित होत होत्या. परंतु प्रादेशिकता अथवा ग्रामीणता यांच्या मर्यादातून मराठी कांदबरी सुटली आणि छोटी शहरे व ग्रामीण परिसर असे विविध प्रदेश आपल्या कवेत घेतले असे दिसून येते.

साठोत्तरी कालखंडातील ग्रामीण कादंबरीतील सामाजिकता पाहत असतांना काही महत्वाच्या कादंबरीकारांचा थोडक्यात परिचय येथे आपण करुन घेणार आहोत. उध्दव शेळके यांची 'धग' ही कादंबरी १९६० साली प्रकाशित झाली. या कांदबरीमध्ये व–हाडातील ग्रामीण जीवनाचे वास्तव चित्रण पहावयास मिळते. कौतिक हे या कादंबरीचे केंद्र आहे. ती, तिचा नवरा महादेव आणि त्यांचे कुटूंब, त्यांचे दु:ख, वेदना म्हणजे माणसाला असाहय करणारी 'धग' होय. गरीबी, अज्ञान, अंधश्रध्दा, माणसाची हतबलता, रुढी आणि परंपरा जपणारे मानवी मन आणि त्यामधून आढळणारी माणुसकी या सा–यांचे चित्रण अतिशय ताकदीने 'धग' मध्ये झालेले आहे. या विषयी भाष्य करताना अविनाश सप्रे म्हणतात, ''धग' मध्ये उध्दव शेळके यांनी व–हाडकडच्या एका खेडयातल्या सामान्य आयुष्य जगणा–या, काबाडकष्ट करणा–या, मोलमजुरी करणा–या एका कुटूंबाची आणि विशेषत: रघुनाथ शिंप्याची करारी सून कौतिक हिची जीवघेणी कथा व–हाडी बोलीत सांगीतली आहे''. उध्दव शेळके यांनी 'धग' मधून सामाजिक वास्तव व्यक्त केले आहे. ही कादंबरी व–हाड या प्रदेशातील व्यक्तीविषयी असली तरी ती प्रादेशिकतेच्या मर्यादेने घेरलेली नाही. कौतिक आणि तिच्या कुटुंबाचे उदध्वस्त होणे हे एखाद्या प्रदेशापुरते मर्यादित नाही. माणूस जिददीने नियतीशी संघर्ष करतो आणि त्यामध्ये पराभुत होतो. हे अशा माणसाचे 'कौतिक' एक प्रतिक आहे. त्यामुळे त्याला सामाजिक अंग प्राप्त झालेले दिसून येते.

ग्रामीण कांदबरीमध्ये प्रादेशिक वातावरण अथवा ग्रामीण परिसराचे चित्रण असले तरी त्यामधील सामाजिक अंग समाजमूल्य व मानवीमूल्य महत्वाचे वाटतात. काही महत्वाच्या कादंब–या साठोत्तरी कालखंडात प्रकाशित झाल्या. उदाहरणार्थ हमीद दलवाई यांची 'इंधन' (१९६४) व्यंकटेश माडगुळकर यांची 'वावटळ' (१९६४), शंकर पाटील यांची 'टारफुला', वि.ह. पिटके यांची 'शिदोरी' (१९६९), आंनद यादव यांची

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एक शोध, डॉ. माहेश्वरी गावित, दास्ताने रामचंद्र आणि कंपनी प्रकाशन, पुणे, प्रथमावृत्ती २००८.

२) आदिवासी साहित्य : विविधांगी आयाम, डॉ. माहेश्वरी गावित, चिन्मय प्रकाशन, औरंगाबाद, प्रथमावृत्ती २०१५.

३) आदिवासी साहित्यविचार, डॉ. माहेश्वरी गावित, याहामोगी प्रकाशन, अहमदनगर, द्वितीयावृत्ती २०१८.

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५) कोसबाडच्या टेकडीवरून, अनुताई वाघ, चा प्रकाशन, ठाणे, प्रथमावृत्ती १९८०.

६) मी वनवासी, सिंधू सपकाळ, रिया पब्लिकेशन्स, कोल्हापूर, प्रथमावृत्ती २०१३.

७) संघर्षाच्या नव्या वाटा, आबा करमरकर, प्रथमावृत्ती १९८४.

८) आदोर, नजूबाई गावित, प्रथमावश्त्ती १९९५.

९) तृष्णा, नजूबाई गावित, सत्यशोधक मार्क्सवादी प्रकाशन, धुळे, प्रथमावृत्ती १९९९.

१०) आकांत, बाबाराव मडावी, प्रियंका प्रकाशन, यवतमाळ.

११) कोळवाडा, गोपाळ गवारी, मयुरवृत्त प्रकाशन, नाशिक, प्रथमावृत्ती १९८०.

१२) उघडा दरवाजा, रामराजे आत्राम, भूमी प्रकाशन, लातूर, प्रथमावृत्ती २००९.

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आधुनिक कथा वाङ्मयाचे स्वरुप आणि मूल्ये

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प्रस्तावना :

मराठीत कथेला खूप जुनी परंपरा आहे.आज वर्तमानात जी कथा आहे तिचे प्राथमिक स्वरुप हे गोष्टीचे होते. मराठी भाषेच्या विकासाबरोबर कथेचाही विकास होत गेला.मध्ययुगीन मराठी वाङ:मयात वारकरी संप्रदायामध्ये आणि महानुभाव पंथीय साहित्यिकांनी ईश्वराचे गुणगान करण्याच्या उद्देशाने भक्तीभावाने कथा सांगितल्या जात होत्या.महानुभाव पंथात भास्करभट्ट बोरीकरांच्या उध्दवगीतेत कथा आलेल्या आहेत .एकनाथांच्या भागवतातूनही आख्याने आलेली आहेत .शिवकाळ आणि पेशवे काळात बखर वाङमय प्रकार उदयाला आला.बखरीमधून राजाचे गुणगान आणि युध्दप्रसंगाची वर्णन आली आहेत. त्यामधून आलेली कल्पना चमत्कृती, अतिशयोक्ती, दन्तकथा यांचा पुरेपुर वापर केल्यामुळे ही वर्णन कथेशी जवळीक साधतांना दिसतात.म.ना. अदवंत याविषयी भाष्य करतांना म्हणतात, लघुकथेपेक्षा ऐतिहासिक कांदबरीशी या बखरीचे नाते जवळचे असले तरी कथात्म वाङमयाचा मधला टप्पा म्हणुन या बखरीचे महत्व विशेष गणले पाहिजे. इ.स.१८०० पूर्वीच्या कथेचा प्रवास हा या प्रकारे झालेला दिसून येतो.

आधुनिक मराठी वाङमयाला इ.स.१८०० नंतर प्रारंभ झाला. इ.स.१८१८ साली पेशवाईचा अंत झाला ब्रिटिश सत्ता उदयाला आली. त्यामुळे विशिष्ट विचारात अडकलेले मराठी वाङमय चौकट भेदून बाहेर पडले आणि त्यास नविन वळण लागले.मराठी गद्याचा

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प्रस्तावना :

मराठी भाषेत "मुलाखत" हा शब्द मुलाकत या अरबी शब्दापासुन आला आहे. याचा अर्थ गाठ किंवा विचारपूस असा आहे. त्यास इंग्रजी भाषेमध्ये इंटरव्हयू म्हणतात. मुलाखत ही अमेरिकन वृत्तपत्र सृष्टीची निर्मिती मानली जाते.

मुलाखत हा एखांदया व्यक्तीच्या व्यक्तीमत्वाची अभिव्यक्ती असते. ज्यामध्ये व्यक्तीच्या विचारांचे जीवनाचे व केलेल्या कार्याचे दर्शन होते. परिचयात्मक लेख आणि आत्मचरित्रात्मक लेखन या माध्यमातून माहीती उपलब्ध होत असली तरी मुलाखतीचे स्वरूप वेगळे असते. कारण केवळ मुलाखत देणारा व घेणारा ज्या माध्यमातून व्यक्त होत असतात त्या माध्यमांचाही (वृत्तपत्रे, नियतकालिके, प्रकट सभा, आकाशवाणी दूरदर्शन,संशोधनकार्य) मुलाखतीच्या स्वरूपात परिणाम होत असतो. या सर्वांखेरिज राजकिय नेत्यांच्या मुलाखतीचा वाचकवर्ग मोठा असतो. त्यानुसार मुलाखतीचे स्वरूप बदलत जात असते. संशोधनात्मक कार्यातही एकाच नमुन्यात अनेक व्यक्तींच्या मुलाखती घेतल्या जातात. परंतु त्याचे स्वरूप साचेबंध पध्दतीचे असते. प्रत्येक मुलाखतीचे स्वरुप वेगळे असते. दिडशेहून अधिक वर्षापूर्वी मुलाखत तंत्राला सुरुवात झाली आहे. 1869 साली ऑक्सफर्डच्या इंग्रजी शब्दकोशात Interview शब्दाचा समावेश झाला. अभ्यासपूर्ण आणि लेखस्वरुपात येणाऱ्या विस्तृत मुलाखती हा वृत्तपत्रे आणि इलेक्ट्रॉनिक माध्यमांचा ठळक भाग बनला आहे. पण कालपरत्वे मुलाखतीच्या तंत्रातील ठळक बदलही दिसून येत आहेत. मुलाखत तंत्रापेक्षा विषय व आशयाला अधिक महत्व दिले गेले आहे.त्यादृष्टीने संबंधित लेखकांनी /पत्रकारांनी जागरुक राहणे महत्वाचे आहे कारण लिहिलेली किंवा दाखविल्या गेलेली मुलाखत जागरुक वाचक/ प्रेक्षक वाचणार, ऐकणार आहेत. मुख्यत: मुलाखती वार्तामूल्याशी संबंधित असतात. त्यामुळे व्यक्तीच्या किंवा प्रासंगिक विषयाच्या मुलाखतीपासून राजकारणी, कलावंत, खेळाडू, शास्त्रज्ञ, साहित्यिक इत्यादीच्या मुलाखती अभ्यासपूर्ण असणे महत्वाचे ठरते.

मुलाखत लेखन प्रकारात अनेक प्रयोग झालेले दिसतात. वाङमयीन अथवा सांस्कृतिक क्षेत्राशी संबंधित महत्वपूर्ण व्यक्तींच्या मुलाखती या वृत्तपत्र , नियतकालिके, दूरचित्रवाहिन्या अथवा चित्रपट पुरवण्यातून प्रकाशित होताना दिसतात. राजकारणी व समाजकारणी व्यक्तीच्या मुलाखतीमधून विषय शोधून त्याची मांडणी सुसंगतपणे करावी लागते. कारण राजकारणातील समाजाच्या स्वभावाचे , सांस्कृतीक क्षेत्रातील जुने नवीन अनेक संदर्भ त्यामधून समजत असतात. जीवनातील अनेक व्यथा, वेदना व आनंदाचे क्षण त्यांच्या मुलाखतीच्या माध्यमातून जीवंत केले जातात. तसेच भाषिक वृत्तपत्रामध्ये मुलाखती घेण्याचे निमित्त ठरलेले असतात. साहित्यसमेलनाच्या अध्यक्षपदी निवड, साहित्य अकादमी पुरस्कार, एखादी सामाजिक किंवा राजकिय भूमिका घेतल्यानंतर उठलेले वादळ असे साधारण विषय मुलाखत घेण्यासाठी महत्वाचे असतात.

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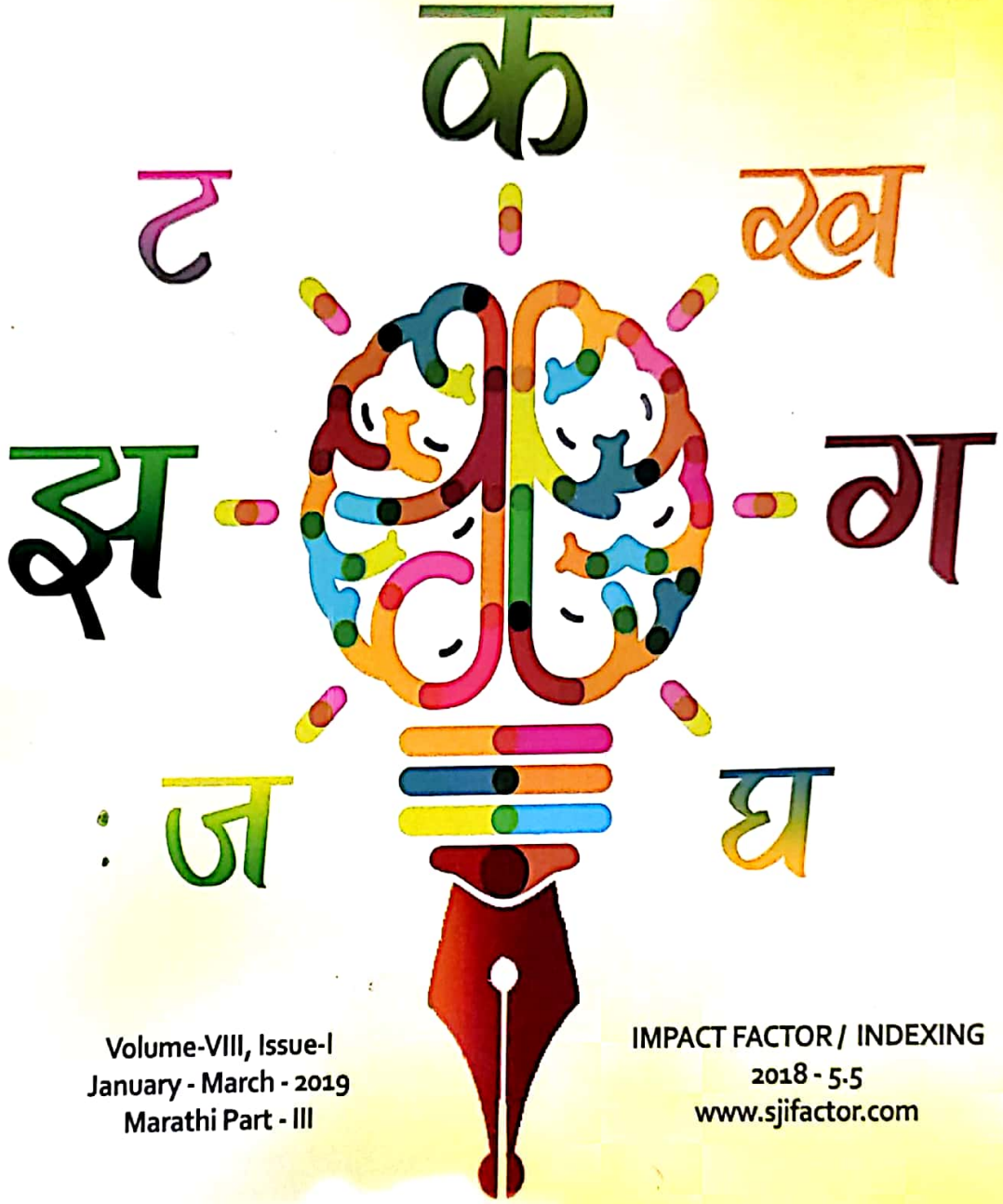

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प्रस्तावना

भाषा हे मानवी जीवनातील अविभाज्य घटक आहे. दैनंदिन व्यवहार पुर्णत्वाला घेवून जाण्यासाठी मानवी जीवनात अनन्यसाधारण महत्त्व आहे. नव्हे तर भाषाशिवाय मानवी व्यवहार पुर्णत्वालाच जात नाही असे म्हटले तरी वावगे ठरणार नाही. भाषेमध्ये प्रमाणभाषा व बोलीभाषा दोन्हीही भाषा घटक महत्त्वाचे आहेत. प्रमाणभाषा ही बोलीभाषा पासूनच विकसित होत असते. दैनंदिन व्यवहाराचे विनिमय साधन असलेल्या भाषेस बोली असे म्हणतात. भाषा जरी सामाजिक असली तरी बोलणे मात्र व्यक्तिनिष्ठ आणि संदर्भनिष्ठ असते. या संदर्भात भाष्य करतांना डॉ. ना. गो. कालेलकर म्हणतात. ''बोली हे दैनंदिन व्यवहाराचे एक स्वाभाविक साधन आहे. परिस्थितीनुरुप अशा भाषिक सामग्रीचा उपयोग करते. मुख्य परंपरेने आल्यामुळे तिच्या अंगी एक प्रकारचा जीवंतपणा असतो. ती साधी पण परिणामकारक असते. तिची स्वाभाविकता हेच वैशिष्ट्ये''. साधेपणा, जीवंतपणा, परिणामकारकता व व्यवहार सुलभता इत्यादी बोली भाषाचा आधार आहे. असे भाषा अभ्यासकांचे म्हणने आहे. साहित्य क्षेत्रातही बोलीभाषाचा प्रभावी वापर होतांना आज आपणास दिसून येत आहे. याविषयी मत नोंदवतांना डॉ. कल्याण काळे म्हणतात, ''निवेदनाच्या भाषेत प्रमाण भाषेचेच वर्चस्व होते. गेल्या पंचवीस वर्षात ग्रामीण आणि दलित साहित्य चळवळीच्या निमित्ताने निवेदन वर्णन संवाद या सर्वच ठिकाणी बोली भाषेचा सरळसरळ वापर होऊ लागला.'' आपल्या नैसर्गिक भावनेचे प्रकटीकरण करतांना बहुजन समाज आपल्याच भाषेत व्यक्त होत असतो. म्हणजे तो समाजघटक त्या विशिष्ट बोलीवरील आपले प्रेमच प्रकट करीत असतो. वास्तव चित्र साहित्यामध्ये व्यक्त करताना निवेदन,संवाद व वर्णनासाठी जर बोलीभाषेचे उपयोजन केले तर ते अधिक प्रभावी होते. त्यामध्ये जीवंतपणा येतो. म्हणुनच बोलीभाषेतुन अनेक साहित्यीक आत्मनिवेदनही करतांना दिसून येतात.

माणूस भावनेची उत्कटता आणि तीव्रता जितक्या सहजपणे बोली भाषेत प्रकट करु शकतो. तितक्या सहजपणे तो अन्य इतर भाषेत किंवा प्रमाण भाषेमध्ये व्यक्त करु शकत नाही. दलित आत्मकथने बोली भाषेत अविष्कृत झाली आहेत. दलित साहित्यिक आपला भूतकाळ आठवतांना त्याला तो आपल्या बोलीतच आठवू लागतो. जे अनुभव अभिव्यक्त करावयाचे आहेत. त्याच्याशी लेखक बांधिल असला की तो त्याच्या बोलीभाषेमधून अधिक प्रभावीपणे व्यक्त होतो. सुरुवातीला दलित व ग्रामीण साहित्यिकांच्या बोलीभाषेची उपेक्षा झाली. पण आज ग्रामीण व दलित साहित्यातील बोलीभाषेच्या अभिव्यक्तीने मराठी साहित्य समृध्द होत आहे. भाषिक रुपावरुन ग्रामीण व दलित साहित्यावर काही आक्षेप घेण्यात आले. ग्रामीण साहित्य गावंढळ, खेडवळ आहे. दलित साहित्य उरबडवे, आक्रस्ताळे आहे, शिव्यांनी भरलेले आहे इत्यादी आक्षेप घेण्यात आले.

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मराठी भाषेला लोकसाहित्याचे योगदान

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प्रस्तावना :

मराठी भाषेचे लोकसाहित्याला योगदान या संदर्भातील स्वरुप समजावून घेतांना मराठी भाषेच्या उत्पत्ती व उन्नतीच्या पार्श्वभूमीचे विवेचन न मांडता, मराठी भाषा ही लोकभाषा आहे. ही संकल्पना सर्वमान्य आहे. हे गृहित धरुन लोकाश्रयाने, लोकमान्य अशी बोलीभाषा व प्रमाणभाषेचे दोन रुपे पहावयास मिळतात. बोलीभाषेच्या माध्यमातून लोक मनातील भाव भावनांचे अभिव्यक्तीकरण करत असतात. लोकसाहित्य हा वाड.मय प्रकार इतर वाड.मय प्रकारापेक्षा थोडासा वेगळा असलेले वाड.मय प्रकार आहे. ललित साहित्याला कोणी एक लेखनकर्ता असतो. पण लोकसाहित्याला लेखनकर्ता नसतो. अमुक एका विशिष्ट कालखंडात ते लिहिले आहे. असा निश्चित लेखनकाल सांगता येत नाही. ललित साहित्याप्रमाणे या वाड.मयाची लिखित किंवा मुद्रित संहीता नसते. लोकांमधून मौखिक परंपरेने चालत आलेला कुणा एकटयाच्या मालकीचा नसलेला, समाजातील सर्व घटकांचा प्रतिनिधित्व करणारा हा वाड. मय प्रकार आहे. श्रम,विधी,सण उत्सव करतांना लोकाकडून लोकभाषेतून उत्स्फूर्तपणे होणारा लोकाविष्कार असतो. म्हणुन परंपरेने चालत आलेल्या लोकसंस्कृतीचा अविष्कार म्हणुन लोकसाहित्याकडे पाहिले जाते. या साहित्याच्या माध्यमातून निखळ कविता,नाटक, कथा असा वाड.मयीन सौदर्य गुण वैशिष्टयेपुर्ण परंपरेने चालत आलेला आहे. याकडे आपण महाराष्ट्रातील संस्कृतीचा मागोवा घेण्याचे साधन म्हणुन पाहिले जाते. म्हणुनच मराठी भाषेला लोकसाहित्याने दिलेले योगदानही महत्वाचे आहे. त्यामुळेच प्रस्तुत शोधनिबंधामध्ये भाषेच्या उत्पत्ती विकास कालखंडाचा आढावा न सांगता विषयाची मांडणी केली आहे.

''लोकसाहित्य हा शब्द लवचिक असून त्यात लोकसमुहाच्या अलिखित किंवा मौखिक स्वरुपाच्या भावाविष्कारांच्या समावेश होतो.'' असे जॉर्ज एम फॉस्टर यांनी म्हटले आहे. त्यांच्या या व्याख्येमुळे दैवतकथा ,कथागीते, आख्यायिका, लोककथा, लोकगीते यांचा लोकसाहित्य या संकल्पनेत अंतर्भाव होतो. तसेच म्हणी, लोकविश्वास व लोकभ्रम यांचाही 'लोकसाहित्य' या संज्ञेत अंतर्भाव करता येतो. याशिवाय पारंपारीक खेळ उत्सव, तोडगे, चेटूक यांचाही समावेश लोकसाहित्यात करावा असे म्हटले आहे. लोकसाहित्याचे स्वरुप हे त्याच्या वाड.मयीन विशेषावरुन निश्चित न करता लोकांच्या अविष्कार पध्दतीचा विविध पध्दती आणि रुपबंधाचा समावेश लोकसाहित्यात होतो. ही व्यापक व्याख्या स्वीकारल्यामुळे लोकसाहित्याने भाषेला दिलेले योगदान उलगडण्याची संधी प्राप्त झाली आहे.

लोकसाहित्य हे लोकांच्या दैनंदिन जगण्याचाच अविभाज्य घटक आहे. दळण कांडण करतांना ओवी अभंग रचले/गायिले जातात. पूर्वीच्या कालखंडात विहिरीतून मोटेवर पाणी ओढतांना लोकगीत म्हटले जात होते.लग्नाच्या किंवा धर्मविधीच्या कार्यक्रमाचा भाग म्हणुन लोकगीते,लोकनृत्य केली जात होते. त्यामुळे एखादया लोकसमुहाची संस्कृती, रुढी, मूल्ये, परंपरा, विधि कर्माविषयी अभ्यास करावयाचा असेल तर लोकसाहित्याच्या साधनांचा उपयोग होतो. भाषा व वाड.मय अभ्यासातही मौखिक वाड.मय म्हणुन लोकसाहित्याचा साहित्य दृष्टीतून अभ्यास केला जातो. कुढलेही वाड.मय आपल्या सांस्कृतिक साहित्याचा वारसा पचवून पुढे जात असते. लोकवाड.मयाचा संस्कार लिखित वाड.मयीन अविष्कारांवरही होत असतो. हा प्रभाव तपासण्यासाठी लेखवाड.मयाचा अभ्यास केला जातो. आधुनिक वाड.मयातही लोकसाहित्याच्या अकृतिबंधाचा कल्पक वापर करुन नवे प्रयोग केलेले पहावयास मिळतात. वाडमयीन परंपरा आणि सांस्कृतिक वारसा यांचा संबंध शोधण्यासाठी लोकसाहित्याचा अभ्यास केला जातो. यावरुनच मराठी भाषेला लोकसाहित्याचे खुप मोठे योगदान आहे. हे आपल्या लक्षात येते.

लोकसाहित्य हे मराठी भाषेला ज्याप्रमारणे समृध्द करण्याचे काम करते त्याप्रमाणे समाजातील सर्वसामान्य लोकांना शिक्षण देण्याचे कार्य करते. त्यामुळे लोकांच्या कर्तव्य, अधिकारी व नीतीमूल्यांचेही अपारंपारीक वळण्याचे निरंतर शिक्षण होत असते. तसेच लोकशिक्षण व प्रबोधनाची गरज लोकसाहित्याच्या माध्यमातून पूर्ण होत असते.

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ईदगाह कहानी में नैतिकमूल्य

प्रा. डॉ.महेमूद पटेल
सहयोगी प्राध्यापक , आनंदराव धोंडे महाविद्यालय, कडा तह. आष्टी जि. बीड

मूल्य समाज के वे आधारस्तंभ हैं, जिनपर समाज की सभ्यता एवं संस्कृति का भव्य भवन आधारीत है | इनकी धारणा किसी वस्तु के सत्व और सत्य की तात्विक धारणा है, ऐसे सत्व या सार तत्व की, जिससे वस्तु मूल्यवान बनती है |

साहित्य के जीवनमूल्य जीवन की मूल्यवत्ता का प्रतीक है, तिसे कोई युग सहर्ष स्वीकार करता है | वावू गुलाबराव का कहना है ''साहित्य के मूल्य जीवन के मूल्य से भिन्न नही है | अतः यह बात सर्वमान्य है कि जिसका जीवन में मूल्य है, उसका साहित्य में भी मूल्य है''|

कर्तव्य और सेवा भावना भी हमारे नैतिक कर्तव्य और नैतिक मूल्य है | जिससे बच्चों में समानता की भावना निर्माण होती है | वे जाति, धर्म, भाषा, क्षेत्र, सामाजिक तथा आर्थिक असमानता के बंधनों से मुक्त रहते हैं | उन्हे उहसूस होता है कि मनुष्यजीवन परस्परपुरक है | उन्हे एक.दुसरे के सहयोग की आवश्यकता होती है |

प्रेमचंद का जीवन ब्रिटीश सरकार की गुलामी और उसकी नीतियों की आलोचना में बीता है | उस समय जब देश गुलाम था और कुछ अपने ही लोग मुस्लिम भाईयों को बदनाम कर रहे थे | उसी वक्त प्रेमचंद की नजर सुफी कवियों के अंदाज में हामिद के संघर्षशील व्यक्तित्वपर पडी, प्रेमचंद को ही इस्लाम की उदारता की ताकद और उसकी नैतिकता का पता था |

'ईदगाह' कहानी बालमनोवैज्ञानिक होते हुए भी लेखक ने बच्चों की मुँह से बडो के मनकी बातों को उगलवा दिया है | रमजान के तीस रोजों के बाद आज ईद आयी है | ईदगाह जाने की खुशी में बच्चे, बुढें सभी लोग खुश है | महमूद, मोहसिन, नूरे, सम्मी अपने पैसे गिन रहे हैं | लेकिन हामिद के पास दादी आमिना ने दिए हुए सिर्फ तीन पैसे हैं | फिर भी हामिद सबसे अधिक प्रसन्न है | उसके पिता हैजे की भेंट हो चुके है तो उसकी मॉ पिलिया से दवा–दारू के अभाव में चल बसी है | अमिनाने उसे कहा था कि उसके मॉ–बाप अल्लाह मियॉ के घर ढेर सारी खुशीयॉ लाने गये हैं | उसके पॉव में जूते नही है | फिर भी वह प्रसन्न है | उसके भीतर प्रकाश है, बाहर आशा | सवाल यह निर्माण होता है कि ऐसे निर्धन लोंगों के लिए यह निगोडी ईद क्यों आती है | अधिक विचार करे तो यह कहानी दरिद्रता की नहीं बल्कि आर्थिक विषमता की भी कहानी है | इस्लाम और दूसरे धर्मों के बराबरी भाईचारे जैसे थोथे दावोंपर एक कठोर व्यंग्य है |

शायद इस्लाम को ही ऐसे गरीब परिवारों की फिक्र थी, इसलिए तो जमिनदार, अमीर, पैसेवाले लोंगोंपर ही सदका, जकात, फितरा वगैरा अनिवार्य कर दिया है | सच में 'जकात' का पैसा विधवा , अनाथों और गरिबों के लिए ही होता है | सच तो यह है की ईद के समय दादी अमिना के पास सिर्फ अठन्नी है | उसके सामने गवलन बैठी है, इद के लिए दो पैसे का दूध जरूरी है | हामिद के खिलौने के लिए तीन पैसे और बचे पॉच पैसे अमिना के बटवे में | उपर से धोबन, नाइन, मेहतरानी और चुडिहारीन भी आयेगी क्योंकि ईद बार–बार थोडे. ही आती है | यू लगता है की हमारे देश के अर्थमंत्री भी अमिना की इस अर्थनीति को देखते तो भारत का भविष्य कुछ और होता | फिर भी अमिना आशा करती है कि ये दिन भी कट जायेंगे |

जैसे ही शहर का दृश्य आता है, प्रेमचंद की कलम और पैनी हो जाती है | प्रेमचंद लिखते है,'' बडी–बडी इमारतें आने लगी, यह अदालत है, यह कालेज है, यह क्लबघर है | इतने बडे. कालेज में कितने लडके पढते होंगे ? सब लडकें नहीं है जी ! बडे.–बडे आदमी हैं, सच ! उनकी बडी–बडी मूँछे हैं | इतने बडे हो गये, अभी तक पढने जाते हैं| न जाने कब तक पढेंगें और क्या करेंगे इतना पढकर''?|[2]

हामिद और उसके मित्र आगे चलने पर पुलिस लाईन दिखायी देती है | इसी पुलिस व्यवस्था पर प्रेमचंदजी भ्रष्टाचार का आरोप लगाते है | ''यह कानिसटिबल पहरा देते है ? तभी तुम बहुत जानते हो | अजी हजरत, यही चोरी कराते हैं | शहर के जितने चोर–डाकू है, सब इनसे मिलें रहते है | रात को ये लोग चोरों से तो कहते हैं, चोरी करो और आप दूसरे मुहल्लो में जाकर जागते रहो ! जागते रहो ! पुकारते है''|[3] हामिद के कहने पर कि चोरी करने पर इन्हें कोई नहीं पकडता तब मोहसिन कहता है | ''लेकिन अल्लाह इन्हें सजा भी खूब देता है | हराम का माल हराम में

संपादक
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डॉ. मीना अग्रवाल

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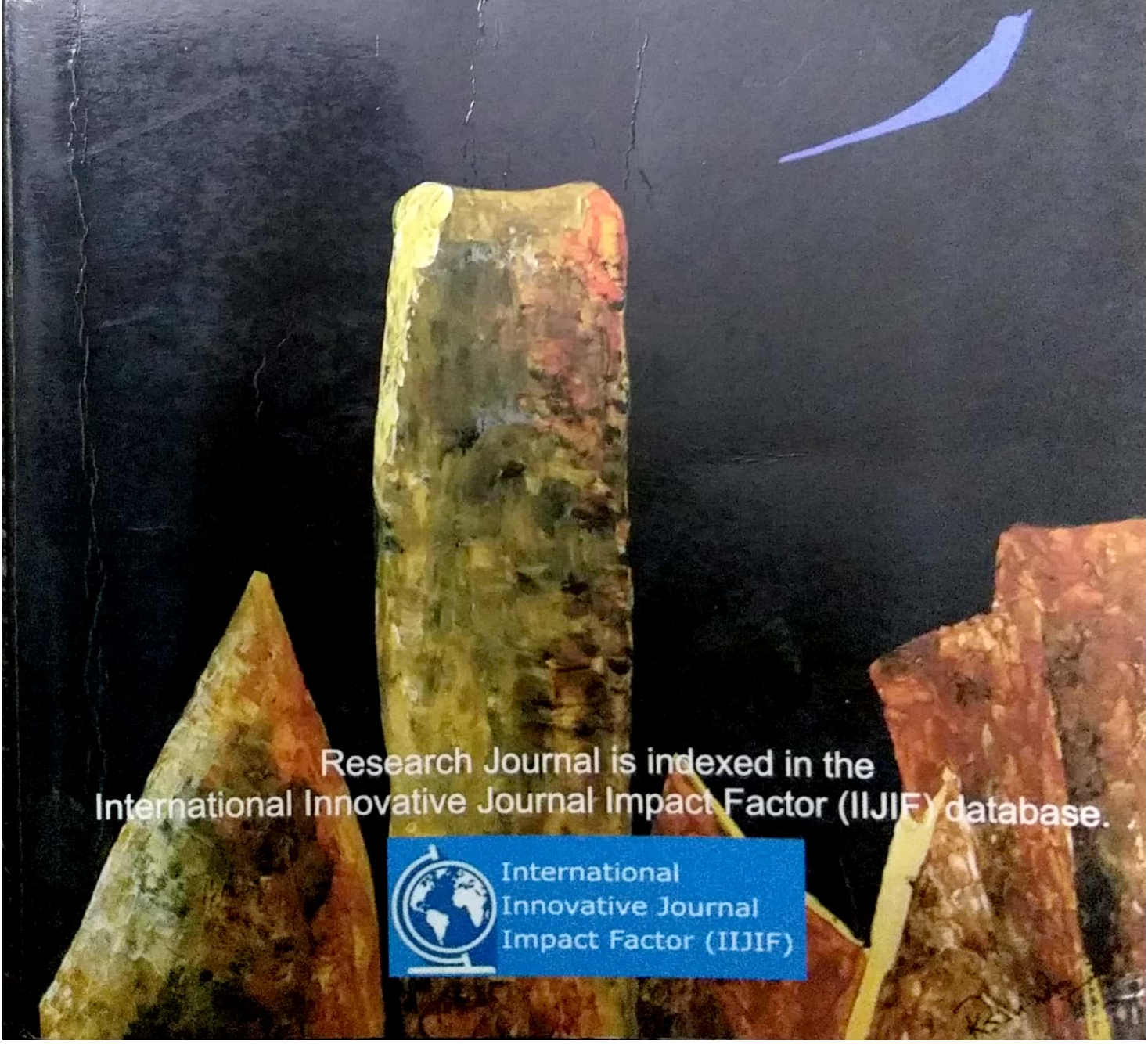

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काका हाथरसी के काव्य में हास्य-व्यंग

प्रा॰ डॉ॰ महेमूद पटेल
आनंदराव धोंडे महाविद्यालय, कड़ा

मनुष्य जीवन में रिक्तता, कड़वाहट और कसैलापन आ गया है। बाहरी-भीतरी दोनों रूपों में घात-प्रतिघात व्यक्ति झेल रहा है। घृणा, क्रोध, करुणाभरे वातावरण की अनुभूति की अभिव्यक्ति का एकमात्र साधन हास्य-व्यंग्य ही है।

हास्य मनुष्य की एक सर्वसामान्य प्रवृत्ति है। मनुष्य के मनोरंजन की परिणति हास्य में होती है। हास्य का महत्त्व बताते हुए डॉ॰ बरसानेलाल चतुर्वेदी कहते हैं, 'हँसी जीवन का विटामिन है। इसके बिना जीवनरस की परिपुष्टि नहीं। यदि मनुष्य और कुछ न सीखकर केवल हँसना सीख ले, दूसरों को देखकर हँसना नहीं, अपने आप पर हँसना तो वह सहज ही संसार और घर-गृहस्थी के भार तथा दु:ख-झंझटों को झेल सकता हैं।'[1] जीवन के संपूर्ण आस्वाद के लिए हास्य का होना आवश्यक है।

व्यंग्य में शोषित वर्ग के प्रति करुणा का भाव होता है, जो सामाजिक बदलाव के लिए प्रेरित करता है। व्यंग्य को स्पष्ट करते हुए रवींद्रनाथ त्यागी एक साक्षात्कार में बताते है कि समाज की कुरीतियों का भंडाफोड़ करने का कार्य मुख्यतया व्यंग्य द्वारा ही हो सकता है। जब मैं दु:खी होता हूँ, तो व्यंग्य लिखता हूँ'[2] डॉ॰ बापु देसाई कहते हैं, 'व्यंग्य समाज की तत्कालीन विसंगतिपूर्ण परिवेश की वह तल्ख अभिव्यक्ति है, जो प्रहार कर व्यक्ति, वस्तु तथा समाज की पोल खोलने का एक अस्त्र है।'[3]

प्रभुलाल गर्ग उर्फ काका हाथरसी हास्य-व्यंग के पुरोधा माने जाते हैं। अनेक दशकों तक उन्होंने लोगों को हँसाया है। काकाजी हास्य-व्यंग्य के ज्ञान को अपनी पहली दौलत मानते हैं। काकाजी के व्यंग्य पर डॉ॰ गिरिराजशरण अग्रवाल कहते हैं, 'काका की कलम का कमाल कार से लेकर बेकार तक, शिष्टाचार से लेकर भ्रष्टाचार तक, रिश्वत से त्याग तक और कमाई से मँहगाई तक देखने को मिलता है। तात्पर्य यह है कि उन्होंने प्रत्येक क्षेत्र में धड़ल्ले से प्रवेश किया है।'[4] काका के व्यक्तित्व की अलग पहचान बनानेवाली दाढ़ी सन् 1956 के आस-पास उनके व्यक्तित्व का अभिन्न अंग बन गई है। उन्होंने अपनी कविताओं में भी दाढ़ी के महत्त्व का गुणगान किया है–

काका दाढ़ी राखिए, बिन दाढ़ी मुख सून,
ज्यों मंसूरी के बिना, व्यर्थ देहरादून।

अपनी पत्नी पर हास्य-व्यंग की रचनाएँ करना हास्य-व्यंग कवियों की एक प्रवृत्ति रही

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बीड जिल्हा: लोकसंख्या साक्षरता व लिंग गुणोत्तर

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

प्रस्तावना:

भारतात जनगणनेनुसार अशा व्यक्तीला साक्षर म्हणून ओळखले जात होते की, ज्याचे वय ६ वर्षापेक्षा जास्त असून त्याला कमीत कमी लिहिता वाचता यावे. मानवाच्या बदलत्या प्रवृत्तीचा परिणाम उत्पादन वाढविण्यासाठी आदानांचा वापर करण्यात होतो. सर्व क्षेत्रातील नविन संशोधन व त्याचा प्रसारामध्ये शिक्षणाची भुमिका महत्वाची असते.

अभ्यासक्षेत्र :

बीड जिल्हा मराठवाड्याच्या मध्यस्थानी आहे. बीड जिल्ह्याचा अक्षवृत्तीय विस्तार १८°२७' उत्तर ते १९°२७' उत्तर अक्षांश व रेखावृत्तीय विस्तार ७४°४९' पूर्व ते ७६°४४' पूर्व रेखांश असा आहे. जिल्ह्याच्या उत्तरेस औरंगाबाद व जालना, पूर्वेस परभणी व लातून हे जिल्हे आहेत. दक्षिणेस उस्मानाबाद व अहमदनगर तर पश्चिमेस अहमदनगर जिल्हा आहे. जिल्ह्याचे एकूण क्षेत्रफळ १०६९४ चौ.कि.मी. असून ते महाराष्ट्राच्या एकूण क्षेत्रफळाच्या ३.४७% एवढे आहे. २०११ च्या जनगणनेप्रमाणे जिल्ह्याची एकूण लोकसंख्या २५,८५,०४९ होती. महाराष्ट्राच्या एकूण लोकसंख्येशी हे प्रमाण २.३०% आहे. जिल्ह्यात एकूण ११ तालुके आहेत. प्रशासकीय सोयीच्या दृष्टीने जिल्ह्याचे दोन महसुली विभाग पाडण्यात आले आहे. एक उपविभाग बीड येथे असून याअंतर्गत बीड, गेवराई, पाटोदा, आष्टी, शिरुर (कासार) हे तालुके येतात. दुसरा उपविभाग अंबाजोगाई येथे असून त्याखाली अंबाजोगाई, केज, माजलगांव, धारुर, परळी, वडवणी हे तालुके येतात. जनगणना २०११ नुसार जिल्ह्यात एकूण १३६८ गांवे आहेत.

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नाशिक जिल्हयातील शेतकरी आत्महत्या-कारणे व उपाय

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प्रस्तावना

भारत कृषी प्रधान देश आहे. 65% जनता शेती व्यवसायावरच अवलंबून आहे. भारतील अर्थव्यवस्थेत शेतीला अत्यंत महत्वाचे स्थान आहे. भारताला शेतीची सुमारे 4000 वर्षाची परंपरा आहे. परतू पारंपारिक पध्दतीने शेती करणारा शेतकरी अजूनही अज्ञानामुळे मागासलेल्या पध्दतीने शेती करीत असल्यामुळे भारतातील शेतीची उत्पादन क्षमता कमी आहे. आर्थिक वृध्दीचा दर, राष्ट्रीय उत्पन्नातील सेवा क्षेत्राचा वाटा, परकीय गुंतवणूक, शिंगेला पोहचलेला शेअर निर्देशांक ही सर्व आकडेवारी भारताची आर्थिक महासत्तेकडे आगेकूच दर्शविणारी आहे. तर दुसरीकडे दारिद्रय, मनुष्यबळ, विकासातील घसरणारी क्रमवारी, वाढती बेरोजगारी, श्रीमंत गरीब यांतील दरी, सामाजिक अस्थिरता, दारिद्रय रेषेखाली जीवन जगणाऱ्याची संख्या, बालमृत्यू प्रमाण, शेतकऱ्याच्या आत्महत्या अशा अनेक समस्या अस्तित्वात आहेत. प्राचीन काळीही कृषी व्यवसायावर अनेक संकटे आल्याचा इतिहास आहे. परंतू आजचा इतका निराशाने ग्रासलेला शेतकरी कधीही नव्हता. भारतातील प्रगत राज्य म्हणून महाराष्ट्र व या राज्यातील प्रगत जिल्हा म्हणून नाशिक जिल्हयाची प्रतिमा आहे. परंतू सध्या शेतकऱ्याच्या आत्महत्यामूळे त्यास गालबोट लागला आहे.

उद्दिष्टे

1] शेतकऱ्याच्या आत्महत्याच्या सदयस्थितीचा आढावा घेणे.
2] शेतकऱ्याच्या आत्महत्याची कारणे शोधणे.
3] शेतकऱ्याच्या आत्महत्यावर विविध उपाय योजना करणे.

संशोधन पध्दती

प्रस्तूत शोध निबंध तयार करण्यासाठी व्दितीय श्रोताचा आधार घेण्यात आला आहे

शेतकरी आत्महत्येचा आढावा/आकृतीबंध

जेव्हा एखादी कमकुवत मनाची व्यक्ती आर्थिक, सामाजिक व राजकीय कारणातून निर्माण झालेल्या नैराश्यामूळे आपल्या जीवनाची अकाली यात्रा संपविते तेव्हा त्याला आपण आत्महत्या म्हणतो. शेतकऱ्याच्या आत्महत्या हा प्रश्न भारतापूरता मर्यादित नसून कॅनकून परिषदेत 'ली' या कोरियन शेतकऱ्याच्या आत्महत्येमूळे जागतिकीकरणास सुरुवात झाली. तर भारतात 1986 मध्ये आंध्रप्रदेशात शेतकऱ्याच्या आत्महत्येस सुरुवात झाली. भारतात महाराष्ट्र, आंध्रप्रदेश, केरळ, कर्नाटक तसेच पंजाब, हरियाणा सारख्या कृषीप्रधान राज्यामध्ये आत्महत्येचे प्रमाण जास्त आहे. आजपर्यंत भारतात 2 ते 3 लाख शेतकऱ्यांनी आत्महत्या केली आहे. आज मितीस दिवसाला 2 ते 3 शेतकरी आत्महत्या करीत आहे. जागतिकीकरणच्या वारुवर आरुढ झालेला. कृषीप्रधान भारत देश आणि या कृषीप्रधान देशाचा कणा बळीराजा, सर्वांना अन्न देणारा, जगाचा पोशिंदा अशी कितीतरी उपाधीनी गौरविला जाणारा हा भारतीय शेतकरी बहुसंख्येने आत्महत्या करतो. नाशिक जिल्हा महाराष्ट्रात कधी काळी

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रोपवाटीका एक शेती पूरक व्यवसाय

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प्रस्तावना

वृक्षवल्ली आम्हा सोयरे वाचरे या तुकाराम महाराजाच्या वाक्याप्रमाणे वृक्षाचे महत्व मानवी जिवनामध्ये, पर्यावरणामध्ये अनन्यसाधारण आहे. भारतातील साधारणपणे ८० टक्के जनजीवन शेती आणि शेतीपूरक व्यवसायावर अवलंबून आहे. कधी महापूर, कधी दुष्काळ, कधी वादळ या आसमानी संकटाचा सामना करून शेतकरी शेतीमाल पिकवतो तर कधी चांगला शेतीमाल पिकवून देखील बाजारभाव मिळत नाही. या असे आस्मानी व सुलतानी संकटात सापडलेल्या शेतकऱ्याच्या जनजीवनात बदल होणे अपेक्षित आहे.

भारतातील शेतकरी शेतीचे योग्य नियोजन करत नाही. मान्सूनचा पाऊस झाल्या नंतर बाजारात बियाणे पाहण्यासाठी जातो व ज्या कंपनीचे बियाणे घेण्याकडे जास्त शेतकऱ्याचा कल आहे. या कंपनीची जाहिरात जास्त कानावर येते ते बियाणे खरेदी करतो व पेरणी करतो, लागवड करतो. पिकाची लागवड करण्या आगोदर काही विशिष्ट दिवस बियाणे टाकून रोपे तयार करुन नंतर लागवड केल्यास कमी कालावधीत जास्त उत्पादन घेता येते. याची काही शेतकऱ्यांना आता जाणीव होऊ लागली आहे. जो शेतकरी स्वत: रोपे टाकून लागवड करीत नाहीत त्यांना दुसऱ्याच्या रोपावर अवलंबून राहवे लागते. त्यासाठी जास्त खर्च करावा लागतो. योग्य वयाचे, प्रमाणित बीयाणाचे रोपे मिळत नाहीत. ऐनवेळी शेतकरी खात्री नसणारे रोपे लागवड केल्यामुळे उत्पादनात घट येते.

रोपवाटीका व्यवसायाचा प्रमुख उद्देश

१) फलोत्पादन क्षेत्रात विशेषत: नियंत्रित शेती या घटकावर गुंतवणूक करण्यासाठी शेतकऱ्यांना प्रोत्साहीत करणे.
२) प्रति हेक्टर प्रति युनिट जास्तीत जास्त पीक उत्पादन वाढीसाठी शेतकऱ्यांना मार्गदर्शन करणे.
३) शेतकऱ्यांना उच्च दर्जाच्या व निर्यातक्षम पिकाच्या लागवडीसाठी प्रयत्न करणे.
४) ग्रामीण भागातील युवकांना कृषी क्षेत्रात स्वयंरोगार उपलब्ध करुन देणे.

५) फलोत्पादन क्षेत्रात बिगर हंगामी पिके घेण्यासाठी व फळाचा फुलाचा दर्जा टिकून ठेवणे.

रोपवाटीकेचे प्रमुख प्रकार - १. भाजीपाला रोपवाटीका, २. फुलझाडे रोप वाटीका, ३. फळझाडे रोप वाटीका, ४. जंगली वृक्ष रोपवाटीका

१) भाजीपाला रोपवाटीका : - फळभाज्या व पालेभाज्या - यामध्ये प्रामुख्याने कोबी, फ्लॉवर, टोमॅटो, वांगी, हळद, काकडी, टरबूज, दोडका, भोपळा, इ. भाज्याच्या रोपवाटीका व्यवसाय महाराष्ट्रामध्ये मोठया प्रमाणावर चालतो. पूणे, सातारा, सांगली, आगर, उस्मानाबाद, सोलापूर (प.महाराष्ट्र व मराठवाड्यात) मोठया प्रमाणावर फळभाज्या व्यवसायात अनेक मजूर गुंतलेले आहेत.

२) फुलझाडे रोपवाटीका - फुलझाडांच्या रोपवाटीकांमध्ये झेंडू, गुलाब, मोगरा, जास्वंद, कन्हेर, गुलछडी, गार्डन करण्यासाठी लागणारी सर्व फुले व लॉन्ससाठी लागणारी सामग्री तयार करण्यामध्ये महाराष्ट्रातील कऱ्याच जिल्हयामध्ये हा रोपवाटीका व्यवसाय चालतो.

३) फळझाडे रोपवाटीका - आंबा, फणस, डाळींब, संत्रा, काजू, बदाम, दाक्षे, जांभूळ, पेरु, सिताफळ, नारळ इत्यादी वृक्षाच्या बिया पासून रोप निर्मिती करुन व त्यावर योग्य मातृवृक्षाचे कलम करुन रोपवाटीका निर्माण केली जाते. महाराष्ट्रातील सर्वच जिल्हेमध्ये हा व्यवसाय मोठया प्रमाणावर चालतो.

४) जंगली वनस्पती रोपवाटीका - कडूनिंब, चिंच, वड, पिंपळ, साग, साल, सिसव, पळस, इत्यादी वृक्षाची लागवड पर्यावरणाचे संतुलन राहण्यासाठी मातीची झिज होऊ नये म्हणून मोठया प्रमाणावर करण्यात येते. हे वृक्ष लागवडीसाठी मोठया प्रमाणावर रोपे मिळण्यासाठी रोपवाटीका निर्माण करण्यात आल्या आहेत. महाराष्ट्र शासन कृषी व फलोत्पादन विभागामार्फत नर्सरी निर्माण करण्यात आलेल्या आहेत. त्यासाठी प्रत्येक तालूका कृषी विभाग काम करत आहे.

रोपवाटीका तयार करण्यासाठी पुढील बाबी विचारात घ्याव्या लागतात :

१) कोणत्या प्रकारची रोपवाटीका तयार करावयाची आहे. २) किती कालावधीसाठी रोपवाटीका कार्यरत ठेवायची आहे. ३) किती कलमे, रोपे, उत्पादीत करावयाची आहेत. ४) किती जमिन हवी आहे. ५) रोपवाटीकेसाठी मजूरांची उपलब्धता कशी आहे. ६) मातृवृक्ष. ७) कलमे रोपे करण्यासाठी निवारा ८) खुट रोप वाढवण्यासाठी जागा.

महत्वाच्या कलमाची अभिवृध्दी पध्दत

आंबा : कोयकलम, शेंडाकलम चिकू : शेंडाकलम, भेटकलम, दाबकलम

दाक्षे : काटे कलम, डोळे भरणे, खोगीर कलम

पेरु : दाबकलम काजू : शेंडाकलम केळी : कंद, ऊती संवर्धन

नारळ : बियापासून अननस : मुनवे मिरी : फाटे कलम

महाराष्ट्रातील कृषी विद्यापीठामध्ये फळ वृक्षावर मोठया प्रमाणात संशोधन करण्यात येत आहे. पुढीलप्रमाणे राज्यातील कृषी विद्यापीठाच्या प्रक्षेत्रमध्ये उभारणी करण्यात आली आहे.

१) हापूस आंबा गुणवत्ता केंद्र : डॉ. बा. स. कोकण कृषी विद्यापीठ दापोली जि. रत्नागिरी

२) केशर आंबा गुणवत्ता केंद्र : वि. ना. मराठवाडा कृषी विद्यापीठ परभणी, हिमातनगर औरंगाबाद

३) संत्रा गुणवत्ता केंद्र : डॉ. प.दे. कृषी विद्यापीठ अकोला, नागपूर

४) डांळीब गुणवत्ता केंद्र : म. फुले कृषी विद्यापीठ राहुरी, आगर

रोपवाटीकेसाठी अनुदान (महाराष्ट्र शासान)

१) राष्ट्रीय बागवानी मंडळ प्रकल्प किंमतीच्या २० % (२५००,०००) पर्यंत चार हेक्टर क्षेत्रासाठी

२) **एकात्मिक बागवानी विकास अभियान** : ४० % अनुदान २५००,००० पर्यत अनुदान दिले जाते. क्षेत्र : चार हेक्टर पर्यत

३) **लघुरोपवाटीका** : क्षेत्र : एक हेक्टर क्षेत्रासाठी १५००,०००/- पर्यत खर्च येतो. अनुदान ७५०००/- पर्यत दिले जाते (अनुदान ५०%)

४) याशिवाय फुलझाडे रोपवाटीकेसाठी अनुदान १,००,००० पर्यत देण्यात येते.

रोपवाटीका व्यवसायातील आडचणी

महाराष्ट्राच्या अनेक भागात दुष्काळाची तीव्रता वाढत आहे. या व्यवसायाला अवकळा येऊ लागली आहे. बऱ्याच रोपवाटीका बंद करण्याची वेळ आली आहे. दुष्काळामुळे रोपांना पुढे शेतकरी ग्राहकच नव्हते. त्यामुळे मोठया अवर्तनात हा व्यवसाय आला आहे. या व्यवसायामध्ये मोठया प्रमाणावर तरुण वर्ग गुंतलेला असल्यामुळे या तरुणांना नवनवीन प्रशिक्षण देऊन व्यवसायामध्ये असणऱ्या नवीन संधी देणे गरजेचे आहे.

* * *

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Research Paper 64

Spatio Temporal Changes in Use of Chemical Fertilizers in Maharashtra State

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Introduction :

Soil naturally containmany nutrients like nitrogen, phosphorous, calcium and potassium. These nutrients allow plants to grow. When soil nutrients are missing or in short supply, plants suffer from nutrient deficiency and stop growing. When nutrient level is too low, the plant cannot function properly and produce the food necessary to feed the world's population.

Once crops are harvested for human consummation, the natural supply of nutrient's in the soil must be refilled, So farmers add nutrients the their soil. Nutrients can be added from verity of sources that is organic matter, chemical fertilizers and even by some plants. This maintain soil fertility. So the farmers can continue use the fertilizers for the healthy crops farmers turn to fertilizers because these substance. Fertilizers are simply plant nutrients applied to agricultural field to supplements required elements found naturally in the soil. Fertilizers have been used since the start of agriculture.

Fertilizers use is remarkable increased from some last decade in all over the world as well as in study area due to the pressure of growing population on agricultural land, consumption of chemical Fertilizers in the Maharashtra state for 2016-17 was 64.67 lakh MT with per hectare consumption of 122.3 kg. It was 59.63 Lakh MT with per hectare consumption of 122.5 kg for 2015-16.

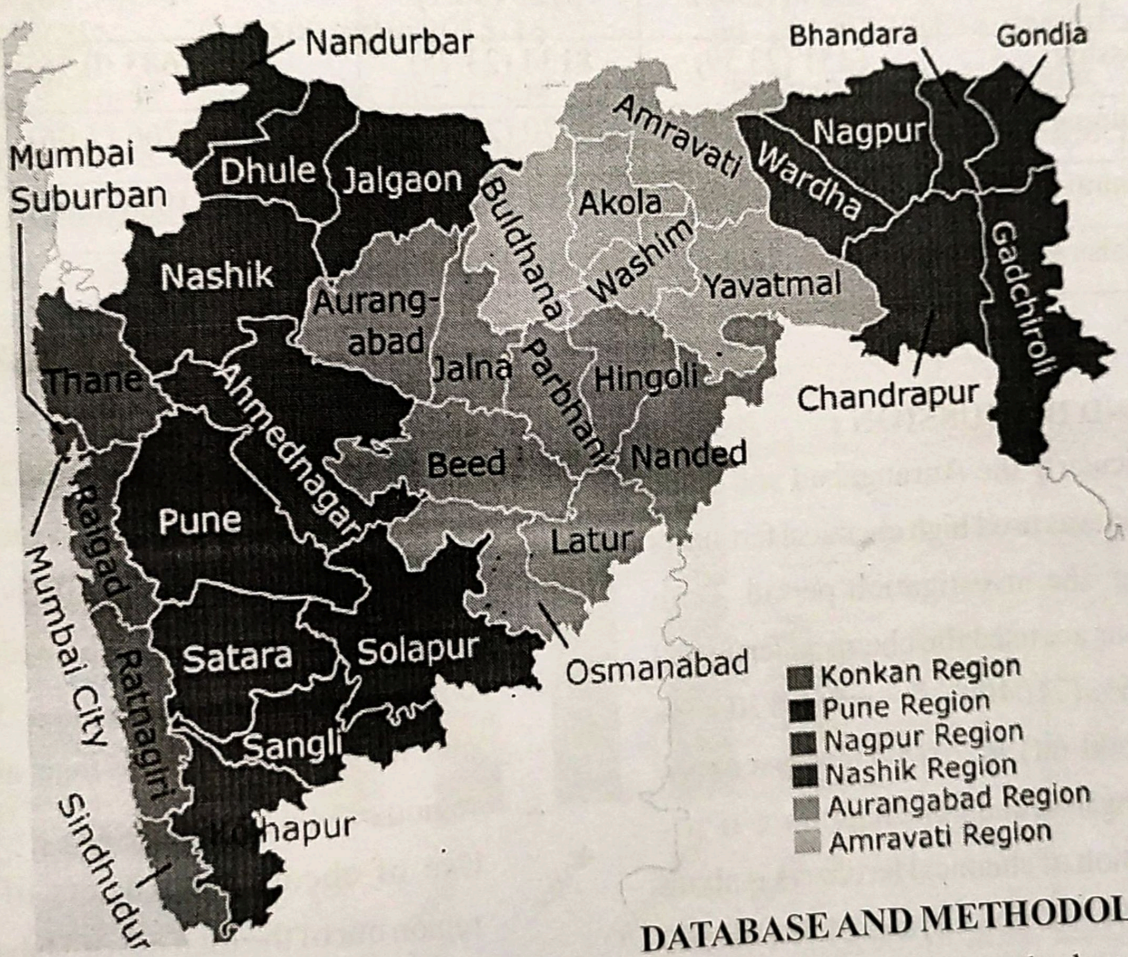
The present investigation tries to find out the spatio temporal changes about use of fertilizers in study area in the research paper authors also highlight the which problems are created due to the heavy use of chemical Fertilizers.

STUDY AREA:

The selected study area, Maharashtra

state is located in north Centre of peninsular India and it is lying between 15045' to 220 6' north latitude and 70036' to 80054'eastlongitude. Maharashtra has a remarkable physical homogeneity. The dominant physical trait of the state is its plateau character. Maharashtra's western part of coastal plains western upturned rims rising to from the Sahyadri rang and its slopes gently descending towards to east and southeast. The Majerrivers and their master tributaries have covered the pleatu in to alternating broad-river valleys and intervening higher level interfluves. The Sahyadri range is the physical backbone of the Maharashtra State. Rising on an average to an elevation of 1000 mtrs.

LOCATION MAP OF MAHARASHTRA :



OBJECTIVES :

1. To Find out the region wise use of chemical fertilizers.
2. To assess the temporal changes in use of chemical fertilizers.
3. To give a review to consequences of use of more chemical fertilizers in study area.

DATABASE AND METHODOLOGY :

The present study based on only secondary data, with is obtained from socio-economic review of Maharashtra state for the period of 2015-16 and 2016-17.

The collected data ware processed by appropriate statistical and quantitative techniques. The map, table and cartographic method are used

for presenting the processed data and their interpretation, which is support for getting concluding remarks.

Region wise use of chemical fertilizers in Maharashtra State (00 MT)

Sr.No.	Region	Use of Chemical Fertilizers		Volume of Change
		2015-16	2016-17	
1	Konkan	599 (2.17)	529 (1.54)	-70 (-0.63)
2	Pune	5755 (20.87)	8418 (24.58)	2663(3.71)
3	Nagpur	3334 (12.09)	3155 (9.21)	-179(-2.88)
4	Nashik	6451 (23.39)	8134 (23.75)	1683 (0.36)
5	Aurangabad	7104 (25.76)	9870 (28.82)	2766 (3.06)
6	Amravati	4328 (15.69)	4135 (12.07)	-193 (-3.62)
	Maharashtra	27571 (100)	34241 (100)	6670 (0.80)

(Fig. in Bracket indicate %)

RESULT AND DISCUSSION :

1. Particularly the Aurangabad and Pune region was used high chemical fertilizers during the investigation period. Both regions are used the chemical fertilizers 25.76% (710400 mt) and 20.87% (575500 mt) in 2015-16 respectively. Aurangabad and Pune region's consumption of chemical fertilizers is about 28.82% (987000 mt) and 24.58 (841800 mt) in year 2016-17 respectively.
2. Use of chemical fertilizers of Aurangabad region 25.76% and 28.82 % in 2015-16 and 2016-17 respectively to total use of Maharashtra State. The volume of change take place positive 3.06% during the period of investigation.
3. Pune region used the 20.87% and 24.58%chemical fertilizers to total use of Maharashtra State in 2015-16 and 2016-17 respectively. The volume of change are found positive 3.71% and it change is higher than all other region of Maharashtra State.
4. Use of chemical fertilizers of Nasik region out of the total use of Maharashtra State is about 23.39% (645100 mt) in 2015-16 and is about 23.75% (813400 mt) in 2016-17. The use of chemical fertilizers is remarkable and volume of change observed to positive only 0.36% during the period of investigation.
5. Amravati region used to chemical fertilizers is about 15.69% (432800 mt)

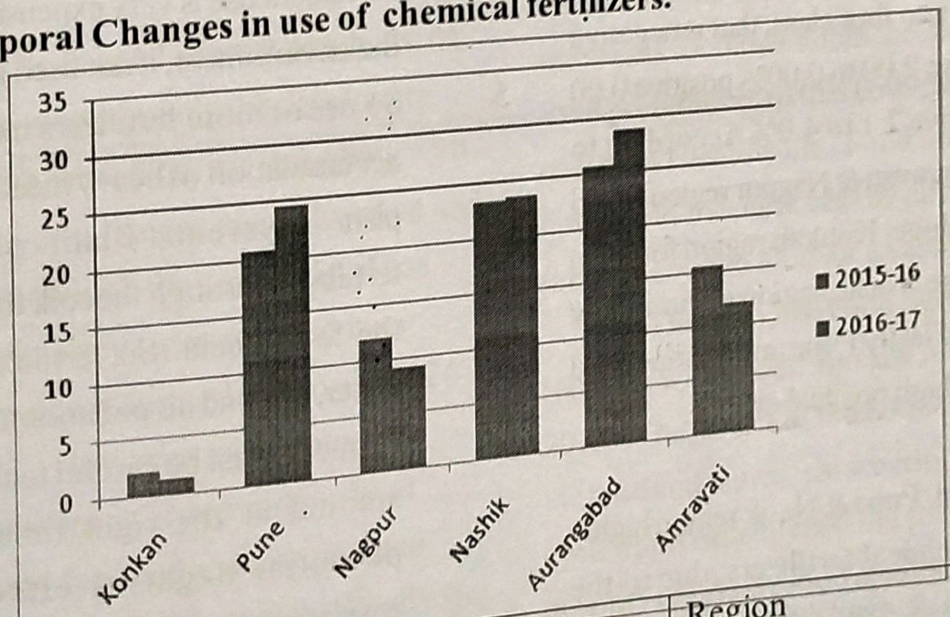
and 12.07% (413500 mt) in 2015-16 and 2016-17 respectively out of the total use to Maharashtra State. This share of utilization of Chemical fertilizers is moderate as compare to the other region of Maharashtra, But volume of change take place negative and high is about 3.62%.

6. Nagpur region used to chemical fertilizers is about 12.09%(333400 mt) and 9.21% (315500 mt) in 2015-16 and 2016-17 respectively; out of the Maharashtra. The volume of change is found negative and high 2.88%.

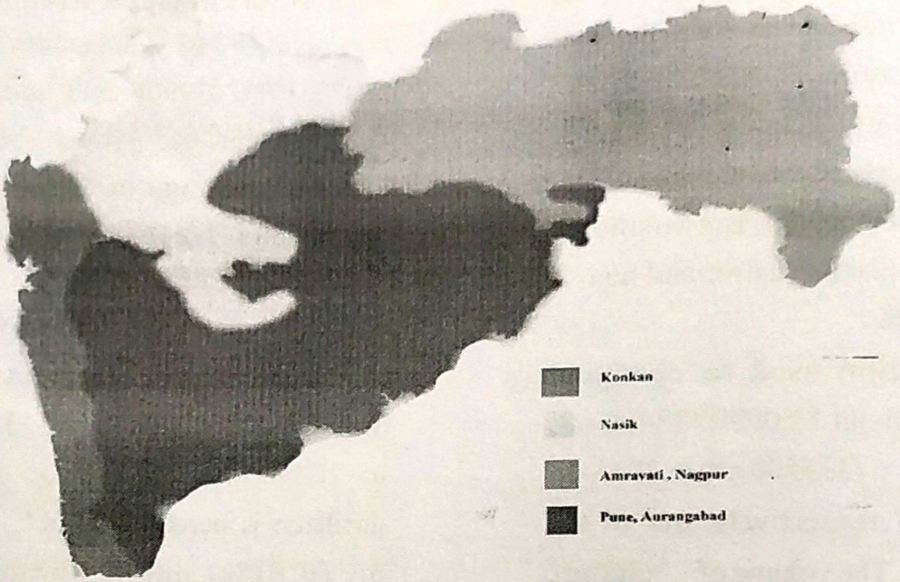
7. Use of chemical fertilizers of konkan region is very negligible as compare other region of Maharashtra and it only 2.17% (59900 mt) and 1.54 (52900 mt) in 2015-16 and 2016-17 respectively out of the total use Maharashtra. The volume of change ta place negative only 0.63%.

8. Total use of chemical fertilizers Maharashtra observed is about 27571 mt in 2015-16 and is about 3424100 in 2016-17. The use of chemi fertilizers is increased about 6670 mt (0.81%) during the period investigation.

Spatio- Temporal Changes in use of chemical fertilizers.



Sr.No.	Volume of Change in % 2015-16 to 2016-17	Region
1	-4.00 to 2.1	Amravati , Nagpur
2	-2.00 to 0.00	Konkan
3	0.00 to 2.00	Nashik
4	2.1 to 4.00	Pune, Aurangabad



Volume of change are take place in use of chemical fertilizers in Maharashtra during the period of investigation. Author has volume of change is classified into four class, that is negative 4.0 to 2.1%, negative 2.00 to 0.00% positive 0.00 to 2.00% and positive 2.1 to 4.0% According to this classification Amravati & Nagpur region found in high negative change, Konkan region found in low negative change, Nasik region occur in low positive change and lastly Pune and Aurangabad region observed in high positive change.

CONCLUSION:

1. Aurangabad, Pune & Nasik region highly used to chemical fertilizers, due to the fertile soil & availability of irrigation sources and also this region growing the more cash crops.
2. Amravati & Nagpur region moderately use the chemical fertilizers due to the rainfeed farming is more.
3. Konkan region very negligible use the chemical fertilizers because of the hilly region and rain feed agriculture.
4. Fertilizers use is very expensive and harm the environment, if not used the correctly.
5. So use of more fertilizers may affect the accumulation of heavy meatls in soil and plant system. Plant absorb the fertilizers through the soil, they can enter the food chain. So fertilizers leads to water, soil and air pollution.
6. Farmers must be careful to use the right amount at the right time, to avoid potential negative effects to the environment.

References :-

1. Socio-economic review of Maharashtra State. (2015-16 and 2016-17)
2. Agricultural Geography-Majid Husain.
3. Geography of Maharashtra.
4. Loksatta, News Paper.

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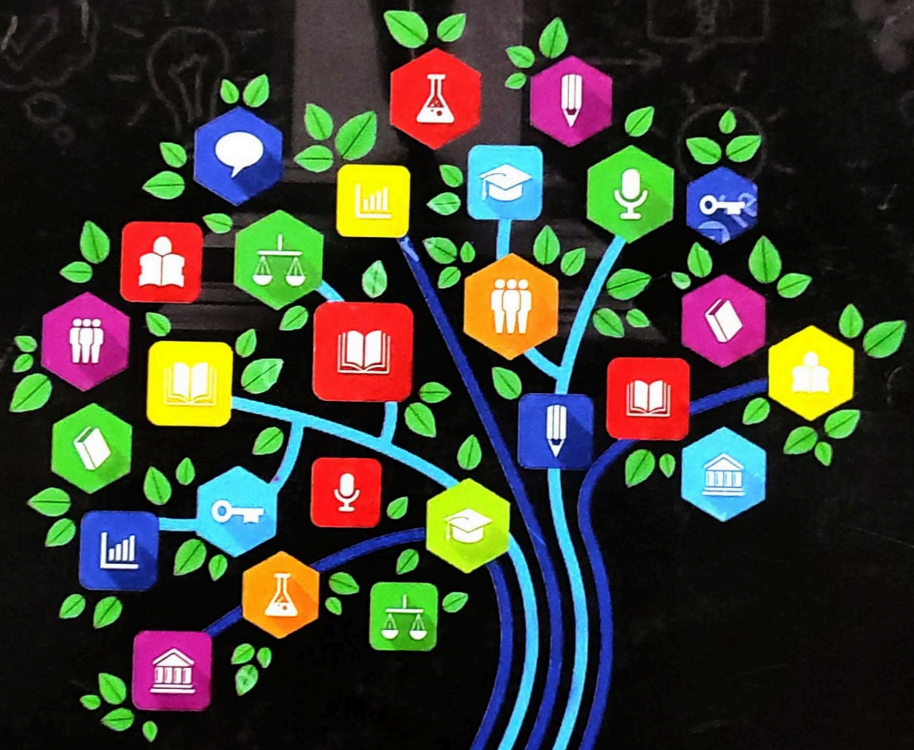

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CONTENTS OF ENGLISH

4. Environment: A Matter of Global Concern

Prof. Dr. Narsale D. V.
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Introduction

As we all know that neuron- mental problems transcend national boundaries they are a feature of world politics. Environmental problems have never been a central preoccupation in the discipline of International relations, which has traditionally focused on security and interstate conflict. Unsustainable use and degradation of earth resources is connected in many ways with the process of globalisation. At current rates of consumption of resources, many raw materials would rapidly run out, pollution would exceed the absorptive capacity of the environment. Free trade associated with globalisation is considered responsible for ever rising levels of consumption, along with associated emissions of effluents and waste gases. Advocates of globalisation claim that sharing of knowledge, advance technology and increase efficiency many result in less input and more output of resources that will have positive effects on the world.

Competing Theories of Environment

Environmental concerns have left their mark on most branches of the social sciences and humanities. However, it was in the late 1980s that a green theory of environment emerged to give voice to new social movements like environment, peace, anti nuclear stance. Robert Cox contrast problem solving theory with critical theory Environmentalists accept the framework of the existing political, social, economic and normative structures of world politics. Moreover, Greens also differ from environmentalists over the notion of sustainability. Environmentalism concentrates on sustainable development. Sustainable development presumes the compatibility of growth with responding successfully to environmental problems.

Environmental Issues on the International Agenda

As we look into the history of environmentalism, we can say that the concern for the protection of environment has recurred in different forms, in several part of the world, long time ago. In 1968 the UNGA accepted a Swedish proposal for what became the 1972 UN conference on the Human Environment. This conference led to the creation of the United Nations Environment Programme. The 1992 UN conference on environment and Development

(UNCED) or Earth Summit was the largest International Conference held in Rio De Janerio, Brazil. This Earth Summit developed Agenda 21 and International Conventions on Climate Change and Preservation of Biodiversity. Earth Summit 2012 was the third international conference on Sustainable Development aimed at Reconciling the Economic and Environmental Goals of the Global Community.

International Trade and Environment

Globalisation as integration of world economy promotes and increases international trade. On the other hand, the current form of globalisation is increasing environmental degradation, over-use of resources, relocation of industry, population movement away from the land, and ever-rising levels of consumption, along with associated emissions of effluents and waste gases, overproduction and consumption with up-gradation of TVs, cell phones, computers and other electronic devices at a breath-taking pace has created unmanageable piles of e-wastes and toxic waste.

Case Study

One of the most discussed cases of hazardous waste being dumped into the ocean occurred along Cote d'Ivoire in Africa in 2006. Hundreds of tons of toxic waste were dumped into the ocean from a ship by the name of Probo Koala. The Probo koala, chartered by the Dutch based oil and commodity shipping company Trafigura, offloaded toxic waste at the Ivorian port of Abidjan. The waste was then dumped by a local contractor at as many as 12 sites in and around the city of Abidjan in August 2006. The incident was responsible for killing at least 17 people and forced thousands to flee from their homes.

Global Climate Change

The problem climate change represents one of the most challenging environmental problems confronting human kind. The green house effect is essential to life on earth. An atmospheric concentration of green house gases resulting from human activity is responsible for the present human induced climate change. Before the Industrial Revolution, carbon dioxide concentrations in the atmosphere were around 280 parts per million and have since grown 405 PPM in 2017.

The effects will include storms, hurricanes, floods, droughts, landslides, mass extinctions, rising sea levels and scarcity of food water and energy. The Intergovernmental Panel on climate change (IPCC) is the leading international body for the assessment of climate change. It was

established by the United Nations Environment Programme (UNEP) and the world Meteorological organization (WMO) in 1988 to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts.

Conclusion

Environment issues have moved from the margins to an increasingly central place in would politics. Environmental problems are now considered as one of the major security problems belonging to high politics. States may try to achieve relative gain as the short term goal by avoiding international environmental regimes but they may come to term with international community once they realise the loss of being free riders. Globalisation, over production of different commodities and continued operation of carboniferous capitalism has contributed to climate change and various problems associated with it. This is high time that states should think about sustainability rather than sustainable development.

References

1) Barnett J. (2001), The Meaning of Environmental Security : Ecological Politics and Policy in the New Security Era.
2) Dobson A. (1990) Green Political Thought.
3) In Tim Dunne, Milja Kurki, and Steve Smith International Relations Theories: Discipline and Diversity, Oxford University Press, 2010.
4) Volger J. (2000) - The Global Commons: Environmental and Technological Governance.

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Environmental Awareness & Socio-economic development in Rural Area: Issues, Problems and Remedies

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Environmental Awareness & Socio-economic development in Rural Area :Issues, Problems & Remedies

Climate Change and Global Warming

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(Assit – Professor), Dept. Of. Geography, Anandrao Dhonde Alias Babaji College, Kada, Tal.Ashti, Dist.Beed.

Abstract:-

The Environmental Scientists believes that the global warming will be higher than ever in the past thousand years. The scientific committee on problems of environment (SCOPE) an international body which met at Ratzeberg, West Germany has also taken a serious view of the growing menace of increasing amount of Co_2 in the atmosphere. The scientists reached to the conclusion that the increase in Co_2 may threaten life on earth. Since the beginning of human civilization, mankind has lived in a competitive relationship with nature. Consequently, the life sustaining environment has been forced to transform more rapidly than ever before. Human tendency to exert a negative influence on ecology has resulted into rapid increase in the greenhouse gases in the atmosphere, large scale deforestation, loss of biodiversity severe land degradation and environmental pollution. The effects of these problems are global.

There may be few areas of uncertainty but scientists are sure that a global warming of $3 - 4\ ^{\circ}C$ could lead to alarming and unpredictable changes in established weather patterns that rainfall and wind patterns could change dramatically and seriously affect agriculture scientists from 66 nations who studied the earth during International Geographic Year have confirmed that an increase of 4°c would completely flood many populous Island Nations from the earth. These Scientist also confirmed that world's climate is becoming warmer due to greater quantities of Co_2 being fed in to the air. Today scientist views that, man will have to retreat from the cities and live under water for protection from high temperature created by the increase of Co_2.

Climate change and global warming are the major environmental problems.

1) Global Climate Change:-

Climate is inherently variable. Climate differs from place to place. It varies with time. As we go back through millions and millions of years that constitute geologic time, the climate record becomes extremely fragmented and unreliable. Bryson and Murray in their book "Climates of Hunger" have described several cases in the distant past when climate change severely affected societies. The problem of climate change represents one of the most challenging environmental problems confronting human kind. The green house effect is essential to life on earth. An atmospheric concentration of green house gases resulting from human activity is responsible for the present human induced climate change. Before the Industrial Revolution, carbon dioxide concentrations in the atmosphere were around 280 parts per million and have since grown 405 ppm in 2017.

Global Warming:-

The report of World Watch Institute (1992), the earth's surface was warmest in 1990. In recent past, global observations have provided clear evidence of climatic changes resulting from anthropogenic activities. Six or seven warmest years on record have occurred since 1980. Observations on temperature at many places of the world over the last century show an average increase of about 0.5k. This is supported by Palaeo - climatic evidence gathered from deep – sea ice – cores from a Arctic and Antarctic regions. While the primary cause of an increase in global temperature in the past has been increasing concentration of Co_2, fossil fuel burning, extensive deforestation rapid increase in chlorofluorocarbons (CFCs) has further complicated the global environmental problems.

Environmental effects of global warming:-

According to Stockholm Environment Institute, all natural ecosystems can tolerate a rise by 0.1°c of temperature per decade. The increase in temperature will cause more frequent storms to many parts of the world, including regions that have experienced no such activity earlier. Global warming could seriously disrupt marine ecosystems. The flooding of many coastal wetlands would mean the loss of breeding grounds of fish, shrimps and birds.

Conclusion:-

Now the climate change and global warming are the two major problems considered in the environmental problems. Globalisation, over production of different commodities and continued operation of carboniferous capitalism has contributed to climate change, global warming and various problems associated with it. This is high time that states should think about sustainability rather than sustainable development. Environmental problems have moved from the margins to an increasingly central place in the world.

References:-

1) Environmental Studies – S.V.S. Rana.
2) Environmental Studies – Prin.Suhas Peshwe, Dr.Ravi Reddy, Dr.Mohan Babare.
3) The meaning of Environmental Security;
Ecological Politics and Policy in the New security Era–Barnett.J
4) Green Political Thought – Dobson.A

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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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Benefits of Yoga in Physical education and sports

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Abstract:

Aim of the present article is the role of some yoga elements in physical education and sports. Yoga is one of the Indian philosophical systems that emphasize the importance of the work with the body to develop healthy behaviours and thoughts. Among all its techniques the physical postures, called asana in Sanskrit, are the ones that got. It is necessary to remember that sports and gymnastics belong to the scope of Physical Education. Once there was a time when people said "it is not the winning itself but the competing nobly that really matters", when the place where competitions took place was sacred and the respect between competitors was essential. In our modern society the term Physical Education has been understood in different ways. Some say it is the "education of the body", which is educating the body to achieve some skills and abilities as it is done, for example, in sports. Others think it is the "education to the body", which is working out only to improve one's looks. Unfortunately, this is the main reason why people join gyms, especially before the summer.

Keywords: Yoga, exercise, science, physical education in schools, muscle)

Introduction:

The word 'yoga' means "to join or Yoke together". It brings the body and mind together to become a harmonious experience. Man is a physical, mental and spiritual being; yoga helps promote a balanced development of all the three. Yoga is a method of learning that aims at balancing "Mind, Body and Spirit". Yoga is a practice with historical origins in ancient Indian philosophy. Yoga is distinctly different from other kinds of exercise as it generates motion without causing strain and imbalances in the body. Other forms of physical exercises, like aerobics, assure only physical well-being. They have little to do with the development of the spiritual or astral body. Yogic exercises recharge the body with cosmic energy and facilitates. They have little to do with the development of the spiritual or astral body. Yogic exercises recharge the body with cosmic energy and facilitates

Benefits for Physical Education:

Yoga is then commonly taken as a system of physical education with a spiritual component, although the truth is the reverse: Yoga is a spiritual system with a physical component. The practice of *asanas* is yet only a small part of the complete system of Physical Culture & Education known as Hatha Yoga.

Role of yoga in education from various angles, including the type of education the was being provided to children throughout the world as well as the different levels of the stress that children face in the classroom environment. The difficulties, problems, conflicts, distractions and dissipation of their energies were also considered. We started using certain principles and practices of yoga, firstly, as an experiment to increase the children's learning ability and, secondly, to inspire teachers to teach their subjects in a slightly different way. Our belief was, and still is, that we are educating our children without considering or caring for the growth of their entire personality. We are cramming their brains and minds with information without creating any support group outside the classroom environment where they can continue to imbibe education. We have to look at what science says about the growth of a child, what psychoanalysis says about child psychology and how the hormones and glands alter and influence the rationality, emotional structure and creative output of the child.

Adjusting Both Hemispheres of the Brain :

According to Science, there are two hemisphers in our brain, the right and the left. These two hemispheres perform different functions. The functions of the left hemisphere are linear, logical and

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Yoga : Fitness :Physical Education

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Dept. Physical Education, Anandrao Dhnde College, Kada. Tq. Ashti, Dist. Beed

Abstract:

This paper is highlighting the yogic benefits for reaching optimum level of physical fitness of an individual. In sports and general life. The human body needs sound relation to nature and its natural remedies which are available in our surround in this paper I tried to highlight the need of yoga and its benefits for human being to be in physically fit.

Yoga is a procedure to control and advance the psyche and figure to increase great health, adjust of psyche and self-acknowledgement. Fitting comprehension and rehearse one can achieve the ideal level to keep physical fitness. Secret of serenity and clam of mind is depending upon physical fitness. Activity abstain from food and unwinding will furnish the sound mental and physical capacities of to human beings. I have chosen here for asnas for mental and physical fitness in brief. Practice of Yoga does not need any equipment and can be done daily. It is simple and given feeling of satisfaction.

Introduction:

Physical fitness is the capacity to do work, it is needed in every aspects of life. i.e. for sitting, standing, reading. Dancing or any other major or minor, things requires energy. This energy is also needed in sports activity, can be improved by Yogic asana and kriya. The word Yoga comes from the Sanskrit word You which means to unite or to bind "It is about the union of a person's own consciousness and the universal consciousness. The scientific inventions, technological developments and rapid processes of urbanization have improved the standard of bring forth varied range of materialistic sufficiency, comfort and enjoyment in human life. We see number of victimized people by cardiac disorders, respiratory ailments, diabetes and peptic ulcer is increasing day by day. Today medical research declares that 90 to 95% of physical disorders are due to stress and tension (zaveri and zaveri, 2006). That's why natural life through the yoga is demand of today. Competition demands, huge hard work and sound will to win the match. Every field is connected with competition even in academic field or sports. Everybody is trying to get medals or a place in sports by any mean whether it is fair or unfair. In the field of Sports, Coaches, Sports Scientist, Physiologist, Psychologist are trying to find out the momentum of success for player. Science helps to develop maximum performance. But our science i.e., "Yoga" is proved to be very helpful to thousand of players and sport men to have secret of serenity and improve performance.

The World Health Organization has defined health as "a state of complete physical, mental and social well-being, and not merely the absence of disease of infirmity. "Normally we feel that if we are not till, we are healthy. Health is not simply absence of disease; it is something positive.

Health is a personal affair. One must be interested in one's own health and there are numerous methods in yoga for keeping oneself healthy. By starting from the physical level by practicing asanas and pranayama we fell psychologically healthy; calmer, free from irritation and we have glimpse of what being healthy in spirit feels like. Occasionally we fell so happy that we lose all sense of the wholeness. The word health means wholeness. When you lose your health, you lose your sense of wholeness. of wholeness. When you lose your health, you lose your sense of wholeness. A loss iteration leads to disintegration. Vigor is the limit of a single physical framework to perform work, it is wanted in each parts of life. i.e., for strolling, utilizing, sitting, standing, dozing, perusing, dancing or any possible major or minor, things needs vigor. This vigor could be enhanced by Yogic asana and kriya.

Physical fitness is a state of well being with flat danger of rash health issues and vigor to partake in an assortment in an assortment of physical exercises.

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Amartya Sen's Capability Approach

Dr. A. B. Malshikhare, Dr. B.M. Waghule
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Tal- Ashti, Dist- Beed.

Introduction

Traditional welfare economics is excessively preoccupied with assessing a person's well-being by assessing her command over goods and services. The income and wealth of a person are seen as primary metries of evaluating wellbeing for they determine the command over commodities or their consumption. This consumption, in turn, would determine the utility that is defined in subjective mental metric such as 'happiness'. And the maximal happiness automatically forms the basis of measuring social welfare. The whole evaluating of individual and social well-being become income and commodity fetish and achieving high levels of income and commodity fetish and achiving high levels of income and accumulations of wealth emerged as dominant paradigms of measuring human wel- being and development The consequentialist emphasis on utility generation and measuring werw taken as the sole indicaters of equalit, freedom and justice in these approaches like sole indicators of equality, freedom and justice in these approaches like Utilitrarianism and Welfarism.

The paradigm shift from exclusive emphasis on utility and achievement to a fairly equal distribution of 'primary goods' and 'basic liberties' greatly helped to 'shift the attention of the social sciences literature in the direction of secing the importance of the freedom.

What is the Capability Approach?

Capability approach is one of the most significant contributions of Amartya Sen to philosophy and social sciences. He first articulated this approach in this Tanner Lectures (1979) and continuously contributed for its theoretical and technical development for the next two decades. The Development as Freedom (1999) is the most comprehensive and influential account of this approach. Apart from Sen's pioneering works, there has been an enormous growth of literature in economics, philosophy, sociology and political philosophy making it a major field of inquiry. Not only has capability approach been used to theoretically evaluate social choice, freedom, development and justice, its practical relevance for policy making and measuring human development is chiefly highlighted by the annual Human Development Reports of United Nations Development Programme [UNDP] since 1990. The capability approach also provides us a conceptual toolkit to understand Sen's work on social choice, freedom, equality, development and justice.

The capability approach is a broad normative framework that evaluates individual well-being, social welfare, social and political arrangement in terms of person's actual 'beings and doings'.

Sen writes; 'A person's capability to achieve functionings that he or she has reason to value provides a general approach to the evaluation of social arrangements, and this yields a particular way of viewing the assessment of equality and inequality'.

The capability approach can be understood, according to David Crocker and Ingrid Robeyns (2010), in both the narrower as well as the broader ways In the narrower way, capability approach tells us 'what information we should look at if we are to judge how well someone's life is going or has gone'. In this way, capability approach helps us in making interpersonal comparisons of well-being and 'focus is often stricutly on the evaluation of individual functioning levels or on both functionings and capabilities'. In its broader use, the capability is a deep evaluative exercise and 'often pays attention to agency and other explicitly normative considerations'

The United Nations' *Human Development reports* evaluating the human development at national, regional and global are the best adaptations of capability approach for the prospective or policy approach.

An approach – Not a Theory

The capability approach is often mistaken for a theory of justice. Sometimes it is taken as a social theory or a development theory, it is neither of them nor does it claim to be a theory. It does not offer a *theory* but provides a broad framework for the evaluation of social arrangements in the 'space of capabilities'.

The capability approach is, thus, a thorough evaluative exercise focusing on '*what* are object of value' and *'how valuable* are the respective objects?'. It is concerned with the 'identification of value-objects, and sees the evaluative space in terms of functioning and capabilities to function' rather than proposing a basic set of principles of justice. As discussed earlier, capability approach is 'a normative framework' within which we can 'evaluate and design policies , ranging from welfare-state design kin affluent societies to governmental and nongovernmental development policies in poor countries, Stating clear, Crocker and Robbery's (20140) argue that capability approach does not explain any social phenomena but provides concepts and 'normative frameworks' which help us to fairly conceptualize and evaluate them.

1.3 Intellectual Trajectory of the Approach: Sen's critique of mainstream approaches

HEAD

Sen develops his capability approach through his constants and engaging critique of mainstream approaches particularly Utilitarianism, Welfarism and Rawlsianism (the term used by Sen for Rawlsian theory). It forms a significant part of capability approach and gives it a position on theory map. He interrogates the reach and limits of informational base of these theories to accentuate the limitations of these approaches . Sen is quite concerned not only with the information that is included, but also with the information that is excluded in an evaluative approach. 'Informational exclusions are important constituents' to demonstrate the character of the approach. Sen provides an alternative evaluative approach to equality and justice by concert rating on informational base of individual freedoms (capabilities) rather utilities (as in case of utilitarianism), conversion of freedoms into functioning rather 'graze' at primary goods (as in case of rawls) and centrality of human diversity rather homogenous 'scaling' of human beings (as in case of both Welfarism and Utilitarianism) All this begins eith his Tanner Lecture on Human Valves delivered at Standford University in 1979 and is accomplished in Development as Freedom (1999).

A) Critique of Utilitarianism

As we discussed abov, Sen is aq strong critique of utilitarianism. He makes a methodological points referring to investigation of informational base of utilitarianism. The informational base of utilitarianism is limited to sum-total utility relevant to the consequence of the agency action that is 'defined in terms of some mental characteristic' such as pleasure, happiness or desire-fulfilment. Utilitariasm aims at the maximization of the 'sum-total of the utility irrespective of distribution'and advocate equality of marginal utility that 'embodies equal treatment of everyone'

B) Critique of Income and Resource Metrics

Sen consistently argues that the income, wealth or over resourse is inadequate to assess the welfare and quality of life. These categories can be highly misleading in examining the standard of living of individuals or groups or states. These can be cases where a person has a high income but is actually poor. Poverty here is understood as a deprivation in the capability to live a good life.

Conclusion

The questions of social justice have received a substantial theoretical treatment by capability theorists chiefly led by Amartya sen, and in the recent past Sen's engagement results in exploring alternative route of 'eliminating injustice' from the societies.

The capability approach brings the idea of effective freedom as the end to the evaluation of standard of lives, development and measuring social justice, From the examination if individual advantage to assessment of poverty. Deprivation and various kinds of un-freedoms, this approach remains centrally focused on the quality of life humans have rather the mere command over goods such as income, wealth and resources, Coupled with this empirical investigation of development on the capability-metric, it carries a normative vision that recognizes the plural ethos, cultural relativity and localism. The evaluation of social and political institutions must look into the contributions they make to enchace agency freedom.

References –

1) 'The Human Development and Capability Approach' by Alkire and Deneulin.
2) India: Development and Participation by Dreze. J and sen. A.
3) A Theory of Justice by Rawals.
4) Well – Being Agency and Freedom by Sen. A.

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ing the microphone capsule very close to a flat surface. This flat surface is called the "boundary" and is why this type of microphone is also called a boundary microphone. For example, Crown PZM 185.

STEREO MICS

Stereo microphones are essentially two microphones in a single casing or body. These are designed primarily for ease of placement, since the body is considerably smaller than two separate microphones. An added advantage is that the capsules are normally closely matched in response. The capsules usually rotate in order to give some flexibility as to the recorded soundfield. Examples are the Royer SF-12, Neumann SM 69, Shure VP88 and AKG C-24.

Some new methods of recording can be used in DAW like Solo Recording, Stereo Recording, Multitrack audio recording, MIDI Recording, Loop Recording, Overlap Recording etc.

References:

1. Theberge and Moogk, Recorded Sound and its impacts.
2. Farlex, Sound recording; Mechanical.
3. Morton, Sound Recording; The life story of a technology, xiv.
4. The Recording Engineer's Handbook by Bobby Owsinski.

Interent Websites :

1. www.masteringbox.com
2. https://electronics.howstuffworks.com

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03

Economic Development and Corporate Responsibility

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Anandrao Dhonde Alias babaji college Kada,
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Abstract

The objective of this paper is to reflect on the consequences of the current economic and financial crisis on Corporate Social Responsibility (CSR), a concept of great importance nowadays. The core approach is the possible link between CSR and the crisis, if both elements can be combined. After an introduction to the current economic and financial situation, some conceptualizations about CSR are made to clarify the perspective used for this complex and incompletely defined concept. The last part of the paper presents an approach to the combination of both concepts, concluding with the idea that CSR in crisis periods can be converted from being a threat to an opportunity.

Introduction:

A great number of economic and financial experts agree in considering the current world-wide economic and financial crisis to be the worst since the Second World War. The crisis began in the United States with the burst of the subprime mortgage housing bubble, after governmental, supervisory and regulatory authorities undervalued the real risk of the situation. But as the world has become closer, economic and financial markets have diminished in number but increased in size and interconnection. The effects of a financial problem are wide-

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विद्येविना मति गेली, मतीविना नीति गेली
नीतिविना गति गेली, गतिविना वित्त गेले
वित्तविना शूद्र खचले, इतके अनर्थ एका अविद्येने केले

-महात्मा ज्योतीराव फुले

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01

A Study of Dairy and Milk Marketing in Maharashtra

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Abstract-

The results of the study indicate that 80 percent of the milk produced by the rural producer is handled by an unorganized sector and the remaining 20 percent is handled by an organized sector. It is found that the dairy co-operatives play a vital role in alleviating rural poverty by augmenting rural milk production and marketing. Involvement of intermediaries; lack of bargaining power by the producers; and lack of infrastructure facilities for collection, storage, transportation, and processing are the major constraints which affect the prices received by producers in milk marketing. Milk quality, product development, infrastructure support development, and global marketing are found to be future challenges of India's milk marketing.

Introduction

Operation Flood and dairy co-operatives emerged in India as the largest rural employment scheme, enabling the modernization of the dairy sector to a level from where it can take off to meet not only the country's demand for milk and milk products but can also exploit global market opportunities. This study reviews the existing status of milk marketing and dairy co-operatives in India and provides recommendations to meet future challenges. The results of the study indicate that 80 percent of the milk produced by the rural producer is handled by an unorganized sector and the remaining 20 percent is handled by an organized sector. It is found that the dairy co-operatives play a vital role in alleviating rural poverty by augmenting rural milk production and marketing. Involvement of intermediaries; lack of bargaining power by the producers; and lack of infrastructure facilities for collection, storage, transportation, and processing are the major constraints which affect the prices received by producers in milk marketing. Milk quality, product development, infrastructure support development, and global marketing are found to be future challenges of India's milk marketing.

Significance of the Study

Dairying is a centuries-old tradition for millions of Indian rural households; domesticated animals have been an integral part of the farming systems from time immemorial. Milk contributes more to the national economy than any other farm com-modity—more than 10.5 billion dollars in 2000-10. In the context of poverty and malnutrition, milk has a special role to play for its many nutritional advantages as well as providing supplementary income to some 70 million farmers in over 500,000 remote villages. More importantly, the farmers earn an average 27.3 percent of their income from dairying, with as high as 53 percent for landless and as low as 19 percent for the large farmers.

Annual milk production in India has more than tripled in the last three decades, rising from 21 mil-lion tons in 1968 to an anticipated 80 million metric tons in 2010. This rapid growth and modernization is largely credited to the contribution of dairy co-operatives under the Operation Flood Project, assisted by many multilateral agencies including the European Union, the World Bank, Food and Agriculture Organization, and World Food Program. Despite the impressive growth in milk production in the last three decades, produc-tivity of dairy animals remains very low and milk-marketing systems primitive. Currently, more than 80 percent of the milk produced in the country is marketed by unorganized sectors and less than 20 percent by the organized sector. The organized sector involves government and co-op-eratives; the unorganized sector involves private organizations.

Rationale

Marketing of the majority of the milk through unorganized sectors is likely to dissuade

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across India on all goods and services. In GST, all indirect taxes such as excise duty, octroi, central sales tax (CST) and value-added tax (VAT) etc. will be subsumed under a single regime. Introduction of The Goods and Services Tax (GST) will be a significant step towards a comprehensive indirect tax reform in the country. It is expected to bring about efficiency and transparency in the indirect tax mechanism in India. Further it will also encourage an unbiased tax structure that is neutral to business processes and geographical locations. Given the enormity of the implication of GST, it requires a consensus among all political parties and states. However the implementation of GST has been delayed several times on account of lack of consensus among the States and Centre on aspects relating to limiting fiscal autonomy of the States.

References

[1]. Khan, M., & Shadab, N., Goods and Services Tax (GST) in India: prospect for states. Budgetary Research Review, 4(1), 38–64.n.d

[2]. Vasanthagopal, R., GST in India: A Big Leap in the Indirect Taxation System. International Journal of Trade, Economics and Finance, 2(2), 144–147, 2011.

[3]. The Empowered Committee Of State Finance Ministers (2009), First Discussion Paper On Goods and Services Tax In India,

[4]. Indirect Taxes Committee, Institute of Chartered Accountants of India (ICAI) Goods and Services Tax (GST). 2015. Retrieved from: http://idtc.icai.org/download/Final-PPT-on-GSTICAI. pdf

[5] Kumar Nitin. Goods and Services Tax in India: A Way Forward. Global Journal of Multidisciplinary Studies, 2014; 3(6):216-225

[6]. Parkhi, Shilpa. Goods and Service Tax in India: the changing.

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WOMEN EMPOWERMENT WITH ENTREPRENEURSHIP

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At/Post :-Kada, Tq. :- Ashti, Dist.:- Beed

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ABSTRACT

In this paper explain about liberalization privatization and globalization role of women's section in transforming India is greatest. In various such as educational, etc. political, public, private, business, IT women is developed herself. In the past women's role is limited to only in family, but with the spread of awareness among the women the scenario has been changed and the women is recognized as a best and successful entrepreneurs in the society. She managed the work-life balance between the business and the family. Due to rapid development in the society now people are satisfied to accept leading role of women in the society. They occupy some specific qualities such as assertive, had work, dedication, punctuality etc. In the world has realized that developing women entrepreneurship is indispensable to flourish, as economically dominant nations in the modern high-each world. Therefore, creation of platforms and networks for entrepreneurial culture are prominent issues globally. This paper focuses on role of women entrepreneurs in transforming India, various Govt., private schemes, main constraints in women entrepreneurs.

"An enterprise owned and controlled by a women's having a minimum financial interest of 51 per cent of the capital and giving at least 51 per cent of the employment generated by the

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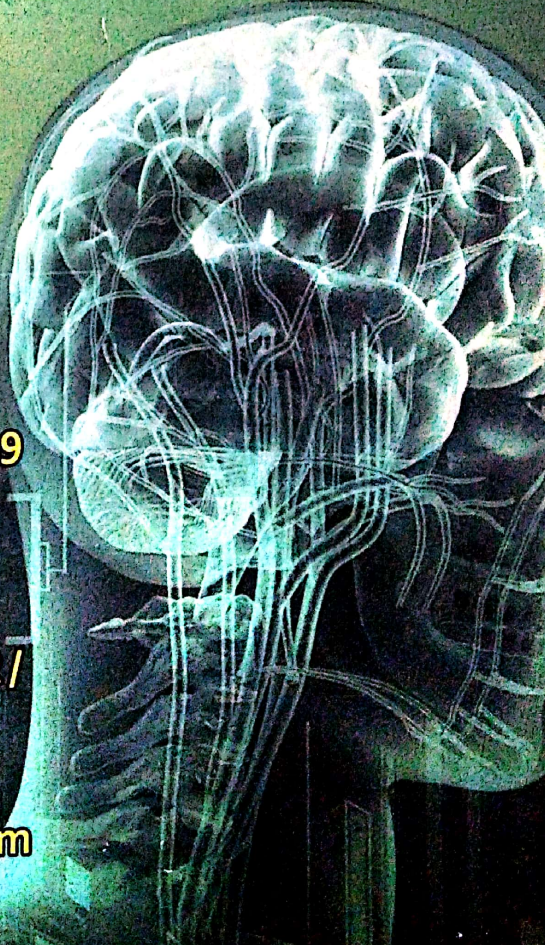

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12. Goods and Services Tax (GST) – Review of Progress Since Mplementation

Dr. Malshikare Ashok Bhimrao
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Abstract

GST will give a major boost to the 'Make in India' initiative of the Government of India by making goods and services produced in India competitive in the National as well as International market. Also all imported goods will be charged integrated tax (IGST) which is equivalent to Central GST + State GST. The implementation of the Goods and Services Tax (GST) in India was a historical move, as it marked a significant indirect tax reform in the country. The amalgamation of a large number of taxes (levied at a central and state level) into a single tax is expected to have big advantages.

One of the most important benefits of the move is the mitigation of double taxation or the elimination of the cascading effect of taxation. The initiative is now paving the way for a common national market. Indian goods are also expected to be more competitive in international and domestic markets post GST implementation.

Introduction

The Goods and Service Tax is a single rate tax levied on the manufacture, sale and consumption of goods as well as services at a national level. In this system the GST is implemented only on the value added at every stage of production. This will ensure there is no cascading effect of taxes (tax on tax paid) on inputs that are used in manufacturing goods Tax policies 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 endeavor to generate tax revenues to support government expenditure on public services and infrastructure development. Cascading tax revenues have differential impacts on firms in the Economy with relatively high burden on those not getting full offsets. This argument can be extended to international competitiveness of the adversely affected sectors of production in the economy. Such domestic and international factors lead to inefficient allocation of productive resources in the economy.

This Results in loss of income and welfare of the affected economy. Traditionally India's tax regime relied heavily on indirect taxes including customs and excise. Revenue from indirect

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Amartya Sen's Capability Approach

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Introduction

Traditional welfare economics is excessively preoccupied with assessing a person's well-being by assessing her command over goods and services. The income and wealth of a person are seen as primary metries of evaluating wellbeing for they determine the command over commodities or their consumption. This consumption, in turn, would determine the utility that is defined in subjective mental metric such as 'happiness'. And the maximal happiness automatically forms the basis of measuring social welfare. The whole evaluating of individual and social well-being become income and commodity fetish and achieving high levels of income and commodity fetish and achiving high levels of income and accumulations of wealth emerged as dominant paradigms of measuring human wel- being and development The consequentialist emphasis on utility generation and measuring werw taken as the sole indicaters of equalit freedom and justice in these approaches like sole indicators of equality, freedom and justice in these approaches like Utilitrarianism and Welfarism.

The paradigm shift from exclusive emphasis on utility and achievement to a fairly equal distribution of 'primary goods' and 'basic liberties' greatly helped to 'shift the attention of the social sciences literature in the direction of secing the importance of the freedom.

What is the Capability Approach?

Capability approach is one of the most significant contributions of Amartya Sen to philosophy and social sciences. He first articulated this approach in this Tanner Lectures (1979) and continuously contributed for its theoretical and technical development for the next two decades. The Development as Freedom (1999) is the most comprehensive and influential account of this approach. Apart from Sen's pioneering works, there has been an enormous growth of literature in economics, philosophy, sociology and political philosophy making it a major field of inquiry. Not only has capability approach been used to theoretically evaluate social choice, freedom, development and justice, its practical relevance for policy making and measuring human development is chiefly highlighted by the annual Human Development Reports of United Nations Development Programme [UNDP] since 1990. The capability approach also provides us a conceptual toolkit to understand Sen's work on social choice, freedom, equality, development and justice.

The capability approach is a broad normative framework that evaluates individual well-being, social welfare, social and political arrangement in terms of person's actual 'beings and doings'.

Sen writes; 'A person's capability to achieve functionings that he or she has reason to value provides a general approach to the evaluation of social arrangements, and this yields a particular way of viewing the assessment of equality and inequality'.

The capability approach can be understood, according to David Crocker and Ingrid Robeyns (2010), in both the narrower as well as the broader ways In the narrower way, capability approach tells us 'what information we should look at if we are to judge how well someone's life is going or has gone'. In this way, capability approach helps us in making interpersonal comparisons of well-being and 'focus is often strictly on the evaluation of individual functioning levels or on both functionings and capabilities'. In as broader use, the capability is a deep evaluative exercise and 'often pays attention to agency and other explicitly normative considerations'

The United Nations' *Human Development reports* evaluating the human development at national, regional and global are the best adaptations of capability approach for the prospective or policy approach.

An approach – Not a Theory

The capability approach is often mistaken for a theory of justice. Sometimes it is taken as a social theory or a development theory, it is neither of them nor does it claim to be a theory. It does not offer a *theory* but provides a broad framework for the evaluation of social arrangements in the 'space of capabilities'.

The capability approach is, thus, a thorough evaluative exercise focusing on '*what* are object of value' and '*how valuable* are the respective objects?'. It is concerned with the 'identification of value-objects, and sees the evaluative space in terms of functioning and capabilities to function' rather than proposing a basic set of principles of justice. As discussed earlier, capability approach is 'a normative framework' within which we can 'evaluate and design policies, ranging from welfare-state design kin affluent societies to governmental and nongovernmental development policies in poor countries. Stating clear, Crocker and Robbery's (2010) argue that capability approach does not explain any social phenomena but provides concepts and 'normative frameworks' which help us to fairly conceptualize and evaluate them.

1.3 Intellectual Trajectory of the Approach: Sen's critique of mainstream approaches

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महाराष्ट्रभातील भटक्या विमुक्त जाती – जमाती व इतर मागासवर्गीय सद्यस्थिती

प्रा.डॉ. विजय दि. पोकळे
आनंदराव धोंडे महाविद्यालय, कडा, ता. आष्टी जि. बीड

प्रस्तावना :

भारतीय समाज हा अनेक धर्मपंथ आणि जाती – पोटजातीच्या लोकांचा समुह आहे. या देशातील प्रत्येक जात ही वेगवेगळी आहे. जाती पोटजातींचे जीवन निरनिराळे आहे. एका जातीचा दुस–या जातीशी तसा संबंध नाही. प्रत्येक जातीतील व्यक्ती स्वत:ची जात इतरांपेक्षा वेगळी आणि श्रेष्ठ मानते. त्यामुळे या देशात जाती अंतर्गत समानतेची बंधू भावाची किंवा एकात्मतेची भावना निर्माण होऊ शकलेली नाही.

ज्या चातूर्वर्ण्य समाजरचनेमुळे आणि कर्मविपाकाच्या सिध्दांतामुळे भारतीय समाजाचे विघटन झालेले आहे किंवा विसंगत आणि जाती – धर्माचे कप्पेबंद जगणे भारतीयांच्या वाटयाला आले आहे. त्या वर्ण जाती व्यवस्थेला या देशातील परंपरावादी आणि सनातनी मंडळी आजही पुर्णपणे नाकारत नाहीत. त्यामुळे भारतीय समाजात पराकोटीची सामाजीक विषमता आणि एकमेकाच्या जाती धर्मा विषयी किंबहुना मानसांच्या विषयीची तुच्छता आजही मोठया प्रमाणात टिकून आहे.

शोध निबंधाची उदिष्टये :

१. भटक्या विमुक्त जाती जमातीच्या सद्यस्थितीचा आढावा घेणे.

२. इतर मागासवर्गीयांची सद्यस्थिती जाणून घेणे.

३. भटक्या विमुक्त जाती जमातीसमोरील आव्हाने अभ्यासनेत्र

शोध निबंधाची गृहितके :

१. भटक्या विमुक्त जाती जमातीची स्वातँत्र्यत्तोर काळातही प्रगती झालेली नाही.

२. इतर मागासवर्गीय जातींची शैक्षणिक, सामाजिक व आर्थिक उन्नती झालेली आहे.

३. भटक्या विमुक्त जाती जमाती आजही विकासाच्या प्रवाहापासून दूर आहेत.

संशोधन पध्दती :

प्रस्तुत शोधनिबंधासाठी द्वितीय स्त्रोतांर्गत संदर्भग्रंथ, मासिके वर्तमानपत्रे, अहवाल इत्यादींचा आवश्यकतेनूसार वापर केलेला आहे.

मात्र सांस्कृतीक उपक्रम देवदवतांच्या विधी वेळी ते जत्रा उत्सवातून या पारंपरिकवेशात पहावयास मिळते. माळेगाव, मढी, जेजूरीसारख्या ठिकाणी यात्रे निमित्त हे सर्व एकत्र येवून जातपंचायती भरवतात. ही वस्तूस्थिती आहे.

शिक्षण घेवून ही या जमातींचा पारंपरिक जातीविषयक पिळमात्र आज ही कायम आहे. रामनाथ चव्हाण यांना एक डक्कलवार जमातींचा वृद्ध सांगतो ''आमची जमात खानदाणी असून इतर जातीजमातीत सोयरीक करीत नाहीत. आणि तसा कोणी प्रयत्न केला तर आज ही त्यांना जातीबाहेर काढतो.'' हे आजचे वास्तव आहे. गुन्ह्याची शिक्षा म्हणून मोठ्या महानगरात ही कुटुंबांना बहिष्कृत केले जाते. त्याचे उदाहरण औरंगाबाद येथील 'गोपाळ' जमातीत नुकतेच घडले.

आज या जमातीत मोठ्या प्रमाणात धर्मांतर होत आहे. मुळात भारतीय समाजव्यवस्थेने यांना वर्णव्यवस्थेतून नाकारले. 'अवर्ण' म्हणून त्यांचा उल्लेख झाला. मात्र स्वातत्र्यपूर्व व नंतर हिंदू, मुस्लीम ख्रिश्चन आदी धर्मांनी यांना आपल्यात सामावून घेण्याचा प्रयत्न सूरू केला. २००७ मध्ये लक्ष्मण माने यांनी पारधी कैकाडी, वडार, गोंधंळी अशा अनेक जमातींना सोबत घेवून बौद्ध धर्मात प्रवेश केला. ते आज बौद्ध म्हणून जगत आहेत.

कायम भटकंती करत मागते म्हणून फिरणारे आज शिक्षण सरकारी पूर्नवसन इत्यादींच्या माध्यमातून मोठ्याप्रमाणात शहर व गावगाड्यात विसावले आहेत. त्यांची आर्थिक उन्नती होत आहे. त्यांनी आज पारंपरिक अनिष्ठ रूढी परंपरा खूप मोठ्या प्रमाणात नाकारूण आपली सुधारणा केली आहे.

संदर्भसूची :–

१) चव्हाण रामनाथ, भटक्याविमुक्तांची जातपंचायत, देशमुख आणि कंपनी पब्लिशर्स, पुणे,मार्च २००२.

२)चव्हाण रामनाथ, भटक्याविमुक्तांची जातपंचायत, खंड २, देशमुख आणि कंपनी पब्लिशर्स, पुणे,मार्च २००४.

३) चव्हाण रामनाथ, भटक्याविमुक्तांची जातपंचायत, खंड ३, देशमुख आणि कंपनी पब्लिशर्स, पुणे,मार्च २००६.

४) चव्हाण रामनाथ, भटक्याविमुक्तांची जातपंचायत, खंड ४, देशमुख आणि कंपनी पब्लिशर्स, पुणे,मार्च २००८.

५) लिंबाळे शरणकुमार, (संपा) साठोत्तरीमराठी वाङमयातील प्रवाह, दिलीपराज प्रकाशन, पुणे, जून २००७.

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विश्लेषणात्मक बाजू :

गावगाडयाच्या परिघा बाहेर जगणा—या भटक्या विमुक्त जमातीचे एक वेगळे जग अनेक वर्षापासून या देशात उपजीविकेसाठी सतत भटकत आहे. आधुनिक काळात त्याला ''पालावरचे जग'' म्हणुन ओळखले जाते. या जगात जगणा—या प्रमुख बेचाळीस जमाती आणि त्यांच्या शेकडो पोटजाती किंवा तत्सम जमाती आजही महाराष्ट्रभात पहावयास मिळतात. या जातीचे प्रस्थापित असे गांव नाही किंवा निवा—यासाठी कायमचे ठिकाण ही नाही. अथवा धर्म किंवा वर्णव्यवस्थेत प्रस्थापित जाती प्रमाणे त्यांना स्थान ही आढळत नाही. आपापल्या सोयीनूसार पिढयानपिढया या जमाती पोट भरण्यासाठी गावोगावी भटकत राहिल्या आणि जमेल त्या मागनि आपाआपली उपजिविका करीत जगल्या. क्वचित प्रसंगी नाईलाजास्तव पोटासाठी चो—यामा—या करुन आपले पोट भरत राहील्या. अशा जमार्तीना स्वातंत्र्यपूर्वकाळात इंग्रजांनी गुन्हेगार जमाती म्हणून जाहिर केले. १८७१ साली गुन्हेगारी जमाती कायदा अंमलात आणून देशात एकूण १९८ तर महाराष्ट्रभात एकूण १४ जमाती इंग्रजांनी गुन्हेगार ठरवल्या. त्यात बेरड, बेस्तर, भामटा, कैकाडी, कंजारभाट, कष्टाळू, बंजारा, राजपारधी, रजपुतभामटा, रामोशी, वडार, वाघरी, छप्परबंद आणि पारधी या महाराष्ट्रभातील भटक्या जमातीचा समावेश करण्यात आला व उर्वरीत १८ जमाती केवळ भटक्या जमाती म्हणून त्यांची नोंद करण्यात आली.

इंग्रजांनी या देशात भटक्या जमातीसाठी गुन्हेगारीचा कायदा निर्माण करुन एका विचित्र आणि अमानुष अशा प्रथेला जन्माला घातले. जमातीतील काही व्यक्तींनी केलेल्या गुन्हयाची शिक्षा त्यांनी त्या व्यक्तीच्या संपूर्ण जमातीलाच दिली. त्यामुळे त्या जमातीत जन्म घेणारी प्रत्येक व्यकतीसुध्दा गुन्हेगार ठरविण्यात आली.

१९२४ साली इंग्रजांनी गुन्हेगार जमातीच्या वसाहतीची देशात वेगवेगळया ठिकाणी निर्मिती केली. त्या वसाहती सेटलमेंट म्हणून ओळखल्या जावू लागल्या. महाराष्ट्रभात पुणे, सोलापूर, बारामती, नंदुरबार, अंबरनाथ, औरंगाबाद, धारवार, विसापूर, हुबळी आणि जेजुरी इत्यादी ठिकाणी स्वतंत्र तारेचे कुंपन ठेकुन या गुन्हेगार जमातीच्या लोकांना बंदिस्त करण्यात आले.

सेटलमेंट किंवा वसाहतीबाहेर जे लोक किंवा तांडे त्या काळात भटकत राहीले त्यांच्यावर लक्ष ठेवण्याचे कॉम गावपाटलाकडे सोपविण्यात आले होते. गावाबाहेर भटक्यांची पालं पडली की कोतवालासह पाटील त्या पालावर जाउन स्त्री पुरुष, मुले, जनावरे बरोबर असल्याची खात्री करुन मगच त्यांना नाहरकत दाखला देत असत. तो दाखला म्हणजे पुढच्या गावी राहण्याचे परवानगीपत्र असे.

१८७१ साली इंग्रज सरकारने या देशात लागु केलेला गुन्हेगार जमाती कायदा तब्बल ८० वर्षे या देशात अस्तित्वात राहीला. १९५१ ला हा कायदा संपुष्टात आला. मात्र त्याची प्रत्यक्षात अंमलबजावणी बाबासाहेब आंबेडकरांनी लिहिलेल्या भारतीय राज्यघटनेनूसार १९६० साली झाली २३ ऑगस्ट १९६० साली स्वतंत्र भारताचे पहिले पंतप्रधान पंडीत जवाहरलाल नेहरु यांनी हजारो भटक्या विमुक्तांच्या उपस्थितीत सोलापुर येथील सेटलमेंटचे तीन तारेचे कुंपन तोडुन कुपणातील गुन्हेगार जमातीला मुक्त केले. त्या दिवसापासून या जमाती 'विमुक्त' या नावाने घोषीत करण्यात आल्या. वास्तविक हा दिवस तमाम भटक्या विमुक्त जमातीचा मुक्ती दिन ठरायला हवा होता. प्रत्यक्षात मात्र तसे घडले नाही.

भटक्या विमुक्त जातींची सद्यस्थिती :

देशातील कोटयावधी भटक्या, विमुक्त जाती जमातीची कुटूंबे स्वातंत्र्य मिळाल्यापासून आपल्या न्याय हक्कापासून वंचित आहेत. घटनेने दिलेल्या मुलभुत अधिकारानूसार अन्न, वस्त्र, निवारा, शिक्षण, रोजगार यापासून या जाती — जमाती, आजही वंचित आहेत. महाराष्ट्र सरकारने भटक्या विमुक्तांच्या विकासासाठी जे कार्य केले ते देशामध्ये इतर कुठल्याही सरकारने केले नाही. भटक्या विमुक्तांसाठी मा. मुख्यमंत्री वसंतराव नाईक, जेष्ठ नेते शरद पवार व गोपीनाथ मुंडे यांनी केलेले काम कोणीही विसरु शकणार नाही. भटक्या विमुक्तासाठीच्या रेणके आयोगाचा अहवाल जर कायम स्वरुपी लागू झाला असता तर ख—या अर्थने सामाजिक, राजकीय, आर्थिक स्वातंत्र्य मिळून घटनात्मक संरक्षण या जाती जमातीला मिळाले असते.

विमुक्त जाती भटक्या जमातीच्या घटकांना केंद्र शासनाच्या सोयी सुविधा आरक्षणाचा लाभ केंद्राने लागू केलेला नाही. या पार्श्वभूमीवर महाराष्ट्र शासनाने १९६१ साली विमुक्त जाती भटक्या जमातीचा अभ्यास करण्यासाठी ''घाडे समिती'' गठीत केली होती. सदर समितीच्या अहवालानुसार राज्यात विमुक्त जातीमधील मुळ १४ आणि भटक्या जामीतीतील मुळ २८ जाती अतिषय भिन्न असून त्यांना सतत पोट भरण्यासाठी भटकावे लागले आहे. त्यासाठी महाराष्ट्र शासनाने विमुक्त जाती भटक्या जमातीच्या घटकाकडून सतत शासनाकडे मागणी करण्यात येत आहे. पुर्वाश्रमीचे अस्पृश्य आणि सर्व दृष्टीने मागास असूनही भटक्या विमुक्तांना महाराष्ट्रात केंद्राच्या अस्थापनामध्ये आरक्षणाच्या सवलती मिळत नाही. यासाठी दोन वेळा आयोग नेमुनही भटक्या विमुक्तांच्या स्थितीत फरक पडला नाही. आज ही ५४: भटके विमुक्त स्वतंत्र तांडे, वाडया, वस्त्या पालात गावकुसाबाहेर राहतात.

इतर मागासवर्गीयांची सद्यस्थिती :

महाराष्ट्रातील लोकसंख्येच्या एकतृतीयांश लोकसंख्या इतर मागासवर्गीयांची आहे. त्यांना लोकसंख्येच्या प्रमाणात त्यांचा वाटा मिळाला का ?

उत्पन्न, गरिबी आणि शिक्षण या अनुषंगाने अन्य मागासवर्गीयांच्या विकासाचा आलेख मांडता येऊ शकतो. २०१२ मध्ये राज्याचे दरडोई दरमहा उत्पन्न (दरमहा दरडोई खर्च क्षमता

प्रमाणात) ६११ रुपये होते. इतर मागासवर्गीयांची खर्च क्षमता ही अनुसुचित जातीपेक्षा अधिक होती मात्र उच्च जातीपेक्षा कमीच होती. उच्च जातीची खर्चक्षमता ७५४ रुपये होती. त्या तुलनेत अन्य मागासवर्गीयांची खर्च क्षमता ५५५ रुपये होती. हीच श्रेणीबध्द असमानता गरिबीमध्येही आढळते. अन्य मागासवर्गीय हे अनुसुचित जातीपेक्षा कमी गरीब असतात परंतु उच्च जातीपेक्षा अधिक गरीब असतात. २०१२ मध्ये मागासवर्गीयांपैकी जवळपास १४: गरीब होते. उच्च जातीतील गरिबांचे हेच प्रमाण ९: होते. त्याचप्रमाणे योग्य निवारा, पिण्याच्या पाण्याची सोय, वीजपुरवठा आणि शौचालये याचा अभाव होता अशा अन्य मागासवर्गीयांचे प्रमाण उच्च जातीच्या तुलनेत जास्त होते. इतर मागासवर्गीयांसाठी घरांची कमतरता ही ८: इतकी होती. त्या तुलनेत उच्च जातीसाठी ही अक्केवारी केवळ ५: इतकी होती.

उच्च जातीपेक्षा अन्य मागासवर्गीयांमध्ये कमी उत्पन्न आणि अधिक गरिबी असल्याची काही विशिष्ट कारणे आहेत. उच्च जातीशी तुलना करता अन्य मागासवर्गीयामध्ये शेती आणि बिगरशेती या मधील कमी उत्पादकता, नियमितपणे वेतन मिळणारे कमी रोजगार कमी शिक्षण आणि किरकोळ दाम मिळणारे काम ही कारणे दिसून येतात. संपत्तीची मालकी असण्याच्या बाबतीत अन्य मागासवर्गीयांचा हिस्सा राज्याच्या एकूण संपत्तीमध्ये २०१४ मध्ये सर्वात कमी म्हणजे उच्च जातीकडे असलेल्या ६६: च्या तुलनेत केवळ १८: होता आणि तो त्यांच्या लोकसंख्येच्या ३१: प्रमाणापेक्षाही कमी होता. उच्च जातीच्या वर्गात नियमित वेतन मिळणा—या कामगारांचे प्रमाण ३०: होते त्या तुलनेत अन्य मागासवर्गीयांचेक प्रमाण २३: होते रोजंदारी किंवा तत्सम किरकोळ कामाची टक्केवारी उच्च जातीमध्ये १७: होती, पण त्या तुलनेत अन्य मागासवर्गीयांमध्ये हे प्रमाण २४: इतके होते.

शिक्षणाच्या बाबतीत २०१४—१५ मध्ये उच्च शिक्षणासाठी प्रवेश घेण्याचे प्रमाण उच्च जातीमध्ये ३५: इतके होते.तेच अन्य मागासवर्गीयांमध्ये २४: होते. त्याच प्रमाणे इतर मागासवर्गीय विद्यार्थी इंग्रजी माध्यमातून प्रवेश घेण्याचे प्रमाण ही कमी होते. उदा. प्राथमिक आणि माध्यमिक शाळेत उच्च जातीमध्ये इंग्रजी माध्यमांतील विद्यार्थ्यांचे प्रमाण ३६: इतके होते. त्या तुलनेत अन्य मागास वर्गीयांचे प्रमाण २६: इतकेच होते. माध्यमिक आणि उच्च माध्यमिक शिक्षणामध्ये उच्च जातीमधील इंग्रजी माध्यमाच्या शिक्षणाचे प्रमाण ४६ : होते तर अन्य मागासवर्गीयांमध्ये हेच प्रमाण ३७: इतके होते. अंतिमत: उच्च शिक्षणात इंग्रजी माध्यमामध्ये अन्य मागासवर्गीयांचे प्रमाण ६०: होते.तर उच्च जातीमधील हे प्रमाण ७२: इतके होते.म्हणजे समजा इंग्रजी माध्यम हे दर्जात्मक शिक्षणाचे प्रमाण मानले, तर अन्य मागासवर्गीय हे उच्च जातीपेक्षा मागे आहेत. माध्यमिक/उच्च माध्यमिक ते उच्च शिक्षण सोडून देण्याचे प्रमाण अन्य मागासवर्गीयांमध्ये ३५: आहे तर उच्च जातीमध्ये हेच प्रमाण २८: आहे. ग्रामीण भागत इतर मागासवर्गीय केवळ एकाच क्षेत्रात उच्च जातीशी बरोबरी करतात ते क्षेत्र म्हणजे कृषी. जमिनीची मालकी २०१३ मध्ये ग्रामीण महाराष्ट्रात २४: अन्य मागासवर्गीयांकडे तर ४२: उच्च जातीकडे शेतजमीनीची मालकी होती. हे प्रमाण इतर मागासवर्गीयांच्या ३२: लोकसंख्येपेक्षा जास्त आहे. खाजगी कंपन्यामध्ये म्हणजेच उत्पादन आणि सेवा या क्षेत्रात ही अन्य मागासवर्गीयांचा हिस्सा उच्च जातीशी बरोबरी करणारा आहे. २०११—१२ मध्ये एकूण उत्पादनापैकी ४३: मालकी अन्य मागासवर्गीयांची होती आणि उर्वरित ३९: होती. सेवा क्षेत्रात अन्य मागासवर्गीयांचा हिस्सा ३७: होता आणि उर्वरीत ४९: होता.

तथापि ग्रामीण भागात अन्य मागासवर्गीयांचे प्रति हेक्टरी उत्पादन उच्च जातीपेक्षा कमी होते २०१३ मध्ये प्रति हेक्टरी एकूण उत्पन्न ८७९०३ रुपये होते परंतू उच्च जातीतील शेतक—यांचे उत्पन्न १०७५८४ रुपये होते. अशा प्रकारे अन्यमागासवर्गीयांच्या स्थितीकडे सखोलपणे पाहुन, त्यांच्या समस्यांची वैशिष्टये समजून घेऊन त्या दूर करणे गरजेचे आहे.

संदर्भ :

१. लोकसत्ता : १८ मे २०१८
२. भटक्या विमुक्तांची जातपंचायत — रामनाथ चव्हाण
३. महाराष्ट्रातील निवडक जाती जमाती — डॉ.एच. जी. देवगावकर
४. जाती जमाती — रामनाथ चव्हाण
५. गावगाडा — त्रि. ना. अत्रे

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भारतातील आधुनिक बालकामगार समस्येचे स्वरूप

प्रा. डॉ. विजय दिनकर पोकळे
आनंदराव धोंडे उर्फ बाबाजीमहाविद्यालय कडा ता. आष्टी जि. बीड

सात ते चौदा वयोगटातील मुला मुलीना रोजगार करायला लावणे हा कायदेशीर गुन्हा असला तरी भारतात अद्याप ही दीड कोटीच्यावर बालमजुराना पोटाची खळगी भरण्यासाठी श्रम करावे लागत असल्याचे निष्पन्न झाले आहे. बालहक्क संरक्षण अयोगाचे अध्यक्ष शांता सिन्हा यांनी अलीकडेच दिलेल्या अहवालात जगातील सर्वाधिक बाल मजूर भारतात असल्याची धक्का दायक कबुली दिल्यामुळे बालमजुरांच्या समस्येची चर्चा पुन्हा सुरु झालीअल्पवयीन मुलमुलीना कामावर ठेवणाऱ्या नाही शिक्षेची तरतूद आहे. पण प्रत्यक्षात या कायद्याची अमल बजावणी मात्र होत नाही. गेल्या पंधरा वर्षात या कायद्यान्वे बाल मजुरांना कामावर ठेवणाऱ्या फारच थोड्या मालकांवर गुन्हे दाखल झाले शिक्षेचे प्रमाण तर फारच कमी आहे.

शोध निबंधाची उदिष्टे

१) भारतातील आधुनिक बाल कामगार समस्येचे स्वरूप जाणून घेणे
२) शासन पातळीवर राबवल्या जाणाऱ्या उपाय योजनांचा आढावा घेणे.
३) बालकामगार समस्येवर प्रकाश टाकणे.

शोध निबंधाची गृहितके

१) भारतात बालकामगारांची समस्या भीषण रूप घेत आहे.
२) भारतात बालकामगार समस्या सोडवण्यास सरकार पूर्णपणे अपयशी ठरत आहे
३) दारिद्र्य ह्या एकमेव कारणाने बाल कामगार समस्या निर्माण झाली आहे

संशोधन पद्धती

प्रस्तुत शोध निबंधासाठी द्वितीय स्त्रोतांर्गत संदर्भ ग्रंथवर्तमान पत्रे, मासिके, बातम्या इत्यादींचा आवश्यकतेनुसार वापर केलेला आहे.

विश्लेषणात्मक बाजू

गरिबीच्या स्थितीमुळे झारखंड बिहार, उत्तरप्रदेश, ओरिसा, या राज्यातील लाखो मुलामुलींना परराज्यात मजुरीसाठी पाठवले जाते. मुंबई, पुणे, बंगलोर, कलकत्ता, दिल्ली यासह मोठ्या शहरात अल्पवयीन मुलींना घरकामासाठी ठेवले जाते. या मुलींना मिळणारा पगार ही खूपच कमी आहे. काही घरात या अल्पवयीन मुलींना मारहाण ही होते.त्यांच्यावर जुलूम जबरदस्ती केली जातेपण अशा फारच थोड्या घटना उघडकीस येतात. धाबे हॉटेल आणि अन्य छोट्या मोठ्या कामावर सर्रास बाल मजुरान कडून काम करून घेतले जाते वीट भट्या दगडाच्या खाणी खडीचे क्रेशर अशा कामावर ही अल्पवयीन मुलांना राबवून घेतले जाते उत्तर प्रदेशातल्या जरी कामाच्या कारखान्यात शिवकाशीच्या फटाके उद्योगात काच कारखान्यात ही काम करणाऱ्या बाल मजुरांची संख्या लाखोच्या घरात आहे झारखंड राज्यात तीन लाख अल्पवयीन मुलींना अन्य राज्यात घरकामासाठी पाठवले जात असावे असा बाल हक्क आयोगाचा निष्कर्ष आहे.

शहरी भागात विविध ठिकाणी श्रम करणाऱ्या मुलामुलींची मोजदात होते पण रस्त्यावर कागद वेचणारी मुले ग्रामीण भागात शेतात काम करणारी मुले घरच्याच दु कान व्यवसायात आपल्या आई वडिलांना मदत करणाऱ्या मुला मुलींची मोजणी होत नाही त्यामुळे भारतात बालमजुरांची संख्या नेमकी किती हे निश्चित झालेली नाही

बिहार, उत्तरप्रदेश, ओरिसा या राज्यात घरातल्या मुलामुलींची संख्या अधिक असल्याने त्यांना पोसण्याची ताकद त्यांच्या आई वडिलात नसल्याने शाळेत घालावयाच्या वयात या मुलांना कामाला जुंपले जाते शिक्षणाचा कायदा लागू झाल्यावर ही शाळा बाहेर असलेल्या मुलांची संख्या अद्याप३ कोटीच्या वर असल्याचे लक्षात घेता ही मुले फक्त शाळेत पाठवली न गेलेली नाहीत बालमजुरीच्या चक्रात अडकलेल्या या दुर्देवी मुलांना प्राथमिक शिक्षण ही मिळत नाही आणि त्यांचे पुढचे जीवन ही दारिद्र्यात जाते ही समस्या कशी सोडवायची यावर अनेक समित्या नेमल्या गेल्या सरकारला अहवाल दिले पण हि समस्या मात्र सुटलेली नाही

अपयश:-

बाल कामगारांचे पुनर्वसन करण्यात तसेच नवीन बालकामगार तयार होणार नहीत या साठी उपाय योजना करण्यास सरकारला अपयश आले. बाल कामगार कायदा हा नुसता कागदाची भेडोळी बनून राहिला असल्याचे चित्र आहे. १४ वर्षा खालील मुलांन कडून काम करून घेणे हा बाल कामगार कायद्यानुसार गुन्हा ठरतो परंतु या कायद्याची कठोर अमलबजावणी करायची ठरवल्यास पोलिसांना दररोज हजारो व्यावसायिक व मालकावर कारवाईचा बडगा उभारावा लागेल. मध्यंतरी मुंबईपुणे,ठाणे,ओरंगाबाद सह इतर विभागातून

पोलिसांनी बाल कामगार कायदा अंतर्गत कारवाई करत अनेक मुलांची तर काही ठिकाणाहून मुलींची धोकादायक व इतर व्यसायातून सुटका केली होती. परंतु सुटका केलेल्या या मुलांचे पुढे काय झाले सध्या ते कुठे आहेत? या प्रश्नांची उत्तरे पोलिसाकडे नव्हती. चहाच्या टपरीवर आपल्याला साहेब बनवत चहा देणारा, बांधकामावर सिमेंट विटाची टोपली वाहणारा, डोंबार्याचे खेळ करणारा तसेच जीवावर उदार होऊन तारेवर च्या कसरती करणारा, बस आणि रेल्वे स्थानकावर बूट चकाचक करणारा रेल्वे मध्ये बारीक सारीख गोष्टी पेन ले ऐअर रिंग्स ले आदी एक न अनेक स्वरुपात आपल्याला बाल कामगार भेटत असतात. खेळण्या बागडण्याच्या वयात कुटुंबाचा, पोटाचा भार उचलण्यासाठी ही कोवळी पोर आपल्या भविष्याचा लिलाव करत असतात. भूकबळी, गरिबी, या सारखीच बालकामगार ही या देशापुढील एक भीषण समस्या बनली आहे.

बाल कामगारांचा प्रश्न दोन टप्यात पूर्ण पणे सोडवण्याचा संकल्प सरकारनी केला होता या मध्ये सन २००९ मध्ये धोकादायक उद्योगधंद्यामधून बालकामगारांची सुटका करणे आणि२०१० मध्ये सर्व प्रकारच्या व्यवसायामधून १४ वर्षा अंतर्गत मुलांची सुटका करणे आदि उदिष्टे असणारा कार्यक्रम आखला होता. परंतु बाल कामगार बनण्यास भाग पडणाऱ्या गरीब दारिद्रय दूर करण्यास सरकार ने सक्षम पर्याय न दिल्यास आज ही दररोज गावागावात व शहरात बालकामगार तयार होत आहेत आणि याला प्रतिबंध करण्यास प्रशासन ही अपयशी ठरल्याचे भेसूर चित्र हल्ली दररोज बातम्या वाचून पाहून आपल्या सर्वाच्या समोर आले आहे

आव्हान ग्रामीण बालमजुरीचे

शिक्षण हक्क कायद्याची काटेकोर अमलबजावणी होते. पण दुर्देवाने शाळा बाह्य मुलांची चर्चा होताना शिक्षण क्षेत्रात बालकामगारांच्या प्रश्नाची जाणीव जागृती खूप कमी असल्याच जाणवते या प्रश्नाच्या सर्व पैलूचे पुरेसे जागरण अजून ही झाले नाही त्यामुळेच समाजाच्या सर्व स्तरात बालमजुरीचा एकमुखी निषेध न होता समर्थनाची अज्ञानातून सहानुभूती मिळते "काय करणार, गरिबांच्या मुलांना काम करावेच लागणार" असा दृष्टीकोन सर्वत्र आढळतो.

बाल कामगार प्रश्न अजून ही पूर्वी इतकाच तीव्र आहे इंटर नॅशनल लेबर ऑर्गनायझेशन च्या मते २२ कोटी बालकामगार आहेत. त्यातील एक तृतीयांश बालमजूर भारतात आहेत स्वंय सेवी संस्थाच्या मते भारतात जवळपास ६ कोटी बालकामगार आहेत. अनेक अभ्यासात हे सिद्ध झाले आहे. की ६० ते ८० % बालमजूर हे ग्रामीण भारतात आहेत

त्यामुळे भारतात ही आणि महाराष्ट्रात ही खरे बालमजूरीचे आव्हान हे ग्रामीण बालमजुरीचे आहे शेती काम व इतर स्वरूपाचे मुलांना करावे लागणारे काम ग्रमीण समाजाला बालमजुरी वाटत नाही. याचे कारण प्रत्यक्ष काम करताना लक्षात येते की बालमजुरी म्हणजे रूढ पणे कारखान्यात, गॅरेज, मध्ये काम करण्यालाच बालमजुरी समजली जाते. टपरी वरून चहा नेहणारा पोरगा हेच बालमजुरीचे प्रतिनिधीक चित्र आपल्या डोळ्या समोर असते. ग्रामीण भागात भांडी घासणारी मुलगी शाळा सोडून गुरे चराई करणारे मुले कापूस वेचणी करणारी मुले यांना बालमजूर समजले जात नाही या ग्रामीण बालमजुरीची जबाबदारी कोणाकडे याची ही स्पष्टता नसते.

ग्रामीण बालमजुरी वाढण्याचे महत्वाचे कारण वंचित समूहाच्या वाढत्या स्थलांतरामुळे ग्रामीण भागात शेतीकामाला मजूर मिळणे कमी झाले आहे. त्यामुळे ती गरज पूर्ण करण्यासाठी मजुरीचे सरासरी वय घटले आहे कायद्याच्या अज्ञानामुळे ग्रामीण बालमजुरीला तोंडच फुटत नाही. विदर्भातील ३२ स्वंय सेवी संस्थांनी शिक्षण हक्क समितीची स्थापना करून या प्रश्नावर काम सुरु केले आहे. खरे तर ग्रामीण भागात बालमजुरीचा प्रश्न समजावून सांगणे हेच पहिल्या टप्यातले महत्वाचे काम आहे

संदर्भग्रंथ

१) दैनिक ऐक्य- १९ मार्च २०१२
२) लोकसत्ता- चतुरंग८ जून २०१३
३) भारतातील सामाजिक समस्या – माई सुनील
४) भारतीय समाज प्रश्न आणि समस्या – सुधाताई काळदाते

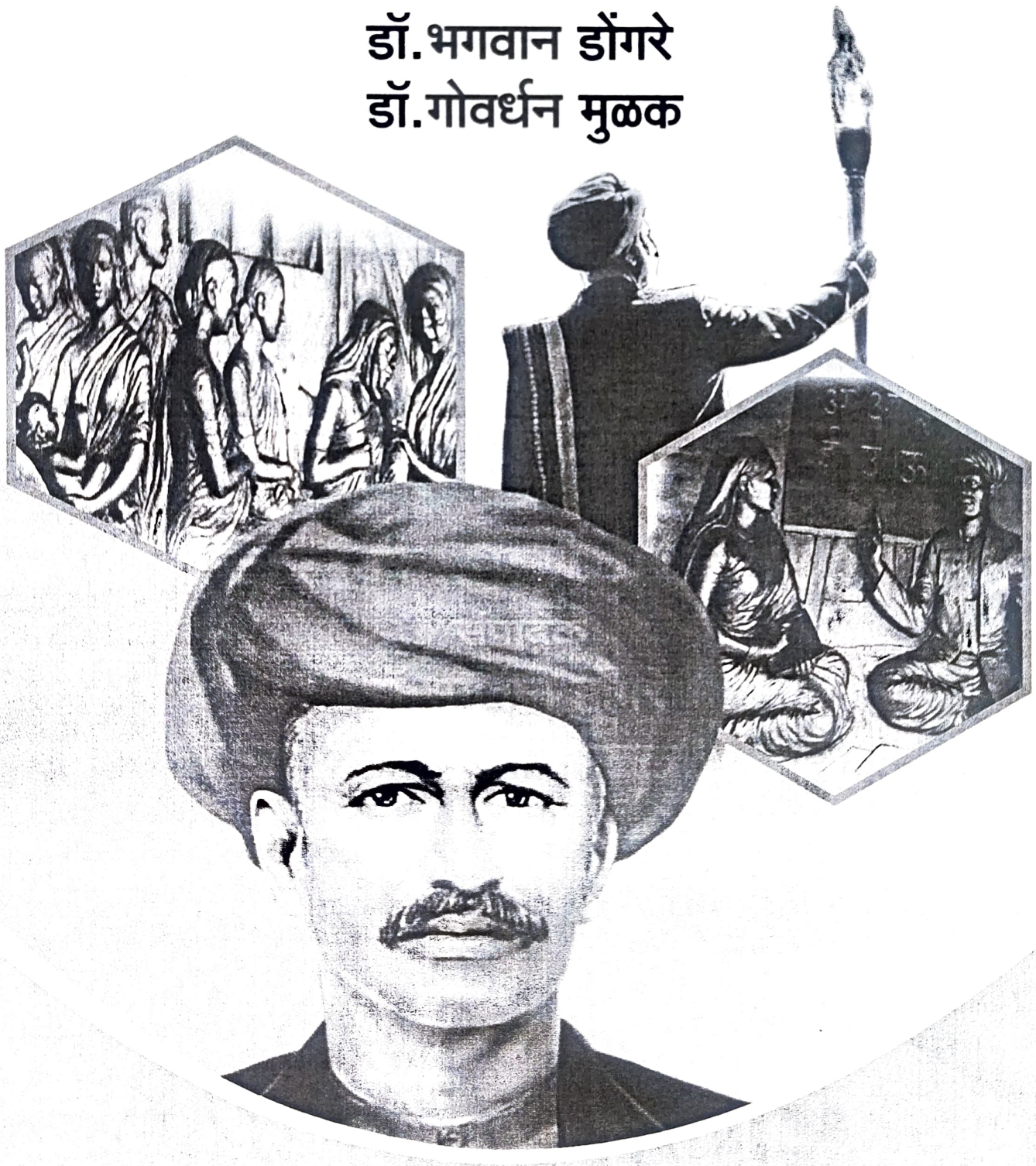
महात्मा फुले

चिंतन आणि चर्चा

• संपादक •

डॉ.भगवान डोंगरे

डॉ.गोवर्धन मुळक



५७

सत्यशोधक समाज चळवळ -पार्श्वभूमी, वाटचाल व सद्यस्थिती

प्रा.डॉ. विजय दि. पोकळे
आनंदराव धोंडे उर्फ बाबाजी महाविद्यालय कडा
ता. आष्टी, जि.बीड

सामाजिक समता व समाता प्रधान समाज निर्मितीसाठी महाराष्ट्रात स्थापन झालेला एक क्रांतिकारक पंथ, समाजाच्या आमुलाग्र मौलिक परिवर्तनाकरिता, हिंदू समाजरचनेतील माणसांना उच्चनीच मानणारा जातिभेद, कर्मकांड, मूर्तिपूजा, स्त्रीदास्य, अंधश्रध्दा, यांचे निर्मूलन करून वैचारिक क्रांती घडविण्याकरिता महात्मा जोतीराव फुले यांनी समाजातील काही समविचारी मंडळींच्या सहकार्यांने २४ सप्टेंबर १८७३ रोजी पुण्यात सत्यशोधक समाजाची स्थापना केली.

शोधनिबंधाची वैशिष्टे

१. सत्यशोधक समाज चळवळीची वाटचाल अभ्यासणे
२. सत्यशोधक समाज चळवळीची सद्यास्थिती जाणून घेणे.
३. वर्तमान काळात या चळवळीसमोरील आव्हाने अभ्यासणे.

शोधनिबंधाची गृहितकेः-

१. स्वातंत्र्योत्तर काळात सत्यशोधक समाज चळवळ बंद पडली आहे.
२. आजही भारतीय समाजाला सत्यशोधक समाज चळवळीची समाज परिर्वतनासाठी आवश्यकता आहे.
३. आजही सत्यशोधक समाज चळवळ ग्रामीण भागापर्यंत पोहोचली नाही.

संशोधन पध्दतीः - १. प्रस्तूत शोध निबंधासाठी व्दितीय स्त्रोतांर्गत संदर्भ ग्रंथ, वर्तमान पत्रे, मासिके, बातम्या इत्यादींचा आवश्यकतेनुसार वापर केलेला आहे.

विश्लेषणात्मक बाजू- पार्श्वभूमी एकोणिसाव्या शतकाच्या मध्यास पाश्चात्य सुधारणेचे स्वागत करण्याऱ्या प्रवृत्तीचे तीन प्रवाह महाराष्ट्रत स्वतंत्ररित्या प्रभावीपणे वाढताना दिसतात. पहिला प्रवाह धार्मिक सुधारणांचा असून तो मुख्यत्वे ब्राम्होसमाज (स्थापना १८२८) व प्रार्थना समाज (स्थापना १८६४) यात व्यक्त झाला. न्यायमूर्ती महादेव गोविंद रानडे, रामचंद्र गोपाल भांडारकर, महर्षी विठ्ठल रामजी शिंदे, न्यायमूर्ती नारायण गणेश चंदावरकर इ. मंडळी दुसरा प्रवाह बुध्दीवादी ब्राम्हण सुधारकाचा होता. आगरकरांसारखे जडवादी किंवा अज्ञेयवादी त्यात अग्रेसर होते. तिसरा मोठा प्रवाह ब्राम्हणी संस्कृतीच्या विरुध्द बंड करणाऱ्या ब्राम्हणेत्तरांच्या बहुजन समाजाच्या चळवळीचा होता. याचे आद्यजनक महात्मा जोतीराव फुले होते या तिन्ही सुधारणा प्रवाहांची सर्वसंमत वैशिष्टे

१. पाश्चात्य विज्ञान पूर्णतः स्वागतार्ह आहे.
२. धर्माशी प्रत्यक्ष सोयरिक नसलेले आधुनिक शिक्षण हाच खरा सुधारणेचा पाया आहे.
३. चातूर्वण्याचे तत्वज्ञान किंवा जातिभेद ही संस्थ व्यक्ती विकासाला मारक व एकात्म समाजाच्या घडणीतील अडसर असल्यामुळे तिचे समुळ उच्चटन व्हावे.

व्यक्ती स्वातंत्राच्या पायावर लोकसत्ताक राज्यव्यवस्था भारतात निर्माण होण्याची गरज आहे. मात्र तत्पूर्वी सामाजिक परिवर्तनाची नितांत आवष्यकता आहे. या सर्व तत्व सूत्रांचा प्रारंभ कुटुंबसंस्थेत आणि विवाहसंस्थेत बदल करण्यापासून होतो.

त्याकरिता स्त्री शिक्षण व स्त्री स्वातंत्र्य यांचा पुरस्कार अपरिहार्य ठरतो. ही सर्वसंमत वैशिष्टे या तिन्ही सुधारणा प्रवाहात चळवळीत असली तरी महाराष्ट्रातील बहुजन समाजातील सुधारणांचे ब्राम्हणेत्तर सुधारकांचे प्रश्न मागासलेल्या बहुसंख्य जनतेच्या जीवनाशी निगडीत, तर ब्राम्हण सुधारकांचे प्रश्न पांढरापेशा उच्चवर्णीयांच्या जीवनाशी संबंध होते. त्यामुळे हिंदू धर्माच्या पूर्व परंपरेवर मुलोच्छेदी प्रहार करण्याची तीव्र व कठोर प्रवृत्ती निर्माण झाली आणि साधारणतः प्रार्थना समाजाच्या धर्तीवर पण शूद्रातिशूद्रांच्या खास उध्दार्थ सत्यशोधक समाजाची स्वतंत्र स्वावलंबी व पुरोगामी विचारांची संघटना स्थापन करण्यात आली.

महात्मा फुले यांच्या या उच्छेदक प्रवृत्तीला अनेक कारणे आहेत त्यातील अत्यंत महत्वाचे म्हणजे पेशवाईच्या उत्तरार्धामधील ब्राम्हणी वर्चस्वाचा काळ. या काळात ब्राम्हणी राज्यात जातीभेदाची तीव्र अंमलबजावणी ब्राम्हणेत्तर जातीला दडपण्याची राज्यकर्त्यांची प्रवृत्ती शुद्रांती शुद्राची बेकार पिळवणूक कायद्याच्या अंमलबजावणीतील ढळढळीत पक्षपात बेसुमार भ्रष्टाचार व लाचलुचपत अशी बेबंदशाही व अनागोंदी होती. साहजिकच त्या काळी महाराष्ट्रातील ग्रामीण व नागरी सामाजिक जीवनात ब्राम्हनांचे धार्मिक व प्रशासकीय क्षेत्रांत पूर्ण वर्चस्व होते. परंपरागत हिंदू धर्माच्या चोकटीच्या पकडीत सर्व समाज गुरफटला होता. त्याचा प्रवर्तक व समर्थक वर्ग विशेषकरुन ब्राम्हण वर्ग होता. या चोकटीविरुध्द बंड करणारी प्रवृत्ती सत्यशोधक समाजाच्या रुपाने जागृत झाली आणि मानसिक गुलामगिरी नष्ट करण्यासाठी म. जोतीराव फुले यांनी सत्यशोधक समाजाच्या रुपाने धगधगणाज्या बंडाचे निशाण हाती घेतले. धर्माचे मनुजवैरी गुंतवळ आणि ते जपणारे समाजघटक यांच्या अनिष्ट प्रवृत्ती विरुध्द जवळजवळ सर्व आघाड्यावर त्यांनी युध्द पुकारले.

वाटचाल - सत्यशोधक समाज स्थापना झाल्यानंतर प्रारंभीच्या तीन-चार वर्षात सत्यशोधक विचाराचा प्रसार मुंबई, पश्चिम महाराष्ट्र व मराठ्वाड्यात झाला फुलेंच्या विचारांचा वारसा घेऊन व सत्यशोधक समाजाच्या तत्वाने प्रभावीत होऊन अनेक कार्यकर्ते ब्राम्हणी परंपरेच्या विरोधी व सावकारकीच्या विरोधात बंड करु लागले.

सत्यशोधक समाजाची स्थापना होऊन वाटचाल सुरु झाली. तेव्हा सर्व जाती धर्माचे लोक त्यामध्ये सहभागी झाले होते. त्यात या समाज मनाचा प्रसार करणारे उपदेशक माळी, मराठे, यादव, कुंभार, वंजारी, भंडारी, रामोशी, मुसलमान, ज्यु आदी जातीचे लोक होते. यावरुन ही चळवळ जाती विशिष्ट नव्हती असे दिसून येते. पुरुष आणि स्त्री यामध्ये भेद करणे हे महान असत्य आहे. अशी मानवी समतेची आणि मानवतावादाची व्यापक भूमिका या समाजाने घेतली असल्याने ही चळवळ फार मोठी झाली आजही गेल्या शंभर पेक्षा अधिक वर्षापासून या समाजाचे अधिवेशन परिषदा आता तर सत्यशोधक साहित्य संमेलणे भरवली जात आहेत. याचे कारण म्हणजे गेल्या शंभर वर्षापासून जो अशिक्षित अस्पृष्य समाजला जाणारा वर्ग होता. तो आता शिकून मोठा झाला. कर्ता सवरता झाला असल्याने त्याला बज्यावाईट्याची समज आली आहे. त्या दृष्टीने तो साहित्य संमेलनासारख्या विचार मंचावरून महात्मा फुलेंचे तत्वज्ञान सुधारणावादी भूमिका आणि जातीप्रथा निर्मूलनाची भूमिका मांडू पाहतो आहे. हे महात्मा जोतोराव फुले यांच्या चळवळीच्या वाटचालीचे फलित म्हणावे लागेल. कारण सुरुवातीची पिढी ही जनजागृती करण्यात गेली. पण ही जनजागृती होत होत नवी पिढी निर्माण झाली आणि ती अंधश्रध्दा व जातिभेदाला जातोप्रथेला ठोकरू लागली. ब्राम्हणशाहीला आव्हान देऊ लागली शेतकरी, कष्टकरी, कामगार वर्गाची ही मुले मोठी होऊन हक्क आणि न्याय मागू लागली. ही महात्मा फुले यांच्या विचारांची क्रांती असून सत्यशोधक समाजाची वाटचाल आहे.

सद्यस्थिती - महाराष्ट्राच्या खेड्यापाड्यात महात्मा फुलेंची सत्य शोधक चळवळ पोहोचली. महाराष्ट्राच्या सांस्कृतिक जीवनात या चळवळीचा प्रवेश झाला. त्यातून समाजात प्रचलित ब्राम्हणावर, जातिव्यवस्थेवर, स्त्री-पुरुष भेदावर अस्पृष्यतेवर हल्ले झाले. तत्कालिन राजकीय स्वातंत्र्याच्या चळवळीत मूलभूत मानवी स्वातंत्र्याचा आधार मिळाला. फुले-शाहू-आंबेडकर ही विचारधारा सध्या प्रचलित आहे. महाराष्ट्र अंधश्रध्दा निर्मुलन समितीचे संस्थापक डॉ. नरेंद्र दाभोळकर यांची २० ऑगस्ट २०१३ रोजी निर्घृण हत्या झाली. त्यांच्या स्मृतिदिनी निघालेल्या मोर्चात पुढील घोषणा दुमदुमली. ' फुले-शाहू-आंबेडकर आम्ही सारे दाभोळकर!' ही घोषणा विलक्षण बोलकी आहे. सत्यशोधक चळवळ संपली असे म्हणणाज्यांना मिळालेले हे चोख उत्तर आहे. परिवर्तन वाद्यांच्या महाराष्ट्रतील बहुसंख्य राजकीय, सामाजीक, स्वरुपाच्या सभांतून शिवाजी महाराज, महात्मा फुले, राजश्री शाहू, डॉ. बाबासाहेब आंबेडकर, सावित्रीबाई फुले,

आण्णा भाऊ साठे, बिरसा मुंडा इ. चा उल्लेख आवर्जून होतो. परिवर्तणवाद्याना फुले-शाहू-आंबेडकर हा वारसा अभिमानाने सांगावासा वाटतो. फुल्यांनी सार्वजनिक सत्यधर्म सांगितला तो कागदावरच राहिला असला तरी स्त्री शद्रातिशद्र समूंहांना चेतावणी मिळली. यात सर्व शोशित घटक सामावतात. नुकताच वेदांतील पुरुष सुक्ताच्या सार्वजनिंक पठणाबददल वाद झाला. ब्राम्हणोऽस्य मुखमासीद बाहूः राज्यः कृतः हे सुक्त प्रत्येक पुजेत म्हटले जाते. भटजी ते आवर्जून म्हणतात. ब्राम्हण हा मुख आहे. क्षत्रिय बाहूपासून वैश्य मांड्यापासून शद्रपायापासून निर्माण झाले. अशी ही मांडणी आहे. वेदवास्तव आहे. सद्य सुरु असलेली हत्यांकाड व हा सनातणी आग्रह याबाबत गांभीर्याने विचार झाला पाहिजे. चिकित्सा झालीच पाहिजे नव्या लोकसभेत व महाराष्ट्राच्या विधानसभेत सभासदांचा शपथ विधी झाला त्यात सविधानाची शपथ घेणाज्यांची संख्या नगन्य होती. ईश्वराचे नाव घेतले गेले वर्ण जाती-स्त्री-पुरुष भेद अस्पृश्यता यांचा वापर राजकारणात प्रच्छन्न होताना दिसतो. धर्म जातिव्यवस्थेची चिकित्सा झाल्याशिवाय धर्म निरपेक्षता कशी निर्माण होणार? भारतीय सविधानातील प्रत्येक आधनिक मल्याची आग्रहपूर्वक प्रस्तावना झाली पाहिजे. स्वातंत्र्य समता बंधूता लोकशाही समाजवाद धर्मनिरपेक्षता, विज्ञाननिष्ठा, या मूल्यांची पेरणी अद्ययावत होऊ शकलेली नाही. शिक्षणाचा मुळ उददेश 'सत्यशोधन' असतो. त्या दृष्टीने प्रत्येक भारतीयाने सत्यशोधक बनण्याची आवश्यकता आहे. आमच्या शिक्षण क्रमात हा विषय वज्र्य मानला गेल्या सारखा आहे. 'रक्ताला जात-धर्म-लिंग असा भेद नसतो' फक्त गट असतात हे वैज्ञानिक सत्य सांगितले जात नाही. जातीचा अहंकार नाहीसा करावयाचा आहे. तर मग हे का सांगायाचे नाही ? आंतरजातीय -आंतरधर्मिक विवाह करणाज्यांना जात देहान्ताची शिक्षा फर्मावते. दलित तरुण तरुणीच्या हत्या होतात. भारतीय सविधानाने नवी मल्य स्वीकारले आहेत. डॉ. बाबासाहेब आंबेडकरांनी घटनेच्या रुपाने नवी स्मृती दिली. तिचा अंमल होण्याऐवजी राजस्थानातील जयपूर येथे उच्च न्यायालयात मणुचा पुतळा उभारण्याचा प्रयत्न झाला. आज ही तो पुतळा झाकल्या अवस्थेत आहे.

भारतातील विषमता पराकोटीची आहे ती आर्थिक सामाजिक सांस्कृतीक स्वरुपात प्रत्यक्षात अनुभवता येते. ही विषमता व सार्वजनिक जीवनातील भ्रष्टाचाराची लक्तरे दुनियेच्या वेशीवर टांगली गेली आहेत. डोक्यात सनातनी वृत्ती ठेवून प्रगती विकास कसा होणार? भारतीय अर्थव्यवस्था नंबर दोनवर अडवली आहे. नॉर्वे, स्वीडन, डेन्मार्क सारखी छाटी राष्ट्रही भ्रष्टाचार मुक्त आहेंत. त्यांच्या घटनेत समाजवाद या मुद्याबददल खळखळ आहे. समाजवादाला समृध्दीचे, विकासाचे, भरभराटीचे वावडे नाही. राज्यकर्त्याला स्वामी विवेकानंद आठवतात परंतू विवेकानंदाना जानवलेल्या भारतीय मानसिकतेकडे मात्र दुर्लक्ष्य करतात. विवेकानंदाच्या पुतळ्याची त्यांच्या आकार उंचीची चर्चा होते. विचारांचा मात्र विसर पडतो. महात्मा फुल्यांनी त्या काळात पुण्यात आर्य समाज संस्थापक स्वामी दयानंद सरस्वतीच्या मिरवणकोला सक्रिय सहाय्य केले. फुल्यांनी 'गुलामगिरी' हे पुस्तक अमेरिकेतील काळ्या मंडळीला सहाय्य करणाऱ्या गोज्या मंडळीला अर्पन केले. फुल्यांची झेप केवढी होती! फुले सत्याला सार्वभौमत्वाची अट लावतात. 'सत्य सार्वभौम सत्य' असे शब्द प्रयोग ते वापरतात. १२५ वर्षानंतर ही आम्ही फक्त फुल्यांचे नामस्मरण करणार को सत्यशोधक ही बनणार हा यक्ष प्रश्न आहे. सत्यशोधक चळवळ संघटितरित्या जोपासली पाहिजे. स्त्री शुद्रातिशुद्रांत सर्व शोषितांचा समावेश होतो. आदिवासी दलित अल्पसंख्यांक सर्व असंघटित कष्टकरी यात सामावतात. मी नव्या दमाचा सत्याग्रही सत्यशोधक समाजवादी आहे. ही जाणीव या करता प्रत्यकात रुजवायला हवी.

संदर्भग्रंथ -

१. लोकसत्ता लेख बाबा आढाव २३/११/२०१४

२. सत्यशोधक चळवळ (वाटचाल आणि चिकित्सा) डॉ. संभाजी खराट

३. सत्यशोधकः- महात्मा जोतिबा फुले- डॉ. लीला दीक्षित

४. शोधगंगा-

५. महात्मा जोतोबा फुले समग्र वाङःमय :- य.दि. फडके

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

प्रास्ताविक : दहशतवाद ही समस्या भारताला नवीन नाही. गेली ४० ते ४५ वर्षापासून या समस्येने आपल्या देश्यासमोर मोठे आव्हान निर्माण केले आहे. ही एक प्रमुख समस्या बनली आहे. या समस्येने काश्मिर, पंजाब, मध्यप्रदेश, छत्तिसगढ, आंध्रप्रदेश, ओरिसा ,बिहार, महाराष्ट्र, आसाम, नागालँड, तामिळनाडू, मिझोरम, मणिपूर यासारखी राज्यच नव्हे तर देश आणि जगातील अनेक देशात दहशतवादाने थैमान घातले आहे. पण भारतासारख्या विकसनशील देशात दहशतवादाची समस्या गंभीर बनली आहे. १३/१२/२००१ संसदेवरील हल्ला, २४/०६/२००२ अह्मदाबादमधील 'अक्षरधाम' मंदिरावर झालेला हल्ला, २६/११/२००८ चा मुंबईवरील हल्ला आणि १४/०२/२०१६ रोजी झालेला पुलवामा हल्ला यासारख्या दहशतवादी घटनांचा विचार केला तर केव्हा संकट उभे राहील याचा अंदाज बांधता येत नाही. दहशतवादाच्या भयाने अनेक देश व्यापले आहेत, याला अनेक घटक जबाबदार आहेत. दहशतवाद्याचे ध्येय हे समाजहिताच्या विरोधी असते. त्यातून समाजा मध्ये विध्वंस व भीतीचे वातावरण निर्माण करणे हा हेतू असतो. दहशतवादाचे स्वरूप विघातक असते. दहशतवादाने भारताचीच नव्हे तर जगाची शांतता भंग केली आहे. ह्मघ वे शतक हे दहशतवादाचे शतक मानले जाऊ लागले. ही अत्यंत भयानक अशी समस्या असून तिचा अभ्यास या शोधनिबंधात मांडण्याचा प्रयत्न कारणे आणि उपायांच्या माध्यमातून मांडण्याचा प्रयत्न केला आहे.

दहशतवादाची संकल्पना : इंग्रजीमध्ये दहशतवादाला पर्यायी शब्द Terrorism हा आहे. हा शब्द लॅटिन भाषेतून आला. Terror (दहशत) या लॅटिन शब्दापासून तो तयार झाला आहे. Terror चा अर्थ भीती दाखविणे किंवा दहशत पसरविणे असा आहे. नक्षलवाद, बंडखोरी, नागरी वा शीतयुद्ध, बदल्यासाठी गनिमी युद्ध, धमकी इ. शब्दांना समान अर्थानेच उच्चारले जाते, कारण यातून हिंसाच घडते या शब्दांना समजून घेण्यासाठी दहशतवादाच्या व्याख्या पाहणे अगत्याचे ठरेल असे शोधनिबंधकाला वाटते.

जॉन क्रेटम : राजकीय उद्दिष्टे साध्य करण्याकरिता समाजाच्या किंवा त्यातील विशिष्ट स्तरात भीती आणि दहशत निर्माण करण्याच्या उद्देशाने केलेली हिंसात्मक गुन्हेगारी म्हणजेच दहशतवाद होय.

योनाह अलेक्झांडर : राजकीय उद्दिष्टे प्राप्त करण्यासाठी नागरिकांच्या विरुद्ध केलेले हिंसक कृत्य म्हणजेच दहशतवाद होय.

जेनकिंस : यांच्या मते हिंसेची धमकी किंवा व्यक्तिगत दहशतीची कृती करून प्रामु—ख्याने दहशतीव्दारा भीती निर्माण करण्याच्या दृष्टीने आखलेली योजना म्हणजे दहशतवाद होय.

सामाजिक शास्त्राच्या ज्ञानकोषानुसार : ही एक अशी पद्धती आहे की, एक संघटित समूह किंवा गट जेंव्हा हिंसेच्या आधारे आपले ध्येय प्राप्त करतो तेव्हा त्यास दहशतवाद असे म्हणतात.

वरील व्याख्येवरून काही गोष्टी स्पष्ट होतात

दहशतवादी कृत्ये संघटित असतात त्यात काटेकोर नियोजन आणि मार्गदर्शन केले जाते.

दहशतवादाचे बळी जरीसर्वसामान्य व्यक्ती असले तरी त्याचा मुख्य रोख सरकारकडेच असतो.

दहशतवादाचा मार्ग काही विशिष्ट हेतू साध्य करण्याकरिता स्वीकारला जातो. त्या मागे फक्त गुन्हेगारी वृत्ती नसते.

दहशतवादविषयक दृष्टीकोन : वेगवेगळ्या विचारवंतांनी दहशतवाद विषयक विविध दृष्टीकोन स्पष्ट केले आहेत ते खालील प्रमाणे

१)ऐतिहासिक दृष्टीकोन : दहशतवादाचा उगम, विकास, आणि विविध टप्प्यात किंवा अवस्थेत

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भारतातील बालकामगार समस्येची कारणे आणि परिणाम

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प्रास्ताविक-

आपल्या राष्ट्रासमोर बालमजुरीचा विषय एक गंभीर स्वरूपाचा प्रश्न आहे. हा प्रश्न सोडविण्यासाठी शासन सतत प्रयत्न करीत असते. भारतासारख्या विकसन-शील देशामध्ये बालकामगाराचे प्रमाण जास्त आहे. जगातील अनेक देशामध्ये ही समस्या आढळते. ह्या समस्येमुळे बालकांचे शोषण मोठया प्रमाणात केले जाते देशाला स्वातंत्र मिळून जवळजवळ ७१ वर्ष झालेली आहेत. पण बालकांच्या स्वातंत्र्याचे काय? हा प्रश्न विचार करावयास भाग पाडतो. कारण आज कित्येक मुलांना शिक्षण घेण्याऐवजी मजुरी करावी लागते. ज्या वयात मौज-मजा करावयाची त्याच वयात त्यांना मजुरी करण्याची वेळ आलेली आहे मुले ही देशाची आधारस्तंभ आहेत आणि तरीही त्यांचे बालपण हिरावून घेतले जात असेल तर देशाचे भविष्य काय असेल! याचा विचार करावयाची वेळ आली आहे. कारण हेच बालके उद्याच्या भारताचे आधारस्तंभ आहेत. घरच्या गरिबीमुळे भारतातील हजारो मुलांना मजुरी करावी लागते बालकांना स्वतःच्या आणि कुटुंबाचा चरितार्थासाठी काम करावे लागत आहे. आज विविध क्षेत्रामध्ये बालकामगार श्रम करतांना आढळतात. औद्योगिक क्षेत्र, हॉटेल, विडी व्यवसाय, बेकरी, कापड दुकान, गालिचे तयार करण्याचे कारखाने, वर्तमान पत्रे विकणे, फटाके तयार करणारे कारखाने, घरकाम, शेती, बांधकाम, इ. ठिकाणी त्यांना काम करावे लागत आहे. 'इंटरनॅशनललेबर ऑर्गनायझेशन' च्या मते जगात २२ कोटी बालकामगार आहेत. त्यातील एक तृतीयांश बालमजूर भारतात आहेत स्वयंसेवी संस्थानच्या मते भारतात जवळपास६ कोटी बालकामगार आहेत. महाराष्ट्रापुरते बोलायचे तर १२ लाख ऊसतोड कामगारांसोबत जाणारी २ ते ३ लाख मुले, ऊस तोडणे, भावंडाला सांभाळणे यासाठीच आणलेली असतात. ते पालकांना त्यांच्या कामात मदत करतात ग्रामीण भागात शेती, गुरे वळणे, छोटे उद्योग आणि नागरी भागात छोटी दुकाने उपहारगृहे व कुटुंबात चालविण्यात येणारे छोटे व्यवसाय यात हे बालकामगार अल्पवेतनावर राबतांना दिसतात अल्पवयात काम करावे लागत असल्यामुळे शैक्षणिक संधी, खेळ व करमणूक यांच्यापासून ते वंचित राहतातम्हणून बालकामगारांच्या समस्येकडे लक्ष वेधण्याचा शोधनिबंधाच्या माध्यमातून हा प्रयत्न आहे

बालकामगार संकल्पना –

बालकामगार ही संकल्पना लक्षात यावी यासाठी संस्था, संघटना आणि विचारवंतानी केलेल्या व्याख्यालक्षात घ्यावा लागतात.

१)बालकामगार कायदा १९८६ नुसार - ज्यांनी आपल्या वयाची १४ वर्ष पूर्ण केलेली नाहीत अशा सर्व कामगारांना बालकामगार असे संबोधले आहे.

२)ग्लोबल मार्च अगेन्स्ट चाईल्ड लेबर - बालकामगार म्हणजे मानसिक, शारीरिक, सामाजिक, नैतिक दृष्ट्या धोकादायक व ज्यामुळे शिक्षणात खंड पडेल किंवा व्यत्यय येत असेल अशा कामामध्ये सहभागी बालक होय.

३)राज्यकृती आराखडा महाराष्ट्र शासन - 'बालकामगार म्हणजे १४ वर्षाखालील शाळेत जाणारी अथवा न जाणारी आणि बालमजूर कायद्यामध्ये नमूद केलेल्या किंवा नमुद नसलेल्या कामामध्ये पूर्णवेळकिंवा अर्धवेळ गुंतलेली सर्व मुले

४)भारतीय राज्यघटना - भारतीय घटनेतील कलम क्रमांक २४ मध्ये कारखान्यात किंवा धोकादायक ठिकाणी काम करणारी वयाच्या १४ वर्षाखालील व्यक्ती म्हणजे बालकामगार होय.

५)होमर फोक्स –"मुलांच्या शारीरिक विकासात, अपेक्षित शैक्षणिक संधीत आणि मनोरंजनाच्या कामात व्यत्यय येणारे कोणतेही काम मुले करीत असतील तर त्यांना बालकामगार समजले आहे.

शोधनिबंधाची उदिष्ट्ये :-

१)बालकामगार संकल्पना समजून घेणे

२)बालकामगारांच्या कारणांचा शोध घेणे

३)बालकामगारांवर होणाऱ्या परिणामांचा आढावा घेणे

शोधनिबंधाची गृहीतके

१)बालकामगार ही एक गंभीर सामाजिक समस्या आहे.

२)आर्थिक विषमता ही या समस्येमागील मूळ कारण आहे.

३)लहानपणी मजुरी करावी लागल्यामुळे शारीरिक आणि मानसिक विकासावर परिणाम होतो

संशोधनाची व्याप्ती व तथ्य संकलन– प्रस्तुत शोधनिबंधाच्या अध्ययनासाठी भारतीय समाजातील बालकामगार विचारात घेण्यात आले. तथ्य संकलनासाठी व्दितीय स्त्रोतांर्गत संदर्भ ग्रंथ,मासिके, वृत्तपत्रे, इंटरनेट इ. आधार घेऊन तथ्य संकलन केले आहे.

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भारतातील शेतकरी आत्महत्या : कारणे आणि उपाय

प्रा.डॉ.आव्हाड भगवान भानुदास
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शेती हा भारताचा मुख्य व्यवसाय आहे. आजही जवळजवळ ६५% लोक शेती हा व्यवसाय करतात. भारतातील हा व्यवसाय जास्तीतजास्त निसर्गावर अवलंबून आहे. भारतातील शेतकरी आज संकटात आहे. त्यामुळे शेतकरी आत्महत्या ही भारतीय समाजातील एक गंभीर समस्या समोर आली आहे. शेतकरी हा जगाचा पोशिंदा आहे. भारत हा कृषीप्रधान देश असूनही शेतकऱ्यांच्या आत्महत्या होतात ही चिंतेची बाब आहे. जागतिकीकरणामुळे अनेक कंपन्या भारतात आल्या. जागतिकीकरण, उदारीकरण आणि खाजगीकरणाच्या धोरणामुळे शेती आणि शेतकरी याची फरकट होण्यास सुरवात झाली. यातून शेतकरी नैराश्यात जाऊन आत्महत्या करू लागला. दर वर्षी १४-१५ हजार शेतकरी आत्महत्या करतात. केंद्र सरकारने न्यायालयास सादर केलेल्या आकडेवारीत असे नमूद केले आहे, की २०१५ मध्ये देशात एकूण १३३६२३ जणांनी जीवन संपविले. महाराष्ट्रात सर्वाधिक म्हणजे ४२९१ शेतकऱ्यांनी या कालावधीत आपले जीवन संपविले होते. महाराष्ट्रासह मध्यप्रदेश, आंध्रप्रदेश, तमिळनाडु, छत्तीसगढ, तेलंगण आणि कर्नाटक या सात राज्यांमध्ये देशातील एकूण शेतकरी आत्महत्यांच्या ८७.५ टक्के शेतकऱ्यांनी जीवन संपविले आहे. १२ हजार ६०२ शेतकरी आत्महत्यांपैकी या सात राज्यांमध्ये ११ हजार २६ शेतकरी आत्महत्या झाल्याची एनसीआरबी'च्या अहवालात नोंद आहे. नॅशनल सॅम्पल सर्व्हे ऑर्गनायझेशनद्वारे सरकारने प्रसिद्ध केलेल्या आकडेवारीवर जरी विश्वास ठेवला तरी तासाला दोन शेतकरी आत्महत्या करतात. आजपर्यंत स्पष्ट झालेल्या आकडेवारीवरून भारतामध्ये सर्वात जास्त आत्महत्या होणाऱ्या राज्यामध्ये महाराष्ट्र अग्रेसर आहे. ही बाब विकासामध्ये अग्रेसर असणाऱ्या महाराष्ट्राकरता भूषनावह नाही. १६ वर्षात मराठवाड्यात ६००० शेतकऱ्यांच्या आत्महत्या झाल्यात त्याखालील प्रमाणे २००२-०९, २००३-१४, २००४-९५ ,२००५-५८, २००६-३७८, २००७-१८९, २००८-२८५, २००९-२२८, २०१०-१९१, २०११-१६१, २०१२-१९८, २०१३-२०७, २०१४-५७४, २०१५-११३३, २०१६-१०५३, २०१७-९९१ आत्महत्या ह्या सर्वच समाजामध्ये होतात परंतु त्याचे प्रमाण सर्वत्र सारखे नाही. शेतकरीच आत्महत्या जास्त प्रमाणामध्ये का करतो ? यावरून शेतकऱ्यांना जीव प्रिय नाही? त्याला जगावे वाटत नाही. असा प्रश्न पडतो. म्हणून शेतकऱ्यांच्या आत्महत्येमागील कारणांचा शोध घेणे आवश्यक ठरते. कारण ही एक सामाजिक समस्या आहे. त्याचे मूळ सामाजिक आणि आर्थिक संदर्भामध्येच शोधणे गरजेचे ठरते.

अभ्यासाचे उदिष्ट्ये :

१) शेतकऱ्यांच्या आत्महत्यांची कारणे शोधणे.
२)शेतकऱ्यांच्या आत्महत्यावर उपाययोजना सुचविणे.

अभ्यासाची गृहीतके :

१)शासनाचे शेतीविषयक असणारे धोरण.
२)शेतकऱ्यांच्या मालाचा भाव व्यापारी ठरवतो.

संशोधन पध्दती : या शोधनिबंधाच्या मांडणीसाठी वर्णनात्मक संशोधन पद्धतीचा उपयोग करून लेखन केले आहे.

शेतकरी आत्महत्येची कारणे :

१) कर्जबाजारीपणा - बँकेकडून कर्ज घेतल्यानंतर शेतकरी जोपर्यंत कर्ज परत करीत नाही. तोपर्यंत त्याला दुसऱ्या बँका कर्ज देत नाहीत अशा वेळेस पूर्वीचे कर्ज फेडायला पैसा नसलेला शेतकरी नवीन पिक घेण्यासाठी परत खाजगी सावकाराकडे वळतो. खाजगी सावकार हे वाटेल ते व्याज दराने कर्ज देतात. शेतकऱ्याला हे व्याजदर परवडणारे नसते. ते तो फेडू शकत नाही. त्यामुळे तो कर्ज बाजारी होतो. या कर्जातुन त्याची सुटका होत नाही शेवटी सावकार जमीन ताब्यात घेतो आणि शेतकऱ्याला एकतर मोलमजुरी करणे भाग पडते. यातून नैराश्य निर्माण होऊन शेतकरी मोठ्या प्रमाणात आत्महत्या करतात.

२) बाजारपेठेत मिळणारी मालाची किंमत - अनेक समस्यांना सामोरे जात जेव्हा शेतातील माल तयार होतो आणि बाजारपेठेत येतो तेव्हा त्याला योग्य भाव मिळत नाही. कधी चांगल्या हवामानामुळे प्रचंड उत्पादन होते तर बाजारपेठेत माल जास्त झाल्याने भाव पडतात. याचा फायदा व्यापारी मोठ्या प्रमाणात घेतात. हंगामात ते शेतकऱ्याकडून कमी किंमतीत माल खरेदी करतात त्याचे साठे करतात. आणि योग्य वेळ आली की माल विकतात याचा फायदा फक्त व्यापारी घेतात. याचाच अर्थ असा की शेतमालाला योग्य भाव मिळत नसल्यामुळे तो आत्महत्येकडे वळतो.

३) शेती ही पावसावर अवलंबून : शेती ही पूर्णपणे निसर्गावर अवलंबून असल्यामुळे आणि निसर्गाच्या लहरीपणामुळे शेतकऱ्यांना आपल्या शेतीतून उत्पन्नाची हमी देता येत नाही. काही प्रमाणात शेतीत मिंचनाचा वापर करण्यासाठी लागणारे भांडवल त्याच्याजवळ नाही.

४) नापिकी : नापिला आत्महत्यांचे प्रमुख कारण मानण्याला आधार असा की नापिकी नसती तर, हाती समाधानकारक पैसा येत राहिला तर लोक थोडी बहुत व्यसने करतीलही परंतु भविष्यात पुन्हा उत्पन्न मिळण्याची आशा असल्यामुळे तरी घरगुती भांडणे इतकी होणार नाहीत व ती आत्महत्यांच्या टोकापर्यंत जाणार नाहीत. नापिकी हे प्रमुख कारण असेही दर्शविता येईल की अगदी पगारदार व्यक्तींचा पगार १०-२० दिवस इकडे-तिकडे झाला तर नको-नको होते हे सांगायला लाज वाटण्याचे कारण नाही. म्हणून उत्पन्नाची नापिकी झाल्यास जे परिणाम शेतकरी कुटुंबावर होतात ते सर्वत्र दिसून येतात म्हणून कोणीही म्हणेल की शेतकऱ्यांच्या आत्महत्येस मूळ कारण नापिकीच आहे.

५) वाढता उत्पादन खर्च : शेती उत्पादनासाठी आवश्यक असणाऱ्या बी-बियाणांचा, रासायनिक खतांचा, मशागतीचा खर्च दिवसेंदिवस वाढत असून, सर्वसामान्य शेतकऱ्यांना हा उत्पादन खर्च परवडत नाही. उत्पादन खर्चात होणाऱ्या वाढीबरोबर शेतीमालाला भाव मिळत नाही. ही चिंतनाची बाब आहे.

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VIMUKTA - NOMADIC CASTES – TRIBES & OTHER BACKSWORD CLASS: PRESENT CONDITIONS, DEVELOPMENT & CHALLENGES.

Guest Editor

Dr.R.D.Rathod
Dr.B.K.Shep
Dr.K.M.Bhange

समाजहित जपले यवतमाळ जिल्हयात अनेक सामाजिक प्रकल्प उभारले. १९७७ साली राज्याचा हा नेता लोकसभेवर खासदार म्हणून निवडून गेला असा हा मनमिळावू ,प्रेमळ,नम्र,शांत नेता म्हणून त्यांची ख्याती होती.

१३. अशा हया जेष्ठ नेत्याचा शेवट १८ ऑगस्ट १९७९ रोजी झाला.

सारांश :

अतिशय गरिबीत जन्मलेला आणि दारिद्रियात वाढलेला नेता म्हणजे वसंतराव होय. गरिबीचे चटके सोसून शाळेत अवमान सहन करुन पदवीपुर्ण करुन,विधी महाविद्यालयात शिक्षण घेउन गोर गरीबांच्या अडचणी दुर केल्या. अनेक प्रकारचे सामाजिक कार्य करुन राजकीय क्षेत्रातील त्यांची कामगीरी अतुलनिय आहे चांगला दूरदृष्टीचा खंबीर,धाडसी,क्रांतीकारी, प्रतिष्ठीत नेता म्हणून मा.वसंतराव नाईक यांचे नाव इतिहासात समाविष्ठ आहे.

संदर्भ सूची

१. बंजार पुकार — संपादक— अविनाश चव्हाण
२. गोरवाणी — संपादक— डॉ.रमेश जाधव.
३. लोकप्रभा — महाराष्ट्र शासन

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हरितक्रांतीचे प्रणेते वसंतराव नाईक : जीवन आणि कार्य

प्रा. डॉ. आव्हाड भगवान भानुदास
आनंदराव धोंडे ऊर्फ बाबाजी महाविद्यालय कडा,
ता. आष्टी, जि. बीड

वसंतराव फुलसिंग नाईक यांचा जन्म ०१.०७.१९१३ मध्ये विदर्भातील यवतमाळ जिल्ह्यातील पुसद तालुक्यातील गहुली या खेडयात झाला. नाईकांचे मुळ आडनाव राठोड होते. पण त्यांचे आजोबा चतुरसिंग राठोड यांनीच गहुली हे गाव वसविले. त्यांनी जमीनजुमला जमा करुन आपल्या समाजाला स्थिर जीवन प्राप्त करून दिले. साहजिकच तो वंजारी समाजाचा नाईक म्हणजे पुढारी झाला. त्यावरून त्यांचे नाईक हे आडनाव रूढ झाले. चतुरसिंगचा फुलसिंग हा मुलगा पुढे या समाजाचा नाईक झाला. त्यांना एकूण सहा अपत्ये होती चार मुली दोन मुले झाली पैकी १) राजूसिंग २) हाजूसिंग, हाजूसिंग छोटे बाबा नावाने परिचित होते. पुढे त्यांना वसंतराव हे नाव पडले. वसंतरावांचे प्राथमिक शिक्षण विविध खेड्यांत झाले. अमरावती येथे माध्यमिक शिक्षण घेऊन, १९३७ मध्ये नागपूरच्या मॉरिस कॉलेजमधून (सध्याचे वसंतराव नाईक सामाजिक विज्ञान संस्था) बी.ए. हि पदवी घेतली. नंतर १९४० मध्ये एल.एल.बी. हि पदवी मिळविली. विद्यार्थीदशेत त्यांच्यावर महात्मा जोतीबा फुले व डेल कार्नेगी यांच्या कार्याचा वसंतरावांच्या मनावर प्रचंड प्रभाव पडत गेला. ६ जुलै १९४१ रोजी त्यांचा विवाह वत्सलाबाई यांच्याशी झाला. हा आंतरजातीय विवाह असल्यामुळे विदर्भात थोडी खळबळ उडाली त्यामुळे त्यांना आपापल्या घरांपासून दूर राहावे लागले. वसंतरावांनी कायद्याची पदवी घेऊन पुसद येथे वकिलीस सुरवात केली. हळूहळू त्यांचा या व्यवसायात जम बसू लागला व आर्थिक स्थितीही सुधारली तसेच प्रतिष्ठाही वाढली.पुढे ते पुसद कृषिमंडळाचे अध्यक्ष म्हणून निवडून गेले. याशिवाय हरिजन वसतिगृह व राष्ट्रीय वसतिगृहाचे ते अध्यक्ष होते. मध्य प्रदेश राज्याचा मध्यवर्ती सहकारी बँकेच्या संचालकपदी त्यांची नियुक्ती झाली. ते पुसदच्या नगरपालिकेचे अध्यक्ष म्हणून निवडून आले. १९५६ मध्ये राज्यपुनर्रचनेनंतर विदर्भ व मराठवाडा हे प्रदेश मुंबई द्विभाषिक राज्यात समाविष्ट झाल्यानंतर वसंतराव यशवंतरावांच्या मंत्रीमंडळात कृषिमंत्री झाले. १९६० मध्ये स्वतंत्र महाराष्ट्र राज्याची निर्मिती झाल्यानंतर

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स्वाभीमानाची चळवळ जिवंत ठेवण्यासाठी चांभार जातीने पुढाकार घेण्याची आवश्यक्ता आहे. आज चांभार जातीमध्ये काही तरुण मुल-मुली डॉक्टर, ईंजीनिअर, वकील, शिक्षक, प्राध्यापक व वेगवेगळया वरिष्ठ पदावर कार्यारत आहेत. परंतु भविष्याच्या दृष्टीने जातीच्या हक्कासाठी, न्यायासाठी व्यापक स्वरुपात कार्या होताना दिसुन येत नाही. म्हणुन प्रस्तुत शोध निबंधात चांभार जातीच्या विकासात्मक परिवर्तनासाठी डॉ. बाबासाहेब आंबेडकरांच्या विचारांची आवश्यक्ता वाटते. डॉ. बाबासाहेब आंबेडकरानी अस्पृश्यतेची चळवळ एका जाती पुरती मर्यादीत केली नाही तर या चळवळीचा व्यापक उद्देश होता. म्हणुन त्यांनी महार सभेची स्थापना न करता २० जुलै १९२४ रोजी "बहिस्कृत हितकारीणी" सभा नावाची संस्था स्थापन केली आणि सर्व जातीच्या प्रांतातल्या जमातीना एकत्रीत व संघटीत करण्यावर भर दिला. या दलित जमातींच्या बरोबर इतर गावाबाहेर, संस्कृती बाहेर ठेवलेल्या आदिवासी व गुन्हेगार जमातींचाही विचार करावा लागेल असे डॉ. बाबासाहेब आंबेडकरानी ठरवले. या चळवळीमध्ये अस्पृश्य जातींपैकी चांभार आणि मातंग समाजाचे कार्यकर्ते पाहीजे तेवडे सहभागी झाले नाहीत. तरीही बहीष्कृत हितकारणी सभेचे कार्य चालुच राहीले. चांभार जातीला मानवी हक्कांचे महत्व कळलेच नाही. त्यामुळे चांभार जातीच्या एकाही उमेदवाराला १९३७ च्या निवडणुकीत डॉ. बाबासाहेब आंबेडकरांनी "स्वतंत्र मजुर" पक्षाचे तिकीट दिले नाही. चांभार समाजाचे श्री शिवतरकर यांच्या हि गोष्ट लक्षात आली. बाबासाहेबाना चळवळीच्या कामात तडजोड व धरसोड करणाज्या बद्दल तीव्र संताप होता. त्यामुळे शिवतरकर यांना पर्याय उरला नाही.त्यांनी पुन्हा बाबासाहेबांबरोबरच कार्य करायला सुरवात केली. आणि चांभार जातीला संघटीत करण्यावर भर दिला. महाडच्या चवदार तळयाचा सत्याग्रह २६ डिसेंबराला झाला या वेळी डॉ.बाबासाहेब आंबेडकरांची चांभारवाडयात संध्याकाळी सभा घेतल्याची नोंद आहे. या सभेत डॉ. बाबासाहेब आंबेडकरांन सोबत चांदोरकर, गोविंद जाधव, शिवतरकर इ. उपस्थीत होते. आज या अंदोलनाच्या इतिहासाला ५० वर्ष पुर्ण होत आहेत. त्यामुळे फूले, आंबेडकरांच्या विचारांचे व समतेच्या हक्काचे महत्व चांभार समाजाने संघटीतपणे समजुन घेणे गरजेचे आहे.

संदर्भ ग्रंथ सुची :

१) दिलीप सुखाडे, चर्मकार समाज आणि आंबेडकरवाद, लोकसाहीत्य प्रकाशन, सिडको औरंगाबाद, पृ.क्र. ९९

२) एस. एस. गौतम, गुरू रविदास ने कहा ऐसा चाहुँ राज मै, गौतम बुक सेंटर शाहदरा, दिल्ली, पृ.क्र.९,११

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हुंडाबळी : सामाजिक समस्या

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हिंदू विवाह पद्धतीमुळे निर्माण झालेल्या अनेक सामाजिक समस्यात हुंडा पद्धती हि एक महत्वाची समस्या आहे. विशिष्ट रक्कम वा धन दिल्याशिवाय मुलीचा विवाह होणे या प्रथेमुळे दुरापास्त झाले आहे. हुंडापद्धती हि भारतीय समाजातील अति प्राचीन प्रथा आहे. पूर्वी हि प्रथा फक्त राजघराणे, जमीनदार, जहागीरदार, श्रीमंत घराण्यांपूरतीच मर्यादित होती कालांतराने समाजाच्या सर्व वर्गात हि प्रथा रूढ झाली. फार पूर्वीपासून आपल्याकडे स्त्रीयांना विवाहात सोने, चांदी, पैसे, जमीन अशा भेटवस्तू देण्याची प्रथा चालत आलेली आहे. त्याला स्त्रीधन असे म्हटले जात होते. मुलीचे वडील ते स्वखुशीने देत असत. या संपत्तीवर फक्त तिचाच अधिकार असे. नंतर समाजातील लोकांना या संपत्तीचा मोह होऊ लागला मुलाचे लग्न करून, कष्ट न कर्ता श्रीमंत होण्याची हाव वरपक्षाला पडली. वरपक्षाणे वधूपक्षाकडून पैसे उकलण्याची पद्धत रूढ झाली. त्यामुळे मुलगी होणे ही एक कौटुंबिक आपत्ती मानली जाऊ लागली.

हुंडयाचा अर्थ :— विवाहप्रसंगी वधूने वरगृहि आपल्या समवेत नेलेल्या देणग्या, पैसा, वस्तू आणि मालमत्तेचे अधिकार म्हणजे हुंडा होय.

१)मॅक्सरॉडीनच्या मते :— हुंडा म्हणजे विवाहाच्या वेळी वराला त्याच्या पत्नीकडून किंवा तिच्या नातलगाकडून मिळणारी मालमत्ता होय.

२)१९६१ च्या हुंडाप्रतीबंधक कायद्यानुसार:— हुंडा म्हणजे कोणत्याही एका पक्षाने विवाहापूर्वी वा विवाहानंतर विवाहाची एक अट म्हणून दिलेली किंवा देण्याचे