



Shri Sachhidanand Shikshan Sanstha's

TAYWADE COLLEGE

(Arts, Commerce, Science) (U.G. & P.G.)

Mahadula - Koradi, Tah. Kamptee Dist. - Nagpur

NAAC ACCREDITED 'B' GRADE
Recognised Centre for
Higher Learning and Research

Principal
Dr. Sharyou B. Taywade
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Chairman
Dr. Babanrao Taywade
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NAAC 2021/ Metrics Level Deviations/Cr3-6-7

Date:-09/05/2022

Criteria 3.3.2	Number of research papers per teachers in the Journals notified on UGC website during the last five years
Findings of DVV	1) kindly provide The HEI should provide screenshots of research articles clearly showing the title of the article, affiliation, name of the journal, year and authors name during the last five years.
Response/ Clarification	1)Table showing details of research papers of teachers and respective Screenshots of research papers (Appendix-I)


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Appendix – I

Academic Year 2020-21

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3.3.2 Number of research papers per teachers in the Journals notified on UGC website during Academic Year 2020-21

Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
A Study of Dyeing Characteristics and Antioxidant Activity of Natural Dye Extracted from <i>Nerium indicum</i> Flowers	Dr. Mrs. S.P. Patil	Botany	Journal of Biological and Chemical Research	Jun-21	2319-3077 (Online) 0970-4973 (Print)	Research Paper Link
Performance Analysis of Structure Similarity Algorithm for the Recognition of Printed Cursive English Alphabets	Dr. G.S. Katkar	Computer Science	International Journal of Scientific Research in Science and Technology	Oct-21	2395-602X (Online) 2395-6011 (Print)	Research Paper Link
Directional Discrete Cosine Transform(D-DCT) Method for Classification and Recognition of Cursive English Alphabets	Dr. G.S. Katkar	Computer Science	International Journal of Scientific Research in Science and Technology	Oct-21	2395-602X (Online) 2395-6011 (Print)	Research Paper Link
Paryavaran Aani Manvi Hakka	Dr. V.T. Sheikh	Political Science	B. Aadhar, International Peer Reviewed Indexed Reserch Journal	Dec-20	2278-9308	Research Paper Link
Mahilanche Manavdhikar	Dr. V.T. Sheikh	Political Science	B. Aadhar, International Peer Reviewed Indexed Reserch Journal	Mar-21	2278-9308	Research Paper Link
Role of Yoga in Physical Fitness	Dr. S.S. Bhotmange	Physical Education	Ajanta,	Dec-21	2277-5730	Research Paper Link
Sociological & Physiological aspects of Sports	Dr. S.S. Bhotmange	Physical Education	B. Aadhar, International Peer Reviewed Indexed Reserch Journal	Mar-21	2278-9308	Research Paper Link
Zadie Smith's 'On Beauty': A Novel on Racism Discrimination and Exploitation	Dr.Mrs. V.V. Vaidya	English	Journal of Emerging Technologies and Innovative Research	Oct-20	2349-5162	Research Paper Link
Narcissism and narcissistic personality in Chitra Banerjee Divakaruni's Oleamder Girl	Dr.Mrs. V.V. Vaidya	English	Shodh Sarita	Mar-21	2348-2397	Research Paper Link
ROOTLESS IDENTITY IN KIRAN DESAI'S	Dr.Mrs. V.V. Vaidya	English	Research Journal of English Language and Literature	Feb-21	2395-2636 (print) 2321-3108 (online)	Research Paper Link

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Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
HULLABALOO IN THE GUAVA ORCHARD			(RJELAL)			
Impact of Caste Class and Religion in Shashi Deshpande's novel Roots and Shadows	Dr.Mrs. V.V. Vaidya	English	B.Aadhar' International Peer-Reviewed Indexed Research Journal	Jul-21	2278-9308	Research Paper Link
FEMININE ISSUES REFLECTED IN THE INDO-ANGLIAN FICTION IN CONTEMPORARY INDIA WITH SPECIAL REFERENCE TO THE NOVELS OF AMITAV GHOSH	Dr.Mrs. V.V. Vaidya	English	Knowledge Resonance	Aug-21	2231-1629	Research Paper Link
THE THEME OF CULTURAL HYBRIDITY IN KIRAN DESAI'S NOVEL THE INHERITANCE OF LOSS	Dr.Mrs. V.V. Vaidya	English	Knowledge Resonance	Aug-21	2231-1629	Research Paper Link
GENDER, SOCIAL INEQUALITY AND DOUBLY EXPLOITATION DEPICTED IN THE NOVEL OF URMILA PAWAR: "THE WEAVE OF MY LIFE" (AYDAAN)	Dr.Mrs. V.V. Vaidya	English	Knowledge Resonance	Aug-21	2231-1629	Research Paper Link
THEME OF DEJECTED HEARTS IN KIRAN DESAI'S NOVEL THE INHERITANCE OF LOSS	Dr.Mrs. V.V. Vaidya	English	UPA NATIONAL E-JOURNAL	Sep-21	2455-4375	Research Paper Link
Luminescence Properties of Rare Earth-Doped Cubic Double Perovskite Tungstate $Ba_{2(1-x)}(Na,RE)_xZnWO_6$ (RE = Ce^{3+} , Eu^{3+} and Dy^{3+}) Phosphors	Dr. A.S. Nakhate	Physics	Physica Status Solidi B	Apr-21	0370-1972 (print) 1521-3951 (online)	Research Paper Link

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Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
Photoluminescence properties of an efficient colour tunable microcrystalline Sr ₃ WO ₆ :Na ⁺ ,RE ³⁺ (RE = Eu, Dy and Sm) phosphors	Dr. A.S. Nakhate	Physics	JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS	Aug-21	1454 - 4164 (print) 1841 - 7132 (online)	Research Paper Link
Development and validation of direct spectrophotometric method for the estimation of glimepiride	Dr. D.M. Chafle	Chemistry	Journal of Pharmaceutical Research International	Jun-21	2456-9119	Research Paper Link
THEME OF GENDER BIAS AND SOCIETY IN ATTIA HOSAIN'S NOVEL SUNLIGHT ON A BROKEN COLUMN	Dr. M.R. Wagh	English	Knowledge Resonance	Aug-21	2231-1629	Research Paper Link
SOCIAL CONCERN IN THE WORKS OF VIJAY TENDULKAR	Dr. A.Y. Bhaik	English	Knowledge Resonance	Aug-21	2231-1629	Research Paper Link
COVID 19 Kalatil Bhartiya Arthvyavasthetil Krushi, Udyog Va Seva Kshetra, Sthalantarit Majur Va Aarogyachya Sthiticha abhyas	Sh. S.P. Ghugal	Economics	B.Aadhar' International Peer-Reviewed Indexed Research Journal	Nov-21	2278-9308	Research Paper Link
COVID 19 Ya Mahamarichya Bhartachya Krushi Va Etar Kshetravar Jhalela Parinam	Sh. S.P. Ghugal	Economics	Ajanta,	Sep-21	2277-5730	Research Paper Link
NEW EDUCATION POLICY & ITS BENEFITS TO THE SOCIETY	Sh. S.P. Ghugal	Economics	UPA NATIONAL E-JOURNAL	Sep-21	2455-4375	Research Paper Link
IMPACT OF COVID19 ON GLOBAL ECONOMY	Dr.Mrs. A.R. Durge	Commerce	UPA NATIONAL E-JOURNAL	Sep-21	2455-4375	Research Paper Link
Punha Ekda Kabritla Samadhisth	Dr. K.V. Thakre	Marathi	Akshar Wangmay	Dec-20	2229-4929	Research Paper Link
Samkalin Marathi Katha	Dr. K.V. Thakre	Marathi	Scholarly Research Journal for Interdisciplinary Studies	Jun-21	2319-4766	Research Paper Link

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Samkalin Adivasi Kadambari	Dr. K.V. Thakre	Marathi	Scholarly Research Journal for Interdisciplinary Studies	Jun-21	2319-4766	Research Paper Link
Samlalin Samaj Jivnache Aaklan Mandnare Kadambarikar Rangnatha Pathare	Dr. K.V. Thakre	Marathi	Scholarly Research Journal for Interdisciplinary Studies	Jun-21	2319-4766	Research Paper Link
A Study of Dyeing Characteristics and Antioxidant Activity of Natural Dye Extracted from <i>Nerium indicum</i> Flowers	Dr. V.N. Charde	Microbiology	Journal of Biological and Chemical Research	Jun-21	2319-3077 (Online) 0970-4973 (Print)	Research Paper Link
Study of mid-gut microflora and microbial population in earthworm casts of composting earthworm eisenia fetida	Dr. R.S. Bahekar	Zoology	INTERNATIONAL JOURNAL OF RESEARCHES IN BIOSCIENCES, AGRICULTURE AND TECHNOLOGY	Jun-21	2347 – 517X	Research Paper Link
Oxidation of alcohols by using 2,4,5-tris [{4-dichloroiodo)phenoxy}] -1,3,5-triazine, as a recyclable hypervalent iodine(III) reagent	Dr. P. B. Thorat	Chemistry	Journal of Advance Scientific Research	Nov-20	0976-9595	Research Paper Link
Study of mid-gut microflora and microbial population in earthworm casts of composting earthworm eisenia fetida	Dr. Y.W. There	Microbiology	International Journal of Researches In Biosciences, Agriculture And Technology	Jun-21	2347 – 517X	Research Paper Link
Spectroscopic investigation of rare earth activated potassium calcium pyrophosphate $K_2Ca_{1-x}RE_xP_2O_7$ ($RE = Tb^{3+}$, Dy^{3+} , Sm^{3+} and Eu^{3+}) phosphors	Dr. K. V. Dabre	Physics	Optik - International Journal for Light and Electron Optics	Dec-20	0030-4026	Research Paper Link
Luminescence Properties of Rare Earth-Doped Cubic Double Perovskite Tungstate $Ba_2(1-x)(Na,RE)_xZnWO_6$ (RE	Dr. K. V. Dabre	Physics	Physica Status Solidi B	Apr-21	0370-1972 (print) 1521-3951 (online)	Research Paper Link

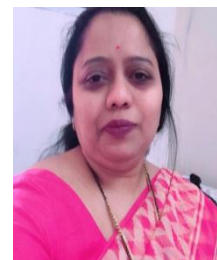
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= Ce ³⁺ , Eu ³⁺ and Dy ³⁺) Phosphors						
Photoluminescence properties of an efficient colour tunable microcrystalline Sr ₃ WO ₆ :Na ⁺ , RE ³⁺ (RE = Eu, Dy and Sm) phosphors	Dr. K. V. Dabre	Physics	JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS	Aug-21	1454 - 4164 (print) 1841 - 7132 (online)	Research Paper Link
Nesting behaviour of potter wasp, delta pyriforme (fabricius) (hymenoptera: eumeninae) from the koradi region, dist, nagpur, maharashtra	Dr. C.R. Deshmukh	Zoology	INTERNATIONAL JOURNAL OF RESEARCHES IN BIOSCIENCES, AGRICULTURE AND TECHNOLOGY	Jun-21	2347 – 517X	Research Paper Link
Acharya Vinobanka Sahitya Chintan	Dr. G.K. Polenwar	Hindi	AksharWarta Monthly International Refreed Journal	Dec-20	2349-7521	Research Paper Link
Faith and optimism in sidney's poem 'let not old age disgrace my high desire': an overview	Dr. V.M. Chavan	English	LangLit An International Peer Reviewed Open Access Journal	Feb-21	2349-5189	Research Paper Link
Reflections of the greatness of Indian philosophy: Special reference with T. S. Eliot's Poem The Waste Land: An Overview	Dr. V.M. Chavan	English	Knowledge Resonance	May-21	2231-1629	Research Paper Link
Themes of caste, religion and politics in mulk raj anand's novel untouchable: an overview	Dr. V.M. Chavan	English	Knowledge Resonance	Aug-21	2231-1629	Research Paper Link

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RESEARCH PAPER

Received: 20/05/2021

Revised: 07/06/2021

Accepted: 10/06/2021

A Study of Dyeing Characteristics and Antioxidant Activity of Natural Dye Extracted from *Nerium indicum* Flowers

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ABSTRACT

There is a considerable inclination towards natural dyes worldwide in order to avoid hazardous effects of synthetic dyes on the environment and human health. Hence, in search of new natural source, an attempt has been made to extract the dye from Nerium indicum flowers. The spectrometric and antioxidant activity of natural colourant from Nerium indicum flowers have been analyzed in the present study. GC-HRMS profile of the dye extract showed the presence of 20 major bioactive components with varied area percentage which may be responsible for the various biological activities and the colour. DPPH radical scavenging activity of the dye extract and its statistical analysis revealed the promising antioxidant activity when compared with standard ascorbic acid. It was also statistically confirmed that there is a positive relationship between concentration of dye extract and percentage of scavenging activity. The colour fastness properties of cotton fabric dyed with natural dye were also investigated and it was found that this natural dye exhibited very good colour fastness to light and dry rubbing, while good colour fastness was rated on the scale for washing and wet rubbing. Therefore, inheritance of significant antioxidant and colour fastness properties in the natural dye obtained from Nerium indicum flowers provides a huge potential for industry usage.

Keywords: Antioxidant activity, Colour fastness, GC-HRMS analysis, Natural dye, Nerium indicum flowers.

INTRODUCTION

Natural dyes are non-toxic, non-carcinogenic and non-allergic and their non-polluting as well as biodegradable nature makes them environment friendly whereas synthetic dyes uses petrochemical sources which releases harmful carcinogenic, mutagenic and allergic substances.

Performance Analysis of Structure Similarity Algorithm for the Recognition of Printed Cursive English Alphabets

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ABSTRACT

Article Info

Volume 8, Issue 5

Page Number : 542-546

Publication Issue

September-October-2021

Article History

Accepted : 16 Oct 2021

Published : 30 Oct 2021

In this paper we analyse the performance of Structure Similarity algorithm for the recognition of printed cursive english alphabets, SSIM is a structural method suitable for printed characters but not efficient for cursive handwritten characters.

Keywords : SSIM, Structure Similarity algorithm, printed characters

I. INTRODUCTION

Zhou Wang and Al Bovik developed the predecessor of SSIM in 2001. It's also called Wang-Bovik Index or Universal Quality Index (UQI) . This evolved, through their group effort with Hamid Sheikh and Eero Simoncelli, into the current version of SSIM, which was published in April 2004 in the IEEE Transactions on Image Processing.. In addition to defining the SSIM quality index, the paper provides a general context for evaluating and developing perceptual quality measures, including direct validation of the index against human subject ratings and connections to human visual neurobiology and perception.

SSIM was rapidly adopted by the image processing community, in part because the March 2000 FRTV Phase I report by the Video Quality Experts

Group had concluded that nine previously proposed models for perceptual quality were ineffective.

The structural similarity index (SSIM) is a technique for predicting the various kinds of digital images and videos also the perceived quality of digital television and cinematic pictures. For Image and Video Engineering(LIVE) ,the first version of the model was developed in the Laboratory at The University of Texas at Austin and further developed jointly with the Computational Vision (LCV) Laboratory at New York University.

The SSIM index is a full reference metric also it is used for measuring the similarities between two images; in other words, the measurement or prediction of image quality is based on distortion – free image or an initial uncompressed as reference. SSIM is designed to improve on traditional methods

Directional Discrete Cosine Transform(D-DCT) Method for Classification and Recognition of Cursive English Alphabets

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ABSTRACT

Article Info

Volume 8, Issue 5

Page Number : 560-565

Publication Issue

September-October-2021

Article History

Accepted : 16 Oct 2021

Published : 30 Oct 2021

In this chapter we analyze the performance of D-DCT algorithms for the recognition of cursive english alphabets, These are statistical methods suitable for the recognition of cursive English characters. These methods are used for feature extraction and classification of English characters. We have used Directional Discrete Cosine Transform Method as a classifier.

Keywords : D-DCT, Directional Discrete Cosine Transform Method, OCR

I. INTRODUCTION

A system based on Neuro-fuzzy method is proposed for the recognition of English script document. In this research, an attempt has made to apply Neuro-fuzzy based method to test the performance rate of cursive english alphabets recognition.

As only one feature descriptor cannot produce competent result, some local technique like Gaussian membership method have been used for better representation of the features. The samples are collected from different persons by allowing them to write English alphabets on a piece paper. Fuzzy Gaussian Membership method used as a classifier.

Main part in the field of document analysis is that of Optical Character Recognition (OCR), which is broadly defined as the process of recognizing either

printed or text from document images and converting it into electronic form.

The OCR evaluation are mostly classified into two categories: black box evaluation and white box evaluation. In the black box case the OCR is consider as a block box where only the input and output are visible to the evaluator. In a white box situation, outputs of dissimilar modules (eg. Skew correction, zone segmentation character extraction) of the system are accessed and evaluated .

Indian scripts are always prominent by the presence of the matras in addition to main characters. whereas English script has no matras. Therefore, We can not apply these algorithms directly to Indian Scripts.. Many OCRs for Indian scripts have been reported . However, nobody have attempted to recognise the Indian Scripts character. Printed character for Devanagari script has been recognize. And attempted based on Kohonen Neural Network

**पर्यावरण आणि मानवी हक्क****डॉ. वकील टी. शेख**

राज्यशास्त्र विभाग प्रमुख तायवाडे महाविद्यालय, महादुला-कोराडी, जि. नागपूर

मानवी हक्क ही आधुनिक काळातील एक महत्वाची संकल्पना समजली जाते. द्वितीय महायुद्धानंतर ही संकल्पना अतिशय प्रकटपणे प्रसिद्ध होत गेली. संयुक्त राष्ट्रसंघाने १० डिसे. १९४८ रोजी मानवी हक्कांची उद्घोषणा केली आणि ही संकल्पना सर्वांना माहीत झाली. असे जरी असले तरी मानवी हक्कांची ही संकल्पना आधीच अस्तीत्वात होती. मध्ययुगात युरोपात हक्क (RIGHT) ही संकल्पना नैसर्गिक कायद्याच्या अनुषंगाने अस्तीत्वात होती. पृथ्वीतलावर माणुस म्हणुन जन्माला आल्याबरोबरच व्यक्तीला काही हक्क जन्मतःच प्राप्त होतात. हा विचार त्या संकल्पनेमागे होता. पुढे आधुनिक युरोपात सामाजिक कुराच्या सिद्धांताच्या जन्माबरोबर संवैधानिक शासन जन्माला आले आणि त्याबरोबर घटनात्मक अधिकार या कल्पनेचा उगम झाला म्हणजेच राज्यशास्त्रातील जे नैसर्गिक हक्कांचे तत्त्व होते, ते मानवधिकाराचे द्योतक आहे असे म्हणणे चुकीचे ठरणार नाही.

मानवी जीवनाला स्थैर्य प्राप्त करून देण्यासाठीच मानवी हक्क संकल्पना अस्तित्वात आली आहे. मानवी जीवन हे उद्दीष्टपूर्ण असते. व्यक्तिमत्व विकास हा या उद्दिष्टातील महत्त्वपूर्ण घटक आहे. व्यक्तिमत्व विकास म्हणजे मन, बुद्धी आणि शरीर यांचा विकास होय. व्यक्तिमत्व विकासासाठी अनुकूल वातावरणाची आवश्यकता असते. व्यक्तिविकास हा कोणाच्या मर्जीवर किंवा सहानुभूतीवर आधारलेला नसून तो स्वयंपूर्ण असावा लागतो, अशी स्वयंपूर्णता व्यक्तीला सर्व प्रकारच्या स्वातंत्र्यातून प्राप्त होत असते. 'मनुष्याला उद्दीष्टपूर्ण जीवन जगण्यासाठी आवश्यक असणाऱ्या पोषक वातावरणाची निर्मिती या हक्कामुळे प्राप्त होते, त्याला मानवी हक्क असे म्हणतात.

मानवी हक्कांचा विचार ग्रीक तत्त्वचिंतकांनी प्राथमिक स्वरूपात मांडला मात्र मानवाच्या सुख-दुःखाचा विचार करणाऱ्या स्टोईक तत्त्वचिंतकांनी मानवी हक्कांच्या संकल्पनेला मुर्त स्वरूप देण्याचा प्रयत्न केला. या तत्त्वचिंतकांच्या चिंतनाची विचारसुत्रे प्रामुख्याने भभापण आणि लेखन स्वातंत्र्य, कायद्यासमोर समानता आणि सर्वांना समान प्रतिष्ठा या तत्वांवर आधारलेली होती. मात्र या तत्वांचे स्वरूप अतिशय मर्यादीत होते. त्यामुळे मानवाच्या शोषणाची प्रक्रिया ही कमी होण्याऐवजी दिवसेंदिवस वाढतच होती. सत्ता स्थापण्यासाठी शक्तीची बलस्थाने अतिशय बळकट करण्यात येत होती, त्यामुळे अन्याय आणि अत्याचाराचे स्वरूप अमर्याद झाले होते. ही स्थिती बदलण्यासाठी अमेरिकेचे भूतपूर्व अध्यक्ष रूझवेल्ट यांनी प्रत्येक व्यक्तीला अभिव्यक्ती स्वातंत्र्य, उपासना स्वातंत्र्य, गरजेपासून मुक्तता आणि भितीपासून मुक्तता अशी चार तत्त्वे सांगितली, या चार तत्वांना व्यापक स्वरूप आणि अर्थ प्रदान करीत संयुक्त राष्ट्र संघटनेने १० डिसेंबर १९४८ रोजी सर्व जगासमोर मानवाचे माणुसपण जपणारा मानवी हक्काचा जाहीरनामा प्रसिद्ध केला. या जाहीरनाम्याद्वारे भुतलावरील प्रत्येक व्यक्तीला राजकीय व नागरी हक्क आणि सामाजिक आणि सांस्कृतिक हक्क कायद्यासमोर प्राप्त झाले यालाच आपण मानवी हक्क असे म्हणतो.

२० व्या शतकात आंतरराष्ट्रीय राजकारणातील एक महत्वाचे पाऊल म्हणून मानवी हक्क या संकल्पनेचा उदय झाला. दुसऱ्या महायुद्धापर्यंत राज्यप्रणित हक्कांची संकल्पना रुढ होती. यामध्ये राज्यसंस्थेद्वारा मान्य केले जाणारे व राज्यसंस्थेच्या कार्यक्षेत्रात उपलब्ध असणारे व्यक्तीचे दावे म्हणजे मानवी हक्क अशी संकल्पना होती. दुसऱ्या महायुद्धानंतर उदयास आलेल्या मानवी हक्क संकल्पनेने राज्य व राष्ट्राच्या सिमा ओलांडून हक्काविषयी वेगळे परिमाण दिले. आज राज्याची

महिलांचे मानवाधिकार**डॉ. वकील टी. शेख**

(राज्यशास्त्र विभाग प्रमुख) तायवाडे महाविद्यालय महादुला-कोराडी, जि. नागपूर

मनुष्य एक सामाजिक प्राणी आहे. मानवी अधिकार हा संपूर्ण मानवतेच्या मुलभूत गरजांशी जुळलेला एक महत्त्वपूर्ण प्रश्न आहे. महिला अधिकारशिवाय मानवी अधिकाराची कल्पनाच करता येत नाही. महिला व पुरुष यांच्या प्रती समान व सहज सामाजिक प्रतीबद्धता मानवतेच्या पूर्ण भावनेमध्ये समाविष्ट असते. मानवी अधिकाराची संकल्पना केवळ महिला किंवा पुरुष यांच्या अधिकारांपरतीच मर्यादीत नाही तर संपूर्ण मानवतेशी त्याचा संबंध आहे. महिला अधिकार व मानवी अधिकार यांना परस्पर विरुद्ध करून आपण मानवी कल्याणाची अपेक्षा करू शकत नाही. तर मानवी अधिकार व महिला या परस्पर पूरक बाबी आहेत म्हणून महिला व मानवी अधिकार यांना परस्परापासून वेगळे करूया येत नाही. मानवी अधिकार कोणत्याही देशाच्या किंवा राज्याच्या आंतरिक किंवा कौटुंबिक अधिकाराच्या अंतर्गत येणारा प्रश्न नाही. संपूर्ण जगाच्या कल्याणासाठी त्याचे संरक्षण व संवर्धन करण्यावर भर देणे अत्यंत आवश्यक आहे. मानवी अधिकार एक महत्त्वपूर्ण अधिकार आहे. त्यामध्ये व्यक्तीच्या व्यक्तीमत्त्व विकासासाठी प्रयत्न केला जातो. मनुष्याला आपल्यामागील असलेल्या सुख गुणांच्या व क्षमतांच्या विकासासाठी मानवी अधिकाराची आवश्यकता असते. कारण या अधिकारापासून व्यक्तीच्या स्वातंत्र्याची अभिव्यक्ती होऊन स्वतंत्र धातावरणात व्यक्तीला व्यक्तीगत गुणांचा विकास साधता येते. त्याचबरोबर मानवातील सुख गुणांचा, प्रतिभांचा विकास होण्यास बरीच मदत होत असते. भाषा, रंग, भेद, मानसिक क्षमता इत्यादी आधारावर मानवी समाजात भेदभाव केला जात असतो परंतु प्रत्येक मानवाच्या गरजा या कमी अधिक प्रमाणात समान असतात. त्यामुळे प्रत्येक व्यक्तीला मानवी अधिकाराची प्राप्ती व्हायला हवी. मानवाधिकार म्हणजे अशी परिस्थिती होय की, ज्याशिवाय कोणतीही व्यक्ती आपल्या व्यक्तीमत्त्वाचा पूर्ण विकास करू शकत नाही. त्याचबरोबर मानवाधिकार म्हणजे व्यक्तीद्वारा सिद्ध अशी व्यवस्था होय की, ज्यामुळे व्यक्ती आपला नैतिक कल्याण करू शकेल, जगाच्या कोणत्याही भागात वास्तव्यास असलेल्या मानव समाजातील सदस्याला (स्त्री-पुरुष) सन्मानपूर्वक जीवन जगण्याचा अधिकार आहे. मानवाधिकार समानतेच्या सिध्दांतावर आधारित आहे. त्यामुळे मनुष्याद्वारे निर्माण विशेषाधिकार, भेदभाव व असमानता समाप्त करून समतेवर आधारित समाजाची रचना करणे हे मानवी अधिकाराचे मुख्य कार्य आहे.

कोणत्याही राष्ट्राचा, समाजाचा व व्यक्तीचा विकास घडवून आणायचा झाल्यास व्यक्ती-व्यक्तीमध्ये लिंगावरून भेदभाव न करता स्त्री-पुरुषांना समान संधी मिळणे आवश्यक असते. स्त्री-पुरुष ही जीवनरूपी संसाराची दोन नाके आहेत. ही दोन नाके सोबत व समान चालली तरच व्यक्ती, समाज आणि पर्यायाने देशाचा विकास होऊ शकतो. परंतु भारतीय स्त्रीच्या संदर्भात विचार केला असता असे दिसून येते की, प्राचीन काळापासून आपल्या देशात पुरुषप्रधान संस्कृती असल्याने स्त्रियांना समाजात व इतर सर्वत्र क्षेत्रात पुरुषांपेक्षा दुय्यम स्थान दिल्याचे दिसून येते. पूर्वी स्त्रियांना मूल आणि मूल यातच बंदिस्त करण्यात आले होते. जगात सर्व देशातील स्त्रियांपेक्षा भारतीय स्त्रियांची अवस्था अधिक दयनीय होती आणि आहे. माणूस म्हणून समाजाला तिची ओळख नव्हती. स्त्रियांना शिक्षणापासून वंचित ठेवल्यामुळे ती आपल्या मूलभूत मानवी

10. Role of Yoga in Physical Fitness

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Introduction

What is Yoga?

Yoga is the science of life and the art of living. It is the commonsense answer to overall physical and mental fitness. Basically yoga is a system of physical and mental self improvement and final liberation that people have been using for thousands of years. Yoga arose in the age of the Vedas and Upanishads. It is India's oldest scientific perfect spiritual discipline.

Yoga is a method of training the mind and developing its power of subtle perceptions so that man may discover for himself the spiritual truths on which religion, beliefs and moral values finally rest. It is realization of our hidden powers. Swami Shivananda said, "He who radiates good, divine thoughts does immense good unto himself and to the world also". Yoga is science of life, it offers us simple, easy remedies and techniques and methods of health and hygiene to assure physical and mental fitness with a minimum of time, effort and expense.

Meaning

The word 'yoga' means "to join or Yoke together". It brings the body and mind together to become a harmonious experience. 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.

Profit of Yoga

- Increased adaptability.
- Increased grease of joints, ligaments and tendons.
- Massaging the form's interior organs.
- Toning the muscles.
- Help in listening to and feeding the form.
- Also cools your brain
- Help to decrease the weight.
- Yoga can improve focus.

**Sociological & psychological Aspects of Sports****Dr.Sunil Bhotmange**

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Abstract

Since sports and material culture have taken an important place in the life of modern man, a separate discipline has been created to study the field - "sociology of sport". First, it focuses on the relationship between people and sports in the context of many social institutions, such as family, education, economics, and politics. Important to understand the essence of the game is the recognition of its many varieties. There is a game for all, and there is a game for some - a game of highest achievements. In turn, the Olympics, commercial and nonprofits are included. All these varieties of sports mainly fulfill their inherent social functions. Sports for all introduces people to the values of material culture, educates and allows them to manifest themselves more clearly in work, art and any other activity, improving their quality of life. In the presented paper, views on sports psychology and sociological perspectives have been expressed.

Keywords: Socio-culture, Psychology, Science, sports

Introduction

The more private scientific disciplines seem to "sow" with it, with extensive and in-depth knowledge in the field of material culture and sporting events. First of all, we are talking about subjects that do not consider the entire region of the region that make up the region, but only some "part" of it. For example, the theory of sports, theories, each of which studies a particular sport, the theory of physical education, theories that study individual forms of physical education (for example, physical therapy or physical education, etc.). At the same time, such private scientific disciplines are being formed that consider certain phenomena, based on specific (physical, educational, psychological, or some other) ways, from a specific or physical point of view. In this regard, a cycle of specific scientific disciplines studying physical culture and sports is also generated and spread - biomedical disciplines (sports physiology, sports biochemistry, sports anatomy, sports medicine, etc.), Social Science (Sports Affirmation, Psychology) Sports, Sports Economics, Physical Education and History of Sports, etc.), etc. Today it has become clear that these two directions do not contradict each other, but throw light on the same object of study - human activity from different sides. An awareness of this fact encourages close collaboration between psychologists and sociologists, including the study of material culture and the problems of sport. A general trend toward such collaboration is to integrate scientific knowledge using integrated scientific research method, which provides for the integration and coordination of the efforts of representatives of different scientific disciplines, strengthening the relationship between them. One solution to this problem is to develop on the basis of physical education and sociology of sports and other sciences. These include, for example, philosophical and sociological geophysical culture and the theory of games. It is about multi-disciplinary



Impact of Caste Class and Religion in Shashi Deshpande's novel *Roots and Shadows*

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Abstract

Shashi Deshpande is one of the iconoclastic writers of contemporary India. She is known for depicting women characters of Indian soil. Her representation of women characters is true in sense. She portrays the dilemma of the Indian women trapped between tradition and modernity. Her women protagonists are at the cross roads of tradition and modernity. The traditional patriarchal Indian society had an impact on the lives of women. The treatment towards women was subordinate and is still prevalent in most parts of the country. Shashi Deshpande raises such concerns and plights of middle class educated women and captures the ordinariness of the routine beautifully. She is mainly concerned with the theme of husband-wife relationship. She portrays the female world as she finds it. A woman is repudiated a status equal to the male counterpart. She plays an inferior role in the household. Her skills are always limited to the household work. This paper investigates the impact of caste, class and religion on women with special reference to Deshpande's novel *Roots and Shadows*. Indu, the protagonist, is caught up in a conflict between her personal and professional life. She goes through the process of self-introspection and self-realization and emerges quite strong and is determined with the tenacity to adhere to do what she believes is the right thing to do.

Keywords: Patriarchal, Freedom, Subordinate, Internal struggle, Tradition.

Introduction:

Manusmriti or Manava Dharma Shashtra seemed to have prominence as an ancient legal text. It quoted the dos and don'ts of social behavior of society. Traditional Indian society followed these rules blindly without even questioning. These rules and regulations were imposed on women too. This led to the subaltern treatment towards women. For ages women have been treated as subordinate by the patriarchal Indian society. According to The Laws of Manusmriti translated by George Buhler,

By a girl, by a young woman, or even by an aged one, nothing must be done independently, even in her own house (83).

Based on the above quote, it is clear that women were never treated equal to that of men. Women were enclosed in the four walls of their homes. They were deprived of their basic rights. They were not even given a choice to choose their better halves. Shashi Deshpande's realistic representation of her characters trapped in their cocoons on one hand and trying to assert their individuality on the other is one of the greatest contributions to the Indian English Literature.

For ages women are looked down upon. As Shashi Deshpande says in an interview with Geetha Gangadharan,

"I have a very strong feeling that until very recently women in our society have been looked down upon as breeding animals. They have no other role in life. I have a strong objection to treating any human being in that manner" (II).

This paper investigates the impact of such norms laid down by the traditional patriarchal Indian society with special reference to Shashi Deshpande's novel *Roots and Shadows*. The protagonist, Indu, is a representative of educated woman of upper class society. She visits her paternal home after a span

Zadie Smith's 'On Beauty': A Novel on Racism, Discrimination and Exploitation

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Abstract

This paper is an attempt to research the major theme of Racism and also to research the problem of Exploitation happening with the black race in America. It also aims to research the exploitative and racial relation of Americans with that of the Haitian region as well as the role of American Educational institutions in aggravating the problem of Racism and Discrimination in Zadie Smith astonishing satirical work 'On Beauty'. This novel deals with the issues of the underprivileged in the America and how they are indirectly denied the education, a right to get educated which should be available to every citizen despite his or her socio-economic and racial position. 'On Beauty' was a novel published in 2005. It was shortlisted for the Man Booker Prize and is the winner of Baileys Women's Prize for Fiction, 2006. Here also like her earlier masterpiece 'White Teeth', Smith follows the style named by British Critic James Wood as 'Hysterical Realism' to tackle the problem of racism and underprivileged. 'Beauty' derives its title from the essay of well-known American professor named Elaine Scarry titled 'On Beauty and Being Just'. Even though the title of the novel may be 'On Beauty', but it primarily deals with the ever-present air of discrimination and racism in the America, the country which has long been associated with the clashes of two races, where the conflicting events of racism come to surface from time to time in new and in popular culture and art forms like paintings and majorly in the form of rap, a song genre primarily associated with the black race. Smith presents us with the tale that deals with the Belsey family who is constituted of Howard Belsey of Britain and his black wife of America and their mixed-race children namely Jerome, Zora and Levi. It also deals with conservative Monty Kipps of Kipps family who oppose the education of the underprivileged blacks in Wellington University and other black characters who bear the pain of discrimination. Thus the novel is also said to be taking inspiration from the idea outlined by the great Liberal English Fiction writer Edward Morgan Forster's magnum opus 'Howards End' which tackles the idea of social conventions. 'On Beauty' is also the terse satirical literary work on the conservative policies of the elite Universities which go against the idea of 'Education to all'. It not just deals with the differences in the races but also the reaction of one race to the culture of another and the mental trauma dealt by underprivileged black youngsters in the land where education and respect to them is the distant dream.

Nelson Mandela once truly said "Education is the most powerful weapon which you can use to change the world." This former South African president has written his famous book named 'Long Walk to Freedom' in which he has told about the struggle the black man faces in the land filled with the discrimination. His words are valuable and every professor agrees with it. But in her novel "On Beauty" Zadie Smith literally



ROOTLESS IDENTITY IN KIRAN DESAI'S *HULLABALOO IN THE GUAVA ORCHARD*

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Abstract

There is a particular role of a person in the human society. A person keeps his grandeur by performing a leading role in it. Each person is an embodiment of someone or something which attribute them with their status. The identity is not delivered but it is achieved by the efforts done by a person. There are people who are recognised and those who are not recognised. Such people find solace in abandoning themselves entirely from the society. These people are rootless though they have their roots in the society. The present research paper explores the rootless identity of such people through examining the character of the protagonist of Kiran Desai's maiden novel *Hullabaloo in the Guava Orchard*.

Key words: rootlessness, identity, alienation, diaspora, exile, reunion.

With her winning the Man Booker Prize of 2006, Kiran Desai came into light with her works. Kiran Desai is a Diaspora writer as she grew up in India until the age of fourteen. Later, she moved to US with her mother Anita Desai. She learnt through her experiences the pangs for motherland. She used writing to express her diaspora feelings. She is a writer of two novels and her sincere endeavour brought worldwide name and fame for her. She published her first novel in 1998. This novel of hers got certain recognition bringing the Bretton Trask Prize for her. Later, she took a seven years long break to come forward in the literary scene. She dazzled with her glorious work *The Inheritance of Loss*; a tale of loss, alienation, pangs of migration, illegal migration, separateness, disruption and so on. She received the Man Booker Prize of 2006 and left

her strong imprint on the literary world; never to be forgotten. But before achieving the worldwide recognition, Kiran studied a lot the lives of the people she chose to narrate. It is her innate wisdom which also made her to do the same for her maiden novel. She caught the theme of her first novel in a newspaper which reported a man from North India living on a treetop until his last breath. She brilliantly explored and weaved the thread of the story intervening altogether a variety of characters. These characters are identified by their role attributed to them by the novelist. The identity helps them to find their way in the social sphere. The society needs their efforts to work for it. People live with their key features and their inmates are familiarized with their behavioural habits.

NARCISSISM AND NARCISSISTIC PERSONALITY IN CHITRA

BANERJEE DIVAKARUNI'S OLEANDER GIRL

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ABSTRACT

In the modern world, the concept of narcissism has taken various forms. Some psychoanalysts have attached it to an autoerotic sexual condition where a self is treated as a sexual object. Some others consider it as a stage of excessive self-centeredness. Now-a-day this term is also used in corporate section. The origin of this concept can be traced in the Greek mythology. But it was Sigmund Freud who offered the earliest example of narcissism in psychology. Freud thinks narcissism as a grandiosity which acts as a defence against feeling of insignificant. In *Oleander Girl*, one can observe this feeling of insignificance in two characters: Bimal Prasad Roy and Sonia. The first is a retired barrister and the grandfather of Korobi, the protagonist and the second is an ex-girlfriend of Rajat. Bimal is totally narcissistic person who doesn't want his self-importance to be diminished by anybody. He has a fear that his self will be diminished. This nature proves very harmful for his family members. Due to his fear of feeling insignificance, he destroys not only the life of his daughter but also his own. His wife also suffers from his narcissistic nature. The second narcissistic person, Sonia, doesn't bear the thought of feeling insignificant. She is such a self-centred person who tries to kill her ex-boyfriend because he denies her importance. Therefore, the researcher tries to find out narcissistic behaviours of these two personalities in the novel.

Keywords : Narcissism, Self-esteem, Self-insignificance, Over-possessive, Psychoanalysis, Stubbornness

Narcissism is not a new term in psychology. In his research paper, *On Narcissism: An Introduction*, translated from German into English by James Strachy, Freud says that the term narcissism was first used by Paul Nacke in 1899 to denote the attitude of a person who treats his or her body in the same way in which body of sexual object is treated.

Some critics think that Ellis used this term for the first time. Later on this term was used by Freud in a later footnote added in 1910 to *Three Essays on the Theory of Sexuality*.

Related to Narcissism, he also wrote a research paper entitled *On Narcissism: An Introduction*. "In this paper, Freud noted the dynamic characteristic in narcissism of consistently keeping out of awareness any

information or feelings that would diminish one's sense of self" (Kenneth N. Levy 4). In present scenario, the study of narcissism has got momentum because it has been used by number of journals and persons to express their experiences. Even if we search on web we notice many articles and blogs which say that a number of persons have been suffered from hands of narcissistic persons. The study of narcissism is now useful in corporate sector also; because most of industrialists and owners of companies are applying this study for selection of a right person by observing his or her organizational behaviour and decision making ability.

In order to know the origin of this concept, we have to go to the Greek myth in which this story is narrated. The Roman poet Ovid has narrated this story in his work,

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FEMININE ISSUES REFLECTED IN THE INDO-ANGLIAN FICTION IN CONTEMPORARY INDIA WITH SPECIAL REFERENCE TO THE NOVELS OF AMITAV GHOSH

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Abstract:

Position of Indian women in society has been a matter of great discussion since ages. In an ancient period evidences show the women had equal position during the Rig Vedic period, it is believed that the position of wife was honored and women's position was acknowledged, especially in the performance of sacred ceremonies. Gradually women were traditionally discriminated against and excluded from political and family related decisions. Despite the large amount of work that women have to do on a daily basis to support their families, their opinions are rarely acknowledged and their rights are limited. These are the different aspects of impact of society on women. Amitav Ghosh has exposed the extant criticism significant socio cultural representations and one of the concerns is the representation of gender which has become the subject of much critical debate on feminism. One of the significant aspects of Ghosh's novels is his unique portrayal of the female characters especially in works, Sea of Poppies, The Hungry Tide. His women characters are revolutionaries who seem to be aware of their milieu and their vulnerable positions and are anxious to establish an identity outside traditional domestic sphere. The burning issues of woman liberation and woman empowerment against the background of changing global politics run undercurrent in all of Ghosh's fictions. Gender issues and society are the important lens through which we view people and life. This paper will mainly focus on the position of women as depicted in his novels like The Hungry Tide, Sea of Poppies and to explore their dedicated strive against the patriarchal society. The purpose of the paper is to depict the individual struggle towards relief from male enslavement from the contemporary society.

Keywords: Patriarchal, Society, Woman Empowerment, Feminism, Unique, Contemporary.

Introduction:

In every walk of life, women are now marching side by side with men. In every field, whether it is sports, politics or academics she proved herself not only equal

but a better one. The role of women in today's world has changed considerably with positive attitude. In somewhat way, she becomes self-sufficient, well aware and independent financially. She is the symbol of strength, love, sacrifice and courage. Amitav Ghosh is a prominent novelist of contemporary Indian English fiction. Indian English fiction writers depicted women and their experiences in patriarchal societies with a deep sympathetic understanding. The contemporary Indian novelists in English like Arundhati Roy, Shashi Deshpande, Anita Desai, Shobha De, Sudha Murthy, Anita Nair, Jhumpa Lahiri, Chitra Banerjee Divakaruni, Kiran Desai, Bharati Mukherjee, Kamala Markandaya, Amitav Ghosh etc. deal with this theme minutely in Indian social milieu. Ghosh's women representation portrays sensitively and in fact they are the leading spirits in his fiction. His women representation is real life and in a realistic manner. Amitav Ghosh through his women representation in novels has attempted to explore the emotional world of women that help the readers to understand the feminine sensibility as well as psychology. The terrain of gender inequality in education has seen much change in recent decades. Ghosh traces the evolution of the feminine world from the stereotypes to the feminists. His women characters are nothing but a continuous inspiration to the surrounding people. He portrays women and their experience with sympathetic understanding. Patriarchy, traditionally, refers to a system of social relations in which men become powerful and dominated women. Today everywhere there is undisputed norms of patriarchy and undoubtedly women become the victim of this sophisticated system. This leads to inequitable social relations is the political, social, cultural, and economic institutions of a society as well as in, and through, private domestic relations. Women at some places are adorned and worshipped sublime purpose, but under this beautiful cover she becomes the victim of brutal treatment given by men. Shouri Daniels describes the "female incarnate" thus: "She has no shape or form. She is everything or nothing. She is fluid.

THE THEME OF CULTURAL HYBRIDITY IN KIRAN DESAI'S NOVEL *THE INHERITANCE OF LOSS*

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Abstract:

*There are cultures across the world each one differing from the other. The human communities are identified by their cultures. These cultures play a key role in people's entire development by teaching those attributes of their community. The humans have evolved with passage of time with innovating and adding something new to their cultures. A community adheres good and acceptable customs of the other communities. In such case, the people are influenced by other cultures, they hone their habits by innovating themselves as modern. The present research paper throws light on such aspects of human behaviour. The researcher sincerely endeavours to find out the cultural hybridity throughout the characters development in Kiran Desai's acclaimed novel *The Inheritance of Loss*.*

Keywords: Culture, Hybridity, Loss, Identity, Other, Stranger, etc.

Kiran Desai, the Man Booker Prize winner of 2006, is a novelist and the daughter of the celebrated novelist Anita Desai. She inherited the literary taste from her mother which inculcates her literary perspective. A symbol of cultural hybridity herself, Kiran embroils it in her works successfully working the thematic pattern of them. She lived in India with her Indian identity till the age of fourteen. But she had to leave for England and later to US with her novelist cum professor mother. She continued her growing and nurturing in the lap of her mother till her adulthood. Later, she opted for Creative Writing course as advised by her mother. Primarily, she wanted to become a scientist but she is attracted to the literature by reading her home library. Kiran never looked back since then and continues her journey in writing novels. She was introduced to the literary world by Sir Salman Rushdie in his edited book *Mirrorwork 50 Years of Indian Writings* (1997) with her closing excerpt *Strange happenings in the Guava Orchard*. She published her first novel *Hullabaloo in the Guava Orchard* in 1998. It brought her the Bretty Trask award. Later, she took a break almost for seven years to write her second novel. She

published it in 2006 and brighten the literary world as well as Indian Writing in English world by bagging the coveted prize who allured her mother twice. *The Inheritance of Loss* brought worldwide acclamations for its entire setup and magnificent style.

The novel is a slight reflection of Kiran's own life and also similar to her life spent in India. She was just fourteen years old when she left India with her mother. Spanning a time in India with inhabiting its culture and tradition, she could not forget the rich culture of India. She developed herself with the passage of time by accepting an altogether different culture, she herself began to feel a sense of cultural hybridity in her behaviour. *The Inheritance of Loss* projects her inherent change through her characters. She presents anglophile characters who are Indian in blood but English in taste and behaviour by influencing with English education. This cultural hybridity results in detaching them with their people and making them strangers among them. The culture differs from one part of the nation to the other. It is the education system which provides a better knowledge of any culture. People migrate from their homeland to abroad; a nation entirely carrying dissimilar culture. These migrated birds accept it with all its oddities mould their culture for no reason.

Hybridity is key term used by Homi K. Bhabha. In its simplest manner, it is used by the philosophers to navigate through the ideas of mixing one culture with the other. In general, it is a blending of cultures of the East and the West. The people come in contact with a culture which is different from theirs and they inculcate it in their behaviour. Such person belongs to the cultural hybridity section. According to Associate Professor Amardeep Singh, 'Culture, defined in terms of art, music, fashion, cuisine, and so on, might be the broadest and perhaps also the easiest place to think about hybridity. Cultural hybridity is also extremely widespread today, as one sees a proliferation of fusion cuisine, fusion cuisine, and fusion musical forms.' (Singh) The central character Jemubhai Popatlal Patel is a retired judge

GENDER, SOCIAL INEQUALITY AND DOUBLY EXPLOITATION DEPICTED IN THE NOVEL OF URMILA PAWAR: "THE WEAVE OF MY LIFE" (AYDAAN)

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Abstract:

In India we see caste based discrimination is deeply rooted in the mind of the people although many people have tried to uprooted caste system from the mind of the people. The caste-based discrimination began with the establishment of verna system in four varnas classified as – Brahmins, Kshatriyas, Vaishyas and Shudras in Indian Society. This quadruple division is a form of social stratification not to be confused with the much more nuanced "Jati" or European term "Caste". Dalit literature is the literature by Dalit for Dalit and of Dalit tells the stories of their insult of human dignity and human esteem through their autobiographies. Autobiography has been a favourite genre of Dalit Writers. In India women are considered second class citizen, for Dalit women the problem is grave. Their identity gives them a different set of problems. Urmila Pawar through her autobiographical novel "The weave of my Life" (Aydaan) depicts the pathetic condition which she had faced in her life as a woman as well as a Dalit also. This research paper seeks to explore the complexities and dilemma of the mind of the women, by focusing upon gender, social inequality and double consciousness of Dalit Women.

Keywords: discrimination, rooted, uprooted, quadruple, stratification, dilemma

Introduction:

Urmila Pawar is a distinguished Indian dalit writer of fiction in Marathi and her collections of short stories. She is prominent figure in dalit and feminist movement in India. Pawar's autobiography Aydaan (Weave), which was one of the first of its kind account by a dalit woman, won her acclaim and numerous accolades. The book was later translated into English by Maya Pandit and released under the title "The Weave of My Life: A Dalit Woman's Memoirs. Wandana Sonalkar writes that the title of the book The weave is a metaphor of the writing technique employed by Pawar," the lives of different members of her family, her husband's family, her

neighbors and classmates, are woven together in a narrative that gradually reveals different aspects of the everyday life of Dalits, the manifold ways in which caste asserts itself and grinds them down

Urmila Pawar's autobiographical narrative which are potential enough to scratch and debunk the ruthless stories of Indian women's plight in the society and their struggle to liberate themselves from shackles of slavery and claiming the victorious trophy; establishing a position of their own. Dalit people are oppressed on all social ground, they are subjected to caste, class and gender discrimination. The intersection of caste, class and gender inequality has worse in case of dalit women. Through this autobiographical writing Urmila Pawar has portrayed the real state of Mahar women, their sufferings, torture, and their struggles to shape their identity.

Gender inequality:

Urmila pawar's life experience illustrate that woman have marginal identity and occupy marginal space within the family and the community. Urmil pawar was an unwanted child because she was a girl. When she was born, her cousin Govind dada wanted to through her away onto the dung heap. Urmila Pawar Says," When I grew a little older, many would beat me" (WML 64). The caste and gender identity of Dalit women writers makes it difficult for them to have space in the literary arena and the traditional notions that Dalit women have less IQ complicate the situation further. Tulsidas in Ramcharitmanas states.

"Dhor,gavaar, pashu, aur nari "

Yeh sab tadan ke adhikari "

According to Tulsidas Animals, illiterate, lower castes and women should be subjected to beating, He emphasizes Dalit and Women are fit for beating under such perception, the space for Dalit women in society as well as in literary sphere becomes twice shrunk due to caste and gender inequality.

Pawar had got new way for shaping her identity, through her writing she got new opportunity to improve her creative writing skill. Her writing enabled to present herself as a prolific writer along

THEME OF DEJECTED HEARTS IN KIRAN DESAI'S NOVEL THE INHERITANCE OF LOSS

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Abstract: Human beings are fragile and brittle that they are depressed and driven away by emotions. It is in human nature that they empathise everything that emotionally attach with them. Emotion plays a vital role in the entire world of human relationship. It is not inept to note here that our thoughts often form the core of our actions. It reflects the framework of our psychology greatly. There are instances in our routine where one work affects the other because of the mood of a person. Deliberately, the writers across the world develop and circle their thoughts around emotional balance of human beings in various points. They successfully stress the effect of a particular crisis and its outcomes on human mind. The present research paper deals with the effects of such crisis on the lives of human beings who are deeply engulfed in their normal life. The study is a sincere endeavour to bring to the fore a serious effect of GNLFF movement; a politically motivated insurgency on the common man living peacefully, amicably in the company of nature.

Keywords: globalization, other, loss, humiliation, discrimination, etc.

Kiran Desai with her 'strange happening in the guava orchard' was introduced to the literary world by Sir Salman Rushdie; a literary stalwart. A daughter of the renowned novelist Anita Desai who was shortlisted thrice for the Man Booker Prize, Kiran developed the literary taste and imbibed it in a homely atmosphere from her mother. Her mother's advice of opting for Creative Writing Program proved beneficial to her. She accumulated her literary assets and used them in her first work that brought her the Bretton Trask Prize; an award given to the new writers of commonwealth nation under the age of thirty five for their maiden novel by the Society of Authors since 1984. Kiran Desai bagged the prize for her first novel published in *Hullabaloo in the Guava Orchard* (1998). The novelist of a critically acclaimed maiden novel, she took a seven year break. She appeared on the literary zone and brightly lightening it with her second novel *The Inheritance of Loss* in 2006 receiving the most coveted the Man Booker Prize in the same year. She is the youngest novelist to win such an award which lured her novelist mother almost thrice.

Kiran Desai, an Indian born author, lives in US with her mother Anita Desai. She lived in India till the age of fourteen and left for England with her mother. She spent nice time living in various parts of India and collected her experiences to disclose them through her novel. She wanted to study science but literary taste allured her developing her senses for expressions. It is the mother who motivated her daughter to opt for the creative writing course. The literary inheritance of her mother and father continued to attract its successor. The book shelves at home interested Kiran and she read the literary books to enrich her taste

Luminescence Properties of Rare Earth–Doped Cubic Double Perovskite Tungstate $\text{Ba}_{2(1-x)}(\text{Na,RE})_x\text{ZnWO}_6$ ($\text{RE} = \text{Ce}^{3+}$, Eu^{3+} and Dy^{3+}) Phosphors

Kamlesh Vasantrao Dabre, Javaid Ahmad Wani, Sanjay Janrao Dhoble, Satya Pal Lochab, and Abhivilas Shiodas Nakhate*

Herein, the photoluminescence (PL) and thermoluminescence (TL) properties of rare earth doped cubic double perovskite tungstate $\text{Ba}_{2(1-x)}(\text{Na,RE})_x\text{ZnWO}_6$ ($\text{RE} = \text{Ce}^{3+}$, Eu^{3+} and Dy^{3+}) phosphors synthesized by the solid-state reaction method are presented. The self-luminescence of pure Ba_2ZnWO_6 material in the blue-green region is enhanced by Ce^{3+} doping with its most effective concentration of 3 mol%. The dominant emission in orange (of Eu^{3+} at 597 nm) and blue (of Dy^{3+} at 485 nm) region in the emission spectra of $\text{Ba}_{2(1-x)}(\text{Na,Eu})_x\text{ZnWO}_6$ and $\text{Ba}_{2(1-x)}(\text{Na,Dy})_x\text{ZnWO}_6$ phosphor, respectively, shows highest intensity for 3 mol% of Eu^{3+} and 2 mol% of Dy^{3+} ion in the host lattice. The broad excitation band of Ce^{3+} and Dy^{3+} doped phosphor in the near UV region claims its candidature for solid-state lighting. TL studies are also performed using γ -radiation. Pure host material shows a simple glow curve while the rare earth ion doped phosphor shows a complex glow curve with enhanced intensity. Phosphor shows the fairly linear response up to 1 kGy radiation. Glow curves are deconvoluted and the trap parameters are calculated by Chen's peak shape method.

1. Introduction

Perovskites, with their variety of new forms, interesting physical and chemical properties, and wide spectrum of applications, are one of the most extensively studied family of materials.^[1–9] Recently, perovskite materials have gained more attention for their noteworthy application in photovoltaic^[6] and perovskite light-emitting diodes (LEDs).^[3,4] This family of materials has proven to be the best for doping of transition metal ions^[9,10]

as well as rare earth ions^[7,8,11–13] for the enhancement of physical properties for various applications. Nevertheless, rare earth ions are preferred over transition metal ions as dopants in perovskite host lattices due to the very peculiar spectroscopic characteristics required for developing a good phosphor. At present, many researchers prefer tungstate-based materials when developing phosphor materials for different applications such as phosphor-converted LEDs (PcLEDs),^[13] latent fingerprinting imaging,^[11] and optical thermometers.^[14]

Double perovskite (DP)-structured tungstate (A_2BWO_6) compounds have been explored experimentally as well as theoretically since the 1950s.^[14–35] The simplicity of their crystal structure and their diverse physical properties, such as ferroelectric, dielectric,^[21,22,32] ferromagnetic,^[15,23] photocatalytic,^[26] photoluminescence


(PL),^[17,18,35] and magnetoresistance properties,^[33] continue to fascinate researchers to explore DP-structured tungstate for different applications. The physical properties of DP-structured tungstate mainly depend upon the choice of the pair of A^{2+} and B^{2+} ions, which leads to different possibilities of crystallization of a compound in phases such as cubic, orthorhombic, and monoclinic.^[19,27]

Blasse and Corsmit^[17] reported the electronic and vibrational spectra of DP-structured tungstate in which their main interest was the double emission band of cubic DP Ba_2MgWO_6 . According to Blasse and Corsmit, only one type of WO_6 octahedron is responsible for the luminescence of DP Ba_2MgWO_6 . The studies on double band emission were continued by Bode and Oosterhout,^[18] who found that these emission bands originated from both a regular and a distorted WO_6 octahedron, which is contrary to the findings of Blasse et al. Since then, reports on optical properties of cubic DP tungstate have been very sparse. Further efforts were made by Shivakumar and Varadaraju^[36] and Sun et al.,^[37] but their studies are limited only to PL studies of orange-red emission of Eu^{3+} in Ba_2CaWO_6 . About the same time, Bugaris et al.^[38] reported the optical properties of crystals of cubic DP Ba_2MgWO_6 and Ba_2ZnWO_6 grown by a flux method, along with structural refinement. Alsabah et al.^[39] studied the effect of different concentrations of Sr^{2+} ions on the structural and optical properties of BaZnWO_6 DP oxides. Later, Chen et al.

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DOI: 10.1002/pssb.202000442

Photoluminescence properties of an efficient colour tunable microcrystalline $\text{Sr}_3\text{WO}_6\text{:Na}^+,\text{RE}^{3+}$ (RE = Eu, Dy and Sm) phosphors

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The microcrystalline samples of double perovskite tungstate $\text{Sr}_3\text{WO}_6\text{:Na}^+,\text{RE}^{3+}$ (Eu, Dy and Sm) phosphor were synthesized by modified solid state reaction method. The XRD and SEM results reveal the formation of phase pure microcrystalline phosphor samples. Noteworthy appearance of characteristic broad CT band of $(\text{WO}_6)^{6-}$ complex is observed in excitation spectra of Dy^{3+} and Sm^{3+} ion doped phosphors. PL emission spectra of Eu^{3+} , Dy^{3+} and Sm^{3+} ions doped phosphors show characteristic emission of rare earth activator. The rare earth ions are doped at non-centrosymmetric 'A' site of the double perovskite tungstate and show no concentration quenching up to 2mol% concentration of rare earth ions.

(Received July 2, 2020; accepted August 16, 2021)

Keywords: Double Perovskite Tungstate, Sr_3WO_6 , Phosphors, Photoluminescence, Rare earth

1. Introduction

In the present world, our routine practices became more energy dependable. Hence, its demand has enormously increased which exerts pressure on our traditional energy resources and causing the natural imbalance. Lighting consumes around 15 to 20% of producing electricity at worldwide level [1]. To ease the pressures on energy structure, we can reduce the energy consumption in lighting either by modifying the lighting technology or by improving the energy efficiency of the sources. Presently, the solid state lighting technology is being utilized for various purposes which is not only energy efficient, but also environment friendly [2,3]. The researchers are continuously working to improve luminous efficiency of the phosphor material [which will be utilized in PC-LED (phosphor converted light emitting diode)] together with their quality of light by exploring various materials as there is still a possibility for development.

Rare earth ions play a very crucial role in development of efficient phosphor material. Thus, they are preferred dopant amongst the researchers. Rare earth ions give intense and sharp lines in all parts of the visible spectrum, which allow the tuning the colour of the phosphor: hence, this considerably modifies the luminescence properties of the material [4,5]. The selection of host material has equal importance as the selection of activator ion in the development of phosphor for a particular application. Tungstate is self-activated material also could be act as sensitiser, so it could be an interesting host lattices for rare earth ions [6,7]. The double perovskite tungstate is one of the member of tungstate family, which offers simplicity of crystal structure as well as other important physical properties such as ferroelectricity, dielectricity, photocatalytic,

magnetoresistance etc. [8-14] which make it the material of interest since 1950s [15,16].

Initially Eman et al. [17] reported the photoluminescence (PL) properties of $\text{Sr}_3\text{WO}_6\text{:Eu}^{3+}$ phosphor in which the phosphor shows the characteristics luminescence indicating the doping at centrosymmetric site and is consistent with our previous work [18]. Furthermore, they continue their work [19] and report the PL properties of the same along with the UV irradiated thermoluminescence properties. Collaterally, Zhao et al. [7] reported the photoluminescence of $\text{Sr}_3\text{WO}_6\text{:K}^+,\text{Eu}^{3+}$ and they found that the charge compensation results in the enhancement in PL intensity of the phosphor and is comparable to the commercial red phosphor $\text{Y}_2\text{O}_3\text{:Eu}^{3+}$. Later on, Lee et al. [20] reported the structural, morphological and PL properties of Sr_3WO_6 doped with Eu^{3+} and Sm^{3+} ions. Zhang et al. [21] explore the up-conversion luminescence properties of Er doped Sr_3WO_6 multiphase phosphors for the optical temperature sensor. The PL properties of various rare earth ions activated Sr_3WO_6 phosphors seldom occurred in the literature. The work reported by Zhao et al. [7] attracts our attention because the PL intensity of the phosphor was found to be comparable to commercial phosphor. Hence, in this work we put an effort to present the PL properties of three different rare earth ions (Eu^{3+} , Dy^{3+} and Sm^{3+}) activated double perovskite tungstate (Sr_3WO_6) with charge compensated by Na^+ ion.

2. Experimental

The pure and rare earth doped samples of Sr_3WO_6 phosphors were synthesized by modified high temperature solid state reaction method. The analytically pure starting



Development and Validation of Direct Spectrophotometric Method for the Estimation of Glimepiride

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Authors' contributions

This work was carried out in collaboration between both authors. Author DC designed the study, performed the statistical analysis and wrote the first draft of manuscript. Author LA did the experimental work. Both authors managed the literature searches and read and approved the final manuscript.

Article Information

DOI: 10.9734/JPRI/2021/v33i30A31629

Editor(s):

(1) Dr. Takashi Ikeno, National Institute of Mental Health, National Center of Neurology and Psychiatry, Japan.

Reviewers:

(1) Shradha Binani, Hyderabad Institute of Technology and Management, India.

(2) Abhishek Sharma, India.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/69151>

Original Research Article

Received 22 March 2021

Accepted 29 May 2021

Published 02 June 2021

ABSTRACT

Aims: To develop simple, sensitive and direct spectrophotometric methods for the estimation of widely prescribed antidiabetic hypoglycemic agent Glimepiride in pure and pharmaceutical dosage form.

Place and duration of study: Research Centre of Taywade Group of Institution Koradi, Nagpur affiliated to Rashtrasant Tukadoji Maharaj Nagpur University Nagpur between June 2020 and March 2021.

Methodology: Two spectrophotometric methods were developed based on ion-pair formation of drug with Cresol Red dye (Method A) and Bromophenol Blue dye (Method B) in methanol and chloroform. The possible reaction mechanism was proposed with evaluation of statistical parameters. The methods were validated for its application to determine Glimepiride in bulk as well as in pharmaceutical formulations

Results: The Beer's law was found linear in the range 10 - 60 μgml^{-1} at 450 nm for method A and 2 - 20 μgml^{-1} at 578 nm for method B, respectively. The linear regression equation obtained by applying least square regression analysis for Glimepiride were found to be Absorbance = $0.0136 \times \text{Concentration in } \mu\text{gml}^{-1} + 0.028$; $R^2 = 0.9965$ for method A and Absorbance = $0.0428x$

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THEME OF GENDER BIAS AND SOCIETY IN ATTIA HOSAIN'S NOVEL SUNLIGHT ON A BROKEN COLUMN

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Abstract:

Attia Hosain's very popular novel sunlight on a broken Column is a novel which was published in 1961. It is mainly set in Lucknow. In this novel, the novelist has very successfully intermingled the theme of gender and society through different characters. Basically, it is an Autobiographical account by a fictional character called Laila who is a 15-year-old orphaned daughter of a rich Muslim family of Taluqdars. The researcher has tried to show the theme of gender and society through this work.

Keywords: Gender, society, freedom, struggle, orthodox.

Introduction:

Gender is, undoubtedly, one of the most important factors in our lives. I also realised that in a world dominated by male values, while the caste and the class struggle are taken seriously, the gender struggle is not.

(Shashi Deshpande, 1998, Of concerns, Of anxieties)

Attia Hosain was a British- Indian novelist, author, writer, journalist and actor. She has considered as a pioneering woman of letters and classic diasporic writer. Her both the works Sunlight on a broken Column and Phoenix Fled has been recognised as finest in the Indian canon. Her writing career began in England at the end of the 20th century in semi-exile. As she took the title of this novel from the poem The Hollow Men which is a symbol of loneliness, isolation and moral blindness and their inability to see the truth of their own nature. It continues to reverberate with new generations of critics, communicators and recogniser her contribution to post-colonial literature. Many popular Indian writers have expressed admiration for her work and acknowledged its influence. The title of the novel has taken from T. S. Eliot's poem The Hollow Men which is very suggestive for the theme of the novel. As the lines appear:

*There, the eyes are
Sunlight on a broken column,
There, is a tree swinging
And voices are in the wind's singing*

More distant and more solemn

Than a fading star. (Line-22-28)

Hosain's character Laila is a young girl who has lost both her parents lives in the households of her grandfather along with her grandfather's sisters Abida and Majida and Majida's seventeen-year-old daughter Zahra. She is brought by her orthodox but principled aunt Abida. Here, we can remind the very world famous line by a great feminist writer, Simone de Beauvoir as she wrote: "One is not born a woman but rather becomes one."

Though Laila according to the wishes of her father had benefit of western education, she too keeps purdah like her aunts. However, death of her grandfather makes uncle Hamid, her father's elder brother, head of the family and her new guardian. Uncle Hamid, a man of 'liberal' ideas, is nevertheless an autocratic guardian, along very little freedom to those who live under his rule. As we see such orthodox tradition in Manusmriti: "in childhood a woman should be under her father's control, in youth under her husband's, and when her husband is dead under her sons'. She should not have independence". (Manu, Manusmriti, 5148).

No linger in purdah, Laila starts attending college. Here the writer has shown the importance of education to change human life and personal progress and development. Her university friend and her distant cousin Asad become involved in anti-government protest. Surrounded by people who are either pro-British or against. She, however, is unable to take sides. She is enmeshed in the struggle for her own personal freedom. Once when asked by her uncle to opine about the agitation going on in the university, she refused to do so.

On being asked whether she had no freedom of thought she answer that she had no freedom of action. Her rebellion against the hypocrisy visible in the so called liberal views of her uncle and his wife remains limited to her mind until she loves with Ameer. Ameer, a poor relative of their family friends, would never be approved by her family. She goes against their wishes to marry him, and wins her freedom from their authority. Here, the

SOCIAL CONCERN IN THE WORKS OF VIJAY TENDULKAR

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Abstract:

In his renowned play, Silence! The Court is in Session Vijay Tendulkar raises very important questions on the need of maintaining social stability, moral sanctity and legal integrity. The story of the play revolves upon the character of Miss Benare, the heroine of the play. Tendulkar's another play Ghasiram Kotwal has an historical assertion. The play though based on historical legend, does not comment on morality or immorality of Peshwa Nana Phadnavis or Ghashiram. It is a mere statement of degeneration of society, in which will find universality.

Key words: Independent, Woman, Society, Politics, Hierarchy

In *Silence! The Court is in Session*, Miss Benare is a schoolteacher who is dedicated to her profession. She has never gone late to school. She has given her entire self to the upliftment of her school children to the extent of losing her health. She has always been very strict with her students. But her children always adore her and are willing to do anything for her. Her professional popularity has caused the envy of her colleagues at school and even the school management. They plan to institute an enquiry for a small bit of scandal about her.

Miss Benare is frank, freedom loving and independent woman. She feels that her life is her own and nobody needs dictate her how or what to do with it. She cannot understand why the management should try to dismiss her from her job when she is impeccable as a teacher school. It is not proper on their part to punish her for the unfortunate happenings in her private life. Benare confesses that she is a victim of love and life. She has not harmed anyone. If at all she has banned anybody, it was her own self. She feels that everyone around her, including her own people and her lovers has betrayed her. This being the case she is already victim of life and it is meaningless on the part of the management or the society to victimize her further. It will be tantamount to adding insult to injury.

So far, we have examined the stand of Miss Benare as a victim of life and society. But during

the course of the mock-trial of Miss Benare for infanticide, the witnesses for the prosecution prove that she had a love affair with her maternal uncle while she was just fourteen and tried to commit suicide as she could not marry him because her mother and others were against it calling a sin; that she loved Prof. Damle, a married man with children and became pregnant by him and lie had jilted her, that she tried to persuade her colleagues like Ponkshe and Balu Rokde into marrying her and fathering her child, and that she carried a bottle of Tik-20 in her bag with an intention to commit suicide if everything failed.

In the court Miss Benare's crimes of infanticide and illegitimate motherhood is established by the prosecution as crimes against society. Public prosecutor Sukhatme points out that motherhood is sacred and a mother bears the responsibility of rearing her child unmindful of her own difficulties. Motherhood is sacred and pure. A mother weaves a magic circle with her whole existence in order to protect and preserve her little one. So he points out that Miss Benare has brought shame to the holy motherhood by her conduct. He says:

"The woman who is an accused has made a heinous blot on the sacred brow of motherhood—which is purer than heaven itself. For that, any punishment, however great, that the law may give her, will be too mild by far. The character of the accused is appalling. It is bankrupt of morality. Not only that. Her conduct has blackened all social and moral values. The accused is public enemy number one. If such socially destructive tendencies are encouraged to flourish, this country and its culture will be totally destroyed." (46)

Sukhatme further points out that Miss Benare has committed a far more serious crime than infanticide by her unmarried motherhood. If the latter is permitted unchecked, promiscuity will become the order of the day. In this connection he observes:

"The charge against the accused is one of infanticide. But the accused has committed a far more serious crime. I mean unmarried motherhood. Motherhood without marriage has always been considered a very great sin by our religion and our traditions. Moreover, if the accused's intention of bringing up the offspring of this unlawful maternity is carried to completion, I have

२. कोविड-१९ या महामारीचा भारताच्या कृषी व इतर क्षेत्रावर झालेला परिणाम

सुनिल प्रभाकर घुगल

अर्थशास्त्र विभाग प्रमुख, तायवाडे कॉलेज, महादुला, कोराडी, जि. नागपूर.

सारांश

भारतीय अर्थव्यवस्थेचा विचार केला तर असे दिसून येते ते म्हणजे कमकुवत गरिब शेतकरी, शेतमजूर वर्ग व लोकांचे परावलंबित्व होय. कोविड-१९ च्या महामारीमुळे पुन्हा ग्रामीण व कृषी क्षेत्रातील समस्यांत पुन्हा भर पडली. लॉकडाऊन मुळे प्रत्यक्ष बाजार व वाहतुक बंद असल्यामुळे कृषी माल विक्रीवर मर्यादा आल्या त्यामुळे शेतकऱ्यांची विक्री व उत्पन्न घटले. कृषीवर अवलंबून असणाऱ्या शेतमजूर वर्गावर बेरोजगारी व उपासमारीची कुऱ्हाड कोसळली. पर्यायाने कृषी अर्थव्यवस्थेवर प्रतिकूल परिणाम झालेला आहे. नंतर लॉकडाऊन अंशतः शिथिल करण्यात आले परंतु त्याचा विशेष फायदा शेतकऱ्यांना होतांना दिसत नाही तसेच जागतिक पुरवठ्याची साखळी विस्कळीत झाली परिणामी शेतकरी हवालदिल झाला. कोरोणा महामारीमुळे कृषी क्षेत्रातील अवलंबित्व, कृषी प्रक्रीया उद्योग, वन उद्योग, कुटिर उद्योग प्रभावित झाले व त्यांची दयनीय अवस्था झाली. या महामारीला सावरण्यासाठी सरकारने नियंत्रणात्मक पाऊले उचलली आहेत त्यासाठी सरकारने शेतकऱ्यांना आर्थिक मदतीसाठी शेतकऱ्यांच्या खात्यात थेट पैसा जमा केला. कृषी क्षेत्राला महामारीच्या प्रभावातून बाहेर काढण्यासाठी केंद्र सरकारने १.६३ लाख कोटी रूपयांचे पॅकेज जाहीर केले, याअंतर्गत कृषीतील पायाभूत सोयी, पतसंस्था व स्टार्टअप व कृषी प्रक्रीया उद्योग, कृषी पुरक उद्योग यांना उर्जीतावस्था प्राप्त होऊन अर्थव्यवस्था वर येण्यास मदत होईल अशी आशा आहे.

प्रस्तावना

कोविड-१९ चा प्रादुर्भाव चिनमधुन संपूर्ण जगात झाल्यानंतर त्याची सुरवात भारतात सुद्धा फेब्रुवारी २०२० च्या शेवटच्या सप्ताहात जाणवयाला लागली होती. यानंतर साधारणतः त्याचा प्रभाव १४ मार्चनंतर प्रकर्षाने जाणवायला लागला. भारताचे मानणिय पंतप्रधान श्री नरेंद्र मोदी यांनी घोषित केलेला जनता कर्फ्यू व त्यानंतर १४ (एप्रिल २०२० पर्यंत लावलेला लॉकडाऊनचा प्रतिबंध पुढे नंतर ३ मे २०२० पर्यंत लॉकडाऊनचा दुसरा टप्पा, याबरोबरच लॉकडाऊन-३, लॉकडाऊन-४, आणि नंतरचे अनलॉक-१, अनलॉक-२, अनलॉक-३ व पुढची एकूणच प्रक्रीया याचा संपूर्ण देशाच्या अर्थव्यवस्थेवर विलक्षण प्रभाव पडलेला दिसून येतो. या काळात देशाची सर्वाधिक महत्वपूर्ण अशी अन्नधान्याची गरज जी प्राथमिक क्षेत्रातील कृषी क्षेत्रातून कृषी या महत्वपूर्ण घटकांद्वारे प्राप्त झाली. याच महत्वपूर्ण अशा कृषी घटकांवर या कोविड-१९ महामारीचा सर्वाधिक प्रभाव पडून बदल आलेला दिसून येत आहे.

कोविड-१९ काळातील भारतीय अर्थव्यवस्थेतील कृषी, उद्योग व सेवा क्षेत्र,
स्थलांतरीत मजूर व आरोग्याच्या स्थितीचा अभ्यास

श्री. सुनील प्रभाकर घुगल

असिस्टंट प्रोफेसर, अर्थशास्त्र विभाग प्रमुख, तायवाडे महाविद्यालय महादुला,
कोराडी ता. कामठी जि. नागपूर

मो. ८३०८०८५३३७ ,ई मेल : sunilghugal20100@gmail.com

सारांश : कोविड १९ च्या महामारिमुळे संपूर्ण जग हादरले १८० हुन जास्त देशात पसरलेल्या या महामारिमुळे सर्वात जास्त म्हणजे ७,६६,२९९ एवढे मृत्यू अमेरिकेत झाले असून भारतातील मृत्यूसंख्या ४,५८,४७०, एवढी नोव्हेंबर २०२१ अखेरीस पर्यंत झाली त्यानंतर रशिया ब्रिटेन यांच्या क्रमांक लागतो भारतीय अर्थव्यवस्थेतील कृती क्षेत्र उद्योग क्षेत्र व सेवा क्षेत्रावर याचा नकारात्मक परिणाम झालेला आहे. सर्वसामान्य जनतेला जिवनावश्यक वस्तुंचा तुटवडा निर्माण झालेला आहे. त्यामुळे अनेक जीवनावश्यक वस्तुंच्या कीमती दुप्पट व तिपटीपेक्षा जास्त झाल्या. त्याचा फटका गरीब व श्रमीक वर्गांना जास्त बसला. परंतु आता या महामारीचा प्रभाव आटोक्यात आला असून १०.८% मागणात वृद्धी होत असल्याचे कॉन्फडरेशन ऑफ ऑल इंडिया ट्रेड्स (CAIT) ने सांगितले आहे. आरोग्य क्षेत्रावरही कोरोनाचा प्रभाव भयंकर झाला असून औषधी कंपण्याची मालाची विक्री मोठ्या प्रमाणात झाल्याने आरोग्य व फार्मा क्षेत्रातील शेअर्सच्या कीमतीत मोठी वाढ दिसून आली आहे. लॉकडाऊनमुळे कामगारांची स्थिती वाईट असून राष्ट्रीय लॉकडाऊन उद्भवलेल्या कामगारांच्या आव्हानांवर तोडगा काढण्यासाठी ६ मे २०२० ला रोजगार राज्यमंत्री श्री. संतोषकुमार गंगावार यांनी भारतातील कामगारांच्या सद्यस्थितीला सामोरे जाण्यासाठी आणी कामगारांच्या कल्याणासाठी शक्य त्या उपाययोजना व सुचना करण्याचे निर्देश केंद्रीय व्यापार संघटनेने सांगितले आहे. भारतातील ऑक्टोबर २०२० अखेर प्रमुख आठ क्षेत्रे त्यात कोळसा, कच्चे तेल, नैसर्गिक वायु, कृषी, खते, स्टील, सिमेंट, उर्जा, इत्यादी ची स्थिती अतिशय वाईट आहे. यातील पहिले तीन क्षेत्र म्हणजे कोळसा, कच्चे तेल व नैसर्गिक वायु यांचा विकास दर ऋण आहे.

बिजशब्द :- कोविड १९, भारतीय अर्थव्यवस्था, स्थलांतरित मजूर, असंगठीत क्षेत्र, कृषी, उद्योग व सेवा क्षेत्र, विकसित अर्थव्यवस्था, केंद्रीय व्यापार संघटना, निर्यात व आयात व्यापार, आरोग्य क्षेत्र.

प्रस्तावना :

कोराना विषाणू प्रथमतः १९३० दशकात प्राण्यांमध्ये रोगप्रतिकारक म्हणून आढळला. १९६० च्या सुमारास तो मानवी श्वसनसंस्थेत संसर्गजन्य रोग म्हणून असल्याचे समजले नंतर तो २००३ मध्ये सार्स कोरोना म्हणून नव्या रूपात आढळला. हया जागतीक उद्रेकात सुमारे ८०० जनांना याची लागण झाली. नवीन कोराना २०१२ मध्ये मध्यपूर्व जगतात उदयास आला. सौदी अरेबीया व इतर देशात संसर्ग झाला तेव्हा त्याचा मृत्यूदर जास्त होता.

त्यानंतर डिसेंबर २०१९ ला चिनच्या वुहान शहरात न्युमोनीयाचे रूग्ण रूग्णालयात दाखल झाले. हे रूग्ण वुहानच्या सी फुड व वेटअनीमल होलसेल मार्केटेशी संबंधित होते. ११ फेब्रुवारी २०२० ला जागतिक आरोग्य संघटनेने (WHO) कोरोना विषाणू आजाराचे २०१९ चे 'कोविड १९' असे नामकरण केले.

NEW EDUCATION POLICY & ITS BENEFITS TO THE SOCIETY

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Abstract: *The new education policy in 2020 came after 30 years and it all set to change the existing academic system of India. Gross Enrollment Ratio in higher Education increased from 25.8% in 2017-18 to 26.3% in 2018-19 According to OECD, more than half of GDP growth is directly related to labour income growth among secondary and higher education individuals. National Education Policy (NEP) aims to achieve 100% Gross Enrolment Ratio (GER) in Pre-school to secondary level by 2030. The vision of the NEP is to develop knowledge skills, values and disposition. The government of India in the recent years has setup the ministry of skill Development & Entrepreneurship (MSDE), skill development is a significant driver to address poverty reduction by improving employability and inclusive growth.*

Keywords: *Gross Enrolment, National Education Policy, Holistic Development, Samgra Shiksha, Global Knowledge, Skill Development, Employability.*

Introduction:

Recently many changes have been introduced in the academic system of India starting from the school to college level. New National Education Policy has been approved by the Union Cabinet reflecting all the changes. The new education policy in 2020 came after 30 years and it all set to change the existing academic system of India with the purpose of making it at par with the international standard of academic. The Government of India aims to set up the NEP by the year 2040. Till the targeted year, the key point of the plan is to be implemented one by one. The proposed reform by NEP 2020 will come in to effect by the collaboration of the Central and State Government.

Objectives:

- To emphasis on Indian education system.
- To study the New Education Policy of India
- To see benefits of New Education Policy of India
- To study the importance of education for social development.

Hypothesis :

IMPACT OF COVID19 ON GLOBAL ECONOMY

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Abstract : *With the development of cosmopolitanization and globalization, dense population and large-scale population flow not only make the economy more integrated, but also make the spread of the plague more rapidly. The impact is unprecedented. The outbreak of COVID-19 has disrupted the Chinese economy and is spreading globally. The evolution of the disease and its economic impact is highly uncertain. Because of its high infectivity, high mortality and incubation period, the main preventive measures are to control social distance and isolation, which makes many economic activities impossible. Global GDP will fall by as much as 3%, while developing countries will be the hardest hit, as much as 4% on average, but some were more than 6.5% and world merchandise trade will plummet by 13% in 2020 due to the COVID-19 pandemic. This paper analyzes the macro economic impact of new coronavirus on the world GDP, merchandise trade (taking China as an example with other countries), and various industries, and proposes some countermeasures.*

Introduction :

Covid-19 is spreading rapidly around the world. It is not a simple accident from the first discovery of the new corona virus in Wuhan, China at the end of 2019. Tedros Adhanom Ghebreyesus pointed out that the new corona virus will coexist with us for a long time. The outbreak of COVID-19 has disrupted the world economy. Because of its high infectivity, high mortality and incubation period, the main preventive measures are to control social distance and isolation, which makes many economic activities impossible. The COVID-19 will change the macro environment of the world economy from the aspects of aggregate demand and total supply, labor income and financial market trade. The evolution of the disease and its economic impact is highly uncertain. But before that, people did not treat infectious diseases as an important factor affecting the economy. According to annual Trade Outlook on 8 April issued by WTO, world merchandise trade will plummet by between 13 and 32% in 2020 due to the COVID-19 pandemic. WTO economists believe the decline will likely exceed the trade slump brought on by the global financial crisis of 2008-09. Trade is likely to fall more steeply, particularly in electronics and automotive products. Services trade will also be highly impacted due to the imposition of transport and travel restrictions and the closure of many retail and hospitality establishments. It is said global GDP will fall by as much as 3%, while developing countries will be the hardest hit, as muas much as 4% on average, but some were more than 6.5% (Maliszewska et al., 2020) [1]. This paper will analyze the macro economic impact of new coronavirus on the world, and take China as an example to analyze its impact on three main industries, as well as World Trade solutions.

पुन्हा एकदा कब्रीतला समाधिस्त

- डॉ. कोमल ठाकरे

सुधाकर गायधनी यांच्या 'कब्रीतला समाधिस्थ' हा कवितासंग्रह १९७३ साली प्रकाशित झाला. तब्बल ४६ वर्षांनंतर आज या कवितासंग्रहाची दुसरी आवृत्ती प्रकाशित करण्यात आली.

कवीचा पहिला कवितासंग्रह हा बीजभूत असतो. तो एखाद्या कंदाप्रमाणे असतो. आयुष्यात आलेल्या अनेक अनुभवांचे पैलू त्यात दडलेले असतात. गायधनीचा 'कब्रीतला समाधिस्थ' हा कवितासंग्रह त्यांच्या वाङ्मयीन व्यक्तिमत्त्वाचे प्रतिनिधित्व करणारा आहे. या काव्यसंग्रहापासूनच त्यांच्या वाङ्मयीन कारकिर्दीला सुरुवात झालेली आहे. त्यांच्या आयुष्यातील समाजिक, सांस्कृतिक, कौटुंबिक जीवनाचे प्रतिबिंब त्यांच्या कलाकृतीतून दिसते.

काव्यप्रतिभेची देणगी लहानपणापासूनच गायधनींना लाभली आहे. लहानपणीच त्यांनी ध्यानयोगाचा सराव केलेला आहे. जळगावला असताना अकुल खेड्यात त्यांनी समाधीचा अनुभव घेतलेला असल्याचे ते सांगतात. शरीर व चेतना या दोनमधील अंतर यांना या समाधी अवस्थेत अनुभवता आल्याचे त्यांनी सांगितले, ते आपल्या मुलाखतीत म्हणतात मला लहानपणापासून थडगे, स्मशानघाट, कब्रस्तान याविषयी फार आकर्षण आहे. पूर्वजन्म आणि पुनर्जन्म यावर माझा पूर्ण विश्वास आहे आणि ते आजच्या अद्ययावत जेनेटिक विज्ञानामुळे सिद्धही होऊ शकते. मानवाप्रमाणे सर्व जीवांना हे लागू आहे. जीन्सचा प्रवास हा स्मृतीसह असतो. दरवेळी नवनव्या स्मृतीसह जीन्स उत्क्रांत होत जातात. पूर्वस्मृती म्हणजेच पूर्व जन्मज्ञान आणि पुनर्जन्म म्हणजे आपली अपत्ये. या अपत्यांमधून आपण जीन्सच्या रूपात पुन्हा स्मृतीसह जन्माला येत असतो. हा त्यांचा आध्यात्मिक दृष्टिकोण आहे. यावरून त्यांची प्रतिभाशक्ती ही स्मृतीसह झालेला जीन्सचा प्रवास असावा असे म्हणावे लागेल. जन्मजात प्रतिभा लाभलेला हा

समकालीन मराठी कथा

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समकालीन हा शब्द काळाचा निर्देश करणारा आहे. त्या त्या विशिष्ट काळातील सामाजिक, राजकीय, आर्थिक आणि इतर विविध समस्या, त्यातील ताणतणाव, अंतर्विरोध, तत्कालीन विचार याचे प्रतिबिंब साहित्यात पडत असते. प्राचीन, अर्वाचीन आणि समकालीन अशा परंपरा साहित्यात मानल्या गेल्या आहेत. सर्वसाधारणपणे १९४५ नंतरच्या साहित्याला समकालीन साहित्य असे मानण्यात येते. जे साहित्य आपल्या काळाबरोबर आहे, ज्या काळात ते निर्माण होत असते, त्या काळातील परिस्थितीशी जवळचे नाते सांगते, त्या काळाचे प्रतिबिंब त्यात आहे, त्या काळातील विचार, जाणिवा, मते ज्या साहित्यातून व्यक्त होतात असे साहित्य म्हणजे समकालीन होय. समकालीन मराठी कथेचा विचार करताना हरिभाऊ ते नवकथाकार यांच्यापर्यंतच्या कथेचा ओझरता आढावा या शोधनिबंधात घेतला आहे.

इंग्रजांच्या राज्याबरोबर मुद्रणकला भारतात आली. मुद्रणकलेमुळे मराठीत विविध साप्ताहिके, पाक्षिके, मासिके छापली जाऊ लागली. यांच्या गरजेतूनच मराठी कथा साहित्याला बाळसे प्राप्त झाले. १८९० साली हरिभाऊ आपटे ह्यांच्या 'करमणूक' या नियतकालिकातून आधुनिक मराठी कथेचा जन्म झाला. हरिभाऊची गोष्ट घटनाप्रधान, प्रसंगप्रधान, स्थलप्रधान आहे. क्वचितच ही गोष्ट व्यक्तिच्या अंतरंगात शिरण्याचा प्रयत्न करते. कथानकप्रधानता हे यांच्या कथेचे वैशिष्ट्य आहे. त्यांचे कथालेखन बोधवादी आहे. असत् प्रवृत्तीच्या माणसांना शिक्षा सत् प्रवृत्तीचा विजय असे जीवनाच्या न्यायासंबंधीचे ढोबळ गणित हरिभाऊ मांडतात. चमत्कारिक, उत्तान श्रृंगारिक गोष्टीला त्यांनी वास्तविकतेत उभे केलेले दिसते. काही कथांतून मानवी मनाचा वेधही घेण्याचा प्रयत्न त्यांनी केला. कथेची विविध रूपे निर्माण करणाऱ्या हरिभाऊंनी मराठी कथासाहित्यात पृथगात्म कामगिरी केल्यामुळे त्यांची कथा एका ऐतिहासिक टप्प्याचा भाग ठरते. हा काळ करमणुकीचा काळ म्हणून ओळखल्या जातो. करमणुकीनंतर कथेला मानाचे स्थान देण्याचे कार्य मनोरंजन मासिकाने केले त्यामुळे त्यानंतरचा काळ मनोरंजनाचा काळ म्हणून ओळखल्या गेला. या काळातील लोकप्रिय कथाकार वि.स. गुर्जर (१८८५-१९६२) यांनी शेकडो कथा लिहिल्या पण प्रकाशित होऊ शकल्या नाहीत. यांचे कथाकर्तृत्व हे काळाशी बांधलेले होते. यांची हरिभाऊप्रमाणे स्फूट गोष्ट नसून संपूर्ण गोष्ट होती. कथेची लांबी वाढली, सुबकपणा आला होता. गुर्जरांनी फडक्यांच्या पुर्वी रंजक, श्रृंगारिक कथेची पार्श्वभूमी निर्माण करून ठेवली आहे. कौटुंबिक जीवनातील प्रश्न विशेषतः

समकालीन आदिवासी कादंबरी

श्री. हर्षल गेडाम

संशोधक विद्यार्थी

डॉ. कोमल ठाकरे

मार्गदर्शक

१९९० नंतरचा कालखंड हा भारतीय समाज जीवनाच्या स्थित्यंतराचा कालखंड आहे. तसाच हा कालखंड समकालीन साहित्याच्या अनुषंगाने सुद्धा महत्वाचा आहे. या कालखंडात अनेक सामाजिक, आर्थिक, राजकीय, धार्मिक स्थित्यंतरे घडून आली. आणि संपूर्ण समाजजीवनाचा चेहरा - मोहराच बदलून गेला. सन १९९० नंतर खाउजा धोरणाचे जसे समाजजीवनावर अनुकूल - प्रतिकूल परिणाम झाले. तसेच साहित्यविश्वावर सुद्धा अनेक परिणाम झाल्याचे आपणास दिसून येते. खाजगीकरण, उदारीकरण आणि जागतिकीकरणाच्या लाटेत वाङ्मयप्रकारांची वैशिष्ट्ये काहीशी बदललेली दिसतात. या त्रयीमुळे सामान्य माणसांची जीवनशैली बदलली. विचारांच्या दिशा आणि भाषा बदलल्या, समुहहितापेक्षा स्वहिताला अधिक महत्व आले. आणि मानवी समाजमनाची संवेदनशीलतेकडून असंवेदनशीलतेकडील वाटचाल याच कालखंडात झाल्याची आपणास दिसते. या त्रयीचा परिणाम शहरी, निमशहरी, ग्रामीण, दलित आणि आदिवासी या सर्वच समाजसमुहावर कमी अधिक प्रमाणात झाला आहे. खाउजा नंतर बदललेली अर्थव्यवस्था, समाजव्यवस्था, कृषीव्यवस्था, कामगारांच्या समस्या, दलितांच्या समस्या, शेतकरी आत्महत्या, दहशतवाद, नक्षलवाद या सान्यांचे प्रतिबिंब समकालीन मराठी साहित्यात मोठ्या प्रमाणात उमटलेले दिसते. या स्थित्यंतराचा सर्वाधिक परिणाम कादंबरी या वाङ्मय प्रकारावर झाला आहे. या कालखंडात मराठी कादंबरीने पारंपरिक मराठी कादंबरीची रुढ चौकट मोडून स्वतःहाची वास्तववादी, जीवनवादी आणि बदलत्या कालचक्राशी सुसंगत अशी एक नवी ओळख निर्माण केली आहे. या कालखंडातील भालचंद्र नेमाडे, रंगनाथ पठारे, आनंद यादव, विश्वास पाटील, राजन गवस, त्र्यं. वि. सरदेशमुख, सदानंद देशमुख, श्याम मनोहर या कादंबरीकारांनी नवदोत्तरी कादंबरीला विशेष लोकप्रियता मिळवून दिली आहे. या सर्वच कादंबरीकारांच्या कादंबऱ्यांना साहित्य अकादमी पुरस्काराने गौरविण्यात आले आहे. नवदोत्तरी कालखंडातील समाजाचे चित्रण या कादंबरीकारांनी आपल्या कादंबऱ्या मधून समर्थपणे रेखाटले आहे.

प्रस्तुत लेखामधून नवदोत्तर कालखंडातील समकालीन आदिवासी कादंबरी लेखनाचा आढावा घेतला जाणार आहे. समकालीन आदिवासी कादंबरी या विषयाला प्रारंभ करण्यापूर्वी 'आदिवासी कादंबरी' ची संकल्पना स्पष्ट करणे उचित ठरेल असे मला वाटते. 'मराठी आदिवासी कादंबरी' ही संकल्पना जेव्हा आपण उच्चारतो तेव्हा आदिवासींना केंद्रस्थानी ठेवून व आदिवासींच्या जीवनावर लिहिण्यात आलेली कादंबरी असे चित्र आपल्या डोळ्यासमोर उभे राहते. 'आदिवासी समाजाच्या जीवनदर्शनाचे यथार्थ चित्रण घडविणारी व आदिवासी समाज या केंद्रबिंदू भोवती फिरणारी कादंबरी म्हणजे आदिवासी कादंबरी होय'

समकालीन समाजजीवनाचे आकलन मांडणारे कादंबरीकार रंगनाथ पठारे

श्री.मनोजकुमार कोसारे

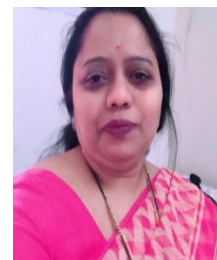
संशोधक विद्यार्थी

डॉ. कोमल ठाकरे

मार्गदर्शक

स्वातंत्र्योत्तर कालखंड मराठी साहित्याच्या विकसनाचा कालखंड होता. या कालखंडात ग्रामीण, दलित, स्त्रीवादी, मार्क्सवादी साहित्य असे नव-नवीन साहित्यप्रवाह उदयास आले. स्वातंत्र्य प्राप्ती नंतर भारतीय समाजात राजकीय, सामाजिक, शैक्षणिक क्षेत्रात वेगाने परिवर्तन झाले. समाजातल्या सर्वच स्तरांमध्ये परिवर्तनाचे व्यापक परिणाम दिसून आले. या कालखंडात निर्माण झालेल्या बऱ्याच कादंबऱ्यावर तत्कालीन सामाजिक, राजकीय, आर्थिक परिस्थितीचा फार मोठा प्रभाव मराठी कादंबरी लेखनावर झालेला आहे. १९६० नंतर कलावाद आणि रंजकप्रधानता या नावाखाली होत असणारे लेखन संपुष्टात आले आणि प्रयोगशील, वास्तववादी कादंबरी लेखनाचा काळ सुरू झाला. १९६० नंतरच्या मराठी कादंबरीच्या क्षेत्रात अनेक स्थित्यंतरे, घडून आली आणि ती अधिकाधिक समाजाभिमुख, प्रायोगिक झाली. या काळात शरच्चंद्र मुक्तिबोध, पु. शि. रेगे, भाऊ पाध्ये, ह.मो.मराठे, चि. त्र्यं. खानोलकर, दिलीप चित्रे, आनंद यादव, अरुण साधू, भालचंद्र नेमाडे यांचे कादंबरी लेखन अनन्यसाधारण आहे. यांच्या लेखनाने जीवनदर्शनाची परमोच्च उंची गाठली. या काळातील मराठी कादंबरी लेखन वेगवेगळ्या अंगाने जीवनदर्शन घडवू लागले. शरच्चंद्र मुक्तिबोध यांनी माणसाचा जीवनप्रवास अखंडपणे सुख दुःखातून चालत असतो हे दाखवून दिले. त्यांच्या 'जन हे ओळतु जेथे' सरहद्द, क्षिप्रा या कादंबऱ्या महत्वपूर्ण ठरल्या. तसेच अरुण साधू यांनी महानगरातील भीषणता, भयावह तांडवनृत्य कादंबरीतून साकार केले. या कालखंडात मराठी कादंबरी वेगवेगळ्या अंगाने जीवन दर्शन घडवू लागली. आजवरच्या मराठी कादंबरीला बदलून रोमँटिक आकलनाला फाटा देत अनुभवाचे निवेदन आपल्या कादंबरीतून मांडून भालचंद्र नेमाडे यांनी मराठी साहित्य विश्वात खळबळ उडवून दिली. 'कोसला', 'बिठार', 'जरीला' भालचंद्र नेमाडे यांच्या कादंबऱ्या उल्लेखनीय आहे. १९८० नंतर सामाजिक वास्तवाच्या दाहकतेवर व त्यातून निर्माण झालेल्या बधिरता आणि भ्रमनिरासतेवर अनेक कादंबरीकरांनी लेखन केलेले आहे. वर्तमान काळातील सामाजिक, राजकीय व सांस्कृतिक आर्थिक घडामोडींचे व त्यामागील व्यक्तींचे चित्रण या कालखंडातील कादंबरी लेखनातून पुढे आले. या काळातील कादंबरी लेखनावर भारतीय स्वातंत्र्य चळवळ, कामगार संघटना आणि त्यांच्या चळवळी, सहकार क्षेत्र, संयुक्त महाराष्ट्र चळवळ, शेतकऱ्यांचे प्रश्न, स्त्रियांच्या शिक्षणाचा प्रश्न, अस्पृश्यता, गरीबी, देशातील दारिद्र्य, अशा विविध घटनांचा आलेख तत्कालीन कादंबरी लेखनातून दिसून येतो.

१९८० च्या कालखंडात कादंबरी लेखनाला सुरुवात करणारे रंगनाथ पठारे हे मराठी मधील एक अतिशय महत्वाचे कादंबरीकार आहेत. मुळात रंगनाथ पठारे हे व्यवसायाने भौतिकशास्त्राचे प्राध्यापक



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RESEARCH PAPER

Received: 20/05/2021

Revised: 07/06/2021

Accepted: 10/06/2021

A Study of Dyeing Characteristics and Antioxidant Activity of Natural Dye Extracted from *Nerium indicum* Flowers

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ABSTRACT

There is a considerable inclination towards natural dyes worldwide in order to avoid hazardous effects of synthetic dyes on the environment and human health. Hence, in search of new natural source, an attempt has been made to extract the dye from Nerium indicum flowers. The spectrometric and antioxidant activity of natural colourant from Nerium indicum flowers have been analyzed in the present study. GC-HRMS profile of the dye extract showed the presence of 20 major bioactive components with varied area percentage which may be responsible for the various biological activities and the colour. DPPH radical scavenging activity of the dye extract and its statistical analysis revealed the promising antioxidant activity when compared with standard ascorbic acid. It was also statistically confirmed that there is a positive relationship between concentration of dye extract and percentage of scavenging activity. The colour fastness properties of cotton fabric dyed with natural dye were also investigated and it was found that this natural dye exhibited very good colour fastness to light and dry rubbing, while good colour fastness was rated on the scale for washing and wet rubbing. Therefore, inheritance of significant antioxidant and colour fastness properties in the natural dye obtained from Nerium indicum flowers provides a huge potential for industry usage.

Keywords: Antioxidant activity, Colour fastness, GC-HRMS analysis, Natural dye, *Nerium indicum* flowers.

INTRODUCTION

Natural dyes are non-toxic, non-carcinogenic and non-allergic and their non-polluting as well as biodegradable nature makes them environment friendly whereas synthetic dyes uses petrochemical sources which releases harmful carcinogenic, mutagenic and allergic substances.



STUDY OF MID-GUT MICRO-FLORA AND MICROBIAL POPULATION IN EARTHWORM CASTS OF COMPOSTING EARTHWORM *EISENIA FETIDA*

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ABSTRACT:

A bacterial and fungal population is analyzed in the gut of composting earthworm *E. fetida*. Result indicates bacteria constitute 12 ± 0.58 (CFU $\times 10^7$ /g) followed by fungi 8 ± 0.33 (CFU $\times 10^3$ /g) and actinomycetes 4 ± 0.33 (CFU $\times 10^3$ /g). Fresh cast contains 26 ± 1.45 (CFU $\times 10^7$ /g) bacteria, 13 ± 1.15 (CFU $\times 10^3$ /g) fungi and 10 ± 0.88 (CFU $\times 10^3$ /g). Microbial population is more in cast due to rich in nutrients and large surface area available for growth and reproduction of microbes. Microbial population seems to be depending on type of feed material and increased significantly when reared in nutrient rich feed materials.

INTRODUCTION:

Earthworms are soil invertebrates that play a key role in recycling organic matter in soils and also called as “Ecosystem Engineers”. An earthworm improves the soil mix by helping it to achieve the proper air, water and increases the soils ability to absorb water. Earthworms are reported to enhance microbial activities by providing in their gut contain favourable physio-chemical conditions like neutral pH, high moisture and temperature in the intestine and the mucus consisting of energetic and easily metabolizable compounds. Earthworms play a major role in causing changes in soil microbial community and promote microbial activity during the decomposition of organic matter.

Earthworms seem to have poor proper enzymatic systems and they appear to rely upon the ingested micro-organisms to degrade soil organic matter. The earthworms and the microorganisms act symbiotically to accelerate and enhance the decomposition of the organic matter. The activity of microbes present in the gut of the earthworms as well as that present in the wastes might jointly

intensify the decomposition process. (Cortez and Bouch., 1998)

Thus, the present study is an attempt to explore the gut associated microbes in earthworm *E. fetida* during vermicomposting process. This study is aimed specifically at Enumerating the microbial load (CFU $\times 10^X$) in mid gut and fresh vermicompost of earthworm specie *Eisenia fetida*.

MATERIALS AND METHODS :

Earthworm are collected from farms, identified and reared in Brick bed containers (50x35x35 cm) containing 5kg of feed material at $28 \pm 2^\circ\text{C}$, 75% moisture and 80% relative humidity. Earthworms (*E.fetida*) were collected from vermicomposting unit of our college, were washed with sterilized water and placed in sterile petri dish with moistened filter paper for 24 hours. They were then wash externally with 70 % ethanol and dissected out mid-gut region, weighed and homogenized in 0.85% NaCl solution.

Isolation of microflora was done by serial dilution method. For this, mid-gut of earthworm was excised and gut content (1gram) was suspended



OXIDATION OF ALCOHOLS BY USING 2, 4, 6- TRIS [(4-DICHLOROiodo) PHENOXY)]- 1,3,5- TRIAZINE, AS A RECYCLABLE HYPERVALENT IODINE(III) REAGENT

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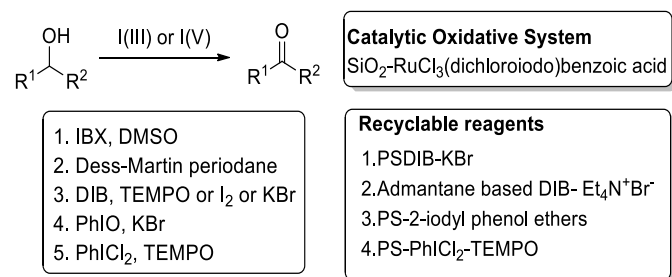
ABSTRACT

A clean and efficient method for the oxidation of alcohols by using recyclable nonpolymeric 2,4,6-tris [(4-dichloroiodo) phenoxy)]-1,3,5-triazine **2** and TEMPO as the co-oxidant is demonstrated. Near insolubility of the co-product triiodide **1** in methanol plays the crucial role in its easy regain and reuse for recyclability of the reagent 2, 4, 6-tris [(4-dichloroiodo) phenoxy)]-1,3,5-triazine **2**.

Keywords: Oxidation, Alcohol, Hypervalent iodine reagent, (dichloroiodo)benzene, 1,3,5-triazine.

1. INTRODUCTION

The oxidation of alcohols to carbonyl compounds is a very basic and well-explored transformation in organic synthesis and numerous methods utilizing various reagents have been reported [1-2]. In synthetic chemistry, selective methods for oxidation of alcohols are highly searched. In order to differentiate amongst the variety of functional groups, these selective methods are very essential. This particular demand is fulfilled by the utilization of hypervalent iodine (III) and iodine(V) reagents as “leading reagents” for the oxidation of alcohols [3-5]. Dominance of hypervalent iodine reagents is due to its mild nature, easy access, reactivities similar to transition metal oxidants but with less toxicity [6-10]. (Scheme 1).



Scheme 1: Hypervalent iodine reagents used for the oxidation of alcohol

Various hypervalent iodine (III) and (V) reagents are reported for the oxidation of alcohols. Dess-Martin periodane (DMP) and *o*-iodoxybenzoic acid (IBX) [11-

12], DMP with a base functionalized thiosulfate resin [13] is used for oxidation of reaction. Owing to the explosiveness of pentavalent iodine reagents [14-16] along with solubility issues, the oxidation of alcohols using trivalent iodine reagents have been long desired.

The trivalent iodine reagents normally show low reactivity towards alcohols. Therefore, iodine (III) reagents DIB, PhIO, BTI and PhICl₂ normally requires additives such as KBr, I₂, Et₄N⁺Br⁻, TEMPO, Pyridine, KNO₂, RuCl₂(PPh₃)₃, and chromium (III) (salen) complexes for effecting the oxidation of alcohols [3-5, 11, 12, 17-20].

In recent years the “Green and clean” approach for organic synthetic reactions is highly appreciated for ecological concern and use of recyclable reagents is emerging as best alternative to meet this purpose. Oxidation of alcohol by using various recyclable reagents like polymer supported hypervalent iodine reagents, DIB-TEMPO, Iodyl phenyl ethers [21-35], fluorine-tagged hypervalent iodine (III) reagents [36-38], ionic liquid-supported iodoarene-TEMPO bifunctional catalyst [39-40] are also demonstrated.

In the literature survey, recyclable catalytic oxidative system SiO₂-RuCl₃/3 (dichloroiodo) benzoic acid in water has been reported for the oxidation of alcohol, both SiO₂-RuCl₃ catalyst as well as the reduced form 3-iodobenzoic acid can be recycled easily [41]. The recyclable polymer supported dichloroiodoarene has been synthesized by Zhdankin *et. al.* and employed for



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Isolation of microflora was done by serial dilution method. For this, mid-gut of earthworm was excised and gut content (1gram) was suspended

Photoluminescence properties of an efficient colour tunable microcrystalline $\text{Sr}_3\text{WO}_6\text{:Na}^+, \text{RE}^{3+}$ (RE = Eu, Dy and Sm) phosphors

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The microcrystalline samples of double perovskite tungstate $\text{Sr}_3\text{WO}_6\text{:Na}^+, \text{RE}^{3+}$ (Eu, Dy and Sm) phosphor were synthesized by modified solid state reaction method. The XRD and SEM results reveal the formation of phase pure microcrystalline phosphor samples. Noteworthy appearance of characteristic broad CT band of $(\text{WO}_6)^{6-}$ complex is observed in excitation spectra of Dy^{3+} and Sm^{3+} ion doped phosphors. PL emission spectra of Eu^{3+} , Dy^{3+} and Sm^{3+} ions doped phosphors show characteristic emission of rare earth activator. The rare earth ions are doped at non-centrosymmetric 'A' site of the double perovskite tungstate and show no concentration quenching up to 2mol% concentration of rare earth ions.

(Received July 2, 2020; accepted August 16, 2021)

Keywords: Double Perovskite Tungstate, Sr_3WO_6 , Phosphors, Photoluminescence, Rare earth

1. Introduction

In the present world, our routine practices became more energy dependable. Hence, its demand has enormously increased which exerts pressure on our traditional energy resources and causing the natural imbalance. Lighting consumes around 15 to 20% of producing electricity at worldwide level [1]. To ease the pressures on energy structure, we can reduce the energy consumption in lighting either by modifying the lighting technology or by improving the energy efficiency of the sources. Presently, the solid state lighting technology is being utilized for various purposes which is not only energy efficient, but also environment friendly [2,3]. The researchers are continuously working to improve luminous efficiency of the phosphor material [which will be utilized in PC-LED (phosphor converted light emitting diode)] together with their quality of light by exploring various materials as there is still a possibility for development.

Rare earth ions play a very crucial role in development of efficient phosphor material. Thus, they are preferred dopant amongst the researchers. Rare earth ions give intense and sharp lines in all parts of the visible spectrum, which allow the tuning the colour of the phosphor: hence, this considerably modifies the luminescence properties of the material [4,5]. The selection of host material has equal importance as the selection of activator ion in the development of phosphor for a particular application. Tungstate is self-activated material also could be act as sensitizer, so it could be an interesting host lattices for rare earth ions [6,7]. The double perovskite tungstate is one of the member of tungstate family, which offers simplicity of crystal structure as well as other important physical properties such as ferroelectricity, dielectricity, photocatalytic,

magnetoresistance etc. [8-14] which make it the material of interest since 1950s [15,16].

Initially Eman et al. [17] reported the photoluminescence (PL) properties of $\text{Sr}_3\text{WO}_6\text{:Eu}^{3+}$ phosphor in which the phosphor shows the characteristics luminescence indicating the doping at centrosymmetric site and is consistent with our previous work [18]. Furthermore, they continue their work [19] and report the PL properties of the same along with the UV irradiated thermoluminescence properties. Collaterally, Zhao et al. [7] reported the photoluminescence of $\text{Sr}_3\text{WO}_6\text{:K}^+, \text{Eu}^{3+}$ and they found that the charge compensation results in the enhancement in PL intensity of the phosphor and is comparable to the commercial red phosphor $\text{Y}_2\text{O}_3\text{:Eu}^{3+}$. Later on, Lee et al. [20] reported the structural, morphological and PL properties of Sr_3WO_6 doped with Eu^{3+} and Sm^{3+} ions. Zhang et al. [21] explore the up-conversion luminescence properties of Er doped Sr_3WO_6 multiphase phosphors for the optical temperature sensor. The PL properties of various rare earth ions activated Sr_3WO_6 phosphors seldom occurred in the literature. The work reported by Zhao et al. [7] attracts our attention because the PL intensity of the phosphor was found to be comparable to commercial phosphor. Hence, in this work we put an effort to present the PL properties of three different rare earth ions (Eu^{3+} , Dy^{3+} and Sm^{3+}) activated double perovskite tungstate (Sr_3WO_6) with charge compensated by Na^+ ion.

2. Experimental

The pure and rare earth doped samples of Sr_3WO_6 phosphors were synthesized by modified high temperature solid state reaction method. The analytically pure starting



Original research article

Spectroscopic investigation of rare earth activated potassium calcium pyrophosphate $K_2Ca_{1-x}RE_xP_2O_7$ ($RE = Tb^{3+}$, Dy^{3+} , Sm^{3+} and Eu^{3+}) phosphors

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ARTICLE INFO

Keywords:

$K_2CaP_2O_7$

Pyrophosphate

Rare earth

Phosphor

Photoluminescence

ABSTRACT

This study investigates the spectroscopic properties of rare earth activated potassium calcium pyrophosphate $K_2Ca_{1-x}RE_xP_2O_7$ ($RE = Tb^{3+}$, Dy^{3+} , Sm^{3+} and Eu^{3+}) phosphors synthesized by a solid-state reaction method. The synthesized phosphor samples were characterized by powder X-ray diffraction, Scanning electron microscope, Fourier transform infrared, and Photoluminescence spectroscopy. The phosphors exhibit a strong excitation band in near UV to blue region in the range 350–400 nm showing spectral overlap with the emission band of a UV light emitting diode (LED) chip. Spectroscopic analysis has also been carried out using the Judd-Ofelt theory. The obtained luminescence properties and calculated spectroscopic parameters indicate usefulness of these phosphors in solid-state lighting, white light emitting phosphor for near UV excited LEDs and other displays applications.

1. Introduction

Light emitting diodes (LEDs) played a significant role in the development of modern technologies also, counterbalance the growing problem of energy crisis. Phosphor converted LEDs (PC-LEDs) is impressive technology for efficient conversion of electrical energy into light energy. New types of LEDs such as organic LED, hybrid Bio-LED, flip chip LED, perovskite LED, etc. are new competitor for the PC-LED in various applications but, PC-LED is still favorite choice for lighting purpose. Phosphor material coating on near-UV or blue LEDs chips is used to achieve desired colour or white light emission from LEDs. Commonly combination of YAG:Ce with blue-LED chip is used to produce white light LEDs which has revolutionized the lighting industry [1]. Researchers put extensive effort to develop efficient and stable phosphor material which could be excited by near UV or blue light and emit in the visible region. Luminescence properties of phosphor material mainly depend upon the type of doped impurity ions (in some cases it also depends on type host lattices such as vanadates, tungstate, molybdates, etc.) and stability also depends upon the type of host lattice used. So after literature review of phosphates we are fascinated by the pyrophosphate family of materials, thanks to their large band gap [2], good thermal stability [3,4], chemical stability [5], and easy synthesis procedure [6]. Thus, pyrophosphate family is the class of material which is in the preference list of researchers for developing the phosphors for different applications. The rare earth (RE) ions have played major

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Luminescence Properties of Rare Earth–Doped Cubic Double Perovskite Tungstate $\text{Ba}_{2(1-x)}(\text{Na},\text{RE})_x\text{ZnWO}_6$ ($\text{RE} = \text{Ce}^{3+}$, Eu^{3+} and Dy^{3+}) Phosphors

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Herein, the photoluminescence (PL) and thermoluminescence (TL) properties of rare earth doped cubic double perovskite tungstate $\text{Ba}_{2(1-x)}(\text{Na},\text{RE})_x\text{ZnWO}_6$ ($\text{RE} = \text{Ce}^{3+}$, Eu^{3+} and Dy^{3+}) phosphors synthesized by the solid-state reaction method are presented. The self-luminescence of pure Ba_2ZnWO_6 material in the blue-green region is enhanced by Ce^{3+} doping with its most effective concentration of 3 mol%. The dominant emission in orange (of Eu^{3+} at 597 nm) and blue (of Dy^{3+} at 485 nm) region in the emission spectra of $\text{Ba}_{2(1-x)}(\text{Na},\text{Eu})_x\text{ZnWO}_6$ and $\text{Ba}_{2(1-x)}(\text{Na},\text{Dy})_x\text{ZnWO}_6$ phosphor, respectively, shows highest intensity for 3 mol% of Eu^{3+} and 2 mol% of Dy^{3+} ion in the host lattice. The broad excitation band of Ce^{3+} and Dy^{3+} doped phosphor in the near UV region claims its candidature for solid-state lighting. TL studies are also performed using γ -radiation. Pure host material shows a simple glow curve while the rare earth ion doped phosphor shows a complex glow curve with enhanced intensity. Phosphor shows the fairly linear response up to 1 kGy radiation. Glow curves are deconvoluted and the trap parameters are calculated by Chen's peak shape method.

1. Introduction

Perovskites, with their variety of new forms, interesting physical and chemical properties, and wide spectrum of applications, are one of the most extensively studied family of materials.^[1–9] Recently, perovskite materials have gained more attention for their noteworthy application in photovoltaic^[6] and perovskite light-emitting diodes (LEDs).^[3,4] This family of materials has proven to be the best for doping of transition metal ions^[9,10]

as well as rare earth ions^[7,8,11–13] for the enhancement of physical properties for various applications. Nevertheless, rare earth ions are preferred over transition metal ions as dopants in perovskite host lattices due to the very peculiar spectroscopic characteristics required for developing a good phosphor. At present, many researchers prefer tungstate-based materials when developing phosphor materials for different applications such as phosphor-converted LEDs (PcLEDs),^[13] latent fingerprinting imaging,^[11] and optical thermometers.^[14]

Double perovskite (DP)-structured tungstate (A_2BWO_6) compounds have been explored experimentally as well as theoretically since the 1950s.^[14–35] The simplicity of their crystal structure and their diverse physical properties, such as ferroelectric, dielectric,^[21,22,32] ferromagnetic,^[15,23] photocatalytic,^[26] photoluminescence


(PL),^[17,18,35] and magnetoresistance properties,^[33] continue to fascinate researchers to explore DP-structured tungstate for different applications. The physical properties of DP-structured tungstate mainly depend upon the choice of the pair of A^{2+} and B^{2+} ions, which leads to different possibilities of crystallization of a compound in phases such as cubic, orthorhombic, and monoclinic.^[19,27]

Blasse and Corsmit^[17] reported the electronic and vibrational spectra of DP-structured tungstate in which their main interest was the double emission band of cubic DP Ba_2MgWO_6 . According to Blasse and Corsmit, only one type of WO_6 octahedron is responsible for the luminescence of DP Ba_2MgWO_6 . The studies on double band emission were continued by Bode and Oosterhout,^[18] who found that these emission bands originated from both a regular and a distorted WO_6 octahedron, which is contrary to the findings of Blasse et al. Since then, reports on optical properties of cubic DP tungstate have been very sparse. Further efforts were made by Shivakumar and Varadaraju^[36] and Sun et al.,^[37] but their studies are limited only to PL studies of orange-red emission of Eu^{3+} in Ba_2CaWO_6 . About the same time, Bugaris et al.^[38] reported the optical properties of crystals of cubic DP Ba_2MgWO_6 and Ba_2ZnWO_6 grown by a flux method, along with structural refinement. Alsabah et al.^[39] studied the effect of different concentrations of Sr^{2+} ions on the structural and optical properties of BaZnWO_6 DP oxides. Later, Chen et al.

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DOI: 10.1002/pssb.202000442



NESTING BEHAVIOUR OF POTTER WASP, DELTA PYRIFORME (FABRICIUS) (HYMENOPTERA: EUMENINAE) FROM THE KORADI REGION, DIST, NAGPUR, MAHARASHTRA

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ABSTRACT: The potter wasp *Delta pyriforme* (Fabricius) nest collected from different location of the koradi region dist., Nagpur, Maharashtra for gathered information about nesting behaviour and prey capturing habit. *Delta pyriforme* (Fabricius) made mostly spherical pots over which wasp apply layer of mud so that the nest look like a mass of mud this character shows in only few potter wasp. Total 39 nest were observed having different number of pots (cell) - 1 pot (4 nest), 3 (5), 4 (7), 6(10), 7(6), 9(7). We observed 14 cell of 3 nest having the average length of the pots measured 2.22cm long, 1.35 cm wide and 1.4cm deep (n=14)

Key words: - pyriforme potter wasp/caterpillar hunting wasp/nesting behaviour

INTRODUCTION:

Delta pyriforme (Fabricius) (potter wasp) is a cosmopolitan wasp belongs to sub family Eumeninae. Subfamily Eumeninae is widely distributed with around 3600 species in more than 200 genera (Pickett and Carpenter, 2010). Most of the species from Eumeninae are solitary and rarely sub-social (Ducke 1914; Bohart and Stange 1965). Female constructed nest by soil which look like earthen pot then amepotter wasp by the construct pot shaped cell by female wasp. *Delta pyriforme* (Fabricius) are not at all aggressive or harmful to the human population they are predators adult feed on nectar but their larvae feed on an insects larvae of Lepidoptera. (Geometridae, Tortricidae) thus they help in controlling Lepidopterous and coleopterous biological pests of agricultural (Jennings and Houseweart 1984) they act as a biopest controller.

MATERIAL AND METHODS:

Present study for collecting wasp and their nest was conducted during the year of 2018-2020. Location – The nest were collected from few specific locations near Taywade College campus at Koradi region Nagpur District Maharashtra.

OBSERVATION AND RESULT:

Study species – *Delta pyriforme* (Fabricius). The adult Female wasp around 25-27 mm ; Male 20-25mm long, head yellow, a broad transverse black band between the eyes on the vertex; occiput black. Reddish-brown colored antenna. Pronotum entirely and mesoscutum yellow at anterior end, the later black posteriorly; tegula, parategula reddish brown; scutellum and postscutellum usually reddish brown; mesopleuron, metapleuron, propodeum and legs reddish brown variegated with black markings. The Sutures between the scutellum, postscutellum and propodeum black; petiole and basal third of the second gastral segment reddish-brown. Wings deep flavo hyaline with a narrow infumation on apical margin of forewing. (Girish kumar and Gaurav Sharma 2015)

Delta pyriforme pyriforme (Fabricius)

Survey of Previous year nest

Delta pyriforme (Fabricius) nest were identified base on shape size. We sampled 126 cells of 21 nests from different locations. We found a evidence for *Delta pyriforme* (Fabricius) by presence of dead young wasps, mummies of remains paralyzed caterpillar. We also observed in some cells contained dead pupa of parasite and

आचार्य विनोबा का साहित्य चिंतन

प्रा. डॉ. गजानन पोलेनवार

हिन्दी विभाग प्रमुख, तायवाडे महाविद्यालय, महादुला कोराडी, नागपुर, महाराष्ट्र

आचार्य विनोबा जी गांधीजी के अनुगामी, अहिंसा और सत्याग्रह के सिपाही, सर्वोदय और भूदान आंदोलन के अग्रणी नायक थे। उनके विचारों की आधारभूमि समृद्ध वैदिकपरंपरा के विस्तृत एवं गहन अध्ययन में निहित है। विनोबा जी अपने गहन अध्ययन एवं नविन व्याख्या के बल पर भारतीय साहित्य को दार्शनिक आधार प्रदान करते हैं। उनके समस्त वैचारिक दर्शन की आधारभूमि अद्वैत में है। शंकराचार्य के दर्शन पर अपने विचार व्यक्त करते हुये वह अद्वैत की निम्नलिखित व्याख्या करते हैं – “अद्वैत अर्थात् प्रेम की परिसीमा। यह सारा जगत मेरा ही रूप है, यह अद्वैत की भूमिका है...। इसलिए अद्वैतानुभूति की साधना प्रेम के और भूतदया के विस्तार की ही साधना रहेगी।”¹

भारतीय भाषा और साहित्य के अध्ययन, विश्लेषण, चिंतन और विकास के क्षेत्र में विनोबा जी ने जो महत्वपूर्ण कार्य किया, वह ऐतिहासिक महत्व का तो है ही, प्रासंगिक भी है। विनोबा जी विलक्षण प्रतिभा के धनी थे। प्रो. अवधेश प्रधान के शब्दों में – “वे भारतीय नवजागरण की महान परंपरा के लगभग आखिरी स्तंभ हैं – आधुनिक भारत की नई ऋषि परंपरा के एक दैदीप्यमान नक्षत्र: समाज, शिक्षा, साहित्य, संस्कृति, धर्म, अध्यात्म आदि विषयों के मौलिक चिंतक और गांधीवादी प्रयोगों के मौलिक अनुसंधानकर्ता, पूर्ण कर्मयोगी।”² आचार्य विनोबा के साहित्य चिंतन की आधारभूमि भारतीय दर्शनशास्त्र और अध्यात्म है। साहित्य को आकाश की संज्ञा देते हुए विनोबा जी कहते हैं – “साहित्य की सर्वोत्तम संज्ञा और संकेत आकाश है। आकाश को देखकर आँखें थकती नहीं। आकाश के समान अविरोधी, व्यापक और गति देनेवाला होता है साहित्य। आकाश शून्य है, पर व्याप्त है। आकाश अभाव और भाव दोनों में है। साहित्य का स्वरूप भी आकाश जैसा ही व्यापक है। इसलिये आकाश ही साहित्य की सर्वोत्तम संज्ञा है।”³ विनोबा जी का मानना है कि दुनिया को बनानेवाली तीन ताकतें हैं: विज्ञान, आत्मज्ञान और साहित्य। उन्हीं के शब्दों में – “दुनिया को बनाने में तिसरी ताकत है साहित्य की। वाल्मीकि आये। व्यास आये। डांते आया। होमर आये। शेक्सपियर आये। रवीन्द्रनाथ आये। ऐसे दूनिया में आये और दुनिया को ऐसी अमूल्य निधी देकर गए, जिससे जीवन समृद्ध बनता है। दुनिया को ऐसी विचार शक्ति दी, जिससे दुनिया का जीवन बदला। दूनिया में जो बड़ी-बड़ी क्रान्तियाँ हुई, उसके पीछे इन विचारकों के विचार हैं। ऐसे साहित्यिकों का साहित्य था, जिसने लोक शिक्षण किया। दुनिया को जब शांति की जरूरत हुई, तब उन्होंने शांति का विचार दिया। जब उत्साह की जरूरत हुई, तब उत्साह दिया। सब को उर्जा देने के लिए जिस-जिस चीज की जरूरत हुई, उन्होंने वह सर्वस्व भाव से दी।”⁴ विनोबा जी का साहित्य चिंतन निर्विकार होने के साथ विश्व की ओर उन्मुख था। वे अपने साहित्य चिंतन में उस वस्तु की खोज करते हैं, जो मनुष्य को

प्रयोजनातीत सत्य की ओर उन्मुख करे। जो उसे क्षुद्रता और संकीर्णता से उपर उठाते हुये विश्वात्मा के साथ तादात्म्य स्थापित करे। विनोबा जी के शब्दों में – “जिसे विश्वानुभूति हुई और जो सर्वभूत हृदय होगा, जिसके मन में संकुचितता नहीं होगी वही साहित्यिक होगा। ऐसे साहित्यिक विरल होंगे।”⁵ विनोबा जी की दृष्टि में साहित्य वह माध्यम है जो विज्ञान और अध्यात्म में तादात्म्य स्थापित करे। उनका मानना है कि भविष्य में दो शक्तियाँ काम करनेवाली हैं – एक है विज्ञान दूसरा है अध्यात्म। ये दो ताकतें मनुष्य के जीवन को आकार देनेवाली होंगी। एक प्राण है, दूसरा ज्ञान। एक शक्ति है दूसरी बुद्धि है। साहित्य को इन दो शक्तियों को जोड़ने के संदर्भ में विनोबा जी कहते हैं – “मुझे तुलसीदास का वचन याद आता है – ‘अगर तू भीतर और बाहर दोनों तरफ प्रकाश चाहता है, तो जिह्वा पर रामनाम का मणिदीप रख।’ इस दोहे के राम नाम का अर्थ मैं साहित्य लेता हूँ। अध्यात्म और विज्ञान को जोड़नेवाली कड़ी साहित्य है। आज साहित्यिकों के सामने यह बहुत बड़ा कार्य उपस्थित है।”⁶

विनोबा जी अपने साहित्य चिंतन में इस बात पर बल देते हैं कि साहित्य लोकमानस को अभिभूत करनेवाला हो। लोकमानस को यह आभास हो कि यह साहित्य हमारे लिए लिखा गया है, तभी वह साहित्य श्रेष्ठ होगा। उनका मानना है कि, “औचित्य, अवसर प्राप्त और हेतु रहित इन तीनों को साधकर आत्मस्फूर्ति के अनुसार साहित्यिक की लेखनी से जो भी लिखा जायेगा, वह समाज के लिये मधुर रहेगा।”⁷ भारतीय साहित्य की विशेषता रही है कि वह पूर्ण सत्य को व्यक्त करती है। वाल्मीकि, व्यास, कालिदास, सन्त कवि, भक्त कवि आदि मनुष्य की महिमा का प्रचार करते हैं, उसकी दुर्बलता के नहीं। विनोबा जी के शब्दों में – “वाल्मीकि को जब छंद सरस्वती का ज्ञान हुआ, तब उन्हें इस बात की चिंता हुई कि किस तरह ऐसे महान चरित्र की अवतारणा की जाये, जो विपत्ति में म्लान न हो, संपत्ति में इतराये नहीं। शक्ति पाने पर सहृदय होने से न चूके और विजय पाने पर भी क्षमा करता रहे। सीता, पार्वती और राधिका भारतीय कवि की आदर्श कल्पना रही हैं। सबको तपना पड़ा, तब जाकर भारतीय चित्त ने उन्हें देवता के आसन पर बैठाया। संयम, तपस्या बड़ी वस्तु है। क्षणिक आवेग, सामयिक उन्माद भारतीय रचनाकार को उद्धेलित नहीं करते। भारतीय साहित्यकारों ने जिन प्रतिमानों के साथ साहित्य की, सौंदर्य लक्ष्मी की सृष्टि की, वह अप्रतिम है।”⁸ विनोबा जी के मन में साहित्य, साहित्यिकों एवं कवियों के प्रति असीम आदरभाव था। वे साहित्य और साहित्यिकों की उपासना करने वाले व्यक्ति थे। उन्हीं के शब्दों में – “भारतीय संस्कृति ने साहित्यिकों और कवियों को उँचा स्थान दिया है। यहां पर जिनकी धार्मिक सत्ता चली वे सब बड़े कवि थे। हजारों वर्षों से वाल्मीकि, व्यास, तुलसी, कबीर की सत्ता चली और आज भी चल रही है।

FAITH AND OPTIMISM IN SIDNEY'S POEM 'LET NOT OLD AGE DISGRACE MY HIGH DESIRE': AN OVERVIEW

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ABSTRACT:

There are many great poets, writers, essayists and story writers who wrote about suffering and pitiable, humble miserable condition of old age people. William Wordsworth, Edmund Waller, T. S. Eliot, W. B. Yeats, and many other great poets wrote about it. Eliot's Gerontion, W. B. Yeats' A Prayer for Old Age, Waller's Old Age are the best among these poems. Sir Philip Sidney's poem 'Let Not Old Age Disgrace My High Desire' is one of the greatest poems among these in which the poet expresses faith and optimism about old age and old people. It is one of the best motivational poems for old age people who lost their hope and faith to live life. In this modern period where we are looking and reading in daily newspaper the unfortunate suffering of old people, this poem will encourage their faith and hope to live life. It has become very contrasting to see their active young age and the old age suffering. The researcher has tried to show Faith and Optimism in Sidney's Poem 'Let Not Old Age Disgrace My High Desire'

Key-words: Hope, Optimism, Old Age, Motivation, Suffering. Faith.

Introduction:

Sir Philip Sidney's poem 'Let Not Old Age Disgrace My High Desire' is the poem in which the poet depicted the values of old age very positively. Sidney wrote about both the value of young age and also of old age. This sonnet by Sir Philip Sidney is a very eye opening and thoughtful in which poet wrote about the virtues of old age. The poet does not allow the old age to discourage the high spirit. The speaker emphasizes both the open endedness and uncommunicativeness upon which the notion of the poem is based. The poet Sidney very sincerely and optimistically says that the old age should not affect his high desire as he writes:

**Let not old age disgrace my high desire,
O heavenly soul, in human shape contained: (Let Not..., Line, 1-2)**

Sidney says that human life is the gift of the God. According to poet, every human being is a heavenly soul. As like any other ages benefits, old age has also its own benefits. Poet here very open heartedly says that human life is the gift of the God so, the poet does not allow the old age to discourage his high spirit. In the above lines, poet is addressed to heavenly soul is that lord God has sent you here in human shape. Every human being is Lord God's representative and lovely child on the earth. It is our god gifted rights to fulfill our desire and

THEMES OF CASTE, RELIGION AND POLITICS IN MULK RAJ ANAND'S NOVEL UNTOUCHABLE: AN OVERVIEW

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Abstract:

In India, the untouchables are forced to accept menial jobs so that they could be branded forever as low born caste. When the people from this low category were known about this man made conspiracy they started to prevent themselves from this conspiracy and make a loud cry against it. These suffered people from all the lower category seem to scorn the economic and social structure built by the so called master class founded on the principle of injustice and inequality. Many Indian writer writing in English has taken these social issues seriously in their writings. Mulk Raj Anand's novel Untouchable is one of the best and greatest novel in this list of writing. In this article, researcher has tried to find the themes of caste, religion and politics in this novel.

Keywords: Untouchable, Caste, Injustice

Mulk Raj Anand certainly occupies one of the topmost position in Indo- Anglian literature. The three names are very great and pioneering in the Indian writing in English, R. K. Narayan and Raja rao with Mulk Raj Anand. Their writings and works are successful in attracting the attention of not only Indian Critics but also from abroad. There are many novels on the credit of Mulk raj Anand and all are equally gain name and fame from the country and abroad. He is very famous for sociological novel and the social burning topics which he very seriously, successfully and effectively covered in his novels. They deal with some glaring social evils and problems of the society. Untouchability, social evils, exploitation of labours are the prominent themes of his novels. The novel Untouchability and Coolie are the best example of this facts. Naval Kishor Singh, a writer, writes about the strong and firm social background of Anand as: "Anand was born into the Kshatriya warrior caste, which is placed one below the top caste of the Brahmins priests. He had always befriended and played with the children of sweepers and as a child he had been shocked and disgusted by the suicide of a relative who had been disowned by his family for daring to share her food with a Muslim, for this too was

regarded as pollution. Anand had always been disgusted with and apposed religious sectarianism, communalism and caste society. (Singh, pg. 79)

Among the Indian untouchables there is a sweeper caste. Unlike the sweepers in any other part of the world, the Indian sweepers not only clean the premises with their brooms, but they have been forced to clean the latrines with their brooms and carry the human dung in the pots on their shoulders. For generations the sweepers have been doing this abominable work despite the development of science and technology and the nation got Independence. It is for the first time in the history of Indian literature Mulk Raj Anand wrote this novel in 1935 on the sweepers theme, titled Untouchable. There was a hue and cry filled with contempt among the contemporary publisher. And it is said that they could not tolerate the realities which a sweeper is confronted with in the Indian social structure. The publishers said that a sweeper cannot become the hero of the novel and added no reader would touch such literature.

Finally, Anand had to rush to England to get this novel published. While telling the role of art and artist, Mulk Raj Anand said as K. K. Sharma quoted G. S. Balaram Gupta in the following lines: 'According to Anand "in this conception of the function of art in society approximates to the real need of people in our time, then artist is a revolutionary in the true sense. And as he can perceive reality at its highest, and disclose the way to a new life. The artist stands as an inspiring force behind all those men and women who face the task of reconstructing the future society out of the shambles of a near prehistoric present. (Sharma, pg.6).

Mulk Raj Anand novel's special feature is that they are mostly about the downtrodden people of the society. It is the reason the critics call him 'underdog'. His novels deal with social evils and problems. His novels Untouchable too depicts the miserable life of the sweepers. The central theme of the novel is untouchability as a social evil. The fact is revealed by the example of the character Bakha, the hero of the novel. He is a sweeper boy in the novel. Different aspects of untouchability

Reflections of the greatness of Indian philosophy: Special reference with T. S. Eliot's Poem The Waste Land: An Overview

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HHH.....

Abstract

Indian philosophy can include many concepts as: Swarg (Heaven), Narak (hell), Dharma (Religion) Karma (Act), Reincarnation, Renunciation, Meditation, Dukkha (Sorrow) with almost all of them focused on the ultimate goal of liberation of human soul through various ranges of human practices i.e. Moksha. India is the land of great Spiritualists, Saints, Prophets, Rishis and Maharishis. The great spiritual soul in the world as: Lord Krishna, Lord Rama, Lord Buddha, Wardhaman Mahaveer, Guru Nanakji and many other great, immortal spiritual souls borned in this pious land. As like great above immortal souls, great holy books: the Ramayana, The Mahabharata, the Upanishada, The Gurugrantsahib consist of the Indian spiritual philosophy and Literature. The Indian epics the Mahabharata and the Ramayana show symbolic conflict between the 'Good' and the 'Evil' and the ultimate victory of the good over the evil. The epics have been serving as a great guide for whole humankind because of moral vision and idealism. This research paper is a humble attempt to study the role of Indian literature and human values in human Life in the great world popular eminent poet, T. S. Eliot's poem 'The Waste Land'.

Keywords: moksha, spiritual, philosophy, literature, holy

It is very prestigious and gainful achievement of Indian mythological and cultural greatness that the entire life experiences and teachings of Indian Rishis and Maharishis is deeply rooted in the love of humanity and the spirit of serving mankind. Rabindranath Tagore, a great Nobel Prize winner Indian writer expresses his views about humanity as: "When Man's preoccupation with the means of livelihood became less insistent he had the leisure to come to the mystery of his own self, and could not help feeling that the truth of his personality had both its relationship and its perfection in an endless world of humanity." (Tagore, 56). Modern great philosophers like Dr. Radhakrishnan who was a great teacher and who has been honored with the position of being the president of Indian democratic secularism and he has left no stone unturned in bringing dignity to Indian politics. He wrote big volumes like occasional speeches and 'Writings of Radhakrishnan'. He also wrote a voluminous book titled

'The Hindu View of Life'. He also mentioned their philosophy of 'Giving' as he said 'Great men are like Lamps, destruction for themselves, and light for others'.

That is why a great writer, critic, poet, philosopher, T. S. Eliot has digested the very greatness of Indian spirit. As a result he has incorporated the philosophy of sacrifice, kindness and pity. Also he has embraced the philosophy of self control. There can be no other recommendation or appreciation more than Eliot embracing Indian depth of literature and life style. T. S. Eliot has been profoundly influenced by Indian mythology and Upanishad to the extent that such a man of great wisdom recommends the wisdom of India for the spiritual salvation of modern humanity which lost its roots and mooring. It is marching ahead aimlessly like a drifting paper boat. Rabindranath Tagore writes: 'But according to the Upanishad the sole pursuit of the infinite leads to a deeper darkness. For the absolute infinite is emptiness. The finite is something. It may be mere cheque-book with no account in the bank. But the absolute infinite has no and not even a cheque-book.' (Tagore, 60).

T. S. Eliot, the greatest poet of the world expresses his view about the greatness of Indian philosophy in his poem, The Waste Land. Then spoke the thunder DA means Datta: What have we even? It means to 'give.' This is very important message of the thunder to all humanity, this message is we must give ourselves over to some noble cause and in modern times man has become self centered. It has become practically impossible that modern men would ever be ready that they will do something unofficial for others. This is the reason that great martyrs and even saints are now rare, for they are not honored in the modern waste land. Such greater men do not get earthly name and fame, wealth and prosperity but it is only due to such great men and their dedication to society that spiritual values survive and humanity can become happy.

Second DA means Dayadhvam which mean to sympathies. This quality, in modern times, is totally missing because the modern man survives only for the self. He has become prisoner of 'The Self'. So the need of the hour is to come out of this prison of the self by way of

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3.3.2 Number of research papers per teachers in the Journals notified on UGC website during Academic Year 2019-20

Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
Gadimanchya Katha Sahityatil Loktatva	Dr. Mrs. S. B. Taywade	Marathi	Loksahitya va lalit sahitya : Ek Anubandh	Nov-19	2229-4996	Research Paper Link
Potential biocontrol and superlative plant growth promoting activity of indigenous <i>Bacillus mojavensis</i> PB-35(R11) of soybean (<i>Glycine max</i>) rhizosphere	Dr. Mrs. S.P. Patil	Botany	SN (Springer Nature) Applied Sciences	Sep-19	2523-3971	Research Paper Link
Plant Essential Oils Based Nanoemulsion Formulations and Its Antibacterial Effect on Some Pathogens	Dr. Mrs. S.P. Patil	Botany	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	Nov-19	2278-3075	Research Paper Link
Pollen Grains as Antibacterial Agents A New Approach for Therapy	Dr. Mrs. S.P. Patil	Botany	World Journal of Biology and Medical Sciences	Jun-20	2349-0063	Research Paper Link
Training and Development Need Ranking of a Hotel Manager using Fuzzy Technique for Order Preference by Similarity to Ideal Solution	Dr. Mrs. N.R. Dhawade	Mathematics	Applications and Applied Mathematics: An International Journal (AAM)	Jun-19	1932-9466	Research Paper Link
Raje Lakhuji Jadhavrav – Vyakti Aani Karya	Dr. S.R. Daware	History	Shodh Samiksha Aur Mulyankan	Jun-19	2320-5474 (Online) 0974-2832 (Print)	Research Paper Link
Yuvak Yuvtinchya Kaushalya Vikasamadhe Prashikshan Ghene Hi Aajchya Kalachi Avashyakta	Dr. M.P. Shirkhedkar	Home Economics	Research Journey	May-20	2348-7143	Research Paper Link
Bhartiya Lokshahit Nyayalayachi Sakriyata	Dr. V.T. Sheikh	Political Science	Research Journey	Feb-20	2348-7143	Research Paper Link
Maharashtra Vidhansabha Nivadnuk-2019: Ek Vishleshan	Dr. V.T. Sheikh	Political Science	Research Journey	Feb-20	2348-7143	Research Paper Link
Lokkatha Aani Adhunik Katha : Ek Anubandh	Dr. R.R. Watane	Marathi	Loksahitya va lalit sahitya : Ek Anubandh	Nov-19	2229-4996	Research Paper Link
Lavnitil Kalgi Tura	Dr. R.R. Watane	Marathi	Research Journey	Mar-20	2348-7143	Research Paper Link
Shahirancha 'Tamasha'	Dr. R.R. Watane	Marathi	Research Journey	Apr-20	2348-7143	Research Paper Link

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Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
Lokranga Dharetil Gan aani Gaulan						Paper Link
Bhartiya Swatantrache Krantisukt: Powada	Dr. R.R. Watane	Marathi	Research Journey	Apr-20	2348-7143	Research Paper Link
Waman Pamditanchi Sudhakavye	Dr. R.R. Watane	Marathi	Research Journey	May-20	2348-7143	Research Paper Link
Divorce in india: main problem with context to today's society	Dr. S.S. Dudhe	Sociology	B.Aadhar' International Multidisciplinary Research Journal	Mar-20	2278-9308	Research Paper Link
Effect of body image issues on female athlete - Sports perspective	Dr. S.S. Bhotmange	Physical Education	Vidyawarta, International Multilingual Research Journal	Sep-19	2319-9318	Research Paper Link
Importance of Physical Education in One's Life	Dr. S.S. Bhotmange	Physical Education	Vidyawarta, International Multilingual Research Journal	Aug-20	2319-9318	Research Paper Link
a study of E-Commerce transaction and its impact on Customer's awareness in Nagpur city	Dr. A.H. Dhote	Commerce	Research Journey	Nov-19	2348-7143	Research Paper Link
An analytical study of the customers attitude and satisfaction towards investment in life insurance policies	Dr. V.S. Khapne	Commerce	International Journal of Advance and Innovation Research	Jun-19	2394-7780	Research Paper Link
Delineation of a training and development model for banking and financial sector of India (with special reference to Mumbai region)	Dr. V.S. Khapne	Commerce	Aayushi International Interdisciplinary Research Journal (AIIRJ)	Jan-20	2349-638X	Research Paper Link
A Study of Recent Development of Human Resource Management	Dr. V.S. Khapne	Commerce	Vidyawarta, International Multilingual Research Journal	Aug-20	2319-9318	Research Paper Link
A Study of potentials and commitments by internet merchants and problem faced by E-Trade customers of Nagpur city	Dr. V.S. Khapne	Commerce	Our heritage Journal	Feb-20	0474-9030	Research Paper Link
Impact of Currency Fluctuations on Indian Economy	Dr. V.S. Khapne	Commerce	Shodh Sarita	Jun-20	2348-2397	Research Paper Link
Importance of E-	Dr.Mrs. V.V.	English	Research Journey	Aug-19	2348-7143	Research

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Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
Learning Resources for innovative Teaching-Learning Process	Vaidya					Paper Link
A story of Scattered Hearts: Kiran Desai's The Inheritance of Loss	Dr.Mrs. V.V. Vaidya	English	Smart Moves Journal (IJELLH)	Feb-20	2582-3574 (Online) 2582-4406 (Print)	Research Paper Link
Psychological Study of Chitra Banerjee Divakaruni's Oleander Girl	Dr.Mrs. V.V. Vaidya	English	Alochana Chakra Journal	May-20	2231-3990	Research Paper Link
Postcolonial Picture of the society in selected Novels of Anita Desai	Dr.Mrs. V.V. Vaidya	English	Alochana Chakra Journal	May-20	2231-3990	Research Paper Link
Identity Crisis in Chitra Banerjee Divakaruni's Oleander Girl.	Dr.Mrs. V.V. Vaidya	English	LangLit An International Peer Reviewed Open Access Journal	May-20	2349-5189	Research Paper Link
A Story of Scattered Hearts: Kiran Desai's The Inheritance of Loss	Dr.Mrs. V.V. Vaidya	English	SMART MOVES JOURNAL IJELLH	Feb-20	2321-7065	Research Paper Link
An Invisible Virus Highlites in Age Old Visible Virus	Dr.Mrs. V.V. Vaidya	English	LangLit An International Peer Reviewed Open Access Journal	May-20	2349-5189	Research Paper Link
Shivtirth Agro-tourism Project – A Case Study	Dr. A.S. Nakhate	Physics	International Research Journal of Natural and Applied Sciences	Jun-20	2349-4077	Research Paper Link
The Realistic Narrative Techniques in Emile bronte's Wuthering Heights: A Study	Dr. A.Y. Bhaik	English	AKSHARWARTA Monthly International Referred Journal	Feb-20	2349-7521	Research Paper Link
Mahatma Gandhinchya Aarthik Vicharanchi Prasangikta	Sh. S.P. Ghugal	Economics	Research Journey	Oct-19	2348-7143	Research Paper Link
Major problems in Indian Economy	Sh. S.P. Ghugal	Economics	Research Journey	Oct-19	2348-7143	Research Paper Link
Climate change & its impact on Economics of cotton crop agriculture	Sh. S.P. Ghugal	Economics	Ajanta, An International Multidisciplinary Quarterly Research Journal	Dec-19	2277-5730	Research Paper Link
Jagtik Mukta Vyapar Va WTO Che Yash-Apayash	Sh. S.P. Ghugal	Economics	Research Journey	Feb-20	2348-7143	Research Paper Link
Women and Domestic Violence In India	Sh. S.P. Ghugal	Economics	B.Aadhar' International Multidisciplinary	Mar-20	2278-9308	Research Paper Link

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Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
			Research Journal			
Corona (COVID-19) Cha Manvi Arogya Va Bhartiya Arthavyavasthevaril Parinam	Sh. S.P. Ghugal	Economics	UPA National Peer-Reviewed Interdisciplinary e-Journal	Jun-20	455-4375	Research Paper Link
Theoretical Perspective of non-performing assets management in India	Dr.Mrs. A.R. Durge	Commerce	Research Journey	Jan-20	2348-7143	Research Paper Link
Gender And Education In India	Dr.Mrs. A.R. Durge	Commerce	B.Aadhar' International Multidisciplinary Research Journal	Mar-20	2278-9308	Research Paper Link
E-Commerce in India	Dr. K.V. Ghormade	Commerce	ELXIR National Journal of multidisciplinary research	Sep-19	2277-3428	Research Paper Link
An Analytical Study of E-Commerce Services Associated to Consumer Attentiveness and Consumation with Reference to Nagpur Area	Dr. K.V. Ghormade	Commerce	Research Journey	Nov-19	2348-7143	Research Paper Link
E Madhyam: Bhasha Savrdhanachi Vartaman Garaj	Dr. K.V. Thakre	Marathi	Research Journey	Aug-19	2348-7143	Research Paper Link
Mahamanav Mahatma Gandhiche Samaj va Dharmavishayak Tatvadnyan	Dr. K.V. Thakre	Marathi	Research Journey	Oct-19	2348-7143	Research Paper Link
Madhukar Keche Yanchi Kavita	Dr. K.V. Thakre	Marathi	Kavita Rati	Feb-20	2278-9243	Research Paper Link
Vidharbhachi Akhand Kavyaparampara	Dr. K.V. Thakre	Marathi	Ajanta	Dec-19	2277-5730	Research Paper Link
Madhukar Keche Hyanchya Kavyatil Loktatve	Dr. K.V. Thakre	Marathi	Loksahitya va lalit sahitya : Ek Anubandh	Nov-19	2229-4996	Research Paper Link
Maharashtratil Sant Parampara Aani Rashtasant Tukadoji Maharaj	Dr. K.V. Thakre	Marathi	Shabdasrushti Bilingual Hindi-Marathi Quarterly Magazine	Feb-20	---	Research Paper Link
Jagtikikaran Aani Marathi Gramin Kavita	Dr. K.V. Thakre	Marathi	Drishtikon UGC CARE listed Marathi Quarterly Magazine (SJIF) – 5.60	May-20	0975-119X	Research Paper Link
Synthesis and Properties	Dr. C.S. Bhaskar	Chemistry	Materials today	May-20	2214-7853	Research

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Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
of amino and thiol functionalized graphene oxide			Proceedings			Paper Link
<i>In-Vitro</i> study on tolerance of heavy metals by some endophytic fungi	Dr. V.N. Charde	Microbiology	International Journal of Life Sciences Research	Jun-19	2348-3148 (Online) 2348-313X (Print)	Research Paper Link
Assessment of endophytic fungal isolates for its Antibiofilm activity on <i>Pseudomonas aeruginosa</i>	Dr. V.N. Charde	Microbiology	International Journal of Scientific Research in Biological Sciences	Jun-19	2347-7520	Research Paper Link
Study on synergistic action of <i>Coriandrum sativum</i> seed extracts on antibiotics against multidrug resistant <i>P. aeruginosa</i>	Dr. V.N. Charde	Microbiology	Environment Conservation Journal	Oct-19	2278-5124 (Online) 0972-3099 (Print)	Research Paper Link
<i>Pseudomonas fluorescens</i> : A Proficient Plant Growth promoting Rhizobacteria isolated from Organic Farm	Dr. V.N. Charde	Microbiology	International Journal of Current Microbiology and Applied Sciences	Nov-19	2319-7706	Research Paper Link
Pollen Grains as Antibacterial Agents A New Approach for Therapy	Dr. V.N. Charde	Microbiology	World Journal of Biology and Medical Sciences	Jun-20	2349-0063	Research Paper Link
Green emitting holmium (Ho) doped yttrium oxide (Y ₂ O ₃) phosphor for solid state lighting	Dr. K. V. Dabre	Physics	Optik - International Journal for Light and Electron Optics	Jan-20	0030-4026	Research Paper Link
Observation and study of the nesting behavior of potter wasp, Delta dimidiatipenne (hymenoptera: eumininae: vespidae) in koradi Region nagpur district, maharashtra	Dr. C.R. Deshmukh	Zoology	Mukt Shabd Journal	Apr-20	2347-3150	Research Paper Link
Tulnatmak Sahitya Ka Adhyayan : Swaroop Aur Mahatva	Dr. G.K. Polenwar	Hindi	Ajanta, An International Multidisciplinary Quarterly Research Journal	Jun-19	2277-5730	Research Paper Link
Ram Rajya Ki Nayi	Dr. G.K.	Hindi	Shodh Sarita Journal	Sep-19	2348-2397	Research



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Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
Sadak Par	Polenwar		of Arts, Humanities and Social Sciences Vol-06 Issue-13			Paper Link
Importance of ICT, LMS and E-Learning Resources for innovative Teaching, Learning and Evaluation Process	Dr. V.M. Chavan	English	Research Journey	Aug-19	2348-7143	Research Paper Link
The theme of loss of human virtues and values In T.S. Eliot's poem <i>gerontion</i>	Dr. V.M. Chavan	English	LangLit An International Peer Reviewed Open Access Journal	Feb-20	2349-5189	Research Paper Link
Nature and human vulnerability: special reference with Dilip Chitre's poem the felling of the Banyan Tree	Dr. V.M. Chavan	English	LangLit An International Peer Reviewed Open Access Journal	May-20	2349-5189	Research Paper Link
Massive Open Online Courses: Special Reference to NPTEL	Ku. M.M. Mamilwar	Library	Our heritage Journal	Jan-20	0474-9030	Research Paper Link


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गदिमांच्या कथा साहित्यातील लोकतत्त्व

- प्रा. डॉ. शरयू तायवाडे
तायवाडे महाविद्यालय, कोराडी

लोकसाहित्य हे परंपरागत असूनही ते चैतन्यशील व गतिमान असते. कालिक परिवर्तनाचे पडसाद जसे लोकसंस्कृतीत उमटतात तसेच लोकसाहित्यातही उमटत असतात. लोकसाहित्याचा लोकजीवनाशी अनन्य संबंध असतो. लोकजीवनाच्या गतिमानतेचे अनुसरण लोकसाहित्य करीत असल्यामुळेच ते आदिमकाळापासून टिकून आहे. मानवी संस्कृतीचे सातत्य हे लोकसाहित्य प्रकट होत असते. त्यामुळेच लोकसाहित्याला लोक परंपरेचा भाग मानले जाते. परंपरा ही सातत्य व चिरनूतनीकरणाची प्रक्रिया आहे. परंपरा काळानुरूप बदलते आणि नवी परंपरा निर्माण होते. त्यात लोकसंस्कृतीला जे हवे असते ते टिकते तर जुने टाकाऊ झालेले काढून टाकले जाते. शिवाय आधुनिकतेमुळेच समग्र परंपरेचे लोकसंस्कृतीचा परिघ व्यापक होत जाते. कला आणि साहित्य याची विरंतन लोकतत्त्वीय जाणिवांशी सतत संवादक्रिया सुरू राहिली आहे. साहित्यात लोकतत्त्व कसे प्रविष्ट होते हे सांगतांना डॉ. त्रिलोचन पांडेय लिहितात - "प्रत्येक देश का आदिकालीन साहित्य मुख्यतः लोकतात्त्विक होता है और कालांतर में ये लोकतत्त्व उसमे स्थायी रूपसे विद्यमान रहते हैं । जब कभी साहित्यपर जनताके अत्यधिक निकट पहुँचना चाहता है तो वह सर्वप्रथम जनता की लोकवार्तासे संपर्क स्थापित करता है।" (१) साहित्याच्या संदर्भात आशयसूत्र, जीवनदृष्टी, रचनाबंध, आविष्करण पद्धती यांच्यावर लोकसाहित्याचा कमी-अधिक प्रभाव जाणवतो. आधुनिक साहित्यही लोकसमूह-मानसाचे प्रकटीकरण करताना विविध लोकतत्त्वांचा आधार घेत असते. अलीकडच्या साहित्यात विशेषतः ग्रामीण,

आदिवासी दलित साहित्यात 'कथाविशेष' आणि 'कल्पनाबंध' किंवा 'कथाबीज' योजले जातात. कथाविशेष म्हणून प्रामुख्याने परंपरेने चालत आलेली प्रातिनिधीक अशी संपूर्ण कथा असते. तर कल्पनाबंध हा कथेतील लहानातील लहान कथाघटक असतो. तिच्यात परंपरेने टिकून राहण्याचा धर्म असतो. लोककथा व लोकश्रद्धांशी (मिथकांशी) त्यांचा संबंध असतो. अशा कथाविशेषाची नागर कथा/कादंबरी/नाटकात समांतर योजनाकरून किंवा कल्पनाबंधांचा वापर करून एक नवा आयाम देण्याचा प्रयत्न काही लेखकांनी केल्याचे स्पष्टपणे दिसून येते. विशेषतः ग्रामीण जीवनातून आलेल्या साहित्यातून अशी योजना करून आपले कथात्मसाहित्य समृद्ध करण्याचा प्रयत्न लेखक करताना आढळतात.

गजानन दिगंबर माडगूळकर उर्फ गदिमा यांचे एकूणच व्यक्तिमत्त्व लोकसंस्कृतीशी जवळीक साधणारे असल्यामुळे त्यांच्या साहित्यनिर्मितीवरही लोकशैलीचा ठसा उमटलेला आहे. आशय, विषय, आविष्कार, रचनातंत्र, व्यक्तिरेखा आणि निवेदनशैली यासर्वच बाजूंनी गदिमांचे साहित्य लोकसंस्कृतीशी, त्यातील लोकतत्त्वांशी इमान राखून आहे. त्यांच्या साहित्याचे विशेष म्हणजे जीवनातील मांगल्य, पावित्र्य, उदात्तता, परंपरागत मुल्यांची जोपासना इ. असून त्यांच्या साधा, सोपा व प्रसन्न शैलीने त्यात जिवंतपणा आला आहे. त्यांच्या कथांचे स्वरूप गोष्टीरूप असून कथाकथनाचे अवधान त्यांच्या कथेने सांभाळले आहे. त्यामुळेच ती वाचकांच्या मनाचा ठाव घेताना दिसते. गदिमांच्या साहित्याविषयी बोलतांना पु. भा. भावे म्हणतात - "संत, शाहिरापासून



Potential biocontrol and superlative plant growth promoting activity of indigenous *Bacillus mojavensis* PB-35(R11) of soybean (*Glycine max*) rhizosphere

Bobde M. Prajakta^{1,2} · Patil P. Suvarna¹ · Singh P. Raghvendra³ · Rai R. Alok²

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Abstract

Disease control using microbes that exhibit beneficial effects on plants to strengthen the host is a foremost requirement in agriculture. The aim of the present study is to search for an effective biocontrol agent against *Rhizoctonia solani* endowed with high plant growth potential. A total of 95 bacterial strains were isolated from the soybean plant rhizosphere and screened in vitro against *R. solani* by dual culture technique, revealing that strain PB-35(R11) was the most efficient for controlling *R. solani* with 54.835% inhibition. Isolate PB-35 was identified by 16S ribosomal RNA (rRNA) gene sequencing as *Bacillus mojavensis*. It was observed that, in order to effectively control *R. solani* in vitro, *B. mojavensis* produced volatile metabolites. Fourier-transform infrared (FTIR) analysis revealed the presence of aldehyde (CHO) group (1739.79 cm^{-1}), acetyl group (1896.03 cm^{-1}), and cyanide group (2360.87 cm^{-1}) in the crude extract of isolate PB-35(R11). Furthermore, the siderophore, indole acetic acid (IAA), catalase, oxidase, and chitinase production ability as well as phosphate solubilization potential of PB-35(R11) make it beneficial for crop growth and soil biofortification.

Keywords Soybean · Rhizosphere · Antagonistic activity · 16S rRNA · Soil fortification

1 Introduction

Pathogenic microorganisms affect plant health and represent a major ongoing threat to sustainable agriculture and ecosystem stability worldwide. Chemicals used in agriculture to increase yields and kill pathogens, pests, and weeds have a harmful impact on the ecosystem. Because of current public concern about the side effects of agrochemicals, there is increasing interest in improving understanding of the cooperative activities among plants and rhizosphere microbial populations and an urgent need for biological agents. Use of plant growth promoting rhizobacteria (PGPR) is a better alternative to solve this problem [22].

Over 95% of bacteria exist in plant roots, and host plants obtain many nutrients through soil bacteria. Hence, this

should be the richest source to explore to identify potential PGPR which may be useful for development of bioinoculants for growth and yield enhancement of crop plants [47]. Agricultural products are the primary dietary source of proteins, carbohydrates, fat, vitamins, and other nutrients. Soybean (*Glycine max* L. Merrill) is one of the best “all-in-one” sources, having very high nutritional value. To achieve good health, consumption of healthy food is the main concern, being directly related to the present agroecosystem. As populations increase, the need for dietary sources is increasing greatly day by day. This high demand has resulted in excessive use of different chemicals in the form of phytohormones and pesticides to promote plant growth and address pathogens, respectively, to obtain quick results [25]. However, due to the extreme diversity of pathogens and serious diseases, severe plant loss and yield

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Plant Essential Oils Based Nanoemulsion Formulations and Its Antibacterial Effect on Some Pathogens

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Abstract: Antibiotic resistance is the most challenging problem of concern globally and this is invigorating the need of newer antimicrobial products with potential antimicrobial properties. Plant products, especially plant essential oils produce a large array of secondary metabolites as natural antimicrobials. Use of nanotechnology can add advantages to enhance the antibacterial properties of these essential oils. Present study is focused on development of nanoemulsions from plant essential oils and to study their antibacterial activities. Tea Tree Oil, Thyme Oil, Clove leaf and Cinnamon Essential Oils nanoemulsion was formulated using Tween 20 and Tween 80 respectively using probe ultrasonicator. All the formulated Nanoemulsions were then subjected to physicochemical characterization, stability studies and tested for antibacterial activities using Agar-well diffusion method. Stable nanoemulsion formulation with maximum antibacterial activity then subjected to droplet size measurements and polydispersibility index study. Increase in surfactant concentration resulted in reduction in droplet size when ultrasonication time was constant. Cinnamon oil nanoemulsion 20C4 & 80C4 with pdi index 0.573 and 0.382 and droplet size 272.3nm and 133.6 nm respectively demonstrated maximum antibacterial activity in Agar-well diffusion method against *S.aureus*, *E.coli*, and *S.typhi*. When both nanoemulsions were exposed to bacterial growth curve inhibition study. No potential rise in optical density of test pathogens were observed. The inhibition of bacterial growth may be due to killing action of cinnamon oil nanoemulsion formulations to initial bacterial inoculum added to nutrient broth. The study suggests that nanoemulsion formulations from plant essential oils can be used as natural antimicrobials in variety of products.

Keywords: Agar-well, Bacterial growth inhibition, Droplet size, Essential Oils, Nanoemulsion, polydispersibility index, Tween 20, Tween80, Ultrasonication

I. INTRODUCTION

Microorganisms contribute one of the essential components of the earth and existed on it for more than 3.8 billion years exhibiting great genetic and metabolic diversity, contributing in maintenance and sustainability of ecosystem and also are causative agents of dreadful infections in humans, animals and plants. These microorganisms have evolved several mechanisms to tolerate selective pressures exerted by various

environments and competitive challenges. One of these mechanisms is resistance to antibiotics. In recent times microorganisms evolved the genetic ability to develop and transmit resistance to antibiotics leading to inefficacy of these agents in treatment making use of these antimicrobial agents uncertain from future prospective. [1] Researchers are now warning of a return of pre-antibiotic era; with recent database listing existence of more than 2000 potential resistance (r-genes) of nearly 400 different types from available bacterial genome sequences. [2] Therefore it is the need of an hour to limit the use of chemical antimicrobial agents and to focus on newer drugs, or formulations of either synthetic or natural origin which can be efficiently used to control microbial population. Despite of all the advancements in area of pharmaceutical chemistry and biotechnology, still plants are used sources of numerous phytomedicines with potential applications in treatment of infectious diseases and ailments. Thousands of different plant species have proven medical importance and these characteristics can be attributed synthesis of limitless phytochemicals with potential antimicrobial activity through specialized metabolic pathways that occur in them. [3] Different parts of the medicinal plants contribute to its medicinal properties, including leaves, stems, barks, fruit, seed flowers, seeds, rhizomes, tubers, gums, resins and most importantly Essential Oils. Essential oils are normally volatile, rarely colored lipids constituting terpenoids, phenol-derived compound synthesized by many parts of the plants.[4] Present study focuses on use four different Essential Oil which are Tea tree oil, Thyme Oil, Clove leaf Oil & Cinnamon Bark oil. Tea tree Oil is derived from plant *Melaleuca alternifolia* of native Australian origin. Terpene hydrocarbons mainly monoterpenes, sesquiterpenes and their associated alcohols contributes to its biological activity.[5] Thyme oil is extracted and distilled from *Thymus vulgaris*(L. *Lamiaceae*) native to Mediterranean region of Europe, constituting infusions of monoterpenes, with natural terpenoid thymol and its phenol isomer carvacrol(CVL) showing antitussive, expectorant, antispasmodic & antibacterial activities.[6]-14]. Clove (*Syzygium aromaticum*) belongs to family Myrtaceae. Clove Essential Oil finds application in treatment of acne, asthma rheumatoid arthritis and warts. [15] Cinnamon bark Oil is derived from *Cinnamomum zeylanicum*, (family-Lauraceae) and constitutes Cinnamaldehyde (3-phenyl-2-propanol) contributing its antioxidant, antimicrobial and antiseptic uses.[16] Nano science and nanotechnology are nothing but science and engineering applied on nanometer scale of 10^{-9} meters. From last two

Revised Manuscript Received on November 08, 2019.

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Indexed, Abstracted and Cited: Index Copernicus International (Poland), ISRA Journal Impact Factor, International Impact Factor Services (IIFS), Directory of Research Journals Indexing (DRJI), International Institute of Organized Research and Scientific Indexing Services, Cosmos Science Foundation (South-East Asia), International Innovative Journal Impact Factor, Einstein Institute for Scientific Information {EISI}, Directory of Open Access Scholarly Resources, Science Indexing Library (UAE), Swedish Scientific Publication (Sweden), citefactor.org journals indexing, Directory Indexing of International

World Journal of Biology and Medical Sciences

Published by Society for Advancement of Science®

ISSN 2349-0063 (Online/Electronic)

Volume 7, Issue-1&2, 84-91, January - June, 2020

Journal Impact Factor: 4.197



WJBMS 07/02/021/2020

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RESEARCH PAPER

Received: 15/05/2020

Revised: 30/06/2020

Accepted: 30/06/2020

Pollen Grains as Antibacterial Agents – A New Approach for Therapy

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ABSTRACT

In ancient Indian literatures considered that all plant parts are potential sources of medicinal substances. Antibiotic resistance exhibited by pathogenic microbial infectious agent have led to the screening of several medicinal plants for their potential antimicrobial activity. Pollen as well as other apiculture products, has gained increased attention for its therapeutic properties as antibacterial, antifungicide, anti-caryogenic, antioxidant and immunomodulatory effects. Pollen finds its use in apitherapy and also as a functional food in the food industry due to their nutritional properties. Pollen is fine and light powder like material having nutritional value with proteins (25-30%), carbohydrate (30-55%), lipids, including fatty acids and sterol (1-20%), fats (1-13%), vitamins and mineral. The aim of this study was to investigate the antibacterial activity of pollen extracts of some common flowers from Vidharbha region against some pathogenic bacteria. Pollen samples showed a potential activity against the growth of both Gram positive and Gram negative bacteria. This would be a very interesting approach to control more dangerous species of microorganism in medical sciences.

Keywords: Antimicrobial Activity, Pollen grains, Common Flowers and Antibiotic Sensitivity.



Training and Development Need Ranking of a Hotel Manager using Fuzzy Technique for Order Preference by Similarity to Ideal Solution

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Received: October 11, 2018; Accepted: April 18, 2019

Abstract

Regular training and development programs are necessary to learn or improve skills and knowledge of the employees, as it has long term positive effect on the prosperity or success of the organization. For this, organization searches out the employees to whom training may be given as per their need. As every organization has different needs, various criteria and alternatives are determined by the group of decision makers. In this paper, multi-criteria group decision making model is considered, where various training and development needs of a hotel manager have been identified by group of decision makers and ranked with simplified fuzzy technique for order preference by similarity to ideal solution (Fuzzy TOPSIS) method. Results are reported with application on the basis of closeness coefficient using triangular and trapezoidal fuzzy number. Results showed that the ranking by Fuzzy TOPSIS is same, by using triangular and trapezoidal fuzzy number and can be successfully used to rank the appropriate training and development need required by the manager of hotel.

Keywords: Training and development need; Ranking; Fuzzy TOPSIS; Manager; Hotel

MSC: 90B50, 90C29

राजे लखुजी जाधवराव – व्यक्ति आणि कार्य



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प्रस्तावना :

सिंदखेडकर जाधवरावांचे घराणे हे ऐतिहासिक घराणे असून ती देवगिरीच्या यादव घराण्याचीच एक उपशाखा आहे. या घराण्याला स्वतंत्र, सार्वभौम देवगिरीच्या राजघराण्याचा वारसा लाभलेला आहे. सिंदखेडला जाधवराव घराण्याची राजवट इ.स. 1576 मध्ये लखुजी जाधवरावांनी स्थापन केली. या इतिहास प्रसिद्ध राजघराण्यात कर्तुत्ववान मर्दवीर जन्माला येवून त्यांनी दक्षिणेतील जिंजी-तंजावर पासून ते उत्तरेकडील काबूल-कंदहार पर्यंत आपली तलवार गाजवून नावलौकीक प्राप्त केला.

विषयाचे महत्त्व :

मध्ययुगीन काळाचे प्रारंभी देवगिरीचे यादव महाराष्ट्राचे मुख्य राज्यकर्ते होते. परंतु दिल्लीच्या खिलजी सुल्तानांनी यादवांना सत्ताभ्रष्ट करून देवगिरीचे राज्य दिल्ली साम्राज्यात विलिन केले. यादवांचे 'जाधव' असे उपनाव गोविंददेव जाधव यांच्यापासून सुरू झाले.¹ गोविंददेवांनंतर त्यांचा पुत्र ठाकूरजी जाधव यांनी बहामणीचे मांडलिकत्व स्विकारून देशमुखी वतन प्राप्त केले. ठाकूरजीनंतर भूतजी हा पित्याच्या जहागिरीवर आला. भूतजीचा पुत्र अचलोजी याने निजामशाहीत 500 घोड्यांची मनसब आणि जहागिर प्राप्त केली. अचलोजीच्या निधनानंतर त्यांचा पुत्र विठोजी 1540 मध्ये मनसबिबर आला.

विठोजीचा ज्येष्ठ पुत्र लखुजी जाधव होय. लखुजीचा जन्म 1560 मध्ये झाला.² विठोजीने लखुजीला बालपणीच युद्ध व राजकारणाचे शिक्षण देऊन तरबेज बनविले. 1570 मध्ये विठोजीचे निधन झाल्यावर लखुजी आपल्या वडिलोपार्जित जहागिरीवर आला. लखुजी निजामशाहाच्या पदरी पंचहजारी मनसबदार बनला. दौलताबाद जवळील पैठण परगण्यातील लासनेर येथे छावणी करून तो राहात असे. मुर्तजा निजामशाहा दौलतबादचा किल्ला घेण्याचा बारा वर्षांपासून प्रयत्न करित होता. लखुजीने हा अजिंक्य मानला गेलेला किल्ला आपला जीव धोक्यात घालून निजामशाहाला जिंकून दिला.³

सिंदखेड येथील देशमुखी आणि जोशी या दोन्ही वृत्ती मुळे नावाच्या ब्राम्हण कुळात होत्या. या मुळंनी देशमुखीच्या कामावर रवीराव ढोणे हा कारभारी नेमला होता. परंतु तो अतिशय उन्मत्त होऊन मालकास बेईमान झाला. त्याने सिंदखेडची देशमुखी आपल्या नावे करून मुळे घराण्यातील स्त्री-पुरुषांची कत्तल केली. त्यातून एक गरोदर स्त्री यमुनाबाई मुळे ही कशीबशी वाचली. यमुनाबाईने रवीराव ढोणेची तक्रार लखुजीकडे केली. लखुजी जाधवांनी रवीराव ढोणेवर आक्रमण करून त्यास ठार

केले. 1576 मध्ये यमुनाबाईने सिंदखेडचे देशमुखी वतन स्वखुशीने लखुजीच्या नावे करून दिले.⁴ मुर्तजा निजामशाहाने लखुजीच्या पराक्रमावर खुश होऊन अठ्ठावीस महाल आणि बावन्न चावड्यांचे वतन आणि दहा हजारांची मनसब लखुजीला बहाल केली. तेव्हापासून लखुजीची निजामशाही दरबारातील प्रति ठा वाढली. लखुजी 1576 पासून सिंदखेडला कायमस्वरूपी वास्तव्यास आले. त्यावेळी त्यांचेजवळ 10000 सैनिक होते. याच वेळेस सिंदखेडचे 'सिंदखेडराजा' असे नामांतर झाले. लखुजींनी आपल्या वास्तव्यासाठी एक टोलेजंग गढी सिंदखेडला बांधली. कदमापूर, माननगर, इत्यादी पेठा वसविल्या. निलकंठेश्वर, केशवराज, रामेश्वर या मंदिरांचा जीर्णोद्धारही केला.⁵

लखुजी जाधवरावांना म्हाळसाबाई, यमुनाबाई व भागीरथीबाई अशा तीन पत्नी होत्या. म्हाळसाबाईच्या पोटी लखुजींना दत्ताजी, अचलोजी, राघोजी आणि बहादूरजी हे चार पुत्र आणि जिजाबाई नावाची कन्या झाली. जिजाबाईचा विवाह वेरुळच्या भोसले घराण्यातील शहाजीशी 1611 मध्ये संपन्न झाला.⁶ जिजाबाईच्या पोटी 19 फेब्रुवारी 1630 रोजी मराठा स्वराज्याचा संस्थापक छत्रपती शिवाजी जन्मास आला. मुर्तजा निजामशाहाच्या मृत्युनंतर निजामशाही अंतर्गत कट कारस्थानांनी होरपळून निघाली. वजीर जमालखानाने इस्माईल निजामशाहाला गादीवर बसवून प्रत्यक्ष कारभार आपल्या हाती घेतला. या कार्यात लखुजीने जमालखानाला सक्रीय मदत केली. यावेळी लखुजी निजामशाहीत दक्षिणीफळीचे पुढारी बनले होते. 1596 मध्ये मोगलांनी निजामशाही गिळकृत करण्यासाठी अहमदनगरला वेढा दिला. त्यावेळी चोंदबीबी या शूर स्त्रीने अहमदनगरचे संरक्षण केले. मोगलाविरुद्ध संघर्षात लखुजीने चोंदबीबीला सर्वतोपरी सहाय्य करून निजामशाहीचा कारभार चालवितांना चोंदबीबीला लक्ष्मिणय मदत केली.

1600 मध्ये मोगलांनी पुन्हा अहमदनगरवर स्वारी केली. चोंदबीबीने लखुजीला हाताशी धरून मोगलांशी समर्थपणे टक्कर दिली. सन 1570 ते 1600 पर्यंतचा लखुजी जाधवरावांचा निजामशाही दरबारातील कारकिर्दीचा काळ हा उमेदिचा आणि प्रभावाचा होता.⁷ लखुजी हा निजामशाही दरबारामध्ये मराठा बारगिर सैन्याचा सेनापती आणि दहा हजारी मनसबदार होता. 1600 ते 1620 या कालखंडात मलिक अंबरच्या नेतृत्वाखाली मोगलांविरुद्धच्या संघर्षात लखुजीने भाग घेतला. मोगलांनी निजामाची राजधानी अहमदनगर 1600 मध्ये जिंकून घेतल्यानंतर वजीर मलिक अंबर, मुस्लिम सरदार आणि लखुजी जाधव तसेच इतर

युवक व युवतींच्या कौशल्य विकासामध्ये प्रशिक्षण घेणे ही आजच्या काळाची आवश्यकता

डॉ. माया प्रभाकर शिरखेडकर

सहयोगी प्राध्यापक

तायवाडे महाविद्यालय कोराडी (महादुला)

सरांश

प्रस्तुत अध्ययनात ग्रामीण भागातील व शहरी भागातील युवक व युवती यांचे कौशल्यात्मक विकासाचे तुलनात्मक परिक्षण करण्यात आले. २०-३० वर्षे वयोगट असणाऱ्या युवक व युवतींचे नागपूर जिल्ह्यातील कोराडी, सावनेर, महादुला व खापरखेडा ह्या भागातील सर्वेक्षण करण्यात आले. येथील युवक युवतींना आपला कौशल्य विकास कसा साधता येतो याची वयोगटानुसार आणि विषयानुसार तुलनात्मक माहिती गोळा केली. या अध्ययनाद्वारे असे निदर्शनास आले की, अधिकाधिक युवक-युवती शिक्षण घेतांना विज्ञान व वाणिज्य शाखेला प्राधान्य देतात. ग्रामीण भागातील युवक-युवतींचा कल विज्ञान व कला विषयात शिक्षण घेण्याकडे अधिक आहे तर शहरी भागातील युवक-युवतींचा कल विज्ञान व वाणिज्य विषयात शिक्षण घेण्याकडे अधिक आहे. ग्रामीण भागाच्या तुलनेत शहरी भागातील युवक-युवती कौशल्य विकासावर आधारित रोजगार व स्वयंरोजगार मिळविण्याच्या दृष्टीने अधिक आश्वस्त असल्याचे निदर्शनास येते. यावरून ग्रामीण भागातील युवक युवतींना आपल्या स्वतःच्या पायावर उभे राहण्याकरिता कौशल्य विकासाचे मार्गदर्शन करणे अत्यावश्यक आहे.

प्रस्तावना

जागतिकीकरणाच्या काळात भारतामध्ये ५० टक्के जनसंख्या ही ३० वर्षे वयोगटाखाली आहे. भारतामध्ये विश्वप्रतिस्पर्धेनुसार कौशल्य विकास ही बाब तरूण तरुणींना आत्मसात करण्याची अंत्यत आवश्यकता आहे. कौशल्य विकासाकरिता अत्याधिक परिश्रम करणे आवश्यक झालेले आहे. सद्यपरिस्थितीत भारतामध्ये शिक्षित युवक व युवती मध्ये कौशल्य व तांत्रिक विकास साधण्याकरिता भारत सरकारद्वारे, निजी संस्थांतर्फे तथा सरकारी उपक्रमाद्वारे कौशल्य विकास प्रशिक्षणासाठी सदैव परिणामकारक प्रयत्न चालू आहेत. ह्या प्रशिक्षणाद्वारे रोजगार/स्वयंरोजगार ह्याबद्दल योग्य मार्गदर्शन दिल्या जाते. कौशल्य विकास हा विज्ञान/गृहअर्थशास्त्र/वाणिज्यशास्त्र ह्या विषयाच्या प्रशिक्षणाने साधल्या जाऊ शकतो वा प्राप्त होऊ शकतो. ह्या प्रशिक्षणाच्या मार्गदर्शनाने युवक व युवती ही पदवी प्राप्त केल्यावर कौशल्य विकास साधून रोजगार अथवा स्वयंरोजगार प्रयत्न करू शकतात. संस्कृत मधील म्हणी प्रमाणे “प्रयत्ने श्रीः प्रति बसती” ह्याचाच अर्थ असा की प्रयत्नातून यश व समृद्धी हे गुण प्राप्त होतात. कौशल्य विकास साधण्याकरिता अधिक परिश्रम करणे अत्यावश्यक आहे त्यातूनच कौशल्य विकास साधून साधनसंपत्ती प्राप्त करू शकतात.

एकविसाव्या शतकातील औद्योगिकरण /तांत्रिकीकरण /वैज्ञानिकीकरण /शहरीकरण /शिक्षणाचाप्रसार /दळणवळणाची दूरसंचारणाची प्रसार माध्यम, संगणक/ गुगल/ अद्यावत, अत्याधुनिक साधने/ सामाजिक जीवनमुल्ये यामुळे सामाजिक जीवनाचे चित्रच पालटून गेलेले आहे.

प्रधानमंत्री कौशल्य विकास योजना केंद्र सरकारद्वारा संचालित अभियानांतर्गत “मेक इन इंडिया”/ नॅशनलसोलर मिशन/ स्वच्छ भारत/ डिजिटल इंडिया इ. आशयावर भर देऊन युवक व युवतींना त्यांच्या व काळाच्या गरजेनुसार विषयाचे योग्य प्रशिक्षण देण्यात येते. आजच्या धकाधकीच्या तांत्रिकरणाच्या युगात भावी पिढीच्या निर्मीतीकरिता प्रत्येक युवक युवती ही सक्षम व स्वतःच्या पायावर उभी राहण्यास सबल असावयास



भारतीय लोकशाहीत न्यायालयाची सक्रियता

डॉ. वकील टी. शेख

राज्यशास्त्र विभागप्रमुख

तायवाडे महाविद्यालय, महादुला-कोराडी. जि. नागपूर

न्यायालय अथवा न्यायपालिका हे शासनसंस्थेचे तिसरे आणि महत्त्वाचे अंग आहे. अध्यक्षीय शासनपद्धतीत शासनसंस्थेचे तीनही विभाग परस्परांपासून वेगळे व स्वतंत्र असतात. संसदीय शासनपद्धतीत मात्र तसे नसते. या पद्धतीत विधिविभाग आणि कार्यकारी मंडळ एकमेकात मिसळून गेलेले असतात, तरीही न्यायविभाग मात्र वेगळे आणि स्वतंत्र असतो. थोडक्यात लोकशाही शासनपद्धतीचा अध्यक्षीय किंवा संसदीय असा कोणताही प्रकार असला तरीही न्यायविभाग मात्र अन्य दोन विभागांपेक्षा वेगळा आणि स्वतंत्र असतो. न्यायविभाग वेगळा व स्वतंत्र असणे ही आधुनिक राज्याची अथवा लोकशाही शासनपद्धतीची गरज झाली आहे .

विधिमंडळ कायदे करते. या कायद्यांची अंमलबजावणी करणे, हे कार्यकारी मंडळाचे कार्य असते. कायद्यांची अंमलबजावणी करतांना काही व्यक्तींवर अन्याय होण्याची शक्यता असते म्हणजे काही व्यक्तींच्या व्यक्तिस्वातंत्र्यावर कार्यकारी मंडळ, अन्य संस्था किंवा व्यक्ती यापैकी कोणाहीकडून अतिक्रमण होण्याची शक्यता असते. म्हणून न्यायदानव्यवस्थेसाठी स्वतंत्र न्यायालय नसेल, तर व्यक्तिस्वातंत्र्य सुरक्षित राहू शकत नाही. न्यायालयाचे महत्त्व स्पष्ट करताना लॉर्ड ब्राईस म्हणतात, “स्वतंत्र न्यायमंडळाच्या अस्तित्वामुळे कायद्याच्या राज्याची हमी लोकांना मिळू शकते. न्यायाचा दिप विझल्यास, निर्माण होणारा काळोख भयंकर असतो.”

भारतामध्ये न्यायव्यवस्थेची सुरवात ब्रिटिश शासनाच्या १८६१ च्या कायद्यानुसार झाली. या कायद्यानुसार भारतात मुंबई, मद्रास, कलकत्ता, लाहोर, अलाहाबाद, पाटणा इत्यादी ठिकाणी उच्च न्यायालये स्थापन करण्यात आली होती. या उच्च न्यायालयानी दिलेल्या निर्णयावर इंग्लंडमधील प्रिव्ही कौन्सिलकडे त्या काळात अपील करावे लागत होते. नंतर १९३५ च्या कायद्यानुसार भारतात फेडरल कोर्ट ऑफ इंडियाची स्थापना करण्यात आली. भारतातील उच्च न्यायालयाच्या निर्णयाविरुद्ध फेडरल कोर्टाकडे अपील करता येत होते आणि फेडरल कोर्ट ऑफ इंडियाच्या निर्णयाविरुद्ध इंग्लंडच्या प्रिव्ही कौन्सिलकडे अपील करता येत होते. खऱ्या अर्थाने प्रिव्ही कौन्सिल हेच सर्वोच्च न्यायालय असे मानण्यात येत असे. प्रिव्ही कौन्सिलने दिलेला निकाल हाच अंतिम व सर्वोच्च समजला जात असे. त्यामुळे भारतातील न्यायदान व्यवस्थेला ब्रिटिश कालखंडाचा वारसा लाभलेला आहे असे म्हणतात.

स्वातंत्र्यप्राप्तीनंतर स्वतंत्रपणे लिखित संविधानानुसार राज्यकारभाराला सुरवात झाली. कायदेमंडळ, कार्यकारी मंडळ, शासनव्यवस्थेच्या या दोन घटकांच्या बरोबरीने न्यायमंडळ या घटकाला देखील स्वतंत्र महत्त्व देण्यात आले. १९३५ च्या भारत प्रशासन कायद्यानुसार अस्तित्वात असलेल्या ‘फेडरल कोर्ट ऑफ इंडिया’ याच न्यायदान संस्थेचे रूपांतर सर्वोच्च न्यायालय म्हणून करण्यात आले व त्यामधूनच २६ जानेवारी १९५० साली भारतामध्ये संघराज्याचे न्यायालय म्हणून सर्वोच्च न्यायालय स्थापन झाले. भारतीय संविधानाच्या कलम १२४ नुसार सर्वोच्च न्यायालयाची रचना निश्चित केलेली आहे. सर्वोच्च न्यायालय हे आज भारतातील पुनर्निर्णयाचे सर्वश्रेष्ठ न्यायालय आहे.

न्यायालयीन सक्रियता हे भारताच्या सांविधानिक इतिहासातील एक महत्त्वाचे कारण मानावे लागेल. न्यायालयांची पहिली चार दशके नेहरू गांधींच्या संसदीय सार्वभौमत्वाच्या वाढत्या प्रभावाखाली गेल्यामुळे त्याकाळात न्यायालयीन पुनर्विलोकन फारसे प्रभावी ठरले नव्हते. पण संसदीय सार्वभौमत्वाचा ब्रिटिश आदर्श आणि न्यायालयीन पुनर्विलोकनाचा अमेरिकन आदर्श हा जो संकर संविधानकारांनी केला तो कधीतरी संसद विरुद्ध न्यायालय या तणावात प्रवर्तित होणे अटळच होते. तसा तो गोलखनाथ खटल्यामागून मिन्वा मिल्स खटल्यापर्यंत झाला. न्यायालयाने संविधानाची पायाभूत चौकट कायम ठेवून बाकीचे बदल करण्याचा संसदेचा अधिकार मान्य करून तो तणाव आटोक्यात ठेवला.

न्यायालयीन सक्रियता – अर्थ व पार्श्वभूमी –

न्यायालयीन सक्रियतेचा अर्थ असा की सामान्यतः ज्या प्रश्नांवर धोरणात्मक पुढाकार सर्वस्वी कार्यपालिका किंवा विधिपालिका यांचा असावा अशा प्रश्नांवर न्यायालयाकडून जनतेने अपेक्षा करणे, आणि न्यायालयांनी ती अपेक्षा पूर्ण करणे कायद्यांचा नुसताच अर्थ लावण्यावर न थांबता कायदा कसा असावा हेही न्यायालयांनी सांगणे १९८० नंतरच्या दशकात जे लोकहितयाचिकांना उधाण आले त्यातून १९९० नंतरच्या दशकातील न्यायालयीन सक्रियतेची पायाभरणी झाली. लोकहितयाचिकांचे प्रस्थ श्रीमती गांधी व राजीव गांधी यांच्या लोकानुरंजनी राजकारणाला पोषक असल्यामुळे त्या दोहोंना त्यात संसदीय सार्वभौमत्वाला धोका आहे असे काही वाटले नाही. नव्या आर्थिक धोरणाच्या आधीच्या काळातील न्यायालयीन सक्रियतेचा भर नागरिकांच्या मूलभूत हक्कांना संरक्षण देण्यावर होता. गरीब आणि सत्तावंचित समाज घटकांच्या मानवी हक्कांचे राज्यसंस्थेपासून उदाहरणार्थ पोलिस छळ, कोठड्यांमधील बलात्कार, तुरुंगामधील कैद्यांना मिळणारी अमानुष वर्तणूक, सुधार गृहांमधील अत्याचार इत्यादी प्रकरणी संरक्षण करणे ही जबाबदारी न्यायालयांनी आपल्या



महाराष्ट्र विधानसभा निवडणूक-2019 : एक विश्लेषण

डॉ. वकील टी. शेख

राज्यशास्त्र विभाग प्रमुख,

तायवाडे महाविद्यालय,

महादुला-कोराडी, जि. नागपूर दृ

भारतात अतिशय महत्वाची समजली जाणारी महाराष्ट्र विधानसभेची निवडणूक दि. 21 ऑक्टोबर 2019 रोजी संपन्न झाली. या निवडणूकीचा निकाल दि. 24 ऑक्टोबर 2019 रोजी घोषित झाला. महाराष्ट्र विधानसभेच्या निवडणूकीचे विश्लेषण करताना असे दिसून येते की, ही निवडणूक अनेक दृष्टिकोनातून अनन्यसाधारण स्वरूपाची होती. या निवडणूकीत प्रमुख राष्ट्रीय पक्षासह अनेक प्रादेशिक पक्षांनी आपले उमेदवार निवडणूकीच्या रिंगणात उभे केलेले होते. एकूण 288 विधानसभा मतदार संघात ज्यात 47 राखीव मतदार संघाचा समावेश होता, एकूण 3237 उमेदवारांनी आपले नशिब आजमावलेले होते. महाराष्ट्र विधिमंडळाच्या मागील 60 वर्षांच्या ऐतिहासिक परंपरेत ही 14 वी विधानसभा निवडणूक अनेक अंगाने लक्ष्यवेधक ठरली. ही निवडणूक मुख्यतः दोन गटात विभागलेल्या महायुती आणि महाआघाडी अशा निवडणूकपूर्व आघाडी तयार झालेल्या विविध पक्षामध्ये झालेली असली तरी ऐनवेळी वंचित बहुजन आघाडीने वेगळी आघाडी निर्माण केल्यामुळे निवडणूकीत चुरस निर्माण झालेली दिसली. महाराष्ट्रातील निवडणूकीच्या मागील परंपरेप्रमाणे या ही निवडणूकीत अनेक प्रकारचे आरोप-प्रत्यारोप, व्यक्तीगत टीका-टीपणी आणि चिखलफेक झालेली दिसली. अनेक राजकीय पक्षांनी आपल्या जाहिरनाम्यात सांगितल्याप्रमाणे ही निवडणूक विकासाच्या मुद्द्यावर लढवली जात असल्याचे सांगितले परंतु प्रत्याक्षात अविकासाची मुद्दे, क्षेत्रीय समस्या, आणि अस्मिता अशाच बाबींची चर्चा अधिक झालेली दिसली. बंडखोरीने ग्रासलेल्या या निवडणूकीत जनता जनार्धनाने अनेक दिग्गज उमेदवारांना घरचा रस्ता दाखविण्याचे काम केले. लोकशाहीत मतदार राजा हाच खरा मालक असतो हे या निवडणूकीने सिद्ध केले.

भाजपाच्या नेतृत्वाखाली शिवसेना आणि इतर मित्र पक्षांच्या सहकार्याने 5 वर्षे अडथळ्यांची शर्यत पार करत चाललेले सरकार विरोधी पक्षांची झालेली वाताहत आणि या निवडणूकीत त्यांचे पणाला लागलेले अस्तित्व, केंद्र सरकारच्या धोरणांचा राज्याच्या शेती उद्योग आणि सेवा इत्यादी क्षेत्रावर झालेला नकारात्मक परिणाम, राज्यात विविध कल्याणकारी योजनांची करण्यात आलेली मोठी जाहिरातबाजी आणि या योजनांची प्रत्यक्षात "काही अधिक काही उणे" या स्वरूपात होत असलेली अंमलबजावणी, शेतकरी, आदिवासी, बँक कर्मचारी, शिक्षक-प्राध्यापक ते शासकीय कर्मचारी तसेच युवक यांनी केलेली आंदोलने, जातीआधारित आरक्षण मिळावे यासाठी मराठा, धनगर, मातंग, ब्राह्मण आणि परिट जात समुदायांचे मोर्चे तसेच धर्माधारित आरक्षणासाठी लिंगायत आणि मुस्लिम समुदायांचे मोर्चे अशा राजकीय-आर्थिक आणि सामाजिक अस्वस्थतेच्या पार्श्वभूमीवर ही निवडणूक पार पडणार होती, यामुळे तिच्या निकालाची उत्कंठादेखील तेवढीच टोकाची होती. या निवडणूक निकालाद्वारे राजकारणातील काही प्रस्थापित समीकरणांना जबरदस्त धक्का बसला तर राज्याच्या राजकारणात काही स्वतंत्र अशी वैशिष्ट्ये पुन्हा एकदा अधोरेखित झालेली आहेत.

निवडणूक निकालानंतर मात्र राज्यातील राजकीय परिस्थितीत झपाट्याने बदल होत गेला. त्रिशंकू अवस्थेत निकालाची स्थिती असल्यामुळे कोणत्याही पक्षाला सरकार स्थापनेसाठी बहुमत प्राप्त झालेले नाही निवडणूकपूर्व काळात शिवसेना-भाजपाने इतर छोट्या पक्षाना सोबत घेवून निर्माण

लोककथा आणि आधुनिक कथा : एक अनुबंध

- प्रा. डॉ. राजेंद्र वाटाणे
सहयोगी प्राध्यापक
तायवाडे महाविद्यालय, कोराडी

भारतीय साहित्याच्या परंपरेत कथा हा आदिम साहित्यप्रकार आहे. मानवी जीवनातील व्यवहारांबरोबरच कथा, गोष्ट आणि कहाण्या चालत आलेल्या आहेत. कथा हा साहित्यप्रकार मानवकेंद्री अनुभूतींना सौंदर्यपूर्ण रूप प्रदान करणारा असून गोष्ट सांगणे किंवा ऐकणे ही मानवामध्ये एक मूलभूत प्रेरणा आहे. मानवी स्वभावातील कथनरूपता जोपासण्याचा प्रयत्न लोककथेपासून तर आधुनिक कथेपर्यंत झालेला दिसतो. कथा सांगण्याची प्रेरणा आणि ऐकण्याची गरज या दोन्हीमुळे कथा ही मनुष्याच्या सांस्कृतिक इतिहासात पुरातन काळापासून तर आजच्या वर्तमान व भविष्यातही सोबत राहणार आहे.

लोककथेचा प्रांत अतिशय समृद्ध असून ती आदिकाळापासून चालत आलेली व मौखिक परंपरेने टिकलेली साहित्यकृती होय. 'गोष्ट सांगणे' या बाबीला आपल्या दैनंदिन जीवनातही महत्त्वाचे स्थान आहे. ग्रंथबद्ध पहिली लोककथा म्हणून 'उर्वशी' ला मान द्यावा लागतो. कारण ऋग्वेद, शतपथ ब्राह्मण, कठोपनिषद अशा प्राचीन लिखित वाङ्मयापर्यंत 'उर्वशी' कथेचा आढळ होतो. रामायणाच्या बाल-उत्तराखंडात कितीतरी कथा आपल्या आदिमतेला धरून असलेल्या दिसतात. लोककथेची परंपरा जशी 'उर्वशी' कथेपर्यंत मागे नेता येते तर मौखिक परंपरा स्वातंत्र्योत्तर काळापर्यंत चालू असल्याचे 'शालिनीच्या शौर्यगाथे'वरून लक्षात येते. याशिवाय 'महाभारत' तर कथांचे आगारच आहे. महाभारताच्या शांतीपर्वात आलेल्या अनेक कथा लोककथाच आहेत. याशिवाय बौद्धजातके आणि जैन चूर्णीकाकथांनी भारतीय कथा परंपरेला अतिशय समृद्ध केले आहे. लोककथेच्या संदर्भात डॉ. मधुकर वाकोडे म्हणतात. "मराठी लोककथा अतिशय लवचिक आहे.

ती भारतीय लोककथेच्या प्रचंड नि विस्तीर्ण असलेल्या प्रवाहातीलच एक धारा आहे. कहाणी, चिटुकला, आख्यायिका, गोष्ट नि कथा असा देशकाल परिस्थितीनुरूप पेहराव बदलत आली आहे. केवळ लोकांचे रंजन-उद्बोधन करण्यासाठी, आर्षमहाकाव्याची दालने समृद्ध करून ती थांबली नसती तर रानावनातून, डोंगरदऱ्यातून नि गावाशिवरातून ती भटकत राहिली".^(१) मराठी लोककथा रामायण-महाभारतकालीन, मध्ययुगीन-यादवकालीन संदर्भ घेऊन आली आहे. तशीच ती सांप्रतकालीन वागव्यवहाराशी संपर्क ठेवून प्रवाहीत झाली आहे. कुठलीही लोककथा आपल्या श्रद्धा-निष्ठा जपण्यासाठी नवे नवे संदर्भ शोधून सतत प्रवाही राहण्याचा प्रयत्न करीत असते. कारण ती त्या चराचर सृष्टीच्या जीवनाशी निगडीत असते. संतांचे तत्त्व विवरणपर ग्रंथ देखील 'ज्ञानकथा'च असल्याचे मत डॉ. रा.चिं. ढेरे व्यक्त करतात. ते म्हणतात, "संतांची तत्त्वविवरणपर ग्रंथरचना ही 'प्रेम'-युक्त अथवा 'भक्ति' युक्त असल्यामुळेच ती 'ज्ञानकथा' रूप बनली आहे."^(२) याशिवाय अनेक व्रतवैकल्य, सणसमारंभाच्या निमित्ताने कथा सांगण्याचा प्रघात पूर्वीपासून चालत आलेला आहे. त्या कथांचा संबंध धार्मिक व्रतांशी व विधींशी आहे. आधुनिक काळात त्यांचे महत्त्व कमी होत असले तरी लोककथा नष्ट झाल्या, असे म्हणता येत नाही. तर त्या आपले स्वरूप बदलून कायम असल्याचे दिसून येते. "भारतात कथासंग्रहाच्या व संस्करणाच्या कार्याला व्यास, वररची, गुणाढ्य, गौतमबुद्ध अशा महान व्यक्ती आणि विभूती कारणीभूत झाल्या"^(३) असे प्रकार सांगतात.

आधुनिक काळातील कथनरूपांचे रचनाबंध, आशयद्रव्य व जीवनदृष्टी हे घटक बऱ्याच ठिकाणी लोककथांचा रचनाबंध, आशयद्रव्य व जीवनदृष्टीने

लावणीतील कलगी—तुरा

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मध्ययुगीन मराठी साहित्याचे दालन संत, पंत आणि तंत साहित्याने बाराव्या शतकापासून तर अठराव्या शतकापर्यंत समृद्ध केले आहे. वेगवेगळ्या काळात निर्माण झालेल्या या तिन्ही वाङ्मय प्रवाहाची स्वतंत्र विचारधारा आणि तत्वप्रणाली होती. संतांनी लोकजीवनाला आणि लोकमानसाला ईश्वरभक्तीच्या माध्यमातून नीतिमूल्ये व सदाचाराची शिकवण दिली तर पंडित कवींनी पंचमहाकाव्यातील विविध विषय आणि संकेत घेऊन त्यांना लौकिकाचा रंग दिला. संतांच्या आणि पंडितांच्या कवितेपेक्षा निराळी आणि स्वतंत्र वळणाची कविता शाहिरींनी लिहिली. डफ आणि तुणतुण्याच्या चालीवर बहरलेली ही कविता शाहिरी काव्य म्हणून ओळखली जावू लागली. शाहिरी काव्याची ही परंपरा अठराव्या शतकापासून तर आजतागायत टिकून आहे.

पेशवाईपासून शाहीर अनंत फंदी, होनाजी बाळा, परशुराम, रामजोशी, प्रभाकर आणि सगनभाऊ इ. प्रमुख शाहिरींनी लावणी आणि पोवाड्यांची रचना करून वीर आणि शृंगार या प्रधान रसांबरोबरच इतरही रसांची आळवणी केली. शाहिरींनी पोवाड्यातून महाराष्ट्राच्या वीरत्वाची व शौर्याची पराक्रमगाथा जशी वर्णन केली, त्याचप्रमाणे महाराष्ट्राचा सामाजिक, राजकीय व सांस्कृतिक पट देखील उभा केला. शाहिरींचा पोवाडा स्तुतीप्रियतेतून, गुणवर्णनातून व शूर-वीरांच्या पराक्रमातून उदयाला आला तर लावणी ही मनोरंजनातून आकारास आली. परंतु पुढे लावणीने विविध आयाम घेतले त्यातूनच ती अधिकाधिक विस्तारत गेली. त्यात जसा शृंगार आला तसेच समाजाचे प्रतिबिंब त्यात उमटू लागले. शिवाय शाहीर हे मूळातच लोककवी असल्यामुळे समाजमनाशी ते समरस झाले होते त्यामुळे जनमानसाचे कल्याण साधणे हा देखील त्यांचा हेतू होता. शिवाय संत आणि पंडितां परंपरेचा समृद्ध वारसा त्यांच्या पाठिशी होताच त्यामुळे समाजाची नेमकी नस ओळखून शाहिरींनी आध्यात्मिक लावण्या लिहिल्या, शिवाय उपदेशपर लावण्यांची रचना करून जनमानसाला नीतिबोध शिकविण्याचा प्रयत्न केला. शाहीर अनंत फंदीने तर 'बिकट वाट वहिवाट नसावी धोपट मार्गा शिरू नको' अशा शब्दात उपदेशपर फटक्यातून संसारी माणसाला जीवनाचा मूलमंत्रच दिला आहे. शाहिरींच्या लावण्यांची वैविध्यता विचारात घेता शाहिरीकाव्य किती समृद्ध आहे याची कल्पना येते. तत्पूर्वी शाहिरींनी हाताळलेल्या 'लावणी' या रचनाप्रकाराचे पूर्वसुकृत जाणून घेणे गरजेचे आहे.

लावणी :

लावणी या वाङ्मयप्रकाराला शाहिरींनी प्रकाशझोतात आणले असले तरी लावणीची बीजे संतसाहित्यातही विखुरलेली दिसतात. पंधराव्या शतकातील वेमभूपाल या ग्रंथकाराने 'संगीतचिंतामणी' या ग्रंथात 'लावण' नृत्याचा 'लवणी' असा निर्देश करून 'अप्रयासेन नमनमड्ना लवणी मता' अशी 'लवणी'ची व्युत्पत्ती दिली आहे. याच 'लवणी' नृत्याचा काही संगीतशास्त्रग्रंथकारांनी 'नवणी' असाही नामोल्लेख केला आहे. 'लवणी' नृत्याचा प्राचीनतम उल्लेख तेराव्या शतकातील 'ज्यायन' नावाच्या ग्रंथकाराने 'नृत्यरत्नावली' या ग्रंथात केलेला दिसतो. लावणीच्या अभ्यासकांना तिच्या ज्या विशेषाचे आकर्षण वाटते, त्याला अनुसरून 'लावणी' या संज्ञेची व्युत्पत्ती शोधण्याचा प्रयत्न झालेला आहे. लावणी हे लोकगीत आहे असे वाटणाऱ्यांनी 'शेतात भाताच्या

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भ्रमणध्वनी : ९९२२४४३५६६

भारतीय लोकमानसाची बैठक ही मुळातच अध्यात्मावर अधिष्ठीत असून विश्वचैतन्यावर त्यांचा अगाध विश्वास आहे. लोकमानसाने परमेश्वराचे अस्तित्व मान्य केले असल्यामुळे त्याचा विषयीचा भक्तिभाव त्याने गुणवर्णन करणे हा लोकमानसाचा स्थायीभाव ठरलेला आहे. भारतातील सर्व प्रदेशात शिव आणि शक्ती यापैकी सृष्टीचे आदितत्व कोणते यासंबंधी चर्चा पूर्वीपासूनच चालू आहे. त्यातूनच 'शिवपक्ष' आणि 'शक्तीपक्ष' असे दोन पक्ष निर्माण झाले आहे. त्यांच्यातील वादाचे स्वरूप लोकरंगधारेतील प्रश्नोत्तरात्मक कवनांच्या स्वरूपात प्रचलित आहेत. प्रदेशपरत्वे त्यात विविधता निर्माण झाली. नौटंकी, स्वांग, तमाशा अशा विविध नावांनी प्रचलित असणाऱ्या शाहिरांच्या या कलाप्रकाराने मराठी मन-माणसावर आपला ठसा उमटविला आहे.

शाहिरांच्या रचनाप्रकारातून आविष्कृत झालेली 'तमाशा' ही सामान्य माणसांची श्रेष्ठ कला आहे. तमाशातून केवळ रंजन आणि विनोदच पुढे आला नाही तर त्याचे सामाजिक प्रबोधनाचे अंगही महत्त्वपूर्ण ठरणारे आहे. वि.कृ. जोशी यांनी गाथा सप्तशती या ग्रंथातील 'रतिनाट्य' या कलाप्रकाराच्या सादरीकरणाच्या वर्णनाधारे — "तमाशा लोककला प्रकाराचे मूळ रूप हे सातव्या शतकातील असावे"^१ असे म्हटले आहे. शाहीर अनंतफंदी यांच्या मते, शाहिरी वाङ्मयाचा नाट्यात्मक प्रकार म्हणजे तमाशा होय. तर पू. गो. काणेकर तमाशाची कल्पना सुफी पंथाच्याद्वारे मराठीत आल्याचे मानतात. प्रबोधनकार ठाकरे यांनी लोकरंजनाचे साधन म्हणून 'खेळ तमाशे' हा लोकनाट्यप्रकार ज्ञानदेवांच्या काळी असल्याचे म्हटले आहे. विनायक भावे तमाशाचे मूळ नवव्या ते तेराव्या शतकापर्यंत मागे नेता येत असल्याचे सांगताना तमाशातील पौराणिक वगात इंद्रालाच महत्त्व असल्याचे म्हणतात. डॉ. प्रभाकर मांडे तमाशा लोकरंगभूमी लोकगायकांच्या रंगभूमीतून विशेष स्वीकारून जन्मास आल्याचे आपल्या 'लोकरंगभूमी' या ग्रंथात सांगतात. इ. विविध मतमतांतरातून तमाशा या लोकरंगधारेचे प्राचीनत्व आणि स्वरूप सहजच लक्षात येते. तमाशा या कलाप्रकारात मराठी भाषेचा ठसका जसा जाणवतो त्याचप्रमाणे त्यातून महाराची परंपरा, मराठी संस्कृती, महाराष्ट्राचा इतिहास व भौगोलिक परिसर पुढे आला आहे. 'तमाशा' ही लोकरंगधारा दहाव्या शतकापासून अस्तित्वात असली तरी तिचे विकसीत रूप सतराव्या शतकात उत्कर्ष पावलेले दिसते. १६८० ते १७०७ च्या दरम्यान मुसलमानी सैनिकांचे मनोरंजन करण्यासाठी जे फड उदयाला आले त्या फडांना 'तमाशा' संबोधल्या जात असे तोच तमाशाचा उदय असल्याचे नामदेव व्हटकर म्हणतात. तमाशाला आजही ग्रामीण विभागात 'खेळ' अथवा 'गंमत' म्हटले जाते. काही अभ्यासक 'पोवाडा' हे तमाशाचे प्रारंभिक रूप मानतात.

तमाशा या लोकरंगधारेने आपल्या उदयाच्यापूर्वी अस्तित्वात असलेल्या लोककला प्रकारातून आपणास आवश्यक असणारी तत्वे उचलली आणि स्वतःला वेगळा आकार देऊन समृद्ध आणि सर्वांगसुंदर केले. उदा. गोंधळ, जागरण, वाघ्या-मुरळी, भराड, लळीत इ. लोकरंगधारेतील कलाप्रकारांचा आधार घेऊनच 'तमाशा' ही लोकरंगधारा समृद्ध झालेली आहे. तमाशाची ही परंपरा बहुजनात रुढ असणाऱ्या या कलाप्रकारातून विकसित झालेली असल्यामुळे हिंदू धर्मातील रूढी आणि परंपरेचे प्रतिबिंब त्यात उमटणे साहजिकच होते. त्यामुळेच

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महाराष्ट्रीय अंतःकरणाच्या तारा छेडून निघालेला नादमय ललकार म्हणजे शाहिरी काव्य. महाराची आन, बाण आणि शान अबाधित राखण्याचे कार्य शाहिरी वाङ्मयाने केले आहे. समस्त भारतवर्षाला वैभवशाली व अभिमान वाटावा असा हा काव्यप्रकार अठराव्या शतकात उत्कर्ष पावला. कलगी-तुऱ्याच्या आध्यात्मिक शाहिरीपासून प्रेरणा घेऊन ऐतिहासिक, ग्रीय आणि सामाजिक पोवाड्यांची मोठी परंपरा उदयाला आली. “पोवाडा हा प्रांगणीय लोककला प्रकार असून वीरश्रीयुक्त कीर्तिगान म्हणजे पोवाडा होय.”^१ ज्ञानेश्वरीत सुद्धा ‘पवाडा तुआ केला गंधर्वासी’ असा उल्लेख आलेला आहे. पोवाड्याची परंपरा ही कीर्तिगानापासून झाली असल्याचे अनेकांनी मान्य केले आहे. छत्रपती शिवाजी महाराजांच्या काळात अगीनदास आणि तुळशीदास हे दोन शाहीर झाले. त्यांनी शिवरायांचे गुणगान केले ते पहिले उपलब्ध पोवाडे असल्याचे दिसते.

मराठी मनाला टाळ-मृदंगाइतकेच आकर्षण शाहिरांच्या डफ-तुणतुण्याचे देखील आहे. त्यामुळेच संतांच्या अभंगवाणीत मराठी मन जेवढे तल्लीन होते तेवढेच शाहिरांच्या रंगेल आणि रंगेल कवनातही देहभान विसरते.” ‘शायर’ या मूळच्या अरबी शब्दापासून मराठीमध्ये शाहीर हा शब्द आलेला आहे. शाहीर म्हणजे कवी, काव्यलेखन करणारा मनुष्य.”^२ शाहिरी काव्याने रसाविष्कार, अलंकारसृष्टी आणि शैली या तिन्ही बाबतीत निराळे वैशिष्ट्य सिद्ध केले आहे. शाहिरी काव्याचे स्फुरणच अगदी स्वतंत्र आहे. त्यांनी साकारलेला वीररस अथवा शृंगाररस पूर्णपणे त्यांच्या जीवनातून साकार झालेला आहे. शिवाय त्यांच्या रसाविष्काराला अनुभूतीची जोड असल्यामुळे त्यात जिवंतपणा उतला आहे. मराठेशाहीच्या वैभवसंपन्नतेचे दर्शन त्यात उमटले आहे. त्यामुळेच प्रा. भगवान सावंत म्हणतात — “शाहिरांनी मराठी भाषेला एका नव्या क्षितिजाचे दर्शन तर घडवलेच पण बहुजन समाजाच्या साध्या-भोळ्या अंतःकरणाला वाचा फोडल्याने या वाङ्मयास एक अभिनव वैशिष्ट्य प्राप्त झाले.”^३

पोवाडा ही नाट्यपूर्ण कथनपरंपरा असून लोककथा गायन व कथनातून तिचा उदय झालेला आहे. पोवाडा सादर करणारा शाहीर हा श्रोत्यांना त्या पोवाड्याच्या प्रसंगांमध्ये कळत-नकळत सामील करून घेत असतो. तो केवळ सादरीकरण करत नाही, तर वक्ताश्रोता संवाद हे त्यांच्या सादरीकरणाचे स्वरूप असते. “पोवाड्यातील नायक-खलनायक यांचा संघर्ष, सुष्ट-दुष्ट प्रवृत्ती, कथेचा आरंभबिंदू, संघर्षबिंदू, कथेला कलाटणी देणारे घटक आदींचा अंतर्भाव पोवाड्यामध्ये होतो.”^४ पोवाडा हा एक संगीतप्रकार असून त्याची परिणामकारकता गाण्यातच असते. पोवाड्यामध्ये संगीताच्या दृष्टीने महत्त्व असलेल्या लयीला व तालाला अधिक प्राधान्य असते. शब्दातील जोरकसपणा, उच्चाराची विशिष्ट ढब त्यामुळे पोवाडा हा जनमानसाची विशेष पकड घेणारा ठरला आहे. पोवाड्याचा योग्य परिणाम साधण्यासाठी शाहिराला आवश्यक तेथे अभिनयाची साथ घ्यावी लागते. आव्हान-प्रतिकार, हल्ला-बचाव या प्रसंगांसोबतच करुण, हास्य, वीर, बीभत्स इ. रसांचे आविष्करण देखील अभिनयाद्वारे प्रेक्षकांपुढे साकारावे लागते. पोवाडा गायनाच्या वेळी जे गद्य बोलायचे असते ते लिखित

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भ्रमणध्वनी : ९९२२४४३५६६

मध्ययुगीन मराठी सारस्वताचा प्रांत संतकाव्य, पंडितीकाव्य आणि शाहिरी काव्याने समृद्ध झाला आहे. संतांनी ओवी आणि अभंगांद्वारे भक्तीतत्व आणि नीतीमूल्यांची शिकवण समाजाला दिली तर पंडितांनी संस्कृत गणवृत्तात आख्यानपर रचना केली. पंडितकवी हे विद्वज्जन्य रसिक होते. त्यामुळे त्यांच्या रचनेत भक्ती व शृंगाराला स्थान लाभले. पंडितकवींनी रामायण, महाभारत, भागवत, पुराणे, रघुवंश, शाकुंतल, कुमारसंभव, हनुमन्नाटक इत्यादी लौकिक विषयांना आणि रसांना स्थान देणाऱ्या महाकाव्यातून आणि नाटकातून आपल्या आख्यानाचे विषय निवडले. शिवाय त्यांना आपल्या डौलदार भाषेने, तंत्रबद्धतेने आणि विविध वृत्तांनी नटविले. “मोक्षप्राप्तीसोबतच कवित्वाचा विद्वज्जन्य आस्वाद घेणे, ही पंडितांची दृष्टी!”^१ होती. पंडितांवर व्युत्पन्नता आणि रसिकतेचा प्रभाव होता. शिवाय बरेच पंडितकवी हे व्यवसायाने पुराणिक होते. त्यातील काहीना राजाश्रयही लाभला होता. त्यामुळे व्यासंगपूर्णतेतून प्रायोगिकतेकडे त्यांचा कल झुकला होता. पंडितांनी “शृंगार मुख्य नवही रस मूर्तिमंत काव्यात या परिसंता दिसती प्रशस्त”^२ मानले होते. त्यामुळे त्यांच्या कलाविष्कारास अधिक संधी होती. पंडिती काव्याचा अर्थ विशद करताना के. ना. वाटवे सांगतात — “मराठीतील भक्तिरस आणि संस्कृतातील कलाविलास यांचा संगम म्हणजे पंडिती काव्य.”^३ कथाविषय जुनेच असले तरी पंडितांनी रचनाविषयक नव्या जाणिवेने आणि रसिकतेने ते विषय हाताळले. शिवाय त्यात आपल्या कल्पनासामर्थ्याने नवे रंग भरले. मराठी भाषेला संस्कृताचा डौल, प्रौढी आणि संस्कृतज्ञांची मान्यता प्राप्त करून देणे हा पंडितांचा मुख्य हेतू होता. त्यामुळे महाकाव्य, खंडकाव्य, लघुकाव्य, कथाकाव्य, स्तोत्र, चंपूकाव्य असे विविध काव्यप्रकार मराठीत आले. पंडित कवींची ही उज्ज्वल परंपरा मुक्तेश्वर, वामनपंडित, रघुनाथ पंडित, सामराज, नागेश, श्रीधर, विठ्ठल, मोरोपंत अशा क्रमाने विकसित झाली असून या पंडित कवी परंपरेत वामन पंडितांचे स्थान अग्रगण्य आहे.

वामन पंडित हे संत रामदासकालीन असून पंडिती परंपरेचे प्रातिनिधीक कवी आहेत. वामन पंडितांच्या काव्यात यमके फार असल्यामुळे त्यांना “यमक्या वामन”^४ देखील म्हटले जाते. मराठीतील खंडकाव्य रचनेचा त्यांनी पाया घातला असून वाचकांच्या मनावर कायमचा ठसा उठविण्याचे सामर्थ्य त्यांच्या वर्णनशैलीत आहे. त्यामुळेच “आपल्या खंडकाव्यात्मक नूतन काव्यप्रकाराने व विविधाक्षर गणवृत्तात्मक सगुण सालंकार रचनेने कलाकवींच्या एका नवीन संप्रदायास जन्म देणारा कवी”^५ असे द.सी. पंगू यांनी त्यांचे वर्णन केले आहे. वामन पंडितांनी आपल्या भाषाप्रभुत्वातून ‘सुश्लोक वामनाचा’ ही उपाधी खऱ्या अर्थाने सार्थ केली आहे. वामन पंडितांची एकूणच साहित्यसंपदा विविधता, विदग्धता आणि विपुलता या गुणांनी नटलेली आहे. त्यांच्या चरित्राविषयी बरेच विवाद्य प्रश्न अजूनही कायम असले तरी त्यांच्या काही आख्यानांच्या शेवटी आलेल्या ओझरत्या माहितीवरून त्यांच्या चरित्राचा काहीसा अंदाज लावता येतो. त्यावरून वामन पंडितांचे पूर्ण नाव वामन नरहरी शेष असून त्यांचा जन्म इ.स. १६०८ साली झाल्याचे दिसते. तर त्यांना श्रीसच्चिदानंद स्वामींचा गुरुपदेश लाभल्यानंतर इ.स. १६९५ मध्ये वयाच्या ८७ व्या वर्षी गुन्हेगरजवळील भूगावी त्यांनी समाधी घेतल्याचे दिसून

Divorce in india: main problem with context to todays society

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INTRODUCTION

Divorce is defined as the formal end of marriage and it involves a legal process. It signifies the end of a relationship. Divorce is one of the most painful thing one may have to undergo in life. It is the official or legal procedure to end a marriage.

A divorce is said to be the most traumatic event that can happen to a couple. In a country like India, divorce and religion are very much interconnected. Divorce occurs when a married person feels no longer capable of living with each other. It signifies end of a marital relationship, i.e., breakage of marital bonding. Divorce is a fairly long process and involves a hectic procedure in a country like India.

To be divorced, there should be a mutual consent between the couple. Only when both parties are conclusive about divorce, the court shall consider it. After a divorce is complete there is no legal relation or obligation between the married people.

Recently the number of divorce cases have increased. This is mainly attributed to the changing culture, traditions and perceptions of today's society. India's ancient customs and traditions are being transformed to modern thinking and beliefs.

Years ago, divorce was considered as a social taboo. But now Indian society is undergoing a period of change. Initially divorce cases lasted only in cities but now has spread to small towns and villages.

Hence we can say that divorce rates are increasing day by day due to modern life styles.

CAUSES OF DIVORCE/PROBLEMS IN MARRIAGE

Disloyalty: If either man or wife starts a corporal relation with anybody other than the partner without the agreement, the other party can file a demand for divorce.

Malice: Any type of physical and/or mental unkindness which initiatives a spouse to seek divorce.

Disappearance: Leaving a spouse for 2 years or more is called disappearance. There can be four kinds of desertion: wife left husband, husband left wife, wife created such a situation that husband left wife, or husband created such a situation that wife left husband. The victim can claim divorce.

Psychologically Sick: If the spouse is psychologically not stable.

Leprosy: If the spouse is suffering from leprosy.

STDs: If the spouse is suffering from any sexually transmitted disease.

Conversion: If the spouse has transformed from Hindu religion to any other religion (not Jainism or Buddhism or Sikhism; but to Islam or Christian or anything of that sort.) The other person can file for a divorce case.

Abstinence: If whichever husband or wife has left household and become a sanyasi, the other party can claim for divorce.

Missing: If one of the partners is absent for 7 or more years, the other party can file for a divorce.

Two-timing: Before the Hindu Marriage Act was made, there was no rule of exclusivity. So a person could have more than one wife. So if any person had numerous wives before the act, his all wives but the last one, have the right to fight for divorce on the ground of exclusivity after the act was made. However, husbands do not have any such right, as it was assumed that women do not marry multiple men

county to empower the people who are already in business in order to improve on their businesses to promote their business expansion and growth which will enable them to improve and participate in reducing unemployment among the youths. Policy makers should know the importance of Entrepreneurship education and training in enhancing growth of SMES, thus come up with policies that enhance entrepreneurial culture in the counties and in the country at large. The government should support organizations which come up with entrepreneurship training programs and education, enhance production of books, journals and seminars to empower entrepreneurs. The trainings should be affordable and tailored toward the needs of the entrepreneurs.

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Effect of body image issues on female athlete –Sports perspective

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Abstract:

Body image refers to how people see themselves. Distorted body image (also called negative body image) refers to an unrealistic view of how someone sees their body. Like eating disorders, it's seen most ordinarily in women, but many men also suffer from the disorder. Women who participate in sport and exercise tend to possess more positive body image than other women. Positive body image in women who exercise has been linked with variety of things including relatively greater specialize in body performance instead of aesthetics, the very fact that exercised bodies tend to be closer to the mainstream cultural ideal in terms of body fat levels and muscular tonus, and psychosocial benefits of sport, like autonomy and competence, that are linked to more positive body image. Female athletes experience both sociocultural and sport-specific pressure to vary their weight, body, and appearance and that they are in danger of developing dissatisfaction with their body. The aim paper was to research how body image affects the feminine athlete.

Keywords: female athletes, body satisfaction, Positive body image, eating disorders

Introduction:

The culture of sports and athletics are

IMPORTANCE OF PHYSICAL EDUCATION IN ONE'S LIFE

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INTRODUCTION:

According to 'Central Advisory Board of Physical Education and Recreation'- Physical education is an education through physical activities for the development of total personality of the child. Physical education is an essential and integral part of the total education program and makes significant contributions toward the achievement of desirable education and health outcomes through the medium of physical activity. Quality physical education programs promote physical growth and development of children and youth while contributing to their general health and well being. They are based on a planned sequence of experiences in a wide variety of activities beginning with basic movement skills. Ultimately, they should help young people keep physically fit and enjoy many forms of physical activity during the school years and throughout life. Physical fitness is not only one of the most important keys to a healthy body, it is the basis of dynamic and creative intellectual activity.

COMPONENTS OF PHYSICALEDUCATION:

A. Health Related

1. Cardiovascular fitness-allows body to exercise for long period of time
2. Muscular strength-how much force your muscles can produce
3. Muscular Endurance-using your muscles many times without getting tired
4. Flexibility-using your joints through a wide range of motion

B. Skill Related

1. Agility-the ability to change the position of your body quickly and to control body movements
2. Balance-keeping an upright posture while standing still or moving
3. Coordination-using your senses together with your body parts
4. Power the ability to use strength quickly
5. Speed covering a distance in a short period of time
6. Reaction-the amount of time it takes you to move.

BENEFITS OFPHYSICALEDUCATION:



A Study of E-Commerce Transaction and Its Impact on Customer's Awareness in Nagpur City

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Abstract

This paper present A Study of E-commerce Transaction and its impact on customer's awareness in Nagpur city. The data collected from E-Commerce Customers who purchase various kinds of product through E-Commerce service provider websites. For the study, purpose responses from 100.E-Commerce Customers in different areas of NagpurCityhave taken. Hence, data is collected from total 100E-Commerce Investors.

Introduction

The research is based on the Consumer Consciousness and Happiness regarding adopting E-Commerce transaction. The research discusses the opinion of the Customers regarding the E-Commerce transaction Consciousness and Happiness. Also the research analysis the problem face by the Customers while using the E-Commerce services. The research evaluates the Customers the between the activities undertaken through E-Commerce service by the Investors, the potentials of E-Commerce services and the problem of E-Commerce transaction.

The research has taken e-banking, e-payment, e-trade, e-credit and loan, e-insurance & guarantees and e-rating as the E-Commerce services which I the Customers uses for various modes of services like ATM/ debit card, credit card, mobile banking, online banking, and Teli banking. The researcher also analysis the problem faced by the Customers while dealing with E-Commerce service.

E-Commerce transaction

E-Commerce transaction is a business methodology that addresses the needs of participants to reduce costs while improving the quality of goods and services, product marketing and advertising and increasing the speed of service delivery. Kalakota and Whinston (1996) have identified four principal reasons why E-Commerce transaction such as E-Commerce and e-retailing has evolved. First, the cost of processing many types of financial and retail Trades has been rising so rapidly that it is imperative to develop new ways to handle those Trades. Second, competition in banking and retailing has become so intense that only those organizations that can provide superior consumer services, which in turn require sophisticated transaction management, will continue to grow and prosper. Third, consumers themselves are feeding the fires of competition by demanding more services and greater convenience in their banking and shopping activities. Finally, the technology is at last in place to process electronic Trades at faster speeds more easily and at less cost than consumers can process paper Trades .

Focusing on the argument of Kalakota and Whinston (1996), by describing how E-Commerce transaction technologies have been deployed by different kinds of financial and retail firms, and how the role and structure of the products and services sector have been reshaped by these new technologies.

Objective of the Study

1. To Study of E-commerce Transaction and its impact on customer's awareness in Nagpur city

Research Methodology

The researcher has adopted analytical, descriptive and comparative methodology for this report; reliance has been placed on books, journals, newspapers and online databases and on the views of writers in the discipline of Competition law.

AN ANALYTICAL STUDY OF THE CUSTOMER'S ATTITUDE AND SATISFACTION TOWARDS
INVESTMENT IN LIFE INSURANCE POLICIES

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ABSTRACT

Human life is most important Assets and the protection and safety of individuals plays an Vital role in the life of human being.

Insurance is one of the important options for the investors for earning long term returns, more tax benefits as well as maximum risk coverage. Insurance policy provide there millions of customers protection against risk of life such as unfortunate death or accident The most important type of insurance policy which provides financial security to any person and his family at the time of the uncertain situation is life insurance policy.

As the majority of Indian population cannot understand the meaning of life insurance it is considered intangible. A history shows more than 200 years of life insurance in India and still it is underrated with almost 30 percentage.

Study area is limited to Palghar district of Maharashtra and the sample size is 200 policy holders of LIC and different private life insurance companies have been selected

Keywords: Consumer Attitude, Customer Satisfaction, Insurance Policy, Investment, Life Insurance.

INTRODUCTION

Human life is most important Assets and the protection and safety of individuals plays an Vital role in the life of human being.

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Study area is limited to Palghar district of Maharashtra and the sample size is 200 policy holders of LIC and different private life insurance companies have been selected

Palghar is newly established district and separated from Thane District on 1st August, 2014. At the 2011 Census, 8 (Palghar, Vada, Vikramgad, Jawhar, Mokhada, Dahanu, Talasari and Vasai-Virar) talukas now comprising the district had a population of 2,990,116. In Palghar, 11.8% of the population is under 6 years of age. It is popularly known for adivasis. Palghar has an urban population of 1,435,210 that is 48% of total population is living in Urbanized Area. Literacy rate is 78% on an average. Major population is located in urban area of Palghar District. Investment attitude of the people is still far from the progress places like Mumbai and Thane. So the researcher has a wider scope to analyze the habit and preferences for life insurance investments

REVIEW OF LITERATURE

Jayakar (2003) gave importance to that new products innovation; distribution and better use of technology are helping the new private life insurers to increase market share as compare to LIC, a only public insurance company before liberalization of insurance industry. With the privatization of insurance sector and with the entrance and cut throat competition with the private sectors gaining an ever increasing edge over the public sector.

Athma. P and kumar. R (2007) in his research paper titled "an explorative study of life insurance purchase decision making: influence of product and non-product factors". The factual based study conducted on 200 sample size comprising of both rural and urban market. The various product and non-product related factors have been identified and their impact on life insurance purchase decision-making has been studied. Based on the survey analysis; urban market is more influenced with product based factors like risk coverage, tax benefits, return etc. Whereas rural population is influenced with non-product related factors such as: credibility of agent,

Delineation Of A Training & Development Model For Banking And Financial Sector Of India (With Special Reference To Mumbai Region)

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Supervisor

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1.0 Introduction

In accordance with the International Financial Markets, India's diverse and comprehensive financial services industry is also growing rapidly, owing to demand drivers (higher disposable incomes, customized financial solutions, etc.) and supply drivers (new service providers in existing markets, new financial solutions and products, etc.). The overall Indian financial services industry comprises of several important sub segments, which include, but are not limited to-mutual funds, pension funds, insurance companies, stock-brokers, wealth managers, financial advisory companies, and commercial banks- ranging from small domestic players to large multinational companies. All the above mentioned Banking, Financial Services and Insurance (BFSI) sectors provide services (Chen et al., (2007) to a diverse client base- including individuals, private businesses and public organizations ()

This diversity is not only limited to the clients, but also the service providers i.e. employees of these companies (Bushardt et al., 1994). Moreover, it is the skill set and knowledge of these employees that determines the growth and development of these organizations. BSFI workforce requirement between 2008 and 2022 is expected to be about 4.2 million and sector may create up to 20 lakh new jobs in the next 5-10 years. For meeting this demand there is a need of well trained manpower for Indian BFSI sector (Haridas and Chandawarkar, 2017; Kumar and Prakash, 2018). Advantaged by issuance of new licences and efforts being made by the RBI and the Government to expand financial services into rural areas, the hiring trend may further get a boost from the public sector banks. Since most

banking workforce is scheduled to retire in the times to come, they would be in dire need of fresh talent.

As McCracken et al., (2012) has said that the knowing how a positive organizational training climate can help get a more committed workforce.

Presently, the BFSI sector is witnessing use of many unconventional methods like use of social media for higher profitability (Latif, 2012; Elnaga and Imran, 2013). Although the addition of such factors is very fast, the sector itself has seen a lot of changes throughout history that demanded its employees to remain highly skilled to be considered relevant in the field (Zehra, 2016). All the skill development in this sector has been traditionally through the various trainings (Al-Athari et al., 2002) organized by the human resource department of the respective organization. However, currently, in view of the high competition in this field it is necessary to know the most important factors that govern the capacity building (Ahmad et al., 2015; Kaur, 2016) of these employees. And for this a systematic study for identification of critical success factors in the training and development process was carried. Also, a Mumbai region specific model for improving effectiveness of training and development initiatives was delineated.

2.0 Research Methodology

The present study was carried out in three steps involving reconnaissance, data collection and analysis, followed by interpretation of statistics.

2.1 Scope of the study

The Scope of the study is restricted to study the training and development practices implemented in Banking and Financial Sector in the context of capacity building of employees and with special reference to Mumbai region.

IMPACT OF CURRENCY FLUCTUATIONS ON INDIAN ECONOMY

□ DR. VINOD KHAPNE*

ABSTRACT

This paper explores the impact of currency fluctuation on Indian economy. The circumstances which has been created for the economy due to depreciation of rupee against dollar reveals that there has been a strong and significant negative impact of this currency volatility on many sectors. Indian economy which already suffered from large fiscal and current account deficit adversely affected by relatively exchange rate pressure. To track it again on the way many hard decisions were taken by RBI and Indian govt. This paper presents different challenges due to these fluctuation and steps triggered by central bank and government to create stability.

Keywords: Impact of Rupee, Dollar Fluctuations, Challenges

INTRODUCTION:

Exchange rate between two currencies is that rate at which one currency will be exchanged with another currency. It is also known as a foreign-exchange rate, forex rate. It is regarded as the value of one country's currency in terms of another currency. The spot exchange rate is the current exchange rate. The forward exchange rate is that exchange rate which is quoted today but delivery and payment settlement will be held on a specific future date. A market-based exchange rate will change whenever the values of either of the two component currencies change. A currency tends to become more valuable whenever demand for it is greater than the available supply.

In India a series of economic reforms including liberalization of foreign capital inflows were initiated since the early nineties. Foreign exchange market has emerged as the largest market in the world and the breakdown of the Bretton Woods system in 1971 marked the beginning of floating exchange rate regimes in several countries. The focus was given to wide ranging reforms of widening and deepening the foreign exchange market and liberalization of exchange control. The Forex rates are determined by market forces and are

based on demand & supply of these currencies. If supply exceeds the demand, the value of the currency depreciates.

OBJECTIVES OF THE STUDY:

- 1) To understand the concept of Exchange rate and currency fluctuation.
- 2) To understand the causes for decline of the rupee against dollar.
- 3) To study the real implications of the depreciation of the rupee on the Indian economy
- 4) Different stringent measures by RBI & government to make rupee stronger

RESEARCH METHODOLOGY:

The research paper is based on the secondary data sourced from various websites, Government reports, journals, articles, and media reports etc.

CURRENCY IMPACT ON INDIAN ECONOMY

A currency's level has a direct impact on the following aspects of the economy:

1. Merchandise trade: This refers to a nation's international trade, or its exports and imports. In general terms, a weaker currency will stimulate

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A STUDY OF RECENT DEVELOPMENT OF HUMAN RESOURCE MANAGEMENT PRACTICES IN HIGHER EDUCATION IN INDIA

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Abstract:-

In this research paper the Researcher focus on recent development of Human Resource Management practices in higher education in India. This will enable to find out scope for improvement of HRD policies of higher educational institutions. This will help in improving the Human resource policies provided by these institutions to their employees. Thus, this study is significant for improvement and betterment of Human resource policies in educational institutions in India.

Introduction:-

Educational institutions are essentially service providers but they are also work places for their employees. So, educational institutions cannot remain unaffected by the changes taking place world over. Education is today looked on as a business world over, including India and the competition is getting stiff. In this competitive scenario, management of human resources in universities is just as challenging as it is in any other organization. The human resource management strategies of an organization influence the way in which its employees work as well as how the organization itself works. Higher Education Institutions undergo fundamental changes due to globalization, growing competition for funding and staff as well as increasing institutional autonomy. These changes are linked to new responsibilities requiring greater managerial and leadership competences. Despite the high expenditures of higher education institutions on their staff a systematic application of strategic planning, managing and developing of human resources is only poorly established.

HRM activities strive towards activities that advance staff member's competencies so they have the skills to assume tasks aligned with the strategic direction of the university. If the strategic direction is not clear or HRM activities are not in alignment with the strategy, HRM activities become inefficient and useless, even if they are excellent.



OUR HERITAGE

ISSN: 0474-9030, Vol-68, Special Issue-9

International Conference On E-Business, E-Management,
E-Education and E-Governance (ICE4-2020)

Organised by

Kamla Nehru Mahavidyalaya, Nagpur

7th & 8th February-2020



A Study of Potentials and Commitments by Internet Merchants and Problem Faced by E-Trade Customers of Nagpur City

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Abstract

In this research paper the authors observed that internet merchants promise their customers that online understandings will be adequate ones, understanding what creates anadequate customer experience becomes crucial. Even though this understanding appears crucial, no studies have examined the influences that make consumers satisfied with their e-retailing experiences. The authors examine the role that consumer views of online convenience, merchandising (product offerings and product information), site design, and financial security play in e-satisfaction imposts. They concluded that convenience, site design, and financial security are the dominant influences in consumer imposts of e-satisfaction.

Introduction

E-trade is a field of trade with the use of different networks such as the Internet, so that e-trade provides online sales support operations and customer service. E-trade can be liked with electronic market where sellers (suppliers, or companies, or shops), intermediaries (brokers) and buyers, continue in providing products and services in the virtual or digital format, and pay the money. In general, it is a comprehensive expression that means any type of business or commercial

Psychoanalytic Study of Chitra Banerjee Divakaruni's *Oleander Girl*

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Abstract:-

Whenever a subject or an interpretation of human being comes, psychology comes hand in hand. We cannot judge human action, thought and behavior only on his or her outward activities; and to do this we need to take the help of psychology. In this novel, *Oleander Girl* the author explores the inner world of the characters. Freud believes that a suppressed desire finds its way in a dream. The protagonist, Korobi, sees her suppressed desire-to know her parents- in a dream. In the dream, her deceased mother urges her to know about them. Narcissist sometimes does harm to us. The grandfather of Korobi, Bimal possesses a narcissistic personality. His narcissism not only becomes the cause of his daughter's death but also his own.

Keywords: Anxiety, Dream, Narcissism, Conscious, Unconscious

Introduction:-

Our actions are outward expression of our mind, which is, according to Sigmund Freud, divided in three parts: conscious, pre-conscious (subconscious) and unconscious. We act what our conscious mind orders; but sometimes we responses in such a way that we also surprise other and ourselves too. Literary works are not the products of aliens, who come from other world, but

Postcolonial Picture of the Society in the Selected Novels of Anita Desai

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Abstract: -

Postcolonialism deals with the effect of colonization on culture and society. Likewise, Postcolonial theory deals with the literature produced by the people who once were colonized by the European Imperial power. A Great number of quality literature is produced in India after the departure of the British Empire. Postcolonial Indian English literature specially fiction occupies a great significance in the world of literature. Postcolonial Indian English novelists expand the predicament in modern times, the socio-cultural matrix of human society with its ailments, vices and weaknesses. Anita Desai is one of them. Her name is taken with great honour in the horizon of the postcolonial Indian English fiction. Though she mainly dealt with the plight and problems of women, she equally handled the postcolonial themes with great ease. In fact, she wrote a number of novels depicting and describing the social and cultural dimensions of the society. The present paper deals with her selected novels- Voices in the City, Fasting Feasting, In Custody and Clear Light of the Day. Voices in the City deals with changing social values, Fasting Feasting is about the influence of the colonized past, In Custody focuses on the monetary and language problems and other cultural issues after partition whereas Clear Light of the Day describes patriarchy and status of women in the society.

DOI: <https://doi.org/10.24113/ijellh.v8i1.10414>

A Story of Scattered Hearts: Kiran Desai's The Inheritance of Loss

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Abstract

Human beings are so fragile and impatient that they are easily subjected on emotional basis. It is in human nature that they empathise everything that emotionally attach with them. Emotion plays a vital role in the entire world of human relationship. It is not inept to note here that our thoughts are often forms the core of our actions. It reflects the framework of our psychology greatly. There are instances in the world of living where one work affects because of the mood

IDENTITY CRISIS IN CHITRA BANERJEE DIVAKARUNI'S *OLEANDER GIRL*

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Abstract

Identity is a sensitive part of every person; and if it is in dark, then he or she tries to reveal it. Sometime culture, old and new traditions make us to think what identity we should adopt? Similarly when we are unaware about our parents then we find ourselves in the crisis of identity. The same situation we find in Chitra Banerjee Divakaruni's *Oleander Girl*. The protagonist, Korobi, doesn't know her parents. Similarly she finds herself in old and new tradition. These two reasons become the cause of identity crisis in her. Inwardly the protagonist is disturbed that why her mother has named her after a poisonous flower, oleander. All these things compel her to take journey to foreign land to search her father. When she reaches the foreign land and comes to know his identity, her own identity increases. Therefore, this paper aims to deal with the identity crisis of the protagonist.

Keywords: *Anxiety, Identity, Identity – Crisis, Diaspora, Immigration*

German psychologist Erik K. Erikson has used the term identity crisis to indicate the loss of a sense of personal identity. In life when a person feels that his or her identity is losing

AN INVISIBLE VIRUS HIGHLIGHTS AN AGE-OLD VISIBLE VIRUS

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Abstract

The outbreak of Corona Virus disease (COVID-19) has created a global health crisis that has had a deep impact on the whole world. Experts believe the virus spreads mainly from person to person. No epidemic can threaten the existence of Dalits to the extent that caste discrimination and poverty do. This paper examines that the biggest issue for Dalits is not the invisible virus but the visible virus that has been exist in the society for ages i.e. caste discrimination. The paper also dissects the stark realities and hypocrisy of the present society.

Keywords: COVID-19, Caste, Discrimination, Dalit, Poverty.

The outbreak of Coronavirus impacts on the way we perceive our society and our everyday lives. Not only the rate of contagion and patterns of transmission threatens one's sense of agency, but the safety measures putting place to contain the spread of the invisible virus also requires social distancing as it spreads by being in contact with COVID-19 affected person. In India marginalized people are oppressed under the pretext of caste system. The main source is inequality which led to insecurity, exploitation and injustice. Concepts like 'race' and 'caste' are not new but as old as the history of human civilization. Indian society has played a very significant role in suppressing the people within the structure, using the power of established social system.

No epidemics can threaten the existence of Dalits to the extent that caste discrimination and poverty do. Caste discrimination is without doubt most central to the

Special Issue

897

May 2020

Website: www.langlit.org

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**One Day National Webinar On Effects of Crisis on Language, Literature and Culture Organized by
Department of English, Vasantrao Naik Government Institute of Arts and Social Sciences, Nagpur
Indexed: ICI, Google Scholar, Research Gate, Academia.edu, IBI, IIFC, DRJI, The Cite Factor, COSMOS**

Importance of E-Learning Resources for Innovative Teaching-Learning Process

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Abstract:

Today's age is an age of science and technology. It is globally accepted fact that E-learning resources are playing major role for innovative teaching-learning process. In modern scenario, this method is best suited for everyone. This digital revolution has led to remarkable changes in content accessed, consumed, discussed and shared with others. Many people of different fields are depending on their easy availability and comfort. These E-learning resources are playing major role in modern scenario.

Key-Words: E-Learning, Innovative, Digital, Teaching, Learning.

Introduction:

With easy availability and comfort, this resources access the content an unlimited number of times. This is specially required at the time of revision when preparing for an exam and research. In traditional learning, there were so many restrictions and limitations, but in e-learning resources, you can attend the lectures whenever you want with ease and comfort. A major benefit of E-learning resources is that it makes sure that you are in synchronization with modern learners. This enables the learner to access update content whenever they want it.

Another benefit of e-learning resources for innovative teaching-learning process is a way to provide quick delivery of lessons as compared to traditional classroom teaching method. It indicates that the time required to learn is reduced to 25%-60% of what is required in traditional learning process. There are different reasons why the learning time is reduced by eLearning:

- In eLearning process, lessons start quickly and easily.
- In this process, teachers and learners can define their own speed of teaching-learning instead of following the speed of the whole group.
- This process always saves time as a student does not need to travel to the training venue. You can learn at the comfort to your own place. It helps to save your time and money both.
- In this process, students and researchers can choose to study specific and relevant areas of the learning material without focusing on each and every area of the study.

It is very easy and time saving process. It always helps in creating and communicating new ideas, concepts, training, and policies. It plays major role in formal education and also in entertainment. It is a very quick way of learning, eLearning always enables researchers, students and educators to get a higher degree of coverage. To communicate the message in a consistent way. Through this process, it is easy to ensure that all learners receive the same type of training with this learning mode.

As per the demand of modern modes and methods, as compared to traditional forms, e learning is cost effective forms of learning. There are many benefits but, the reason behind it is that it happens quickly and easily. A lot of training time is reduced with respect to



Shivtirth Agro-tourism Project – A Case Study

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Abstract:

Agriculture provides a source of living to almost 54% population in India. But its share in Gross Domestic Product (GDP) has been declining steadily. In present scenario, Indian agriculture is facing many problems such as low income, in able to create new jobs, climate change, etc. Agro-tourism is a new emerging concept in the sector of tourism and it is a way to sustainable agriculture also. Agro-tourism is becoming an important for rural area as well as urban area. It provides several advantages like income, employment, and use of accommodation, activities, natural resources conservation, recreation and education.

Increase in unemployment, lower socio economic status and living challenges demands opportunities for community development in rural area without disturbing the ecology of the region; the agro-tourism is the best way. The main five forms of tourism are Natural tourism, Cultural tourism, Ecotourism, Village tourism and Agro-tourism. This case study is based on Shivtirth Agro tourism project. Information collected in the form of primary data, based on visiting the sites and communicating with owner and working employees. This study is an attempt to reveal the way of performing, handling agro-tourism and its benefit for the society.

Key words: *Argo-tourism, Local community, Community development.*

Introduction:

India is agriculturist country and near about more than 80% peoples of India depends on agriculture and its outputs directly and indirectly, therefore agriculture is the backbone of Indian economy. Majority of the Indian population living in rural belts and facing several challenges arising from socioeconomic, demographic

The Realistic Narrative Techniques in Emile bronte's Wuthering Heights: A Study

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Abstract: Narrative technique is a mode of presenting the abstract content into the form of concrete through plot, setting, characterization and narration. The present paper is an attempt in decoding the narration, the narrators and the various narrative devices used in the novel, 'Wuthering Heights'. Wuthering Heights presents a complex narrative design. The novel runs through thirty-four untitled chapters and is composed of two volumes. It presents two horizontally crossing tales within a broad framework. The novel has been narrated through multi-layered narrations. It has the huge time shifts but it is logically supported by the technique of multi narration techniques. Hence, the novel does not move in chronological order of events. The story of Wuthering Heights is narrated by Nelly. The dynamics of the plot is so complex and progressively moving some times, it demands the absence of Nelly as narrator on some occasions. To resolve this issue, Bronte makes other characters to narrate the events to Nelly who in return gets the whole picture and narrates it to Lockwood and to the readers. This many narrative layers in the novel provide polyphonic sense to the content of the story, imparting it the realism. This makes it one of the most critically approached novels.

Key words : narrative technique, multi layers, polyphonic, realism etc.

Introduction: Every novelist attempts to narrate a story with the aim of making it credible and natural. Here, the skills of the novelist in dealing with narrators, plot, setting (milieu), characters etc., play a vital role in creating the illusion of the real world to the readers. Mostly a novelist chooses any one of the two basic methods of storytelling, the one is omniscient narrator/author method, the other is to make one character as a narrator in plot progression.

However, Wuthering Heights has a complex and many-layered plot construction. Emile Bronte has chosen the peculiar method of narration. She introduces Lockwood as the narrator but very soon we understand that he is not the narrator but he is like us, the listener to the story told by Nelly. Hence, the text unfolds the story within a double frame. Lockwood's diary is the outer frame to the whole story whereas Nelly's account of all the main characters gives an inner framework to the novel.

Discussion of the study : The novel, Wuthering Heights becomes successful in seeking the total participation of the listener/reader in the development of the plot due to its unique narrative techniques. The author does not take participation in storytelling and the story doesn't have the first-person narrator, and therefore every dialogue in the story, is uttered by a character. Remarkably, the novel begins with the personal pronoun 'I' (that stands for Lockwood). For a moment it implies the presence of a first-person narrative. Nevertheless, he is not a main character and the story does not pertain to his experience. Although, it is his mystic impressions at the Heights that compels him to dig out the history of landlord's family. For this purpose, he asks Nelly Dean, his housekeeper at The Grange to narrate the life events of the Earnshaws of the Heights and the Linton's of Thrushcross Grange. She is the witness to many a principal events of the novel. Lockwood develops curiosity about the life events of Heathcliff. When he asks Nelly to tell about him she replies, "I could have told Heathcliff's history, all that you need to hear, in half a dozen words". However, Lockwood wants to know the history of former inhabitants of Wuthering Heights and Thrushcross Grange in detail and in elaborate manner because, he says,

17. Climate Change & its Impacts on Economics of Cotton Crop Agriculture

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Introduction

Cotton is leading agricultural non food commodity associate with soil degradation , water pollution and pesticide poisoning due to high levels of agrochemical inputs.

Global climate change is a change in the long term weather patterns that characterize the regions of the world the term “ weather” refers to the short-term (daily) changes in temperature, wind and precipitation of a region. In the long run the climate change could affect agriculture in several ways such as quantity and quality of crops in terms of productivity, growth rates, photosynthesis and transpiration rates, moisture availability etc. climate change is likely to directly impact food production accros the globe. Increase in the mean seasonal temperature can reduce the duration of many crops and hence reduce the yield. In areas where temperature are already close to the physiological maxima for crops, warming will impact yields more immediately.

The overall impacts of climate change on agriculture are expected to be negative, threatening global food security In 2005 , nearly half of the economically active population in developing countries 2.5 billion people. relied on agriculture for its livelihood. Today 75% of the world poor live in rural areas also in India 70% poor live in rural areas & they depends on agriculture for employment.

Climate Change & its Impact on Cotton

The earth temperature has increased by 0.74 C during the last century (1906 to 2005) due to increase in greenhouse gasses through anthropogenic emissions as reported by IPCC. Thus the increase in temperature is likely to be 1-8-40 by the turn of 21st century resulting in anticipated greater instability in food , feed and fibre production. Increase in temperature can reduce crop duration , change pest populations hasten mineralization in soils and increase evapotranspiration. It is reported that 40 and 50% less biomass is anticipated in cotton (*Gossypius* sp) at 20/10c and

“ Women And Domestic Violence In India”

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Abstract :-

Domestic violence is a burning issue in today's era. Domestic violence in India includes any forms of violence suffered by person from a biological relative but typically is the violence suffered by a women by male member of her family or relatives. According to a National Family and Health Survey in 2005. Total life time prevalence of domestic violence was 33.5% and 8.5% for sexual violence among women aged 15-49. Dalit women in Maharashtra face the violence in the form of sexual and physical abuse, economic exploitation. In India Domestic violence Bill passed in 2005 & it supported to stop domestic violence some extent. To control domestic violence prevention should start early in life by educating and working with young boys and girls promoting respectful relationship and gender equality.

Key words :- Domestic violence , sexual violence, victims, morphing, physical abuse, dowry death, harassment, exploitation, dominant case.

Introduction :-

Domestic violence is a common phenomenon throughout India & abroad. Women, who constitute nearly half of the world population are facing problems since ancient time. The various studies show that women are still backward. violence is perpetuated on usually young married women in their marital homes in many forms beating, torture, verbal abuse, starving, locking up, imposing excessive work burden abuse, starving locking up, imposing excessive work burden, denying money or running the household, sexual abuse etc. Quite often this may result in murder, but more often in driving the women to suicide. On average the domestic violence is increasing in our country due to lower status of women in the family.

Domestic violence in India includes any form of violence suffered by a person from a biological relative but typically is the violence suffered by a women by male members of her family or relatives.

According to a National family and Health survey in 2005, total lifetime prevalence of domestic violence was 33.5% and 8.5% for sexual violence among women aged 15-49. A 2014 study in the Lancet reports that although the reported sexual violence rate in India is among the lowest in the world, the large population of India means that the violence affects 27.5 million women over their lifetimes. However A survey carried out by the Thomson Reuters Foundation ranked India as the most dangerous country in the world for woman.

Back ground of the Domestic violence :-

Domestic violence or intimate partner violence (IPV) as it is sometimes called is a worldwide problem Domestic abuse includes physical, emotional and sexual violence of any form. In India the PWDVA also includes economic abuse under the definition of domestic violence. A 1999 study examined the prevalence and characteristics of domestic abuse in five districts of northern India during 1995- 1996. The study reported that in those five districts life time prevalence of domestic abuse ranged from 18% to 45%

Definition and law :-Domestic Violence is currently defined in India by the protection of women from Domestic Violence Act of 2005. According to section 3 of the Act, any act, omission or commission or conduct of the respondent shall constitute domestic violence in case it

कोरोना (कोविड 19) चा मानवी आरोग्य व भारतीय अर्थव्यवस्थेवरील परिणाम

सुनील प्र. घुगल,
असिस्टंट प्रोफेसर व अर्थशास्त्र विभाग प्रमुख
तायवाडे कॉलेज,
कोराडी जि. नागपूर

सारांश : कोरोना विशाणूच्या महामारिमुळे व त्याच्या परिणामांमुळे संपूर्ण जग हादरले आहे 180 हुन जास्त देशात पसरलेल्या या महामारिमुळे 20 लाखांच्या वर लोकांना वेढले आहे. व त्यात मृत्यु पावलेल्या लोकांचे प्रमाण 1 लाख 15 हजारांच्यावर पोहचली आहे. सुरवातीला चीनमध्ये आलेल्या या कोरोना विशाणूद्वारे नंतर इटली, स्पेन, ब्रिटन, फ्रान्स, अमेरिका यासारख्या प्रगत राष्ट्रांसोबतच जगातील अनेक मागासलेले व अर्धविकसित देशात थैमान घातले आहे. याचा मानवी आरोग्य तसेच विविध देशांच्या अर्थव्यवस्थांना धक्का पोहचुन व्यवहार ठप्प झालेले आहेत. भारतीय अर्थव्यवस्थेतील सुध्दा कृषी व असंघटीत कामगार, उद्योग व सेवा क्षेत्रातील अनेक उद्योगधंदे ठप्प पडलेत सर्वसामान्य जनतेला जिवनावश्यक वस्तुंचा तुटवडा निर्माण झाला आहे. भारतात भितीमय वातावरण असुन देशातील सरकारने व रिझर्व्ह बँकेने अर्थव्यवस्थेला बाहेर काढण्यासाठी योजना आखली आहे. यासाठी सरकारने गरिबांना व शेतकऱ्यांना आपल्या गरजा पूर्ण करता याव्या यासाठी त्यांच्या खात्यांवर जन धन योजनेमार्फत पैसा वळता केला आहे. संशोधन पेपरचा उद्देश हा कोरोनाच्या महामारिमुळे मानवी आरोग्य व अर्थव्यवस्थेवरील परिणाम अभ्यासने हा आहे. कोरोनाचा संसर्ग हा आपल्या जवळच्या संपर्कादरम्यान, खोकल्यामुळे, शिकण्यामुळे, कीर्वा बोलताना नकळत बाहेर पडणाऱ्या थुंकीच्या तुशारामुळे लोकांमध्ये पसरतो म्हणुनच जगातील भारतातील सरकारने 'घरी रहा, सुरक्षित रहा' हा नारा दिलेला आहे. कोरोनाच्या संसर्गाला W.H.O ने 11 मार्च 2020 ला महामारी घोषित केली. कोरोनावर उपचार नाही. फक्त रोग्यांच्या लक्षणावर आधारित उपचार, प्रतिकारशक्ति वाढविण्याचे उपाय या गोष्टींचा उपचार म्हणुन वापर केला जातो. म्हणुनच येणाऱ्या काळात सतर्क राहण्याची खबरदारी प्रत्येक व्यक्तीची व सरकारची आहे. भारतात सद्यास्थितीत 28 हजारांच्या वर कोरोनाचे रुग्ण पोहचले आहे व हजारांच्या जवळ मृत्यु पावले आहे.

प्रस्तावणा :-



महात्मा गांधीच्या आर्थिक विचारांची प्रासंगिकता

सुनिल प्रभाकर घुगल

सहाय्यक प्राध्यापक व अर्थशास्त्र,
विभाग, प्रमुख तायवाडे महाविद्यालय
महादुला-कोराडी. तह.कामठी जि. नागपूर

सारांश :-

जगामध्ये जे अनेक महान नेते होऊन गेले त्यात आपल्या भारताच्या माहात्मा गांधीचे नाव सुध्दा आहे. जे लोक काळानुसार समाजाच्या समस्या व गरजा भागविण्यासाठी प्रयत्न करतात ते लोक त्या त्या काळात महान ठरले त्यात मा. गांधीजीचे नाव घेणे हे अतिशयोक्ती होणार नाही. मा. गांधींनी सत्य, अहिंसा, धर्म, राजकारण, कुटिर व ग्रामोद्योग, सर्वोदय, खादीचे अर्थशास्त्र, ग्रामसफाई व स्वच्छता, ग्रामस्वराज्य, नितीमुल्य व आर्थिक विकास, स्वदेशी, संतती नियमन, श्रमप्रतिष्ठा, मोठ्या उद्योगांना विरोध, स्त्रियांची उन्नती व सक्षमिकरण, व्यसनमुक्ती इत्यादीबाबत मांडलेल्या विचारांतून त्यांचे आर्थिक व सामाजिक विचार स्पष्ट होते. मा. गांधीजीचे विचार हे जीवनाच्या सामाजिक, राजकीय, धार्मिक व नैतिक पैलुना स्पर्श करतात. त्यांचे विचार हे सामाजिक न्याय व कल्याण प्रस्थापित करणारे आहे संपत्तीचे देशात विषम विभाजन होत असेल तर ही एक सामाजिक समस्या आहे असे ते मानत. आजच्या जागतिक 1991 च्या नविन आर्थिक धोरणानुसार जगात मुक्त अर्थव्यवस्थेचा स्विकार केल्या गेला अर्थव्यवस्थांचे जागतिकीकरण, उदारिकरण व खाजगीकरण झाले. परंतु या नविन आर्थिक धोरणामुळे मंदी, बेकारी, अतिउत्पादन, मागासलेली शेती, वाढते औद्योगिकीकरणामुळे पर्यावरणीय हाणी, प्रदुषण व त्याचा माणवी स्वास्थावर होणारा विपरीत परिणाम व विविध रोगांचा प्रादुर्भाव व त्यातून बरे होण्यासाठी लोकांच्या उत्पन्नाची उधळपट्टी यासारख्या अनेक समस्यावर उपाय हे गांधीजिंच्या विचारात आपल्याला सापडते.

प्रस्तावना :-

जगामध्ये जे अनेक महान नेते होऊन गेले त्यात आपल्या भारताच्या माहात्मा गांधीचे नाव सुध्दा आहे. परमेश्वराची भारतावर मोठी कृपा आहे. अनादिकाळापासून आजपर्यंत अनेक महापुरुष येथे झाले आहेत, आणि येथील जीवन कमी प्रमाणात त्यांनी समृद्ध केले. या महापुरुषांच्या परंपरेचा शेवटचा जोड (कडी) समजला जाईल असा आणि यापुढे येणाऱ्या महापुरुषांच्या श्रेणीत प्रथम समजला जाईल असा पुरुष माहात्मा गांधी होते. जे लोक काळानुसार समाजाच्या समस्या व गरजा भागविण्यासाठी प्रयत्न करतात ते लोक त्या त्या काळात महान ठरले त्यात मा. गांधीजीचे नाव घेणे हे अतिशयोक्ती होणार नाही. दक्षीण अफ्रिकेतील काळ्या गोऱ्यांचा प्रश्न व त्यातून निर्मित उच्च-निचतेचा प्रश्न, बिहार मधील चंपारण्यातील शेतकऱ्यांचा प्रश्न, गुजरात राज्यातील अहमदाबाद येथील गिरणीकामगारांचा प्रश्न असो मिठावरील कराचा प्रश्न, ब्रिटिशांच्या गुलामगिरीत असलेल्या भारताच्या स्वातंत्र्याचा प्रश्न हिंदु मुसलीम वाद, स्पृश्य-अस्पृश्यता यासारखे महत्वाच्या समस्या व प्रश्न त्यांनी सद्विवेक बुद्धीने व अहिंसा, सत्य व प्रेम, असहकार, सविनय कायदेभंग यासारख्या सनदशीर मार्गाने सोडविल्या म्हणूनच ते 20 व्या शतकातील महापुरुष ठरले.

महात्मा गांधी यांनी अर्थशास्त्रावर स्वतंत्र ग्रंथ लिहिलेला नसला तरी देखील त्यांनी भारतातील निर्धन नागरीकांना सहाय्यतेसाठी एक व्यवहारीक आर्थिक कार्यक्रम दिला. महात्मा गांधी हे शास्त्रीय दृष्टिने अर्थशास्त्रज्ञ नसून देखिल त्यांच्या विचारांनी भारतीय अर्थशास्त्रावर व्यापक प्रभाव पाडला आहे.



Major Problems in Indian Economy

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Abstract:

India is a developing market economy. It is the fifth largest economy in terms of nominal GDP and the third largest in terms of purchasing power parity (PPP). According to the IMF based on per capita income, India ranked 142nd in terms of GDP (nominal) and 119th in terms of GDP (PPP) per capita in 2018 since the start of the 21st century, average annual growth of GDP was 6% to 7% and from 2014 to 2018, India was the world's fastest growing main economy, overtaking China. India's GDP growth is falling and reached 4.5% in 2019, November. Our economy dramatized GDP by 8.2% in the 13th plan. We must redouble our efforts to maintain this GDP until 2024. The service sector represents 55.60% of GDP and remains the fastest growing sector, while the industrial sector employs the majority of the workforce. 'artwork. Almost 70% of India's population is rural, whose main source of livelihood is agriculture.

India has a high national debt with 68% of the DGP. While its budget deficit remained at 3.4% of GDP.

India is facing high unemployment, increased income equality and a sharp drop in demand, poverty, climate change and its consequences like a storm, the melting ice on the place cooling, rising sea levels, population problems, urbanization, water and air pollution, extreme precipitation events, droughts and its impact on crop yields and the agricultural industry, economic growth, etc. Recently, our Indian economy is \$ 2.8 trillion.

The objective of the study is to examine the problems of the Indian economy such as unemployment, inequality, poverty, climate change and any impact on the Indian economy and the rate of growth.

□ **Keywords:** Indian economy, economic growth, Indian GDP, foreign direct investment, unemployment, poverty, inequality, income and wealth, climate change.

□ **Introduction:** The economy of India is characterized as a developing market economy. It is the fifth world economy in terms of nominal GDP and the third in terms of purchasing power parity (PPP). According to the IMF, based on per capita income, India ranked 142nd in terms of GDP (nominal) and 119th in terms of GDP (PPP) per capita in 2018 since the start of the 21st century, annual growth GDP average was 6% to 7% and from 2014 to 2018, India was the world's fastest growing main economy, overtaking China. In 2019, the November Indian economy reached \$ 2.8 trillion. GDP growth fell from 6% to 4.5%.

The outlook for long-term growth of the Indian economy remains positive due to its young population and the corresponding low dependency ratio, good savings and investment rates, and increases integration into the world economy. The economy slowed in 2017, due to the "demonetization" shocks in 2016 and the introduction of the goods and services tax.

Almost 60% of India's GDP is driven by domestic private consumption and remains the sixth largest consumer market in the world. In addition to private consumption, India's GDP is also fueled by public spending, investment and exports. In 2018, India was the tenth largest importer in the world and the nineteenth - the largest exporter. India has been a member of the World Trade Organization since January 1, 1995. It ranks 63rd on the report on global competitiveness with 520 million workers,



जागतिक मुक्त व्यापार व WTO चे यश-अपयश

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सारांश:-

1991 च्या आंतरराष्ट्रीय पातळीवर जागतिकीकरण, उदाकिरण व खाजगीकरणाच्या धोरणानंतर 1 जानेवारी 1995 ला W.T.O ची स्थापना झाली. व भारताने W.T.O च्या करारावर सहया करून मुक्त व्यापार धोरणाचा स्विकार केला. या करारांतर्गत शेतमालाचा व्यापार खुला करणे. आयात शुल्क कमी करणे, देशांतर्गत अर्थसहाय्य हळूहळू कमी करणे इ.बाबी ठरविण्यात आल्या हयाबाबत 10 वर्षांची मर्यादा विकासनशील देशासाठी ठरविण्यात आली. पण नंतरच्या काळात भारतीय अर्थव्यवस्थेवर त्यांचा परिणाम दिसायला सुरुवात झाली. आरसेम मुळे भारताचा तोटा होण्याची शक्यता आहे. हे नाकारता येत नाही. एकुणच W.T.O चा दृश्य व अदृश्य परिणाम भारतीय शेतकरी, व्यापारी, कारखानदार यांच्यावर होऊन देशाच्या आयात निर्यातीवर सुध्दा परिणाम झालेला आहे. अशाप्रकारे डब्लू टी.ओ.चे भारताला फायदे व तोटे दिसून येतात.

प्रस्तावना :-

आंतरराष्ट्रीय मुद्रा निधी आणि जागतिक बँक स्थापनेच्या घोषणापत्रात सन 1944 मध्ये भरलेल्या ब्रिटन बुड कॉन्फरन्स मध्ये आंतरराष्ट्रीय व्यापारासाठी या दोन संस्थाना समकक्ष अशा संस्थेच्या महत्वावर जोर दिला गेला. लगेच दोन वर्षांनंतर तीस-या संस्थेच्या रूपाने आंतरराष्ट्रीय व्यापार संघटनेच्या स्थापनेसाठी संयुक्त राज्य अमेरिकेत एका प्रारूपाचे प्रकाशन केले गेले. परंतु कॉंग्रेसच्या प्रखर विरोधामुळे या जागतिक व्यापार संघटनेची स्थापना होऊन शकली नाही. आंतरराष्ट्रीय व्यापार संघटनेच्या ऐवजी 1947 मध्ये 23 सदस्यांद्वारे गॅट (जनरल अॅग्रीमेंट ऑन टॅरिफ अॅण्ड ट्रेड या सीमा शुल्क व व्यापाराबाबत सामान्य समझोता) कराराची स्थापना केली. सन 1948 मध्ये हवाना कॉन्फरन्स मध्ये गॅट कराराला अंतिम रूप दिल्या गेले. सन 1947 पासून ते 1993 पर्यंत गॅट करारामधील सदस्य देशांमध्ये व्यापारवार्ताचे आठ राऊंड सफलतापूर्वक संपन्न झाले.

गॅट व्यापार वार्तांचे राऊंड

वर्ष	स्थान	चर्चेतील विषय	सहभागी सदस्य देश
1947	जिनेव्हा	सिमा शुल्क	23
1947	एन्सि	सिमा शुल्क	13
1951	टॉक्वे	सिमा शुल्क	38
1956	जिनेव्हा	सिमा शुल्क	26
1960-61	जिनेव्हा (डीलॉन राऊंड)	सिमा शुल्क	26
1964-67	जिनेव्हा (केनेडी राऊंड)	सिमा शुल्क व अॅन्टी डॅंपिंग उपाय	62
1973-79	जिनेव्हा (टोक्यो राऊंड)	सिमा शुल्क, डॅंपिंग विरोधी इतर उपाय व 'ढाचागत' करार	102
1986-93	जिनेव्हा (उरुग्वे)	सीमा शुल्क व अन्य डॅंपिंग विरोधी उपाय,	123

Gender And Education In India

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In our society, we notice the differences between boys and girls at all places, in the family, on road, in playground, in gender bias present in economic, social, religious and educational matter also. These differences between the two genders are the result of social experiences over a long time. Girls belong to the homosapiens so they are equal to boys. Right from birth they possess all those rights which they ought to possess as humans. They born with fundamental rights like life food, education, health and employment opportunities.

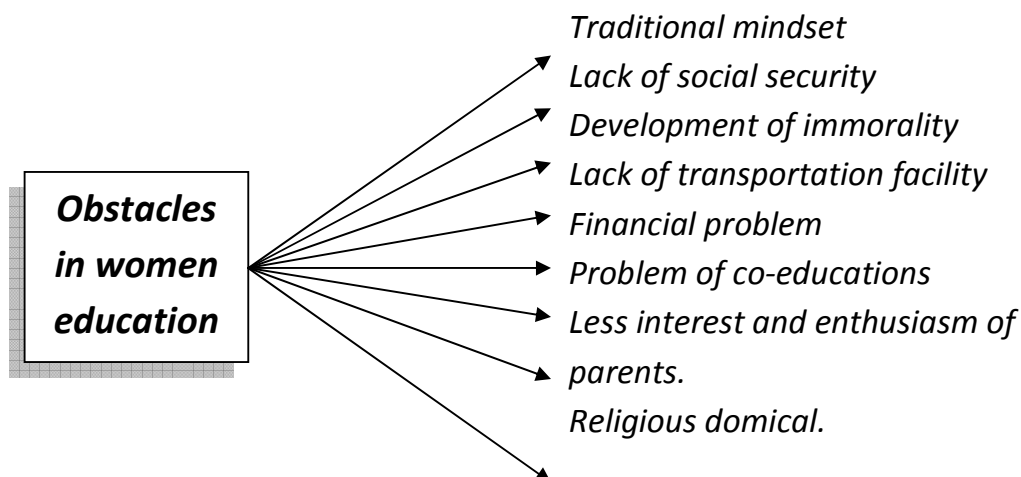
Gender discrimination takes place in each corner of world, whether it is the remote under-developed country or a prosperous industrial country. This discrimination takes place at all levels and in all groups of the society, family community, governments.

In the 2011 censuses, the females literacy levels according to literacy rate are 65.46% where the male literacy rate is over 80%. For the past four decades, the goal the education policy in India has been aimed at beginning about gender equality however this goal has not been implemented.

Obstacles in women education:

India is known for its progressive educational policies on so far as gender issues are concerned. The national education policy, 1986 has paid special emphasis on women education. According to education policy of India, education will be used as an agent of basic change in the status of women. In order to neutralize, accumulated distortions of the past, there will be well achieved edge in favour of women. The national educational system will play a positive internationalist role in the empowerment of women.

Despite efforts far gender equality and universalisation of education over three decades the actual condition has remained worrying. Especially in rural and deprived classes where girls' conditions has not improved.



Traditional mindset:

By traditional thinking girl is a 'parayadhan'. This thinking of *parayadhan* is not going to give parents any return for the money spent on their education. It is so thought and this is one of the main reasons that girls are not sent to school. Dowry system is also a massive problem. Parents do not want their girls to be highly educated because this will enquire a more educated groom, for whom a



Theoretical Perspective Of Non-Performing Assets Management in India

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Abstract:

A non-performing asset is a loan or lease that is not meeting its stated principal and interest payments. It is a debt obligation where the borrower has not paid any previously agreed upon interest and principal repayments to the designated lender for an extended period of time. The non-performing asset is therefore not yielding any income to the lender in the form of principal and interest payments. An asset, including a leased asset, becomes non-performing when it comes to generate income for the bank. A 'non-performing asset' (NPA) is defined as the credit facility in respect of which the interest and / or installment of principal has remained 'past due' for a specified period of time. The regulations should be very strict and precise according to the needs of the banks so that the NPA's should be properly maintained. The bank should also make the special account of the client where monthly loan concentration report should be maintained. The paper conclude that, It is also wise for the banks to carry out special investigation audit of all financial transactions and books of account of the borrower when there is possibility of the diversion on the funds and mismanagement.

Keywords: non-performing asset, debt obligation, interest and principal repayments, regulations, special investigation audit.

Introduction:

The economic progress of a nation and development of banking is invariably interrelated. The Banking sector is an indispensable financial service sector supporting development plans through channelizing funds for productive purpose, intermediating flow of funds from surplus to deficit units and supporting financial and economic policies of government. The importance of banks stability in a developing economy is noteworthy as any distress affects the development plans thereby the economic progress. The Indian banking sector accounts a major portion of financial intermediation and is acknowledged as a main vehicle for monetary policy signals, credit channels and facilitator for payment systems.

A non-performing asset is a loan or lease that is not meeting its stated principal and interest payments. Generally, it is an asset which is not producing income. Banks usually treat assets as non-performing if they are not serviced for some time. If payments are late for a short time a loan is classified as past due. Once a payment becomes really late (usually 90 days), the loan classified as non-performing.

Non-performing assets:

In business and accounting, an Asset is defined as a probable future economic benefit obtained or controlled by a particular country as a result of a past transaction or an event. In simple terms, an asset is a thing, usually something of value, and usually something you own.

All assets can be classified as being on one of the five stages:

- Performing
- Performing but compromised
- Under - Performing
- Non-performing
- Charge-Offs

Performing Assets:

This is a loan or a property (an asset) that is making payments on time, and there are no problems and concerns.

Performing but compromised Assets:

This is a loan or property (an Asset) that is making promises, and has a current balance. However it has been delinquent in the past, and there is concern that the collateral or borrower is impaired. The collectability of this Asset is less certain than a fully performing Asset, and the holder should have taken accordingly greater reserves.

E –Commerce in India

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Abstract

E-Commerce is growing with swift pace in our country. Backed by increasing internet users' base and favourable demographics, Indian E-Commerce Industry has registered impressive growth in the last few years. There are tremendous opportunities of growth in E-Commerce in future also. But there are certain challenges which need to be addressed properly.

Keywords : *E-Commerce*

Introduction

E-Commerce stands for electronic commerce and caters to exchange of products, services and information via internet. Electronic commerce is more than just buying and selling products online. It includes the entire online process of developing, marketing, selling, delivering, serving and paying for products and services. It is doing business online. It includes any commercial activity that takes place directly between a business, its partners, or its customers through electronic communication and digital information processing technology. E-Commerce is a modern business methodology that addresses the needs of the organisations, merchants and consumers to cut costs while improving the quality of goods and services and increasing the speed of service delivery. India has shown tremendous growth in the E-Commerce segment.



An Analytical Study of E-Commerce Services Associated to Consumer Attentiveness and Consumption with Reference to Nagpur Area

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Abstract

This paper presents E-commerce services related to Consumer Attentiveness and Consumption in Nagpur Area. The data collected from E-commerce Consumer who purchase various kinds of product through E-commerce service provider websites. For the study, purpose responses from 1250 E-commerce Consumer in different areas of Nagpur Area have taken. Hence, data is collected from total 1250 E-commerce Investors.

Introduction

The research is based on the Consumer Attentiveness and Consumption regarding adopting E-commerce transaction. The research discusses the opinion of the Consumer regarding the E-commerce transaction Attentiveness and Consumption. Also the research analysis the problem face by the Consumer while using the E-commerce services. The research evaluates the Consumer the between the activities undertaken through E-commerce service by the Investors, the potentials of E-commerce services and the problem of E-commerce transaction.

The research has taken e-banking, e-payment, e-trade, e-credit and loan, e-insurance & guarantees and e-rating as the E-commerce services which I the Consumer uses for various modes of services like ATM/ debit card, credit card, mobile banking, online banking, and Teli banking. The researcher also analysis the problem faced by the Consumer while dealing with E-commerce service.

E-commerce transaction

E-commerce transaction is a business methodology that addresses the needs of participants to reduce costs while improving the quality of goods and services, product marketing and advertising and increasing the speed of service delivery. Kalakota and Whinston (1996) have identified four principal reasons why E-commerce transaction such as E-commerce and e-retailing has evolved. First, the cost of processing many types of financial and retail Services has been rising so rapidly that it is imperative to develop new ways to handle those Services. Second, competition in banking and retailing has become so intense that only those organizations that can provide superior consumer services, which in turn require sophisticated transaction management, will continue to grow and prosper. Third, consumers themselves are feeding the fires of competition by demanding more services and greater convenience in their banking and shopping activities. Finally, the technology is at last in place to process electronic Services at faster speeds more easily and at less cost than consumers can process paper Services.

Focusing on the argument of Kalakota and Whinston (1996), by describing how E-commerce transaction technologies have been deployed by different kinds of financial and retail firms, and how the role and structure of the products and services sector have been reshaped by these new technologies.

Objective of the Study

To study customer are Attentiveness and Consumption regarding E-commerce transaction

Research Methodology

The researcher has adopted analytical, descriptive and comparative methodology for this report; reliance has been placed on books, journals, newspapers and online databases and on the views of writers in the discipline of Competition law.

जागतिकीकरण आणि मराठी ग्रामीणकविता

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कोराडी, जि. नागपूर

सारांश

नव्वदोत्तर कालखंडात आधुनिक महाराष्ट्राच्या आर्थिक, सामाजिक, सांस्कृतिक परिस्थितीमध्ये, जगण्याच्या शैलीमध्ये, मूल्यदृष्टीमध्ये जे लक्षणीय बदल झाले त्याला मराठीतल्या नव्वदनंतरच्या कवींनी वैशिष्ट्यपूर्ण पध्दतीने प्रतिसाद दिलेला आहे. या काळात जागतिक स्तरावर व्यापार, राजकारण, समाजकारण, दहशतवाद अशा सर्व घटकांशी माणसांचे जगणे जोडले गेल्यामुळे या कालखंडाचा प्रभाव जीवनाच्या सर्वच स्तरावर अधिक प्रखरपणे, प्रभावीपणे पडला. या कालखंडात निर्माण होणारी सर्व प्रवृत्ती प्रवाहातील मराठी ग्रामीण कविता जागतिक घडामोडींशी निगडित असणारी कविता आहे. ग्रामीण संस्कृतीशी बांधील राहूनच ग्रामीण कवितेत बदलते वास्तव आले. तुळशीलाही पाणी टाकण्याचा कंटाळा ज्या समाजाला आला तो झाड कसे जगवणार? जर झाडे जगवली नाही तर अशांतता निर्माण होईल हे ग्रामीण कवितेने हेरले. निसर्ग जीवनाशी समरस होऊन त्यांचे लेखन प्रकटले. पाण्याअभावी शेतकऱ्यांवर आलेले संकट, अतिवृष्टी अनावृष्टीमुळे झालेली हतबलता, ग्रामव्यवस्थेवर, सामान्य मानसाच्या जगण्यावर भांडवलशाही अर्थव्यवस्थेचा झालेला परिणाम, शेतकरी, स्त्री यांच्या वेदनांची गहनता, भ्रष्टाचार, खेड्यातील मुलांची शिक्षणाअभावी होणारी वाताहत, स्वार्थामुळे कुटुंबातल्या नात्यात निर्माण झालेली हिंसक वृत्ती, कर्जांमुळे शेतकऱ्यांच्या झालेल्या आत्महत्या, समाजजीवनाची होणारी पडझड, जीवन यंत्रवत चालल्याची भिती, अशा सर्वप्रकारच्या आव्हानात्मक प्रश्नातून निर्माण झालेल्या अस्वस्थतेमुळे विद्रोहाची परिवर्तनशील जाणीव या दशकातील कवींच्या सर्जनशील मानसिकतेवर प्रभाव गाजवित राहिली. त्या अस्वस्थ वर्तमानापोटी ग्रामजीवनाच्या करुणेतून ही कविता बहरून आली.

१. विदर्भाची अखंड काव्यपरंपरा

डॉ. कोमल वि. ठाकरे

तायवाडे महाविद्यालय महादुला कोराडी.

वैदर्भीय साहित्याला फार जुनी व प्रदीर्घ व प्रगल्भ परंपरा आहे. ऋग्वेदातील सूक्तकारांपासून तर विदर्भ वाड्मयाच्या काळातील दण्डी, भारवीसारखे महाकवी, संस्कृत महाकवी कालिदास, विवेकसिंधूकार त्रिविक्रमभट्ट आद्यकवी मुकुंदराज अशी वैदर्भीय कवितेची समृद्ध परंपरा आहे. भवभूती गुणाढय, राजशेखरसारखे नाटककारही विदर्भभूमीतच जन्माला आहे. राजशेखरने तर आपल्या काव्यमीमांसेत विदर्भाबद्दल केलेले वर्णन सर्वज्ञात आहेच. 'हे सुंदर सीते स्वर्गाचा सुखकर मार्ग व वेदांचे सातवे अंग, उसाच्या रसापेक्षाही मधुर व शब्दरूपी नेत्र असलेले जे मधुर प्रासादिक सुरस मनोहर काव्यामृत ज्या देशात आहे व जो विद्येचे माहेरघर आहे तो हा विदर्भप्रदेश पुढे आहे.' अशा विदर्भात मेघदूत, लीळाचरित्र, विवेकसिंधूसारखे ग्रंथ जन्माला आले आहेत. विदर्भाच्या कसदार मातीत फुललेली प्रतिभा निळ्या आकाशाला व्यापून आहे.

कालिदास हा कवीना वेड लावणारा अक्षय प्रतिभेचा महाकवी म्हणून प्रख्यात आहे. महाकाव्यानंतर ललित प्रतिभेचे दिव्य स्रोत कालिदासाच्याच काव्यात अविकृत जिवंतपणे पाझरताना दिसतात. मेघदूतातील निसर्गवर्णने, प्रेम-विरहाची भावव्याकुळ चित्रणे अजरामर झालेली आहेत. राम शेवाळकर म्हणतात त्याप्रमाणे 'कालिदास हा जाणून बुजून भलाकवी त्याच्या परिष्करणात रामसीतांच्या स्वभावातील सूक्ष्म, नागमोडी, नाजूक प्रक्रियांचे मनोगाहनात्मक दर्शन असण्याऐवजी कलेच्या अनेकरंगी तुषारांचे कमनीय नर्तन आहे. व्यग्रतेच्या मंथर पदव्यासाऐवजी नुपरांची मुलायम रूमझुम आहे.' अशी भावमय शब्दरूपांची चित्रे रखाटणाऱ्या कालिदासाच्या मेघदूताचे इंग्लिश, जर्मन आणि फ्रेंच भाषांत अनुवाद झालेत. 'आषाढस्य प्रथम दिवसे' च्या निमित्ताने सातत्याने स्मरण होणाऱ्या कालिदासाचे विदर्भभूमीशी अनन्यसाधारण नाते होते. हे नाते रामटेक आठवण करून देते. मेघदूताचे रोमांचपर्व अजूनही रसिकमनाला भुरळ घालते. 'वैनंगेच्या तिरी मनोहर अंबानगरी' हे वर्णन विदर्भातील अंभोरा या गावाला लागू पडते या वर्णनावरूनच मुकुंदराज हे विदर्भाचे प्रज्ञाशील अपत्य ठरते. अद्वैत सिद्धान्ताचे प्रतिपादन करणारा विवेकसिंधू हा ग्रंथ आणि 'परमामृत' हा दुसरा ओवीबद्ध ग्रंथ अशी मुकुंदराजांची अनमोल ग्रंथनिर्मिती मराठी साहित्यप्रांतात सुपरिचित आहे.

महानुभाव पंथाच्या प्रभातकाळातील बहुतेक महत्त्वाचे ग्रंथ विदर्भातच लिहिल्या गेले. मराठी भाषेतील पहिला गद्य ग्रंथ, पहिला चरित्रग्रंथ 'लीळाचरित्र' विदर्भातच रिद्धपूर येथे लिहिल्या गेला. मराठीतील आद्यकवियित्रीचा बहुमान ज्या महदंबेला प्राप्त झाला तिच्या धवळ्यांची निर्मितीही विदर्भातील रिद्धपूरलाच झाली. प्राकृत सप्तशती. लिहिणारा उत्तमश्लोक हा उमरखेडचा होता. त्यानंतर अब्बल इंग्रजीच्या काळात विष्णुकवी, देवनाथ महाराज, दयाळनाथ महाराज, प्रज्ञाचक्षू गुलाबराव महाराजांसारखे अलौकिक संतकवी

ई माध्यम : भाषा संवर्धनाची वर्तमान गरज

कोमल ठाकरे

सहयोगी प्राध्यापक

तायवाडे महाविद्यालय, कोराडी

सारांश

मराठी भाषा, साहित्याचा अभ्यास करतांना, त्याचे अध्ययन अध्यापन करताना आपल्या ज्ञानकक्षा अधिक वृद्धिंगत होण्यासाठी आपल्यातील सुप्त कलाकौशल्याच्या विकसनासाठी आजच्या पिढीला नव्या तंत्रज्ञानाच्या माध्यमातून ज्ञान देण्याची आवश्यकता आहे. हे ज्ञान देताना शिक्षकाला त्या नव्या तंत्रज्ञानाच्या साधनांची माहिती असणे नितांत गरजेचे आहे. जागतिकीकरणाच्या, उदारीकरणाच्या गेल्या दोन दशकांमध्ये शेती, सेवा, उद्योग, आरोग्य, प्रसारमाध्यमे, चित्रपट, संगीत, साहित्य या व अशा सर्वच क्षेत्रात झपाट्याने बदल होत चालला. यातल्या काही क्षेत्रांचा तर नव्या तंत्रज्ञानाने कायापालट करून टाकला. एकेकाळी पुस्तक घेवून वाचणे ही मध्यमवर्गीयांची सवय होती. आता ही सवय समाजातल्या सर्व स्तरातील लोकांना झाली. पुस्तक विकत घेण्याविषयी अनुकूलता वाढली. पूर्वी आवडही कमी होती. अनुकूलताही नव्हती. परिस्थिती वाईट होती. आता माहितीच्या प्रचंड स्फोटामुळे, सेवासुविधांमुळे ही अनुकूल परिस्थिती निर्माण झाली. गेल्या सात-आठ वर्षात माहिती तंत्रज्ञान हे 'पावर फिर्नमिनन' झालेलं आहे. भारतातील ६४ टक्के लोकसंख्या ही २० ते ३५ या वयोगटातील आहे. त्यामुळे भारत हा तरुणांचा देश आहे.

तरुणांची माध्यमे नवी आहेत. त्यांच्या हातात स्मार्ट फोन, टॅब, फॅब, आहे. किंडल आहे. त्यांच्या कामाचा सर्वात जास्त वेळ डेस्कटॉप, लॅपटॉपवर जात आहे. भारतीय तरुणांना आकर्षित करण्याची संधी मराठी साहित्याला मोठ्या प्रमाणात प्राप्त झालेली आहे. काळानुरूप वाचकाची अभिरुची बदलत चालली आहे. आता मुलांना पडलेल्या प्रश्नांची उत्तरे लगेच, ताबडतोब मिळत आहे. त्याला ग्रंथलयात जावून पुस्तक शोधून त्यातून माहिती काढण्याची आवश्यकता राहिली नाही. तो थेट 'गुगल सर्च' करून लेखक, कवी, कादंबरी, नाटक अशा कुठल्याही प्रकारच्या साहित्यकृतीची अथवा साहित्यिकाची माहिती लगेच मिळवितो. यासाठी ज्योत्स्ना, राजहंस, मौज, पॉप्युलर, कॉन्टीनेंटल यासारख्या मराठीतील प्रकाशन संस्थांनी 'मराठी रीडर' हे ॲप सुरू केले आहे. मराठी ई बुकची विक्री करण्यासाठी हे ॲप त्यांनी सुरू केले. अलीकडे मराठी विश्वकोशाचे सर्व खंड वेबसाईटवर विनामूल्य उपलब्ध करून देण्यात आले. त्यांचे स्वतंत्र ॲपही तयार करण्यात आले. २००६ साली स्नोवेल या कंपनीने मराठी ऑडीओ बुक काढायला सुरुवात केली. २०११ मध्ये मराठीतील कविता महाजन यांची 'कुहू' ही पहिली मल्टिमीडिया कादंबरी तयार झाली. युरोपमध्ये ऑडीओ बुकची उलाढाल नऊ हजार कोटीवर पोहोचली पण भारतात मराठीत 'ऑडीओ बुक' या संकल्पनेला फारसे स्थान मिळाले नाही जपानमध्ये थेट मोबाईलवर लिहिल्या जाणाऱ्या कादंबरी प्रकारचा अर्थात मोबाईल नॉव्हेलचा जन्म २००३ साली झाला जपानी भाषेत त्याला 'केताई शोसेत्सी' असे म्हणतात. केताई म्हणजे मोबाईल आणि शोसेत्सी म्हणजे कादंबरी 'डीपलव्ह' ही टोकीयातील योशी या तरुण युवकाने लिहिलेली पहिली कादंबरी मोबाईल नॉव्हेलच्या रूपाने प्रकाशित झाली. मोबाईल कादंबरी प्रमाणे चीनमध्ये पहिल्यांदा कॉमिक्स बुकची संक्षिप्त आवृत्ती म्हणून 'मोमिक्स' सुरू झाले. भारतात मोमिक्सचा प्रयोग अमर चित्रकथेने केला. तो यशस्वी झाला सध्यायात इंग्रजी कॉमिक्स पाहायला मिळत आहे. लवकरच यात सर्व भाषांचा समावेश होईल. त्यात मराठी असेल तेव्हा नव्या



महामानव महात्मा गांधीचे समाज व धर्मविषयक तत्त्वज्ञान

डॉ. कोमल ठाकरे

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तायवाडे महाविद्यालय, कोराडी

सारांश –

महात्मा गांधी हे या सहस्त्रकातील महामानव आहे. जगातल्या अनेक महान विद्वानांनी त्यांचे महामानवत्व सिद्ध केले आहे. गांधीजी भारतातील गरीबी पाहून अस्वस्थ झाले. त्यांच्या संवेदनशील अस्वस्थ मनाने देशसेवेचे व्रत स्वीकारले. त्यासाठी ते राजकारणात आले. मानवधर्माची मूल्ये व राष्ट्रप्रेम समाजमनात रुजविण्याचे कार्य केले. त्यांनी आईचा शब्द महत्वाचा मानला. मुळातच असलेल्या सश्रद्ध भावबळावर आपल्या आत्मशक्तीला जागे करून सर्वांना सर्वधर्मसमभावाची शिकवण दिली. समाजातील जातीभेद आणि अस्पृश्यता निवारण्याचे कार्य केले. सत्याग्रह व उपासनेच्या माध्यमातून आतला आवाज जागवून मानवाच्या हृदयपरिवर्तनाचे कार्य केले. अहिंसात्मक मार्गाचे समाजभान जागे करून मानवी मनात प्रेम जागविले. राजकारणात, सामाजिक जीवनात, शिक्षणात, व्यापारात नीतीतत्वाचे पालन कसे करावे हे पटवून दिले.

महामानव –

महामानव हा सामान्य माणसापेक्षा नीतीदृष्ट्या खूप उंच असतो. चारित्र्यसंपन्न असतो. मानव, दानव न होता देव होऊ लागला की महामानव होतो. गुणांनी उंच होता होता जो भूतल सोडतो आणि आकाशाला भिडतो त्याला महामानव म्हणतात. संपूर्ण जगाला गांधीजींची ओळख असल्यामुळेच आज आंतरराष्ट्रीय पातळीवर गांधीजींची जयंती ही अहिंसा दिन म्हणून पाळल्या जाते. महात्मा गांधीचे महामानवत्व जगातल्या अनेक विद्वानांनी जाणले होते. सर्व जगाला प्रभावित करणारे व्यक्तिमत्त्व म्हणून अनेक विचारवंतांनी आपली मते प्रकट केली त्यात अल्बर्ट आइनस्टाईन यांनी म्हटलं की, गांधीसारखा एक हाडामासाचा चालताबोलता माणूस या पृथ्वीवर होऊन गेला यावर येणाऱ्या पिढ्यांना विश्वास ठेवणे अवघड जाईल. यावर येणाऱ्या पिढ्या विश्वास ठेवणार नाही. तसेच पर्ल बक, मार्टिन ल्यूथर किंग, जगाच्या संस्कृतीचा इतिहास लिहिणारा विल ड्युरंट, अमेरिकेचा पत्रकार लुई फिशर, स्त्री चळवळीची कार्यकर्ता ल्युरीअल लेस्टर, सुभाषचंद्र बोस अशा अनेक महान विचारवंतांनी गांधीजीबद्दल विचार प्रकट केलेले आहेत. रवींद्रनाथ टागोरांनी गांधीजींना 'महात्मा' ही पदवी बहाल केली. व त्याला हिंदुस्थानमधील सर्व जनतेने उत्तम प्रतिसाद दिला. येशू ख्रिस्त, भगवान बुद्ध, महावीर यांच्यानंतर या भूतलावर जन्मलेला महामानव म्हणून बहुसंख्य लोकांनी महात्मा गांधींना महामानवत्व बहाल केलेलं आहे. यामागे महात्मा गांधींची सत्याग्रही, अहिंसात्मक, लोकसेवक व असामान्य संघटकाची भूमिका असल्याचे विस्ताराने प्रकट करण्यात आले. महात्मा गांधीवर जगात एक लाख पुस्तके लिहिल्या गेलीत माझ्या पश्चात हा माणूस देशाचं नेतृत्व करील असा विचार मांडून लोकमान्य टिळकांनी गांधींचे सामर्थ्य ओळखले होते. चार्लीन चापलीन हे गांधी विचाराने प्रभावित झाले होते. गांधीजींचा जगावर इतका प्रभाव होता की, इंग्लंडच्या आमदारांनाही इंग्लंडमध्ये खादी बंद करा, असा नारा द्यावा लागला.

गांधीजींची जडणघडण –

1963 ते 2011 पर्यंत महात्मा गांधीवर दहा चित्रपट निर्माण झालेत. त्यात पहिले दोन चित्रपट ब्रिटिश दिग्दर्शक, निर्मात्यांनी तयार केलेत. "गांधीजींच्या मृत्यूनंतर सोळा वर्षांनी 1963 ला 'नाईन

मधुकर केचे ह्यांच्या काव्यातील लोकतत्त्वे

- प्रा. डॉ. कोमल ठाकरे

सहयोगी प्राध्यापक,
तायवाडे महाविद्यालय, कोराडी

लोकसमुहामध्ये मौखिक स्वरूपाच्या परंपरेने चालत आलेले लोकसाहित्य बोलीतच असते. लोकसाहित्य ही लोकसमुहाची, लोकसमुहाच्या बोलीतून झालेली निर्मिती असते. लोकसाहित्यातून लोकसमुहाचे मानस प्रकट होते. लोकसमुहाची लोकश्रद्धा, लोकविश्वास, लोकभावना हे लोकमानस प्रकट करण्याची धडपड नसते तर स्वाभाविकपणे, सहजपणे त्याचा आविष्कार झालेला असतो. त्यामुळेच लोकसाहित्यात स्वाभाविकता व सहजता हे विशेष येतात.

ललित वाङ्मयात लोकसाहित्यातील विशेष आढळून येतात. लोकसाहित्यातही ललित वाङ्मयाची लक्षणे दिसून येतात. लोकसाहित्याची आणि ललित साहित्याची भाषा यात भेद असला अथवा दोन्हीच्या प्रेरणा भिन्न असल्या तरी त्यात खूप साम्य आहे. त्यात इतके साम्य असते की, कधी कधी दोन्ही साहित्यातील निराळेपण ओळखता येत नाही. एकच वाङ्मयकृती लोकसाहित्य आणि ललितकृती असू शकते. कितीतरी ओवीगीते ही ललितसाहित्यात सहजपणे समरसून जातात. समाजातील व्यक्तींना स्वतःचे एक पृथगात्म असे व्यक्तिमत्त्व प्राप्त झाले तरी आदिम समाजाची काही लक्षणे या समाजात दिसतात. व्यक्तिगत अनुभव व समुहमनाने घेतलेले अनुभव या दोन्हीचे अस्तित्व त्याच्या अनुभवांत असते. म्हणूनच त्यांच्या अनुभवाच्या आविष्कारात व्यक्तिनिर्मित असाधारणत्व जसे असते तसेच पारंपारिक लोकसमुहाच्या मनाचा आविष्कारही असतो. "व्यक्तिनिर्मित वाङ्मयकृतीत किंवा कलाकृतीत अपरिहार्यपणे येणाऱ्या या लोकसमुहाच्या मानसाच्या आविष्कारासच लोकसाहित्यत्व किंवा लोकतत्त्व असे (Folk Elements) म्हणतात"^१ मधुकर केचे ह्यांच्या वाङ्मयकृतीतील आविष्कार झालेल्या लोकतत्त्वाचे स्वरूप

पाहिल्याशिवाय त्यांच्या वाङ्मयकृतीचे आकलन अपुरे आणि अशक्य आहे.

मधुकर केचे हे विदर्भातील ललित लेखक, कवी असल्यामुळे त्यांच्या समग्र लेखनातून वैदर्भीय सामाजिक, सांस्कृतिक जीवनाचे दर्शन घडते. विदर्भाच्या लोककला, लोकपरंपरा, लोककथा, लोकगीते, भजने, जुन्या कल्पना, लोकरीती, लोकसमज आपल्या वैदर्भीय रांगड्या शैलीसह त्यांच्या साहित्यकृतीच्या पानापानांवर ठिबकल्या आहेत. केचे भटकंती करणारे कवी होते. त्यांनी संपूर्ण विदर्भप्रदेश पिंजून काढला होता. बालपणापासून विदर्भातील जनजीवनाचे संस्कार त्यांच्यावर झाले आहेत. लोकपरंपरेचे दर्शन त्यांना घडले आहे. ग्रामातील व्यवस्था, जाती, धर्म पंथ, संप्रदाय, रुढी, चालीरीती, जागरण, महादेवाची गाणी, जात्यावरच्या ओव्या, भुलाबाईची गाणी, अवधुती भजने, दंडार या व अशा अनेक लोककलांचा त्यांच्या मानसपटलावर संस्कार झालेला आहे.

केचे ह्यांच्या अभंग वृत्तातील कविता या आधुनिक आशयाने भरलेली लोकगीते वाटतात. अभंग हे पारंपरिक संतांनी वापरलेले वृत्त आहे. त्या वृत्तातून केच्यांनी केलेला सहजोत्कट भावाविष्कार हा पारंपारिक लोकभिरुची संपन्नतेशी जवळचे नाते सांगणारा आहे. मुलतः काव्य व काव्यप्रकारांचा प्रारंभ हा लोकवाङ्मयातूनच झालेला आहे. त्यांचे परस्परांशी घट्ट नाते आहे. लोकवाङ्मय आणि ललित वाङ्मयात फरक करायचा झाल्यास अथवा त्याचे निराळेपण शोधायचे झाल्यास ते कलाकृतीच्या अभिव्यक्तीपद्धतीत की आशयात असते हा प्रश्न महत्त्वाचा ठरतो. लोकवाङ्मयातील आशय पारंपरिक असतो. ललित वाङ्मयात लेखकाचा परंपरेपेक्षा वेगळे काही सांगण्याचा प्रयत्न असतो. आशयाच्या स्वरूपातील वेगळेपणच त्यात

मधुकर केचे यांची कविता

कोमल वि. ठाकरे

मधुकर केचे ह्यांचा जन्म विदर्भात वर्धा जिल्ह्यातील अंतोरा या गावी १७ जानेवारी १९३२ला एका शेतकरी कुटुंबात झाला. वयाच्या १४व्या वर्षापासून त्यांनी कवितालेखनाला सुरुवात केली. त्यांचा 'दिंडी गेली पुढे' हा पहिला कवितासंग्रह १९५९ला तर 'पुनवेचा शेंब' १९६१ आणि 'आसवांचा ठेवा' १९६३ ला असे त्यांचे तीन कवितासंग्रह क्रमाने प्रकाशित झाले व या तिन्ही कवितासंग्रहांना महाराष्ट्र शासनाचा पुरस्कार प्राप्त झाला.

केचे ह्यांनी अनेक वाङ्मयप्रकारात लेखन केलं असलं तरी त्यांचा मूळ पिंड हा कवीचाच होता. आपल्या भावनेचा पहिला उत्कट आविष्कार त्यांनी काव्यमधूनच साधला. हा आविष्कार साधत असताना त्यांच्यासमोर प्राचीन आणि अर्वाचीन काव्याची प्रदीर्घ परंपरा होती; तथापि अगदी सुरुवातीपासूनच आपल्या पृथगात्मतेचं त्यांना भान होतं. परंपरेमधून काय शोषावयाचं आणि आपल्या आंतरिक उर्मीनाही कसं प्रगट करायचं याचा समन्वय त्यांनी आपल्या काव्यलेखनात साधला. संताच्या जातीची ओवी, अभंगातून त्यांची रचना प्राचीन काव्यपरंपरेशी आपलं नातं सांगत असली तरी मढेकर-कंदीकर या नवकाव्यपरंपरेशीही त्यांचं नातं आहे. संतांच्या काव्यातील भक्तिभावनेचा, विठ्ठलप्रेमाचा रस शोषून घेऊन अत्याधुनिक काळातील आपल्या नव्या संवेदनशीलतेचा त्यांच्याशी सांधा जुळवून केच्यांनी आपली ओवी, अभंगातील प्रारंभीची कविता लिहिली आणि पुढे अनेक भावना-जाणिवांना तिच्यात सामावून घेत आविष्काराचं नव रूप साकार केलं. त्यांचं वाङ्मयीन व्यक्तित्व हे मूलतः अंतर्मुख आणि आत्मरत होतं. घरात विठ्ठलभक्तीचा वारसा होता. त्यामुळे त्यांचा पहिला भावोद्गार अध्यात्मव्याकूळतेतूनच बाहेर पडला.

केच्यांनी काव्यलेखनाला सुरुवात केली तेव्हाचा काळ मराठी काव्यनिर्मितीच्या बहराचा कालखंड होता. मढेकर काळाच्या पडद्याआड गेले होते. केच्यांना मढेकरी काव्यातील मध्यवर्ती असणारी आध्यात्मिक अनुभूती स्वीकाराहं वाटली. कारण तिचा त्यांच्या व्यक्तित्वाशी जवळचा संबंध होता. (अक्षयकुमार काळे, लोकमत, साहित्यजत्रा, रविवार, ४ एप्रिल १९९३) वारकरी पंथ, रामकृष्ण आश्रम आणि अनुवंश यातून जुनी आध्यात्मिक मूल्ये त्यांच्या रक्तात भिनली असल्यामुळे त्यांनी अध्यात्मप्रधान नवकविता सहज लिहिली. (द. भि. कुळकर्णी, दुसरी परंपरा, पृ. १३९) विठ्ठलमय झालेली भक्तिभावना केच्यांमध्ये संपूर्णपणे ओथंबलेली असली तरी तिच्यातील विवेकाचे आणि संघर्षाचे सूर लपून राहिले नाहीत. तुकाराम आणि मढेकरांचा अबोध पातळीवर स्वीकारलेला

वारसा त्यांच्या आध्यात्मिक कवितेला वेगळे परिमाण देणारा ठरला. मढेकरांप्रमाणे ओवी-अभंगांचे पुनरुज्जीवन तर त्यांनी केलेच पण याशिवाय परंपरागत श्रद्धाभावाला जोडवित असताना आपल्या पृथगात्म आध्यात्मिक अनुभूतीचे पदर शोधून ते आकारबद्ध करण्यात कोणतीही कसर केली नाही. केच्यांच्या आध्यात्मिक कवितेच्या यशामध्ये ही केच्यांची कमालीची असणारी आत्मनिष्ठा आणि ईश्वरी तत्वांशी त्यांचे या काळातील लक्षणीय अनुसंधान या गोष्टींना मोलाचे स्थान आहे.

अध्यात्मनिष्ठा, प्रणयपरङ्मुखता, विठ्ठलप्रेम, अभंग-ओवी छंद यामुळे संतवाङ्मयाशी त्यांचं नातं जोडलं जातं. संतांची जीवनमूल्ये स्वीकारल्यानं ते संतवळणाचं वाटतं पण ते संतकाव्यापेक्षा वेगळं आहे. संतकाव्यापेक्षा कवीला येणारी अनुभूती ही नवीन आहे. ही अनुभूती वेगळी होण्याचं कारण म्हणजे संतकवींचा काळ हा केच्यांचा काळ नाही. केचे हे लौकिकबद्ध व्यक्तिमत्त्व आहे. त्यांनी कोणताही त्याग केलेला नाही. ते संसारात रमले, जीवनव्यवहारात समरस झाले. अगदी तारुण्याच्या पहिल्या कालखंडात ते एका फकीर वृत्तीने जगत होते. पण ही फकीर वृत्ती जास्त काळ न टिकता पूर्ववत आपल्या संसाराकडे ते वळलेत. त्यांच्या कवितासंग्रहातील श्रद्धेचं स्वरूप अत्यंत उत्कट आहे. त्यांची ही उत्कटता 'दिंडी गेली पुढे' या कवितासंग्रहात अधिक उत्कटेनेनं आविष्कृत झालेली आहे. याचं कारण त्यांची मनोवस्था या काळात अव्यक्ताच्या ध्यासात आकंठ बुडालेली होती. पण ती टिकली नाही. याचे कारण ते स्वतः सांगतात, 'माझ्यासमोर सागर/ त्याशी आकाश टेकले/ झाली असती त्रिवेणी/ माझे घर आड आले.' (दिंडी गेली पुढे, पृ. २४) अशा या आधुनिक कवीने आधुनिक संवेदनशीलतेचा आविष्कार केलेला आहे. त्यामुळे त्यांची कविता संतवळणाची वाटत असली तरी तिचा समावेश संतांच्या कवितेत करता येत नाही. येथे विठ्ठलाविषयीची ओढ दिसते. तथापि संतांची जाणीव एकसंघ आणि अभंग होती ती तर आधुनिक कवींची जाणीव दुभंगलेली आहे. ऐहिक आणि पारलौकिक जगातली रंद दरी त्याला जाणवते. हा आधुनिक कवी अद्वैताच्या अनुभवासाठी आसुसलेला असतो. पण द्रव्दातीत अवस्था अप्राप्यच राहते. त्यांची ईश्वरकल्पना आंधळी नाही, गतानुगतिक नाही. स्वर्ग-नरक, आस्तिक-नास्तिक, परंपरा-नवता, शरणागतता, समानता अशा परस्पर बाजूंनी ते देवाकडे पाहतात. त्यांची अनुभव घेण्याची आणि व्यक्त करण्याची पध्दती ही आधुनिक आहे. म्हणून त्यांची कविता सनातन विषयावरची असूनही आधुनिक वाटते, नवकविता वाटते, परंपरा आणि नवतेचा समन्वय साधणारी वाटते.

संतांचा मागोवा घेत कवीचा प्रवास असला तरी त्यांची आध्यात्मिक क्षेत्रातील जाण मोठी आहे. अध्यात्मक्षेत्रातील मूलभूत सत्य व समस्या या कवीला गवसल्या आहेत. अध्यात्मजीवनातील हे टप्पे वैचारिक पातळीवर न मांडता ते अनुभवाच्या पातळीवर मांडतात.

॥ महाराष्ट्रातील संतपरंपरा आणि राष्ट्रसंत तुकडोजी ॥

✍ डॉ. कोमल वि. ठाकरे

महाराष्ट्रात समाजसुधारणा आणि धर्मसुधारणा करण्यासाठी वारकरी आणि महानुभाव या दोन संप्रदायांचा उदय झाला. महानुभावांनी भक्तीचा आणि संन्यासाचा मार्ग सांगितला. चक्रधर स्वामींनी मराठी भाषेचा पुरस्कार केला. कर्मकांडाचा निषेध केला. जातपात, वर्णाश्रम, शिवाशीव, विटाळ यासारख्या अनिष्ट चालीरीती-परंपरांवर महानुभाव आणि वारकरी या दोन्ही संप्रदायांनी परखडपणे टीका केली. चक्रधर स्वामींनी 'मनीचे अभिलाष निवर्तले की शूची-अशूची दोन्ही नाही' हे सूत्र मांडून शुभाशुभ, पवित्र-अपवित्र या मनात द्वैत निर्माण करणाऱ्या भावनांना समज देऊन स्वार्थी वृत्तीला नाहीसे करण्याचे चित्त शुद्धी तत्त्व सांगितले. कर्म-विकर्माची बौद्धिक व तात्त्विक मांडणी केली. विवेकाचे अधिष्ठान, समता आणि चित्त शुद्धी ही मराठी जीवन दृष्टी समृद्धी करणारी त्रिसूत्री मराठी मनात रुजविली. स्त्री-पुरुष समानतेचा मूलमंत्र दिला. भक्तीच्या क्षेत्रात सर्वांना मुक्त संचार करण्याचा अधिकार दिला. स्वामींनी लीळाचरित्र, सूत्रपाठ, दृष्टांतपाठ, अशासारख्या अनेक गद्य ग्रंथातून जिवांचा उद्धार करण्याचे आचारसूत्र बहाल केले.

महानुभावांनी महाराष्ट्रात मराठी भाषेचे युग सुरू केले. ज्ञानेश्वरांनी त्या नगरीत ब्रह्मविद्येचा सुकाळ केला. निष्काम कर्मयोग, भक्तियोग, ज्ञानयोग सांगितला. मानवतेच्या मंदिराची पायाभरणी करण्याचे कार्य करणाऱ्या ज्ञानदेवांनी श्री विठ्ठलाची उपासना केली. वारकरी संप्रदायाच्या माध्यमातून अठरापगड जातीतल्या सर्व संतांनी महाराष्ट्रातल्या मानवी जीवनात आध्यात्मिक लोकशाही निर्माण केली. संन्याशाची पोरं म्हणून धर्मबाह्य ठरविणाऱ्या ज्ञानदेवांचा छळ होऊनही आत्मचिंतनाची, परोपकाराची सात्त्विक वृत्ती ढळून न देता भगवद्भक्ती करता करता समाजाच्या अभ्युदयाचा उपदेश केला. ज्ञानदेवांनी भावार्थदीपिका सांगून नीतिश्रष्ट, सैरभैर झालेल्या समाजाला आदर्श व्यवहाराचा दीप दाखविला. चित्त शुद्धी, ज्ञानलालसा, दान, इंद्रिय निग्रह, अहिंसा, सत्य, अक्रोध, तप, शांती, दया, तेज, धैर्य या गुणांची जोपासना करून आदर्श वागणूक कशी असावी याचा आदर्श वस्तुपाठ म्हणजे संत ज्ञानेश्वरांचे जगणे होते.

संत ज्ञानेश्वरांच्या समकालीन असणाऱ्या संत नामदेवांनी वारकरी पंथाचा विस्तार करून त्याची विजयपताका पंजाबपर्यंत नेण्याचे अद्वितीय कार्य केले. 'नाचू कीर्तनाचे रंगी ज्ञानदीप लावू जगी' ही त्यांची मुख्य भूमिका होती. त्यांनी अडीच हजारांच्यावर अभंग लिहिले. त्यांनी महाराष्ट्राबाहेर कीर्तनाच्या माध्यमातून समाजोद्धाराचे कार्य केले. त्यांची पंजाबमधील 'गुरुग्रंथ साहेब' या ग्रंथामध्ये 'नामदेव की मुखबाणी' म्हणून 61 पदे अंतर्मुख केलेली आहेत. राष्ट्रीय ऐक्य निर्माण करण्याचे अनमोल कार्य संत नामदेवांनी केले. त्यांनी आपल्या रचनांमधून समाजाला धार्मिक, सामाजिक स्वातंत्र्याची दिशा दाखविली. चारित्र्यसंपन्न व्यक्तीच्या निर्मितीकरिता आवश्यक असणाऱ्या विचारांची मैफल त्यांनी मनामनात सजविली. सामाजिक समतेचा मूलमंत्र देणाऱ्या संत नामदेवासमेत अनेक संतांनी मानवमंदिराला नैतिकतेचे परिमाण प्राप्त करून दिले. वर्णव्यवस्थेचा नकार करणाऱ्या गोरा कुभारांने

आपल्या कर्मभक्तीचा उद्योग करताना 'अंतरीचे गुज बोलू ऐसे काही । वर्णव्यस्त नाही शब्द शून्य' अशा तऱ्हेने वर्ण शब्द त्यांनी नाकारला. सावता माळी यांनी 'कांदा मुळा भाजी । अवधी विटाई माझी' या प्रकारे आपल्या कर्तव्यात ईश्वर शोधला. नरहरी सोनार, सेना न्हावी, परिसा भागवत, शेख महमंद, गोणाई, राजाई, विठा, जनाबाई, मुक्ताबाई या सर्व संतांनी आपल्या अभंग रचनेतून आध्यात्मिक लोकशाहीचा मार्ग सुकर करून मानवी जिवाच्या कल्याणाचा व समृद्धीचा विचार रुजविला. समाजात दीन, दलित गोर-गरिबांना, समान व न्यायाची वागणूक मिळावी यासाठी चोखोबांनी आपल्या अभंगातून आपले आत्मसन्मुख करणारे उत्कट भाव प्रकट केले. त्यांच्या बरोबर त्यांची पत्नी सोयराबाई, मुलगा कर्ममेळा, बहीण निर्मळा, तिचा पती बंका या सर्वांच्या अभंगातून जातीहीनतेमुळे वाटचाला आलेली उपेक्षा, खंत प्रकट केलेली आहे. संत चोखामेळा यांच्या अभंगातून जातीय विषमतेच्या विषाची वेदनाच प्रकट झाली. तर कर्ममेळाच्या अभंगातून विषमताग्रस्त समाजाला मानवी अस्तित्वाचे भान सजग करणारा विद्रोह प्रकट झाला. संत कवयित्री जनाबाई, मुक्ताबाई यांच्या अभंगातून सामाजिक रूढी, प्रथा, अंधश्रद्धा याची भीडमूर्खत न करता गुणविकास साधणारी अध्यात्म साधना अभिव्यक्त झालेली आहे.

महाराष्ट्रात संत ज्ञानेश्वरानंतर मुसलमानी राजवट सुरू झाली. संत तुकारामानंतरही ती टिकून होती. त्या दरम्यान अनेक सामाजिक स्थित्यंतरे झालीत. याच काळात भागवतधर्माच्या मंदिराला आधार देण्याचे कार्य संत एकनाथांनी केले. एकनाथांनी चतुश्लोकी भागवत, भावार्थ रामायण, रुक्मिणी स्वयंवर हे आख्यान काव्य तसेच गौळणी, अभंग आणि भारुडाची वैविध्यपूर्ण निर्मिती केली. समाजातील विषमता, दंभ, स्वार्थ, निर्दयता यावर कडक टीका केली. त्यांच्या मानवतावादी भूमिकेतून वर्णभेद अमान्य केला. आपल्या मनातील विकार-विकल्प दूर करून सत्त्वगुणाचा अंगारा लावून, षड्विकाराचा विंचू उतरवून आपण खऱ्या अर्थाने मानवताधिष्ठित भक्त म्हणून जगावे हा संदेश त्यांनी दिला.

एकनाथानंतर लगेच सोळाव्या शतकात संत तुकाराम आणि समर्थ रामदास या दोन संतांनी ही भक्तिगंगा अधिक प्रभावीपणे प्रवाहित केली. समर्थ रामदासांनी सामाजिक परंपरा नाकारून प्रपंच नेटका करून परमार्थ साधण्याच्या आचार विचाराचे आदर्श पटवून देण्याचा प्रयत्न केला. दासबोध हा त्यांचा ग्रंथ व्यक्तिविकास, राजकारण आणि समाजकारण यांचा सार्वकालिक मार्गदर्शक ठरतो. संत तुकारामांना मानवतेच्या मंदिराच्या कळसाचे भाग्य लाभले. त्यांनी आपल्या बेदरकार वाणीने महाराष्ट्रातल्या निपचित पडलेल्या थंडगार मनांना खडबडून जागे केले. 'तुका म्हणे सत्य सांगे येवोत रागे येतील ते' अशा आपल्या सत्यवाणीतून, विचारातून त्यांनी सदाचार आणि नीतीमत्तेचा पाठ गिरविला. वैदिक धर्माभिमान्याचे गर्व हरण करून खऱ्या वेदनेचा अर्थ समजावून सांगितला. शुद्रातिशूद्रांना आध्यात्मिक अधिकार बहाल केला. समाजातील दांभिकता, फसवेगिरी, भोंदुपणा,



Contents lists available at ScienceDirect

Materials Today: Proceedings

journal homepage: www.elsevier.com/locate/matpr

Synthesis and properties of amino and thiol functionalized graphene oxide

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ARTICLE INFO

Article history:

Received 17 March 2020

Received in revised form 23 April 2020

Accepted 23 April 2020

Available online xxxx

Keywords:

Reduced graphene oxide

Functionalisation

2-amino-4-phenylthiazole

Synthesis

Toxic metals

ABSTRACT

Graphite, an allotrope of carbon, has been extensively researched in varied fields of science due to its typical structure and properties. Many researchers have transformed graphene from graphite in many ways. Functionalized graphene have immense importance because of advancement of properties for technological applications. =N- and -S- fabricated graphene oxide composite was prepared. The amino and thiol functionalized graphene oxide with improved properties is expected to adsorb heavy and toxic metals like Pb, Cd, Hg, and Ag from aqueous solutions. The synthesized composite was confirmed and characterized by various characterization techniques like FTIR, SEM, TEM and XRD.

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Selection and Peer-review under responsibility of the scientific committee of the 11th National Conference on Solid State Chemistry and Allied Areas.

1. Introduction

Graphene has been researched from many aspects of superior properties such as mechanical strength, high thermal stability, and excellent electrical and photo physical properties [1–5]. Graphene has emerged as a wonder material. It is an extensively studied material as it offered many new unusual and extremely attractive properties that can be utilized for many potential applications ranging from electrochemical power sources, nanoelectronics, drug delivery, energy storage and environmental issues [6].

The reason for attraction of graphene from all the fields of science lies in its typical structure and unique properties. The properties of graphene can be more enhanced by grafting other nucleophilic species having nitrogen and sulphur containing moiety on its already existing planar, sp^2 hybridized hexagonal structure [6]. Graphite, in the form of a stack of many layers [7], was used as a starting material to produce graphitic oxide by Hummers and Offeman [8]. Hence it is further exfoliated to single layered graphene oxide by different chemical and physical methods. The extent of oxygenation of graphitic oxide is very important in terms of its electrical conductivity which changes with the oxygen content. More the degree of oxygenation, lesser is the conductivity [8–10].

Hence to improve the electrical conductivity, the removal of oxygen from graphene oxide was carried out to get the pristine graphene like properties. Thermal, mechanical, chemical, hydrothermal and many other methods are generally carried out for the removal of oxygen functionality of graphene oxide [11]. Strong efforts are being taken to produce high quality graphene with minimum defects in structure and compatible with fabrication [12]. Many reducing agents like amino acid [9], $NaBH_4$ hydrazine hydrate, dimethyl hydrazine, aluminium powder, reducing sugars, L-Cysteine, vitamin C [12–15], and many more were used to remove the oxygen from graphene oxide chemically. Ultrasonication is another method used to remove the oxygen from of graphene oxide [16]. A. Alazami et al. [11] showed that the structural rearrangement in reduced graphene oxide does not depend only on reduction step but also on initial approach of graphitic oxidation [17]. Functionalized graphene find great application in separation and pre concentration of heavy metals [18,19]. It was reported that the carboxylic acid, carbonyl, hydroxy, epoxide functional groups which are predominantly present on the surface of graphene oxide helps in chemical modification and functionalisation. Nucleophilic attack on oxygen functionalities leave reactive groups on the surface of graphene oxide which are responsible for further chemical functionalisation [20]. In this work, the reduced graphene oxide is functionalized by amino and thiol groups using 2-amino-4-phenylthiazole (2-APT).

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Original Research Article

<https://doi.org/10.20546/ijcmas.2019.811.232>

***Pseudomonas fluorescens*: A Proficient Plant Growth Promoting Rhizobacteria Isolated from Organic Farm**

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ABSTRACT

In the present study, strains of *Pseudomonas fluorescens* designated as OrgS63 and OrgS49 isolated from soybean rhizosphere of an organic farm. Siderophore production was detected by using modified Fiss Minimal medium and estimation was done by CAS assay. Both the strains were found to produce good amount of siderophores. These *Pseudomonas* strains were screened for their other plant growth promoting traits like IAA production, production of Ammonia, HCN production, Phosphate solubilization and antifungal activity. OrgS63 was the most efficient phosphate solubilizer on NBRIP plates with a solubilization index of 6.10. In liquid NBRIP medium, significantly higher Phosphate solubilization was recorded for both the strains OrgS63 and OrgS49 (440 and 450 µg/ml) after 5 days of incubation. Both the strains OrgS63 (90.00%) and OrgS49 (90.44%) has shown high % inhibition against *Fusarium oxysporum*. These isolates also showed positive results for Indole 3-acetic acid (IAA), ammonia production, hydrogen cyanide (HCN) production and ammonia production. Thus, the present study concludes that these Siderophore producing *Pseudomonas fluorescens* strains could serve as a proficient Plant growth promoting Rhizobacterial inoculants for improving the cropping systems and enhancing metal remediation of polluted environments.

Keywords

Pseudomonas fluorescens,
OrgS63, OrgS49,
Fusarium oxysporum

Article Info

Accepted:
17 October 2019
Available Online:
10 November 2019

Introduction

Due to excessive use of chemical fertilizers in agricultural field, the soil loses the microbial activity. It is reported that Organic applications in agricultural farms increases the microbial activity drastically as compare to soil with chemical fertilizers [3]. In rhizosphere, siderophore producing *Pseudomonas* plays a central role in

improvement of the plant development. These bacteria act as biocontrol agent by limiting iron nutrition to the pathogen. Many bacteria synthesize siderophore that has an high affinity for ferric iron, resulting in ferric-siderophore complex which is transported into the cell and thus facilitates iron uptake under low iron condition making unavailable to the other organisms and restrict the growth of deleterious bacteria and fungi at the root [1].



Study on synergistic action of *Coriandrum sativum* seed extracts on antibiotics against multidrug resistant *P. aeruginosa*

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Received: 01.07.2019

Revised: 28.08.2019

Accepted: 19.10.2019

Abstract

Increase in resistance of antibiotic against *P. aeruginosa*, the antibiotic treatment therapy fail to exterminate the infection. The approach of new strategy is must to deal with multidrug resistant *P. aeruginosa*. In the present study total 300 isolates from different clinical samples (Urine, Blood, Sputum, and Pus) were studied for isolation, identification and analysis of resistance pattern against 22 antibiotics. Total 5 most resistant isolates (U004, P017, P078, U105, and U237) were screened to search for synergistic approach of *Coriandrum sativum* extract prepared by both Soxhlet method and Maceration process in different solvents; petroleum ether, chloroform, acetone, methanol and water. Encouraging results were obtained where HDME extract could synergise the activity of total 8 antibiotics that are; MZ, CPZ, CTX, PB, LE, DOR, AZ and CAZ. Thus the present study provides a landmark approach to deal with multidrug resistant *P. aeruginosa* by synergistic action of antibiotic and *Coriandrum sativum* extract.

Key Words: *Coriandrum sativum*, *P. aeruginosa*, Multidrug resistant, Synergistic action, Antibiotics, Solvents

Introduction

Mortality rate is still significantly high worldwide despite of development of synthetic antibiotics. Emergence of antimicrobial resistance is a main problem in the treatment of infectious diseases (Russell, 2003). Therefore, a quest for new and sustainable antibiotics or other treatment therapy is a necessity. Many researches have proved substantial information on antibacterial activity of natural products on resistant microbial strains (Bakkali *et al.*, 2008; Miladinović *et al.*, 2012). Tremendous increase in antibiotic resistance due to ESBL production in gram negative bacteria created a problem (Duman, *et al.*, 2010; Duman, *et al.*, 2014; Toner, *et al.*, 2016). Development of Resistance in *P. aeruginosa* is by spontaneous mutations process or by plasmids acquisition (extrachromosomal DNA) having resistance genes (Livermore, 2002). Efflux pumps and beta-lactamases are common mechanisms of resistance detected in *P. aeruginosa* (Singh *et al.*, 2000). Nosocomial outbreaks and failure of treatment by cephalosporins is due to plasmid-

mediated AmpC enzymes in enteric bacteria (Pai *et al.*, 2004). Enzymatic degradation of antibiotics causes resistance to extended-spectrum β -lactam antibiotics in Enterobacteriaceae (Mylvaganam *et al.*, 2017). The distinctive attribute of *P. aeruginosa* is that it has low permeability of the cell wall, produce cephalosporinases, have active efflux pumps and have low affinity for DNA gyrase (Al-Tawfiq, 2007). *P. aeruginosa* is resistant for β lactams antibiotics, Fluoroquinolones, and carbapenem (Marilee, 2005). *Coriandrum sativum* (Coriander) is an annual herb that belongs to Apiaceae family. The medicinal properties of *Fructus Coriandri* are practice for the treatment of carminative, dyspeptic action loss of appetite and digestive problems (Baytop, 1999). Losing of antibiotic potential as antimicrobial agents due to drug resistance shifted the interest of researchers use plant derived products that increases in the use of plant extracts to practice it as conventional medicine for antibacterial effects.

Coriander shown to have antibacterial effects against various organism studied (Laribi *et al.*, 2015; Jiang *et al.*, 2015). Plantaricin CS is a novel antimicrobial peptide in Coriander leaf extract and reported to have significant antibacterial activity against gram negative bacteria. The phytochemical such as the essential oils (EOs) of plants displayed

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In-Vitro study on tolerance of heavy metals by some endophytic fungi

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Abstract: The present study reports on tolerance study of heavy metals by endophytic fungi. Endophytic fungi isolated from agriculture field used for the study were *Phomopsis sp.*, *Fusarium sp.1*, *Colletotrichum sp.*, *Fusarium sp.2* and *Phoma sp.* To test the effect of different metal on varying concentration of heavy metal, the heavy metal of different concentration were added to the PDA media range varying from 50-600ppm. Fungal endophytes on PDA medium without heavy metal served as control. PDA plates with metal ions were inoculated with fresh culture of fungus and were allowed to incubate at 27 °C for 7 days. The different test isolates at the different concentrations of the test metals exhibited varying degree of effect on mycelia formation. The results indicated at 600 ppm metal concentration, the most heavy metals tolerant endophytic fungus was *Colletotrichum sp.* (resistant to all metals under study) followed by *Fusarium sp.1* and *Phoma sp.* (resistant to Cu (II), Zn (II), Pb (II) and Cd (II)). *Phomopsis sp.* and *Fusarium sp.2* were tolerant to Cu (II), Zn (II) and Pb (II) and Zn (II), Pb (II) and Cr (VI) respectively. The ability of fungal endophytes to grow in the presence of heavy metals is always be an added advantage in the treatment of waste water where role of microorganisms is to degrade organic matter through biological process.

Keywords: Endophytic fungi, Heavy metal Tolerance, Bioremediation.

1. INTRODUCTION

Due to increased industrialization and technological development, contamination of soil and water environments by heavy metals also increases significantly leading to heavy metal pollution. Such pollution has serious impact on the environment and public health as heavy metals are toxic in nature, non-biodegradable and are bio-accumulator. Failures of conventional treatment systems for heavy metal removal mainly pointed for high expenses, low efficient, labor-intensive operational or lack of selectivity in the treating process [1], [2], [3], [4].

In order to detoxify and degrade environmental pollutants, alternatives strategies has been necessitated for environmental clean-up. Recently, remediation with use of microorganisms has gained considerable attention for the restoration of contaminated environments. This remediation includes the phytoremediation, bacterial bioremediation and mycoremediation and effectiveness of these options has been well reported [5], [6], [7], [8]. Among these options, mycoremediation has been explored more recently because of its low cost inputs and significant outputs in the bioremediation of environments polluted with heavy metals [9], [10].

Plant-associated fungi isolated from the internal tissues, where reside and cause asymptomatic infection in the host, are called endophytes. Such fungal endophytes are often found to have beneficial effects on plant growth by providing essential elements, resisting colonization by pathogenic microorganisms, or by assisting the plant to adapt to environment [11], [12], [13]. Metal tolerance/resistance referred to as the capacity of a microorganism to survive to lethal effect of metal by means of involvement of their adaptation mechanisms when exposed to the metal(s) concerned [7]. Endophytic fungi have been known for their distinct attributes such as ability to adapt into host to the competitive, high-stress environment of the soil, and therefore with this advantage, these fungi serve as effective bioremediator [14], [15], [16], [17]. The aim of this study is to analyse the effect of heavy metals on growth response of fungal endophytes under laboratory conditions.

Assessment of endophytic fungal isolates for its Antibiofilm activity on *Pseudomonas aeruginosa*

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Available online at: www.isroset.org

Received: 29/May/2019, Accepted: 19/Jun/2019, Online: 30/Jun/2019

Abstract- The present study reports assessment of the antibiofilm activity of endophytic fungi on quorum sensing controlled biofilm formation in *Pseudomonas aeruginosa* MTCC 2453. Endophytic fungi isolated from agriculture field were evaluated for antibiofilm activity. After fermentation in sucrose broth, biofilm formation inhibitors from endophytic fungi were extracted using ethyl acetate. The active extract from each endophytic fungus was assayed for inhibition of biofilm formation using biosensor strain *Pseudomonas aeruginosa*. At highest tested concentration (200µg/ml) of both fungal extract and biocidal agent, the extract from *Fusarium* sp.1 demonstrated maximum inhibition in biofilm formation (49.65%) and minimum inhibition by *Colletotrichum* sp. extract (18.21%) and inhibition was significant at ($P < 0.05$). Similarly at highest tested concentration (200µg/ml) of fungal extract alone, the maximum percent decrease (18.90%) was observed in *P. aeruginosa* by *Phoma* sp. extract and minimum inhibition by *Penicillium* sp extract (4.00%) with no statistical difference. On the other hand extract from *Aspergillus* sp.2 was found to show no antibiofilm activity but exhibit stimulatory effect on biofilm formation extract (-4.78%). Combined effect of active fungal extract and biocidal agent resulted in significantly more percent biofilm inhibition as compared to fungal extract alone. The action of one or more active compounds extracted from endophytic fungi may be responsible for antibiofilm activity. Such compounds could be effective against emerging multidrug resistant pathogens.

Keywords- Endophytic fungi, Biofilm, Quorum sensing, *Pseudomonas aeruginosa*.

I. INTRODUCTION

Biofilm is a sticky, firm structure formed due to communal interaction of bacteria attached to substrate surface and submerged into extracellular slimy conglomerations [1], [2]. The process of attachment of biofilm to surfaces, a sequential process, where bacteria firstly are transported to living or nonliving surfaces and then adhere to it and formed microcolonies which then mature into aggregate in a hydrated polymeric matrix called Biofilms [3],[4],[5].

Biofilm forming bacteria are highly resistant to antimicrobial compounds, protecting themselves from negative impact of environment [6]. In addition to numerous chronic infections, biofilm also responsible for various infections of biomaterial used in medicine, such as catheters, medical devices and contact lenses [7]. *Pseudomonas aeruginosa* is Gram-negative bacterium and an increasingly prevalent opportunistic human pathogen, causing the majority of hospital infections and emerge as antibacterial drug resistant bacterium [8], [9], [10]. Certainly new alternatives to the currently available broad-spectrum antibiotics have to be developed, which should not kill the bacteria instead inhibit the pathogenicity of *P. aeruginosa*.

There is a group of fungi residing inside higher plants without causing any harm to them (endophytic fungi). Such plant endophytes being a large and mostly unexplored group require special attention for research as they have the special ability to safeguard its host against pathogens and herbivores with enormous number of varied bioactive compounds which have been produced by them. These varied bioactive compounds have potential therapeutic value leading to discovery of novel metabolites, and more specifically novel antibiotics. The novel bioactive metabolite extracted from *Colletotrichum gloeosporioides* serve as a possible origin of new antibiotics [11]. Plant endophytic fungi are microorganisms that colonize the inside of host healthy plant tissues, spending all or part of their lifecycle within the intercellular region of the plant parts, mostly in leaf, bark and root system typically causing no apparent disease symptoms [12], [13].

Indexed, Abstracted and Cited: Index Copernicus International (Poland), ISRA Journal Impact Factor, International Impact Factor Services (IIFS), Directory of Research Journals Indexing (DRJI), International Institute of Organized Research and Scientific Indexing Services, Cosmos Science Foundation (South-East Asia), International Innovative Journal Impact Factor, Einstein Institute for Scientific Information {EISI}, Directory of Open Access Scholarly Resources, Science Indexing Library (UAE), Swedish Scientific Publication (Sweden), citefactor.org journals indexing, Directory Indexing of International

World Journal of Biology and Medical Sciences

Published by Society for Advancement of Science®

ISSN 2349-0063 (Online/Electronic)

Volume 7, Issue-1&2, 84-91, January - June, 2020

Journal Impact Factor: 4.197



WJBMS 07/02/021/2020

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RESEARCH PAPER

Received: 15/05/2020

Revised: 30/06/2020

Accepted: 30/06/2020

Pollen Grains as Antibacterial Agents – A New Approach for Therapy

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ABSTRACT

In ancient Indian literatures considered that all plant parts are potential sources of medicinal substances. Antibiotic resistance exhibited by pathogenic microbial infectious agent have led to the screening of several medicinal plants for their potential antimicrobial activity. Pollen as well as other apiculture products, has gained increased attention for its therapeutic properties as antibacterial, antifungicide, anti-caryogenic, antioxidant and immunomodulatory effects. Pollen finds its use in apitherapy and also as a functional food in the food industry due to their nutritional properties. Pollen is fine and light powder like material having nutritional value with proteins (25-30%), carbohydrate (30-55%), lipids, including fatty acids and sterol (1-20%), fats (1-13%), vitamins and mineral. The aim of this study was to investigate the antibacterial activity of pollen extracts of some common flowers from Vidharbha region against some pathogenic bacteria. Pollen samples showed a potential activity against the growth of both Gram positive and Gram negative bacteria. This would be a very interesting approach to control more dangerous species of microorganism in medical sciences.

Keywords: Antimicrobial Activity, Pollen grains, Common Flowers and Antibiotic Sensitivity.



Original research article

Green emitting holmium (Ho) doped yttrium oxide (Y_2O_3) phosphor for solid state lightingVijay Singh^{a,*}, K.V. Dabre^b, S.J. Dhoble^c, G. Lakshminarayana^d^a Department of Chemical Engineering, Konkuk University, Seoul, 05029, Republic of Korea^b Department of Physics, Taywade College, Koradi, Nagpur, 441111, India^c Department of Physics, R.T.M. Nagpur University, Nagpur, 440033, India^d Intelligent Construction Automation Center, Kyungpook National University, 80, Daehak-ro, Buk-gu, Daegu, 41566, Republic of Korea

ARTICLE INFO

Keywords:

Y_2O_3
 Ho^{3+} ions
 Citrate sol-gel synthesis
 Band gap
 Photoluminescence

ABSTRACT

This paper reports the synthesis of $\text{Y}_{2-x}\text{Ho}_x\text{O}_3$ phosphor by citrate sol-gel method. Phase purity and morphological studies were performed by X-Ray diffraction (XRD) and scanning electron microscopy (SEM) characterization technique, respectively. Diffuse reflectance (DR) spectrum of the sample was recorded, and the band gap energy was estimated by using Kubelka–Munk (K–M) model. Photoluminescence (PL) studies of the prepared phosphors were carried out in this work. CIE coordinates of the studied phosphor were calculated, and which indicate the green color of the phosphor. The studied phosphor $\text{Y}_{2-x}\text{Ho}_x\text{O}_3$ exhibits strong green luminescence upon the blue excitation which claims its candidature for solid state lighting applications.

1. Introduction

Green emitting phosphor has important application in various fields such as lamp industries [1], cathode ray tube [2,3], field emission displays [4,5], biomarkers [6,7], security printing [8] and many more. The unique luminescence properties of rare earth ions due to well shielded intra f-f electronic transitions make them popular activator [9]. Ho^{3+} ion has been a subject of extensive investigation owing to the several high-lying metastable levels of Ho^{3+} ion giving rise transitions at several wavelengths in ultra-violet (UV) and visible region, which enable it to give both up and down conversion photoluminescence (PL), while it is well known for its application as IR laser because of its transition between Stark levels [1,10–15].

In literature, Y_2O_3 has been reported as a potential host material which can incorporate various rare earth ions owing to similar ionic radii and chemical properties with doped rare earth ions [16]. In addition to this, Y_2O_3 exhibits significant optical and physical properties such as wide transparency ranges from 0.23 μm to 0.8 μm and comparatively small phonon energy [15], phase permanency, minimal thermal expansion coefficient and high melting point [17–20], etc. There are many techniques for synthesizing Y_2O_3 phosphors doped with rare earth ions, such as urea homogeneous precipitation method [21], solution combustion method [22,23], EDTA complex sol-gel process [24], flame spray pyrolysis [25–27], low temperature hydrothermal route [28] and many more. In our previous work [29] we reported the PL properties of nano crystalline $\text{Y}_2\text{O}_3:\text{Ho}^{3+}$ phosphor synthesized by low temperature combustion method. In which the prepared phosphor shows the efficient green luminescence. In present paper, we adopt the citrate sol-gel method for the synthesis and investigate the photoluminescence (PL) characteristics of the phosphor sample. Phosphor powders were also characterized using X-ray diffraction (XRD) technique for phase purity, scanning electron microscope (SEM) for morphology and diffused reflectance spectra (DRS) for the calculation of band gap of host lattice.

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OBSERVATION AND STUDY OF THE NESTING BEHAVIOR OF POTTER WASP,
DELTA DIMIDIATIPENNE (HYMENOPTERA: EUMININAE: VESPIDAE) IN KORADI
REGION NAGPUR DISTRICT, MAHARASHTRA

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Abstract

In the present work observed nesting and feeding habits of Delta dimidiatipenne (potter wasp). In which the Female wasp construct the nest by using wet mud and each nest have around 1 to 34 chambers and the average dimension of the chambers is 2.3 mm long and 1.4 mm in diameter (length range, 1.9-2.9 mm, diameter range 1.2-1.9 mm, n=20). In each chamber 1 to 4 caterpillars are stuffed according to their size. Adult wasp feed on the nectar or pollen but the newly hatched larva feeds on live caterpillars which are harmful to the crops. Wasp controls the population of insect pest and in this way the wasp acts as a natural bio-pest controller.

Key words: Potter wasp, Eumininae, Delta dimidiatipenne, Red wasp

Introduction

Delta dimidiatipenne solitary wasp belongs to the order Hymenoptera family Vespidae and sub family Eumeninae. Eumeninae are large group of cosmopolitan insects' approx 3,600 species and more than 200 genera (Pickett and Carpenter, 2010) are recorded worldwide. All the known Eumenine species are predators, and have different style of nest building. A potter wasp Delta dimidiatipenne (Saussure, 1852) is a widely distributed species and they are commonly found in Africa, Egypt, Afghanistan, Nepal and India. The Delta dimidiatipenne have been recorded in various parts of India, Van der Vecht and Fischer(1972); Binhham (1897); Das and Gupta (1989); P. Girish Kumar (2014,2015); C. R. Deshmukh (2017).

Delta dimidiatipenne are identified clearly on basis of lower half of their frons and clypeus which are red in color and hence they are known as Red Wasp. The adult wasp feed on plant juice and nectar, but their offspring feed on live caterpillars therefore they are also known as caterpillar Hunter Wasp for studying nesting behaviour asp.

Material and method

Study Site – The study of nesting behavior of the above mentioned wasps have been done on few specific locations near Taywade College campus at Koradi region Nagpur District Maharashtra. The Nest were located on roof of the College building, garden area, dump yards, air conditioners, outlet boxes, window frame, door frame and nearby newly constructed houses and low and high shelters.

I collected around 40 new and old wasp nests from the research site and which were later brought to the laboratory for observation. During this observation I also observed the emergence of larva and their feeding habits.

१०. तुलनात्मक साहित्य का अध्ययन : स्वरूप एवं महत्व

डॉ. गजानन किशनराव पोलेनवार

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तुलनात्मक साहित्य अंग्रेजी के 'कम्पैरेटिव लिटरेचर' का हिंदी अनुवाद है। एक स्वतंत्र विद्या शाखा के रूप में विदेश तथा भारत के विभिन्न विश्वविद्यालयों में इसके अध्ययन-अध्यापन के कार्य को विशेष महत्व दिया जा रहा है। विदेश में इसे 'सांस्कृतिक अध्ययन' के नाम से भी जाना जाता है। अंग्रेजी के कवि मैथ्यू आर्नल्ड ने सन 1948 में अपने एक पत्र में सबसे पहले 'कम्पैरेटिव लिटरेचर' पद का प्रयोग किया था। तुलनात्मक साहित्य साहित्यिक समस्याओं का अध्ययन है, जहाँ एक से अधिक साहित्यों का उपयोग किया जाता है। यह साहित्यिक अध्ययन की ऐसी शाखा है जो प्रत्येक देश और काल की साहित्यिक अभिव्यक्ति की मूलभूत संरचना से संबंधित है। इसीलिए विश्वकवि रवींद्रनाथ टागोर ने तुलनात्मक साहित्य को 'विश्व साहित्य' का नाम दिया है।

तुलनात्मक अनुसंधान के अंतर्गत किन्हीं दो समकालीन या विषम – कालीन गुणात्मक प्रतीत होनेवाली कृतियों का अध्ययन किया जाता है। यह अध्ययन दो युगों, दो देशों, दो कृतियों, दो भाषाओं एवं दो व्यक्तियों का हो सकता है।

प्रसिद्ध विश्वकोषकार वेबस्टर ने तुलना (Comparison) के अर्थ और आशय को बहुत विश्वसनीय ढंग से स्पष्ट किया है।

“The placing together or juxtaposing of two or more items to ascertain, bring into relief or establish their similarities and dissimilarities. Identify (as one feature or set of features with another) between two or more things or persons. Used chiefly with a negation of something or someone decidedly inferior to another comparison is the most general term. In its broadest term it may imply no more than an impartial search for resemblances as well as differences.”

अर्थात् “दो या दो से अधिक वस्तुओं के समान एवं असमान तत्वों को ज्ञात करने के लिए उन्हें साथ रखकर परीक्षित करना। दो वस्तुओं की असमानता की मात्रा का पता लगाने के लिए भी तुलना की जाती है। दो वस्तुओं के साम्य-वैषम्य की निष्पक्ष जाँच के लिए तथा निष्कर्ष-प्राप्ति के लिए भी तुलना की जाती है।”¹

तुलनात्मक साहित्य की परिभाषाएँ

तुलनात्मक साहित्य एक से अधिक भाषाओं में रचित साहित्य का अध्ययन है और तुलना इस अध्ययन का मुख्य अंग है। तुलनात्मक साहित्य में विभिन्न भाषाओं में लिखित साहित्यों अथवा उनके संक्षिप्त घटकों की साहित्यिक तुलना होती है। तुलनात्मक साहित्य की अवधारणा का विकास ऐतिहासिक समालोचना पद्धति से माना जाता है। समालोचना से तुलनात्मक समीक्षा का विचार सामने आया। तुलना से ही तुलनात्मक अध्ययन संज्ञा सामने आयी। तुलनात्मक साहित्य के संदर्भ में भारतीय एवं पाश्चात्य विद्वानों ने अनेक परिभाषाएँ दी हैं, जो निम्नलिखित हैं—

राम-राज्य की नई सड़क पर

□ डॉ० गजानन किशनराव पोलेनवार*

शोध सारांश

प्राचीन काल से लेकर आज तक की समयावधि में मनुष्य के जीवन में अभूतपूर्व परिवर्तन हुए हैं किंतु आज भी ऐसे वर्ग हैं जो तथाकथित मुख्यधारा के प्रवाह में शामिल नहीं हो पाए, वे हैं किसान, दलित, स्त्री इत्यादि। आज भी समाज में जातीय भावबोध का आभास होता है। दिन-ब-दिन स्त्री पर अत्याचार बढ़ रहे हैं। किसान की स्थिति तो विचारणीय है। आज खेती करने के सभी संसाधन उपलब्ध होने के बावजूद किसान कर्ज में डूबकर आत्महत्या कर रहा है। केदारनाथ अग्रवाल किसान जीवन के कवि। उनकी कविता के केंद्र में किसान जीवन का दर्शन है। केदारनाथ अग्रवाल सहज एवं सरल, सपाटबयानी में किसान के दर्द को अभिव्यक्त ही नहीं करते अपितु उन कारणों की भी पड़ताल करते हैं जो किसान की दुर्दशा में सहायक है। केदारनाथ अग्रवाल की कविता में व्यक्त किसान आसमान की छत के नीचे खुली हवा में पौधे लगाकर, दिन-रात अपना खून-पसीना पिलाकर बड़ा करता है। फसल उगाकर दूर-दूर तक के लोगों को अपनी मेहनत के जादू से मोह लेता है। भूख से पीड़ित जनों का पेट भरता है किंतु वह स्वयं भूखे पेट से अकुलाता है तो दूसरी ओर अपने जीवन में आये प्रत्येक क्षण को पूरी जिंदादिली के साथ जीता है। केदारनाथ अग्रवाल एक ओर किसान जीवन की करुणता का चित्रण करते हैं तो दूसरी ओर उनके जीवन में नवसंजीवनी का संचार प्रवाहित करने का सफल प्रयास करते हैं। कवि किसान की अशांत दुनिया में शान्ति की ज्योति जलाकर तथा स्वर में स्वर भरकर गाँव, गलियों में जीवन के संगीत को पहुँचाने की कोशिश करते हैं। इसके लिए वे आशा रूपी चंदन से शोषित, मजदूर, किसान में साहस का संगीत भरते हैं।

Keywords : पक्षधरता, विमर्श, समकालीन, संवेदना, किसान, चेतना, यथार्थ, शोषित,

मध्ययुगीन धर्म-सुधार आंदोलन के पश्चात संपूर्ण विश्व में क्रांतिकारी परिवर्तन होने की प्रक्रिया शुरू हो जाती है जो आज तक जारी है। इस परिवर्तन की प्रक्रिया के दौर में भारतीय जन-मानस ने कई पड़ाव देखे हैं। साहित्य जन-मानस की चेतनात्मक अभिव्यक्ति होने के नाते समय-समय पर इस परिवर्तकारी प्रक्रिया को अपने में समाहित करता आ रहा है। वह समाज के संचित प्रतिबिम्ब को बिम्बित कर जन पक्षधरता का वहन कर रहा है। यही जन पक्षधरता उसे कालजयी बनाती है। आज ऐसे साहित्य की आवश्यकता है जो समकालीन सामाजिक, सांस्कृतिक, राजनीतिक परिस्थितियों को आँककर जीवन की गहरी संवेदनाओं को अभिव्यक्त करें। वैसे तो वर्तमान दौर विमर्शों का दौर है। इसमें दलित, आदिवासी, स्त्री आदि प्रमुख हैं। यह विमर्श अपने-अपने वर्ग की विषमताओं तथा संवेदनाओं की जड़ों तक पहुँचकर उन संवेदनाओं एवं स्थितियों की उत्कट अभिव्यक्ति कर उन्हें मुख्यधारा के प्रवाह में प्रवाहित करने की कोशिश कर रहे हैं। ऐसे में हमें जन-मानस का पालनकर्ता किसान, मजदूर आदि की जीवन संवेदनाओं को समझना आवश्यक है। मध्यकालीन समाज व्यवस्था से लेकर आज तक के

किसान जीवन को देखा जाए तो हमें दिल पर हाथ रखकर सोचना पड़ेगा। गोस्वामी तुलसीदास ने अपने समकालीन समाज जीवन की स्थितियों का अंकन करते हुए किसानों के हृदय विदारक जीवन संघर्ष का चित्रण किया है। वे लिखते हैं—

“खेती न किसान को, भिखारी को न भीख बलि,
बनिज को बनिज न चाकर को चाकरी।
जीविका—बिहीन लोगसीधमान सोच—बस
कहैं न एकन सो. “कहाँ जाई, का करी ?”¹

आज भी किसानों की स्थिति इससे भिन्न नहीं है। वह आज आधुनिक विज्ञान एवं तकनीकी के युग में अपने अस्तित्व को मिटा रहा है। आज का किसान प्रकृति और समकालीन राजनीतिक व्यवस्था की मार सहन कर रहा है। प्रकृति उसके लिए धुप और छाँव की तरह है जो कभी काल बनकर उभरती है तो कभी सहारा बनकर उम्मीद की नई किरण उसके जीवन में खुशहाली भर देती है। समकालीन राजनीतिक व्यवस्था उसे कहीं—न—कहीं सदैव मानसिक रूप से छलती आ रही है। इन विकट स्थितियों का सामना करवह संपूर्ण समाज व्यवस्था को सुचारु ढंग से चलाने में सबसे अधिक योगदान देता है। वह अपनी भूमिका का

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THE THEME OF LOSS OF HUMAN VIRTUES AND VALUES IN T. S. ELIOT'S POEM *GERONTION*

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ABSTRACT:

The loss of faith in religion has been caused of failure of all learning and knowledge because the two world wars have proved the total collapse of modern civilization. This acute awareness of crises, the loss of sense of faith and conviction are the dominant features of modern age. The roots of this condition of crisis of loss of faith are rooted in the absence of religion, philosophy and ethical values. This bewilderment and confusion has direct bearing upon art including literature. Thomas Hardy, Hopkins, Huxley, T. S. Eliot and Auden are the spokesman of this great crisis of anxiety and fear. The feeling of aimlessness, the need to search for faith which can work as providing some solution. Eliot, through this poem, shows the loss of human virtues and values as a result of loss of faith in religion.

Key words: Aimlessness, Anxiety, Virtues, Values.

Introduction:

T. S. Eliot started his career as a writer by presenting wonderful pieces of poems. His master pieces in poetry *The Waste Land* (1922), *The Hollow Men* (1925), *Gerontion* (1919), *Ash Wednesday* (1930) and *Four Quartets*. These poems profoundly indicate the condition of the emptiness. In themes and structure all these poems have no parallel. *The Waste Land* (1922) has been considered as the masterpiece of our times. This poem won for him the Nobel Prize and many other prizes. Every poem of Eliot talks of anxiety, lack of peace and spirit, sacrifice and love. Eliot's poetry holds a mirror to modern life situation. It has great relevance with the problems that women are facing today. The poem under the title *Gerontion* is such a poem giving us very great description of an old man who has become bundle of psychological undercurrents going on his sub-consciousness. He has no vitality, no energy left in his body very weak and lonely. 'Gerontion' is the central figure in the poem. He is the broken and decayed man. His life indicates contemporary barrenness at all levels. Through him the poet suggests the spiritual barrenness of contemporary civilization. He has been described as a very ordinary person having got no heroic record as his achievement. He neither fought in any battle, nor did he do any work of adventure. His consciousness becomes the substance of the poem.

NATURE AND HUMAN VULNERABILITY: SPECIAL REFERENCE**WITH DILIP CHITRE'S POEM *THE FELLING OF THE BANYAN******TREE*****Dr. Vishnu Chavan**

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Email- vishnuchavan138@gmail.com**Abstract**

There are many great poets, writers and thinkers who have written about nature and its importance for human life like- William Wordsworth, John Keats, P. B. Shelley, Sarojini Naidu and many others. Dilip Chitre was one of the foremost Indian poets and Critics who emerged in the post-Independence India. Through this poem *The Felling of the Banyan Tree*, researcher has tried to show how human beings are going apart from the company of nature. In the present poem *The Felling of the Banyan Tree*, the poet has very pictorially depicted an event of cutting a huge banyan tree. It shows poets vulnerability towards nature.

Keywords: *Literature, Nature, Vulnerability, Humanity, Conservation*

Introduction

In modern period, humanity is suffering by many complexities and problems. Some problems are natural and some complexities and problems are man-made which are more critical and complex for the existence of the humanity. Under the name of development, progress and change, human beings have been losing many basic natural things which are inevitable to conserve and preserve it for healthy and happy human and all living beings' life. Literature is the best medium and a way to express our feelings, emotions and thoughts. All the human actions and overall behavior of human beings expressed through the medium of literature and also through various genres by contemporary creative writers. Many great writers, all over the world, depicted the contemporary social surrounding of both, Rural life

Special Issue**713****May 2020**Website: www.langlit.org

Contact No.: +919890290602

One Day National Webinar On Effects of Crisis on Language, Literature and Culture Organized by
Department of English, Vasantrao Naik Government Institute of Arts and Social Sciences, Nagpur
Indexed: ICI, Google Scholar, Research Gate, Academia.edu, IBI, IIFC, DRJI, The Cite Factor, COSMOS

Importance of ICT, LMS and E-Learning Resources for innovative Teaching, Learning and Evaluation Process

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Abstract:

ICT, E-learning and LMS have become a backbone of modern education system. These resources improve and strengthen the effectiveness of educational process. ICT, LMS and E-Learning have a pivotal role to play to address the issue of quality content and quantity of teachers and researchers. The government has been laying emphasis on the importance of ICT, E-Learning in modern educational process. While implementing the new education policies in the present scenario of education system, many changes have taken place especially in the teaching-learning to assessment and evaluation process. Information and Communication technology, LMS and E-Learning are extremely influencing every field and faculties including education. The present paper aims to high light the importance of ICT, LMS and E-Learning resources for innovative teaching, learning and evaluation process.

Key Words: ICT, LMS, Innovative, E-Learning.

Introduction:

Krishna Mohan and Meera Banerji writes about importance of communication as “Man has been using language as a tool of communication for centuries. It has enabled him to interact with the environment and to regulate his social behavior. Though there are a number of means of communication, language is the most widely used instrument. Man communicates meaning through a sophisticated system of symbols.” (Mohan and Banerji, pg.1) There has been a rapid growth in the modes of communication in the 21st century. Due to this it is possible to contact and communicate with each other very fast. With the advancement in technology. Teaching, Learning and Evaluation process is an essential and important part of education system. It has become the essential and necessary to make these processes easy and attractive while implementing new education policy. It has become necessary to apply ICT, LMS and E-Learning tools in modern education system. It will improve and enhance the effectiveness of teaching, learning and evaluation process. In modern scenario, the role of ICT and E-learning have been acknowledged and appreciated globally.

An essential need of ICT and E-learning in modern education system has shown effectiveness in this process. While telling the importance of ICT in Indian Context, R. Agrawal and Sajid writes, “The ICT equipment presents huge opportunities to both educators and students in becoming life-long learners. Knowledge of ICT is the key to globalization and creating world citizens. ICT is not only for effective and systematic functioning of some higher education institutions, but also for more meaningful adoption of it for teaching, learning and governance.” (Kumar, Pg.2)

E-learning was coined in late 90s as the technological enhanced learning mechanism through internet. It captured a broad range of electronic media like Internet, Intranets, extranets, Satellite broadcast, audio-video tape, interactive TV and CD ROM to make the innovative



OUR HERITAGE

ISSN: 0474-9030 Vol-68, Special Issue-23

National Conference on "Academic Libraries in
E-learning Environment: Role and Prospect"

Organized by: Learning Resource Centre, Jeevan Vikas
Mahavidyalaya, Devgram, Narkhed, Nagpur, Maharashtra

Sponsored by: ICSSR and Held on 29-30 January 2020.



Massive Open Online Courses: Special Reference To Nptel

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Abstract

In the recent year, Massive Open Online Course (MOOC) has increased tremendously in educational environment. Seeing the growth of enrolment from the country and satisfy their need of education, Massive open online courses (MOOCs) as a third generation distance education enable anyone anywhere to study for free in higher education. In this paper, researcher studied about NPTEL's theoretical and technical background of these platforms is provided with a discussion of their features. Further, a comparative analysis of the platforms is providing, using web analysis. There are some challenges that are faced in implementing MOOC in India. With the launch of SWAYAM, some of these issues are already addressed.

Keywords: MOOC, Indian MOOC Course, NPTEL

Introduction

Educational learning environment has tremendous changes with the development and impact of information communication technology usage. New technology is considered as most promising development in education, with the help of technology in education provides global learning environment which allows accessing the course material anytime, anywhere, connect other learners and get access to the content without considering any geographical boundaries. (chauhan 2017). The significant changes in use of the technology in online education has seen emergence of the concept of Massive Open Online Course.

Massive Open Online Course is a free Web- Based distance learning program that is designed for the participation of large numbers of geographically dispersed students. Its may be patterned on a college or university course. MOOCs do not always offer academic credits; they provide education that may enable certification, employment or further studies.

History

The word MOOC was introducing in 2008 by Dave Cormier, from the university of prince Edward Island for a course offered by the University of Manitoba. In 2011 the

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3.3.2 Number of research papers per teachers in the Journals notified on UGC website during Academic Year 2018-19

Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
Isolation and Characterization of Endophytic Bacteria from <i>Limonia acidissima</i> L. with potential PGPA and Antimicrobial Activity	Dr. Mrs. S.P. Patil	Botany	Journal of Biological and Chemical Research	Nov-18	2319-3077 (Online) 0970-4973 (Print)	Research Paper Link
Plant Growth Promotion and Antimicrobial Study of Endophytic Fungi Isolated from <i>Limoniaacidissima</i>	Dr. Mrs. S.P. Patil	Botany	Journal of Biological and Chemical Research	Nov-18	2319-3077 (Online) 0970-4973 (Print)	Research Paper Link
Rhizobacteria of soybean (Glycine max): In vitro screening for their plant growth promoting potentials.	Dr. Mrs. S.P. Patil	Botany	IJBAT (international Journal of Researches in Bioscience, Agriculture & Technology	Aug-18	2347-517X	Research Paper Link
Molecular Identification of Multi-Drug Resistant <i>Klebsiella pneumoniae</i> Phenotypes and Appraisal of its Response to Combined Action Activity of <i>Coriandrum sativum</i> (Apiaceae) Extracts and Antibiotics	Dr. Mrs. S.P. Patil	Botany	Research Directions	Feb-19	2321-5488	Research Paper Link
Use of vegetal oils in the poultry feed as infection control agents	Dr. Mrs. S.P. Patil	Botany	Research Directions	Feb-19	2321-5488	Research Paper Link
Screening for Antibacterial Potentials of Some Dye Yielding Plants	Dr. Mrs. S.P. Patil	Botany	Research Directions	Feb-19	2321-5488	Research Paper Link
Fitness Prediction Modelling Using Adaptive Neuro-Fuzzy Classifier & Artificial Neural Network, Accepted for publication in journal International Review of	Dr. Mrs. N.R. Dhawade	Mathematics	International Review of Fuzzy Mathematics	Dec-18	0973-4392	Research Paper Link

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Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
Fuzzy Mathematics.						
Role of Computer Technology to Enhance E-Commerce	Dr. G.S. Katkar	Computer Science	ELXIR National Journal of multidisciplinary research	Feb-19	2277-3428	Research Paper Link
Computer Technology's Cloud Computing and its Impact on E-Commerce	Dr. G.S. Katkar	Computer Science	ELXIR National Journal of multidisciplinary research	Feb-19	2277-3428	Research Paper Link
Cloud Computing: A Drift to a E-Business	Dr. G.S. Katkar	Computer Science	ELXIR National Journal of multidisciplinary research	Feb-19	2277-3428	Research Paper Link
Analysis of statistical Parsing in Natural Language Processing	Dr. G.S. Katkar	Computer Science	International Journal of Innovative science and Research Technology	Dec-18	2456-2165	Research Paper Link
Kernal based Integration of Neural Network and Ant Colonization Algorithm for easy optimization of Two Dimensional Diagrams	Dr. G.S. Katkar	Computer Science	International Research journal of Management Science and Technology	Mar-18	2250-1959 (Online) 2348-9367 (Print)	Research Paper Link
Artificial Neural Network – An Overview	Dr. G.S. Katkar	Computer Science	IOSR Journal of Engineering (IOSR JEN)	Apr-19	2250-3021 (Online) 2278-8719 (Print)	Research Paper Link
Interactive data extraction algorithm to extract data from microsoft word document, applicable in conducting for river study	Dr. G.S. Katkar	Computer Science	Review of Research	Mar-19	2249-894X	Research Paper Link
Jal Pradushan Va Paryavaran Ek Aadhyayan	Dr. S.R. Daware	History	Research Journey	Mar-19	2348-7143	Research Paper Link
Panjabrao Deshmukh Yanche Shaikhanik Karya.	Dr. S.R. Daware	History	Review of Research	Mar-19	2249-894X	Research Paper Link
A Study of Crop Combination in North-East Ahmednagar District using Weaver Technique and GIS Approach	Dr. D.S. Samarth	Geography	International Journal of Applied Information Systems (IIAIS)	Sep-18	2249-0868	Research Paper Link

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Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
Bharat Ki Badhti Jansankhya Ka Paryavaran Par Hone Wale Parinamoka Krushi Ki Faslonke Sandarbh Me Bhaogolik Aadhyan	Dr. D.S. Samarth	Geography	Research Journey	Mar-19	2348-7143	Research Paper Link
Aadhunik Auodyogik Kshetratil Samajik Paryavarnache Sthan, Prakar, Samasya Aani Upay	Dr. D.S. Samarth	Geography	Power of Knowledge	Mar-19	2320-4494	Research Paper Link
Manviya Sadhan Sampatiche Vyavsthapan: Kalachi Garaj	Dr. M.P. Shirkhedkar	Home Economics	Research Journey	Mar-19	2348-7143	Research Paper Link
Dalit Sahitya- Perna Ani Prayojan.	Dr. R.R Watane	Marathi	Research Journey	Aug-18	2348-7143	Research Paper Link
Keshav Sutanchya Kavyatil Naisargik Paryavaran	Dr. R.R Watane	Marathi	Research Journey	Mar-19	2348-7143	Research Paper Link
Samteche Purskarte Mahatma Shree Chakradhar Swami.	Dr. R.R Watane	Marathi	Review of Research	Jan-19	2249-894X	Research Paper Link
Sant Eknathanchya Sahityatil Samaj Darshan	Dr. R.R Watane	Marathi	Review of Research	Mar-19	2249-894X	Research Paper Link
Drusthantpathatil Tatwavichar.	Dr. R.R Watane	Marathi	International Journal of Research in Social Sciences	Apr-19	2249-2496	Research Paper Link
Globalization: Challenges, Strategy, Consequences in Current Scenario	Dr. S.S. Dudhe	Sociology	Review of Research	Jan-19	2249-894X	Research Paper Link
Female Foeticide : A Challenge To Women Empowerment	Dr. S.S. Dudhe	Sociology	Review of Research	Feb-19	2249-894X	Research Paper Link
Deforestation is Responsible For Environmental Degradation	Dr. S.S. Dudhe	Sociology	Review of Research	Mar-19	2249-894X	Research Paper Link
Global Challenge in Front of Humanity	Dr. S.S. Dudhe	Sociology	International Journal of Research in Social Sciences	Apr-19	2249-2496	Research Paper Link
Psychological preparation in Sports	Dr. S.S. Bhotmange	Physical Education	Research Chronicler, International Multidisciplinary	Feb-19	2347-503X (Online) 2347- 5021 (Print)	Research Paper Link

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			Research Journal			
A Study of Impact of IT Application in Agriculture in Nagpur District	Dr. A.H. Dhote	Commerce	ELXIR National Journal of multidisciplinary research	Feb-19	2277-3428	Research Paper Link
Study of NAAC methods and its effect on quality of engineering institute	Dr. V.S. Khapne	Commerce	Research Journey	Feb-19	2348-7143	Research Paper Link
A Study of Recent Development of Indian Agri-Business: A Case of Awareness Among Farmers About Substitute Fertilizers	Dr. V.S. Khapne	Commerce	ELXIR National Journal of multidisciplinary research	Feb-19	2277-3428	Research Paper Link
RECENT DEVELOPMENT IN COMMERCE AND BUSINESS	Dr. V.S. Khapne	Commerce	ELXIR National Journal of multidisciplinary research	Feb-19	2277-3428	Research Paper Link
Nagpur Jilhyatil Prachalit Bank Pranalicha Va Dhornacha Prabhav Mahila Bachat Gatachya Karya Varhonare Parinamache Adhyayan	Dr. V.S. Khapne	Commerce	Review of Research	Mar-19	2249-894X	Research Paper Link
Women's condition: past and present: an overview	Dr. Mrs. V.V. Vaidya	English	LangLit An International Peer Reviewed Open Access Journal	Aug-18	2349-5189	Research Paper Link
Invisible footprints: sufferings of dalits	Dr. Mrs. V.V. Vaidya	English	LangLit An International Peer Reviewed Open Access Journal	Aug-18	2349-5189	Research Paper Link
Female Protest And Assertion of Self In Githa Hariharan's – The Thousand Faces Of Night	Dr. Mrs. V.V. Vaidya	English	International Journal of English Language Literature in Humanities (IJELLH)	Sep-18	2321-7065	Research Paper Link
The illegal immigrants and their life in American kitchens' in Kiran Desai's novel IOL	Dr. Mrs. V.V. Vaidya	English	International Journal of English Language Literature in Humanities	Sep-18	2321-7065	Research Paper Link
Myths and Allusions in Rushdie's Grimus	Dr. Mrs. V.V. Vaidya	English	Review of Research	Mar-19	2249-894X	Research Paper Link

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Importance of English in Business communication	Dr.Mrs. V.V. Vaidya	English	ELXIR National Journal of multidisciplinary research	Feb-19	2277-3428	Research Paper Link
Men's credit and women's literature	Dr.Mrs. V.V. Vaidya	English	Cenacle, A Peer Reviewed Annual Journal of English	Dec-18	2231-0592	Research Paper Link
Zadie Smith's White Teeth: Multiculturalism and problems of Immigrant	Dr.Mrs. V.V. Vaidya	English	INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS	Apr-19	2349-5138	Research Paper Link
ULTRASONIC STUDIES OF ESSENTIAL AMINO ACID LYSINE AND THREONINE IN AQUEOUS POTASSIUM HYDROXIDE SOLUTIONS AT 303 K AND 5 MHZ	Dr. A.S. Nakhate	Physics	IJBAT (international Journal of Researches in Bioscience, Agriculture & Technology	Jan-19	2347-517X	Research Paper Link
A narrative adaptation of Aristotle's concept of ideal Tragic hero in modern Indian Hindi movies: Aashiqui 2 and Raanjhanaa	Dr. A.Y. Bhaik	English	Review of Research	Dec-18	2249-894X	Research Paper Link
Aarthik, Samajik Vikas Va Paryavaran	Sh. S.P. Ghugal	Economics	Research Journey	Mar-19	2348-7143	Research Paper Link
Dr.Babasaheb Ambedkarancha Arthik Vicharanchi Vastvikikata Ek Abhyas.	Sh. S.P. Ghugal	Economics	Review of Research	Mar-19	2249-894X	Research Paper Link
Bhartiya Arth Vyavasthet Vishesh Aarthik Kshetra Chi Bhumika	Dr.Mrs. A.R. Durge	Commerce	Review of Research	Jan-19	2249-894X	Research Paper Link
Krushni Malachya Mulyantil Uchhvacchane	Dr.Mrs. A.R. Durge	Commerce	Review of Research	Feb-19	2249-894X	Research Paper Link
Aadhunik Yugatil Bhartiya Banka: Sandhi Va Aavhane	Dr.Mrs. A.R. Durge	Commerce	Review of Research	Mar-19	2249-894X	Research Paper Link
Vishesh Aarthikk Shetrachi Bhumika Va Tyasandarbhatil	Dr.Mrs. A.R. Durge	Commerce	Vidyawarta, International Multilingual Research	Sep-18	2319-9318	Research Paper Link

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Tartudinche Aadhyayan			Journal			
Mahilanche Rajkarnatil Vadhta Sahbhag	Dr.Mrs. A.R. Durge	Commerce	Vidyawarta, International Multilingual Research Journal	Mar-19	2319-9318	Research Paper Link
Manavdhikar Eva Bhartiya Mahilae	Dr.Mrs. A.R. Durge	Commerce	International Journal of Management, IT & Engineering	Apr-19	2249-0558	Research Paper Link
The Importance of English in the Business World	Dr. K.V. Ghormade	Commerce	ELXIR National Journal of multidisciplinary research	Feb-19	2277-3428	Research Paper Link
E-Commerce pranali mule vyavharat padat aslela prabhav	Dr. K.V. Ghormade	Commerce	ELXIR National Journal of multidisciplinary research	Feb-19	2277-3428	Research Paper Link
Modelling for the establishment of a network of protected Areas in the different land use management site of Gondia District in Maharashtra	Sh. A.A. Wankhede	Zoology	Research Directions	Feb-19	2321-5488	Research Paper Link
Samajik Karyamadhil Tatvadrushti	Dr. K.V. Thakre	Marathi	Shivsanstha	Dec-18	---	Research Paper Link
Sant Wani Tun Prakatlele Nisarg-Sawardhan	Dr. K.V. Thakre	Marathi	Research Journey	Mar-19	2348-7143	Research Paper Link
Rashtasant Tukdoji Maharajanche Kavyapurna Va Kavyadrusti.	Dr. K.V. Thakre	Marathi	Review of Research	Mar-19	2249-894X	Research Paper Link
Rashtasantachi Abhangwani Aani Gramgeeta.	Dr. K.V. Thakre	Marathi	International Journal of Research in Social Sciences	Apr-19	2249-2496	Research Paper Link
C-S and C-N Coupling Reactions of Barbituric Acid via Selective and Complete Bromination Using Greener KBr/H ₂ O ₂ as a Brominating Agent	Dr. C.S. Bhaskar	Chemistry	Journal of Indian Chemical Society	Apr-19	0019-4522	Research Paper Link
One pot synthesis of 1,2,4,5-Tetrazinones and their characterization	Dr. C.S. Bhaskar	Chemistry	Research Directions	Feb-19	2321-5488	Research Paper Link
Isolation and	Dr. V.N. Charde	Microbiology	Journal of Biological	Nov-18	2319-3077	Research

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Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
Identification of <i>Geobacilluskaustophilus</i> from Salbardi Hot Spring and Compared with <i>Geobacillus stearothermophilus</i> for Antibiotic Detection in Milk Samples by Agar Diffusion Method			and Chemical Research		(Online) 0970-4973 (Print)	Paper Link
Isolation and Characterization of Endophytic Bacteria from <i>Limonia acidissima</i> L. with potential PGPA and Antimicrobial Activity	Dr. V.N. Charde	Microbiology	Journal of Biological and Chemical Research	Nov-18	2319-3077 (Online) 0970-4973 (Print)	Research Paper Link
Plant Growth Promotion and Antimicrobial Study of Endophytic Fungi Isolated from <i>Limoniaacidissima</i>	Dr. V.N. Charde	Microbiology	Journal of Biological and Chemical Research	Nov-18	2319-3077 (Online) 0970-4973 (Print)	Research Paper Link
Molecular Identification of Multi-Drug Resistant <i>Klebsiella pneumoniae</i> Phenotypes and Appraisal of its Response to Combined Action Activity of <i>Coriandrum sativum</i> (Apiaceae) Extracts and Antibiotics	Dr. V.N. Charde	Microbiology	Research Directions	Feb-19	2321-5488	Research Paper Link
Isolation of Endophytic Fungi from Agriculture Field of Nagpur Region and Assessment of Isolated Fungi for Antiquorum Sensing Activity	Dr. V.N. Charde	Microbiology	Research Directions	Feb-19	2321-5488	Research Paper Link
Screening for Antibacterial Potentials of Some Dye Yielding Plants	Dr. V.N. Charde	Microbiology	Research Directions	Feb-19	2321-5488	Research Paper Link
Growth kinetics and Baculovirus productivity of indigenously developed cell line DZNU-Bm-1	Dr. R.S. Bahekar	Zoology	Research Directions	Dec-18	2321-5488	Research Paper Link

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of Bombyx mori (L) in different medium.						
Adaptation and Baculovirus production in indigenously developed cell lines of Bombyx mori (L) in Haemolymph free and serum free media.	Dr. R.S. Bahekar	Zoology	Research Directions	Feb-19	2321-5488	Research Paper Link
Diversity of Zooplanktons in Koradi lake, District- Nagpur, India	Dr. R.S. Bahekar	Zoology	Review of Research	Mar-19	2249-894X	Research Paper Link
Detection of <i>vanA</i> gene among MRSA isolates in tribal district Chandrapur (M.S.) India.	Dr. Y.W. There	Microbiology	Research Directions	Feb-19	2321-5488	Research Paper Link
Antibiogram study of Methicillin sensitive <i>Staphylococcus aureus</i> in Vidarbha region.	Dr. Y.W. There	Microbiology	Research Directions	Feb-19	2321-5488	Research Paper Link
Molecular identification and characterization of MRSA isolates in Vidarbha region of central India.	Dr. Y.W. There	Microbiology	Review of Research	Feb-19	2249-894X	Research Paper Link
Thermoluminescence assessment of Eu^{3+} and Dy^{3+} ion activated $\text{Ba}_2\text{WO}_3\text{F}_4$ phosphors irradiated with γ -photon and C^{5+} ion beam	Dr. K. V. Dabre	Physics	International Journal of Current Engineering And Scientific Research (IJCESR)	Jan-19	2394-0697 (Online) 2393-8374 (Print)	Research Paper Link
Nagriya Samsanyane Aur Hindi Upnyas	Dr. G.K. Polenwar	Hindi	Research Directions	Jan-19	2321-5488	Research Paper Link
Paryavarn Chintan Aur Samkalin Adivasi Kavita	Dr. G.K. Polenwar	Hindi	Research Journey	Mar-19	2348-7143	Research Paper Link
Samkalin Hindi Natkome Paryavaran Chintan	Dr. G.K. Polenwar	Hindi	Review of Research	Mar-19	2249-894X	Research Paper Link
Paryavaran Aur Manav Swasth	Dr. R.P. Waghmare	Hindi	Research Journey	Mar-19	2348-7143	Research Paper Link
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J. Biol. Chem. Research. Vol. 35, No. 2: 843-851, 2018

(An International Peer Reviewed / Refereed Journal of Life Sciences and Chemistry)

Ms 36/01/40/2019

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ISSN 2319-3077 (Online/Electronic)**ISSN 0970-4973 (Print)**

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[http:// www.sasjournals.com](http://www.sasjournals.com)[http:// www.jbcr.co.in](http://www.jbcr.co.in)jbicrchemres@gmail.com**RESEARCH PAPER**

Received: 31/10/2018

Revised: 28/11/2018

Accepted: 29/11/2018

Isolation and Characterization of Endophytic Bacteria from *Limonia acidissima* L. with Potential PGPA and Antimicrobial Activity**Pranita P. Shuddhalwar, Vijay N. Charde and *Suvarna P. Patil**

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ABSTRACT

Limonia acidissima plant parts (root, stem bark and leaves) were investigated for the bacterial isolates having antibacterial and antifungal compounds producing ability. Total five isolates having potential plant growth promotion activity PGPA identified as *Pseudomonas stutzeri* and *Aeromonas sobria* from roots, *Sphingomonas paucimobilis* and *Aeromonas sobria* from stem bark, *Aeromonas sobria* from leaves. Results highlighted that large diversity prevails in the endophytic bacterial population and those can produce indole acetic acid (IAA) and ammonia which supports plant growth. In addition, they are also found to be promising candidate to produce several secondary metabolites which has ability to control human and plant pathogens for sure. These endophytes are recorded to be encouraging nominee for therapeutic studies in coming time.

Keywords: *Limonia acidissima*, Endophytic Bacteria, Plant Growth Promotion, Antibacterial and Antifungal, Phytochemical.

INTRODUCTION

Endophytes can be easily isolated from plant parts such as stem bark, petiole leaf blade (Hata and Sone, 2008), primordia, meristem and resin ducts (Pirttila *et al.* 2000; Pirttila *et al.* 2003), leaf segments with mid rib and roots (Hata *et al.*, 2002). Endophytes as bacteria, fungi, and/or actinomycetes could be isolated from plant tissues by adopting number of techniques extensively used for the isolation of endophytes (Hallmann *et al.* 1997; Reinhold-Hurek and Hurek, 1998). Generally, endophytes are isolated by surface sterilizing plant tissue and by culturing from ground tissue extract (Rai *et al.* 2007) and also by direct culturing of plant tissues (Hata and Sone, 2008) on media suitable for bacteria or fungi or actinomycetes growth. Endophytes are known to produce a wide range of plant growth promoting hormones, such as auxins, cytokinins and gibberellic acids. Besides that, endophytes also provide vital antimicrobial activity by which, it assists in controlling microbial pathogens in plants and/or animals. Mostly endophytes isolated from medicinal plants produces broad spectrum antimicrobials and remain effective to number of pathogenic microorganisms (Sette *et al.* 2006; Selim *et al.* 2011; Devaraju and Sathish, 2011). Some endophytes have unique ability to mimic properties of plants such as its ability to produce secondary metabolites (J. Zhao *et al.* 2010). *L. acidissima* is the native plant of India and also present in Srilanka, Pakistan and Bangladesh (Bakshi *et al.* 2001). The plant is dominant in dry plains area. It grows well in a monsoon season and in distinct dry season also. The trees found to be reaching in height up to 450 meters especially in western Himalayas. It can sustain dry spell and better adapted to light soils (Vaidyaratnam Varier *et al.* 1995). Whole plant parts of *Limonia* were found to be useful in controlling number of diseases. As per Ayurveda, bark and leaves of *L. acidissima* are recommended for the treatment of two basic

J. Biol. Chem. Research. Vol. 35, No. 2: 852-860, 2018

(An International Peer Reviewed / Refereed Journal of Life Sciences and Chemistry)

Ms 36/01/46/2019

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ISSN 2319-3077 (Online/Electronic)**ISSN 0970-4973 (Print)**

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[http:// www.sasjournals.com](http://www.sasjournals.com)[http:// www.jbc.co.in](http://www.jbc.co.in)jbiolchemres@gmail.com**RESEARCH PAPER**

Received: 08/11/2018

Revised: 28/11/2018

Accepted: 29/11/2018

Plant Growth Promotion and Antimicrobial Study of Endophytic Fungi Isolated from *Limonia acidissima*

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ABSTRACT

From the *Limonia acidissima* plant parts (root, stem bark and leaves) 31 isolates were obtained and out of that 3 endophytic fungi (*Aspergillus flavus* FR14, *Aspergillus fumigatus* FS11 and *Aspergillus flavus* FL3) were studied. These fungi were subjected to plant growth promotion activity (PGPA) and preliminary phytochemical screening. From the results, it was found that they have promising effect in the growth of plant by producing plant growth hormone Indole acetic acid (IAA) and ammonia and also has potential to produce various secondary metabolites having ability to control human and plant pathogens. The outcome of this entitled study, offers promising information for the potential utilization of these remarkable endophytic fungus and its components in the biotechnological, medicinal, and agricultural industries.

Keywords: *Limonia acidissima* Endophytic Fungi, Plant Growth Promotion, Antibacterial, Antifungal and Phytochemical.

INTRODUCTION

Endophytic microorganisms produce natural bioactive compound and have ability to kill or inhibit a wide range of harmful disease causing agent including fungi, viruses, phytopathogen and other bacteria and protozoa that affect human and animals (Muzzamal *et al.*, 2012). The association between endophytes and plant is often mutualistic. In response to environmental stress, co-evolution may exist between endophytes and their host. Endophytic microorganisms can be isolated from sterilized surface of plant tissue. Primarily, endophytes enter into plant tissue through root zone. Aerial portion of plant such as flowers, stems and cotyledons may also be used for entry by endophytes. Inside a plant, endophytes may either become localized at the point of entry or spread throughout the plant (Munif, 2012). Fungal endophytes like *Ascomycota* or their anamorphs are the colonizers for plants and algae and those often being identified as *Orchid mycorrhizas* (Rungjindamai, 2008). In an oil palm, *Elaeis guineensis* which is a Thai plantation found to be positive for *Basidiomycetous* harbouring in healthy leaves, petioles and rachis of the plant. Now for the first-time fungi such as *Tetraploa aristata*, *Phoma tropica*, *Monodictys castaneae*, *Acremonium terricola* and *Penicillium glandicola* were reported as prominent fungi as endophytes (Bezerra *et al.*, 2012). Fungi as an endophyte being classified as per phylogeny and life history traits as *Clavicipitaceous* (C) which generally infects grasses and the *non Clavicipitaceous endophytes* (NC-endophytes) which can grow in asymptomatic tissues of non-vascular plants, conifers, ferns and allies and angiosperms has also been reported (Rodriguez *et al.*, 2009). At the present moment human is putting intense focus on the natural products, natural medicines so that artificial drugs should be replaced (Malviya *et al.*, 2012). As it is known that either whole plant or parts of it has a good source of medicinal, therapeutic or savoury qualities, it is advisable to promote such possible medicinal plants as a source of new drugs. In a



RHIZOBACTERIA OF SOYBEAN (*GLYCINE MAX*): IN VITRO SCREENING FOR THEIR PLANT GROWTH PROMOTING POTENTIALS

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ABSTRACT:

Plant growth promoting rhizobacteria (PGPR) are the rhizosphere bacteria that may be utilized to augment plant growth and suppress plant diseases (Shaikhul Islam et al. 2016). In the search for efficient PGPR strains associated to the Soybean (*Glycine max*), a total of 95 isolates were obtained from the rhizospheric soil of soybean plants that were grown in the agricultural fields of Kamptee region. Among 95 isolates, 12 isolates were selected based on their in vitro antagonism towards phytopathogens. The effective antagonists were further screened for their plant growth promoting (PGP) activities viz., Phosphate solubilizing assay, Zinc solubilizing assay, Potassium solubilizing assay, Ammonia production, HCN production, Nitrogen fixation, Siderophore production, IAA production, and Chitinase assay. 11 isolates were positive for phosphate solubilization on Pikovskaya agar, 3 isolates were able to solubilize zinc, all 12 isolates were positive for ammonia, HCN and IAA production, 8 isolates were able to fix atmospheric nitrogen, of total twelve isolates, the only isolate unable to grow in chitin media was PB-5, rest all the eleven isolates were positive for chitinase assay, and 7 isolates found positive for siderophore production. Since these PGPR inoculants exhibited multiple positive PGP traits beneficial to the host plants, they may be applied in the development of new, safe, and effective bio-inoculants for improving plant growth and yield.

Keywords: *rhizobacteria, phytopathogens, Pikovskaya agar and siderophore.*

INTRODUCTION:

The rhizosphere is the rich source of microbes and microbial activity and thus better known as a storehouse of microbes and it consists of a large number of microorganisms mainly bacteria. These bacteria can be symbiotic or non-symbiotic on the basis that not only the plants get benefitted by their presence but bacteria also derive the nutrients for their survival (Kundan et al. 2015). Among these potential soil microorganisms, the most promising bacteria are known as plant growth promoting rhizobacteria (PGPR). In this sense, PGPR may be used to enhance plant health and promote plant growth rate without environmental contamination (Calvo et al. 2014). Soybean is an important Kharif oilseed crop in Maharashtra. Soybean is gaining popularity on account of its unique characteristics and adaptability to varied agro-climatic conditions. However, due to the extreme diversity of pathogens and serious diseases severe plant losses and yield reductions are common in susceptible cultivars of the soybean (Zivkovic V. et al., 2010). Rhizoctonia

solani is one of the most important soil-borne fungal pathogens, which develops both in cultured and non-cultured soils, causing diseases in different crops. Damping-off of seedlings is the most common disease caused by *R. solani*. It has a wide host range and causes diseases in a variety of crops such as potato, tomato, cucumber and soybean.

Hence, the present study was designed to isolate and characterize bacteria from the rhizosphere of soybean plants having PGP and antagonistic traits so that they can be exploited as a potential bioinoculants for soybean.

METHOD AND MATERIAL:

The study site and soil sampling: The soil samples used in the present study for the isolation of rhizospheric bacterial spp. were collected from soybean cultivating farms of 5 different villages of Kamptee region (Nagpur) in Maharashtra, India. The location of the site is at 21.20° N latitude and 79.18° E longitude with an elevation of 284 m. The root adhering samples of soybean plants were collected from randomly selected soybean crop under each

1

MOLECULAR IDENTIFICATION OF MULTI-DRUG RESISTANT *KLEBSIELLA PNEUMONIAE* PHENOTYPES AND APPRAISAL OF ITS RESPONSE TO COMBINED ACTION ACTIVITY OF *CORIANDRUM SATIVUM* (APIACEAE) EXTRACTS AND ANTIBIOTICS

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Abstract

The relative shortage of new antimicrobials for life threatening microbial infections because of perilous condition of loss of efficacy of antibiotics due to emergence of Multi-Drug Resistance. Research is focused on the new strategy of treatment tactics. *Klebsiella pneumoniae* is one of the most widespread gram negative pathogen facing the problem of MDR. In the existing study, out of total 106 clinical samples screened, 26 samples are found to be *Klebsiella pneumoniae* infected. Total 34 antibiotics were tested to analyze antibiotic sensitivity pattern. The pathogens showing wide and diverse spectrum of resistance namely, U010, U019, B087, U088 and U0106 were selected for further studies of synergistic action of herb extracts and antibiotics. Cold and hot extract of herb, *Corindrum sativum* were prepared by Maceration process and by Soxhlet extraction respectively with solvents, Petroleum ether, Chloroform, Acetone, Methanol and Water. Individual extract was not found to be effective against any of the selected MDR pathogens. The extracts of *Corindrum sativum* showed potentiation activity on antibiotic which is previously resistant against *Klebsiella pneumoniae*. The extracts found to have synergistic effect over CPZ, CIP, MO, RIF, TI, CID, CPZ, CIP, DOR, ETP, E, FAR, GAT, MEC to very high extent, shifted the activity of antibiotics from resistant to sensitive range. The effectiveness shown by these extracts may apply their use against multidrug resistant pathogens in achieving combination therapy.

Key words: Corindrum sativum, Klebsiella pneumoniae, Multi-Drug Resistance.

Introduction

The morbidity and mortality among the population due to MDR (Multi-Drug Resistance) phenotypes of Gram negative bacteria responsible for building stress in health care services for choice of potential treatment therapy [1,2]. WHO reports warned the medical practitioner and lay man community to reduce drug abuse to not to turn round of susceptible bacteria in resistant level. Most antibiotics are losing efficacy of treatment [3]. Foxman, B. (2010) reported *K. pneumonia*, *P. mirabilis*, *P. aeruginosa*, *S. aureus*, *E. faecalis*, *S. saprophyticus* are commonest bacteria associated with the UTIs in human [4].

USE OF VEGETAL OILS IN THE POULTRY FEED AS INFECTION CONTROL AGENTS

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Abstract

The importance of poultry on the world stage is widely acknowledged as it is a basic source of protein. The poultry business is often marred with the various infections to the birds. This basically hampers the prospects of the business to grow sustainably. Hence, in view of this the poultry businessmen have made rampant use of antibiotics to control the menace of infections. This leads to development of antibiotic resistance amongst the common pathogens encountered in the poultry industry. Hence, in order to develop new techniques and means to prevent development of antibiotic resistance among the poultry pathogens, novel agents are needed. In view of the above, this study has been carried out to determine the potential of herbal Vegetal Oils as an antimicrobial agent, especially against the poultry pathogens. This is particularly very important as majority of poultry farms are operational in the rural areas where indiscriminate use of antibiotics is a real issue. In the backdrop of the above information, this study was carried out to assess the utility of vegetal oils (thyme oil and tea tree oil) as an antimicrobial agent for its possible use in the poultry feed. The study has been carried out by using standard procedures, wherein the birds (Indian broiler) were fed with feed fortified/treated with vegetal oils for a period of six weeks. The study results showed that the prevalence of infections in the poultry was significantly less, thereby indicating the effectiveness of these vegetal oils as antimicrobial agents. Moreover, the results also indicated that the birds gained substantial body weight during this time indicating that the addition of vegetal oils has not affected the health of birds.

Keywords: Poultry, infections, antibiotic resistance, pathogens, vegetal oils

Introduction

In order to have proper growth, egg production and good health, poultry birds require adequate amount of energy. Moreover, the growth is also a function of their overall health i.e. remaining infection free. Thus, in order to obtain desired growth rate, one needs a nutritious feed for the poultry along with its (feed's) ability to control the menace of infection. Hence, selection of poultry feed ingredients become very important and need adequate attention for sustainable development of this industry. Moreover, the other important problem faced by the poultry industry is the mortality of birds due to various infections that result in significant economic losses. Hence, the industry does need a dependable as well as potent agent to fight against this problem of infectious diseases.

Amongst all the medicinal plants, vegetal oils are one of the most active components that have varied usage. These compounds (vegetal oils) that are made up of variety of different volatile compounds (Hadizadeh et al., 2009) possess antimicrobial activity against

SCREENING FOR ANTIBACTERIAL POTENTIALS OF SOME DYE YIELDING PLANTS

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Abstract:

Aqueous and methanolic natural dye extracts from flowers of *Nerium indicum*, fruits of *Aegle marmelos*, flowers of *Delonix regia*, leaves and flowers of *Lagerstroemia speciosa*, bark of *Bauhinia purpurea* and seeds of *Bixa orellana* were screened for their antibacterial activity by agar well diffusion method. These herbal extracts were tested against cultures of *Escherichia coli*, *Pseudomonas aeruginosa*, *Shigella boydii*, *Bacillus subtilis* and *Salmonella abony*. Methanolic extracts of dyes gave better results for antibacterial activity than aqueous dye extracts and maximum zone of inhibition (24mm) was found in methanolic dye extract of flowers of *Nerium indicum*.

Keywords: Antibacterial activity, Natural dye extracts, Zone of inhibition

Introduction:

Plants are the richest bio-resource of variety of useful novel products including timber, food, fragrance, beverages, fibres, fodder, medicines, flavours and dyes. Dyes are nothing but colouring agents which impart colour to various things and hence find application in food, cosmetics and textile industry. Human's association with colours is not new. It is very evident from many historical monuments, sculptures and literature that man knew about colours since ancient times. Henna was used even before 2500 BC, while saffron is noted in Bible (Gulrajani, 2001). Herbal dyes obtained from dye yielding plants was the only source to impart colours to various stuff till the advent of synthetic dyes. After its invention, synthetic dyes take over the market of natural dyes due to difficulty in the collection of dye yielding plants, species availability, tedious extraction procedure, low colour value etc. However, researchers found that synthetic colorants release allergic and carcinogenic chemicals which are detrimental to human health.

In this current scenario, various ill effects of synthetic dyes such as allergy, carcinogenicity, non-degradable nature, less compatibility with the environment etc. made a switch and a strong return to safe and subtle natural dyes. Moreover, the practise of herbal dyes has boosted owing to the pharmacological properties of dye extracts. Researchers have studied different plants for potential source of dyes such as lawsone from henna, juglone from walnut and lapachol from alkanet. These dyes were found to exhibit antibacterial and antifungal activity (Gerson, 1975; Schuerch and Wehrli, 1978; Wagner et al., 1989). The work in this paper is undertaken to screen the antibacterial potentials of dye yielding plants, namely *Nerium indicum*, *Aegle marmelos*, *Delonix regia*, *Lagerstroemia speciosa*, *Bauhinia purpurea* and *Bixa orellana* against representatives of common pathogenic bacterial strains

**Trupti A Thakre, Onkar K Chaudhari, Nita R Dhawade and
Prashant Borkar**

FITNESS PREDICTION MODELLING USING ADAPTIVE NEURO-FUZZY CLASSIFIER & ARTIFICIAL NEURAL NETWORK

***Abstract:** Fitness of an individual plays very important role for better quality of life. It requires proper health caring system which can predict it properly as per the convenience of an individual. This increasing need has encouraged using more precise and transparent system. This paper aims to design artificial neural network (ANN) and adaptive neuro-fuzzy classifier (ANFC) for fitness prediction based on various input parameters. Twelve variables are used as input. Same training and testing data sets are used for comparing both models. Results of the adaptive neuro-fuzzy classifier and artificial neural network with their accuracy rate are compared and discussed for the conclusion.*

***Keywords:** Artificial neural network (ANN), Adaptive neuro-fuzzy classifier (ANFC), Fitness Prediction, health caring system.*

***MSC:** 03B52, 68T05*

1. INTRODUCTION

Healthcare is an emerging area now days. Because of the changes in lifestyle and excessive work load, health is getting affected. Most of the people especially those who are working, hardly pay attention towards their fitness. This may be because of their busy schedule or money problem or scarcity of health services in their area or their ignorance to the fitness. Sometimes it is also difficult to visit doctor. But this may give rise to the development of severe disease in future. This requires emergence of a health care assistance system which will be convenient to use at home without actually going to the clinic, so that their time and money both are saved.

For overall health improvement, fitness becomes essential. A fit person is able to relish life with positive energy. So, a system can be helpful which will tell whether

Role of Computer Technology to Enhance E-Commerce

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Abstract: E-commerce is abbreviation of Electronics Commerce. It termed as buying and selling of goods or services on internet using computer network.. i.e. online business. In today's era conventional business is moreover replaced by E-commerce. One can buy required goods using online E-commerce website like amazon.com, flipcart.com etc. and mobile apps uber and ola used to avail car services. Zomato and Uber Eats for online food services. In this review paper we have taken brief review of E-Commerce services and discussed the types of digital channels like retailers website and mobile apps. We have also reviewed fraud prevention model viz. *Blacklist Based Algorithm with Machine Learning* and types of fraud validation.

Keywords: *Digital Channels, E-Commerce, Fraud Prevention Model, Fraud Validation, Machine Learning*

Introduction:

E-commerce is the activity of buying or selling of products on online services or over the Internet [1]. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems.

Modern electronic commerce typically uses the World Wide Web for at least one part of the transaction's life cycle although it may also use other technologies such as e-mail. Typical e-commerce transactions include the purchase of online books (such as Amazon) and music purchases (music download in the form of digital distribution such as iTunes Store), and to a less extent, customized/personalized online liquor store inventory services [5]. There are three areas of e-commerce: online retailing, electric markets, and online auctions. E-commerce is supported by electronic business [6].

E-commerce businesses may also employ some or all of the followings:

- Online shopping for retail sales direct to consumers via Web sites and mobile apps, and conversational commerce via live chat, chatbots, and voice assistants[3].
- Providing or participating in online marketplaces, which process third-party business-to-consumer or consumer-to-consumer sales
- Business-to-business buying and selling;
- Gathering and using demographic data through web contacts and social media
- Business-to-business (B2B) electronic data interchange

Computer Technology's Cloud Computing and its Impact on E-Commerce

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ABSTRACT

Cloud computing has been one of the most popular topics on information technology, since it was proposed by Google in 2007. In the past years, cloud computing has become from a theoretical concept into the real applications in different industries such as telecommunication and healthcare. Inevitably, its influences on different industries have also attracted much attention. Based on the literature review, this paper discussed how the traditional E-commerce businesses and industry were influenced by cloud computing in technical architecture, service modes and the industrial chain. Besides, it analyzed the driving-forces which led to the changes of E-commerce in cloud era. Finally, it concluded that only when the E-commerce enterprises involved cloud computing in the business strategy and established the core competencies, could they realize the sustainable development in the cloud era.

Keywords: *Cloud Computing; E-Commerce; Business Model; Industry Chain*

1. Introduction

Internet has changed the world, it is an indisputable fact. The 21st century, the trend of the gate to the social normalization brings the huge impact, based on the Internet and the rise of the Internet technology one at tremendous speed changing people's existence and study way, Cloud Computing so arises at the historic moment. Cloud Computing is a new technology, is a hi-tech product, has broad prospects for development. A good structure, reliable and extensible security model structure of the Cloud Computing development plays a very important role, it is the grid and cloud can actually used in the powerful guarantee of real world. E-commerce is online commerce verses real-world commerce. E-commerce includes retail shopping, banking, stocks and bonds trading, auctions, real estate transactions, airline booking, movie rentals—nearly anything you can imagine in the real world. Even personal services such as hair and nail salons can benefit from e-commerce by providing a website for the sale of related health and beauty products, normally available to local customers exclusively. While e-commerce once required an expensive interface and personal security certificate, this is no longer the case. Virtual storefronts are offered by a variety of hosting services and large Internet presences such as eBay and Yahoo!, which offer turnkey solutions to vendors with little or no online experience. Tools for running successful e-commerce websites are built into the hosting servers, eliminating the need for the individual merchant to redesign the wheel. These tools include benefits like shopping carts, inventory and sales

Cloud Computing: A Drift to a E-Business

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ABSTRACT

The computing trend moved toward cloud from the concept of grid computing, particularly when large computing resources are required to solve a single problem, using the ideas of computing power as a utility and other allied concept. In cloud computing, the IT and business resources, such as servers, storage, network, applications, and processes, can be dynamically provisioned to the user needs and workload. Cloud service providers (CSP's) offer cloud platforms for their customers to use and create their web services, much like. Internet service providers offer costumers high speed broadband to access the internet.

Keywords : *Cloud Computing, Internet , Business, SaaS, PaaS, IaaS*

CLOUD COMPUTING

The computing trend moved toward cloud from the concept of grid computing, particularly when large computing resources are required to solve a single problem, using the ideas of computing power as a utility and other allied concept. However, the potential difference between grid and cloud is that grid computing supports leveraging several computers in parallel to solve a particular application, while cloud computing supports leveraging multiple resources, including computing resources, to deliver a unified service to the end user.

In cloud computing, the IT and business resources, such as servers, storage, network, applications, and processes, can be dynamically provisioned to the user needs and workload. In addition, while a cloud can provision and support a grid, a cloud can also support on grid environments, such as a three-tier web architecture running on traditional or web 2.0 applications.

Analysis of Statistical Parsing in Natural Language Processing

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Abstract:- A statistical language model is a probability distribution $P(s)$ over all possible word sequences (or any other linguistic unit like words, sentences, paragraphs, documents, or spoken utterances). A number of statistical language models have been proposed in literature. The dominant approach in statistical language modeling is the n-gram model.

I. INTRODUCTION

A. n-gram Model

The goal of a statistical language model is to estimate the probability (likelihood) of a sentence. This is achieved by decomposing sentence probability into a product of conditional probabilities using the chain rule as follows:

$$P(s) = P(w_1, w_2, w_3, \dots, w_n)$$

$$P(s) = P(w_1) P(w_2/w_1) P(w_3/w_1 w_2) \dots$$

$$P(w_n/w_1 w_2 \dots w_{n-1})$$

$$= \prod_{i=1}^n P\left(\frac{w_i}{h_i}\right)$$

Language Processing and
Information Retrieval

Where h_i is history of word w_i , defined as $W_1 W_2 \dots W_{i-1}$

Example-1

➤ Training set

The Arabian Knights

These are the fairy tales of the east

The stories of the Arabian knights are translated in many languages

➤ Bi-gram model

$$P(\text{the}/<s>) = 0.67 \quad P(\text{Arabian}/\text{the}) = 0.4 \quad P(\text{knights}/\text{Arabian}) = 1.0$$

$$P(\text{are}/\text{these}) = 1.0 \quad P(\text{the}/\text{are}) = 0.5 \quad P(\text{fairy}/\text{the}) = 0.2$$

$$P(\text{tales}/\text{fairy}) = 1.0 \quad P(\text{of}/\text{tales}) = 1.0 \quad P(\text{the}/\text{of}) = 1.0$$

$$P(\text{east}/\text{the}) = 0.2 \quad P(\text{stories}/\text{the}) = 0.2 \quad P(\text{of}/\text{stories}) = 1.0$$

$$P(\text{are}/\text{knights}) = 1.0 \quad P(\text{translated}/\text{are}) = 0.5 \quad P(\text{in}/\text{translated}) = 1.0$$

$$\wedge(\text{many}/\text{in}) = 1.0$$

$$P(\text{languages}/\text{many}) = 1.0$$

Test sentence (s): The Arabian knights are the fairy tales of the east.

$$P(\text{The}/<s>) \times P(\text{Arabian}/\text{the}) \times P(\text{Knights}/\text{Arabian}) \times$$

$$P(\text{are}/\text{knights})$$

$$\times P(\text{the}/\text{are}) \times P(\text{fairy}/\text{the}) \times P(\text{tales}/\text{fairy}) \times P(\text{of}/\text{tales}) \times$$

$$P(\text{the}/\text{of})$$

$$\times P(\text{east}/\text{the})$$

$$= 0.67 \times 0.4 \times 1.0 \times 1.0 \times 0.5 \times 0.2 \times 1.0 \times 1.0 \times 1.0 \times$$

$$0.2$$

$$= 0.0268$$

As each probability is necessarily less than 1, multiplying the probabilities might cause a numerical underflow, particularly in long sentences. To avoid this, calculations are made in log space, where a calculation corresponds to adding log of individual probabilities and taking antilog of the sum.

B. Add-one Smoothing

This is the simplest smoothing technique. It adds a value of one to each n-gram frequency before normalizing them into probabilities. In general, add-one smoothing is not considered a good smoothing technique. It assigns the same probability to all missing n-grams, even though some of them could be more intuitively appealing than others. Gale and Church (1994) reported that variance of the counts produced by the add-one smoothing is worse than the unsmoothed MLE method. Another problem with this technique is that it shifts too much of the probability mass towards the unseen n-grams (n-grams with 0 probabilities) as their number is usually quite large. Good-Turing smoothing (Good 1953) attempts to improve the situation by looking at the number of n-grams with a high frequency in order to estimate the probability mass that needs to be assigned to missing or low-frequency n-grams.

C. Good-Turing Smoothing

Good-Turing smoothing (Good 1953) adjusts the frequency f_{af} of an n-gram using the count of re-grams having a frequency of occurrence $+/!$. It converts the frequency of an n-gram from f_{tof}^* using the following expression:

$$n f_{af} + 1 \quad / \bullet = (/ + !) - \frac{f_{af}}{f_{af}^*}$$

where n_i is the number of re-grams that occur exactly i times in the training corpus. As an example, consider that the number of re-grams that occur 4 times is 25,108 and the number of re-grams that occur 5 times is 20,542. Then, the smoothed count for 4 will be H^{*TM}

Kernal based Integration of Neural Network and Ant Colonization Algorithm for easy optimization of Two Dimensional Diagrams.

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ABSTRACT

This paper evaluating the critical fundamental of pattern and object detection technique, with full scale integration of kernel. Totally integrated separate result of ant colonization algorithm and neural network. The cross correlation data have histogram data, it also have kernel for our test image; integrating all this in one we have developed the full scale model for ACO and NN technique. It has calculated the error bound for this data, as well as we have checked the efficiency of this algorithm in terms of speed of computation, efficiency of memory allocation and pixel definition.

Keywords : Neural Network, Kernel, canvolisation

1. Introduction

Ant colony optimization (ACO) is an evolution simulation algorithm proposed by M. Dorigo et al [1]. Ants communicate with each other using pheromones. They leave pheromone trails on the ground in order to mark a path between their colony and a food source for other members in the colony to follow. The more ants following the same path, the higher its pheromone concentration becomes. Over time pheromone trails evaporate. The longer it takes for an ant to walk back and forth, the more time the pheromone has to evaporate. Hence, pheromone density remains higher at shorter and more favorable paths where pheromone is deposited at a much higher rate. This behavior helps ants successfully establish, and follow, the better paths. ACO is inspired by this foraging behavior. There exists several ant colony optimization algorithms, whereas the original algorithm, known as Ant System (AS), originates from the early nineties. Since then, a number of other algorithms, among the more successful variants MAX-MIN Ant System (MMAS) and Ant Colony System (ACS), were introduced. Several ACO-based approaches have been proposed to the edge detection problem. In this project, a new ACO-based approach is applied to image edge detection. The approach makes use of improvements introduced in ACS, with the addition of a new direction control feature. edges belonging to long and narrow openings, hence, edges belonging to cracks.

2.1 ACO in Image Edge Detection

Image edge detection deals with extracting edges in an image by identifying pixels where the intensity variation is high. Basically edge detector are usually subjected for evaluation of observer [2][3]. There are many well-known edge detection algorithms. Potvin[3], laporte[4] and Canny[5], to mention a few. Although originating from the early days of computer vision, some are still considered state-of-the-art edge detectors. Ant Colony Optimization introduces a different approach to image edge detection. In ACO, artificial ants «walk on» the image depositing pheromone where the intensity variation is high. A how two dimensional image can be represented as a two-dimensional graph with the image pixels as its nodes (Figure 5.1). A pixel is connected to all adjacent pixels in an 8-connectivity neighborhood.

Artificial Neural Network – An Overview

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Abstract: Today, we are living in the exciting time where technology is changing day by day. The purpose of paper is to study the recent trends emerging in the field of artificial neural over Digital Computer and Human Brain. Artificial Neural Networks are electronic models based on the neural structure of the brain. Neural networks are attractive since they consist of many neurons, each of the neurons processes information separately and simultaneously. Artificial neural network is most popular in the field of pattern classification or recognition, linear filtering problems, system identification, process control, optimization, robotics, and so on. Even by using the feedback network type architecture of neural network can be employed on time-variant systems, such as time series prediction, system identification and optimization and process control as in this network, the outputs of the neurons are used as feedback inputs for other neurons. The paper focuses on four basic types of artificial neural network type including Single-Layer Feed forward, Multilayered Feed forward, Recurrent/Feedback and Mesh Architecture. Also it focuses on Training Processes and properties of learning.

Keywords: Artificial Neural Networks, Hybrid Neural Network, Mesh Architecture

I. Introduction

The Neural Networks

The study of the neural networks is generated by the study of human brain, that how the brain works to make the decision, to store the patterns and how a brain learns for the recognition of objects? The study defines that a human brain contains an average of 3×10^{10} neurons [23] of various types, which are basically known as decision elements, with each neuron connecting to up to 10^4 synapses [24]. Artificial Neural Networks are electronic models based on the neural structure of the brain [25-27]. Neural networks are attractive since they consist of many neurons, each of the neurons processes information separately and simultaneously. All the neurons are connected by synapses with variable weights.

Artificial neural networks referred as to connectionist systems or neurocomputing, are a recent generation of information processing systems that are deliberately constructed to make use of some organizational principles that characterize the human brain. The main theme of neural network research focuses on modelling of the brain as a parallel computational device for various computational tasks which have traditionally been difficult to solve using traditional serial computers [Mehrotra et al., 1997].

Brain versus Digital Computer

The human brain can be seen as a flexible analog processor with enormous memory capacity that has been engineered and fine-tuned by evolution through several millions of years to execute tasks that are important for survival in our particular world. The human nervous system and the brain is a particular good example of this.

We are very good at recognizing faces and understand speech, very rapidly and accurately and far better than any digital computer, probably because it was very important to our survival to differentiate between friends and enemies and to communicate with each other. We can perform such tasks so effortlessly that we do not realize how hard they are until we try to program a digital computer to perform them.

Artificial Neural Networks provide possible methods for trying to solve some of the problems that are not suitable for digital computation.

Artificial Neural Networks:

The great majority of digital computers in use today are based around the principle of using one very powerful processor through which all computations are channeled. This is the so called *von Neumann architecture*, after John von Neumann, one of the pioneers of modern computing. The power of such a processor can be measured in terms of its speed (number of instructions that it can execute in a unit of time) and complexity (the number of different instructions that it can execute). The traditional way to use such computers has been to write a precise sequence of steps (a computer program or an algorithm) to be executed by the computer. This is the *algorithmic approach*. Such programs can be written in different computer languages, where higher level languages will have commands that when translated to the machine level will correspond to



INTERACTIVE DATA EXTRACTION ALGORITHM TO EXTRACT DATA FROM MICROSOFT WORD DOCUMENT, APPLICABLE IN CONDUCTING RIVER STUDY

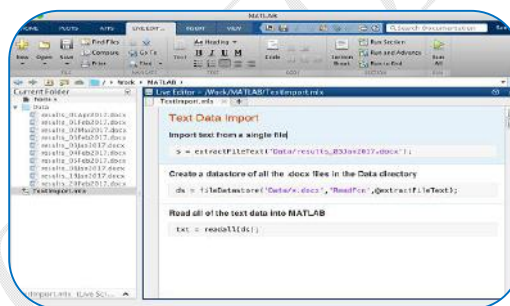
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ABSTRACT :

Microsoft word provides magnificent features in designing document, thus very popularly used for the documentation. Scientific reports involved charts, flowcharts, procedural diagrams, block diagram, Mathematical & Statistical equations and 3-D diagrams. Microsoft word provides very handy features in generating such documents, hence popularly used in scientific community. Moreover, it provides good features for text designing, tabular data generation, colors and images, thus gives immense pleasure to the user to generation document using this software. In addition to this, designed document can be easily converted into other popular forms like PDF, HTML and rich text format, hence made it worth in using. Microsoft word (*.doc) documents are also shared on the web and this is also one media used in disseminating information among the other. If this shared information extracted and re-processed, then this can be very useful information for conducting Research & Development(R&D) activities. This research paper introduces the algorithm developed for extracting data from the word document, which further geo-map the extracted data for the wide dissemination. Considering need to generate data for the Kanhan River, team has only targeted Kanhan river water quality data for the extraction as team is aimed to generate a central information repository. Using different data generation methodologies central data repository for the Kanhan river is maintained, which can be further utilized for the river and human health management.



KEYWORDS : Word-Extraction, data generation, extraction, Kanhan River, information system;

Related work:

Organizations like CPCB (Central Pollution Control Board, Delhi), MPCB (Maharashtra Pollution Control Board, Mumbai) and CSIR-NEERI (Council of Scientific and Industrial Research National Environmental Engineering and Research Institute, Nagpur) periodically conducts water quality study and generates water quality data for the rivers. Dr. S. R. Wate, Former Director of CSIR-NEERI conducted Kanhan river water quality study for three sites namely Kiranapur, Keslapur & Sawangi, and generated water data for the year 2004 and 2005 (winter, monsoon and summer). MPCB, Mumbai has setup three water quality monitoring stations on the Kanhan River for monitoring water quality and generate water quality data periodically.

Observing such work and getting inspiration, authors of this research paper has developed an algorithm which can extract data from such reports, the then benefits in conducting various R&D studies on the kanhan river study. In order to generation information for the kanhan river, research team is involved in introducing different possible medium through which information can be extracted.

जलप्रदूषण व पर्यावरण-एक अध्ययन

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सारांश :

मानव व त्याच्या सभोवताली असणारे पर्यावरण यांचा अतिशय घनिष्ठ संबंध आहे. पृथ्वीवरील सजीव सृष्टी निकोप राहण्यासाठी स्वच्छ व सुंदर पर्यावरणाची आवश्यकता असते. पर्यावरण शुद्ध ठेवण्यासाठी मानव व पर्यावरण यांचे संतुलन कायम ठेवणे गरजेचे आहे. मानवाच्या बहुतांश गरजा पर्यावरणातूनच भागविल्या जातात. अलिकडील काळात प्रचंड प्रमाणात वाढलेली लोकसंख्या व औद्योगीकरणामुळे मानव व पर्यावरण यांच्यातील समतोल ढासळत चालला आहे. मानवाने अविचाराने नैसर्गिक साधनसंपत्तीचा अविवेकी व अनिर्बंध वापर करून निसर्गाचा पर्यायाने पर्यावरणाचा नाश केला आहे. पृथ्वीवरील जीवसृष्टी ज्याविशिष्ट अधिवासात, नैसर्गिक परिस्थितीत जगते त्या सर्व पार्श्वभूमीला सामान्यतः पर्यावरण असे म्हटले जाते. पर्यावरणावरच सजीवांची निर्मिती, वाढ, रंगरूप, अस्तित्व या गोष्टी अवलंबून असतात. काही वेळा पर्यावरणामध्ये नैसर्गिक किंवा मानवी कारणांमुळे सजीवांना काही गोष्टी बाधक ठरतात, अशा घटकांना प्रदूषण असे म्हणतात.

प्रस्तावना :

मानवाच्या मुलभूत गरजांमध्ये पाण्याला अनन्य साधारण महत्त्व आहे. अनेक प्रदूषकांच्या साहाय्याने जेव्हा पिण्यायोग्य पाणी दुषित होते त्याला जलप्रदूषण असे म्हणतात. जल म्हणजे जीवन. पृथ्वीतलावरील जीवन केवळ पाण्यामुळे शक्य आहे. नदी काठावर मानवी संस्कृती वसल्या आणि त्यांचा विकास झाला. एकाच नदीच्या काठावर अनेक वसाहती वसल्यावर दुषित पाण्याचा प्रश्न निर्माण झाला. शहरांची आणि उद्योगधंद्याची वाढ झाल्यानंतर दुषित पाण्याच्या प्रश्नांची तीव्रता वाढली. जगातील जवळजवळ ७५ टक्के गावे आणि शहरे नद्यांच्या काठी वसलेली आहेत. माणसांना पिण्याच्या पाण्याचा पुरवठा करण्यापासून तो त्यांनी केलेली सर्व प्रकारची घाण वाहून नेण्यापर्यंतची असंख्य कामे या नद्यांना करावी लागतात. त्यातच गेली काही दशके अनेक प्रकारचे कारखाने आणि गिरण्या त्यांना नको असलेले निरुपयोगी पदार्थ व गाळ नद्यांच्या पात्रात सोडीत आहेत. त्यामुळे जलप्रदूषणाची समस्या मानवी समाजासमोर उभी ठाकली आहे. मानवी जीवनाला भेडसावणाऱ्या व अपायकारक परिणाम करणाऱ्या समस्यांमध्ये जलप्रदूषणाची समस्या अतिशय गंभीर मानावी लागेल.

विषयाचे महत्त्व :

पृथ्वीचा ७१ टक्के हिस्सा पाण्याने व्यापलेला आहे. पण त्या पैकी फारच थोड्या प्रमाणात पाणी गोड्या पाण्याच्या स्वरूपात उपलब्ध आहे. पृथ्वीवर उपलब्ध पाण्यापैकी ९७.२ टक्के पाणी सागरात आहे. परंतु हे पाणी पिण्यायोग्य नसते कारण ते खारट असते. त्यामुळेच हे पाणी सिंचनासाठी ही वापरता येत नाही. फक्त २.८ टक्के पाणी गोड किंवा स्वच्छ असते. या गोडपाण्यापैकी २५ टक्के पाणी हिमाच्छादीत क्षेत्रात हिमनद्या व हिमाने व्यापले आहे. शिल्लक राहिलेले २५ टक्के पाणी पृष्ठभागाखाली ७५० मीटरपर्यंत खोल असते. गोडपाण्यापैकी ०.३ टक्के पाणी सरोवरात, ०.०६ टक्के पाणी पृष्ठ भागाजवळ जमिणीत आणि ०.३ टक्के पाणी नद्यात असते, म्हणजे शुद्ध पाणी अतिशय दुर्मिळ किंवा अपुरे आहे. ते पिण्यासाठी, इतर घरगुतीवापरांसाठी, शेतीसाठी, त्याचप्रमाणे कारखाण्यासाठी वापरले जाते.

नैसर्गिकरित्या भूकंप, ज्वालामुखी, पूर, वादळे, नदी गाळाने किंवा मानवी हस्तक्षेपांमुळे पाण्याची आम्लता, रंग, चव, गढूळपणा पारदर्शकता बदलून ते वापरण्यास अयोग्य होते त्यालाच प्रदूषित जल असे म्हणतात. जगातील ९८ टक्के लोक समुद्र, नद्या, तळी, सरोवरे इत्यादी जलसाठ्याच्या सानिध्यात राहतात. त्यांच्या अयोग्य वापराने पाणी एकसारखे दुषित होत असते. म्हणजेच जेव्हा पाण्याची गुणवत्ता तसेच पाण्याचे गुणधर्म मानवी हस्तक्षेपामुळे बदलून जलसाठ्यातील पाणी कुठल्याही वापरासाठी अयोग्य होते तेव्हा पाणी प्रदूषित झाले असे मानण्यात येते.

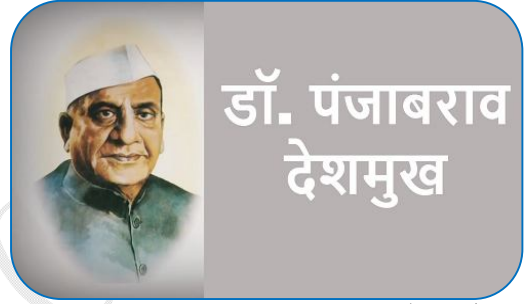
सामान्यतः जल प्रदूषण होण्याची कारणे खालीलप्रमाणे आढळून येतात. नदीचे पाणी वाहतांना त्यात गाळ विरघळतो. काही कण तरंगतात तर खणन क्रियेद्वारे नवीन गाळाचे थर पडत असतात. पावसाळ्यात नदीचे पाणी जास्त प्रदूषित असते. याशिवाय वादळे, पूर, भूमिपात, भूकंप, ज्वालामुखीच्या वेळी ते अधिक प्रदूषित होत असते. घरगुती मानवी हस्तक्षेप स्नान, कपडे, घर स्वच्छतेसाठी लागणारे पाणी, सांडपाणी म्हणून गटारातून वाहतांना प्रदूषित होते. भारतासारख्या देशात तीर्थक्षेत्रे, नद्या, समुद्र, सरोवर याठिकाणी स्नान, पूजाविधी या निमित्ताने पाणी दुषित होते. मलमूत्र विसर्जनाबरोबर कचराही पाण्यात सडून पाणी दूषित होते. असे पाणी खेडेगावात खड्ड्यात सोडतात. शहरात सेप्टी टँक मध्ये साचवतात. हे जमिनीत मुरून भूमिगत पाणी दुषित होते. शेती कामासाठी वापरलेले पाणी दुषित होते. खेडेगावात अंबाडी, घायपाताच्या पेंढ्या बांधून त्याची साल कुजण्यासाठी पाण्यात टाकतात. त्यामुळे विहिरीचे पाणी दुषित होते. गंगा, ब्रम्हपूत्रा, महानदी, दामोदर त्रिभूज प्रदेशात तागाच्या पेंढ्या पाण्यात कुजत ठेवतात, त्यानेही पाणी दुषित होते. स्नान करतांना साबणांमुळे त्याचप्रमाणे कपडे धुतांना वा परलेल्या डिटर्जंटमुळे पाण्यात रसायने मिसळून पाणी दुषित होते. तळी, सरोवरात जलपर्णीची वाढ होऊन पाण्यातील ऑक्सीजन ते जलपर्णी शोषून घेतात. त्यामुळे पाण्यात ऑक्सीजनचे प्रमाण अल्प होते त्यामुळे मासे व तत्सम जलचर नाहीसे होतात. अपमार्जिके, किटकनाशके, जंतुनाशके, जलसिंचन

“ डॉ. पंजाबराव देशमुखांचे शैक्षणिक कार्य ”

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प्रस्तावना :-

डॉ. पंजाबराव देशमुख हे सहकार, कृषी शैक्षणिक अशा विविध क्षेत्रात ज्ञान व योगदान असणारे गतिशील असे व्यक्तीमत्व होय. त्यांचा जन्म 27 डिसेंबर 1898 रोजी अमरावती जिल्ह्यातील नांदगाव खंडेश्वर तालुक्यातील पापळ या खेडेगावात एका शेतकरी कुटुंबात झाला. त्यांच्या पित्याचे नाव शामराव तर आईचे नाव राधाबाई होते. इ.स. 1998 मध्ये इयत्ता 10 वी चांगल्या गुणांनी उत्तीर्ण झाल्यानंतर उच्च शिक्षणासाठी त्यांनी पुणे येथील फर्ग्युसन कॉलेजमध्ये प्रवेश घेतला आणि आपले महाविद्यालयीन शिक्षण पुणे येथे विशेष प्राविण्य संपादन करून पूर्ण केले. इ.स. 1920 मध्ये ते उच्च शिक्षणासाठी इंग्लंडला गेले. तेथे त्यांनी एम.ए. ऑनर्स संस्कृत ही अत्यंत मानाची पदवी संपादन केली. इ.स. 1925 मध्ये त्यांनी ऑक्सफर्ड युनिव्हर्सिटीतून बार अॅट लॉ आणि डी.फील हया पदव्या संपादन केल्या. 'वैदिक साहित्यातील धर्माचा उगम व विकास' हा त्यांच्या प्रबंधाचा विषय होता. डॉ. पंजाबराव देशमुख हे श्री शिवाजी शैक्षणिक संस्था अमरावतीचे संस्थापक अध्यक्ष होते. इ.स. 1931 मध्ये या संस्थेची स्थापना झाल्यापासून डॉ. पंजाबरावांनी आपल्या जीवणाच्या अखेरच्या क्षणापर्यंत 1965 पर्यंत या संस्थेच्या कार्याची धुरा सांभाळली आणि अधिकाधिक शिक्षणप्रसार केला.



विषय विवेचन :-

भारतीय तत्वज्ञानामध्ये जसे डॉ. पंजाबराव देशमुखांचे योगदान आहे तसे शिक्षणक्षेत्रातही त्यांचे योगदान महत्वपूर्ण आहे. संसदेतील त्यांच्या भाषणातून आणि चर्चासत्र किंवा कार्यशाळांमधून त्यांनी जे विचार मांडले यातून त्यांना शिक्षणाविषयी असलेली तळमळ त्यांची विशाल दृष्टी आणि व्यक्ती व समाजविकासासाठीचे साधन असलेल्या शिक्षणाबद्दलचे विचार लक्षात येतात. जानेवारी 1958 मध्ये श्री शिवाजी शिक्षण संस्थेच्या सिल्ह्वर ज्युबली समारंभाचे वेळी विदर्भ शैक्षणिक अधिवेशन भरविण्यात आले होते. त्यावेळी आपल्या प्रास्ताविक भाषणात डॉ. पंजाबराव देशमुख यांनी प्राथमिक शिक्षणाच्या सार्वत्रिकीकरण व सक्तीचे शिक्षण यावर भर दिला. 1928 ते 1930 या काळात डॉ. पंजाबराव देशमुख अमरावती जिल्हा शिक्षण मंडळाचे अध्यक्ष होते. त्यांच्या प्रेरणेने व कार्यामुळे संपूर्ण जिल्ह्यात ग्रामीण भागात प्राथमिक शाळा सुरू झाल्या. डॉ. पंजाबरावांच्या मते, शैक्षणिक संस्थांमध्ये वाढ झाली तर अधिकाधिक लोकांना शिक्षण देता येईल आणि शिक्षण प्रसारातून वाईट रूढी, परंपरा किंवा अनिष्ट बाबीचे निर्मूलन करता येईल. शिक्षण घेत असतांना कोणताही भेदभाव केला जाणार नाही, कोणत्याही जाती-धर्माच्या, वंशाच्या किंवा वर्गाच्या बालकांना जर एकसाथ, एकत्रीत शिक्षण दिले तर जातीभेदाच्या भिती उन्मळून पडतील आणि खऱ्या अर्थाने एकात्मता प्रस्थापित होईल. सामाजिक समता व सामाजिक न्याय शिक्षणातून प्रस्थापित व्हावा यावर ते भर देत असत. वर्षानुवर्ष शिक्षणापासून वंचित राहिलेल्या समाजाला इतरांच्या बरोबरीने आणण्यासाठी त्यांना शिक्षणाच्या सोयीची संधी उपलब्ध करून देणे म्हणजे खऱ्या अर्थाने सामाजिक समता प्रस्थापित होईल. 11 ऑगस्ट 1948 रोजी भारतीय घटनेच्या मसुदा समितीच्या बैठकीत डॉ. पंजाबराव देशमुख म्हणाले, "सर्व काही गुणवत्तेच्या आधारे व्हावे, कोणालाही मदतीची गरज नाही. अशा केवळ घोषणा देऊन किंवा वल्गना करून उपयोग नाही, तर जे अपंग आहेत, आर्थिक दृष्ट्या कमकुवत आहेत ते शिक्षणाचा खर्च पेलू शकत नाही. अशांचा विचार केल्याशिवाय समानता व सामाजिक न्याय प्रस्थापित होऊ शकणार नाही. म्हणूनच अशा बालकांच्या शिक्षणासाठी मदत देणे हे सरकारचे कर्तव्य आहे." डॉ. पंजाबराव देशमुख हे भारती शेतकऱ्याची दैन्यावस्था जाणून होते आणि म्हणूनच या वर्गाच्या पाल्यांना शिक्षणाच्या सवलती आणि नोकरीमध्ये काही सवलती द्याव्यात. शिक्षणाच्या संधी त्यांना उपलब्ध करून द्याव्यात, असे त्यांनी आग्रही मत प्रतिपादन केले. 5 जून 1958 रोजी मालेगाव नाशिक येथे भरलेल्या राष्ट्रीय स्तरावरच्या शैक्षणिक अधिवेशनात अध्यक्षीय भाषण करतांना डॉ. पंजाबराव देशमुख म्हणाले, आपल्याला अगदी शिक्षण नसल्यापेक्षा केवळ लिहिता



A Study of Crop Combination in North-East Ahmednagar District using Weaver Technique and GIS Approach

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ABSTRACT

The analysis of crop combination founds a significant feature in agricultural geography. It provides quantitative approach for agricultural regionalization to the agriculture planner and decision maker. Crops grown in combinations where specific crop occupies a position of total isolation remaining crops in a specific area at a given time. The maps of individual crops have been prepared using statistical manner and Geographical Information System (GIS) software which are interesting and simplified for planners for decision making process. The study calculated the crop combination for Newasa, Shevgaon and Pathardi tehsils of eastern Ahmednagar district in Maharashtra using Weaver's technique and prepared maps in GIS software. Agricultural crops data (2010) were obtained from District Agricultural Department, Ahmednagar. The data were classified for these three tehsils and calculated the crop combination using Weaver's technique (1954). Thematic maps were prepared in GIS software for obtaining crop combination results in three tehsils. It was found that there are two and four crop combinations in the rainy, winter and summer seasons in the 2010 year. This region has been dominated by Sunflower, Foodgrain, Groundnut, Maize, Cotton and Sugarcane crops. It was also observed the spatio-temporal variations in crop combinations. Geographical factors, like rainfall, physiography, transportation, socio-economic development are influencing the regional agriculture pattern. Using statistical methods and its integration in GIS environment presentation are more accurate for visualization of crop combination with thematic maps. Suggested approach is easier than the traditional approach for further decision making in agricultural environment.

Keywords

Crop combination, GIS, Agricultural Regionalization, Rainfall, Physiography, Socio-Economic factors

1. INTRODUCTION

Agricultural regionalization has been attracting the consideration of many research communities, academic scholars, scientists, planners etc. in the field of agricultural geography. Planner is interested in the overall agricultural region. Agriculture still forms the backbone of Indian economy, despite of concentrated efforts towards industrialization and urbanization in last three decades [1]. Agriculture is the base for the overall world's population and livelihood. In India, nearly 68% of the population is settled in rural area and it contributes approximately 22% of gross domestic product (GDP) where 60 to 70 percent population is dependent on agriculture [2]. Moreover, 60% of net sown area (NSA) in the country is rainfed. Due to variation in rainfall,

the production of agriculture is uncertain spatially and temporally in the world [3].

The primary production is generated from land resource plays the vital role in shaping the fabric of life and the economy which also establishes the pace of development and progress of the community. Therefore, these situations are leading much attention on the regional scenario of agriculture like as crop combination, crop intensity, crop concentration and crop diversification. Hence, the spatio-temporal change in cropping pattern in particular time of span clearly shows the changes that have taken place in the agricultural development [4]. These spatio-temporal changes are brought by physical, climatological, socio-economic and technological factors in any area of world. In India, developing state like Uttar Pradesh, Maharashtra, Gujarat, etc. are the major source of economy and livelihood of the working population which also influenced by the local physical factors.

The agriculture and allied environment has a multi-dimensional correlation with other factors of the earth surface and sub-surface environment. The role of space based input like satellite derived data is growing in the regional environmental and agriculture study [5]. As compare to conventional method of preparing maps GIS technique is most useful for aerial mapping, monitoring and tracing the spatial entities information with thematic maps at precise level [5, 6]. Using conventional methods, study of crop combination, somewhat called time consuming, required more human resources, and less accuracy oriented [6]. Today, the trends of crop combination have been changed and having a more statistical scientific base and its integration in Geographical Information System (GIS) software [7,8]. It is probably most used in spatial or agricultural planning with monitoring, mapping, and analysis of environmental parameters. Similarly, the Remote Sensing (RS) data help to generate the digital relief or digital elevation information of the earth surface at higher resolution with more scientific and visual manner [9]. Such relief information can be helpful to correlate the physiography and agricultural crops [10].

Ahmednagar district of Maharashtra entirely depends on rainfed and irrigation based agriculture. There is huge variation in agriculture cropping pattern in various tehsil. These trends of spatio-temporal changes can be analysed properly with statistical computations of crop combinations and its integrations in GIS software for preparations of thematic base maps [14,15]. It is useful and resourceful for the earth scientists, researchers, regional planners, spatial planners in several decisions making and agricultural regionalization related planning process. In view of this, present investigation mainly relies on the secondary data of

भारत की बढ़ती जनसंख्या का पर्यावरणपर होने वाले परिणामों का कृषि की फसलों के संदर्भ में भौगोलिक अध्ययन (Geographical study of population growth impact on environment in respect to crops in India)

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सार :

बढ़ती जनसंख्या का राष्ट्रीय संसाधनों पर नकारात्मक प्रभाव विश्व के लगभग सभी भागों में महसूस किया गया है। विश्व में तीव्रता से बढ़ती जनसंख्या व इसके परिणाम स्वरूप मनुष्य की बढ़ती विभिन्न गतिविधियों से पर्यावरण प्रदूषित तो हो ही रहा है परंतु अब इससे पर्यावरण दूषित होने की गति इतनी अधिक हो चुकी है कि यह प्राकृतिक संभरण से भी अधिक है। कृषिय भूमि की मृदा की उपरी सतह का अपरदन होने से जब इसके उपजाऊपन में कमी हो जाती है तो इसकी भरपाई किसी भी उर्वरक से नहीं की जा सकती।

मुख्य शब्द : बढ़ती जनसंख्या, प्राकृतिक संसाधन, पर्यावरण, कृषि, उपजाऊपन

जनसंख्या की तीव्र वृद्धि दर समाज के संसाधनों पर दीर्घकालीन प्रभाव डालती है। बढ़ती जनसंख्या का राष्ट्रीय संसाधनों पर नकारात्मक प्रभाव विश्व के लगभग सभी भागों में महसूस किया गया है परंतु ऐसे प्रभाव अविकसित देशों में सर्वाधिक देखे गए हैं, क्योंकि इन में जनसंख्या वृद्धि दर उच्चतम पाई गई। विश्व के प्रत्येक भाग में प्राकृतिक संसाधनों का उपयोग बड़ी बेरहमी से किया गया जिससे पर्यावरण में कहीं ऐसे बदलाव आए जिन का मानव जीवन पर बहुत प्रभाव पड़ा है।

विश्व में तीव्रता से बढ़ती जनसंख्या व इसके परिणाम स्वरूप मनुष्य की बढ़ती विभिन्न गतिविधियों से पर्यावरण प्रदूषित तो हो ही रहा है परंतु अब इससे पर्यावरण दूषित होने की गति इतनी अधिक हो चुकी है कि यह प्राकृतिक संभरण से भी अधिक है।

पृथ्वी का मात्र २९ प्रतिशत क्षेत्र ही स्थलमंडल है जबकि जलमंडल ७१ प्रतिशत क्षेत्र में फैला है। अतः हमारे भूमि व भूमिगत संसाधन अति सीमित है। भूमि पृथ्वी का एक अति महत्वपूर्ण संसाधन माना जाता है, जिस पर पृथ्वी का जीवन-पालन क्षमता निर्भर करती है। बीसवीं शताब्दी में विश्व में तीव्रता से बढ़ती जनसंख्या से अनेक समस्याएं जनित हुई हैं, जिनका प्रभाव कृषि आर्थिक व पर्यावरण के क्षेत्र में स्पष्ट दिखाई देता है। अधिक से अधिक भूमि को कृषि हेतु प्रयोग में लाने के मानव के प्रयासों में पृथ्वी के भूमि संसाधन पर काफी कुप्रभाव देखे जा सकते हैं। भूमि उपयोग में महत्वपूर्ण बदलाव आए हैं। मुख्य नदियों में बड़े-बड़े जलाशय व बांध आदि बना दिए गए हैं। खनिज पदार्थों का बेरोकटोक खनन किया जा रहा है। अनेक शहरों का विस्तार किया जा रहा है, अनेक नई-नई बस्तियां बसाई जा रही हैं तथा अकृषिय उपयोग हेतु अधिक भूमि की मांग बढ़ती जा रही है।

कृषिय भूमि की मृदा की उपरी सतह का अपरदन होने से जब इसके उपजाऊपन में कमी हो जाती है तो इसकी भरपाई किसी भी उर्वरक से नहीं की जा सकती। यह दुर्भाग्य की बात है कि, हम दूरगामी न होकर तुरंत की ललक को मिटा नहीं पाते और दीर्घकाल

को क्षतिपूर्वक बनाने में कोई कसर नहीं छोड़ते। वंडरफुल (१९९५) के अनुसार विश्व में ऐसे कई क्षेत्र व समुदाय हैं जहां कृषि को एक उद्योग के रूप में माना जाता है, जिससे अधिक से अधिक आय प्राप्ति की जाती है तथा जिससे मृदा को अत्यधिक क्षति पहुंचती है। एक अनुमान के अनुसार आज जिस गति से मृदा की क्षति हो रही है, इससे तो मृदा का उपजाऊ जीवन १८२ वर्षों से घटकर ९१ वर्ष ही रह जाएगा। हालांकि भूमि के उपजाऊपन में गिरावट को फसलों के चक्र आवर्तन तथा पशु खाद आदि से कुछ सीमा तक रोका जा सकता है, परंतु मृदा को सतत उपजाऊ बनाए रखने के उद्देश्य से हमें मृदा की रासायनिक संरचना व पोषण चक्र को भलीभांति समझना होगा। पोषण चक्र किसी भी परिस्थितिक तंत्र का एक महत्वपूर्ण अंग है। विश्व की तीव्रता से बढ़ती जनसंख्या परिस्थितिकी मंडल को पर्याप्त क्षति पहुंचा चुका है और आगे भी पहुंच आती रहेगी किसी भी परिस्थिति मंडल में पोषण चक्रों का कार्य मंडल के सभी जैव व अजैव तत्वों के बीच पोषण पदार्थों का आदान प्रदान करना होता है। यह चक्र विश्व स्तर पर हो पोषकों का आदान-प्रदान करते रहते हैं। आज के युग में जबकि मानव की अनेकों गतिविधियों के कारण वायु में कार्बन, नाइट्रोजन, फास्फोरस आदि जैसे तत्वों की वृद्धि हुई है, इससे पोषण चक्रों का संतुलन बिगड़ सा गया है।

तालिका : भारत की जनसंख्या वृद्धि (१९०१ से २०११)

वर्ष	जनसंख्या	वार्षिक वृद्धि प्रतिशत में
१९०१	२३.६	-
१९११	२४.९	०.५६
१९२१	२४.८	-०.०३
१९३१	२७.६	१०.४
१९४१	३१.५	१.३३
१९५१	३६.०	१.२५
१९६१	४३.९	१.९६
१९७१	५४.८	२.२०
१९८१	६८.५	२.२२

आधुनिक औद्योगिक क्षेत्रातील सामाजिक पर्यावरणाचे स्थान, प्रकार, समस्या आणि उपाय

प्रा.डॉ. दिगांबर समर्थ

एम.ए., एम.फिल., बी.एड., पीएच.डी.

सहयोगी प्राध्यापक व विभाग प्रमुख

तायवाडे महाविद्यालय कोराडी, जिल्हा नागपूर

प्रस्तावना :

मानवनिर्मित हजारो रसायने सध्या वातावरण प्रदूषित करीत असल्याने नागरी लोकांचे जीवनमान धोक्यात आले आहे. औद्योगिक क्षेत्रातील प्रदूषण प्रामुख्याने इंधनाच्या ज्वलनामुळे आणि निरनिराळ्या रासायनिक प्रक्रियेमुळे वाढले आहे. कारखान्याच्या धुरांड्यातून धूर आणि सल्फरडाय ऑक्साईड वायू सोडले जातात. वायुरूप पदार्थ व अर्धवट जळलेले कोळशाचे कण याचा परिणाम जीवमात्रावर होऊ लागला आहे. प्रत्येक कारखान्यातून निरनिराळ्या रसायने तयार होत असल्याने त्या सरायनांनी या खाणीतून वा धातूच्या कारखान्यातून अनेक प्रकारच्या धातूच्या कणांनी शहरी वातावरण दूषित होण्याचे प्रमाण गतिमान झाले आहे.

धूर आणि धुके हे औद्योगिकरणाचे एक अपत्य मानवाचे जीवन संपुष्टात आणण्यात यशस्वी ठरते की काय? असे वाटू लागले आहे. कारखान्यातून बाहेर पडणाऱ्या धूर आणि धुक्याचे मिश्रण तयार होऊन ते हवेत जडपणाने वावरत असते. त्यामुळे इमारतीवर काळपट थर जमत असतो आणि पुढे त्याचा परिणाम वस्तू आणि वस्तूचे आयुश्य कमी होण्यावर होत असतो.

कारखान्याच्या आजूबाजूला राहणाऱ्या लोकांवर दूषित वातावरणाचा विपरित परिणाम होऊ लागला आहे. नव्याने जन्माला येणाऱ्या बालकाला याचा प्रचंड प्रमाणात त्रास होऊ लागला आहे. नागरीकरणाची प्रक्रिया गतिमान होऊ लागल्याने शहरातील वातावरण कमालीचे प्रदूषित होऊ लागले आहे.

पर्यावरणाचे स्वरूप :- जेव्हा सजीव आणि निर्जीव घटक एकत्रित येऊन जी नैसर्गिक प्रक्रिया घडून येत असते त्याला पर्यावरण असे म्हणतात.

स्थान व ठिकाण बदलल्यास पर्यावरण देखील बदलत असते. म्हणूनच एकाच देशातील वा प्रदेशातील वेगवेगळ्या ठिकाणच्या पर्यावरणात फरक असतो. पर्यावरण ही बदलती संकल्पना असल्याने मानवाला पर्यावरणाशी जुळवून घ्यावे लागते.

पर्यावरणाचे प्रकार :- मानवाच्या अति हव्यासापोटी पर्यावरणाचा समतोल ढळू लागला आहे. पृथ्वीचे एक संपूर्ण पर्यावरण गृहीत धरले तर या पर्यावरणाचे ढोबळमानाने दोन प्रकार पडतात-

१. **नैसर्गिक पर्यावरण :-** पृथ्वीच्या पृष्ठभागावरील घटकात जलावरण, मृदावरण या दोन्ही वातावरणाचा समावेश असतो. शिवाय पर्यावरणात सजीवांचाही समावेश झालेला असतो. नद्या, जमीन, डोंगर, भूभाग, प्रदेशाचे आकार, स्थान या संपूर्ण घटकांच्या परस्पर मिश्रणाने पर्यावरण तयार होत असते.

२. **सांस्कृतिक पर्यावरण :-** मानवाचा नैसर्गिक पर्यावरणात समावेश झालेला असल्यामुळे सांस्कृतिक पर्यावरणाची निर्मिती झाली आहे. मानवही इतर सजीव प्राण्यांप्रमाणेच एक घटक आहे. मात्र मानव हा इतर प्राण्यांपेक्षा कमालीचा आगळावेगळा आहे.

शोध निबंधासाठी वापरण्यात येणारी संशोधन पद्धती :-

शोध निबंधातील अभ्यास हा द्वितीय समंकावर अवलंबून आहे. समंकाचे संकलन हे विशयाशी संबंधित विविध पुस्तके, मासिके, वर्तमान पत्र व सांकेतिक स्थळावरून करण्यात आले आहे.



“मानवीय साधन संपत्ती चे व्यवस्थापन” -- काळाची गरज!

डॉ. माया शिखेडकर,

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विज्ञान युगात (जागतिकीकरणाच्या काळात) नोकरी करणाऱ्या स्त्रियांच्या शारीरिक व मानसिक तणाव दूर होण्यासाठी वेळ व उर्जा ह्यांच्या व्यवस्थापनाची गरज आहे. या संदर्भात एक अध्ययन करण्यात आले. जागतिकीकरणाच्या काळात नोकरी करणाऱ्या स्त्रियांना मानसिक आरोग्य चांगले ठेवण्याकरिता “मानवीय साधन संपत्ती चे व्यवस्थापन” ही काळाची गरज आहे.

जागतिकीकरणाच्या काळात ‘स्त्री’ हा सामाजिक संशोधनाचा विषय मानला जातो. स्त्री जीवनाच्या अनेक पैलूंशी सम्बन्धित विविध प्रकारची अध्ययने सामाजिक शास्त्रात आढळून येतात. स्त्रियांचे अध्ययन हे केवळ स्त्रियांचे अध्ययन म्हणून विचारात घेतले जात नसून सामाजिक जीवनातील समाज प्रक्रियेत कार्यरत असणारा महत्वाचा घटक म्हणून विचारात घेतले जाते. स्त्रियांच्या अध्यायानावरून जगाचा तसेच मानवी समाजाचा संबंध विविध घटनांशी, समस्यांशी व सिद्धान्तांशी प्रत्यक्ष रीतीने कसा जोडला आहे ह्याचे ज्ञान प्राप्त होते.

प्राचीन काळी भारतीय समाजात स्त्रियांचे अत्यंत गौरवशाली स्थान होते. स्त्री व पुरुष हे जीवनाच्या रथातील दोन प्रमुख चाके (प्रमुख घटक) समजून दोघानाही समान अधिकार होते.

आधुनिक काळातील स्त्रीची भूमिका पूर्वीच्या काळातील स्त्रीच्या भूमिकेपेक्षा बरीच वेगळी आहे. पूर्वी स्त्रीची भूमिका गृहिणीची होती. ‘चूल आणि मुल’ हे तिचे कार्यक्षेत्र होते तसेच सामाजिक जीवनात समाज व्यवस्थेला अति-उच्च मानबिंदू पर्यंत पाहोचविण्याचे करणारा समाजाचा प्रमुख घटक म्हणून तिला मानले आहे. हे जे अध्ययन केले आहे ते तिच्या नैसर्गिक धाधाकीच्या वर्तमान युगाच्या जीवनाशी सम्बन्धित आहे.

एकविसाव्या शतकातील औद्योगिकरण / तंत्रिकीकरण, वैज्ञानीकरण, शहरीकरण, शिक्षणाचा प्रसार, दळणवळणाची व दूरसंचारणाची, Whatsapp, संगणक, अद्यावत साधने, नविन सामाजिक जीवन मुल्ये, वैद्व्यानिक प्रगती, यामुळे मानवी सामाजिक जीवनाचे चित्रच पालटून गेले आहे.

आर्थिक, शैक्षणिक, व कौटुंबिक कारणांमुळे पारंपारिक कृषी व्यवसायाशी सम्बन्धित इतर व्यवसाय न करता ग्रामीण समुदायातील सु-सौन्स्कृत कुटुंबातील सदस्य शहरी औद्योगिक क्षेत्रात नोकरीसाठी मूळ गावापासून दूर जाऊ लागली. ह्यातूनच विभक्त कुटुंब पद्धती अस्तित्वात आली. कुटुंबाच्या वाढत्या गरजा पुरवण्यासाठी इतर व्यक्ती नसल्यामुळे कुटुंब चालविण्याची जबाबदारी पती बरोबर पत्नी वर देखील येवू लागली.

वाढती महागाई, कुटुंबाच्या वाढत्या गरजा, उंचावलेला स्वाभिमानाचा दर्जा, मुलांच्या शिक्षणाचा वाढता खर्च इत्यादी कारणांमुळे घरातील गृहिणीला (स्त्रीला) नोकरी करणे आवश्यक (गरजेचे) वाटू लागले. स्व-व्यक्तिमत्वाचा विकास, आर्थिक स्वतंत्रता, समाजात विशिष्ट अर्जित भूमिकेने स्वतःची ओळख निर्माण करण्याची तीव्रता, वैभवशाली जीवनाची आकांक्षा व जागतिकीकरणामुळे लादलेली सामाजिक व आर्थिक परिस्थिती/ कौटुंबिक विकास साध्य करण्याची इच्छा या घटकांमुळे स्त्री (गृहिणी) नोकरी करण्यास प्रेरित झाली.

स्त्री हि अर्थार्जनासाठी घराबाहेर पडली तरी तिची घरातील जबाबदारी कमी झाली नाही. किंबहुना भारतीय स्त्री कितीही उच्च पदावर नोकरी क्षेत्रात कार्यरत असली तरी गृहिणी या भूमिकेशी तिच्या नैसर्गिक प्रकृतीमुळे ती तडजोड करू शकत नाही असे म्हणता येईल.

नोकरी करणाऱ्या स्त्रीला घरातील व घरा बाहेरील दोन्ही प्रकारची कार्ये एकाच वेळी पार पाडत असताना तिला तारेवरची कसरत करावी लागते. या सर्व कार्यामधून तिला थोडा फार मानसिक व शारीरिक तणाव येण्याची शक्यता असते. हा जाणवणारा शारीरिक व मानसिक तणावाचा परिणाम

केशवसुतांच्या काव्यातील नैसर्गिक पर्यावरण

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मानवाचा पर्यावरणाशी अत्यंत निकटचा संबंध आहे. पर्यावरण हा शब्द आपण सातत्याने ऐकत असतो परंतु पर्यावरणाचा नेमका अर्थ त्याची व्याप्ती यांचा फारसा विचार आपण करत नाही. पर्यावरण हा विषयच मूळात व्यापक असून प्रत्येक माणसाच्या जीवनाचा तो आधारभूत घटक आहे त्यामुळे प्रत्येकानेच पर्यावरणासंबंधी सजग राहणे गरजेचे आहे. प्रामुख्याने हवा, पाणी, जमीन, वनस्पती, पशुपक्षी, कीटक आणि मानव यासर्वांच्या एकत्रीकरणातून पर्यावरण निर्माण होते. निसर्गामध्ये या सर्वांचे प्रमाण आणि त्यांची रचना अत्यंत सूत्रबद्धरितेने झालेली आहे. पृथ्वीवर संतुलित जीवन टिकवून ठेवण्यासाठी कोट्यावधी वर्षांपासून निसर्गाचे हे चक्र अव्याहतपणे सुरू आहे. पर्यावरण म्हणजे आपल्या सभोवतीचा परिसर. पर्यावरणात या परिसरातील घटकांचा एकत्रितपणे विचार करण्याची गरज असते. कारण निसर्गातील सर्वच घटक हे परस्परावलंबी आहेत. कुठल्याही परिसरातील सजीवांचे एकमेकांशी वैशिष्ट्यापूर्ण संबंध असतात. पर्यावरणातील मुख्य घटक म्हणजे सूर्य, पाणी, जमीन, हवा आणि यांच्या संयोगातून आकारास आलेली सर्व सजीव सृष्टी होय.

पर्यावरणातील महत्त्वाचा घटक म्हणजे हवा. सर्व जीवांना प्राणवायूची गरज असून हा प्राणवायू वनस्पतीपासून प्राप्त होतो. वृक्षतोडीमुळे हवेतील कार्बन डायऑक्साईडचे प्रमाण वाढते व प्राणवायूचे प्रमाण कमी होते यामुळे पृथ्वीचे तापमान वाढण्याचा धोका निर्माण होतो.

पर्यावरणातील दुसरा महत्त्वाचा घटक म्हणजे पाणी. त्याला जीवन असे देखील म्हणतात. प्रत्येक सजीवाला पाण्याची गरज असते. पृथ्वीवरील प्रत्येक सजीवाच्या पोषणाला, वाढीला, जगण्यासाठी पाणी आवश्यक असते. सागर, नदी, झरे, ओढे, तलाव, विहीर, तळे व आकाशातील पाऊस इ. माध्यमातून हे पाणी आपल्याला प्राप्त होते.

पर्यावरणाचा तिसरा महत्त्वाचा घटक म्हणजे जमीन. सर्वच सजीव आणि निर्जीव यांचा आधार म्हणजे भूमी. सजीवांचा जन्म, वाढ आणि विनाश हा भूमीशी निगडित असतो. इतकेच नव्हे तर सागर, नद्या, तलाव इ. पाण्याच्या साठ्यांच्या तळाचे भागही भूभाग म्हणून विचारात घ्यावे लागतात. भूमी ही अशी एक केंद्रिभूत घटक आहे की, हा घटक जर सुरक्षित राहिला तरच पुढच्या सर्व गोष्टी सुरळीत राहू शकते. इतकेच नव्हे तर सर्वच जीवांचे अस्तित्वच भूमीवर निर्भर आहे.

मानवी जीवन ज्या मूलभूत साधनांवर विसंबून आहे आणि ज्यामुळे मानवाच्या भौतिक आणि सांस्कृतिक गरजा पूर्ण होतात ती साधनसंपत्ती निसर्गाची देणगी आहे. तसाच ती मानवी जीवनाचा मूलाधार आहे त्यामुळे तिचे रक्षण करणे हे प्रत्येक मनुष्याचे कर्तव्य आहे परंतु या साधन संपत्तीचा सध्या ज्या पद्धतीने न्हास होतो आहे त्यामुळे पुढील पिढ्यांचे भवितव्य निश्चितच संकटात येण्याची शक्यता नाकारता येत नाही. आपल्या स्वार्थासाठी आणि लाभासाठी मनुष्य वाटेला तसा या घटकांचा वापर करीत आहे. त्याचे पडसाद हळूहळू दिसू लागले आहेत. त्याला वेळीच आळा घातला नाही तर भविष्यात पृथ्वीवरील जीवसृष्टी धोक्यात येण्याची शक्यता जशी आहे तसेच मानवाचे अस्तित्व देखील संकटात सापडल्याशिवाय राहणार नाही. त्यासाठी शासनाने व विविध संघटनाने पर्यावरण रक्षणासाठी घेतलेले कार्य व उपक्रम तर स्तुत्य आहेच शिवाय पर्यावरणाचे रक्षण करण्याची जबाबदारी प्रत्येक नागरिकावर देखील आहे याची आपण जाणीव

ठेवणे गरजेचे आहे. पर्यावरण रक्षणाचा हा जागर साहित्यातूनही मोठ्या प्रमाणात झालेला दिसतो. आपल्याकडे संत साहित्यापासून तर आधुनिक काळातील कथा, कविता, कादंबरी, नाटक, पथनाट्या इ. च्या द्वारा पर्यावरणाचा संदेश देण्याचे महत्त्वपूर्ण कार्य झालेले दिसते.

१८८५ ते १९२० हा कालखंड 'केशवसुत युग' म्हणून ओळखला जातो. कारण याकाळात महाराष्ट्रात जे नवचैतन्याचे वारे वाहत होते त्याचे प्रतिबिंब या काळातील कवितेत प्रकर्षाने उमटले आहे. शिवाय विविधांगांनी बहरलेली कविता प्रथमतः केशवसुतांच्या लेखणीतून साकार झाली. ज्याप्रमाणे केशवसुतांची कविता समाजजीवनातील नानाविध प्रश्न हाताळू लागली त्याप्रमाणे पर्यावरणाचा वेध घेणारा निसर्गही त्यांच्या कवितेतून डोकावू लागला.

केशवसुतांच्या नव्या कार्यप्रणालीचा एक विशेष म्हणजे त्यांच्या निसर्गविषयक दृष्टिकोन होय. परंतु त्यांचा हा दृष्टिकोन पारंपरिक नाही तर नाविन्याचा भोक्ता आहे. केशवसुतांपूर्वीच्या काळात देखील निसर्गवर्णनातून पर्यावरणाचा विचार झाला होता परंतु तो विचार प्रासंगिक व आनुषंगिक होता. यातील निसर्गाला काव्यविषयक म्हणून स्वतंत्र स्थान नव्हते. परंतु केशवसुतांनी निसर्गाला प्रेम, चारुता आणि आनंद यांचा कंद मानले. कारण निसर्गाच्या सानिध्यातच त्यांना मनःशांती लाभत होती. 'हरपले श्रेय' गवसत होते. निसर्गाच्या ठिकाणी मानवाला सुखी, आनंदी व दिव्य बनविण्याचे सामर्थ्य आहे असा निराळा दृष्टिकोन केशवसुतांनी आपल्या काव्यात व्यक्त केला आहे. निसर्गातूनच तत्त्व अथवा संदेश शोधण्याची ही प्रवृत्ती काव्यात नवीन होती. निसर्गावर चेतनावस्तूचा आरोप करून निसर्गाचे आत्मनिष्ठ दृष्टिकोनातून वर्णन करण्याची नवीन प्रथा केशवसुतांनीच प्रथम सुरू केली.

निसर्गातील प्रत्येक वस्तूला स्वतंत्र अस्तित्व असून ती आनंदमय आणि सौंदर्यपूर्ण आहे. परंतु मानवाच्या स्वार्थी वृत्तीमुळे त्याने आपले जीवन संकुचित, निरस आणि दुःखी केले आहे. निसर्गात सर्वत्र स्वातंत्र्य व समता असून निसर्गाच्या ठायी मानवाला सुखी, आनंदमय करून मानवी जीवनात दिव्यत्व भरण्याचे सामर्थ्य आहे याची केशवसुतांना पुरेपूर कल्पना असल्यामुळे ती भावना त्यांनी आपल्या निसर्ग वर्णनपर कवितांमधून व्यक्त केली आहे.

दलित साहित्य - प्रेरणा आणि प्रयोजन

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साठोत्तरी कालखंडात जे विविध वाङ्मयप्रवाह उदयाला आले त्यात दलित साहित्याचे महत्वपूर्ण स्थान आहे. डॉ. बाबासाहेब आंबेडकरांच्या प्रेरणेने दलितांच्या चळवळीस पृथगात्मक दिशा प्राप्त झाली. त्यांच्या लोकाभिमुख व क्रांतिकारक नेतृत्वाने दलित चळवळीला वैचारिक आणि कृतिप्रवण अधिष्ठान लाभले. डॉ. बाबासाहेबांनी बौद्ध धर्माचा स्वीकार करून दलित चळवळीला सुसंगत ठरणारी मूलगामी आणि परिवर्तनशील अशी नवीन बैठक प्राप्त करून दिली. त्यामुळे दलित वर्गाला स्वत्व प्राप्त होऊन नवी अस्मिता लाभली. स्वातंत्र्योत्तर काळातच या चळवळीला साहित्यिक चळवळीचे नवे रूप प्राप्त झाले. त्यामुळे आपापल्या प्रज्ञाप्रतिभेनुसार साहित्य, समाज, संगीत, क्रीडा, राजकारण, धर्मकारण इत्यादी क्षेत्रात संचार करून बदलत्या समाजिक जडणघडणीच्या प्रक्रियेत सामाजिक भान जोपासत साहित्य परंपरेशी नाते जोडले व एका नव्या वाङ्मय प्रवाहाला प्रक्रियेत सामाजिक भान जोपासत साहित्य परंपरेशी नाते जोडले व एका नव्या वाङ्मय प्रवाहाला जन्म दिला. त्यातूनच "एक वाङ्मयीन चळवळ ऐतिहासिक व सामाजिक मूल्याधिशिठ होऊन स्वतंत्र वाङ्मय प्रवाहात रूपांतरित झाली. या वाङ्मयीन चळवळीचे नाव दलित साहित्य!". दलित लेखकांनी आपले समाजवास्तव साहित्यातून मांडले. त्यामुळे दलित वर्गात जन्माला आलेल्या, दलितांची दुःखे भोगलेल्या, दलितांवद्दल जिद्दाळा असणाऱ्या व दलितांच्या जीवन-जापिवा आपल्या लेखनातून साकार करणाऱ्या साहित्यिकांना दलित लेखक असे संबोधले जाऊ लागले. दलित साहित्यिकांनी कथा, कविता, कादंबरी, आत्मकथा, नाटक अशा विविध वाङ्मय प्रवाहातून आपल्या व्यथा-वेदनांचा जीवनपटच साकार केला. त्यामुळे मराठी साहित्यात एक नवे स्थित्यंतर घडून आले. यासंदर्भात डॉ. अनिल गजभिये म्हणतात, "आजच्या मराठी वाङ्मयाच्या अभ्यासकाला दलित साहित्याची भीमांसा व चिकित्सा केल्याशिवाय मराठी वाङ्मयाचा पूर्ण विचार व्यक्त करणे शक्य होणार नाही.". त्यांचे हे विधान निश्चितच चिंतनीय आहे. दलित साहित्याची चर्चा करताना दलित साहित्याचे मराठी साहित्यातील योगदान किती मोठे आहे याची जाणीव करून देतांना प्रा. रा. ग. जाधव म्हणतात, "दलितांच्या भूतभविष्याची नि मूलभूत हक्कांचे ही साहित्यरूपी सनद हा स्वतंत्र भारतातील अत्यंत मौलिक असा ऐतिहासिक दस्तावेज ठरेल.". आज दलित साहित्याचे व्यापकत्व लक्षात घेता प्रा. रा. ग. जाधव यांचे हे विचार किती महत्त्वपूर्ण आहेत याची साक्ष पटते. आपल्या समाजाचे साहित्य असावे. त्यातून आपले विचार, भावना, रश्मि समाजापुढे यावेत हे भान दलित लेखकांमध्ये रुजले आहे. त्यामुळेच आज शेकडो लेखक आपले विचार प्रकल्पपणे आणि आत्मविश्वासाने मांडू लागले आहे. त्यातूनच सांस्कृतिक विचारमंचावर एक मोठे बळ प्राप्त झाले ही निश्चितच अभिमानाची बाब आहे. दलित लेखकांची नवीन पिढी पुढे येणे ही आधुनिक परिवर्तनवादी साहित्याची नांदी आहे. त्यातून आमुलाग्र समाज परिवर्तनाला दिशा प्राप्त होईल हे निश्चितच आहे.

दलित साहित्याचा मागोवा घेणाऱ्या चर्चेत डॉ. म. ना. वानखडे, प्रा. मे. पुं. रेगे, प्रा. व्हा. ल. कुलकर्णी, प्राचार्य म. भि. चिटणीस यांनी सहभाग घेऊन दलितांची सांस्कृतिक चळवळ आणि वाङ्मयीन चळवळ यांच्या सर्वकश व्याप्तीचा एक पटच १९६७ साली उलगडून दाखविला होता. दलित साहित्याचे आकलन करून घेण्यासाठी त्यांची ही चर्चा दिशादर्शक ठरणारी आहे.

दलित साहित्यामागील प्रेरणा आणि प्रयोजनाचा विचार करताना एक बाब प्रकाशाने बाहेर येते ती म्हणजे डॉ. बाबासाहेबांचे मानवतावादी तत्वज्ञान या तत्वज्ञानापासूनच दलित लेखकांना दिशा



समतेचे पुरस्कर्ते महात्मा श्रीचक्रधरस्वामी

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प्रस्तावना —

तेरावे शतक हे मराठी साहित्याच्या, संस्कृतीच्या, धार्मिक अधिष्ठानाच्या तसेच सामाजिक संवर्धनाच्या दृष्टीनेही महत्त्वपूर्ण ठरले आहे. कारण याकाळात मराठी साहित्य निर्मितीला जसा प्रारंभ झाला तसाच वारकरी व महानुभाव संप्रदायातील संत, महंतांनी सामाजिक ऐक्य प्रस्थापित करून देशाची अखंडता शाबूत राखण्याचा प्रयत्न केला. कालमानानुसार या दोन्ही पंथांनी अध्यात्माचा मार्ग सांगत समाजसुधारणेचा—समाजप्रबोधनाचा मार्ग सांगितला. ज्ञानेश्वरांच्या पसायदानातून हे जसे जाणवते तसेच श्रीचक्रधरस्वामींच्या “परधर्म : तुमचें जीवन की गा”⁽¹⁾ यातून स्पष्ट होते. परधर्म म्हणजे परमेश्वराचा धर्म (मार्ग) असून यातून जीवीताविषयीचे प्रेमच उत्पन्न होते. भक्तीच्या आड काहीही, अर्थात वर्णभेदही येऊ देऊ नये ही चक्रधरस्वामींची मुख्य भूमिका होती; म्हणूनच ‘एथ जातिकुळ नाही:’ (लीळाचरित्र एकांक) असे ते सांगतात.

श्रीचक्रधरस्वामींनी स्थापन केलेल्या महानुभाव पंथाची स्थापना तेराव्या शतकाच्या उत्तरार्धात वऱ्हाडात झाली. चक्रधरस्वामी गुजराथेतून आले. त्यामुळे त्यांच्या मनावर जैन आणि भागवत या दोन्ही संप्रदायाचे संस्कार होणे स्वाभाविक होते. त्याकाळी गुजराथेत श्वेतांबर जैनांचे वर्चस्व होते. तर आंध्र—कर्नाटकात दिगंबर जैनांची व लिंगायतांची स्पर्धा चालू होती. शिवाय या कार्याच्या प्रसाराच्या दृष्टीने महाराष्ट्राचे कार्यक्षेत्र दुर्लक्षितच होते. त्यामुळे चक्रधरांनी महाराष्ट्राला आपली कर्मभूमी मानले व मराठीला धर्मभाषेचा बहुमान प्राप्त करून दिला. महानुभाव संतमहंतांनी मराठी भाषेला ‘धर्मभाषेचे स्थान दिले आणि ‘तुमचे अस्मात् कस्मात् मी नेणेगा : मज चक्रधरे निरोपिली मराठी जाणा.’ याची साधकांना जाणीव करू दिली. या संदर्भात डॉ. उषा देशमुख म्हणतात, “महानुभाव कवींच्या अनुभवविश्वावर संस्कृत साहित्यतत्त्वपरंपरा आणि मराठी लोकतत्त्व परंपरा यांचा संस्कार झाल्यामुळे त्यातून त्यांची कविता रूपवंत होते. काव्यभूमिका आणि काव्यजाणिवा प्रगट करते पण भक्तीची चौकट न सोडता हे सारे धर्मभाषेतून घडून येते.”⁽²⁾ त्यांच्या या विधानातून महानुभावियांचा मातृभाषेविषयीचा जाज्वल्य अभिमान किती व्यापक होता हे लक्षात येते. जैन आणि महानुभाव हे दोन्ही पंथ संन्यास प्रवण म्हणजेच अत्यंतिक निवृत्तिवादी आहेत. त्यांच्या मते जीव हा अनादिकाळापासून कर्मबंधनात जखडलेला आहे. या कर्माचा पूर्ण नाश झाल्याशिवाय त्याला मोक्ष लाभत नाही; म्हणून जैनांनी यातिधर्माचा पुरस्कार केला व अहिंसा, संयम आणि साधना ही तीन तत्वे सांगितली. श्रीचक्रधरांनी देखील याच तत्त्वत्रयीचा आधार आपल्या पंथासाठी घेतला. “आता अहिंसे निःसंगुः निवृत्ति भजि योगु : तो नमस्करु परमार्गु : दातारांचा।।”³ (रिधपूर वर्णन) चक्रधरांनी समाजात समतेचे बीज रुजविण्याचे महत्त्वपूर्ण कार्य केले आहे. त्यामागील त्यांचा उद्देश अज्ञान आणि अविद्या यात घुटमळत असणाऱ्या जीवांचा उद्धार करावयाचा होता.



चक्रधरस्वामींनी भक्तीच्या क्षेत्रात समतेचा पुरस्कार केला. परंतु समाजात जी चातुर्वर्ण्यव्यवस्था होती तिचा कोठेही निषेध केला नाही. तर चारही वर्णांच्या जीवांना मोक्षाची वाट वर्णभेदातीत दृढ ठेऊन दाखविली शिवाय विटाळाच्या कल्पनेची त्यांनी थट्टा केली तरी तिला विरोध दर्शविला नाही. यादृष्टीने ‘उमाई नमस्कारं आंगुठा लावणे’ ही लीळा उल्लेखनीय आहे. यावरून हेच सिद्ध होते की चातुर्वर्ण्य काय किंवा स्पृश्यास्पृश्यत्व काय चक्रधर स्वतः

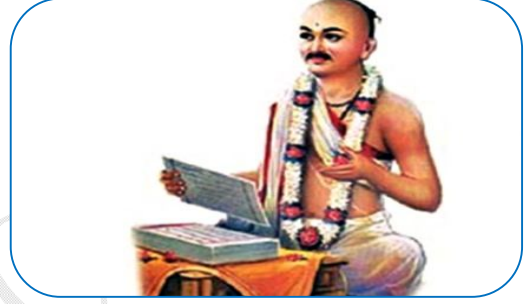


संत एकनाथांच्या साहित्यातील समाजदर्शन

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प्रस्तावना :

संत साहित्य हे भारतीय संस्कृतीचे आणि अद्वैत विचारसरणीचे संचित आहे. संतांनी आपली वाणी आणि लेखनी लोककल्याणासाठी खर्ची घातली. त्यामुळेच त्यांच्या व्यक्तित्वात कृती आणि उक्तीचा अपूर्व मेळ आढळतो. 'जे जे भेटे भूत | ते ते मानिजे भगवंत' या उक्तीप्रमाणे संतांनी लोकोद्धाराचे निरंतर कार्य केले. संत साहित्याचा समावेश धार्मिक वाङ्मयात केला जातो. यात वावगे काहीच नाही. परंतु धर्मापासून आजचे साहित्य बरेच दुरावलेले दिसते. त्यामुळे सर्वच संतसाहित्य हे धर्मसाहित्य असते पण सर्वच धार्मिक साहित्य हे संतसाहित्य होऊ शकत नाही. यावरून संतसाहित्याचे निराळेपण सहजच लक्षात येते. "संतांना धर्माच्या पार्थिव अंगापेक्षा अपार्थिव स्वरूपासंबंधी विशेष आकर्षण होते. त्यामुळे संतसाहित्याचे शाश्वत धर्माशी थेट नाते प्रस्थापित होते."¹ यावरून धर्मतत्त्व आणि सर्वसामान्य माणूस यांना जोडणारा महत्त्वाचा दुवा म्हणजे संत असल्याचे स्पष्ट होते. संतांची ही परंपरा बाराव्या शतकापासून तर सोळाव्या शतकापर्यंत कशी विकसित होत गेली हे संत बहिणाबाईंच्या पुढील अभंगावरून सहजच लक्षात येते.



ज्ञानदेवे रचिला पाया | उभारिले देवालया ||
नामा तयाचा किंकर | तेणे केलासे विस्तार ||
एकनाथ जनार्दन | स्तंभ दिला भागवत ||
तुकाझालासे कळस | भजन करा सावकाश ||

संत बहिणाबाईंच्या या उक्तीप्रमाणे भागवत संप्रदायाच्या भक्तिमंदिराला स्तंभ देण्याचे महत्त्वपूर्ण कार्य संत एकनाथांनी केले. संत एकनाथांचा जन्म इ.स. 1533 साली पैठण येथे झाला. त्यांचे घराणे विद्वान, भक्तीप्रवण आणि धर्मनिष्ठ म्हणून प्रसिद्ध होते. त्यांच्या घराण्यात जसा कर्मठपणा होता तशीच भक्तीही होती. त्यांचे वडील सूर्यनारायण व आई रुक्मिणी यांच्या निधनानंतर नाथांच्या पालनपोषणाची संपूर्ण जबाबदारी त्यांचे आजोबा आणि आजी यांचेवर आली. त्यांनी अत्यंत प्रेमाने एकनाथांचे संगोपन केले. नाथांच्या घराण्यात पिढ्यान्पिढ्या सूर्योपासना सुरू होती. शिवाय एकवीरा देवी ही त्यांची कुलदेवता होती. त्यामुळे भक्तीचे संस्कार त्यांच्या मनावर बालपणापासूनच रुजले होते. संध्या पूजा-पाठ, नामस्मरण हा त्यांचा आवडता छंद होता. त्यांची दांडगी स्मरणशक्ती, प्रचंड पाठांतर आणि धर्मग्रंथांचा सखोल अभ्यास विलक्षण होता. त्यांचे गुरु जनार्दन स्वामी हे दत्तोपासक असून साक्षात्कारी पुरुष आणि अधिकारसंपन्न योगी होते. त्यांनी नाथांना अनुग्रह दिला. शिवाय नाथांकडून ज्ञानेश्वरी, अमृतानुभव, भागवत इत्यादी ग्रंथांचा अभ्यास करवून घेतला. त्यातून नाथांची आध्यात्मिक जडणघडण झाली. "नाथांनी प्रपंच आणि परमार्थ यांचा उत्तम समन्वय साधला होता. त्यामुळेच त्यांना 'शांतिब्रह्म' म्हणून ओळखले जाते."²

दृ'टांतपाठातील तत्त्वविचार

प्रा. डॉ. राजेंद्र वाटाणे*

महाराष्ट्रात जे विविध भक्तिसंप्रदाय उदयाला आले त्यात महानुभाव संप्रदाय एक प्रमुख भक्तिसंप्रदाय म्हणून मान्यता पावला आहे. महानुभाव्यांच्या पंचकृष्णापैकी श्रीचक्रधरस्वामी एक असून त्यांनी स्थापन केलेल्या या संप्रदायास "परमार्ग, महात्मा पंथ, महानुभाव पंथ, जयकृष्णी पंथ, अच्युत पंथ"¹ इत्यादी नावांनी ओळखले जाते.

श्री चक्रधरस्वामींच्या जीवनातील प्रसंगांना म्हाइभटांनी 'लीळा' असे म्हटले असून या लीळा म्हणजे 'ईश्वरावताराने सचेतनाशी केलेली क्रीडा होय. लीळांच्या साहाय्याने म्हाइभटांनी श्री चक्रधरस्वामींचे जे चरित्र ग्रंथीत केले आहे, त्यास त्यांनी 'लीळाचरित्र' असे नाव दिले आहे. मराठी गद्याचे स्वरूप लीळा चरित्राच्या रूपाने म्हाइभटांनी तेराव्या शतकात लोकांपुढे मांडले. "लीळाचरित्र" हा ग्रंथ म्हणजे पुढील काळात निर्माण झालेल्या अनेक महानुभावीय गद्यग्रंथांची गंगोत्रीच होय."² लीळाचरित्रात श्री चक्रधरस्वामींच्या जीवनातील प्रसंगांचे वेधक चित्रण आढळते. त्याचप्रमाणे त्यात स्वामींची वचनेही आढळतात. त्यांची ही वचने, विचार म्हणजेच महानुभाव संप्रदायाच्या तत्त्वज्ञानाचा व आचारधर्माचा अमृतकलशच होय. या विचारांनाच पुढे 'सूत्र' असे नाव देण्यात आले. या सूत्रांचे संकलन 'सिद्धांतसूत्रपाठ' या ग्रंथात करण्यात आले. 'सूत्रपाठ'च्या साहाय्याने पुढे महानुभावांचे तत्त्वज्ञान व आचारधर्म यांचे विवेचन करण्यात आले आहे. संप्रदायाच्या अनुयायांनी कोणकोणते जीवनादर्श आपल्यासमोर ठेवावेत, कुठल्या आदर्श विचारांचे मनन करावे आणि कशा प्रकारे वर्तन करावे. याविषयीचे विवेचन या ग्रंथात केले आहे.

केशीराजबास संकल्पित 'दृ'टांतपाठ' हा ग्रंथही 'लीळाचरित्रा'तून सिद्ध झालेला एक ग्रंथ होय. श्री चक्रधरस्वामींनी विशिष्ट प्रसंगाच्या संदर्भात आपले विचार जसे मांडले, त्याचप्रमाणे या विचारांच्या स्पष्टीकरणासाठी काही कथाही सांगितल्या त्यासाठी काही दृ'टांतही दिले आहेत. केशीराजबास यांनी 'लीळाचरित्रा'तून ही सूत्रे व दृ'टांत निवडले आणि त्यास 'दृ'टान्तिक नावाचा भाग जोडून त्यात त्या दृ'टांताचे लक्षात घेण्याजोगे सार किंवा तत्व 'द्रा'टान्तिक' सांगितले. त्यामुळे 'दृ'टान्तपाठातील सूत्रांचे व दृ'टान्ताचे कर्तृत्व श्री चक्रधरस्वामींकडे तर त्यातील द्रा'टान्तिकांचे कर्तृत्व केशीराजबास यांचेकडे जाते. दृ'टान्तपाठातील ही सर्व सूत्रे व त्यांचे स्पष्टीकरण करणारे श्री चक्रधरांनी निवेदन केलेले दृ'टान्त यांचे संकलन केशीराजबासांनी केल्यामुळे 'दृ'टान्तपाठाचे संकलनकार म्हणून केशीराजबासांचा निर्देश केला जातो. ज्याप्रमाणे 'सूत्रपाठ' महानुभाव पंथाचा श्रुतिग्रंथ ठरला. त्याचप्रमाणे 'दृ'टान्तपाठ' हाही ग्रंथ श्री चक्रधरस्वामींच्या वचनानी युक्त असल्यामुळे त्यालाही महानुभाव पंथात श्रुतीची प्रतिष्ठा लाभली आहे.

आद्य मराठी गद्याचा एक मौल्यवान अलंकार, महानुभाव पंथाच्या तत्त्वज्ञानाचा एक आधारग्रंथ आणि यादवकाळातील महाराष्ट्राच्या समाजजीवनाची काही वैशिष्ट्ये प्रतिबिंबित करणारा एक आरसा अशा नानाविध दृ'टीने दृ'टांतपाठाचे अनन्य महत्त्व आहे. 'दृ'टान्तपाठांत प्रथम सूत्र, त्यानंतर दृ'टांत आणि शेवटी द्रा'टान्तिक असा क्रम आहे. सूत्र आणि द्रा'टान्तिक यासह असलेले एकूण एकशे चौदा दृ'टांत या ग्रंथात आहेत. विश्वनाथबासांनी आपल्या 'दृ'टान्तस्थळ' या दृ'टान्तपाठावरील टीपग्रंथात दृ'टान्ताची व्याख्या "दृ'टाचा अंती अदृ'य बुझविले म्हणौनि दृ'टांत बोलीजे"³ अशी दिली आहे. महानुभावीय शास्त्रकारांनी दृ'टान्ताचे अंशग्राह्य, समग्रांशग्राह्य, अन्वयग्राह्य, अप्रत्यन्वय, योज आणि वास्तव असे सहा भाग सांगितले आहे. दृ'टान्ताचा निष्कर्ष ज्यात ग्रथित आहे, त्या भागास केशीराजबासांनी द्रा'टान्तिक असे नाव दिले आहे. "दृ'टान्ताचे नि व्यवहार जो अर्थु निर्धारिजे तें दृ'टांतिक" अशी व्याख्या भीष्माचार्य नावाच्या पंडिताने 'बत्तीस लक्षणांच्या टीपेत' दिलेली आहे.

श्री चक्रधरस्वामींनी केलेल्या जीवोद्धरणकार्याचा शाब्दिक आविष्कार म्हणजे 'दृ'टान्तपाठ' होय. केशीराजांचे 'लापणिक' म्हणजे दृ'टान्तपाठाची प्रकरणानुक्रमे पृथक्करणात्मक अशी अनुक्रमणिकाच होय. दृ'टांतपाठातील 114 दृ'टांत स्वामींनी निरनिराळ्या शिष्यांना निरनिराळ्या स्थळी सांगितले असले तरी त्यातील जास्तीत जास्त दृ'टांताचे श्रोते भटोबास, महदाइसा, रामदेव दादोस आणि बाईसा हेच आहेत. चक्रधरस्वामी हे 'पर' आणि 'अपर' अशा उभयविध शक्तींनी युक्त असून, जीवोद्धरणाच्या तळमळीने वावरत होते. परमेश्वर जीवाविषयीच्या अपार कारणेपोटीच अवतार घेतो आणि मातेच्या वत्सलतेने जीवांचा उद्धार करतो; परंतु मातेवर सर्व प्रकारे विसंबून राहणाऱ्या बालकाच्या अनन्यतेने जीवांनी त्याला अनुसरले पाहिजे, हाच मुख्य विचार 'दृ'टान्तपाठा'त अनेक रूपांनी साकार झालेला आहे.

जीवांचा उद्धार परमेश्वरच करू शकतो. त्यासाठी परमेश्वर परदर्शी, अवरदर्शी आणि परावरदर्शी अशा तीन प्रकारचे अवतार धारण करतो. यातील परदर्शी स्वरूप हे आत्मस्वरूपाची प्राप्ती करून देणारे आहे. अवरदर्शी स्वरूप हे स्वरूपज्ञानाशिवाय अन्य विद्या प्रदान करणारे आहे आणि परावरदर्शी स्वरूप हे उभयविध ज्ञान देणारे आहे. चक्रधरस्वामी हे उभयदर्शी अवतार असल्यामुळे त्यांच्या ठिकाणी उभयविध ज्ञानदान करण्याची शक्ती होती.

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Global Challenges in Front of Humanity

Dr.Sanjay Dudhe*

Introduction

There are many challenges which India faces in today's developing world. People like farmers, workers, carpenters etc are left behind in this developing world. Only the educated person is getting over rich and the uneducated are getting poorer. The global challenges that we face today are not the issue of a single nation, like the issue of climate change, over use of plastic, overpopulation, etc. one single nation cannot solve these issues we have unite this world and collaborate to these big issues.

The global challenges-

- 1) Developed and developing countries
- 2) Poverty
- 3) Over population
- 4) Veto power
- 5) Misuse of technology
- 6) Climate change
- 7) Religious conflicts
- 8) Income discrimination

1) Developed and developing countries (globalization)

It is the processes by which businesses and other organization develop international influence and start operating on an international scale

Origin: - In medieval period the economical developed countries used to colonize the underdeveloped countries for economical greed and these led the demotion of local industries in underdeveloped countries. After world war 2 imperils and colonization almost came to an end. This led to the rise of globalization and business organization develops international influence.

In 2000, the International Monetary Fund (IMF) identified four basic aspects of globalization trade and transaction, capital and investment movement migration and movement of people.

2) Problems due to globalization:

The developed countries have many multinational companies which have quality product than the local products. Therefore people in developing and under developing countries prefer to buy products of multinational companies. This leads to destruction of local industries which leads to unemployment and poverty. Therefore the gap between the developed and undeveloped countries. Most of the electronic devices available in developing countries like India are not produced locally.

Poverty

Today the income gap between the rich and the poor is increasing despite having a tax system that favors the poor, the rich people take advantage of loopholes in the system and get tax benefits.

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GLOBALIZATION: CHALLENGES, STRATEGY, CONSEQUENCES IN CURRENT SCENARIO

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ABSTRACT :

The process by which businesses or the organizations develop international influence or start operating on an international scale. It is a process of interaction and integration between people companies and governments worldwide. Globalization was grown due to advances in technology and transportation with increased global interactions comes growth of ideas international trade and culture. It describes the way countries and people of the world interact and integrate. Many things have become globalised as people come into contact economic globalization is how countries are coming together as one big global economy, making international trade easier.

KEYWORDS : *people companies and governments worldwide , economic globalization.*

INTRODUCTION

There are 3 type of globalization

- Political globalization
- Social globalization
- Economic globalization

POLITICAL GLOBALIZATION:-

It refers to the amount of political co-operation that exist between different countries. This ties in with the belief that umbrella global organizations are better placed than individual states to prevent conflict. The League of Nations established after world war – I was certainly one of the pioneers in this regards.

Since then, global organizations such as world trade organization UNO and more regional organizations such as EI have helped to increase the degree of political globalization.

ECONOMIC GLOBALIZATION:-

It refers to the interconnectedness of economics through trade and exchange of resources. Effectively, therefore, no national economy really operates in isolation, which means national economics influence each other.



SOCIAL GLOBALIZATION:-

It refers to sharing of ideas and information between and through different countries.

In today's world, the internet and social media is at the heart of this. Good examples of social globalization could include internationally popular, films, books and TV series.



FEMALE FOETICIDE: A CHALLENGE TO WOMEN EMPOWERMENT

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ABSTRACT :

Female foeticide is the act of aborting a fetus because it is female related process. This is a major social problem in India. It estimated that more than ten million female foetes have been illegally aborted in India.

KEYWORDS : *Female foeticide, major social problem, illegally aborted.*



INTRODUCTION

The act of aborting or terminating a fetus while it's still in the womb, because it is female, is known as female foeticide. This can be done after determining the sex of the child before it's born, through ultrasound scans and other instruments.

Sex determination in India is illegal; the practice is rampant and has become a multi-million dollar industry. Coupled with prospective parents desperate for a boy child, and physicians who are carrying out these abortions, female foeticide has become a shameful and shocking reality of our nation.

WHAT IS FEMALE FOETICIDE?

Female foeticide is the specific fetus removal/end of the young lady kid in the belly itself, done intentionally by the mother, after the identification of the kid's sexual orientation through therapeutic implies. This is typically done under commonplace weight from the spouse or the in-laws or even the lady's folks. Spontaneous pregnancy is commonly the explanation for fetus removal. In any case, female foeticide is an unquestionably more egregious sin than the deep rooted act of murdering an undesirable youngster, even before it's conceived.

In the same way as other social orders the world over, India also is male centric in nature. A set various leveled framework wins in all levels of the social request. The enthusiast fixation on the male sex, however, is unique. Directly from the old sacred texts, one discovers occasions where men are glowingly lauded as the way to proceed with the family heredity.

Unfortunately, a lion's share of female foeticide cases include an excited support of ladies, both old and youthful.

CONSEQUENCES OF FEMALE FOETICIDE

Every unethical act, like this one, has some age-old lame reasoning behind it, which is used as genuine justification by its staunch supporters. The root cause for female foeticide lies within the cultural norms as well as the socio-economic policies of the country where this practice prevails.



DEFORESTATION IS RESPONSIBLE FOR ENVIRONMENTAL DERADATION

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ABSTRACT :

Deforestation is clearing or durance of trees for the human use which leads to the decrease in the 33% of forests. As we know trees are very useful and for the greed of men. We are cutting the trees recklessly. Day by day the forest is decreasing. The forests are changing into the habit. Deforestation can be counterattacked by deforestation. Since many years the process of deforestation is decreasing but deforestation is increasing because of having many uses of the trees and forest produce.



KEYWORDS : *durance of trees , greed of men , process of deforestation.*

CAUSES:

- 1) **Urbanization:** - Due to increase in population it need more place for construction of houses roads and other infrastructure needed for the comfort of the human.
- 2) **Mining:** - If an area under forest is found with any mineral the surrounding areas of forest are also lead deforestation. Due to construction of infrastructure per mining.
- 3) **Agriculture:** - as agriculture should also be increase which comes after the deforestation of forest.
- 4) **Forest fires:** - Due to first fuels the total area of under forest is burnt which is evaluated and it loads to deforestation.
- 5) **Timber production:** - Due to increase in the demand timber required for the paper production day by day Timber requirement increases and used to deforestation.
- 6) **Industrialization:** - Due to industrialization the need for the wood increases which is used for prep of machines.
- 7) **Floods:** - Due to some natural calamities such that floods the total area gets washed which uproots the trees leading to deforestation.
- 8) **Transportation:** - for transportation or highways tracks the forest areas are dappled and also the nearby areas.
- 9) **Occupation:** - Moe population more needs more demand which requires more resources withdrawn from forest products.
- 10) **Medicinal uses :-** For preparation of some medicines resource from forestation are used for which a specific type of herbs plants are removed.

EFFECTS:-

1. **Global warming:** - Due to less no. of trees it leads to the increase in amount of which directly leads to global warming.

Psychological Preparation in Sports

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Abstract

Various people view personality from different angles and this is the main reason that why no static conception of personality has been fixed till now. Concept of personality keeps on evolving from time to time. Majority of the people consider personality of a human being only outward appearance. Some of the view that the pattern of behaviour performed by a human being in certain way is termed as personality. On the basis of various perspective. It can be said that whole bio-psychological structure of a human being is included in his or her personality. It implies that personality not only mean what a person looks like but also include the way in which he thinks or behaves with other persons. Personality of a human being keeps on changing from time to time. Basically, there viewpoints have been suggested with which personality of a human being is viewed, which are: what actually he is, what other considers him to be and what he considers of himself. All the actions, reactions and behaviours are important aspects of his mind in general and mind in particular. It is entirely wrong to estimate the personality of an individual on basis of his or her single trait. While assessing the personality of a person, attention should be provided to various kinds of factors, which can be dynamic and static in nature.

Key Words: Psychology, sports, practice

Concept

The concept of personality is so broad that it is difficult to define precisely. Regardless of what definition is put forth, there will be those who argue that it is either too broad or too narrow. One definition that has stood the test of time was proposed by Allport, who said personality "is the dynamic organization within her individual of those psychophysical systems that determine his unique adjustments to his environment". Hollander gave a similar yet simpler total of an individual's characteristics which make him unique". No matter what definition is selected, both Allport and Hollander agree that the personality of each individual is unique. Perhaps the best way to

understand personality is to look at its structure. Such a structure has been outlined by Hollander and adapted to sport psychology of Martens. A schematic view of personality structure. While the basic concept for the structure of personality of Hollander, the unique manner of presenting these concepts should be attributed to Martens.

A personality can be divided into three separate but related levels. These are (i) typical responses, (ii) the psychological core, (iii) role-related behaviours. The psychological core is further represented as being internal and consistent in nature, while typical responses and role-related

A Study of Impact of IT Application in Agriculture in Nagpur District

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Abstract:

It is to be mentioned that the IT offers a variety of programmes both for the social development and the economic development. An assessment of the impact was felt essential so as to determine whether there is any significant change on the part of the farmers before and after their IT application in Agriculture. It is to be noted that a change which a farmers does not possess before IT application in Agriculture may take place in the farmers after his IT application in Agriculture.

The researcher, through his observations and interaction with the farmers, has identified eight economic and social traits which the farmers may or may not possess before their IT application in Agriculture. As such, the economic and social traits for the purpose of the study include productivity improved, avoiding buying on credit, comfortable life, reduction in poverty, house modified, liberal spending, change in the life style and maintenance of children improved.

Introduction

Information technology (IT), as defined by the Information Technology Association of America (ITAA), is "the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware." IT deals with the use of electronic computers and computer software to convert, store, protect, process, transmit, and securely retrieve information. Recently it has become popular to broaden the term to explicitly include the field of electronic communication so that people tend to use the abbreviation ICT (Information and Communications Technology). Basically IT is a valuable set of tools because it benefits you immediately and directly. Knowledge of IT is important because:

- IT is everywhere
- IT can help you to be more productive

Study of NAAC Assessment Methods And its Effects on Quality of Engineering Institutions

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Abstract

There has been a tremendous decrease instudents' enrollment in higher education institution especially in engineering colleges. The purpose of this study is to identify and examine the role of NAAC in improving quality of engineering institutions.

Keywords: NAAC, higher education.

Introduction:

India is a country where education has given prime importance since olden days. Education has its own significance to govern interests of the members in the society. Education plays a vital role in the development of any nation. Therefore, there is a premium on both quantity (increased access) and quality (relevance and excellence of academic programmes offered) of higher education. The NAAC has been set up to facilitate the volunteering institutions to assess their performance vis-a-vis set parameters through introspection and a process that provides space for participation of the institution. The quality of higher education leads India towards global economic power. The institutions like NAAC though their various committees eying on educational intuitions to achieve goal of quality higher education in India. Therefore, role of NAAC is remarkable to promote quality higher education in India. Engineering Institutions are classified in following manner.

- a) Affiliated Colleges
- b) Autonomous Colleges
- c) Deemed University

In the case of affiliated colleges, the institution is affiliated to a university, which is the degree awarding body. The college has no flexibility or powers related to curriculum or evaluation. The academic powers rest with the university. In the case of autonomous colleges, the institutions have academic flexibility viz they can make curriculum changes and conduct examinations and undertake evaluation. However they are notionally under the university and have relatively less financial autonomy. Institutions that have acquired deemed university status have the maximum academic and financial autonomy. In India most of the colleges are affiliated (approximately 98%).

In today's modern competitive environment, the success of engineering institutions in acquiring students depends on the capability of an institution to recognize the needs of the education in the market. Engineering Institutions should consider ways to make themselves more competitive players in educational markets.



नागपूर जिल्ह्यातील प्रचलीत बँक प्रणालीचा व धोरणाचा प्रभाव महिला बचत गटांच्या कार्यावर होणारे परीणामाचे अध्ययन

डॉ. विनोद खापने

मार्गदर्शक , तायवाडे महाविद्यालय, कोराडी जि. नागपूर

सारांश

प्रस्तुत प्रकरणात विदर्भातील नागपूर जिल्ह्यातील ३५ बचतगटातील प्रत्येकी १० बचत गट सदस्यांकडून म्हणजेच एकूण ३५० बचत गट सदस्यांकडून संकलीत करण्यात आलेल्या माहितीचे विश्लेषण करण्यात आले. संकलीत तथ्यांच्या विश्लेषणाकरीता विविध सांख्यिकीय पद्धतींचा वापर करण्यात आला. यात प्रामुख्याने वारंवारीता व टक्केवारी तसेच विविध पर्यायांदरम्यान सार्थकता स्तर तपासण्याकरीता Non-Parametric Chi Square Test (गैर-प्राचल काई वर्ग परिक्षण) या सांख्यिकीय चाचण्यांचा वापर करण्यात आला.



प्रस्तावना

बचत गटांच्या चळवळीचे जनक नोबेल पुरस्कार विजेते डॉ. महमंद युनूस यांनी महिलांमध्ये बचत गटांच्या माध्यमातून कमालीचा आत्मविश्वास निर्माण केला. ग्रामीण बँकेसारखी संकल्पना राबवून गरिबी निर्मुलनाचा जणू त्यांनी वसाच घेतला. आज जगभरात बचत गटांची चळवळ फोफावली आहे. १९८२ पासून बचत गट स्थापना व निर्मितीस मोठ्या प्रमाणावर वेग आला. राष्ट्रीय कृषी व ग्रामीण विकास बँकेने (नाबाई) हे गट आणि बँकांकडून होणाऱ्या पतपुरवठ्याची सांगड घातल्यानंतर बचतगट चळवळ व्यापक होत गेली. देशात एकूण ४० लाख बचत गट आहेत. त्यापैकी ३० लाख गटांना कर्ज व अनुदानापोटी आठ हजार कोटीची मदत शासनाने केली आहे. या वर्षी दहा हजार कोटी रुपयापर्यंत मदतीचा आकडा जाईल. विशेष म्हणजे कर्ज परतफेड प्रमाणपत्र ८६ टक्के आहे. हे प्रमाण उद्योग शेती कर्जाच्या तुलनेत कौतुकार्पद आहे. महिला बचतगट स्थापल्यामुळे ग्रामीण विभागातील महिलांना आत्मसन्मान मिळाला आहे.

महाराष्ट्रापुरते बोलायचे तर बहुतेक जिल्ह्यांमध्ये या बचत गटांचे जाळे पसरले आहे. शेतीच्या उत्पन्नातून किंवा कुटुंबाच्या पारंपारिक व्यवसायातून मिळणारा पैसा घरात खर्च होत असला तरी घरच्या बाईच्या हातात तो नसायचा.

RECENT DEVELOPMENT IN COMMERCE AND BUSINESS

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ABSTRACT:-

E-commerce means buying & selling goods and services across the internet. An e-commerce site can be as simple as a catalogue page with a phone no or it can range all the way to a real time credit and processing site where customer can purchase downloadable goods and receive them on the spot. E-commerce is more than just buying and selling products online.

E-Business is the creation of new and the redesigning of existing value chains and business process through the application of information technology. This paper focuses on the developments in commerce and business.

Keywords: - E-Commerce, E-Business, Developments

INTRODUCTION:-

Nowadays many people are making purchases from various e-commerce websites with rising competition. Business owners want to make their website more attractive yet functional for their users. The latest development trends and technologies in E-commerce has allowed developers to integrate various new technologies in their E-commerce website.

By using latest technology trends, e-commerce development companies want to improve the user experience of online shopping drastically.

OBJECTIVES OF THE STUDY:-

- To study the developments in E-commerce
- To study the developments in Business

A Study of Recent Development of Indian Agri-Business: A Case of Awareness Among Farmers About Substitute Fertilizers

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Abstract:

This research paper present interpretation of data collected from farmers and fertilizer company agents in Nagpur Division. For the study purpose, 600 farmers (100 from each district viz., Nagpur, Wardha, Bhandara, Chandrapur, Gondia and Gadchiroli) and 150 agent of Fertilizer Company (25 from each district) were selected. The collected data was analysed by using appropriate statistical tools, which include frequency, percent and ANOVA. The variation in responses were measured by employing Non-parametric chi square test. The analysed data was arranged in tables and were described appropriately. The results were presented at the end after description of each table.

Introduction

Agriculture is the backbone of Indian economy. It has gained importance to meet the requirement of over a billion people of the country. Green revolution is an attempt to make the country self-sufficient in this regards. Requirement of fertilizer thus, has been the demand of time to increase the food grain productivity. Marketers, including private, public and cooperative sectors are setting their tone to make the right products available to the right consumers at the right place and at the right time of need.

It is likely that, fertilizer industry will be decontrolled fully in near future. The manufacturers and their marketing team have to prepare themselves for such an eventuality when 4 'P's namely Product, Price, Place (Distribution) & Promotion of marketing mix will be in their total control.

WOMEN'S CONDITION: PAST AND PRESENT: AN OVERVIEW**DR. VISHNU M. CHAVAN**Assistant Professor,
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Nagpur.**DR. VARSHA V. VAIDYA,**Head, Dept. of English,
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Nagpur.**ABSTRACT:**

Male dominance is found at all levels all over the world. It is a masculine rationality that has always privileged reason, order, unity and lucidity and that it has been done so by silencing and excluding the irrationality, chaos, and fragmentation that has come to represent femininity. This 'patriarchic system' is male dominating and one sided. This has done great harm to womankind. When the feminist scholars studied in detail the social structure, they came to the conclusion that 'patriarchic system' of male domination is rooted in the tradition of the past and that such heritage of women's subordination blatantly mistreat and devalues half of humanity.

Key words: Masculine, Feminism, Chaos, Patriarchy.

Women play different roles in her entire life successfully. If she got full support and freedom from his family as well as from the society, there will be stupendous progress and development of both family and of the nation. There is the need to widen our approach towards this half of humanity. A good and supportive woman can make his family and society joyful. When we glanced towards 'progressed' countries, we can understand the status of women in these countries.

Women have achieved freedom to vote which is called suffrage- right for voting. The feminist movement has effected change in western society, including woman's suffrage; greater access to education; more nearly equitable pay with men; the right to intimate diverse proceeding and "no fault and the right of the women to take individual decision regarding pregnancy in which also is included access to contraceptive and abortion. Beauvoir writes: 'Now, woman has always been man's dependent, if not his slave; the two sexes have never shared the world in equality. And even today woman is heavily handicapped, though her situation is beginning to change. Almost nowhere is her legal status the same as man's, and frequently it is much to her disadvantage.' (McCann and Kim, pg. 37.).

All negative qualities have been attributed to womankind and credit of positivity is taken by men. Rasmi Gaur writes: women are frequently represented in literature by men, but even the most famous heroines "represent what men desire in women, but not necessarily what women are in themselves –when one sex is dependent upon the other it will endeavour for safety's sake to simulate what the dominant sex finds desirable" (Gaur, p.2-3). Women's status and condition was very critical at the time of post-vedic period. Clara Nubile writes by quoting the reference of Manusmriti as following: 'in childhood a woman should be under her

INVISIBLE FOOTPRINTS: SUFFERINGS OF DALITS

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ABSTRACT

This research paper is an attempt to talk about Dalit Minority and their sufferings for discourse and especially with reference to the two important works namely 'Poisoned Bread' and 'Harum Scarum Saar & Other Stories' by Arjun Dangle and Bama selected respectively. The Poisoned Bread, published in 1992, was the first anthology of Dalit Literature. The paper, besides, presenting Dalits' pathetic condition in India, also presents their suppression, be that social, political, economical or mental. The characters from the above mentioned short stories share the same type of ostracism, physical repression and social stigma with the revolt of being kept out of the legitimate boundaries of human society. Earlier Dalits were the silent sufferers. After getting education, settled down in their life, they raise their voice against injustice to get their human identity. Their struggle is not for creating violence or anarchy but it is the struggle for their acceptance as human beings with human dignity in democratic India. Thus Dalit literature is the voice of oppressed humanity.

*“Where the mind is without fear and the head is held high
Where knowledge is free
Where the world has not been broken up into fragments
By narrow domestic walls.”*

-Rabindranath Tagore's Gitanjali

This research paper is an attempt to talk about Dalit Minority and their sufferings for discourse and especially with reference to the two important works namely 'Poisoned Bread' and 'Harum Scarum Saar & Other Stories' by Arjun Dangle and Bama selected respectively. The *Poisoned Bread*, published in 1992, was the first anthology of Dalit Literature. The paper, besides, presenting Dalits' pathetic condition in India, also presents their suppression, be that social, political, economical or mental.

Dalits from earlier times have been considered as untouchables in India traditionally categorized as outcastes, falling outside the hierarchical ladder of the four *varna* caste system. They are categorized in the Constitution adopted in 1950 as Scheduled Castes and Scheduled Tribes. They have been socially subjugated, politically marginalized, economically exploited and deprived of basic human dignity. Majority of the Dalit population lives in segregated hamlets called *Veliwada* or *Dalitwadal* located at the outskirts of villages or in urban slums. Most of the Dalits have no access to formal education and have been living below the poverty line. There has been an endless conflict between the upper and the lower

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Female Protest And Assertion Of Self In Githa Hariharan's –
The Thousand Faces Of Night

Abstract:

The Thousand Faces of Night is a Commonwealth Award winning first novel of Githa Hariharan. Hariharan in this novel diligently captures both the submissiveness and the struggle for self identity of her female characters. The novel also portrays the female protest in its myriad forms. The paper makes an attempt to study critically the female protest and their assertion of self in the novel.

Introduction:

The concept of self is a brooding concern for many modern women writers. Githa Hariharan, a post-modern feminist writer, voices the same concern in her first novel *The Thousand Faces of Night*. In the patriarchal system, the identity of woman is that which defines her relation to a male. Either she is a daughter, wife or his child's mother. She does not have her own independent identity. Now, slowly women have begun to move towards self perception and self expression, not entirely against tradition but within family binding.

Hariharan's *The Thousand Faces of Night* is a sensitive saga of women struggling to survive in a world of shattered dreams. It is a story of Devi, the protagonist and her desperate search for identity in the traditional Hindu society. Intermingled with Devi's search is the search of Mayamma, the old caretaker and Devi's mother Sita.

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The illegal immigrants and their life in American kitchens' in Kiran Desai's novel IOL

Abstract

People migrate from one place to another for better job opportunities, education, business etc. Leaving in a foreign country is a different experience for a migratory. They look at these country in a optimistic way to earn something which is impossible in their own country. They need a visa, a green card to stay safely in these foreign countries. After the completion of their short visit, they are expected to return their home. The expiry of their short term visa declares them as an illegal one to which they have to forcibly throw out of the country. Somehow they don't want to return but to stay in the foreign country. They accept the country even on odd conditions. They make their minds to work even in dirty kitchens. The present paper is a sincere endeavour calculating the good or bad experiences of the illegal immigrants and their miserable life in American kitchens.

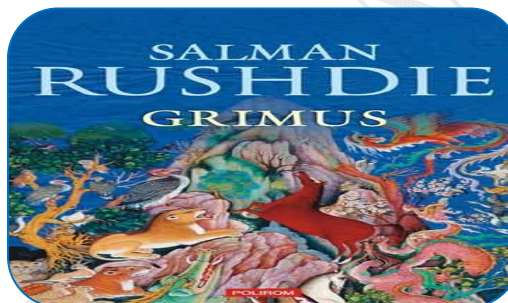


MYTHS AND ALLUSIONS IN RUSHDIE'S GRIMUS

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ABSTRACT :

The purpose of this paper is to account for the techniques in *Grimus*. The focus will be placed on the Myths and Allusions in Rushdie's *Grimus*, who is a British-Indian novelists & essayist. By mixing so many myths together, by juxtaposing the past and the present, the Occident and the Orient, Rushdie seems to have created his own myth about human existence. Anyway, these allusions, like myths, serve their purpose in the novel.



KEYWORDS : human existence , major myths figuring , mythological, literary and historical figures.

INTRODUCTION

Once the less than ordinary hero of *Grimus* is given the stature of romance hero-"superior in degree to other men and his environ"-by the elixir of life, Flapping Eagle experiences the fate of a typical romance hero. He, too, has his share of helpers and detractors. During his journeys, he first meets a temptress in Livia Cramm from whose clutches he is rescued by Nicholas Diggle. On Calf-Island, Virgil Jones becomes his path-finder and safely escorts him to 'K' despite the stiff challenges of Gorfkoax. In 'K', the temptresses are Irina Cherkassova and Eifrida Gribb. It is again Virgil Jones and Bird-Dog who show Flapping Eagle his proper way by freeing him from the clutches of the "witches", Irina and Elfrida. During the last leg of his journey, Media accompanies him. In the end, after *Grimus*' destruction, Flapping Eagle emerges as the exalted hero and also wins a bride in Media. The romance form is further strengthened by Rushdie by the imposition of various myths on Flapping Eagle's fantasies. There are also several allusions to many mythological, literary and historical figures, both past & present. All of them, in one way or other, contribute to give shape to the fantasies in the novel. Some of the major myths figuring in *Grimus* are those of the legendary bird Simurg, the Kafmountain and the Norse god Odin. In the following discussion, we will consider their relevance to the themes in the novel.

MYTHS IN GRIMUS:-

Even if the alchemical symbols are revealed in *Grimus*, the meaning of the novel is far from clear. Several of the novel's myths overlap and almost seem to merge. They create a vast room that embraces creation and destruction, search and insight, hell and paradise. The myths have several common components, above all, the way through great difficulties, a kind of death and after that a rebirth. This is a classical theme in what is usually called an initiation quest or rite, which Joseph Campbell names monomyth in *The Hero With a Thousand Faces*. The same theme recurs in the alchemical process. Campbell refers to Jung's interpretation of alchemy and uses a similar syncretistic method, which involves historical comparisons between myths. Myths are always associated with gods or some divine

Importance of English in Business Communication

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Abstract:

English is the backbone of communication. It has acquired the status of world language. On account of its elasticity, excellence and tremendous capacity to accommodate and express every situation may it be from emotions, psychology to microscopic Biology. All shades of human experience can be conveyed very clearly and perfectly only in English. As a result we are aware that today's life is technical and commercial full of business, transaction, banking, technological branches, medical complications and political debates. Therefore, business and commercial transaction today cannot stand without using English. And grand success in business, commerce and banking totally depend on these effective uses of English.

Keywords: Backbone, Communication, Business, Technical, Transaction, Banking, Commercial.

Introduction:

Today's age is an age of science and technology. In every field we are easily using technology. And mostly, English is the language of science and technology. Indian government, under its new economic policy has accepted the LPG policy means Liberalization, Privatization and Globalization. So, English language, being the mother-tongue of mostly progressed countries, has playing vital role in the world of commerce and business. While writing about the importance of English in India, Mohan and Bannerji write: "Researches in this area have shown that 70% to 80% of the working time of a professional is spent on communication. 64.14% is on communicating in English as against 27.22% in Hindi and 8.64% in regional language. Thus the role of English in the professional world is still dominant and we have therefore focused our attention on the conventions of communication in English followed in India" (Mohan and Bannerji, pg. 07).

Communication is an integral part of human being. Our success of any activity depends on our effective and proper communication. Our success and failure depends on proper way of communication. John and Christopher writes while telling about the limitations of a good communicator in the following lines: "Communicators, of course, are not omniscient, and they cannot be expected to go against their own interests and preferences in producing an utterance. There may be relevant information that they are unable or unwilling to provide, and ostensive stimuli that would convey their intentions more

Zadie Smith's White Teeth: Multiculturalism and problems of Immigrant

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Abstract

This paper is an attempt to research the major theme of Multiculturalism and also to research the problems of the immigrants that do not belong in the land they live, in Zadie Smith's magnum opus 'The White Teeth'. Zadie Smith's famous novel deals with the major issue of multiculturalism and problems of immigrants who live in the foreign land, contributing to its multiculturalism. It also includes the way British people react and respond to this ever increasing mix of culture, a sort of cultural melting pot. It tracks the life of three families namely Iqbal's and Joneses and Bowden's. All three of the families have intermingling of culture amongst them. Novel explores how they again and again feel that they are 'just tolerated' in land that is not theirs. It explores their feeling of 'not belonging' which is kept ever increasing by the way British people respond to them, sometimes deliberately or sometimes unknowingly. Besides this novel also includes the urge of people belonging to various immigrant cultures, to trace their historical roots and their beliefs relating to their ancestral homelands and forefathers. Characters depicted in this work are constantly on the tormenting pursuit of greatness in their roots in order to tell the new people that they belong to something great. Zadie Smith uses the style referred to as hysterical realism, first coined by British Critic James Wood, one of the prominent critics of Smith's work. This style has helped her rightly put on paper the confusion in the minds of immigrants. Smith has very well depicted the mixed race conditions of London. It is not that minor Muslim culture only has problem dealing with the dominant British culture but also with other cultures like Jamaican, American, Bangladeshi/ Bengali culture etc. The main characters Shamad who has emigrated finds himself in the hot pot of plethora of cultures which is always boiling with some or the other issue of racial, cultural conflict. He like every other character feels an urge that his culture is in danger of suppression through domination. It is evidently shown that the minor culture is dominated in the foreign land, by behaviour or words. Alienation is felt by all the immigrant characters thus they react in the different way, some in stoic way and some in reactive or offensive way like Shamad's son Millat. Zadie Smith has always included the issues of immigrants, issues of religion, cultural identity etc. She has in the novel given the positive ending giving the message that despite the various conflicts, the things will eventually improve as people start to respect each other's culture and their identity.

Nelson Mandela once said *'My dream would be multicultural society, one that is diverse and where every man, women and child are treated equally. I dream of the world where all people of all races work together in harmony.'* Zadie Smith's novel 'White Teeth' deals with the ground reality of immigrant and the multicultural society. Her narration depicts that Mandela's dream is still not completely realised as far as the place where the novel is set- London, Britain. Zadie Smith is probably the most critically acclaimed novelist of the 21st century and 'White Teeth' a work which has played a major role to this. Since its publication it is bestowed with many well known literary awards like James Tait Black Memorial Prize, Whitbread Book Award, Guardian First Book Award, Commonwealth Writers First Book Prize and Betty Trask Award. Zadie Smith was born as Sadie Adeline Smith on 25th October 1975 in Brent, London, England to a Jamaican mother and English father.

This paper intends to study the Multiculturalism and the problems of immigrants in the undertaken novel of Smith's 'The White Teeth'.

FEMALE PROTEST AND ASSERTION OF SELF IN GITHA HARIHARAN'S –*THE THOUSAND FACES OF NIGHT*

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Abstract: *The Thousand Faces of Night* is a Commonwealth Award winning first novel of Githa Hariharan. Hariharan in this novel diligently captures both the submissiveness and the struggle for self identity of her female characters. The novel also portrays the female protest in its myriad forms. The paper makes an attempt to study critically the female protest and their assertion of self in the novel.

Introduction:

The concept of self is a brooding concern for many modern women writers. Githa Hariharan, a post-modern feminist writer, voices the same concern in her first novel *The Thousand Faces of Night*. In the patriarchal system, the identity of woman is that which defines her relation to a male. Either she is a daughter, wife or his child's mother. She does not have her own independent identity. Now, slowly women have begun to move towards self perception and self expression, not entirely against tradition but within family binding. Hariharan's *The Thousand Faces of Night* is a sensitive saga of women struggling to survive in a world of shattered dreams. It is a story of Devi, the protagonist and her desperate search for identity in the traditional Hindu society. Intermingled with Devi's search is the search of Mayamma, the old caretaker and Devi's mother Sita.

Female Protest and Assertion of Self:

The novel begins with Devi's preparation for her departure from America. Refusing an offer of marriage from her American coloured friend Dan, Devi returns to India. Her homecoming sucks her back in the traditional family life. Her mother Sita, skillfully drifts her into an arranged marriage with Mahesh, a manager in a multinational company. After marriage, Devi realizes that she has entered a life she has not really expected. Mahesh is a practical man devoid of any emotions. He views marriage as just another necessity and feels thankful that "Indians are not obsessed with love" (55).

Devi's conversations with Mahesh are very brief. When Devi expresses her desire to learn Sanskrit, Mahesh rudely states, "Don't be foolish,..... And what will you do with all this highbrow knowledge?" (52) When she expresses her desire to take up a job or learn playing cards so that she can be with him, Mahesh's disapproval is expressed only through an inward movement of his lips which "weaves a cunning cord around her vulnerable neck" (56). He never speaks a single affectionate word about Devi. Once when Devi tells him to postpone his trip, he teases her by saying "Why don't I pray to be born a woman in my next birth. Then I won't have to make a living at all"(54). His insensitiveness and inability to understand her shock her and give rise to a feeling of awesome loneliness in her. She becomes aware of the insignificant and secondary status assigned to her by her husband.

But then Devi is not a downright protestor. She wants to give an honest try to bring happiness in her married life. She makes every attempt to fit within the predefined framework of the role of a woman, but Mahesh's matter-of-fact attitude alienates her more. Devi's father-in-law with his inspiring stories about ideal womanhood comforts and consoles her. His stories help her to hold back her loneliness. But her father-in-law's departure and death in America makes her more lonelier. As Mahesh's tour becomes more frequent and longer, the loneliness becomes unbearable for her. She considers marriage a torture to her and it hangs like a knife above her neck :

I am still novice in the more subtle means of torture. I thought the knife would plunge in, slit tear, rip across my neck, and let the blood gush—The games it plays with me are ignominious ---- The heart I have prepared so well for its demands remains untouched, unsought for (54).

She feels entrapped in the marital bond and senses, "Her freedom being thwarted, the gaping emptiness threatening her very existence" (Indira.S-178). Mahesh remains indifferent towards her feelings. Devi now feels a need to protest and assert her individuality. The attitude of rebellion in her drives her to a blissful numbness of Gopal's music, a Hindustani singer, her neighbour. She elopes with Gopal condemning Mahesh to a life without a wife or a child. She walks out of her wedlock courageously:



ULTRASONIC STUDIES OF ESSENTIAL AMINO ACID LYSINE AND THREONINE IN AQUEOUS POTASSIUM HYDROXIDE SOLUTIONS AT 303 K AND 5 MHZ

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Communicated : 17.12.18

Accepted : 18.01.19

Published: 30.01.19

ABSTRACT:

The present work reflects the ultrasonic studies of two essential amino acid viz. Lysine and Threonine in aqueous potassium hydroxide (KOH) solutions at 303 K and 5 MHz. The density, viscosity and ultrasonic velocity have been measured for various binary and ternary mixture of Lysine and Threonine with water and 0.04 M aqueous KOH solution. The adiabatic compressibility (β_a), acoustic impedance (Z), intermolecular free length (L_f), Rao's constant (R_1) and Wada's constant (β_m) have been calculated from experimentally measured values. The results of binary and ternary mixtures are correlated by the means of graphical representation. The detail examination of these parameter in terms of interactions between molecules of solvent and solute have been carried out.

Key words: - Ultrasonic velocity, Lysine, Threonine, acoustical parameters, Molecular interactions.

INTRODUCTION:

Proteins are the building blocks of life and it constitute over half the dry weight of most organism. Proteins are polymerized chains of number of amino acids so, the amino acids are functional and structural units of protein. Out of number of amino acids only 20 of them, are found as constituent of most proteins. Nutritionally they are classified into two main groups viz. essential and non-essential. Lysine and Threonine are two of the economically most important essential amino acids [1,2]. Lysine is very important for regulating hormones, antibodies, and enzymes in the body it also plays a crucial role in building muscle, maintaining bone strength, aiding recovery from injury or surgery [3]. Threonine is an important residue of many proteins, such as tooth enamel, collagen, and elastin and very important for the nervous system, it also plays an important role in porphyrin and fat metabolism and prevents fat buildup in the liver [4]. The chemical structure of Lysine and Threonine is shown in Fig. 1.

Now days, ultrasonic technique finds large number of applications in medical, technology, industries, defenses and several other fields. Ultrasonic velocity and absorption studies in liquids, liquid mixtures, and solids provides invaluable

information on the nature of inter and intra molecular interactions and molecular association. In addition, it could also provide an understanding of physical and chemical properties leading to the knowledge of the structure and properties of matter [5-11].

Amino acids in aqueous medium undergoes hydrolysis and exists as Zwitterions [12]. Their structural interactions with water molecule and electrolyte ions in the solution could be predicted by means of ultrasonic velocity and compressibility measurements [13]. In Last decade, several works are published on ultrasonic investigation on the amino acids in ternary mixture with aqueous solution of electrolyte such as urea [5,12,14], sodium acetate [15], NaCl [11,16-18], $MgCl_2$ [17], etc. Thus, present work aims to investigate the molecular interactions between essential amino acids Lysine and Threonine electrolytic aqueous solution.

2. Experimental

2.1. Materials

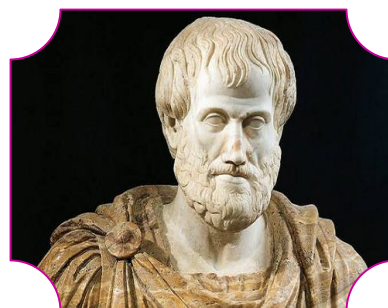
Amino acids (lysine and threonine), potassium hydroxide (KOH) were used in this work to study the physical properties of different binary and



A NARRATIVE ADAPTATION OF ARISTOTLE'S CONCEPT OF IDEAL TRAGIC HERO IN MODERN INDIAN HINDI MOVIES: AASHIQUI 2 AND RAANJHANAA

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ABSTRACT

It is the greatness of Aristotle that the narrative techniques he had laid down some thousands of years earlier for the creation of an Ideal Tragic Hero are to be found relevant even today. The aim of the present paper is to critically understand how Aristotle's narrative techniques of an Ideal Tragic Hero has been adopted in the creation of male leading characters in 'Aashiqui 2' and 'Raanjhanaa'. There has been reciprocal relationship between literature and other forms of artistic expressions and the film is no exception to this. Aristotle, an eminent Greek scholar has created his concept of an Ideal Tragic Hero in his insightful treatise, 'The Poetics'. The male protagonists of the above said movies, as Aristotle wishes are neither paragon of virtues nor utterly wicked; rather an intermediate sort of persons, passing through hamartia(tragic flaw or error in judgment). There are also peripetia (reversal of fortune) and anagnorisis (realization of truth) in their actions. Except some modern limitations, the tragic protagonists of 'Aashiqui 2' and 'Raanjhanaa' follow the steps, shown by Aristotle.

KEYWORDS: tragic hero, narrative, hamartia, peripetia, anagnorisis, film etc.

1. INTRODUCTION

This paper builds insight into how the critical theories of literature impact films, through a detailed study of Aristotle's concept of an Ideal Tragic Hero with reference to the selected modern Indian Hindi movies, 'Aashiqui 2' and 'Raanjhanaa'. Today's world is an interdisciplinary world. There has been growing mutual interaction between literature and film. The various concepts of Aristotle are ever influential to the authors. Aristotle has created his concept of an Ideal Tragic Hero in his great world book 'The Poetics'. 'The Poetics' provides meticulous discussion of tragedy as dramatic form of literature. Aristotle pin-points the elements of tragedy and set forward his concept of an Ideal Tragic Hero.

Who can be called an ideal tragic hero? What are his characteristics? Answers to these questions are given by Aristotle in his 'The Poetics', and these answers are to be found in the heroes of modern Indian Hindi movies, 'Aashiqui2' and 'Raanjhanaa'. Thus the endeavor of the present paper is to bring into light Aristotle's views about tragic hero and how these are reflected in two modern Indian Hindi movies, 'Aashiqui 2' and 'Raanjhanaa'. The paper will not peep into the socio-cultural and political aspects of the movie rather limits only to the investigation of character portrayal of tragic heroes of the above said movies along the lines of Aristotle's precepts, mentioned in 'The Poetics'.

2. ARISTOTLE AND HIS 'THE POETICS'

Aristotle (384-322 B.C.), a Greek philosopher and scientist, was born at Stagira in Macedonia, classical Greece. Aristotle's 'The Poetics' is the work of the distant past. It is difficult to ascertain the

आर्थिक, सामाजिक विकास व पर्यावरण**श्री. सुनिल प्र. घुगल**सहायक प्राध्यपक व अर्थशास्त्र विभाग प्रमुख
तायवाडे कॉलेज महादुला, कोराडी, ता. कामठी, जि. नागपूर**प्रस्तावना :**

भारतात विसाव्या शतकाच्या सातव्या दशकापासून पर्यावरण प्रदुषणाला आळा घालण्याचा प्रयत्न सुरू झाला. “धरतीमाता आपल्या पुत्राची गरज भागविण्यास समर्थ आहे’ ती देखील हतबल ठरते त्याच्या लोभापाई” अशा अर्थाचे म. गांधीचे वचन आहे. या वचनात पर्यावरण प्रदुषणाचे मुळ दडले आहे. पर्यावरणाची सहजीवनाचा नाते-संबंध पुनस्थातित करणे गरजेचे आहे.

अलिकडच्या काळात निसर्गात मानवी हस्तक्षेप वाढल्यामुळे पर्यावरण असंतुलन निर्माण झाले आहे. या पर्यावरणीय समस्यांना मानव स्वतः जबाबदार असून त्याचे दूषपरिणाम त्यालाच भोगावे लागत आहेत. जंगलतोड, जमिनीची धुप, लोकसंख्यावाढ, वैश्विक तापवृद्धी, पर्यावरणीय प्रदुषण, ओझोन थराचा नाश, आम्ल पर्जन्य इत्यादी समस्या मानवी अस्तित्वास आव्हान देत आहेत. आपल्या भोवती असणारे हवा, पाणी, प्रकाश, जमीन, वस्तुमात्रा, प्राणी व वनस्पती या सगळ्या घटकांचा एकत्रित विचार म्हणजे पर्यावरण. मानवाचा व पर्यावरणाचा परस्परांशी अनन्य संबंध आहे. जेव्हापासून माणव सामाजिक प्राणी म्हणून स्थिरावला आहे. त्याचे पर्यावरणाशी सहजीवन सौहार्दाचे राहिले आहे. परंतु गेल्या काही दशकांत वाढती जनसंख्या व प्रगत तंत्रज्ञानाच्या अती वापरातून पर्यावरण प्रदुषित होत आहे. कारण पृथ्वीच्या साधनसंपत्तीचे प्रमाणाबाहेर शोषण होत आहे.

विकसित देशात १९६० च्या सुमारास पर्यावरण शास्त्राचा अभ्यास सुरू झाला. पर्यावरण सर्वव्यापी असल्याने पर्यावरण शास्त्राचा अभ्यास भौतिक, रसायन, वनस्पती, प्राणी, भुविज्ञान इ. सर्व विज्ञान शाखांशी तसेच समाजशास्त्र शाखांशी संबंधित असून तो बहुविद्याशाखीय स्वरूपात आहे. १९७२ मध्ये झालेल्या स्टॉकहोम जागतिक परिषदेनंतर विकासनशील देशात विभिन्न कार्यक्रम राबवतांना पर्यावरणीय समस्येकडे लक्ष पुरविण्यास सुरवात झाली.

क्षेत्राचा आर्थिक सामाजिक विकास साधतांना पर्यावरणाचा समतोल राखला पाहिजे अशी जाण आपल्या देशात शासन व समाजाला होऊ लागली आहे. उत्तरांचल प्रदेशात हिमालयाच्या पायथ्याशी खाणकाम व धरण बांधण्यासाठी केलेली भ्रमसाठ वृक्षतोड त्यामुळे बोडखे पडलेले खडक, दिल्लीतील गटारी यमुना, स्वच्छ गंगा अभियानाची गरज, मथुरा तेल शुद्धीकरण कारखान्यातून निघणाऱ्या धुराच्या विळख्यात सापडलेला ताजमहल इ. लागोपाठ घडणाऱ्या घटनांमधून पर्यावरणीय आपत्तीची जाणीव होऊन पर्यावरण समस्यांच्या निराकरणाची स्थायी निकड भासू लागली आहे.

(कार्बन डायऑक्साइड), (मिथेन) (क्लोरोफ्युरोकार्बन) (ओझोन). अतिनील व अवरोक्त प्रारणे इ. पृथ्वीचे तापमान कायम राखण्यासाठी किंवा पृथ्वीला उबदार राखण्यासाठी हरितगृह वायुंची काही प्रमाणात आवश्यकता नक्कीच आहे. मात्र या वायुंचे प्रमाण वाढत गेले की, पृथ्वीचे तापमानही वाढू लागते. त्यामुळे वैश्विक तापमान वाढीचा धोका संभवतो. शतक भरत पृथ्वीचे तापमान १

डिग्री सेंटिग्रेडने वाढले आहे.

» **पर्यावरणाची व्याख्या :** सी. पार्क या तज्ञाने केलेली व्याख्या : “विशिष्ट वेळी व विशिष्ट ठिकाणी मानवाला वेष्टित जी सर्वसमावेशक परिस्थिती असते तिला पर्यावरण म्हणतात.

» **पर्यावरण शास्त्राची व्याप्ती व स्वरूप :** पर्यावरण शास्त्राच्या व्याप्तीची कल्पना येण्यासाठी भिन्न-भिन्न दृष्टितुन पर्यावरणाचा विचार होणे आवश्यक आहे. पर्यावरणाचा संबंध भौतिक, रसायन, वनस्पती, प्राणी, भुविज्ञान इ. सर्व विज्ञान शाखांशी तसेच भुगोल व इतर समाज शाखांशी असून त्याचे स्वरूप बहुविद्याशाखीय आहे.

पर्यावरणाची व्याप्ती बहुव्यापी असल्यामुळे गुंतागुंतीची आहे. यातून एक गोष्ट स्पष्ट होते की ती म्हणजे सर्व घटकांचे अस्तित्व, त्यांचे व्यवहार निसर्गनियमानुसार चालतात या व्यवहारात जेव्हा मानवी हस्तक्षेप होतो तेव्हा पर्यावरण प्रदुषण होते.

शोध निबंधाची उद्दिष्टे :

- १) पर्यावरण व विकासातील संबंध अभ्यासणे.
- २) अर्थशास्त्र व पर्यावरण यांचा संबंध स्पष्ट करणे.
- ३) पर्यावरणाचा विकासावर काय परिणाम होतो ते स्पष्ट करणे.
- ४) पर्यावरणाचा सामाजिक परिणामांचा अभ्यास करणे.
- ५) पर्यावरणाचा आर्थिक दुष्टीकोन स्पष्ट करणे.

गृहीते :

- १) पर्यावरणीय समस्या ही एक सामाजिक समस्या आहे.
- २) पर्यावरणाचा परिणाम सामाजिक व आर्थिक विकासावर होतो.
- ३) पर्यावरण समस्या ही जागतिक समस्या बनली आहे.

संशोधन पद्धती व तथ्य संकलन :

प्रस्तुत शोध निबंधासाठी वर्णनात्मक. पद्धतीचा अवलंब केला असून शोध निबंधासाठी विविध ग्रंथ, मासिक, वर्तमानपत्रे, इंटरनेट इत्यादी ज्ञान स्रोतांचा वापर करण्यात आलेला आहे.

पर्यावरण आणि विकास :

आर्थिक विकासाच्या कुठल्याही स्तरावर असणाऱ्या अर्थ व्यवस्थे मध्ये देशांतर्गत उपलब्ध असणाऱ्या नैसर्गिक साधनसामग्रीचा



डॉ. बाबासाहेब आंबेडकरांच्या आर्थिक विचारांची वास्तविकता एक अभ्यास

सुनील प्र. घुगल

असिस्टंट प्रोफेसर व अर्थशास्त्र विभाग प्रमुख ,
तायवाडे कॉलेज, कोराडी जि. नागपूर.

सारांश :

डॉ. बाबासाहेब आंबेडकरांनी सामाजिक , शैक्षणिक, राजकीय व आर्थिक विषयांवर आपले विचार स्पष्टपणे मांडले त्यांनी 1943 मध्ये इस्ट इंडिया कंपनीच्या व्यापाराचा एकाधिकार नष्ट करून ब्रिटीश जनतेसाठी भारताशी व्यापार करण्याचा मार्ग मोकळा करण्यात आला. रुपयाच्या अवमुल्यना बाबत चांदीचा अतिरिक्त पुरवठा जबाबदार नाही तर जगातील प्रमुख देशांनी रौप्यमानकाचा त्याग केल्यामुळेच रुपया पौंड विनिमय दरात विसंवाद निर्माण झाला. सोनेचांदीचा विनिमय दर स्थिर ठेवणे कठीण झाल्यामुळे भारताचे प्रचंड आर्थिक नुकसान झाले असे डॉ. आंबेडकर यांनी म्हटले



शेती हे राष्ट्रीय उत्पादनाचे एक मोठे साधन आहे. शेतीला आर्थिक विकासाचे साधन म्हणुन विशेष महत्व दिले पाहिजे. जलसंपत्तीच्या नियोजनाबाबत डॉ. आंबेडकर म्हणतात की नदीला येणाऱ्या महापुरांपासुन संरक्षण करणे एवढाच मर्यादित उद्देश दामोदर नदी खोरे योजनेचा नव्हता तर या योजनेद्वारे शेतीसाठी सिंचन विद्युतनिर्मिती आणि नौकायन असा तिहेरी उद्देश होता.

राष्ट्रीयीकरणाला डॉ. आंबेडकरांचा विरोध नव्हता शेतजमीन आणि अवजड उद्योगधंदे यावर सामुदायीक मालकी असावी अशी त्यांची धारणा होती उत्पादनाचे लोकशाही पध्दतीने जातीभेद न करता वाटप करावे.

प्रस्तावना :-

डॉ. बाबासाहेब आंबेडकर नावाच्या ज्ञानसुर्याने भारतभर आणि भारताबाहेरही विसावे शतक प्रकाशमान केले. येथे हजारो वर्षे चातुर्वर्ण्याच्या आणि जातियतेच्या घाणीत, चिखलात रूतलेल्या कोटयावधी लोकांना त्या ज्ञानसुर्याच्या विचारकिरणांनी मुक्त केले वर काढले आणि स्वच्छ केले. बाबासाहेबांचा विचार स्वीकारणाऱ्या समाजाच्या जीवनाला अर्थ प्राप्त झाला कुत्र्या मांजरापेक्षा किंवा किडे मुंग्यांपेक्षाही जे हिन आणि अस्तित्वहिन जीवन जगत होते, त्यांना माणुसपणाचे हक्क प्राप्त झाले ही सर्व किमया डॉ. बाबासाहेब आंबेडकरांच्या कार्य कर्तृत्वान, चळवळीने आणि तत्वज्ञानाने केली. प्रत्येक भारतीयांच्या मनात राष्ट्रवाद निर्माण व्हावा आणि राजकीय स्वातंत्र्याची गोड फळे सर्व स्तरातील जनतेला चाखावयास मिळावी असा त्यांचा अथक सामाजिक प्रयत्न होता. माणूस त्यांच्या विकासाचा केंद्रबिंदू होता त्यांनी सर्वांना हक्काची जाणीव करून देताना समाज आणि देशाच्या प्रती असलेल्या कर्तव्याचीही जाणीव करून दिली.

डॉ. बाबासाहेब आंबेडकरांनी सामाजिक, शैक्षणिक, राजकीय, आर्थिक विषयावर आपले तत्वज्ञान (विचार) स्पष्टपणे मांडले भारताच्या ऐक्याला पूरक असलेला विचार राज्यघटनेत मांडला. सामाजिक आर्थिक समता



भारतीय अर्थव्यवस्थेत विशेष आर्थिक क्षेत्राची भूमिका

प्रा. डॉ. आसावरी आर.दुर्गे
कला, वाणिज्य व विज्ञान महाविद्यालय , कोराडी.

प्रस्तावना

भारत हा विकसनशील देश आहे तेव्हा भारतीय अर्थव्यवस्था विकसित करण्याच्या दृष्टिकोणातून स्वातंत्र्यप्राप्तीनंतर मागील सहा दशकात सातत्याने प्रयत्न केले जात आहेत. परंतु आर्थिक विकासासाठी सरकारने केलेले प्रयत्न फारसे यशस्वी झाले नाही. असा विचार घेऊन केन्द्रसरकारने उद्योग क्षेत्राला नविन आधार देण्यासाठी, जागतिकीकरणाच्या प्रक्रियेत टिकून राहण्यासाठी, देशाच्या औद्योगिक विकासाचा वेग वाढविण्यासाठी तसेच निर्यात वाढीसाठी एप्रिल 2000 मध्ये स्पेशल इकॉनॉमिक्स झोन (SEZ) धोरणाची घोषणा केली. तत्कालीन वाणिज्य मंत्री मुरासोली मारन यांनी चीनला भेट देऊन तेथील विशेष आर्थिक क्षेत्राच्या माध्यमातून झालेली प्रगती पाहून ते प्रभावित झाले. त्यामुळे त्यांनी 1997 ते 2002 या काळातील व्यापार निर्मिती करण्याच्या दृष्टीने प्रयत्न चालविले. थोडक्यात चीन मध्ये सेझचे यश लक्षात घेऊन भारतात सेझचा स्वीकार करण्यात आला. केन्द्र सरकारने 23 जून 2004 मध्ये सेझ संबंधीचे विधेयक संसदेमध्ये पास केले. 10 फेब्रुवारी 2006 पासून सेझ संबंधीच्या कायद्याची अंमलबजावणी वेगाने सुरु झाली. या कायद्यानुसार देशांतर्गत विशेष आर्थिक क्षेत्र उभारण्याची जबाबदारी खाजगी/सार्वजनिक, परदेशी कंपनी सोबतच काही ठिकाणी एम.आय.डी.सी. (M.I.D.C.) सारख्या महामंडळावर टाकण्यात आली. भारतात विशेष क्षेत्राची संख्या 142 वरून 403 पर्यंत गेली असून त्यापैकी जवळपास 267 प्रस्तावांना शासनाने मंजुरी दिलेली आहे.

विशेष आर्थिक क्षेत्र (SEZ)

विशेष आर्थिक क्षेत्र म्हणजे विशेष आर्थिक दर्जा दिलेला भूप्रदेश होय. त्याचे आर्थिक कायदे हे देशाच्या वैशिष्ट्यपूर्ण आर्थिक कायद्यापेक्षा शिथिल असतात.

केन्द्र सरकारने पुरस्कृत विशेष आर्थिक क्षेत्रांना विशेष आर्थिक धोरणांचा लाभ देण्यासाठी उद्योगा संबंधीचे कायदे, नियम यात लवचिकता असते. सरकारने धोरण व कायदे अशा क्षेत्रांसाठी इतर क्षेत्रांपेक्षा वेगळे असतात. म्हणून त्यांना विशेष आर्थिक क्षेत्र असे म्हणतात. थोडक्यात विशेष आर्थिक क्षेत्र हे असे क्षेत्र आहे की , ज्यामध्ये उभारल्या जाणाऱ्या उद्योगांना अनेक प्रकारच्या सवलती सुविधा दिल्या जाणार आहे. जसे आयकर व प्रशुल्कामध्ये सूट, स्वतःचे स्वतंत्र व्यवस्थापन, स्वतंत्र उद्योगासंबंधी धोरण, पायाभूत सुविधा (पाणी, रस्ते, वीज, टेलिफोन इ) हवाई अड्डे (बंदरांची निर्मिती) कच्च्या मालाच्या खरेदीवर सुट, स्वतंत्र वसाहती इ. होय.

विशेष आर्थिक क्षेत्रांची उद्दिष्टे



अर्थव्यवस्थेत खाजगी क्षेत्रांच्या माध्यमातून उद्योगधंद्याचा विस्तार करून रोजगार वृद्धी व आंतरराष्ट्रीय व्यापारात वाढ घडवून आणणे हा सेझचा मुख्य उद्देश असला तरी त्याशिवाय भारतात सेझ निर्मितीचे इतर उद्देश पुढीलप्रमाणे आहेत.



कृषीमालाच्या मुल्यांतील उच्चवचने

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तायवाडे महाविद्यालय, महादुला, कोराडी.

भारत प्राचीन काळापासून एक कृषीप्रधान देश आहे. देशातील अधिकांश रहिवासी आज ही कृषी द्वारा आपली उपजीवीका करीत आहेत. भारतातच नाही तर जगातील इतर देशात सुद्धा कृषी एक महत्वपूर्ण व्यवसाय आहे. कारण की मनुष्याच्या मुलभूत आवश्यकतेच्या पूर्तीचे हे एक महत्वपूर्ण साधन आहे. कोणत्याही देशात उद्योगाच्या विकासाच्या अगोदर कृषीचा विकास करणे अत्यंत आवश्यक आहे. भारतासारख्या देशाला जीथे लोकसंख्येच्या मोठ्या भागाला अन्नधान्य शेतीमधून प्राप्त होते तेव्हा शेती व्यवसायाचा विकास करणे अत्यंत आवश्यक आहे.



भारत एक असा देश आहे. जीथे शाकाहारी लोकांची संख्या सर्वाधिक आहे व भारतीय जेवणात कृषी द्वारा उत्पादित पदार्थ असणे स्वाभाविक आहे. खाद्यान्य, डाळ, तिळ, शेंगदाणे, भाजीपाला, फळे इत्यादी कृषीचीच देण आहे. याशिवाय दुध, तुप, लोणी, दही हा व्यवसाय सुद्धा कृषीवरच आधारीत आहे. हे बरोबर आहे की भारतीय शेती आत्मनिर्भर नाही. कारण आपली संपूर्ण खाद्यान्याच्या आवश्यकतेची पूर्ती करणे सुद्धा संभव नाही. हया कमतरतेची पूर्ती आयातरद्वारे पूर्ण करावी लागत आहे. परंतु कृषी सुधारणे द्वारे देशाला आवश्यक असणारे अन्नधान्य उत्पादन करणे शक्य आहे. हरीतक्रांती मुळे वरील कथनाला पृष्टी मिळाली आहे व आज देश खाद्यान्य उत्पादनात जवळपास स्वावलंबी झाला आहे.

स्वतंत्र अर्थव्यवस्थेत वस्तु मूल्यात परीवर्तन एक स्वाभावीक क्रमानुसार होते. कारण वस्तुचा पुरवठा व मागणी यात सामंजस्य स्थापीत होवून आकस्मीक कारणामुळे वस्तूचे मूल्य कधी वाढते तर कधी त्यामध्ये घट होण्याची प्रवृत्ती निदर्शनास येते. स्वतंत्र स्पर्धा असल्यामुळे कोणत्याही वस्तूचे मूल्य खूप काळ पर्यंत जास्त व कमी सुद्धा राहू शकत नाही. परंतु हा सिद्धांत केवळ विकसित अर्थव्यवस्थेला लागू होतो. अविकसीत व विकसनशील अर्थव्यवस्थेत कृषीला अत्याधीक महत्व असल्यामुळे कृषी पदार्थाचे मूल्य केवळ मागणी व पुरवठाच्या सिद्धांताद्वारे निश्चित होत नाही. त्यातील परीवर्तन अनेक आंतरीक व बाह्य तत्वांद्वारे प्रभावीत होते.

कृषी कीमतीतील परिवर्तन :

भारतीय कृषी मागासली असण्याचे कारण कृषी विकासातील नैसर्गिक व मानवीय दोनही तत्वे बाधक आहे. कृषी मूल्यात अत्याधीक चढ उतार होतात. या तथ्याच्या गंभीरतेचा अनुमान होवू शकते की गहू, तांदुळ अथवा अन्य खाद्यान्याच्या कीमती पीकांच्या वेळी व नंतरच्या मूल्यात कधी कधी १०-१५ रुपये प्रती मन पर्यंत अंतर येत असते. या परीवर्तनामुळे कृषी पदार्थ साठविणारे व्यापारी मनमाने लाभ मिळवितात. शेतकऱ्याला मात्र याचा कोणताच भाग मिळत नाही आणि उपभोक्त्यांना अधिक समस्यांचा सामना करावा लागतो. कृषी पदार्थाच्या कीमतीत चढ उतार होण्याचे कारण पीकांचा विक्रीचा हंगाम. याकाळात शेतकरी माल विकून घरी जातो तर तो माल व्यापारी खरेदी करून नंतर त्याला जास्त कीमतीत



“आधुनिक युगातील भारतीय बँका : संधी व आव्हाने”

प्रा. डॉ. आसावरी आर. दुर्गे

व्यवसाय व्यवस्थापन विभाग प्रमुख, कला,
वाणिज्य व विज्ञान महाविद्यालय, महादुला, कोराडी, नागपूर.

सारांश

ह्या संशोधनासाठी नागपूर जिल्ह्याची निवड केली असून नागपूर जिल्ह्यातील 25 ग्रामीण व 25 शहरी असे एकूण 50 बँक अधिकारी नमुना निवड पद्धतीने निवडल्या गेले. आधुनिक युगात भारतीय बँकांना उपलब्ध झालेल्या संधी व त्यामुळे निर्माण झालेली आव्हाने हे पाहण्यासाठी नमुन्यांची निवड केल्या गेली व त्या आधारे सामुग्रीचे पृथक्करण व विश्लेषण करण्यात आले.

आजच्या 21 व्या शतकातील भारतीय बँक व्यवसाय आणि त्याच्या सभोवतालची परिस्थिती आणि समस्या पाहता व्यापारी बँकांना 18 व्या आणि 19 व्या शतकात ज्या कठीण समस्यांना तोंड द्यावे लागले त्याची आठवण होते. इतिहासापासून धडा शिकणे महत्वाचे असते. त्यासाठी भारतीय बँक व्यवसायासमोर अनेक संधी व तेवढीच आव्हाने आहेत. तेंव्हा वेळीच त्यांचे आकलन होऊन जो जी आव्हाने स्विकारेल व संधीचा उपयोग करून घेईल तो यशाचा अत्युच्च शिखरावर विराजमान असेल हे सांगण्यास कोणत्याही भविष्यवेत्त्याची गरज नाही. मात्र जो याचा सामना करणार नाही त्याचा बँक व्यवसाय डबघाईस आल्याशिवाय राहणार नाही व 18 व्या आणि 19 व्या शतकातील पुर्नरावृत्ती होण्यास वेळ लागणार नाही.

स्वातंत्र्यप्राप्ती नंतर भारताने जलद आर्थिक विकास घडवून आणण्यासाठी नियोजनाचा स्विकार केला अर्थव्यवस्थेच्या सर्व क्षेत्रांचा समतोल पद्धतीने विकास घडवून आणणे व समाजवादी समाजरचनेच्या उद्दिष्टांच्या पूर्ततेसाठी नियोजन यशस्वी करणाऱ्या नियोजनकारांचा पंचवार्षिक योजनांच्या माध्यमातून साकार केला जात आहे. 1951 ते 1990 पर्यंत भारताने 7 पंचवार्षिक योजना पूर्ण केल्या. या काळात शेती, उद्योग व सर्व क्षेत्राच्या विकासात भारतीय बँकांचे योगदान बहुमुल्य आहे हे कुणीही नाकारू शकणार नाही. मात्र या काळात बँक व्यवसाय प्रामुख्याने ठेवी स्विकारणे व कर्जवाटप करणे यावरच भर देणारा होता.

बँक या संकल्पनेचा उदय –

प्राथमिक कार्याच्या स्वरूपात बँकांच्या कार्याची सुरुवात फार वर्षांपूर्वीच झालेली आहे. ख्रिस्तपूर्व 2000 वर्षांपूर्वीच बॅबिलॉन मध्ये बँकांची सुरुवात झाली होती. प्राचिन काळी ग्रीस व रोम मध्येही पतपैसा देण्याची पद्धत प्रचलित होती. इजिप्तमध्येही असेच पतपैशाचे व्यवहार केले जात असत. पतपैसा व पतपत्रे यासंबंधीचे उल्लेख ‘मनस्मृती’ मध्येही आढळतात.

बँक हा शब्द बँको (Banco) बँकस (Bancus) या शब्दांवरून रुढ झाला असावा असे मानले जाते. हे सर्व शब्द एक विशिष्ट प्रकारचे बाक असे सुचित करतात. आर्थिक व्यवहारासाठी युरोपियन ज्यू सावकार अश्या



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जगभरामध्ये महिला कोणत्याही प्रकारचा मोबदला न घेता वर्षाला ७१० लाख कोटी रुप्यांएवढ्या पगाराचे काम फुकटात करतात. ही रक्कम जगातील सर्वात मोठी कंपनी अॅपलच्या वार्षिक व्यवसायाच्या ४३ पट आहे. ऑक्सफोमच्या एका अहवालानुसार, भारतीय महिला घर आणि मुलांची देखभालसारखी विनामोबदल्याची कामे करतात. त्याची एकूण किंमत देशाच्या सकल उत्पन्नाच्या ३.१ टक्क्यांएवढी आहे. भारताच्या शहरी भागातील महिला रोज ३१२ मिनिटे अशा कामांमध्ये गढलेल्या असतात. ज्याबदल्यात त्यांना काहीच मोबदला मिळत नाही. दुसरीकडे ग्रामीण भागातील महिला २९१ मिनिटे अशी कामे करतात. महिलांच्या तुलनेत शहरांतील पुरुष फक्त २९ मिनिटे व ग्रामीण भागातील ३२ मिनिटे घर व मुलांची देखभाल यासारखी कामे करतात. भारतासह जगभरात आर्थिक असमानता वाढत आहे. त्यामुळे महिला व मुली जास्त प्रभावित होत आहेत. भारतात पुरुषांच्या तुलनेत महिलांना पगाराचे काम मिळण्याची शक्यता कमी असते. दुसरीकडे देशातील ११९ अब्जाधिशामध्ये फक्त ९ महिला आहेत. भारतात पुरुष व महिलांच्या वेतनात मोठा फरक असतो. त्यामुळे महिलांच्या कमाईवर अवलंबून असलेली कुटुंबे गरीब असतात. जात, धर्म, वर्ग, वय व लैंगिकता यांसारखे घटकही महिलांविषयीच्या असमानतेला प्रभावित करतात. ऑक्सफोमच्या ग्लोबल जडर गॅप इंडेक्स २०१८ मध्ये भारताचे रँकिंग १०८ वे आहे. याबाबतीत भारत चीन व बांगलादेशपेक्षाही मागे

आहे. असे असले तरी महिलांची परिस्थिती सुधारण्यासाठी उपाययोजनांचा विचार करतांना प्रथम महिलांच्या आजच्या स्थितीचा आढावा घ्यायला पाहिजे. म्हणजेच दर १००० पुरुषामागे स्त्रियांचे प्रमाण, महिलांचे आरोग्य, महिलांचे शिक्षण, महिलांवर होणारे अत्याचार हे मुद्दे पाहायला हवेत. या सर्व घटकांचा समाजाच्या एकूणच स्वास्थावर एकत्रित परिणाम होत असतो म्हणून हे सर्व घटक एकत्रितपणे बघणे गरजेचे आहे.

आज महिलांवरचे अत्याचार वाढत आहेत. स्त्रीभ्रूणहत्या वाढत आहेत. महिला कुपोषित आहेत. अशा परिस्थितीत महिलांचा राजकीय सहभाग अत्यल्प आहे. याला उत्तर शोधले पाहिजे. या प्रश्नाचे उत्तर शोधण्याच्या उद्देशाने व महिलांचा राजकारणातील सहभागाचा आढावा घेण्याच्या हेतूने मी 'महिलांचे राजकारणात सहभाग' हा विषय संशोधनासाठी निवडला आहे.

शोध निबंधासाठी वापरण्यात येणारी संशोधनाची पद्धती :

प्रस्तुत शोधपत्रात वापरण्यात येणारी माहिती व तथ्ये हे विषयाशी संबंधित विविध पुस्तके, मासिके, लेख, वर्तमानपत्र व सांकेतिक स्थळावरून संकलित करण्यात आले आहेत.

संशोधनाचे उद्देश :

प्रस्तुत संशोधनाचे मुख्य उद्देश खालीलप्रमाणे आहेत.

१. महिलांच्या राजकारणातील सहभागाच्या वर्तमान स्थितीचे अध्ययन करणे.

२. महिलांच्या राजकारणातील सहभाग कमी असण्याच्या कारणांचा शोध घेणे.

३. महिलांचे राजकारणात सहभाग वाढविण्यासाठी शासनाने कोणत्या उपाययोजना केल्या आहेत? याची माहिती प्राप्त करणे.

४. संशोधनाद्वारे निघणाऱ्या निष्कर्षांच्या आधारे राजकारणात महिलांचे सहभाग वाढविण्यासाठी योग्य उपाययोजना सूचविणे.

५. संशोधनाच्या अध्ययनाद्वारे निघणाऱ्या निष्कर्षांवरून भविष्यातील संशोधनासाठी योग्य उपाययोजना सूचविणे.

विशेष आर्थिक क्षेत्राची भूमिका व त्यासंदर्भातील तरतुदींचे अध्ययन

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भारत आशिया खंडातील असा पहिला देश आहे की, ज्याने निर्यात संवर्धनासाठी निर्यात प्रक्रिया क्षेत्राचे महत्व ओळखून १९६५ मध्ये कांडला बंदरात पहिले निर्यात प्रक्रिया क्षेत्र स्थापन केले. १९६५ पासून तर आतापर्यंत भारतात असे ११ निर्यात प्रक्रिया क्षेत्र स्थापन झालेले. परंतु नियंत्रण आणि परवाने यांची अधिकता (वर्चस्व), जागतिक स्तरावरील प्रारूपाचा अभाव आणि अस्थिर वित्तीय व्यवस्था या कारणांमुळे निर्यात प्रक्रिया क्षेत्राचे प्रारूप संवर्धनात फार प्रभावी माध्यम ठरले नाही. नवीन आयात—निर्यात निती अंतर्गत अधिक व्यापक आणि उदार विशेष आर्थिक क्षेत्र संकल्पना लागू करण्यात आली. या संदर्भात एक विशेष विधेयक तयार करण्यात आले आणि विशेष आर्थिक क्षेत्र अधिनियम २००५ मध्ये संमत करण्यात आले. हे अधिनियम १० फेब्रुवारी २००६ पासून लागू करण्यात आला. सर्वप्रथम या अंतर्गत निर्यात वृद्धीसाठी स्थापन करण्यात आलेले ८ निर्यात प्रक्रिया क्षेत्र केंद्र सरकारने १ एप्रिल २००० पासून लागू असलेल्या आयात—निर्यात निती अंतर्गत विशेष आर्थिक क्षेत्रात रूपांतरित करण्यात आले. १ एप्रिल २००० च्या प्रभावी आयात निर्यात धोरणात 'चिनी प्रारूपाचे' अनुकरण दिसून येते. त्यानुसारच भारतात विशेष आर्थिक क्षेत्राची स्थापना करण्याचे केंद्र सरकारने धोरण निश्चित केले. याचा प्रमुख उद्देश निर्यात संवर्धनासाठी आंतरराष्ट्रीय स्पर्धात्मक आणि अडथळा विरहित वातावरण उपलब्ध करून देणे हा आहे. वरील आठ क्षेत्रांशिवाय

देशातील विभिन्न भागात खाजगी क्षेत्र, संयुक्त क्षेत्र आणि राज्य सरकार यांच्याद्वारे ४५ नवीन आर्थिक क्षेत्र (CEZ) स्थापन करण्यास सरकारने स्वीकृती प्रदान केली. विशेष आर्थिक क्षेत्राची व्याख्या (CEZ)

‘विशेष आर्थिक क्षेत्र (CEZ) म्हणजे मुद्दाम निश्चित केलेला शुल्कविरहित प्रदेश होय. या प्रदेशाला व्यापार, व्यवहार व शुल्क आणि करांसाठी परकीय भुप्रदेश असे म्हटले जाईल.’

विशेष आर्थिक क्षेत्राची भूमिका

१. विशेष आर्थिक क्षेत्राला असे विशिष्ट क्षेत्र समजण्यात की जे उद्योग व व्यापार संचालन करीत असेल त्यांना उत्पादन शुल्क आणि सिमा शुल्क यांच्यासाठी विदेशी क्षेत्र मानण्यात येईल.

२. विशेष आर्थिक क्षेत्रात, उत्पादन आणि सेवा क्षेत्रात कार्यरत उद्योग स्थापन होऊ शकतील

३. आयात आणि निर्यात मालाची कस्टमद्वारे नियमित तपासणी होणार नाही.

४. विशेष आर्थिक क्षेत्रातील उत्पादीत मालाची विक्री देशांतर्गत करताना पूर्ण शुल्क लागू होईल आणि आयात निती सुद्धा लागू होईल.

५. विशेष आर्थिक क्षेत्रातील उद्योगांना पहिले ५ वर्ष आयकरातून पूर्ण सुट मिळेल, त्यानंतर ५ वर्ष ५० टक्के सुट मिळेल आणि त्यानंतरच्या ५ वर्षासाठी सकल लाभावर आयकरात ५० टक्के सुट मिळेल.

६. विशेष आर्थिक क्षेत्रातील उद्योगांनी सतत १५ वर्षांपैकी १० वर्षे निर्यात वृद्धीतील सहभाग नोंदविलेला असल्यास आयकरात १०० टक्के सुट प्राप्त होईल.

७. या उद्योगांना केंद्रीय विक्रीकर, सेवा कर यातूनही वगळण्यात येईल आणि स्थापनेच्या वेळी एक खिडकी योजनाचा लाभ घेता येईल.

८. विशेष आर्थिक क्षेत्रातील उद्योगांना पहिले तीन वर्षे निर्यातीतून प्राप्त झालेल्या विदेशी चलनाद्वारे शुद्ध लाभ प्राप्त करता येईल.

९. उत्पादन क्षेत्रात कार्यरत उद्योगांना १०० टक्के पर्यंत विदेशी गुंतवणूकीची मान्यता देण्यात आली.

१०. उत्पादन आणि उत्पादन प्रक्रिया क्षेत्रात

मानवाधिकार एवं भारतीय महिलाएँ

डॉ. आसावरी आर. दुर्गे*

मानव होने के नाते मानवाधिकार लोगो को विरासत में मिले हैं, जिनसे उन्हें वंचित नहीं किया जा सकता है। चाहे वह मानव कोई भी जाति का धर्म, लिंग, या कोई भी देश का हो या कोई गुन्हेगार हो, पहले वह मानव है। मानव अधिकार को नैतिक एवं कानूनी अधिकार के रूप में परिभाषित किया जा सकता है, जो मानवीय गरिमा को सुनिश्चित करता है। हमारे देश में पिछली अनेक सहस्राब्दियों से महिलाओं की स्थिति में कई परिवर्तन होते रहे हैं। भारत में महिलाएँ अब शिक्षा, राजनीतिक, मीडिया, कला तथा संस्कृति सेवा क्षेत्र विज्ञान और प्रौद्योगिक आदि क्षेत्रों की गतिविधियों में हिस्सा ले रही हैं। इस का कारण भारतीय संविधान आजादी, भाईचारे, समानता और न्याय के मजबूत आधार पर खड़ा होने की वजह से है। उसमें महिला सशक्तिकरण के अनेक प्रावधान हैं। समानता और गैर भेदभाव के प्रति महिलाओं के अधिकारों को संविधान में मूलाधिकार के रूप में प्रस्तुत किया गया है। इसे कानून के माध्यम से स्थापित किया गया है। इसके अंतर्गत नागरिक, राजनैतिक, आर्थिक, सामाजिक और सांस्कृतिक अधिकार भी आते हैं। मानव अधिकार राज्य से विधिमान्य अपेक्षाएँ हैं। भारत सरकार ने हमेशा महिलाओं के मानवाधिकारों की रक्षा की है।

संयुक्त राष्ट्र चार्टर तथा आंतराष्ट्रीय मानव अधिकार घोषणा

संयुक्त राष्ट्र ने मानव अधिकार आंदोलन को अंतराष्ट्रीय शांति के लिए एक अनिवार्य तत्व के रूप में प्रारंभ किया और मानव अधिकार चार्टर प्रकाशित किया। यह चार्टर सभी सदस्य देशों से अनुपालन की अपेक्षा करता है। इसके द्वारा 10 दिसंबर, 1948 को मानव अधिकार की अंतराष्ट्रीय घोषणा की गयी, जिसमें मानव के कुछ मौलिक अधिकार समाहित हैं। ये निम्नलिखित हैं –

1. वाक्य स्वतंत्रता का अधिकार
2. न्यायिक उपचार का अधिकार
3. सरकार (किसी देश में) में भागीदारी का अधिकार
4. काम का अधिकार
5. स्तरीय जीवन जीने का अधिकार
6. आराम एवं सुविधापूर्ण जीवन जीने का अधिकार
7. शिक्षा का अधिकार
8. समान काम के लिए समान वेतन का अधिकार
9. सामाजिक सुरक्षा का अधिकार
10. समाज की सांस्कृतिक गतिविधियों में भाग लेने का अधिकार
11. कला का आनंद लेने का अधिकार तथा वैज्ञानिक प्रगति में भाग एवं उससे लाभ लेने का अधिकार
12. जीवन, सुरक्षा एवं स्वतंत्रता का अधिकार
13. मनमानी ढंग से गिरफ्तारी अथवा निर्वासन के विरुद्ध अधिकार
14. निष्पक्ष एवं स्वतंत्र न्यायिक सुनवाई का अधिकार
15. विचार, विवेक एवं धार्मिक स्वतंत्रता
16. शांतिपूर्ण सभा-संगोष्ठी करने तथा संघ बनाने का अधिकार

इस घोषणा में प्रजातांत्रिक संविधानों में निहित नागरिक एवं राजनैतिक अधिकार ही नहीं अपितु कई आर्थिक, सामाजिक एवं सांस्कृतिक अधिकारों की भी चर्चा है। इस घोषणा में प्रासंगिकता और प्रभाव में कोई कमी नहीं आयी है। जनसंपर्क बढ़ने से वैश्विक स्तर पर सामुदायिक उत्तरदायित्व की भावना का विकास हुआ है।

प्रत्येक नागरिक एवं प्रत्येक राष्ट्र के लिए अंतराष्ट्रीय मानव अधिकार घोषणा सर्व स्वीकृत है। इस घोषणा पर हस्ताक्षर करने वाले प्रत्येक देश का यह कर्तव्य है कि वे अपने यहां इन अधिकारों का संवर्धन तथा संरक्षण सुनिश्चित करें। संयुक्त राष्ट्र मानवाधिकार आयोग ने सन् 1948 से 1954 के बीच मानवाधिकार सम्बन्धी वैधानिक रूप से बाध्य दो मसौदा तैयार किया। आर्थिक, सामाजिक, सांस्कृतिक अधिकारों से सम्बन्धित आंतराष्ट्रीय मसौदा को जनवरी, 1976 में लागू किया गया। नागरिक एवं राजनैतिक अधिकार से सम्बन्धित अंतराष्ट्रीय मसौदा को मार्च, 1976 में लागू किया गया। आंतराष्ट्रीय घोषणा के साथ-साथ इन प्रावधानों को मिलाकर अंतराष्ट्रीय मानवाधिकार बिल बनाया गया है। इसके अंतर्गत नागरिक एवं राजनैतिक अधिकार परम्परागत अधिकार हैं तथा आर्थिक, सामाजिक एवं सांस्कृतिक अधिकार आधुनिक अधिकार हैं।

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THE IMPORTANCE OF ENGLISH IN THE BUSINESS WORLD

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Abstract

As social beings human beings need to communicate to each other communication is very important because everything is impossible to be done without communication, Human beings use language as the means of communication, Since the prehistoric era until the current era language always develops. Communication is more effective because world develops language itself. The language concept including grammar and parole is the speech concept. Nowadays in the global era communication has become one of the most crucial elements. Without good communication people from different nations won't be able to understand each other. When people don't understand each other there are possibilities that misunderstanding will happen need to understand each other with good communication urges people to acquire global languages among the most important and influencing language is English language. The study was under taken to understand the importance of English language in present scenario.

Keywords: *English Language, booming, communication*

Introduction:

English is now a global lingua franca but was first a West Germanic Language spoken in medieval England. Currently, English is the first language for the majority of the people in several countries. There are about 375 million English as first language speakers and 750 million English as second language speakers. English is an official or special status in 70 countries.

The market for English as a Second Language is booming and more individual are studying courses such as this one that will help them improve own accent and understand native English. English learners opt to take English to develop for communication socially with others to become part of global economy.

History of English : English came about in England Anglo-Saxon kingdoms and in the south eastern part of Scotland. English influences of United Kingdom and Great Britain throughout the British Empire from the seventeenth to the mid-twentieth century's the language has been propagated widely around the world.

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सारांश :

दिवसेंदिवस गतीशील होत असलेले मानवी जीवनमान व वेळेच्या अभावामुळे इंटरनेटद्वारे ई-व्यापार गतीशील व विकसित होत आहे. तंत्रज्ञानाच्या विकासासोबतच वाढती स्पर्धा, सेवाक्षेत्राचा वाढता प्रभाव व पैसा कमविण्याच्या मागे लागलेल्या मानवी समाजाला तसेच स्वतःसाठी वेळ नसलेल्या जनसमुदायाला सेवा पुरवून प्रलोभित करण्यात यश प्राप्त केलेले ई-कॉमर्स व्यवसायाचे वाढलेल्या महत्त्वाचा अभ्यास या पेपरमध्ये लेखकाने मांडण्याच्या प्रयत्न केला आहे. तसेच दिवसेंदिवस मान्यता प्राप्त होत असलेल्या ई-बाजारपेठेचे महत्त्व वाढण्यासाठी Amazon, Flipkart कंपनी, स्मार्ट फोन, लॅपटॉप, 2G, 3G, 4G इंटरनेट सुविधा, त्यामुळे ऑनलाईन ग्राहकांची वाढती संख्या, किंमतीचा व उत्पादनाचा तुलनात्मक करण्यात येणारा अभ्यास व वेळेची बचत या कारणांमुळे आजच्या आधुनिक युगात ई-कॉमर्स मुळे व्यापारात काय बदल झाले आहे याचा अभ्यास करण्याचा व त्याचे निष्कर्ष मांडण्याचे प्रयत्न अभ्यासकाने केलेला आहे.

महत्त्वपूर्ण शब्द : संगणक, मोबाईल, स्मार्ट फोन, ई- कॉमर्स, इंटरनेट, ई-बाजारपेठ इत्यादी.

१.१ प्रस्तावना :

बाजारपेठेतील वाढती स्पर्धा, उत्पादनाला जलद गतीने निर्माण करावयाच्या मागणीसाठी दिवसेंदिवस वाढत असलेल्या इलेक्ट्रॉनिक माध्यमाचा प्रभाव वाढण्याचे मुख्य कारण म्हणजे ई-कॉमर्स होय. इलेक्ट्रॉनिक सामग्रीच्या माध्यमाने खरेदी विक्री विपणन प्रक्रिया, सर्व्हिसिंग प्रक्रिया, वितरण कार्य प्रभावीपणे करण्याचे ई-कॉमर्स एकमेव साधन आहे. ई-कॉमर्स म्हणजे केवळ संगणक व इंटरनेट याचा वापर करणारी प्रक्रिया नव्हे. तर उद्योग व व्यापार विकासासाठी तंत्रज्ञानाचा वापर करून इलेक्ट्रॉनिक पद्धतीनुसार फंड ट्रांसफर करणे, पुरवठा करणे, व्यवस्थापन करणे, उत्पादनाला ई-खिडकीद्वारे मागणी निर्माण करणे, ऑनलाईन व्यवहार प्रक्रिया, उद्योगासाठी ई-कॉमर्स द्वारे नव्या संधीचा शोध घेवून उद्योगांना प्रोत्साहन देणारी व मागणी निर्माण करणारी प्रक्रिया आहे. ग्राहकाशी संबंध सुधारणे, सेवा देणे, पुरवठा करणे, अपेक्षित ग्राहकाचा शोध घेणे. तसेच अनपेक्षित ग्राहकापर्यंत पोहोचणे, हया उद्देशातून निर्माण झालेले ई-कॉमर्स दालन एका विशिष्ट स्तरावर जाऊन पोहोचलेले आहे. पारंपारिक चालिरीतील मात देत आज ई-कॉमर्स संकल्पना फार विकसित झालेली आहे.

या प्रक्रियेत प्रचंड क्षमता असून या प्रक्रियेतून नविन अर्थव्यवस्था विकसित झालेली आहे. असे म्हटल्या वावगे ठरणार नाही.

**MODELING FOR THE ESTABLISHMENT OF A NETWORK OF PROTECTED
AREAS IN THE DIFFERENT LAND USE MANAGEMENT SITE OF GONDIA
DISTRICT IN MAHARASHTRA**

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Abstract

Degradation of vegetation is one of the examples of human interference. Some of the major environmental factors that influenced or which are influencing the vegetation or parts thereof are deforestation, overgrazing, erosion and other related factors. To protect the endangered flora and fauna of Gondia district in Maharashtra, a network of protected areas is urgently needed.

Introduction

The quality of land use management establishes environment, cultural and socio-economic of a region. Land use change through industrialization, expansion of agriculture land, urban growth, and development of transportation networks will accelerate the process of land degradation and affects the socio-culture, environment and quality of life (Pandey, 2012). Recognizing this problem, it is suggested to promote establishment of a network of protected areas in the different land use managements that contribute to conservation and sustainable use of natural resources (Uberoi, 2003).

Most of the people in Gondia district are involved in agriculture. So, the use of land in this district under different factors for which records are available are classified into seven groups-(1) Land under agricultural cultivation (2) Land not available for agriculture (3) Land under permanent pasture (4) Land under cultivable waste land (5) Land under forest (6) Land under miscellaneous tree, crops and groves (7) Land under barren and uncultivable land (Bhuskute and Jha, 2014).

Methodology

Different sites for survey were selected from Gondia district situated at geographical coordinate of latitudes 20⁰.40' and 21⁰.38' North and longitudes 79⁰.47' to 80⁰.42' East, for the present study. Information from various key stakeholders was elicited. Further, secondary data collected from the office records (registers, reports and other records available at State, District, Block and Gram Panchayat levels) were compiled and analysed. Some secondary data were also collected from other sources such as journals, newspapers, internet, etc. Primary data was collected by interviewing the respondents at different levels as per objectives. For the selection of samples stratified sampling method was adopted, using the village records. Cultivators were classified on the basis of size of land holding. Considering the population falling in each category, farmers in each category was selected randomly.

राष्ट्रसंताची अभंगवाणी आणि ग्रामगीता

आचार्य कोमल वि. ठाकरे*

राष्ट्रसंत हे एक प्रतिभावंत संतकवी होते. त्यांच्या व्यक्तिमत्त्वात संतत्त्वाचा आणि कवित्त्वाचा सुरेख समन्वय साधला होता. वयाच्या आठव्या वर्षापासूनच त्यांनी आपल्या काव्यलेखनाला सुरुवात केली. त्यांच्या काव्यप्रतिभेतून मराठीत 1260 भजने, 2109 अभंग, 5149 ओव्या, 376 श्लोक, 10 पोवाडे, 13 आरत्या, 16 मंगलाष्टके, 32 श्रीगुरुमहिमामृत ओळी आणि 1517 सुविचार जन्माला आले. राष्ट्रसंत तुकडोजी महाराजांनी कवी म्हणून काव्यलेखनास सुरुवात केली नाही तर निस्सिम ई"वरनिष्ठेपायी, भगवंताला आळवण्यासाठी, मन एकाग्र करण्यासाठी अभंग लिहिले. त्यांचे अभंग हे निरागस, आर्त हृदयाचे बोल आहेत.

अनुभवसागर भजनावली – भाग 1 व 2 ही महाराजांच्या जीवनाच्या उषःकाली निर्माण झालेली पहिली भजनावली आहे. मुळात ही भजनावली 501 भजनांनी नटलेली होती. 1969 ला या भजनावलीची पहिली आवृत्ती छापल्या गेली. जी 251 भजनांनी नटलेली आहे. भजनावलीच्या दुसऱ्या भागाचीही आवृत्ती याचवेळी छापण्यात आली. त्यात 250 भजने समाविष्ट करण्यात आले आहेत.

राष्ट्रसंतांनी लिहिलेल्या अनुभवसागर भजनावलीच्या निर्मितीचे प्रयोजन त्यांनी स्वतःच प्रस्तावनेतून प्रकट केले आहे. ते म्हणतात, "अंतःकरणाच्या भिन्न भावनांना ई"वराच्या दैवी शक्तीचा मार्ग लाभावा व जिवाचा जीवपणा परमे"वराशी तादात्म्य पावावा म्हणून भक्तीची ज्योत साधकाच्या मनात जागविली जात असते."¹ त्यांच्या या काव्यधारेत ई"वरविषयक भजनांची संख्या विपूल आहे. सुरुवातीच्या ई"वरविषयक अभंगातून ते अत्यंत भक्तिभावाने त्याची करुणा भाकताना ओथंबलेल्या अंतःकरणाने ई"वराजवळ मागणे मागतात की, 'मंगलमय नाम तुझे सतत गाऊ दे..... झुरझुरत्या नेत्रांतून, स्वरूप पाहू दे. ' भजनाबद्दल आपले मत व्यक्त करताना ते म्हणतात की, "भजन म्हणजे दैवी शक्तीच्या बगीच्यात नेऊन त्यावर भक्तिरूपी सुगंधाचे आवरण घालणे होय. हीच त्याचे विषय काढून त्याला नारायण करण्याची रीत आहे."² तद्वतच 'भजन म्हणजे अंतःकरणाची ई"वरविषयक अत्यंत तळमळ' अ"ी भजनाची अत्यंत सोपी, साधी सरळ व्याख्या त्यांनी केलेली आहे.

महाराजांनी आपले चित्त स्थिर करण्याकरिता आपल्या वाणीत तेज आणि आत्मबळ वाढविण्याकरिता गुरुकृपेला आणि ई"वरकृपेला आवाहन केलेले आहे. ई"वरप्रेमाने व्याकुळलेले, ई"वरभक्तीने चिंब भिजलेले भाव उत्कटपणे या भजनांतून उत्स्फूर्तपणे प्रकटले आहेत. पारंपरिक संतांच्या अभंगवाणीमध्ये प्रारंभी ज्याप्रमाणे गणे"ला वंदन दिसून येते त्याचप्रमाणे राष्ट्रसंतांनीसुद्धा प्राणिमात्रांचा प्रतिपालक म्हणून यात गणे"ला वंदन केलेले आहे.

तसेच जगाला लीला दाखवून त्याचे मन नादी लावणाऱ्या गणे"ला त्यांनी जगाचे दुकान कसे नाना वर्णांचे निर्माण केले? याची प्रक्रिया क"ी झाली? हे अभंगातून प्रकट केले आहे. त्यांच्या ई"वरविषयक अभंगातून गणे"लाप्रमाणेच राम, कृष्ण व विठ्ठलभक्तीने दृढ झालेल्या भक्तीभावनेचे प्रतिबिंब उमटले आहे. तद्वतच श्री गुरु आडकोजी महाराजांचे स्मरण करीत गुरुवंदना, आई महिमा, नर्मदा, चंद्रभागा आणि गंगा वर्णन, भगवान शंकर, दत्तस्वामी, हनुमानजी, गजानन महाराज ह्यांची स्तुतीपर वर्णने महाराजांनी केलेली आहेत. त्याबरोबरच राजा हरि"चंद्र, धर्मात्मा योगींद्र, पांडव, चित्रगुप्त, "ीवाजी महाराज यांच्या वीर कार्यांचे स्मरण त्यांच्या भजनातून झालेले आहे. शास्त्र-पुराणे, गीता ज्ञानाची महती त्यांनी गायली आहे. पंढरपूरचा महिमा वर्णन केला आहे. या सर्व ई"वराधनेतून त्यांनी सुखाचा मार्ग जगाला प्राप्त होवो आणि निर्मळ ज्ञान प्रवाहित होवो हा उद्देश"ाच जणु प्रकट केलेला आहे. पारंपरिक संतकाव्याच्या मुळा"ी असणाऱ्या ई"वरभक्तीचे केंद्र राष्ट्रसंतांच्याही काव्यनिर्मितीच्या प्रारंभी दिसून येते. एकूणच राष्ट्रसंतांची भजने ही भक्तीभावनेने ओथंबलेली आहेत. 'कुणी सांगा हो, कुणी सांगा, राम कुठे माझा, दत्त दिगंबरा स्मरता भावे, हो"ाल भवी पार रे, 'मन मोहुनि ने गिरीधारी', मज नाही कुणाची आ"ी, त्या जगदी"ावाचुनी, सत्संगगाविण ज्ञान मिळेना सदगुरुबंधाचे', 'भारतभूच्या पुण्य-पिठावरि कडी प्रसंगावरी, झळकला हिरा अंजनी घरी, सदगुरुनाथ 'गजानन' ध्यात हरणे मन-कामना', हरिविण चित्त उदास, गड्या रे अ"ी अनेक भक्तीभावनांतून महाराजांच्या अंतःकरणातला ई"वरप्रेमाचा झरा झुळझुळता दिसतो.

याच ई"वरभक्तीच्या उचंबळ्यातून त्यांनी भक्तिमार्गाच्या आड येणाऱ्या 'इडरिपूरच्या दुर्धर रोगांपासून मुक्ततेची प्रार्थना केलेली आहे. विरागी माणसाला परम्पदाचे बळ प्राप्त होण्यासाठी ज्या आत्मोन्नतीची गरज असते. ती आत्मविकासाची प्रक्रिया पूर्ण होण्यासाठीच जणु महाराजांच्या अंतःकरणात ई"वरविषयक भक्तीभावनेचे वलय निर्माण झालेले आहे. त्यामुळेच त्यांच्या अभंगातून ई"वरभक्ती, गुरुभक्ती, संतसेवा नामस्मरण, देवाचा शोध, साक्षात्काराची उत्कंठा लागलेली वाटते. पण ती भावावस्था संत तुकारामांच्या भावावस्थेसारखी उत्कट वाटत नाही. ती ई"वरसाक्षात्कारासाठी फार काळ टिकत नाही. त्या भावावस्थेतून ते लगेच बाहेर पडून देवभक्तीला दे"ीभक्तीचे संदर्भ देतात. प"ीहृत्येविषयी संताप व्यक्त करतात, संतांनी कसे असावे, खरा ब्राम्हण कसा असतो. भारतभूमीची परिस्थिती क"ी आहे?, ढोंगी साधू कसे आहेत?, हे प्र"न मांडून कर्मगुंतीतल्या माणसाला ते जागे करतात, नर जातीतल्या मनुष्यत्वाला आव्हान देतात, सत्य कर्मसाधना, करण्यास प्रवृत्त

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संतवाणीतून प्रकटलेले निसर्गसंवर्धन

डॉ. कोमल वि. ठाकरे

सहयोगी प्राध्यापक

तायवाडे महाविद्यालय, महादुला, कोराडी

निसर्गसंवर्धन ही सद्यक्षणी ह्या पृथ्वीतलावरील मानवाच्या अस्तित्वाची अपरिहार्य अट ठरली आहे. मनुष्य हे निसर्गाचेच अपत्य असल्यामुळे निसर्ग म्हणजेच निर्मिक होय. या निर्मिकाने मानवाच्या सुखासाठी मुक्तहस्ताने विश्वतलावर हिरवा रंग उधळला आहे. नाक तेथे हवा ठेवली आहे. पाण्याची मुबलक व्यवस्था लावलेली आहे. अत्यंत आवश्यक असा आत्मा मुलतःच सर्वांना दिलेला आहे. मानव हा निसर्गाचे लाडके अपत्य असल्यामुळे निसर्गापासून तो कधीही विलग होऊ शकत नाही. या सृष्टीवरील विलोभणीय निसर्गसौंदर्य बघितल्यानंतर मानवाला आपल्या जीवनातील सुंदरतेचा प्रत्यय येतो. फुललेल्या बागा बघून अतरंग फुलायला लागतो. सुरस फळांनी बहरलेल्या सौंदर्य खाणी पाहताच या किमयागार निसर्गाची ही भव्य-दिव्य देण मनाला मोहनीच घालणारी ठरते. राष्ट्रसंतानाही याचा प्रत्यय येतोच.

‘गर्द छायेतळी हिरवळ । दुर्वाकुरांचे जाळे कोमल ।

नाना रंगी फुलापाखरे सोज्जळ । मन मोहविती जिवांचे ॥

जीवनावरील असामान्य श्रद्धेमुळे, विजिगीषू प्रवृत्तीमुळे संत तुकाराम महाराजांनासुद्धा विश्वचैतन्याचा साक्षात्कार झाला. या चराचर सृष्टीतच निर्मिकाचे रूप आकळले. चितवृत्ती प्रफुल्लित झाल्या. बाहेर निसर्ग सौंदर्याने न्हाऊन निघाला होता. वृक्षवेली, पानफूले, डोंगरदऱ्या, चैतन्ययुक्त झाल्यात. अवधी सृष्टी विठ्ठलाच्या अस्तित्वाने भरलेली आहे. याचा साक्षात्कार झाला आणि “वृक्षवल्ली आम्हा सोयरी वनचरे, पक्षी ही सुस्वरे, आळविती” अश्या केवलानंदाच्या उर्मी दाटून आल्यात ‘रामकृष्णहरी’ या षडाक्षरी मंत्राचा जप करित डोंगरदऱ्यावर बसून प्रत्यक्ष परमेश्वर भेटीसाठी तपसाधना केली. पण या आत्म्याची ही काळोखी रात्र होती. ही रात्र संपली आणि परमेश्वराचे अस्तित्व वृक्षवेलीच्या रूपाने दिसले. संत सावता महाराजांनासुद्धा ‘विठ्ठल’ त्यांच्या कर्तव्यकर्मात दिसतो.

शांती-शेवंती फुलली। प्रेमे जाईजुई व्याली

सावताने केली मळा। विठ्ठल देखियला डोळा

असा हा सुंदर निसर्ग म्हणजे पूर्वजांचा वारसा आणि देशांच्या भावी पिढ्यांचा बहुमोल ठेवा या नात्याने निसर्गसंवर्धनाची, तात्पर्याने वृक्षसंवर्धनाची फार मोठी जबाबदारी जगातील सर्व देशातील सरकारी व जनता ह्यांचे शिरावर येते. मानव भौतिक सुख साधनांच्या व्यवहारात इतका गुरफटलेला आहे की, त्याला निसर्गाशी असलेल्या नात्याची बिलकुलही जाण राहिलेली नाही. त्याच्यात परात्मभाव निर्माण झालेला आहे. त्यामुळे त्याला वृक्ष महात्म कळणे आवश्यक आहे. पृथ्वीतलावरील प्रत्येक वृक्ष, कल्पवृक्ष असल्यामुळे वृक्ष संवर्धन करून कोणत्याही देशाला सुजलाम, सुफलाम होता येईल यात शंका नाही. भारताच्या प्राचीन सांस्कृतिक, साहित्य पुराणात निसर्गाचे जे माहात्म वर्णीले आहे. ते पाहू जाता मानवाच्या जीवनातील निसर्गाच्या अद्भूत सामर्थ्याचे साक्ष पटते.

“So Long as this Land will have mountains, forest and green belts that long will the earth service sustain you, your children and grandchildren”

वनस्पती ही मानवाला आपल्या मूलभूत गरजा भागवत वनस्पतीचे या पृथ्वीतलावरील अस्तित्व हे आपल्याला मिळालेले

वरदान आहे. सजीव प्राणी व वनस्पतीसृष्टी यांच्यात अत्यंत जिह्वाळ्याचा संबंध आहे. अन्न, वस्त्र आणि निवारा या मानवाच्या मुलभूत गरजा प्रामुख्याने वनस्पतीसृष्टी मार्फतच पूर्ण होत असतात. विविध प्रकारच्या झाडाझुडूपापासून आहार योग्य पाने, फुले, शेंगा, मुळ्या, डिक यासारख्या वस्तू लागतात. काही झाडापासून औषधे व धागा मिळतो. तसेच इमारती लाकडाबरोबर मानवी जीवनात अत्यंत महत्वाचे असे इंधनही मिळते. भूसंवर्धन जलप्रवाहाचे नियंत्रण, जलसंचय, पर्जन्यमान पुरांची व वाऱ्यांची तिब्रता कमी करणे आणि उद्योगधंदे व्यापार यात देखील वृक्षांना जंगलांना अपरंपार महत्त्व आहे. भारतीय संस्कृतीने प्राणी आणि वृक्ष ह्या दोन सृष्टीतील घटकांशी जिह्वाळ्याचा संबंध जोडण्याचा प्रयत्न फार प्राचीन काळापासून केला आहे.

वृक्षारोपनाचे महत्त्व सांगतांना विचारवंतानी म्हटले आहे की, ‘दहा आड खोदण्याचे श्रेय एक विहीर खोदल्याने मिळते. दहा विहीरीपेक्षा एका पुष्करिणीची निर्मिती अधिक श्रेष्ठ आहे. दहा पुष्करिणीचे श्रेय एक शीलवंत पुत्र देतो तर दहा पुत्रांचे पुण्य केवळ एक वृक्ष लावणाऱ्यांना, वाढविणाऱ्यांना मिळते.

आपल्या देशाची लोकसंख्या दरवर्षी वाढत आहे. लोकसंख्येची अन्नाची गरज भागविण्यासाठी अधिकाधिक क्षेत्र शेतीखाली आणण्याकरिता तसेच निर्वासितांचे पुनर्वसन आणि जलयुक्त प्रकल्प व कारखाने यांचे उभारणीसाठी, जंगलातील वनश्रीवर सतत कुऱ्हाड चालवून वनक्षेत्र खाली करण्यात येत आहे. वाढत्या लोकसंख्येच्या प्रमाणात जंगले मात्र वाढलेले दिसत नाही. वैयक्तिक स्वार्थासाठी वृक्षतोड अफाट होत असून वन क्षेत्राचा न्हास होत आहे आणि हे असेच चालू राहिले व नवीन झाडे लावून ह्यांचे संगोपन झाले नाही तर वृक्षतोडीच्या दुष्परिणांना तोंड तर घावेच लागेल पण एकेकाळी सुवर्णभूमी म्हणविणाऱ्या भारत देशाचे दुसरे सहारा वाळवंट व्हायला भविष्यात वेळ लागणार नाही.

राष्ट्रीय पातळीवर सामाजिक वनिकरणाचा कार्यक्रम राबविला जातो. पण त्या कार्यात राष्ट्रीय कर्तव्य म्हणून कितीजन सहभागी होतात? हाही प्रश्न महत्वाचा ठरतो. म्हणून राष्ट्रसंताच्या विचारांना जपून “ग्राम हेच मंदीर” साकार करणे महत्वाचे ठरते. कारण विश्वाला सुंदर करायचे तर देश सुदृढ करावा लागतो, देश सुदृढ करण्यासाठी

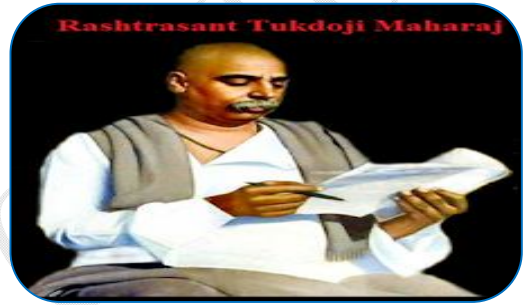


राष्ट्रसंत तुकडोजी महाराजांची काव्यप्रेरणा व काव्यदृष्टी

आचार्य कोमल वि. ठाकरे
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प्रस्तावना :-

राष्ट्रसंत तुकडोजी महाराज हे आधुनिक संतपरंपरेतील एक महत्वाचे संत आहेत. 59 वर्षांच्या आपल्या जीवनकाळात त्यांनी आपली नाममुद्रा भारतीय जनमनावर खोल कोरली. बालपणापासून कुग्र बुद्धीचा असणारा माणिक पुढे तुकड्या नंतर तुकडोजी, नंतर महाराज व अखेरीस राष्ट्रसंत झाला. व्यक्तिविकासाची ही मळवाट आपल्या मध्ययुगीन थोर संतांनीच निर्माण केली होती. राष्ट्रसंतांचा मूळ पिंड हा कवीचाच होता. या कवीत भक्तीची ऊर्मी दाटली होती. एक अनावर नादिष्टपणा त्यांच्यात होता. आपल्या भावनेचा पहिला उत्कट आविष्कार



त्यांनी काव्यामधूनच साधला. हा आविष्कार साधत असताना त्यांच्यासमोर प्राचीन-अर्वाचीन काव्याची प्रदीर्घ परंपरा होती; तथापि अगदी सुरुवातीपासूनच आपल्या पृथगात्मतेचे त्यांना भान होते. परंपरेतून काय शोषावयाचे व आपल्या आंतरिक ऊर्मींनाही कसे प्रकट करायचे याचा समन्वय त्यांनी आपल्या काव्यलेखनात साधला. संतांच्या ओवी, अभंग, भजनांतून त्यांची रचना प्राचीन काव्यपरंपरे आपले नाते सांगत आहे. अर्वाचीन मूल्यनिष्ठेशी त्यांचे नाते आहे.

संतांच्या काव्यातील भक्तिभावनेचा, विठ्ठलप्रेमाचा रस शोषून घेऊन आधुनिक काळातील नव्या संवेदनशीलतेचा राष्ट्रीय, सामाजिक मूल्यजाणिवांचा राष्ट्रसंतांनी सांधा जुळवून, परंपरा आणि नवतेचा समन्वय साधून अभंग, ओवी, भजन स्वरूपाची कविता लिहिली. विवेकाच्या बैठकीवर जुन्या-नव्या श्रद्धांचा समन्वय साधून अध्यात्म आणि व्यवहाराचे सुंदर मीलन घडविले. आपली वाणी, लेखणी, शक्ती आणि भक्ती याचे संपूर्ण सामर्थ्य एकवटून समाजजागृतीचे, परिवर्तनाचे आणि प्रगतीचे उन्नयन केले. परंपराप्रिय भारताला खरा देवधर्म आणि देशधर्म दाखविण्याचे कार्य त्यांच्या काव्यातून झाले.

राष्ट्रसंतांवरील आध्यात्मिक संस्काराचे स्वरूप

राष्ट्रसंत तुकडोजी महाराजांवर बालपणापासूनच आध्यात्मिक काव्याचे संस्कार आहेत. भारतीय भक्तिआंदोलनाचा प्रभाव आहे. ते विदर्भातील अमरावती जिल्ह्यातील यावली या गावाला 30 एप्रिल 1909 ला बंडोजी ब्रम्हभट्टाच्या घरी, माता मंजुळेच्या पोटी जन्माला आले. त्यांच्या घराण्यात पंढरीची वारी होती. श्री विठ्ठल हे त्यांचे आराध्य दैवत होते. आडकुजी महाराजांच्या सहवासात त्यांचे बालपण गेलेले होते. तत्कालीन विदर्भातील अवलीया संतांचा सहवास राष्ट्रसंतांना लाभला. अनेक कीर्तनकारांचे खंजिरीवादन त्यांनी ऐकले होते. हनोतीबुवाकडून एकतारीचे पाठ घेतले होते. पुरातन मठात जाऊन दगडांचे टाळ हातात घेऊन भजन करणारा माणिक बालपणापासूनच अध्यात्मरंगात रंगला होता. ध्यानस्थ बसला होता. त्याचे बालरूप अनन्यभक्तीत दंग होते. शाळेत फावल्या वेळात तो प्रवचनासारखेच बोलत होता. वरखेडला त्याच्या मामाकडे राहायला गेल्यानंतर ग्रंथवाचनात रमला. "वरखेडक्षेत्रीच माणिकदेवानं गोस्वामी तुलसीदासाचे रामायण, भगवान श्रीकृष्णाची व्यासकृत

सामाजिक कार्यामागील तत्त्वदृष्टी

डॉ. कोमल वि. ठाकरे

भा रतीय जीवनात निर्माण झालेल्या अनेक प्रश्नांना, संकटांना उत्तरे देण्यासाठी ज्याप्रमाणे गीतेचा जन्म झाला त्याचप्रमाणे महाराष्ट्रातील अज्ञानाचा अंधःकार दूर करून समाजात प्रकाश निर्माण करण्यासाठी गीताजयंतीच्या मंगलदिनी पंजाबराव देशमुख यांचा जन्म झाला. भारतीय प्रबोधनाच्या पोटी जे काही थोडे नरवीर जन्माला आले त्यात डॉ. पंजाबराव देशमुख यांचा अतिशय सन्मानाने उल्लेख करण्यात येतो. त्यांनी निर्माण केलेल्या शैक्षणिक, कृषीविषयक आणि सामाजिक कार्याची व्याप्ती व विराटता पाहून आपण अचंबित होतो. त्यांनी लावलेल्या वटवृक्षाच्या फळातील ज्ञानरस पिऊन बलपुष्ट झालेल्या बहुजन समाजातील अनेक व्यक्ती यशाच्या गगणात विहार करीत आहेत. काही त्या वटवृक्षाच्या सावलीचा आश्रय घेऊन जीवनाची वाट चालत आहे. भाऊसाहेबांच्या विचार कर्तृत्वमय प्रबोधनाच्या प्रकाशवाटेने चालताना विदर्भातील बहुजन पाऊलांच्या जीवन वाटा उजळून नियालेल्या आहेत. भाऊसाहेबांच्या प्रज्ञासूर्यरूपी तेजाने विदर्भाचे गोठलेपण वितळू लागले. वितळलेपण वाहतेपण झाले. याला एकच महत्त्वाचे कारण आहे. पंजाबराव देशमुख नावाचे कृतिशील आंदोलन.

सदुसष्ट वर्षे आयुष्य लाभलेल्या या भाऊसाहेबांच्या जीवनकार्याची वाटचाल एकूणच मनाला सुन्न करणारी आहे. भाऊसाहेबांना आर्थिकदृष्ट्या मागासलेले विदर्भ अस्वस्थ करीत होता. खेड्यापाड्यातील लोभा महारासारखे हुशार विद्यार्थी शिकू न शकल्याची खंत त्यांना होती. सर्वसामान्य माणसाची होणारी कुचंबणा त्यांच्या लक्षात आलेली होती. ब्रिटिश राजवटीत तरुणांची इच्छा नोकरी मिळविण्याकडे होती. शेती, व्यापार अथवा कष्ट करण्याची मानसिकता

नव्हती. देशहित, गरिबांविषयीचा कळवळा, शेतकऱ्यांविषयीची तळमळ कुणालाही नव्हती. आयसीएस ला श्रीमंताचाच मुलगा जाऊ शकत होता. या व अशाप्रकारच्या अनेक शैक्षणिक क्षेत्रातील अडचणींचा अभ्यास त्यांना होता. भाऊसाहेबांना स्वतःलाही आयसीएस करावचे होते. परंतु डोक्याचे ऑपरेशन झाल्याने ते परीक्षा देऊ शकले नाहीत. परंतु जागतिक विद्वानांच्या पंक्तीत नेऊन बसविणारी डि. फिल. ही ऑक्सफर्ड विद्यापीठाची पदवी त्यांनी प्राप्त केली. वैदिक धर्माचा उद्गम आणि विकास या जटील समस्येवर २५ व्या वर्षी संशोधन करणाऱ्या भाऊसाहेबांना आपल्या तत्त्वदृष्टीची निश्चित दिशा ठरविता आली. पुढे एम.ए. ऑनर्स होऊन ते बॅरीस्टर झाले. भाऊसाहेब अतिशय विद्वान आणि अलैकिक बुद्धिमत्ता लाभलेले व्यक्तिमत्त्व होते. आपल्या बुद्धिसामर्थ्याच्या व परिश्रमाच्या बळावर त्यांनी शैक्षणिक यश प्राप्त केले. स्वतःच्या शिक्षणप्रवासातील अडचणींची आठवण ठेवून त्यांनी आपल्या प्रयत्नातून विद्याशास्त्रातील मागासवर्गीयांना शिष्यवृत्ती देण्याची प्रथा भारत सरकारकडून सुरू केली. शेतकऱ्यांच्या, गरिबांच्या, दिनदलितानांच्या प्रश्नांना भाऊसाहेबांनी अतिशय जवळून तपासले होते. आपल्या बुद्धिमत्तेचा यथार्थ उपयोग या देशातील उपेक्षित कष्टकऱ्यांसाठी करण्यासाठी त्यांनी आपले संपूर्ण आयुष्य खर्ची घालण्याचे ठरविले. आपल्या कार्याचे प्रचंड डोंगर त्यांनी उभे केले. जिद्द, ऐहिक जीवनदृष्टी, कष्ट आणि सामाजिक समतोल या तत्त्वांवरील प्रगाढ निष्ठा या गुणांच्या बळावर त्यांनी वऱ्हाडच्या देहात प्राणाची प्रस्थापना केली. या संपूर्ण कार्यकर्तृत्वामागे भाऊसाहेबांची एक विधायक अशी तत्त्वदृष्टी, जीवनदृष्टी उभी आहे. त्या

तत्त्ववादी जीवनदृष्टीचा प्रत्यय त्यांच्या व्यक्तिगत जीवनातील अनेक प्रसंगातून सहज प्रत्ययाला येतो. मुंबईच्या नाना वैद्य यांच्या विमल या सोनार जातीच्या मुलीशी त्यांचा झालेला आंतरजातीय विवाह ही त्यावेळची एक क्रांतीकारक घटना होती. हे सोपे सहज नव्हते. भाऊसाहेब मुळातच बुद्धिवादी विचाराचे होते. त्यामुळे त्यांनी आपला विवाहसुद्धा चालीरिती परंपरेला फाटा देत अत्यंत साध्या पद्धतीने केला. वधूवरांना हळद नाही, डोक्याला मुंडावळ्या नाहीत, वाजंत्री नाही, भटजी नाही. उलट मेहतरपुऱ्यातील मुलांनी तयार केलेले जेवण आपल्या वकील मित्रांना स्वतःच्या लग्नाच्या पार्टीखाला दिले. "आपल्या वडिलांच्या श्राद्धाच्या वेळी ब्राह्मण न बोलावता अस्पृश्यांच्या मुलांना जेवायला घातले. या सामाजिक क्रांतीतून त्यांनी समाजाला समतेचे धडे दिले. " लोकांच्या पारंपरिक मानसिकतेला धक्के दिले. लोकांना एका नव्या भूमिकेतून विचार करण्यास प्रवृत्त केले. ही त्यावेळी सामान्य बाब नव्हती. सामाजिक समतेच्या पायाभरणीचा तो एकेक टप्पा होता. 'बोले तैसा चाले' या न्यायाने भाऊसाहेबांनी स्वतःच्या आयुष्यात बौद्धिक तत्त्व पाळले होते. जातीजातीतील विषमता दूर व्हायची असेल तर आंतरजातीय विवाह घडून आले पाहिजे हा विचार नुसता त्यांनी बोलून दाखविला नाही तर हा विचार प्रत्यक्ष कृतीतून समाजासमोर ठेवला. Dead a speak louder than words' या कृतीयुक्त आचाराचा आदर्श वस्तुपाठ वैदर्भीय मानसिकतेला देणारे भाऊसाहेब एक तत्त्वताच होते.

भाऊसाहेबांनी जी शैक्षणिक संस्था निर्माण केली त्या कार्याच्या विराटतेमागेही त्यांचा बुद्धिवादी विचार उभा होता. तो

C-S and C-N coupling reactions of barbituric acid via selective and complete bromination using greener KBr/H₂O₂ as a brominating agent

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Manuscript received 05 March 2018, revised 16 March 2018, accepted 11 April 2018

1,3-Disubstituted/unsubstituted barbituric acids on treatment with KBr-H₂O₂ as a greener brominating reagent give mono and dibromo barbituric acids. With aqueous HCl selective bromination and without aqueous HCl complete bromination of active methylene group of barbituric acids took place. The reaction of monobarbituric acids with thiosemicarbazide and thioglyoxalic acid under refluxing in aqueous medium, simple C-S coupling products were obtained. The spiro C-N coupling product was obtained by the interaction of dibromo barbituric acid with thiosemicarbazide and C-N condensation product was obtained by the interaction of dibromo barbituric acid with guanidine nitrate, both reactions took place in aqueous medium under refluxing conditions. An environmentally benign, aqueous mediated C-S and C-N organic transformation by the interaction of barbituric acids mediated by KBr-H₂O₂ as a greener brominating reagent is described. The simple product workup, use of inexpensive greener reagent KBr-H₂O₂ for bromination and simple purification without column are the additional advantages of synthetic protocol.

Keywords: Mono and dibromo barbituric acids, KBr/H₂O₂ greener brominating agent, C-S and C-N coupling products.

Introduction

The carbon sulfur bonds are prevalent present in organic compounds and have numerous applications like medicinally important natural products, biologically active drugs, paints, and spectroscopic probes^{1,2}. Therefore, in the recent era, C-S coupling reaction has been of immense importance in organic synthesis and researchers developed diverse cross coupling methodologies for pharmaceuticals. Some important methods involved in the reduction of aryl sulfones or aryl sulfoxides using strong reducing agents like DIBALH or LiAlH₄³, thiol addition to α,β unsaturated carbonyl compounds at RT⁴. In 1980, Migita *et al.* have reported the Pd catalyzed thiation of aryl bromides using Pd(PPh₃)₄⁵. Subsequently, other metals like nickel⁶, copper⁷, cobalt⁸, iron⁹,

rhodium¹⁰, and manganese¹¹ have also been employed. The bromination of active methylene compounds is an important electrophilic substitution in organic synthesis. These important classes of compounds are useful synthetic intermediates for various transformations¹²⁻¹⁶, especially, α -bromo carbonyl compounds have become an important motif for the development of various biologically active compounds¹⁷⁻²¹. The selective bromination of carbonyl compounds have been challenging task, because monosubstituted is main product but small amount of disubstituted product is also produced as an impurity during the reaction^{22,23}. Literature survey revealed that the synthesis of α -halo carbonyl compounds is a challenge for organic chemists in 19th century hence considerable efforts have been taken for development of various useful reagents²⁴⁻²⁷.

“ONE POT SYNTHESIS OF 1, 2, 4, 5 - TERAZINONES AND THEIR CHARACTERIZATION”

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Abstract

1,2,4,5-tetrazinan-3-one (3) have been prepared by the condensation of diphenyl carbohydrazide with different aliphatic and aromatic aldehydes under microwave irradiation. The irradiation given for 120 seconds at 160 watts. The compound (3) has been transformed in to di-acetyl and di-benzoyl derivatives by treating with excess acetic anhydride in acetic acid and benzoyl chloride in excess, respectively. The structure of all these synthesized compounds have been established on the basis of chemical transformation, elemental analysis, equivalent weight determination and IR, ¹H NMR and mass spectral studies. In the present paper the use of microwave irradiation allows to improve the yields and expedite the reaction.

Key word: Green synthesis of 1, 3, 5-triazin-2, 4-diones.

Introduction

Azolo-tetrazinones constitute an interesting class of pharmacologically active compounds which have been extensively studied during the past two decades. In particular, large numbers of papers on imidazo, pyrazolo, and pyrrolo-tetrazinones have been published because these compounds show remarkable antitumor and herbicidal properties¹.

Results and Discussion

In order to synthesize 1,2,4,5-tetrazinan-3-ones (3), a relatively more versatile yet simplified procedure was perceived. Our arguments have been that microwave would lead to an instantaneous condensation to affording 1,2,4,5-tetrazinan-3-ones without the use of any solvent or catalyst. The strategy worked well affording the desired product in respective yields. (Table –1) the present reaction have been relatively faster, as anticipated, compared to those in conventional solution phase. It is necessary to mention that in all cases the conversion was never 100 %.

Small amount of starting material were recovered after each reaction. To prepare the 1,2,4,5-tetrazinan-3-ones (3), various aldehydes were reacted with diphenyl carbohydrazide, the result is displayed in table 1.

All these compounds (3) were purified by crystallization from ethanol. These 1, 2, 4, 5-tetrazinan-3-ones (3) have been converted into acetyl (5) and benzoyl (6) derivatives by treating them with acetic anhydride and benzoyl chloride, respectively. (Table 2.)

Experimental

J. Biol. Chem. Research. Vol. 35, No. 2: 711-719, 2018

(An International Peer Reviewed / Refereed Journal of Life Sciences and Chemistry)

Ms 35/02/7050/2018

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ISSN 2319-3077 (Online/Electronic)**ISSN 0970-4973 (Print)**

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[http:// www.sasjournals.com](http://www.sasjournals.com)[http:// www.jbcr.co.in](http://www.jbcr.co.in)jbiolchemres@gmail.com**RESEARCH PAPER**

Received: 28/08/2018

Revised: 08/09/2018

Accepted: 09/09/2018

Isolation and Identification of *Geobacillus kaustophilus* from Salbardi Hot Spring and Compared with *Geobacillus stearothermophilus* for Antibiotic Detection in Milk Samples by Agar Diffusion Method**Madhuri A. Dixit, *Arun B. Ingle, Vijay N. Charde and
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ABSTRACT

The presence of certain antibiotic residues in milk is dangerous for human consumption. These antibiotic residues are the potential risk for consumers' health because it may be toxic and potentially help to develop antimicrobial resistance. Kuntat Agar is used for detection of antimicrobial residues in animal feed preparations and dairy products. The test is economically cheap, easy to perform and carried out using an Ampoule of *Geobacillus stearothermophilus* (LA840) as test microorganisms. *Geobacillus stearothermophilus* is an outstanding testing microorganism for its properties to grow rapidly at higher temperatures (64°C) and a high sensitivity to the β -lactam antibiotics. In the present investigation, a thermotolerant bacteria *Geobacillus kaustophilus* was isolated from Salbardi hot spring. Antibiotics detection in milk samples was performed in the form of an agar diffusion test. Antibiotics or inhibitors present in the samples showed inhibition zones more than 10mm detecting up to lowest concentrations of 1 ppm to 10ppm. And after considering all the screening tests along with results on agar diffusion test on Kuntat agar, *Geobacillus kaustophilus* 2HSBW2 was found to be a prominent replacement for commercially used *Geobacillus stearothermophilus*.

Keywords: Antibiotic detection, *Geobacillus kaustophilus*, *Geobacillus stearothermophilus*, Thermo-stable and Salbardi hot spring.

INTRODUCTION

Globally, attention is paying towards the evaluation of the risk of occurrence of veterinary drug residues in foodstuffs and foods of animal origin, to take appropriate measures to reduce this risk. The design and strategy involved in antibiotics detection in milk are the health safety of the milk regulated by the recent legislative regulations (toxicological safety) and ability to sell the milk depending on its quality (technological safety). Veterinary drug residues in milk and other food products represent a health risk for the consumer. (Navratilova, 2008) In lactating cows, antimicrobial agents are used mostly for the therapy of mastitis but also of other diseases (e.g. laminitis, respiratory diseases, metritis). Long-acting antimicrobials are commonly used in dry-cow therapy. (Honkanen-Buzalski T., 1997; Botsoglou N.A., 2001) Antimicrobial agents administered to cows in the course of lactation can pass to milk in various levels. Therefore a screening assay is required that

Indexed, Abstracted and Cited in Indexed Copernicus International and 20 other databases of National and International repute

J. Biol. Chem. Research. Vol. 35, No. 2: 843-851, 2018

(An International Peer Reviewed / Refereed Journal of Life Sciences and Chemistry)

Ms 36/01/40/2019

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ISSN 2319-3077 (Online/Electronic)**ISSN 0970-4973 (Print)**

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[http:// www.sasjournals.com](http://www.sasjournals.com)[http:// www.jbcr.co.in](http://www.jbcr.co.in)jbicrchemres@gmail.com**RESEARCH PAPER**

Received: 31/10/2018

Revised: 28/11/2018

Accepted: 29/11/2018

Isolation and Characterization of Endophytic Bacteria from *Limonia acidissima* L. with Potential PGPA and Antimicrobial Activity**Pranita P. Shuddhalwar, Vijay N. Charde and *Suvarna P. Patil**

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ABSTRACT

Limonia acidissima plant parts (root, stem bark and leaves) were investigated for the bacterial isolates having antibacterial and antifungal compounds producing ability. Total five isolates having potential plant growth promotion activity PGPA identified as *Pseudomonas stutzeri* and *Aeromonas sobria* from roots, *Sphingomonas paucimobilis* and *Aeromonas sobria* from stem bark, *Aeromonas sobria* from leaves. Results highlighted that large diversity prevails in the endophytic bacterial population and those can produce indole acetic acid (IAA) and ammonia which supports plant growth. In addition, they are also found to be promising candidate to produce several secondary metabolites which has ability to control human and plant pathogens for sure. These endophytes are recorded to be encouraging nominee for therapeutic studies in coming time.

Keywords: *Limonia acidissima*, Endophytic Bacteria, Plant Growth Promotion, Antibacterial and Antifungal, Phytochemical.

INTRODUCTION

Endophytes can be easily isolated from plant parts such as stem bark, petiole leaf blade (Hata and Sone, 2008), primordia, meristem and resin ducts (Pirttila *et al.* 2000; Pirttila *et al.* 2003), leaf segments with mid rib and roots (Hata *et al.*, 2002). Endophytes as bacteria, fungi, and/or actinomycetes could be isolated from plant tissues by adopting number of techniques extensively used for the isolation of endophytes (Hallmann *et al.* 1997; Reinhold-Hurek and Hurek, 1998). Generally, endophytes are isolated by surface sterilizing plant tissue and by culturing from ground tissue extract (Rai *et al.* 2007) and also by direct culturing of plant tissues (Hata and Sone, 2008) on media suitable for bacteria or fungi or actinomycetes growth. Endophytes are known to produce a wide range of plant growth promoting hormones, such as auxins, cytokinins and gibberellic acids. Besides that, endophytes also provide vital antimicrobial activity by which, it assists in controlling microbial pathogens in plants and/or animals. Mostly endophytes isolated from medicinal plants produces broad spectrum antimicrobials and remain effective to number of pathogenic microorganisms (Sette *et al.* 2006; Selim *et al.* 2011; Devaraju and Sathish, 2011). Some endophytes have unique ability to mimic properties of plants such as its ability to produce secondary metabolites (J. Zhao *et al.* 2010). *L. acidissima* is the native plant of India and also present in Srilanka, Pakistan and Bangladesh (Bakshi *et al.* 2001). The plant is dominant in dry plains area. It grows well in a monsoon season and in distinct dry season also. The trees found to be reaching in height up to 450 meters especially in western Himalayas. It can sustain dry spell and better adapted to light soils (Vaidyaratnam Varier *et al.* 1995). Whole plant parts of *Limonia* were found to be useful in controlling number of diseases. As per Ayurveda, bark and leaves of *L. acidissima* are recommended for the treatment of two basic

J. Biol. Chem. Research. Vol. 35, No. 2: 852-860, 2018

(An International Peer Reviewed / Refereed Journal of Life Sciences and Chemistry)

Ms 36/01/46/2019

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ISSN 2319-3077 (Online/Electronic)**ISSN 0970-4973 (Print)**

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[http:// www.sasjournals.com](http://www.sasjournals.com)[http:// www.jbcr.co.in](http://www.jbcr.co.in)jbiolchemres@gmail.com**RESEARCH PAPER**

Received: 08/11/2018

Revised: 28/11/2018

Accepted: 29/11/2018

Plant Growth Promotion and Antimicrobial Study of Endophytic Fungi Isolated from *Limonia acidissima*

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ABSTRACT

From the *Limonia acidissima* plant parts (root, stem bark and leaves) 31 isolates were obtained and out of that 3 endophytic fungi (*Aspergillus flavus* FR14, *Aspergillus fumigatus* FS11 and *Aspergillus flavus* FL3) were studied. These fungi were subjected to plant growth promotion activity (PGPA) and preliminary phytochemical screening. From the results, it was found that they have promising effect in the growth of plant by producing plant growth hormone Indole acetic acid (IAA) and ammonia and also has potential to produce various secondary metabolites having ability to control human and plant pathogens. The outcome of this entitled study, offers promising information for the potential utilization of these remarkable endophytic fungus and its components in the biotechnological, medicinal, and agricultural industries.

Keywords: *Limonia acidissima* Endophytic Fungi, Plant Growth Promotion, Antibacterial, Antifungal and Phytochemical.

INTRODUCTION

Endophytic microorganisms produce natural bioactive compound and have ability to kill or inhibit a wide range of harmful disease causing agent including fungi, viruses, phytopathogen and other bacteria and protozoa that affect human and animals (Muzzamal *et al.*, 2012). The association between endophytes and plant is often mutualistic. In response to environmental stress, co-evolution may exist between endophytes and their host. Endophytic microorganisms can be isolated from sterilized surface of plant tissue. Primarily, endophytes enter into plant tissue through root zone. Aerial portion of plant such as flowers, stems and cotyledons may also be used for entry by endophytes. Inside a plant, endophytes may either become localized at the point of entry or spread throughout the plant (Munif, 2012). Fungal endophytes like *Ascomycota* or their anamorphs are the colonizers for plants and algae and those often being identified as *Orchid mycorrhizae* (Rungjindamai, 2008). In an oil palm, *Elaeis guineensis* which is a Thai plantation found to be positive for *Basidiomycetous* harbouring in healthy leaves, petioles and rachis of the plant. Now for the first-time fungi such as *Tetraploa aristata*, *Phoma tropica*, *Monodictys castaneae*, *Acremonium terricola* and *Penicillium glandicola* were reported as prominent fungi as endophytes (Bezerra *et al.*, 2012). Fungi as an endophyte being classified as per phylogeny and life history traits as *Clavicipitaceous* (C) which generally infects grasses and the *non Clavicipitaceous endophytes* (NC-endophytes) which can grow in asymptomatic tissues of non-vascular plants, conifers, ferns and allies and angiosperms has also been reported (Rodriguez *et al.*, 2009). At the present moment human is putting intense focus on the natural products, natural medicines so that artificial drugs should be replaced (Malviya *et al.*, 2012). As it is known that either whole plant or parts of it has a good source of medicinal, therapeutic or savoury qualities, it is advisable to promote such possible medicinal plants as a source of new drugs. In a

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MOLECULAR IDENTIFICATION OF MULTI-DRUG RESISTANT *KLEBSIELLA PNEUMONIAE* PHENOTYPES AND APPRAISAL OF ITS RESPONSE TO COMBINED ACTION ACTIVITY OF *CORIANDRUM SATIVUM* (APIACEAE) EXTRACTS AND ANTIBIOTICS

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Abstract

The relative shortage of new antimicrobials for life threatening microbial infections because of perilous condition of loss of efficacy of antibiotics due to emergence of Multi-Drug Resistance. Research is focused on the new strategy of treatment tactics. *Klebsiella pneumoniae* is one of the most widespread gram negative pathogen facing the problem of MDR. In the existing study, out of total 106 clinical samples screened, 26 samples are found to be *Klebsiella pneumoniae* infected. Total 34 antibiotics were tested to analyze antibiotic sensitivity pattern. The pathogens showing wide and diverse spectrum of resistance namely, U010, U019, B087, U088 and U0106 were selected for further studies of synergistic action of herb extracts and antibiotics. Cold and hot extract of herb, *Corindrum sativum* were prepared by Maceration process and by Soxhlet extraction respectively with solvents, Petroleum ether, Chloroform, Acetone, Methanol and Water. Individual extract was not found to be effective against any of the selected MDR pathogens. The extracts of *Corindrum sativum* showed potentiation activity on antibiotic which is previously resistant against *Klebsiella pneumoniae*. The extracts found to have synergistic effect over CPZ, CIP, MO, RIF, TI, CID, CPZ, CIP, DOR, ETP, E, FAR, GAT, MEC to very high extent, shifted the activity of antibiotics from resistant to sensitive range. The effectiveness shown by these extracts may apply their use against multidrug resistant pathogens in achieving combination therapy.

Key words: Corindrum sativum, Klebsiella pneumoniae, Multi-Drug Resistance.

Introduction

The morbidity and mortality among the population due to MDR (Multi-Drug Resistance) phenotypes of Gram negative bacteria responsible for building stress in health care services for choice of potential treatment therapy [1,2]. WHO reports warned the medical practitioner and lay man community to reduce drug abuse to not to turn round of susceptible bacteria in resistant level. Most antibiotics are losing efficacy of treatment [3]. Foxman, B. (2010) reported *K. pneumonia*, *P. mirabilis*, *P. aeruginosa*, *S. aureus*, *E. faecalis*, *S. saprophyticus* are commonest bacteria associated with the UTIs in human [4].

ISOLATION OF ENDOPHYTIC FUNGI FROM AGRICULTURE FIELD OF
NAGPUR REGION AND ASSESSMENT OF ISOLATED FUNGI FOR
ANTIQUORUM SENSING ACTIVITY

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Abstract

The aim of present study was to isolate the endophytic fungi from agriculture field of Nagpur region and evaluate the isolated fungi for the inhibition of quorum sensing activity. Initially, samples were collected for isolation of fungal endophytes. Fungal endophytes was isolated from the healthy, symptomless leaves, stem and root of various plants such as mustard, Linseed, Bengal gram, safflower, Pigeon pea and Orange. The identification of isolated endophytic fungi was done on the basis of their morphological and microscopic structures. The Slide culture technique was performed using isolated fungi and temporary slides were prepared in Lactophenol cotton blue stain for identification purpose. For quorum sensing inhibitors production, first Liquid- state fermentation and then extraction of inhibitors were carried out. The extract from each endophytic fungal isolate was assayed for the presence of inhibitors using biosensor strains such as *Chromobacterium violaceum* wild type MTCC 2656.

Keywords: Endophytic fungi, quorum sensing inhibitors, *Chromobacterium violaceum*

Introduction:

Endophytic fungi reside within host plants exclusive of causing any noticeable symptoms of infection (Pimental *et al.*, 2006). The endophytic fungal hyphae present internal cellular aerial plant parts such as leaf sheaths, sometimes even within the stem and root system also. Association with plants, the endophytic fungi can reduce the damage from the pathogens by inhibiting pathogen infection and propagation within the host. *In vitro* study showed that endophytic fungi capable of producing various enzymes necessary for colonizing their plant hosts. Enzymes such as amylase, pectinase, xylanase, proteinase, and cellulose have been produced by fungal endophytes. (Rajesh and Rai, 2013).

Endophytic fungi have been considered as biofactories of novel bioactive molecules, among the extracted molecules and purified substances derived from the broth or fungal biomass, some have possessed antibacterial activity with moderate to powerful effect when assayed on the bacterial strains resistant to the antibiotics which are currently in use (Radic, N., Strukelj, B., 2012).

As endophytes are serving as the richest source of enzymes and secondary metabolites, such metabolites can be used as quorum sensing inhibitors (antimicrobials) directing possible new method for industrially significant substance production and utilization (Rajesh and Rai, 2013).

SCREENING FOR ANTIBACTERIAL POTENTIALS OF SOME DYE YIELDING PLANTS

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Abstract:

Aqueous and methanolic natural dye extracts from flowers of *Nerium indicum*, fruits of *Aegle marmelos*, flowers of *Delonix regia*, leaves and flowers of *Lagerstroemia speciosa*, bark of *Bauhinia purpurea* and seeds of *Bixa orellana* were screened for their antibacterial activity by agar well diffusion method. These herbal extracts were tested against cultures of *Escherichia coli*, *Pseudomonas aeruginosa*, *Shigella boydii*, *Bacillus subtilis* and *Salmonella abony*. Methanolic extracts of dyes gave better results for antibacterial activity than aqueous dye extracts and maximum zone of inhibition (24mm) was found in methanolic dye extract of flowers of *Nerium indicum*.

Keywords: Antibacterial activity, Natural dye extracts, Zone of inhibition

Introduction:

Plants are the richest bio-resource of variety of useful novel products including timber, food, fragrance, beverages, fibres, fodder, medicines, flavours and dyes. Dyes are nothing but colouring agents which impart colour to various things and hence find application in food, cosmetics and textile industry. Human's association with colours is not new. It is very evident from many historical monuments, sculptures and literature that man knew about colours since ancient times. Henna was used even before 2500 BC, while saffron is noted in Bible (Gulrajani, 2001). Herbal dyes obtained from dye yielding plants was the only source to impart colours to various stuff till the advent of synthetic dyes. After its invention, synthetic dyes take over the market of natural dyes due to difficulty in the collection of dye yielding plants, species availability, tedious extraction procedure, low colour value etc. However, researchers found that synthetic colorants release allergic and carcinogenic chemicals which are detrimental to human health.

In this current scenario, various ill effects of synthetic dyes such as allergy, carcinogenicity, non-degradable nature, less compatibility with the environment etc. made a switch and a strong return to safe and subtle natural dyes. Moreover, the practise of herbal dyes has boosted owing to the pharmacological properties of dye extracts. Researchers have studied different plants for potential source of dyes such as lawsone from henna, juglone from walnut and lapachol from alkanet. These dyes were found to exhibit antibacterial and antifungal activity (Gerson, 1975; Schuerch and Wehrli, 1978; Wagner et al., 1989). The work in this paper is undertaken to screen the antibacterial potentials of dye yielding plants, namely *Nerium indicum*, *Aegle marmelos*, *Delonix regia*, *Lagerstroemia speciosa*, *Bauhinia purpurea* and *Bixa orellana* against representatives of common pathogenic bacterial strains



DIVERSITY OF ZOOPLANKTONS IN KORADI LAKE, DISTRICT-NAGPUR, INDIA

Dr. Ravindra S. Bahekar

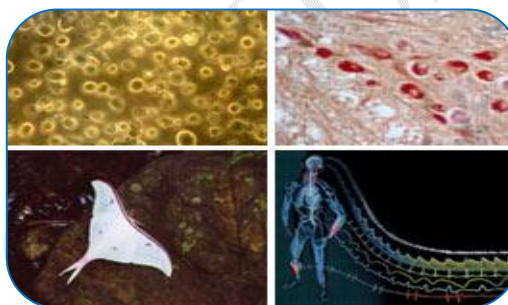
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ABSTRACT :

The study of freshwater bodies has gained much attention in recent years due to its importance in aquaculture, ecological, agricultural and recreational potential. The lakes and reservoirs, all over the country without exception, are in varying degrees of environmental degradation. The population explosion during last century without corresponding expansion of civic facilities converted, lakes and reservoirs as a sink for contaminants.

These water bodies harbors wide array of aquatic organisms like planktons, aquatic weeds etc. Planktons form a very important part of fresh water community and contribute significantly to aquatic productivity. Therefore, the information about plankton is essential to understand the functioning and trophic dynamic of different water bodies. In addition certain planktonic organisms are valuable indicators of trophic status of various aquatic biotopes.

Koradi Lake is a water body situated beside famous Koradi Devi temple. This reservoir is used for fishing and domestic purpose by the temple authorities and people living in this area. In view of this, we try to investigate the present status of this reservoir.



KEYWORDS : Biotopes, trophic status, Phytoplankton, Zooplanktons, Eutrophication.

INTRODUCTION

Freshwater bodies have great aquaculture ecological and recreational potential, therefore such water bodies are becoming a symbol of environmental status. For any nation its aquatic ecosystems, lakes, rivers, dams and coastlines are the national wealth and constant efforts are made to exploit them for the benefit of its population. Fresh water, its availability, equity and sustainability are posing a global challenge and there is an all-round acceptance of the fact that world is facing fresh water crisis (Kodarkar, 2003).

These water bodies harbors wide array of aquatic organisms like planktons, aquatic weeds etc. Planktons form a very important part of fresh water community and contribute significantly to aquatic productivity. Therefore, the information about plankton is essential to understand the functioning and trophic dynamic of different water bodies. In addition certain planktonic organisms are valuable indicators of trophic status of various aquatic biotopes.

Zooplanktons are common in the pelagic and littoral regions of ponds, lakes, large rivers, and oceans. In freshwater, these assemblages are dominated by the rotifers (Wallace and Snell 1991) and two groups of microcrustaceans—the four orders of cladocerans (Dodson and Frey 1991) and the class Copepoda (Williamson 1991). The knowledge of their abundance, species diversity and special

GROWTH KINETICS AND BACULOVIRUS PRODUCTIVITY OF INDIGENOUSLY DEVELOPED CELL LINE DZNU-BM-1 OF *BOMBYX MORI* (L) IN DIFFERENT MEDIUM

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Abstract

Lepidopteran cell lines is the primary prerequisites for studying baculoviruses in culture and baculovirus based vector system for the expression of recombinant proteins. DZNU- Bm-1 cell line was initiated in MGM-448 medium supplemented with 10% FBS and 3% heat inactivated *B. mori* haemolymph (BMS), originated from larval overies of silkworm *Bombyx mori* (L). In the present study, The cells were adapted first adapted to MGM-448 with 10% foetal bovine serum and without haemolymph from MGM-448. Bm-1 cells took about 10-12 months to adapt in haemolymph free MGM-448 medium. In haemolymph free MGM-448 medium, the cell line became freely suspended and also showed reduced clumping of cells particularly. This cell lines adapted to MGM- 448 with 10% FBS were subsequently adapted to a cheaper TNM-FH medium supplemented with 10 % FBS. The cell line took about 1- 2 months to get adapted to TNM-FH medium.

Key words: *Bombyx mori* cell line, *B. mori* nucleopolyhedrovirus (BmNPV), Occlusion Bodies

Introduction

In recent years genetic engineering has revolutionized insect cell culture and baculovirus technology (Smith *et al.*, 1983; Luckow, 1991; Agathose *et al.*, 1990) and demonstrated its ability in the production of recombinant protein therapeutics. The utility of insect cell lines for recombinant protein production has grown from laboratory-scale experimental work to industrial applications (Elias *et al.*, 2007).

This led to increase use of serum free medium to avoid regulatory concerns about the inherent potential risk for transmission of infectious agents as well as the heterogeneity and lack of reliability of the serum supply. Therefore, in industry, there is an increasing trend to eliminate

**ADAPTATION AND BACULOVIRUS PRODUCTION IN INDIGENOUSLY
DEVELOPED CELL LINE OF *BOMBYX MORI* L IN HAEMOLYMPH FREE AND
SERUM FREE MEDIA**

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Abstract

The cell line Designated as DZNU Bm-17 was developed in our laboratory from ovarian tissues of commercial (Kolar gold) variety of *Bombyx mori* (*B.mori*). Ovarian follicles from 10-12 larvae were removed chopped aseptically and fragments are explanted in modified Grace's medium (Mitshuhashi, Grace 1969) called MGM-448 which is supplemented with 10% fetal bovine serum (FBS) and 3% heat-inactivated *B. mori* haemolymph and incubated at 25±1°C. After 48 h cells starts proliferating from some of the explanted fragments. Cell proliferation was very slow takes about a year for first sub culture (356 days). The cells were passaged at an interval of 10-12 days up to 15th passage and thereafter, the cells began active proliferation and were passaged at 5 day interval. Dominant cell type in the culture was partially attached small refractive cells. Then the cells were adapted to more simpler and cheapest TNM-FH medium (Hink W.F.1970) enriched with 10% FBS. After 70 passages growth was quite stable and cells were healthy with high viability rate. The cells took about two and half years to complete 100 passages in TNM-FH medium. The resultant cell line was designated as DZNU-Bm-17 (Khurad et al 2011). The population doubling time of cell line was about 36 hr in MGM-448 and 24 hr in TNM-FH media. *B. mori* nucleopolyhedrovirus (BmNPV) infection is 85-92 % with 3-30 OBs/ infected cell. Present study addresses the adaptation, susceptibility to BmNPV infection and its comparative yield in different media formulation.

Keywords: DZNU-Bm-17, *Bombyx mori*, BmNPV, Baculovirus expression system

Introduction:

The biggest impact on insect cell culture in recent years was the discovery by Smith *et al.* (1983) that AcMNPV could be genetically engineered to produce heterologous proteins. This led to the baculovirus expression vector (BEV), a technique useful for producing large quantities of proteins including those useful as vaccines and other therapeutic agents. These potential uses of insect cells in medical applications stimulated efforts to obtain improved media and large-scale culture systems. Insect cell lines also used as important tools for the study of insect viruses and its pathogenicity, insect physiology and developmental biology (Smith *et al.*, 1983; Vaughn, 1991). Virtually, every cell line is a potential or actual source of material for molecular biologists to use in a wide range of studies. However, cell lines originating from different insect species tend to differ in their capacity to produce viruses or express recombinant proteins (Hink *et al.*, 1991). Therefore, there is a constant need to develop more lepidopteran cell lines to be used for baculovirus-expressed proteins (Iwabuchi, 1999). Although several cell lines from *B.mori* from variety of tissue origin are available, there is always a need to develop newer cell lines to replace older one as macula-like viruses has been identified in most commonly used older *B.mori* cell lines and very few are used to express recombinant proteins. So there is a need to establish new fast multiplying *B. mori* cell lines. This may be useful to produce therapeutically and industrially important protein products. In our previous papers (Khurad *et al.* 2006, 09), the establishment of three new cell



MOLECULAR IDENTIFICATION AND CHARACTERIZATION OF MRSA ISOLATES IN VIDARBHA REGION OF CENTRAL INDIA

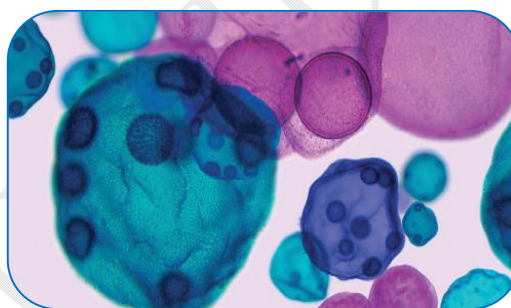
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ABSTRACT :

Introduction: The emergence of hospital acquired methicillin resistant *Staphylococcus aureus* in patients population is a major public health concern. The coagulase positive species *S. aureus* is well documented as a human opportunistic pathogen and responsible for more serious infection. The purpose of present study was to evaluate molecular identification and characterization MRSA in Vidarbha region. **Materials and Methods:** Total 329 MRSA isolates were obtained from three tertiary care clinical centres



of Vidarbha region by disc diffusion and MIC method. The presence of *mecA* gene was determined by PCR among MRSA isolates. The PCR products of 16S rRNA and methicillin resistance gene were Sequences and verified by BLAST search using the NCBI website. **Result and Discussion:** The prevalence of MRSA in Vidarbha region was found 60.92%. The novel finding of this study is all the tested MRSA strains were found positive to *mecA* gene. The blast analysis results were showed the 100% matching of both sequences of *mecA* of B26 isolates with USA 300 strain. **Conclusion:** The diverse genetic group of clinical MRSA isolates found globally, however four distinct genotypes of MRSA strains were identified among hospitalized patients in ICU. Our study revealed that ST8/SCCmec/IV/PVL clone of MRSA with multidrug resistance was found in hospitals of central region of India. Study proposed the continuous and nationwide MRSA surveillance studies are essential to find clonal distribution of MRSA in community to hospitals.

KEYWORDS : Methicillin resistant *S. aureus*, PCR, *mecA* gene.

1. INTRODUCTION

Staphylococci grow readily on most bacteriologic media under aerobic or microaerophilic conditions. They grow most rapidly at 37 °C but form pigment best at room temperature (20–25 °C). Colonies on solid media are round, smooth, raised, and glistening. *S. aureus* usually forms grey to deep golden yellow colonies. Pathogenic *Staphylococci* are commonly identified by their ability to produce coagulase, and thus clot blood¹. *S. aureus* is well documented as a human opportunistic pathogen. Some of the more serious infections produce by *S. aureus* are bacteremia, pneumonia, osteomyelitis, acute endocarditis, myocarditis, pericarditis, cerebritis, meningitis, chorioamnionitis and scalded skin syndrome². *Staphylococcus aureus* is a major pathogen of increasing importance due to the rise in antibiotic resistance³. To date the *S. aureus* genome databases have been completed for 7 strains; 8325, COL, MRSA, MSSA, N315, Mu50, and MW2. The average size of the *S. aureus* genome is 2.8Mb⁴. The *S. aureus* genome consists of a singular circular

DETECTION OF VANA GENE AMONG MRSA ISOLATES IN TRIBAL DISTRICT CHANDRAPUR (M.S.) INDIA

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Abstract

Multidrug resistant methicillin resistant *Staphylococcus aureus* is one of the important reasons for nosocomial and community acquired infections. The vancomycin antibiotic from glycopeptide category is last choice for the treatment of such infections. The mechanism of resistance in VRSA strains is due to *vanA* gene operon. The purpose of study is to identify vancomycin resistance among MRSA isolates and detection of *vanA* gene.

Key words: VRSA, MRSA, *Staphylococcus aureus*, *vanA* gene, vancomycin

1. Introduction

Staphylococcus aureus is well documented as a human opportunistic pathogen. It is responsible mainly for nosocomial infection, especially bacteremia, pneumonia, osteomyelitis, acute endocarditis, myocarditis, pericarditis, cerebritis, meningitis, chorioamnionitis¹, scalded skin syndrome and abscesses of the muscles, urogenital tract and central nervous system. Methicillin resistant *S. aureus* was discovered approximately 40 years ago and is still among top three clinically important pathogens^{2,3}. The development of high level of resistance against most of the antibiotics has made the therapy of staphylococcal disease a global challenge⁴. Penicillin is still the main drug of choice for *Staphylococcal* infections as long as the isolate is sensitive to it. Cephalosporin, such as cefazolin or cephalothin can be administered as an alternative choice of treatment to the patient with delayed- type penicillin allergy. Semisynthetic penicillin, such as Methicillin is used for patients with β -lactamase producing *Staphylococcal* isolates. Patients who have an MRSA infection are treated with a glycopeptides known as vancomycin. Vancomycin is the empirical drug of choice for the treatment of MRSA⁵. Patients who are intolerable to vancomycin are treated with a fluoroquinolone (ciprofloxacin); lincosamide (clindamycin); tetracycline (minocycline) or trimethoprim-sulfamethoxazole, which is also known as co-trimoxazole⁶.

Vancomycin is most important member of this class which is last choice to treat *Staphylococcal* infection. However, there are increasing numbers of reports signifying the emergence of vancomycin resistant *S. aureus* (VRSA). There are two mechanisms of vancomycin resistance have been demonstrated. The first form involves changes in the peptidoglycan synthesis. There is a visible irregularly shaped & thickened cell wall, due to increased amount of peptidoglycan. There is decrease in cross linking of peptidoglycan strands resulting in the exposure of more D-Alanyl-D-Alanine residues⁷. The second mechanism of resistance is due to *vanA* operon, which is result of conjugation process between *E. Faecalis* & MRSA strains. The *vanA* gene together with its regulator genes,

ANTIBIOGRAM STUDY OF METHICILLIN SENSITIVE STAPHYLOCOCCUS AUREUS IN VIDARBHA REGION

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Abstract

Vidarbha region of Maharashtra state is a central part of our country including tribal district Gadchiroli and Chandrapur, which have various tertiary care clinical centres. Limited reports were available on development of Methicillin sensitive *Staphylococcus aureus* from this part of India. Methicillin and Vancomycin is last resort of drug. Hence there is need of continuous surveillance of antibiotic resistance patterns of Methicillin sensitive *Staphylococcus aureus* and there genotypic variation to controlled antibiotic resistance problem so that we may not fall back into pre-antibiotic era. The main objectives of this study were to find out the antibiogram patterns of Methicillin sensitive *S. aureus*.

Key words: Methicillin sensitive *S. aureus*, antimicrobial, resistance

Introduction

Staphylococcus aureus is one of the members of genus *Staphylococcus*. The genus *Staphylococcus* is currently composed of 41 species and 21 subspecies¹. The *Staphylococci* most frequently associated with human infection are *S. aureus*, *S. epidermidis* and *S. saprophyticus*. Other *Staphylococcus* species may also be associated with human infection². *Staphylococcus aureus* is Gram-positive, spherical coccus having a diameter range of 0.5µm–1.5µm. *Staphylococci* are wide-spread in nature, although they are mainly found living on the skin, skin gland and mucus membranes of mammals and birds. They may be found in the mouth, blood, mammary gland and intestinal, genital urinary and upper respiratory tracts of these hosts. *Staphylococcus aureus* generally have a benign or symbiotic relationship with their host, however, they may develop lifestyle of a pathogen if they gain entry into the host tissue through trauma of the cutaneous barriers, inoculation by needles or direct implantation of medical device (foreign bodies). Infected tissues of the host may support large populations of *Staphylococci* and in some situations; they may persist for long periods^{3,4}. It is a highly versatile and adaptable pathogen, causing arrange of infections of varying severity affecting the skin, soft tissue, respiratory system, bone, joints and endovascular tissues.

The global problem of increasing trend in antimicrobial resistance is particularly pressing in developing countries, where the methicillin resistant *Staphylococcus aureus* (MRSA) is often several causal agents in hospital-acquired infections. There is now increasing in difficulties to treat such patient because of emergence of resistance to all current antibiotic classes. A significant



THERMOLUMINESCENCE ASSESSMENT OF Eu^{3+} AND Dy^{3+} ION ACTIVATED $\text{Ba}_2\text{WO}_3\text{F}_4$ PHOSPHORS IRRADIATED WITH γ -PHOTON AND C^{5+} ION BEAM

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ABSTRACT

Present work discusses about the synthesis and study of TL properties of Eu^{3+} and Dy^{3+} activated $\text{Ba}_2\text{WO}_3\text{F}_4$ phosphor irradiated with γ -photon and C^{5+} ion beam. The phosphor was synthesized by combination of wet chemical and solid state method. The as prepared phosphors are characterized by X-ray diffraction (XRD) for its phase purity, scanning electron microscope (SEM) for its microstructure and Thermoluminescence (TL) upon the irradiation of γ -photon and C^{5+} ion beam. XRD and SEM characterization reveals the formation of phase pure microcrystalline phosphor samples. TL response of both pure and rare earth activated phosphors was studied upon the γ -ray from ^{60}Co source and $75\text{MeV}\text{C}^{5+}$ ion beam irradiation. Effect of doping concentrations on TL response and dose response of the phosphor also studied. The glow curve of γ -ray irradiated samples shows the two glow peaks with intense one is at low temperature, whereas C^{5+} ion beam irradiated samples shows entirely different TL response. TL analysis and trapping parameters also determined in this work.

Keywords: Fluorotungstate, Thermoluminescence, γ irradiation, C^{5+} ion beam irradiation, $\text{Eu}^{3+}/\text{Dy}^{3+}$ doping

1. Introduction

Oxy-fluorides have emerged as a new class of materials with interesting photoluminescent properties. Many of oxy-fluoride phosphor shows interesting luminescence properties and found to be promising candidate for the application in various field of luminescence [1,2]. In fact, the doping of oxygen in the

fluoride glass such as BeF_2 , AlF_3 etc. provides stability to the glass system with improvement in optical properties because the M-O bond is less ionic than M-F bond and F^- ion is highly susceptible to hydrolysis [2-5]. Although oxide tungstates and molybdates are well known phosphors, luminescent behavior was not reported for oxy-fluoride tungstates until $\text{Ba}_2\text{WO}_3\text{F}_4$ was reported to be an efficient phosphor by Blasse et al. in 1984 [1]. As Blasse was astonished on high luminescence efficiency of $\text{Ba}_2\text{WO}_3\text{F}_4$ as BaWO_4 show weak luminescence even down to the liquid helium temperature; the luminescence investigation was also carried out for isostructural molybdate, $\text{Ba}_2\text{MoO}_3\text{F}_4$ [6], but it shows luminesces at low temperatures, due to the higher thermal quenching related to the size of the Mo^{6+} cation, which is the reason that the luminescence properties of tungstate based phosphor is more studied than molybdate based phosphor. The structural study of $\text{Ba}_2\text{WO}_3\text{F}_4$ was carried out by Wingefeld et al. [7] and Toradi et al. [8] and Blasse [1] has investigated its luminescence properties. All the while oxy-fluoride materials provide a unique host lattice for rare earth ions doping [2,9,10]. To the best of my knowledge after this no report on barium fluorotungstate is present in the literature. High luminescence efficiency of $\text{Ba}_2\text{WO}_3\text{F}_4$ makes my interest to investigate the luminescence properties when activated with rare earth.

Thermoluminescence (TL) is an extensive technique used for dosimetry of ionizing radiations as in this process, the intensity of light emitted by the phosphor on stimulation i.e. heating reflects the irradiation dose [11-15]. Thermoluminescent materials display,

नगरीय समस्याएँ और हिन्दी उपन्यास

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तायवाडे महाविद्यालय, कोराडी, नागपूर

मम्फोर्ड ने नगरीय संस्कृति पर प्रकाश डालते हुए कहा है कि पन्द्रहवीं शताब्दी के पश्चात् सभ्यता ने जो प्रगति की है उसे यदि देखा जाए तो यह भली-भांति स्पष्ट हो जाता है कि यांत्रिक संगठन और सामाजिक विघटन का विकास साथ साथ हुआ।¹ बहुत से विद्वानों ने नगरीय जीवन का अध्ययन सामाजिक और वैयक्तिक विघटन की समस्या के रूप में ही किया है। इनके अनुसार नगर-जीवन में व्याप्त अनेक मानसिक व्याधियों का कारण नगर का भौतिक वातावरण ही नहीं बल्कि विशेष रूप से नगरीकरण की प्रक्रिया में विकसित जटिल जीवन पद्धति है। यह परिस्थिति आज चिकित्सक वर्ग से अधिक समाजशास्त्रियों के लिए चुनौती है।² वास्तव में नगर जीवन में व्याप्त समायोजन का संकट, सामाजिक जीवन में अकेलेपन की अनुभूति तथा वैयक्तिक व्यर्थता का बोध नगरीय समस्याओं का संदर्भ बनते जा रहे हैं। नगरीय जीवन में फैले अनेक प्रकार के तनाव, संघर्ष, नैराश्य आदि इन्हीं समस्याओं से उद्भूत हैं। आज विश्व में सभ्य कहलाने वाले अनेक समाज इन्हीं समस्याओं से ग्रस्त होकर अन्दर ही अन्दर खोखले होते जा रहे हैं। पिछले दशकों में होनेवाली तीव्रगामी नगरीकरण की प्रक्रिया के कारण हमारा समाज भी इन समस्याओं से अछूता न रह सका है।

स्वतंत्रता के पश्चात् हिन्दी उपन्यासों की अनेक विशेषताओं के साथ एक प्रमुख विशेषता यह रही है कि यह उत्तरोत्तर यथार्थ के आग्रह से जुड़ता गया है। इसी सन्दर्भ में नगरीय परिस्थितियों के साथ विकसित बाह्य तथा आंतरिक संघर्ष में उलझे मानव की स्थिति का चित्रण भी इन उपन्यासों में आँका जा सकता है। ये उपन्यास अनेक स्तर पर नगरीय समस्याओं में छटपटाते आदमी की कथा कहते हैं। कतिपय उपन्यासों ने तो इस सन्दर्भ में विशिष्ट सामग्री प्रस्तुत की है। हिन्दी-उपन्यास में इस सन्दर्भ का विश्लेषण निश्चय ही महत्वपूर्ण कहा जाएगा। अध्ययन को निश्चित सीमा में बाँने के उद्देश्य से, यहाँ १९७६ तक प्रकाशित महत्वपूर्ण एवं बहुचर्चित उपन्यासों की ही चर्चा की गई है।

नगर जीवन में विकसित नवीन सांस्कृतिक तथा सामाजिक परिस्थितियों ने मानव के सामने एक ऐसा संकट पैदा किया है जिसका पूर्व समाज में सर्वथा अभाव था। नगर जीवन में सांस्कृतिक तथा सामाजिक संरचना की स्थितियों के फलस्वरूप नगर में आए एक नवागन्तुक को समायोजित होने के लिए विशेष संघर्ष करना पड़ता है। परम्परागत और नवीन समाज की दो भिन्न संस्कृतियों और उनमें परस्पर समायोजन का प्रयत्न एक व्यक्ति के अन्दर पाश्चिकता (मार्जीनेलिटी) को जन्म देता है। 'पार्श्व व्यक्ति' की अवधारणा सर्वप्रथम राबर्ट ई. पार्क ने दो प्रजातीय संस्कृतियों के मध्य फंसे व्यक्ति के लिए की थी।³ कालान्तर में स्टान्कस्व्यूट ने 'पार्श्व व्यक्ति' की द्वन्द्वात्मक स्थिति को दो भिन्न प्रजातीय संस्कृतियों से निकाल कर, उसे नगरीय सभ्यता के दौर में आँकने का प्रयत्न किया। उनके अनुसार नगर में आया नवागन्तुक 'पार्श्व-व्यक्ति' के रूप में दो भिन्न प्रतिमानों तथा सामाजिक मूल्यों के संसार में उलझा हुआ एक

पर्यावरण चिंतन और समकालीन आदिवासी कविता

डॉ. गजानन किशनराव पोलेनवार

विभाग प्रमुख (हिन्दी)

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“वे सरकारी चेहरे की तरह पत्थर नहीं है
इनमें जंगल के लिए लड़ते हुए
एक पेड़ की कहानी है।
जो धराशायी हो गया
नफरत की कुल्हाड़ी से।”

अनुज लुगुन

भूमंडलीकरण के इस दौर में संपूर्ण विश्व पर्यावरण प्रदूषण की गहन समस्या से ग्रस्त है। बाजारवाद के युग में मनुष्य ने अपनी तकनीकी विकास की दौड़ में पर्यावरण को इस हद तक हानी पहुँचाई है कि भविष्य में मानव सभ्यता नष्ट होने के कगार पर खड़ी है। विकास के अंधी दौड़ में मनुष्य ने जल-जंगल-जमीन ही नहीं अंतरिक्ष को भी प्रदूषित कर दिया है। आज पर्यावरण के असंतुलन से मनुष्य जीवन का अस्तित्व खतरे में है। इसलिए विश्व के सभी देश पर्यावरण संरक्षण हेतु विचार-विमर्श करते हुए दिखाई दे रहे हैं। पर्यावरण संरक्षण को लेकर विविध स्वयंसेवी संस्थाएँ राष्ट्रीय एवं आंतरराष्ट्रीय स्तर पर कार्यरत हैं। पर्यावरण संतुलन के लिए पूरे विश्व में विविध योजनाओं और कानूनों का निर्माण किया जा रहा है। किंतु अंत में सवाल यही है कि पूरे विश्व में पर्यावरण संरक्षण के लिए किये जा रहे प्रयासों से पर्यावरण प्रदूषण को रोका जा सकता है? वास्तव में आज के बाजारवाद और उपभोक्तावादी युग में प्रकृति के प्रति मनुष्य की दृष्टि स्वार्थी एवं उपभोग की रही है। प्रकृति के प्रति स्वार्थी दृष्टि के कारण मनुष्य ने सदियों से प्रकृति का केवल शोषण किया है। जिस प्रकृति से वह निर्मित हुआ है। उसी निर्माणकर्ता को वह नष्ट कर रहा है। पर्यावरण चिंतन अपने आप में प्रकृति के प्रति इसी प्रकार की उपेक्षणीय स्थिति के लिए पैदा होता विचार है। प्राकृतिक परिवेश के न्हास से उपजती सोचने लायक स्थिति ही अपने आप में पर्यावरण चिंतन को साकार करती है। पर्यावरण चिंतन का मूलधार यही है की जीवन की बहुत सारी भौतिक समस्याओं और अभावों से जूझने के साथ ही पर्यावरण प्रदूषण की समस्याओं से भी आज के मनुष्य को रूबरू होना चाहिए क्योंकि पर्यावरण ही अंततः मानव जीवन का आधार है। पर्यावरण चिंतन अपने आप में पर्यावरण संरक्षण की भावना से प्रेरित है जो हमें विभिन्न स्तरों पर न्हास होते पर्यावरण संरक्षण के लिए सचेत करता है। पर्यावरण संरक्षण की मुहिम को साहित्य के माध्यम से भी प्रचारित किया जा सकता है। और लोगों को पर्यावरण संरक्षण के प्रति जागरूक एवं उत्तरदायित्व पूर्ण बनाया जा सकता है। साहित्य, समाज और पर्यावरण चिंतन इसी रूप से संबद्ध है।

समकालीन आदिवासी साहित्य में पर्यावरण चिंतन को लेकर प्रचुर मात्रा में लेखन कार्य हो रहा है। सदियों से प्रकृति आदिवासी समाज जीवन का मूलधार रही है। प्रकृति के प्रति सभ्य समाज की दृष्टि और आदिवासी समाज की दृष्टि में बहुत बड़ा अंतर दिखाई देता है। सभ्य समाज के लिए प्रकृति भोग की वस्तु है, किंतु आदिवासी समाज प्रकृति जीवी होने के साथ-साथ प्रकृति पूजक और संरक्षक है। प्रकृति के प्रति आदिवासी समाज की दृष्टि को समझने के लिए रमणिका गुप्ता का यह कथन सार्थक है - “दरअसल आदिवासी अपने श्रम के बल पर सदैव आत्मनिर्भर और स्वावलंबी रहा है। अपने समूह और समाज से जुड़कर, प्रकृति का साथी बनकर जीना उसकी शैली और स्वभाव रहा है। वह प्रकृति से संवाद करता चलता है, उसका सहयात्री है, उसको गाय की तरह वह पोसता और दुहता है। उसे कैँजे में लाने का कभी भी उसका लक्ष्य नहीं रहा। प्रकृति के प्रकोप को वह सहता है, सहता रहा है और रोकता भी रहा है। उसके मुकाबिल खड़ा भी होता रहा है। सदैव उसका मित्र बना रहता है, प्रतिशोध की भावना से भरकर वह प्रकृति को नष्ट नहीं करता। वह उसे रिझाता है, मनाता है और केवल जीने भर, जरूरत भर उससे लेता है पर उसे बदले में देता भी है, अपना प्यार, अपनी देख-रेख और अपनी संवेदना।”¹

जल-जंगल-जमीन से जुड़ा आदिवासी समाज आदिम युग से प्रकृति प्रेमी होने के साथ-साथ पर्यावरण संरक्षक भी रहा है। इस संदर्भ में आदिवासी कवि अनुज लुगुन कहते हैं - “आदिवासी समाज ने अपने रहने और आजीविका के लिए जंगलो को साफ किया। कृषियोग्य जमीन तैयार की, खेती की, प्रकृति में उपलब्ध साधनों के साथ सामंजस्य बनाते हुये अपने जीवन और इतिहास को गति दी। आदिवासी समाज कृषक होते हुये भी ‘प्रकृति जीवी’ है। उसके जीवन का महत्वपूर्ण हिस्सा नदी, जंगल और पहाड़ से जुड़ा हुआ है। आदिवासी समाज के ‘प्रकृति जीवी’ होने का मतलब केवल आजीविका के लिए प्रकृति पर आश्रित होना नहीं है। बल्कि प्रकृति उनके सांस्कृतिक और आध्यात्मिक जीवन का अभिन्न अंग है।”²

हिंदी साहित्य में छायावाद से लेकर समकालीन हिंदी कविता में प्रकृति एवं उसके सौंदर्य का चित्रण हुआ है, किंतु पर्यावरण चिंतन एवं संरक्षण की दृष्टि से प्रकृति का चित्रण लगभग नहीं के बराबर है। इस संदर्भ में डॉ. गंगासहाय मीना कहते हैं - “आदिवासी साहित्य में प्रकृति परंपरागत चित्रण से भिन्न है। यह आदिवासी जीवन और संस्कृति का मूलधार है।”³

समकालीन आदिवासी साहित्य के अंतर्गत अनुज लुगुन,



समकालीन हिंदी नाटको में पर्यावरण चिंतन

प्रा. गजानन पोलेनवार
तायवाडे महाविद्यालय, कोराडी, नागपुर.

प्रस्तावना :

भारतीय साहित्य में वेदों से लेकर प्राचीन एवं मध्यकालीन साहित्य में प्रकृति को अनेक रूपों में चित्रित किया गया है किन्तु आज हम साहित्य और पर्यावरण के अंतरसंबंध की बात करते हैं तो मात्र प्रकृति चित्रण का संदर्भ नहीं देना है बल्कि पर्यावरण को क्षतिग्रस्त करने वाले मनुष्य को पर्यावरण संरक्षण के प्रति जागरूक एवं सचेत करना है। आज का मनुष्य सभ्यता के सर्वश्रेष्ठ युग से गुजर रहा है किन्तु जिस पर्यावरण और प्रकृति से वह निर्मित हुआ है उसी निर्माणकर्ता को ही वह नष्ट कर रहा है। इसलिए निम्नलिखित पंक्तियाँ यहाँ सार्थक लगती है—



“सामने हो जब नंगी सदी
हर सभ्यता का दावा व्यर्थ है।
प्रकृति के दर्द को समझे बिना
आदमी का आदमी होना व्यर्थ है।”

प्रकृति और पर्यावरण आज इतने चर्चित शब्द बन चुके हैं कि समस्त मानवीय क्रियाकलापों को इनसे अलग करके देखा नहीं जा सकता। पर्यावरण की समस्या आज पूरे विश्व की समस्या बन चुकी है। प्रकृति के संतुलित परिवेश को प्रदूषण की व्यापकता ने बड़े स्तर पर प्रभावित किया है।

प्राकृतिक अवयवों को अनदेखा कर आज के तकनीकी युग में मशीन जन्य उपकरणों के साथ आगे बढ़ता मानव जीवन धीरे-धीरे प्रकृति विमुख होता जा रहा है। पर्यावरण चिंतन अपने आप में प्रकृति के प्रति इसी प्रकार की उपेक्षणीय स्थिति के लिए पैदा होता विचार है। प्राकृतिक परिवेश के ह्रास से उपजती सोचने लायक स्थिति ही अपने आप में पर्यावरण चिंतन को साकार करती है। जीवन की बहुत सारी भौतिक समस्याओं और अभावों से जूझने के साथ ही प्रकृति और पर्यावरण की समस्याओं से भी हमें रुबरु होना चाहिए क्योंकि प्रकृति ही अंततः मानव जीवन का आधार है। पर्यावरण संरक्षण की मुहिम को साहित्य के माध्यम से भी प्रचारित किया जा सकता है और लोगों को प्रकृति एवं पर्यावरण के प्रति जागरूक, सचेत, एवं उत्तरदायित्व पूर्ण बनाया जा सकता है। साहित्य, समाज और पर्यावरण—चिंतन इसी रूप में संबद्ध है। साहित्यिक स्वर में नाटक की भूमिका अपनी जीवंतता के कारण अधिक प्रखर साबित होती है। पर्यावरण—चिंतन अपने आप में पर्यावरण संरक्षण की भावना से प्रेरित है जो हमें विभिन्न स्तरों पर ह्रास होते पर्यावरण संरक्षण के लिए सचेत करता है। जहाँ तक नाटकीय संप्रेषण और पर्यावरण—चिंतन का प्रश्न है साहित्य की अन्य विधाओं की अपेक्षा नाटक व्यापक समूह—समाज को एक साथ लेकर चलने वाली विधा है इसलिए जीवन की अन्य समस्याओं के साथ—साथ प्रकृति और पर्यावरण की समस्याओं को अभिव्यक्त करने के लिए नाटक एक सशक्त विधा है।

पर्यावरण और मानव स्वास्थ्य

प्रा.डॉ. राहुल पुंडलिकराव वाघमारे

हिंदी विभाग

तायवाडे महाविद्यालय, कोराडी, ता. कामठी, जि. नागपूर.

वर्तमान समय में मानव के सामने अनेक ऐसी भीषण समस्याएँ आकर खड़ी हुई हैं। इन समस्याओंका निपटारा करना मनुष्य के हि हाथ में है। आज मनुष्य ने इतनी प्रगति कर ली है कि वह चाँद पर जा पहुँचा है। मानव को जो भी सुविधा लगती है, वह आज उसने विकसित कर ली है। किन्तु यह विकास करते हुए अपनी सुविधा तो कर ली लेकिन उन सुविधाओंका असर उसके स्वास्थ्य पर पड़ रहा है। औद्योगिक क्रांति द्वारा मनुष्य ने उसे जो चाहिए वह हासिल कर लिया है, नये-नये कारखाने तथा मिलों का निर्माण किया गया। यातायात के साधन विकसित किए गये। इस विकास को दूसरे नजरिये से देखे तो पता चलता है कि इसका मानवी मानवी जीवन तथा स्वास्थ्य पर क्या असर हो रहा है। कारखानों से निकलता हुआ धुआँ, पानी तथा यातायात के साधनों से निकलता हुआ धुआँ मानव के स्वास्थ्य पर सिधा असर करता है, जिसके कारण मनुष्य का आर्युमान कम हुआ दिखाई देता है। आज वर्तमान में मनुष्य को रक्तचाप, दिल कि बिमारी, श्वसन कि बिमारियाँ, कैंसर आदि बिमारियाँ प्रमुख रूप दिखाई देती हैं वह केवल हमारे पास को जो पर्यावरण है उसे हमने दुषित कर दिया है और उसका असर मानव के स्वास्थ्य पर बहुत ही भयंकर होता हुआ दिखाई दे रहा है।

आज भारत में ही नहीं बल्कि सारे ब्रह्माण्ड में पर्यावरण प्रदूषण की समस्या मुंह बाये खड़ी है। पर्यावरण को शुद्ध बनाये रखना हमारी संस्कृति एवं सभ्यता के विकास हेतु ही नहीं, बल्कि मानसिक एवं शारीरिक स्वास्थ्य के लिए भी अपरिहार्य है। प्राकृतिक संतुलन को बनाये रखने हेतु जल, वायु, भूमि, आदि को प्रदूषण से बचाया जाना अत्यंत आवश्यक है। प्रदूषण से पर्यावरण असंतुलन के फलस्वरूप हम चाहे जितना आर्थिक विकास क्यों न कर लें, हम अपने मूल्यों, सभ्यता एवं संस्कृति के दृष्टिकोण से पिछड़ते ही जा रहे हैं। अच्छे पर्यावरण के लिए हमें फैल रहे प्रदूषण को समाप्त करना होगा। प्राणी मात्र चाहे सूक्ष्म हो या स्थूल, पर्यावरण के अनुरूप ही जीवन चक्र पूरा करता है। पर्यावरण प्रकृति का अनुशासन है। जब प्रकृति का संतुलन बिगड़ जाता है या अनुशासन भंग हो जाता है तो प्रदूषण उत्पन्न होता है। प्रदूषण शब्द का आशय है किसी भी प्रकार के घटक में त्रुटि का हो जाना। प्रदूषण: खाने-पीने की वस्तुएँ इंजाइमल, बैक्टीरियाँ, फफूंदी, अधिक नमी आदि से मनुष्य के शरीर पर प्रतिकूल प्रभाव पड़ता है। प्रशीतल, कोल्ड स्टोरेज, चील स्टोरेज, स्टेर्लाइजेशन, अनाज आदि को सुखाकर, सब्जियों आदि को धोकर सुखाकर काम में लेना आदि ऐसी क्रियाएँ हैं जिनके कारण हम खाने-पीने की वस्तुओं में विशाक्तता उत्पन्न होने से रोक सकते हैं। यदि हम इन्हें विशाक्तता से नहीं रोक पाते हैं तो यह सब प्रदूषित हो जाएगी। अर्थात् पर्यावरण के किसी भी घटक में रासायनिक या भौतिक परिवर्तन को अन्य सजीव या निर्जीव पर प्रतिकूल प्रभाव उत्पन्न करता है तो ऐसी क्रिया को प्रदूषण होने की क्रिया समझा जाता है। जब प्रदूषण के फलस्वरूप प्रकृति के संतुलन में बिगाड़ होने लगता है तो उससे पर्यावरण खराब होने लगता है। ब्रह्माण्ड के सभी जीव-जन्तु, पशु-पक्षी एवं वनस्पति के लिए शुद्ध पर्यावरण को होना आवश्यक है।

जनसंख्या वृद्धि से औद्योगीकरण एवं शहरीकरण होता जा रहा है जिसके फलस्वरूप कोलाहल, गंदगी, यातायात, अवरोध, जल आपूर्ति आदि की समस्याएँ निर्माण हुई हैं। नगरों एवं महानगरों में वायु, जल, स्थल, ध्वनि एवं विकीरणों से उत्पन्न प्रदूषण से विभिन्न

प्रकार की बीमारियाँ उत्पन्न हो जाती हैं जिससे व्यक्तिगत एवं सार्वजनिक स्वास्थ्य पर प्रतिकूल प्रभाव पड़ेगा। जनसंख्या में वृद्धि की पूर्ति हेतु स्थापित उद्योगों को विस्तार हो जाने से नगरों, महानगरों में धुआँ फैल रहा है। पर्यावरण प्रदूषण के शिकार केवल सामान्य मजदूर ही नहीं, बल्कि छोट-बड़े, अमीर-गरीब, औरत-आदमी सभी इसके दुष्प्रभाव को भोग रहे हैं। आज विकास के नाम पर फैल रही प्रदूषित हवा हमारे स्वास्थ्य को बिगाड़ कर विभिन्न प्रकार के रोगों से समाज को ग्रसित कर रही है। देश की आवश्यकता तथा संसाधनों की मात्रा से ज्यादा होने के कारण ही हमारी यह बढ़ती हुई जनसंख्या प्रदूषण असंतुलन तथा पर्यावरण के विनाश के लिए दोषी हैं।

जनसंख्या एवं उसकी पूर्ति नये-नये उद्योग की स्थापना करने के प्रयास में रसायन का प्रयोग हजारों प्रकार की वस्तुओं में हो रहा है। ये रसायन हमारे स्वास्थ्य के लिए घातक हैं। इनके प्रयोग से एलर्जी पैदा हो जाती है और हमारे नाजुक अंग जैसे-आँख, कान, फेफड़े तथा मस्तिष्क पर भी दुष्प्रभाव डालते हैं। ये रसायन तीन तरह से हमारे स्वास्थ्य और पर्यावरण को खराब करते हैं। प्रथम, मजदूरों का स्वास्थ्य खराब कर देते हैं, द्वितीय औद्योगिक अवशेष या कचरा पर्यावरण नष्ट कर देता है और मनुष्य के लिय दीर्घकालीन खरते पैदा करता है तथा तृतीय रोजमर्रा के जीवन में इस्तेमाल जिन वस्तुओं का हम करते हैं उससे भी स्वास्थ्य पर प्रतिकूल प्रभाव पड़ता है। इसके साथ ही सीसे का प्रयोग भी हानिकारक है। पानी के पाइपों, कीटकनाशकों, सीसे का परिशोधन करने वाली फैक्टरी, बैटरी, सीसे बने रंग-रोगन, क्राकरी, सीसे की पालिश वाले बर्तन, अखबार छापने की स्याही, इसके साथ ही कार, स्कूटरों से निकलने वाला धुआँ जिसमें सीसे का काफी अंश होता है। आज देश में वैध एवं अवैध षराब के कारखाने बहुतायत में मिल सकते हैं जिसमें सीसे का प्रचुर मात्रा विद्यमान होती है जो परोक्ष एवं अपरोक्ष रूप से हमारे स्वास्थ्य पर प्रतिकूल प्रभाव डालता है और जो मनुष्य के स्वास्थ्य और पर्यावरण के लिए खतरनाक साबित हो रहा है। औद्योगिक कचरे, गंदगी के अम्बारों से जमीन समतल बनाकर रहने वालों को भविष्य में दमा, गुर्दे की बीमारियाँ, पोलियो जैसे-रोग

Role of Computer Technology to Enhance E-Commerce

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Abstract: E-commerce is abbreviation of Electronics Commerce. It termed as buying and selling of goods or services on internet using computer network.. i.e. online business. In today's era conventional business is moreover replaced by E-commerce. One can buy required goods using online E-commerce website like amazon.com, flipcart.com etc. and mobile apps uber and ola used to avail car services. Zomato and Uber Eats for online food services. In this review paper we have taken brief review of E-Commerce services and discussed the types of digital channels like retailers website and mobile apps. We have also reviewed fraud prevention model viz. *Blacklist Based Algorithm with Machine Learning* and types of fraud validation.

Keywords: *Digital Channels, E-Commerce, Fraud Prevention Model, Fraud Validation, Machine Learning*

Introduction:

E-commerce is the activity of buying or selling of products on online services or over the Internet [1]. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems.

Modern electronic commerce typically uses the World Wide Web for at least one part of the transaction's life cycle although it may also use other technologies such as e-mail. Typical e-commerce transactions include the purchase of online books (such as Amazon) and music purchases (music download in the form of digital distribution such as iTunes Store), and to a less extent, customized/personalized online liquor store inventory services [5]. There are three areas of e-commerce: online retailing, electric markets, and online auctions. E-commerce is supported by electronic business [6].

E-commerce businesses may also employ some or all of the followings:

- Online shopping for retail sales direct to consumers via Web sites and mobile apps, and conversational commerce via live chat, chatbots, and voice assistants[3].
- Providing or participating in online marketplaces, which process third-party business-to-consumer or consumer-to-consumer sales
- Business-to-business buying and selling;
- Gathering and using demographic data through web contacts and social media
- Business-to-business (B2B) electronic data interchange

FEMINISTIC INTERPRETATION OF BAPSI SIDHAVA'S NOVEL *THE PAKISTANI BRIDE*: AN OVERVIEW

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ABSTRACT:

Bapsi Sidhwa is a south Asian major novelist in common wealth literature. She is a very bold women writer who has exposed the restless undercurrent of feminine existence. Her novels are The Pakistani Bride, American Brat, The crow Eaters, and water. At global level feminism has emerged basically from the western world but no country can be traced without the problems of women-domestically, child bearing, caring for husband and maintaining feminine identity of subordination at the hands of male partners. During the last three decades a large number of women novelists writing in English have attracted a great deal of attention and favorable comment. Bapsi Sidhwa is one of the most significant fiction writers among them.

Key Words: Feminism, Western, Identity, Novelist.

Pakistani Bride is such a novel in which Sidhwa most effectively sheds light on the injustice, ill-treatment, suffering, plight, oppression and tortures on women. There are several passages giving pictorial details of the ill-treatment to women in this novel in the very first chapter we see the tribal society of the Kohistani hills regards women as valuable commodities. In this novel the sufferer is Zaitoon. It is shown in the novel that the entire quote of honour of the tribe depends on nations of sexual superiority and possessiveness.

Zaitoon in fact, is an adapted daughter of Qasim. He gives her in marriage to Sakhi who becomes Zaitoon's husband right from the first night of their marriage Sakhi begins to ill-treat her. Sakhi beats Zaitoon not only with a stick but with sharp stone, he even kicks her. The violence is sexual and verbal, not only physical on the wedding night itself, Sakhi considers her as his property and establish his proprietorship over Zaitoon sexual organs themselves:

*Its my cunt! He breathed, holding her crotch in
A warm squeeze. (Sidhwa,102)*

Sakhi's torture and hatred against his bride is further revealed in the novel. Here,

*You whore, he hissed. His furry was so intense
She thought he would kill her. He cleared his
Throat and spat full in her face. You dirty, black
Little bitch, waving at those pigs... you wanted
Him stop and fuck you, didn't you?
(Ibid. p.108)*

WOMEN'S CONDITION: PAST AND PRESENT: AN OVERVIEW**DR. VISHNU M. CHAVAN**Assistant Professor,
Taywade College, Koradi,
Nagpur.**DR. VARSHA V. VAIDYA,**Head, Dept. of English,
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Nagpur.**ABSTRACT:**

Male dominance is found at all levels all over the world. It is a masculine rationality that has always privileged reason, order, unity and lucidity and that it has been done so by silencing and excluding the irrationality, chaos, and fragmentation that has come to represent femininity. This 'patriarchic system' is male dominating and one sided. This has done great harm to womankind. When the feminist scholars studied in detail the social structure, they came to the conclusion that 'patriarchic system' of male domination is rooted in the tradition of the past and that such heritage of women's subordination blatantly mistreat and devalues half of humanity.

Key words: Masculine, Feminism, Chaos, Patriarchy.

Women play different roles in her entire life successfully. If she got full support and freedom from his family as well as from the society, there will be stupendous progress and development of both family and of the nation. There is the need to widen our approach towards this half of humanity. A good and supportive woman can make his family and society joyful. When we glanced towards 'progressed' countries, we can understand the status of women in these countries.

Women have achieved freedom to vote which is called suffrage- right for voting. The feminist movement has effected change in western society, including woman's suffrage; greater access to education; more nearly equitable pay with men; the right to intimate diverse proceeding and "no fault and the right of the women to take individual decision regarding pregnancy in which also is included access to contraceptive and abortion. Beauvoir writes: 'Now, woman has always been man's dependent, if not his slave; the two sexes have never shared the world in equality. And even today woman is heavily handicapped, though her situation is beginning to change. Almost nowhere is her legal status the same as man's, and frequently it is much to her disadvantage.' (McCann and Kim, pg. 37.).

All negative qualities have been attributed to womankind and credit of positivity is taken by men. Rasmi Gaur writes: women are frequently represented in literature by men, but even the most famous heroines "represent what men desire in women, but not necessarily what women are in themselves –when one sex is dependent upon the other it will endeavour for safety's sake to simulate what the dominant sex finds desirable" (Gaur, p.2-3). Women's status and condition was very critical at the time of post-vedic period. Clara Nubile writes by quoting the reference of Manusmriti as following: 'in childhood a woman should be under her

Value and Importance of Literature and Environment in Human life: An Overview

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Abstract :

There is an intimate relation between environmental, climatic, clean conditions and human survival. This must be kept in everyone's mind but unfortunate part of human mentality is such that we (human beings) are not consciousness of this reality. It is only in the present day situation that due to extreme pollution this aspect has caught up in thinking of human beings. The things have so worsened that in the most developed but industrial and urban countries under compulsion to use oxygen mask. In some developed countries, practically people are to raise themselves on the toe of their feet to take oxygen.

Key words : Environment, climate, human, pollution, industrial, urban, oxygen.

Introduction :

Literature being so near to human life that literature reflects condition of environment through describing growth of trees, scenery, landscape, greenery, gardens and flowers in a natural tones. They were not aware of while writings that they are to do this. R. K. Narayan's stories, novels are completely rooted in this situation of forests, jungle, trees and his major literary work 'Malgudi Days' throws light on all these description as a natural part of life. The reader can enjoy the description of mountains, rivers, general atmosphere at length. Many writers who were contemporary to R. K. Narayan also gives description of this situation.

Very great writers and novelists like Nirad Chaudhuri, particularly in his book 'Passage to India', has written value of trees and jungles in this book when he was on tour to London by BBC to deliver lectures in the programme. He describes in several pages the condition of London. He said in the book that English people have preserved jungles in the midst of city of city so much so that tiger move in the forest in the very day time. Englander have not touched even a leaf of tree for years together and wonderfully he described London as the most modern ideal country from all aspects including architectural constructions. It serves as the model city to the world.

Nature (Environment) remains very close and intimate to all creatures and not only to human beings because nature's creature is the direct product of nature. And hence separation of organism from nature is only dangerous and harmful. Greater poets of the world and creative writers have emphasized the significance of nature's safety and protection keeps any balance to it is only harmful. While writing about the seriousness of environment, a great modern writer, Salman Rushdie writes: "The environmental crisis today haunts mankind like a nightmare. It is no more a regional problem; it has already acquired global proportions. The planet's support systems- land, water and air- seems to have been

damaged beyond the possibility of redemption." (Kundu, 10)

William Wordsworth, a very great nature poet, described in his poetry- beauty and freshness of landscapes, trees, plants, flowers, rivers, mountains, snowfalls, sunshine and beauty of earth. He was almost mad in love with nature. He describes how beautifully the intoxicating sights of tranquil 'Daffodils'. He says that he ran after the melodies sound of the bird cuckoo hilly areas smiles together. Much of human joy is lost, he go away from nature. "Science Exists all around us- in school grounds, on sidewalks; in gardens, in grocery stores, hardware stores, banks, ponds and lakes, in Museums, botanical gardens, zoos and at home." (Singh, 87)

In one of the poem entitled 'The World is Too Much with Us' he criticizes man's materialistic lust and worldly attachment. In his opinions there is no solace without intimate relation with nature. Man has exploited negatively nature for his own advantage and he is against excessive interferences of man in nature or natural climate. He, after looking to the fast industrialization, declares that man is raping the soil. It simply shows to us how it is very significant as has been right from the past till day to see that trees, jungles, landscapes, are to be protected. Otherwise man will have to pay price for nature's damage. And that time has come very near to us.

In the same manner Robert Frost who is a nature poet of America and national poet of America left no stone unturned in describing natural beauty of mountain, trees, rivers, landscape. His poems like 'Birches' and 'Stopping by Wood on a snowy Evening' is almost intoxicating. He emphasized too powerfully in his poetry the role of nature (Environment) for healthy and happy survival of human beings.

In the same manner very great poet Walt Whitman is one with nature. His collection under the title 'Leaves of Grass'. He describes his natural intimacy with nature. To green grass he addresses as it is a symbol of beautiful hair of people underground or it is a perfumed

Men's Credit and Women's Literature

Vishnu M. Chavan
Varsha V.Vaidya

Abstract

Domination of patriarchy at all levels to establish the facts in the very feminine psyche that it is masculine rationality that has always privileged reason, order, unity and lucidity and that it has done so by silencing and excluding the irrationality, chaos, and fragmentation that has come to represent femininity. All negative qualities have been attributed to woman kind and whatever is positive men have taken credit of belong to men. This patriarchic system is male dominating and one sided. This has done great harm to woman kind during the study and research work by feminist scholars this is come to their knowledge that patriarchic system of male domination is rooted in the tradition of the past and that such heritage of women's subordination blatantly mistreat and devalues half of humanity. This the reason that even in literary circles or academic lines represent only the views and values of one small select group of men who agree that those who are not in their own image are not worthy of recognition or that they are available for exploitation.

Keywords: Patriarchy, Femininity, Humanity, Feminine Sensitivity, Modern Faminism.

Introduction

In view of Dale Spender this created the division of good and

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Keywords: Patriarchy, Femininity, Humanity, Feminine Sensitivity, Modern Faminism.

Introduction

In view of Dale Spender this created the division of good and

Importance of English in Business Communication

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Abstract:

English is the backbone of communication. It has acquired the status of world language. On account of its elasticity, excellence and tremendous capacity to accommodate and express every situation may it be from emotions, psychology to microscopic Biology. All shades of human experience can be conveyed very clearly and perfectly only in English. As a result we are aware that today's life is technical and commercial full of business, transaction, banking, technological branches, medical complications and political debates. Therefore, business and commercial transaction today cannot stand without using English. And grand success in business, commerce and banking totally depend on these effective uses of English.

Keywords: Backbone, Communication, Business, Technical, Transaction, Banking, Commercial.

Introduction:

Today's age is an age of science and technology. In every field we are easily using technology. And mostly, English is the language of science and technology. Indian government, under its new economic policy has accepted the LPG policy means Liberalization, Privatization and Globalization. So, English language, being the mother-tongue of mostly progressed countries, has playing vital role in the world of commerce and business. While writing about the importance of English in India, Mohan and Bannerji write: "Researches in this area have shown that 70% to 80% of the working time of a professional is spent on communication. 64.14% is on communicating in English as against 27.22% in Hindi and 8.64% in regional language. Thus the role of English in the professional world is still dominant and we have therefore focused our attention on the conventions of communication in English followed in India" (Mohan and Bannerji, pg. 07).

Communication is an integral part of human being. Our success of any activity depends on our effective and proper communication. Our success and failure depends on proper way of communication. John and Christopher writes while telling about the limitations of a good communicator in the following lines: "Communicators, of course, are not omniscient, and they cannot be expected to go against their own interests and preferences in producing an utterance. There may be relevant information that they are unable or unwilling to provide, and ostensive stimuli that would convey their intentions more

26. Changing the Role of Library with Impact of Information Communication Technology

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Abstract

This Paper discusses the different dimension of the ICTs. It gives an awareness of technology in library and why there is a need to understand the use of ICT in the library for rendering enhanced library services and information to users. The current study discusses various library operations using library automation. The purpose of the study is to express the usefulness of the different ICT for quickest and approachable information dissemination.

Computer technology, communication technology and mass storage technology these are continues development technology. With the help of these technologies, library functions and services are more expensive and easy to disseminate of information to the users. ICT has impacted on every sphere of academic library activity especially in the form of the library collection development strategies, library building and consortia. ICT has brought unprecedented changes and transformation to academic library and information services, conventional LIS such as OPAC, user services, reference service, CAS, document delivery, IIL, Audio Video Services and customer relations can be provided more efficiently and effectively using ICT, as the offer convenient time, place, cost effectiveness, faster and most up to date dissemination and end users involvement in the library and information services process.

Key word : ICT, Internet, Library Services, Digital Libraries, Library Automation.

Introduction

The emergence of IT is one of the wonderful gifts of modern science and technology which has brought tremendous changes in LIS. Information Communication Technology has transformed library services globally. Application of IT to library and information work has revolutionized the traditional concept of libraries from a store house of books to an intellectual information center connoting the concept of electronic library. Most current information are recorded in electronic format, ICT has also contributed immensely to the performance of

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3.3.2 Number of research papers per teachers in the Journals notified on UGC website during Academic Year 2017-18

Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
Assessment of Antibiotic-potentiating Activity of Aqueous and Methanolic Extracts of Piper nigrum Against Multi-Drug Resistant Phenotypes of Pseudomonas sp.	Dr. Mrs. S.P. Patil	Botany	International Journal of Research in Biosciences, Agriculture and Technology.	Jul-17	2347-517X	Research Paper Link
Harmony of Phytochemicals and Antibiotics: A Boon In Antimicrobial Therapy	Dr. Mrs. S.P. Patil	Botany	International Journal of Recent Scientific Research	Jun-17	0976-3031	Research Paper Link
Placement of staff In LIC Using Fuzzy Assignment Problem	Dr. Mrs. N.R. Dhawade	Mathematics	International Journal of Mathematics Trends And Technology	Jun-17	2231-5373	Research Paper Link
A New Approach For Ranking Fuzzy Numbers To Solve Transportation Problem	Dr. Mrs. N.R. Dhawade	Mathematics	International journal of Mathematical archive	Mar-18	2229-5046	Research Paper Link
Recruitment of Personnel In A Bank Using AHP-FLP Model	Dr. Mrs. N.R. Dhawade	Mathematics	AMSE Journal	Dec-17	1258-5769	Research Paper Link
Kernal based Integration of Hough Transform and Genetic Algorithm for easy optimization of Two Dimensional Diagrams"	Dr. G.S. Katkar	Computer Science	International Journal of Engineering, Science and Mathematics	Apr-18	2320-0294	Research Paper Link
Maharani Yesubai – Vyakti Aani Karya	Dr. S.R. Daware	History	Vidyawarta, International Multilingual Research Journal	Mar-18	2319-9318	Research Paper Link
Sindkhedkar Jadhvanchi Ethisik Kamgiri	Dr. S.R. Daware	History	VIBGYOR, Bi-annual Multidisciplinary Research Journal	Feb-18	2277-4491	Research Paper Link
Impact and prevention of eating disorder on the female athlete	Dr. S.S. Bhotmange	Physical Education	Vidyawarta, International Multilingual Research Journal	Dec-17	2319-9318	Research Paper Link
Emerging trends in indian financial derivative market with	Dr. V.S. Khapne	Commerce	Emerging Trends in Management - New Perspectives and	Mar-18	2278-8808	Research Paper Link

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Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
reference to Bombay Stock Exchange (BSE)			Practices			
Indian derivative market: Issues and future prospects	Dr. V.S. Khapne	Commerce	Genius	Jan-18	2297-0489	Research Paper Link
Teacher's Role and Responsibility in Quality Upgradation.	Dr.Mrs. V.V. Vaidya	English	LangLit An International Peer Reviewed Open Access Journal	Aug-17	2349-5189	Research Paper Link
Cultural alienation of Indian women writers writing in English	Dr.Mrs. V.V. Vaidya	English	VIBGYOR, Bi-annual Multidisciplinary Research Journal	Aug-17	2277-4491	Research Paper Link
Victims of Loss and Loneliness in Kiran Desai's novel 'The Inheritance of Loss'	Dr.Mrs. V.V. Vaidya	English	International Journal of English Language Literature in Humanities (IJELLH)	Apr-18	2321-7065	Research Paper Link
ULTRASONIC INVESTIGATION OF TERNARY MIXTURE OF ESSENTIAL AMINO ACID LYSINE AND THREONINE IN AQUEOUS AMMONIUM NICKEL SULPHATE SOLUTION	Dr. A.S. Nakhate	Physics	IJBAT (international Journal of Researches in Bioscience, Agriculture & Technology)	Jan-18	2347-517X	Research Paper Link
Extractive spectrophotometric determination of promethazine hydrochloride an antipsychotic drug in pharmaceutical formulation.	Dr. D.M. Chafle	Chemistry	Bionano Frontier	Dec-17	2320-9593 (Online) 0974-0678 (Print)	Research Paper Link
Globalization, Climate Change and its impact on Agriculture	Dr. M.R. Wagh	English	Vidyawarta, International Multilingual Research Journal	Mar-18	2319-9318	Research Paper Link
Self-help groups and rural development	Sh. S.P. Ghugal	Economics	VIBGYOR, Bi-annual Multidisciplinary Research Journal	Aug-17	2277-4491	Research Paper Link
Bhartatil Notbandi Te Cashless Vyavhar Va Tyanche Bhartiya Arthvyavasthevaril	Sh. S.P. Ghugal	Economics	VIBGYOR, Bi-annual Multidisciplinary Research Journal	Aug-17	2277-4491	Research Paper Link

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Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
Jhalelya Arthik Va Samajik Parinamache Chikitsak Adhyayan						
Bhartachya Videshi Vyaparachi Disha Va Badalche Aadhyayan	Dr.Mrs. A.R. Durge	Commerce	Vidyawarta, International Multilingual Research Journal	Mar-18	2319-9318	Research Paper Link
Effect of occupational stress on job satisfaction and subjective wellbeing of employees in select public sector banks.	Dr. K.V. Ghormade	Commerce	International Journal of Management And Social Science Research Review (IJMSRR)	Jun-17	2349-6746 (Online) 2349-6738 (Print)	Research Paper Link
Vachan Sanskruti: Kaal Aani Aaj	Dr. K.V. Thakre	Marathi	Research Journey International Multidisciplinary E-Research Journal	Dec-17	2348-7143	Research Paper Link
Screening & Isolation of Extracellular Thermostable Enzymes Produced by Bacterial Isolates From Salbardi Hot Spring Region	Dr. V.N. Charde	Microbiology	International Journal of Current Research and Modern Education (IJCRME)	Feb-18	2455-5428	Research Paper Link
Assessment of Antibiotic-potentiating Activity of Aqueous and Methanolic Extracts of Piper nigrum Against Multi-Drug Resistant Phenotypes of Pseudomonas sp.	Dr. V.N. Charde	Microbiology	International Journal of Research in Biosciences, Agriculture and Technology.	Jul-17	2347-517X	Research Paper Link
Harmony of Phytochemicals and Antibiotics: A Boon In Antimicrobial Therapy	Dr. V.N. Charde	Microbiology	International Journal of Recent Scientific Research	Jun-17	0976-3031	Research Paper Link
Antibiogram study of Methicillin Resistant <i>Staphylococcus aureus</i> and Demonstration of Vancomycin resistance among MRSA isolates from Tertiary Care Hospital, Nagpur (M.S.) India	Dr. Y.W. There	Microbiology	International journal of current engineering and scientific research	Feb-18	2394-0697 (Online) 2393-8374 (Print)	Research Paper Link
UV-visible downshifting in CdWO ₄ :Ce ³⁺ nanosized phosphor	Dr. K. V. Dabre	Physics	Materials Discovery	Mar-18	2352-9245	Research Paper Link



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Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
Thermoluminescence Properties of Gamma and C^{5+} Ion Beam Irradiated $Sr_{2(1-x)}(Dy,Na)_xZnWO_6$ Phosphors.	Dr. K. V. Dabre	Physics	International Journal of Scientific Research in Science and Technology (IJSRST)	Feb-18	2395-602X (Online) 2395-6011 (Print)	Research Paper Link
Taxonomic study of Potter Wasp (<i>Hymenoptera: Vespidae: Eumeninae</i>) from Koradi region Dist. Nagpur, India	Dr. C.R. Deshmukh	Zoology	IJBAT (international Journal of Researches in Bioscience, Agriculture & Technology)	Jul-17	2347-517X	Research Paper Link
Teacher's Role and Responsibility in Quality Upgradation.	Dr. V.M. Chavan	English	LangLit An International Peer Reviewed Open Access Journal	Aug-17	2349-5189	Research Paper Link
Cultural alienation of Indian women writers writing in English	Dr. V.M. Chavan	English	VIBGYOR, Bi-annual Multidisciplinary Research Journal	Aug-17	2277-4491	Research Paper Link
Women literature and society: Special reference with Virginia woolf's essay A room of one's own	Dr. V.M. Chavan	English	Chronicle of humanities and cultural studies	Jan-18	2454-5503	Research Paper Link


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Assessment of Antibiotic-potentiating Activity of Aqueous and Methanolic Extracts of *Piper nigrum* Against Multi-Drug Resistant Phenotypes of *Pseudomonas* sp.

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Abstract:

Survey and experimental facts reports the escalating resistance of microorganisms to antibiotics across the globe. This tremendous expansion has stimulated the scientists to discover the alternative strategy that aim and obstruct the consequences of drug resistance. One approach to get rid of this problem could be the adoption of tactics of combination of plant extracts with antibiotics to increase their efficacy. The study was therefore, designed to determine the effects of combining the extract of *Piper nigrum* with selected antibiotics on MDR *Pseudomonas* sp. The *Pseudomonas* isolates were screened from different pathological laboratories of Nagpur (M.S.), India. Identified *Pseudomonas* isolates were then analysed to deduce antibiogram against total 18 antibiotics, most resistance 5 isolates were then evaluated for antibacterial activity of extract alone, and its antibiotic potentiating activity. The antimicrobial activity of each extract was assessed against selected microorganisms and varied results were obtained for each isolate. The hot and cold extracts of herb were prepared in solvents; Methanol and Water. Both hot and cold methanol extract showed very good synergistic effect on most of the antibiotics against Isolate Pseu 3 and water extract showed insignificant effect as compare to methanol extract. Almost all the extracts showed very good synergistic effect on all the antibiotics against Isolate Pseu 19. No significant effect was demonstrated against Isolate Pseu 20 & 26. The overall results denotes the significant antibiotic potentiating activity of some extracts.

Keywords: Antibiotic potentiating activity, Antibacterial activity, Drug resistance. *Piper nigrum*, *Pseudomonas* as sp.

Introduction:

The discovery of antibiotics was landmark discovery to eliminate the infections but the condition seems to ravage because of their indiscriminate use. Arbitrary practicing of antibiotic therapy by medical practitioners and public (self medication) has led to the development of multidrug-resistant (MDR) pathogens (Hemaiswarya S. *et al.*, 2008). The antibiotic resistance not only made the bacteria resistant to commonly available antibacterials but also has acquired augmented virulence (Prabhavathi F. 2006). Researchers are concern about prevention of the emergence of new resistant strains and its spread (Okeke I. N. *et al.*, 2005).

If infection acquire resistant to first line antimicrobials, then treatment procedure is shifted to second line antimicrobials then subsequently to third line antimicrobials. Second and third line drugs are often increases the cost of treatment (Sibanda and Okoh, 2007). The widespread resistance of first-line drugs in poor countries in developing nations increases the mortality and morbidity rates in population (WHO, 2002). The frightening challenge of MDR urges the development of alternative approach and discovery of new antimicrobial compounds (Sibanda and Okoh, 2007). The possible approach in the treatment of infectious diseases could be the use of agent that directly do not kill pathogenic bacteria but modify the bacterial

phenotype that make MDR pathogen susceptible to the antibiotic (Taylor *et al.* 2002). As the research outcomes have shown that active efflux is the main mechanism for the development of antibiotics resistance (Lin J. *et al.*, 2002); inhibition of these active efflux pumps possibly decreases the rank of intrinsic resistance (Lomovskaya O., and Warren M. S., 2001). The duo of antibiotics and efflux pump inhibitors is an effectual approach to resolve the problem of MDR (Lomovskaya O. and Bostian K. A. 2006). The benefit of plants to human life is diverse; as food, as sources of industrial substrate, as sources of medicinal component and many more (Azoro, 2004; Erturk *et al.*, 2006). Medical trials and In vitro evidences proved that plants hold the capacity of combating the problem of antibiotic resistance. Phytomedicine practices have shown remarkable results in the treatment of many infectious diseases including viral infections (Cowan M. M. 1999). Since historic times, mono and poly herbal preparations have been exercised for the treatment of various diseases. In advance studies of phytomedicine, approach have been made to extract a range of natural products and screening of their antimicrobial activity (Abu-Shanab B. *et al.* 2004). Phytochemicals give promising results in combination therapy which may act as multidrug resistance modifiers (Hemaiswarya S. *et al.*, 2008). These phytochemicals can reverse the resistance by several mechanisms including blocking the efflux



ISSN: 0976-3031

Available Online at <http://www.recentscientific.com>

CODEN: IJRSFP (USA)

International Journal of Recent Scientific Research
Vol. 8, Issue, 6, pp. 17930-17938, June, 2017

**International Journal of
Recent Scientific
Research**

DOI: 10.24327/IJRSR

Review Article

HARMONY OF PHYTOCHEMICALS AND ANTIBIOTICS: A BOON IN ANTIMICROBIAL THERAPY

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ARTICLE INFO

Article History:

Received 16th March, 2017
Received in revised form 25th
April, 2017
Accepted 23rd May, 2017
Published online 28th June, 2017

Key Words:

Phytomedicine, Therapeutic agent,
Biological activity, Synergistic action,
Drug resistance.

ABSTRACT

Plants contains bountiful of potentially useful constituents for the development of novel therapeutic agent, hence in recent years drug development in phytomedicine has gained considerable interest. With the emergence of MDR pathogens and insufficient treatment strategy with antibiotic, investigators turned eye in search of alternative potential approach for treatment. Phytochemicals is a unified and unique complex of natural components having therapeutic efficacy. Biological activity of phytochemical is associated with its chemistry. It elaborates the development of natural products, combining it with modern antibiotics to confer its action against MDR pathogens. Present review has been aimed to summarize past practices and latest issues of medicinal plants and its phytoconstituents in medical microbiology against MDR pathogens. It also deals with vast ancient knowledge and its diverse applications, and rejuvenation of therapy with synergistic action of antibiotics and phytochemicals, and its mechanism of action.

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INTRODUCTION

The medicinal potentials of plants have long been recognized and to date plants remain the main source of drugs in the traditional medicine. Plants with curative potentials are known as medicinal plants and have been employed in the treatment of various ailments, and even poisonous properties of phytochemicals were used since pre-historic times for the control of disease causing agents and their vectors (Ghaleb et al., 2010, Olgica et al., 2009). Various plants and their extracts have been exploited for the treatment requiring antimicrobial activity. Since long, honey is being used as one of the popular natural antimicrobial substances, especially for throat infections (Rafa't and Jawad, 2011, Odunbaku and Ashidi, 2012). Most of the herbs have been employed in the traditional herbal medicine exclusively for curative purposes while others serve as food, condiments in food and drugs to control pest, rodents, insects, etc (Hassain, 2002). Some herbs serve as food as well as medicine such as *Treulia africana* and

other species of *Treulia* (Ogbonnia et al., 2008, Maryam et al., 2010).

Morphine was separated from *Papaver somniferum* L. (Opium) and its structure was studied in 1804 although earlier benzoic acid was isolated from plants in 1560 (Maryam et al., 2010). Since then plenty of drugs from plants have been discovered but less than 100 of drugs with defined structure are in use today. In western medicine tentatively 55 or more drugs are being widely employed. Some drugs with defined structure such as aspirin, atropine, artemisinin, colchicine, digoxin, ephedrine morphine, physostigmine, pilocarpine, quinine, quinidine, reserpine, taxol, tubocurarine, vincristine and vinblastine are derived from medicinal plants (Gudrun ulrich-merzenich et al., 2010, UNESCO (1996)).

In the survey of WHO, IHO, almost 70-80% populations living almost solely on conventional medicine for their basic health care needs and nearly 61% of drugs marketed worldwide can be outlined to natural products. Natural product always considered a first choice in the global market. Abundance and availabilities have enforced in the development of native and

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Placement of Staff in LIC using Fuzzy Assignment Problem

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Abstract: The decision of placement of a right person for a right job is difficult because of uncertainty and imprecise information. However fuzzy assignment problem can certainly solve this purpose. In this paper, fuzzy assignment problem is solved for the placement of four candidates for four different designations in Life Insurance Corporation (LIC). The problem is converted into crisp assignment problem by magnitude ranking method and then it is solved by Hungarian, MOA and Direct method. Results are compared for effective application of placement of right candidate for right job.

Keywords: Fuzzy Assignment Problem, Magnitude Ranking Method, Hungarian Method, MOA Method, Direct Method

I. INTRODUCTION

An assignment problem which is special type of linear programming is a well-studied optimization problem in management science. The main objective of this is to assign given number of persons to equal number of jobs on one to one basis in such way so as to minimize total cost of performing that task or to maximize the total profit of allocation. The assignment problem arises because of the varying capacity of person or machine to perform the given task or job [1]. The special structure of assignment problem allows us to use more convenient method of solution in comparison to simplex method [13].

Application of classical AP in solving real life problem has some limitations. Fuzzy assignment problem can certainly minimize these limitations. In this paper, fuzzy assignment problem for the placement of four different candidates for four different designations in Life Insurance Corporation sector is solved. Firstly the problem is converted into crisp one, using magnitude ranking technique [12] and then it is solved by three methods namely, Hungarian method, MOA method and a new methodology. Comparison of these three methods is also done in this paper.

Fuzzy Set: The fuzzy set is represented by a characteristic function, defined as follows:

$$\mu_A : X \rightarrow [0,1]$$
$$\mu_A(X) = \begin{cases} 1, & \text{if } X \text{ is totally in } A \\ 0, & \text{if } X \text{ is not in } A \\ (0,1), & \text{if } X \text{ is partially in } A \end{cases}$$

Mathematical Formulation of Assignment problem: Mathematically, the assignment problem is stated as,

Minimize total cost:

$$z = \sum_{i=1}^n \sum_{j=1}^n c_{ij} x_{ij}, \quad i = 1, 2, \dots, n; j = 1, 2, \dots, n$$

Subject to condition:

$$x_{ij} = \begin{cases} 1 & \text{if } i\text{th person is assigned } j\text{th job} \\ 0 & \text{if not} \end{cases}$$

$$\sum_{j=1}^n x_{ij} = 1, \quad (\text{one job is done by the } i\text{th person } i = 1, 2, \dots, n)$$

**A NEW APPROACH FOR RANKING
FUZZY NUMBERS TO SOLVE TRANSPORTATION PROBLEM**

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(Received On: 06-02-18; Revised & Accepted On: 11-03-18)

ABSTRACT

Many methods have been discussed earlier for solving fuzzy transportation problem, where the cost coefficients, supply and demand quantities are considered in the form of trapezoidal fuzzy numbers. In this paper we have introduced a method for ranking of the trapezoidal fuzzy numbers with new method to find an optimum solution for fuzzy transportation problem. First, we transform the fuzzy quantities into crisp quantities by using our new method, then obtain an initial basic feasible solution and finally find an optimum solution. This is illustrated with a numerical example. The method is very easy to apply and economical.

Keywords: Fuzzy Transportation Problem, Trapezoidal fuzzy numbers, Ranking of fuzzy numbers, Optimum solution.

1. INTRODUCTION

Transportation problem is used globally in solving certain concrete world problems. It plays a vital role in production industry and also in many other purposes. It is a special case of Linear programming problem, which permits us to regulate the optimum shipping patterns between origins and destinations. A transportation problem in which the cost of transportation, supply and demand quantities are uncertain i.e. fuzzy in nature, it is a fuzzy transportation problem; also when the demand in the market and supply are uncertain, it satisfies the condition of vagueness. Ranking fuzzy number is a necessary step in many mathematical models. The concepts of fuzzy sets were first introduced by Zadeh [11]. Ranking normal fuzzy number was first introduced by Jain [6] for decision making in fuzzy situations. Many authors presented various approaches for solving the fuzzy transportation problem [1], [2], [4], [8], [9], [10]. Few of these ranking approaches have been reviewed and compared by Bortolan and Degani [3], Maliniand and Ananthanarayanan [7].

New method is presented for the ranking of generalized fuzzy trapezoidal numbers of a fuzzy transportation problem. To illustrate this proposed method, an example is discussed. As the proposed ranking method is direct and simple, it is therefore easy to understand and to find out the fuzzy optimal solution of fuzzy transportation problems occurring in the real life situations.

In this paper, we tried to find out a fuzzy optimal solution for a fuzzy transportation problem, where all the parameters are trapezoidal fuzzy numbers. In this method, first we transformed the fuzzy quantities into crisp quantities by using our new ranking method, then obtained an initial basic feasible solution by using least cost method and then finally found an optimum solution in a fuzzy number or a crisp number form. This method gives effective solution for a fuzzy transportation problem.

2. FUZZY SET

A class that admits the possibility of partial membership in it, is called a Fuzzy Set.

Let $X = \{x\}$ denote a space of objects. Then a fuzzy set A in X is a set of ordered pairs

$$A = \{x, \mu_A(x)\}, \quad x \in X \quad (1)$$

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Recruitment of Personnel in a Bank Using AHP-FLP Model

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Abstract

For every organization, department of human resource plays very important role as it can select right personnel who can render quality service to the clients of organization thereby giving competitive advantage to it. Hence selection process should be designed by considering various criteria as per choice of employer for selecting best employee for particular post in an organization. In this paper, various selection criteria have been decided for the post of manager and cashier in private bank with the integration of AHP methodology and fuzzy multi-objective linear programming model; selection of best employee for these posts has been made. It was observed that AHP-FLP model is more relevant than AHP method for the selection of employee in bank.

Key words

Analytic hierarchy process, Fuzzy multi objective linear programming model, Human resource.

1. Introduction

Human resource is a base of any enterprise. In this competitive world, every organization has to strive really hard for survival. The success depends largely on the quality of service rendered to the clients, which depends on the competence and the quality of the employees of the organization [1]. This means that success of the organization depends on well trained, dedicated and quality employees. So selecting right personnel becomes an important function of HR department for meeting future survival demands. For recruiting the candidates, the organization has to map carefully the available human resources because they can provide the competitive advantage for the organization [14]. The practice has been already started in many of the

Kernal based Integration of Hough Transform and Genetic Algorithm for easy optimization of Two Dimensional Diagrams

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Abstract

Abstract: This paper describes the detecting object based on kernels. Objects are detected by background differencing. We have Integrated with Genetic Algorithm, to analyze the flow of pattern and object. The Diagram integration gives the high cutting edge result for hough transform. Low contrast levels can present problems, leading to poor object segmentation and fragmentation, particularly on older analogue tracking system. The object detection can be done through the kernel, which is interacting with the given image by morphology and result will be identified. The model-free tracking or detecting algorithm described in this paper addresses object fragmentation and the masking induces spatially-smooth similarity. The morphological operators are applied with kernel for detecting the specific objects. The this kernel can thus the predict the border of object, thus counting on the iteration basis.

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1 INTRODUCTION OF HOUGH TRANSFORM

Morphological based object detection with in image is difficult task. One way to simplify the problem is to change the grayscale image into a binary image, in which each pixel is restricted to a value of either 0 or 1. The techniques used on these binary images go by such names as: blob analysis, connectivity analysis, and morphological image processing. The foundation of morphological processing is in the mathematically rigorous field of *set theory*; however, this level of sophistication is seldom needed.

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महाराणी येसुबाई — व्यक्ती आणि कार्य

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प्रस्तावना —

मराठेशाहीत ज्या कर्तबगार स्त्रियांनी आपल्या गुणवत्तेच्या आणि कर्तबगारीच्या जोरावर मराठेशाही टिकून ठेवण्यात जे दैदिप्यमान यश मिळविले, त्या कर्तबगार स्त्रियांमध्ये राजमाता जिजाबाई, महाराणी येसूबाई, महाराणी ताराबाई, अहिल्याबाई होळकर इ. स्त्रियांनी अतुलनीय कामगिरी केलेली आहे. या कर्तबगार स्त्रियांनी मराठा राज्यांचे रक्षण करण्यासाठी आणि अडचणीच्या प्रसंगी राज्यशासनाचा गाडा पुढे ओढण्यासाठी अथक प्रयत्न केले. परंतु पुरुषप्रधान इतिहास लेखन प्रवाहात या स्त्रियांचे कार्य आणि कर्तव्य बरेच दुर्लक्षित झाल्याचे दिसून येते. त्यादृष्टिने संभाजी महाराजांची पत्नी व शाहू महाराजांची माता महाराणी येसूबाईच्या कार्य आणि कर्तृत्वावर या शोध लेखातून प्रकाश टाकण्यात आलेला आहे.

येसूबाईचे महत्त्व —

येसूबाईचे माहेर दाभोळ प्रांतातील शिर्के पारंपरातील असून शिर्के हे तेथील देशमुख होते. येसूबाईच्या पित्याचे नाव पिलाजी शिर्के असून येसूबाईचा जन्म इ.स. १६८९ मध्ये झाला. पिलाजी शिर्के यांनी राज्याची सेवा पत्करल्यानंतर आपली कन्या जिऊबाई येसूबाई ही संभाजी महाराजांना देऊन शिवाजी महाराजांशी आपले नातेसंबंध प्रस्थापित केले. तसेच शिवाजी महाराजांनी ही आपली कन्या राजकुंवरबाई यांना देऊन बंधू गणोजीस देऊन हे नाते अधिक दृढ केले. येसूबाईचे माहेरचे नाव जिऊबाई असून विवाहानंतर

सासरी जिऊबाईने नाव येसूबाई उर्फ राजसबाई ठेवण्यात आले. संभाजी महाराजांशी येसूबाईचा विवाह १६६१ ते १६६५ च्या दरम्यान झाला असायला. विवाहानंतर येसूबाईला मातोश्री जिजाबाईच्या सहवास लाभला. जिजाबाईच्या मार्गदर्शनाखाली गृहशिक्षणा पासून ते राजनीतीपर्यंतचे सर्व शेडे येसूबाईने मिळाले. मराठी राज्याची भावी महाराणी म्हणून जिजाबाईने येसूबाईच्या शिक्षणात कोणतीच कसर ठेवली नाही. पूढील आयुष्यात निरनिराळ्याप्रसंगी व संकटसमयीचे धाडस, चातुर्य, स्वराज्याबद्दल व निष्ठा, आप्तस्वकीयांबद्दल जिजाबाईने वेळोवेळी येसूबाईमध्ये दिसून आला. त्या सर्वांमागे जिजाबाईचे संस्कार होते. येसूबाई लहानासतांनाच राजमाता जिजाबाईच्या सहवासात असल्याने मोहिमा, स्वराज्याबद्दल आपूलकी, स्वराज्य इ. गुण त्यांच्या अंगी भिनले होते. जिजाबाईसोबतच येसूबाईना शिवाजी महाराजांचे देखील योग्य मार्गदर्शन लाभले. संभाजी आणि येसूबाई यांच्या विवाहामुळे शिर्के आणि भोसले हि दोन मातब्बर घराणी एकत्र आली. या दोन्ही घराण्यांचे अनुवांशिक संस्कार येसूबाईवर लहानपणीच झाल्याने त्या सुसंस्कृत, कर्तृत्ववान आणि सुविद्य बनल्या.

मातोश्री जिजाबाईच्या देखरेखीखाली मराठी राज्याची जडणघडण होत असतांना शिवछत्रपतींच्या राजकारणांचे आणि राजनीतीचे डावपेच अगदी जवळून पाहण्याची संधी येसूबाईना मिळाली आणि याच संधीचा उपयोग त्यांनी आपल्या भावी आयुष्यात करून घेतला. शिवाजी महाराजांचा आपल्या सुनेवर अत्यंत गाढा विश्वास होता. आपल्या उग्र प्रवृत्तीच्या मुलास सुमार्ग दाखविणारी शक्ती म्हणून शिवाजी महाराज त्यांच्याकडे विश्वासाने पाहत असत. एकेप्रसंगी शिवाजी महाराज म्हणाले, “ मी पून्हा सौभाग्यवती येसूबाईच्या पोटी शिवनामे जलम घेऊन इच्छा पूर्ण करीन ”. यावर शिवाजी महाराजांच्या आपल्या सुनेवरील प्रेमाचा प्रत्यय येतो. संभाजी महाराज जरी तापट स्वभावाचे असले तरी, त्यांनी आपल्या वागण्याने येसूबाईना कधीच दुःख दिले नाही. येसूबाई सातत्याने संभाजी महाराजांसोबत स्वारीत असत. तसेच संभाजी महाराजांच्या सहवासामुळे

सिंदखेडकर जाधवांची ऐतिहासिक कामगिरी

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सारांश :-

विदर्भातील वऱ्हाड प्रांतामध्ये बुलढाणा जिल्ह्यात सिंदखेड हे ठिकाण आहे. सिंदखेडकर जाधवांचे घराण्याला गौरवशाली इतिहासाचा वारसा लाभलेला आहे. या घराण्यातील वीर पुरुषांनी मध्ययुगात आपल्या कर्तृत्वाचा ठसा तत्कालीन राजकारणावर उमटविला असून शिवपूर्वकाळात आणि शिवकाळात जाधवांच्या घराण्यामुळेच सिंदखेडला सर्वाधिक प्रतिष्ठा प्राप्त झाली. महाराष्ट्रातील अनेक ऐतिहासिक राजघराण्यांनी इतिहास घडविला, त्यात सिंदखेडकर जाधवरावांच्या घराण्याचा सिंहाचा वाटा आहे.

प्रस्तावना :-

देवगिरीच्या यादव सम्राटांच्या वंशातील सिंदखेडराजा ही एक जाधवांची उपशाखा इतिहास प्रसिद्ध आहे. सिंदखेडच्या शाखेची स्थापना सन १५७६ मध्ये राजे लखुजी जाधवरावांनी केली. विदर्भातील बुलढाणा जिल्ह्यातील सिंदखेड हे एक खेडेवना गाव. राजे जाधवरावांच्या उपाधीवरून सिंदखेडला 'सिंदखेडराजा' या नावाने ओळखले जाते. शिवपूर्वकाळातील अनेक महत्त्वपूर्ण घडामोडींचे सिंदखेडराजा हे केंद्र होते. या घराण्यातील मर्दवीरांनी दक्षिणतील जिंजीतंजावर पासून ते उत्तरेकडील काबूल-कंदहार प्रांतात आपली तलवार गाजविली. जाधवरावांचा वंश म्हणजे वीर गत्तांची खाणच होती. सिंदखेडकर जाधवरावांनी मध्ययुगीन काळातील भारताच्या इतिहासात आपल्या पराक्रमाने वैशिष्ट्यपूर्ण स्थान व महत्त्व प्राप्त केले आहे. मराठी राज्याची स्थापना व विस्तारात सिंदखेडकर जाधवांचे योगदान अनन्यसाधारण असे आहे. सिंदखेडचे नाव मध्ययुगात राजकीय क्षितीजावर सुमारे ३०० वर्षे सतत तळपत होते.

वीजशब्द :- जाधवराव, सिंदखेडराजा, लखुजी, दौलताबाद, जिजाबाई.

उद्देश :-

१. सिंदखेडकर जाधवांच्या इतिहासावर प्रकाश टाकणे.
२. सिंदखेडकर जाधवांच्या ऐतिहासिक भूमिकेचा परामर्श घेणे.
३. जाधव घराण्याचे महाराष्ट्राच्या इतिहासातील मौलिक योगदान स्पष्ट करणे.
४. मध्ययुगीन इतिहासातील जाधव घराण्याचे कार्य आणि कर्तृत्व निश्चित करणे.

संशोधन पद्धती व साधने :-

प्रस्तुत शोधनिबंधामाठी ऐतिहासिक संशोधन पद्धतीचा अवलंब करण्यात आल्या असून प्राथमिक व दुय्यम संदर्भ साधनाच्या माध्यमातून हा शोधनिबंध पूर्णत्वास आलेला आहे.

विषय विवेचन :-

सिंदखेड येथील जाधव घराण्याला स्वतंत्र व सार्वभौम देवगिरीच्या राजघराण्याचा वारसा लाभलेला आहे. मध्ययुगीन काळाचे प्रारंभी देवगिरीचे यादव महाराष्ट्राचे मुख्य राज्यकर्ते होते. सन १२९६ मध्ये अल्लाउद्दीन खिलजीने देवगिरीवर घणाघाती आक्रमण करून तेथील राजा रामचंद्रदेव यादवाचा पराभव केला. त्यामुळे त्याने खिलजींचे मांडलिकत्व पत्करले. इ.स. १३१० मध्ये रामचंद्रदेवाच्या निधनानंतर शंकरदेव देवगिरीच्या गादीवर बसला. शंकरदेवाने खिलजींचे मांडलिकत्व झुगारून देण्याचा प्रयत्न केला. त्यामुळे अल्लाउद्दीन खिलजीचा सेनापती मलिक काफुरने इ.स. १३१२ मध्ये शंकरदेवाला अमानुषपणे ठार करून देवगिरीचे राज्य दिल्ली साम्राज्यात विलीन केले.^१

देवगिरी येथील यादव घराणे सत्ताभ्रष्ट झाल्यावर त्या घराण्यातील पुरुष देवगिरीहून स्थलांतरीत होवून निरनिराळ्या ठिकाणी विखुरले गेले. त्यांपैकीच एक घराणे खानदेश आणि दौलताबाद यांच्या दरम्यान प्रसंगात अनुसरून वास्तव्यास राहिले. शंकरदेवाचा पुत्र गोविंददेव याने औरंगाबाद जवळील हतनूर येथे आपले स्वतंत्र राज्य स्थापन करण्याचा प्रयत्न केला. परंतु त्यात अपयश आल्याने गोविंददेवाने हसनगंू बहामणीला बहामणी राज्य स्थापन करण्याच्या दृष्टीने मदत केली. परंतु पुढे बहामनी सुल्तान हिंदू प्रजेवर अन्याय करू लागल्याने गोविंददेवाने त्यांच्या विरोधात बंड पुकारले. गोविंददेवाने सातत्याने मुस्लिम राजवटीशी लढा देण्याचा प्रयत्न केला. इ.स. १३८० मध्ये गोविंददेवाचे निधन झाले.^२

यादवांचे 'जाधव' हे उपनाव शंकरदेवाचा पुत्र गोविंददेव जाधव यांच्यापासून सुरू झाले. ऐतिहासिक दृष्ट्या विचार केल्यास उत्तरकालीन यादव उर्फ जाधव म्हणजे शंकरदेवाचा पुत्र गोविंददेव जाधव आणि गोविंददेवाचा पुत्र ठाकुरजी जाधव देशमुख असा उल्लेख सापडतो.^३ यावरून गोविंददेवापासून यादवांऐवजी जाधव म्हणण्याचा प्रघात सुरू झाला. तेव्हापासून त्यांच्या वंशजांना जाधव कुळाने ओळखले जाऊ लागले.

गोविंददेवानंतर त्यांचा पुत्र ठाकुरजी जाधव याने बहामनींचे मांडलिकत्व स्विकारून देशमुखी वतन प्राप्त केले. ठाकुरजी नंतर त्यांचा पुत्र भुतजी हा पित्याच्या जहागिरीवर आला. भुतजीचा पुत्र अचलोजी याने निजामशाहित ५०० घोड्यांची मनसब आणि जहागिर प्राप्त केली. अचलोजीच्या निधनानंतर त्यांचा पुत्र विठोजी हा इ.स. १५४० मध्ये मनसबवर आला. इ.स. १५६५ मध्ये झालेल्या तालीकोट (राक्षसनागडी) च्या युद्धात निजामशाहितफे

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Impact and prevention of eating disorder on the female athlete

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Abstract:

Eating Disorders are among the life-threatening psychiatric problems that affect health in multiple ways. Eating disorders are serious mental diseases that regularly appear in female athletes. They're abnormal eating behaviors that will be diagnosed only by strict criteria. Although young women are at particularly high risk, men and youngsters also suffer from it. the essential psychopathology in Eating Disorders is an intense fear of gaining weight, and a preoccupation with the body and eating that encourages compensatory behaviors like dieting, exercise, self-induced vomiting, misuse of laxatives, and diuretics. During this paper focused on the impact of disorder and the way to stop eating disorders in female athletes,

Keywords: nutrition, disordered eating, sport, female athlete.

Introduction:

Athletics are an excellent thanks to building self-esteem, promote physical conditioning, and demonstrate the worth of teamwork, but not all athletic stressors are positive. The pressure to win and stress on weight and shape can create a toxic combination. The athletic contest also can be an element contributing to severe psychological and physical stress. When the pressures of the athletic contest are added to an existing cultural emphasis on thinness, the risks increase for

athletes to develop disordered eating. During the past 30 years, there has been substantial growth in women's involvement in sports. Contrary to popular belief, female athletes aren't shielded from health-harming habits like body-shaping drug use. Additionally, most studies agree that female athletes seem to be potentially in danger of disorder onset. Therefore, the connection between sports, exercise, and eating disorders has received increasing attention. Female athletes are often very body-conscious concerning weight and appearance. There's evidence that a positive body image is usually related to physical activity. However, the difficulty of body image in athletes isn't only negatively influenced by socio-cultural pressures to realize and maintain unrealistic body shape and size but is additionally influenced by demands to be thin to maximize performance.

What are eating disorders?

A disorder may be a mental disease. it's characterized as an illness during which the people suffering experience severe disturbances in their eating behaviors and related thoughts and emotions. People with eating disorders typically become pre-occupied with food and their weight. it's often amid a loss of control of eating habits, resulting in overeating and fluctuating weight. Most eating disorders involve focusing on an excessive amount of on your body, they will furthermore cause dangerous eating behaviors. These behaviors can significantly impact your body's ability to urge appropriate nutrition. Eating disorders can harm the guts, gastrointestinal system, bones, and teeth and mouth, and cause other diseases.

Signs of an Eating Disorder:

- Preoccupation with food and weight
- Repeatedly expressed concerns about being fat
- Increasing criticism of one's body
- Frequent eating alone
- Use of laxatives
- Trips to the toilet during or following meals
- Continuous drinking of diet soda or water
- Compulsive, excessive exercise

EMERGING TRENDS IN INDIAN FINANCIAL DERIVATIVE MARKET WITH REFERENCE TO BOMBAY STOCK EXCHANGE (BSE)

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Abstract

The term "Derivative" is an instrument whose value drives from the value of underlying assets, which may be commodity, foreign exchange, bonds, stock indices etc. The most commonly found the derivatives are forwards, futures, and options. The price of derivatives moves along with the price of the underlying assets. Derivative Market is usually an essential part of Capital Market in developed as well as in emerging market economies like India. Derivative Market has becomes more efficient as these instrument help business growth by disseminating effective price signals relating to exchange rates, indices and reference rates or other assets. Derivative Market also reduces cost during period of volatility (i.e. adverse market movement) by hedging or shifting risks. Derivative can promote more efficient allocation of capital across the economy by transferring unwanted risks. Though the commodity features trading has been in existence since 1953 and certain OTC derivatives such as Forward Rate Agreements (FRAs) and Interest Rate Swaps (IRSs) were permitted by RBI through its guidelines, the trading in "Securities" based derivatives on stock exchanges was permitted only in June 2000. This paper is to study the Trends of Derivatives Segment and its growth in Financial Markets in India with reference to Bombay Stock Exchange (BSE).

Keywords: Derivatives Market, Bombay Stock Exchange (BSE).

1. Introduction: The world financial markets have undergone qualitative changes in the last three decades due to phenomenal growth of derivatives. An increasingly large number of organisations now consider derivatives to play significant role in play in implementing their financial policies. Derivatives are used for variety of purposes, but, perhaps, the most important is hedging. Hedging involves transfer of market risk- the possibility of sustaining losses due to unforeseen unfavourable price changes. A derivatives transaction allows a firm to alter its market risk profile by transferring to counter- party some type of risk for a price. Hedging is the prime reason for the advent of derivatives and continues to be a significant factor driving users to deal in derivatives. With the world embracing the derivatives trading on a large scale, the Indian market obviously cannot remain aloof, especially after liberalisation derivatives are among the forefront innovations in the financial markets and aim to increase return and reduce risk. They provide an outlet for investors to protect themselves from the vagaries of the financial markets. These instruments have been very popular with investors all over the world. Derivatives products serve the vitally important economic functions of price discovery and risk management. The transparency, which emerges from their trading mechanism, ensures the price discovery in the underlying market. Further, they serve as risk management tools by facilitating the trading of risks among the market participants. These products enable market participants to take the desired risks and jettison the undesirable undertones. To facilitate the development of the derivatives market, it is necessary to educate the market participants and the investors on the nuances of these new age products and their strategic uses.

2. Objective of the Study:

The objectives of the study are as follows:

- To have an overview of Indian derivative market.
- To have a look on the evolution of various derivative products.

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Indian Derivative Market: Issues and Future Prospects

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Abstract

Derivatives have fundamentally changed financial management by providing new tool to manage risk. What makes derivatives important is not so much the size of the activity, as the role it plays in fostering new ways to understand, measure and manages risk. Through derivatives the complex risks that are bound together in traditional instruments can be ceased apart and managed independently and often more efficiently. A remarkable growth in the derivatives markets has caused many consequences on the players associated with them. The Indian derivative market has become multi-trillion dollar markets over the years. Marked with the ability to partially and fully transfer the risk by locking in assets prices, derivatives are gaining popularity among the investors. Since the economic reforms of 1991, maximum efforts have been made to boost the investor's confidence by making the trading process more users' friendly. Still, there are some issues in this market. So, the present paper is an attempt to study the Issues and future prospects of the Indian Derivative market. The present paper is descriptive in nature and based on the secondary data. Inspite of the growth in the derivative market, there are many issues which need to be immediately resolved to enhance the investor's confidence in the Indian derivative market.

Keywords: Derivative Markets, Issues and Future Prospects.

1) Introduction

Derivatives have fundamentally changed financial management by providing new tool to manage risk. What makes derivatives important is not so much the size of the activity, as the role it plays in fostering new ways to understand, measure and manages risk. Through derivatives the complex risks that are bound together in traditional instruments can be ceased apart and managed independently and often more efficiently. A remarkable growth in the derivatives markets has caused many consequences on the players associated with them.

The Indian derivative market has become multi-trillion dollar markets over the years. Marked with the ability to partially and fully transfer the risk by locking in assets prices, derivatives are gaining popularity

**TEACHER'S ROLE AND RESPONSIBILITY IN QUALITY
UPGRADATION****DR. VISHNU M. CHAVAN**

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ABSTRACT

The present paper is an attempt to depict the teacher's role and responsibility in quality upgradation. To become a good teacher, it is mandatory that you must be a good personality. A good teacher required effective principles of teaching. Teacher's role in the student's life is more important than his biological parents. Teachers are always honoured while parents bring us to the earth. A teacher is responsible to give us the eyes of knowledge. Teacher's role in the social construction of a country is very central. Teacher has been considered the backbone of all round progress and welfare of society. He practically is behind human society. Without teaching and teacher, we cannot expect peaceful society.

Key words: Mandatory, Biological, Principles, Effective, Honour

Teacher should be devoted and dedicated towards their profession. They should be able to motivate learner's spirit to learn. It should be free from carelessness and casual attitude. It is because education is the key factor for all-round progress of any country. Administrations, political events, including parliamentary debates are the result of good teaching. That is why Dr. Radhakrishnan was made the president of India combining the philosophy of Plato's idea of philosopher-king. Only the wise king can better rule. Bertrand Russell very strongly pointed out that teachers' choice is not less than military actions. He said the country's fate is as much in the minds of a teacher as it is in the hands of military. Newsman, in his big volume under the title, *Idea of a University*, emphasized value of a teacher. He said that a single mistake of an engineer continues for generations and a surgeon's mistake can kill limited patients. But a teacher's mistake can metaphorically kill generations.

It means teachers are more important than the creators. In this regard there is a Marathi sloka in behalf to the value for teachers as Sant Dnyaneshwar says:

Guru daviliya vata/ Yevuni vivek Tirthatata/

Dhuvuniya malkata/ Buddhicha jene //

-Sant Dnyaneshwar

Those who honour their teachers they always grow in their life. To be a good teacher, there are various principles of teaching you needed to follow. Let us bring all those effective

Cultural Alination of Indian Women Writers Writing in English

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ABSTRACT:

Women in Indian cultural context have been and even today are being alienated – in the socio-cultural function. The participation of women is almost equal to nothing. In festivals, cultural activities and in social functions women are not being given any status, as a result women themselves are feeling inferior and unfit to participate in such activities. Kamala Das, Anita Desai, Kamala Markandeya, Shobha Day, Ruth Zabwala, Nayantara Sahgal, Arundhati Roy and many other great women novelists have focused on gender inequality in their writings. Gender has remained dominating factor which has created feminine class structure.

Key words: Alienation, Context, Inequality, Gender, Status

Women at all levels are estimated as secondary on account of their feminine gender which has created great gulf between male and female experience to the extent that women are treated not equal with men. This gender differences should be reduced to a genuine level and women should be encouraged to come up shoulder to shoulder with men. Fortunately in Modern times the awareness among women to participate in the work of national building has become visible. Woman journalists, media person, press reporters and thinkers are coming up. This is the new features which is the good sign.

Women writer who have propagated the ideology of feminism through the channel of creative writing in the world Eastern and Western, Mariama Ba, a western writer, wrote in one of her two novels, *So Long A Letter* and *Scarlet Letter* she has demanded a feminine freedom from the clutches deep concern about the freedom of women from the grip of patriarchy. Mariamaba shows her view indicating woman writers dilemma. She states:

The woman writers in Africa have a special task. She has to present the position of women in

Africa in all its aspects. There is still so much justice.....in the family, in the institution, in Society, in the street, in political organization,

Discriminations reign supreme..... we no Longer accept the nostalgic praise to the African Mother, who, in his anxiety, man confuses with Mother Africa. Other women writers are : Kamala Markandeya, Shobha Day, Ruth Zabwala, Nayantara Sahgal, Arundhati Roy, all these women writers have expressed their agonies. Their creative writing have a deep appeal to make free in all walks of life, Socio-cultural, political, emotional, and ideological. These writer show realistic pictures as much as the great western poets like W. B. Yeats and T. S. Eliot showed in their poems.

There are numerous examples all over the world specially the western world. Most shockingly there are also an example even in the writings of women writers in English in Indian writing. Its most illustrative example is Kamala Das's *My Story* which is written in poetry. This book has arrested the attention of world readers. This is her autobiography. Literary scenario in Indian writing in English there are innumerable women novelists who have presented feminine sensitivity, the grievances, and every type of injustice, inequality and ill-treatment.

Anita Desai is such a giant writers in Indian writing in English who wrote *Cry, the Peacock*, *Voice in the City*, *Bye Bye Black bird*, *Fire on the Mountain*, *Clear Light of Day*. Few of these novels shed light on problems of feminine gender. Kamala Markandeya has several novels: *Nectar in a Sieve*, *A handful of Rice*, *Two Virgins*, *Pleasure City* at her credit. Few of them are presenting most adequately and sensitively problems of the world of women. And, this world is full of pathos, suffering, and subordination of women. Atiya Husain who wrote only one novel under the title *Broken Column* is from Muslim community and is an independent thinker. She focused light on the domestic restriction of a Muslim family.

Bapsi Sidhwa is a south Asian major novelist in common wealth literature. She is a very bold women writer who has exposed the restless undercurrent of feminine existence. Her novels are *The Pakistani Bride*, *American Brat*. At global level feminism has

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Victims of Loss and Loneliness in Kiran Desai's novel 'The Inheritance of Loss'

Abstract:

Human being are social animal, they cannot live without the society. For all human needs, they are dependent on society. It is the utmost desire of human to live in society and not in alienation. Still what makes them to lead such an absurd life is the question. It is possible that there may be a loss of emotion, love, human values or self esteem that leads one to seclusion. The youngest writer to receive worldwide accolades for her second novel the inheritance of loss e.g. brought her name and fame with the man Booker prize in 2006, Kiran Desai has aptly portrayed the picture of how human beings are left alone and in alienated. Kiran being the daughter of the renowned novelist Anita Desai has greatly been influenced by her mother. It is her inherent will to become a writer. Kiran Desai has penned down a sadistic picture of loneliness and loss for each of her characters in this novel. The present paper focuses at the emptiness and the loss experienced by the characters of her novel. It is a sincere endeavor to find out and go through some scholarly papers to see how badly the life of any individual may be affected by such things. This paper examines with certain characters that how they are fall victim to loneliness and loss.

Keywords: alienation, loss, longing, absurdity, distress, disinterestedness,



ULTRASONIC INVESTIGATION OF TERNARY MIXTURE OF ESSENTIAL AMINO ACID LYSINE AND THREONINE IN AQUEOUS AMMONIUM NICKEL SULPHATE SOLUTION

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ABSTRACT:

This work presents, ultrasonic investigation of ternary solution mixture of essential amino acid Lysine and Threonine in 0.04 M aqueous ammonium nickel sulphate (NAS) solution. Density, viscosity and ultrasonic velocity have been measured for ternary mixture of aqueous (NAS + Lysine) and (NAS + Threonine) systems at 5 MHz and 303 K. From the observed values acoustical parameters such as adiabatic compressibility (β_a), acoustic impedance (Z), intermolecular free length (L_f), Rao's constant (R_1) and Wada's constant (β_m) have been obtained. The variation of these parameters with the concentration of Lysine and Threonine are graphically represented. The observed and calculated results have been discussed in terms of various solute and solvent interactions.

Keywords: *Ultrasonic velocity, amino acid, Lysine, Threonine, ternary electrolytic solution, Molecular interactions.*

INTRODUCTION:

Ultrasonic waves are extensively used to examine certain physical properties of material in liquid as well as solid in systems at macro level. Now a day, ultrasonic technique finds large number of applications in medical, technology, industries and defenses. In fundamental research, ultrasonic velocity and absorption studies in liquids, liquid mixtures, and solids provides invaluable information on the nature of inter and intra molecular interactions and molecular association. In physical sciences, the ultrasonic velocity and absorption studies have proved to be of considerable interest in providing an understanding of physical and chemical properties leading to the knowledge of the structure and properties of matter. In basic sciences, ultrasonic waves are used to provide information on the behavior of microscopic particle of matter. The absorption and dispersion of these waves provides information about relaxation process in liquids. The relaxation parameters, chemical and structural aspects of liquid systems, reaction rates and

formation of complex can also be studied by ultrasonic techniques.

Proteins are most abundant intercellular macromolecules and constitute over half the dry weight of most organism. Amino acids are the bio-molecules which are basic building blocks of proteins. Although over 100 amino acids have been shown to be present in various plants and animal, only 20 of them, are found as constituent of most proteins, which are often referred to as standard, primary, normal or magic 20 amino acid. Out of these 20 amino acids 9 amino acids are indispensable for human growth and are called as essential amino acids.

Lysine and Threonine are essential amino acids. Lysine is very important for regulating hormones, antibodies, and enzymes in the body it also plays a crucial role in building muscle, maintaining bone strength, aiding recovery from injury or surgery. Threonine is an important residue of many proteins, such as tooth enamel, collagen, and elastin and very important for the nervous system, it also plays an important role in porphyrin and fat metabolism and prevents fat buildup in the liver.

EXTRACTIVE SPECTROPHOTOMETRIC DETERMINATION OF PROMETHAZINE HYDROCHLORIDE AN ANTIPSYCHOTIC DRUG IN PHARMACEUTICAL FORMULATION

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Abstract: Promethazine hydrochloride is an antipsychotic drug. A sensitive, simple and rapid extractive spectrophotometric method is developed for the determination of promethazine hydrochloride in bulk and in its pharmaceutical formulations. The method is based on the ion-pair complex formation between the drug and the Calmagite dye in acidic medium. The red coloured chromogen formed is extractable with chloroform and quantitatively measured at 478 nm. The method was validated for the precision and accuracy. The molar composition and stability constant of the ion –pair complex formed is determined at room temperature by Turner and Anderson method. The molar composition of complex Calmagite : PromethazineHCl is 1 : 1. The stability constant is 4.0187×10^3 . The detection limit is 5.16 to $27.38 \mu\text{g ml}^{-1}$ and the molar absorptivity is $9.6267 \times 10^3 \text{ L mol}^{-1} \text{ cm}^{-1}$ and Sandell's sensitivity is $0.03244 \mu\text{g cm}^{-2}$ per 0.001 absorbance unit.

Key words: Extractive spectrophotometry, promethazine hydrochloride, calmagite

INTRODUCTION:

Phenothiazines class of drug is widely used in the treatment of mental disorder. Promethazine hydrochloride is an important drug of phenothiazine class of drugs. It shows antihistaminic, neuroleptic and antibacterial activity. It is chemically 2-RS-N, N-dimethyl-1-(10H phenothiazine-10 yl) propan -2- amine hydrochloride. The structure of promethazine hydrochloride is as shown in Figure 1.

It is official in British Pharmacopoeia 1993, The United State Pharmacopoeia 1970 and Indian Pharmacopoeia 1985. Literature survey reveals that various methods for its determination are reported which include flow injection analysis (Caltayud *et.al.*, 1992), chromatography (Sreenivasa *et. al.*, 2001 and Laitem *et.al.*, 1978), spectrofluorometry (Hornyak *et.al.*,1997 and Szydłowska *et. al.*, 2001), solid phase extraction (Song and Putcha, 2001). The spectrophotometric method (Gowda *et. al.*, 2003 Devani *et.al.*, 1999) involved the chromogenic reaction with various reagents. Some of the extractive spectrophotometric methods (Basavaiah and Krishnamurthy, 1998, Regulska *et.al.*, 2002 and Regulska and Puzanowska, 2001) have been reported for the estimation of promethazine hydrochloride. The objective of the present study was to develop a simple extractive spectrophotometric method with calmagite chromogenic reagent. The method is useful for routine quality control of drug in bulk and in its pharmaceutical formulation.

MATERIALS AND METHODS :

Instrument: A Equiptronic model EQ282 visible spectrophotometer with a pair of 1 cm matched quartz cells was used for optical measurements.

Standard stock solution: A 0.01M stock solution of pure Promethazine hydrochloride (PMTH) of Sigma make was prepared in 0.1 N Hydrochloric acid solution. A working standard solution of $32 \mu\text{g ml}^{-1}$ was prepared by appropriate dilutions.

Calmagite (CLM) solution: A 0.01 M Calmagite solution was prepared in 0.1 N Hydrochloric acid. The reagent solution of desired concentration was then obtained by further dilutions.

All chemicals used were of analytical grade. Chloroform and water used were double distilled.

Calibration curve: In a series of flasks an appropriate aliquots of standard PMTH solution and CLM solution were added and final volume was made to 10 ml. These aliquots were vigorously shaken for 15 minutes in two installments of 5 ml chloroform. The absorbance of the extracted chloroform was scan for determination of maximum wavelength, λ_{max} , in visible range (Figure 2). At this wavelength the absorbance for all other solutions extracted with chloroform were measured against reagent blank and calibration curve was constructed for validation of Beer's Law (Figure 3).

Stability constant: 0.001M and 0.002M solutions of PMTH and CLM were prepared by appropriate dilution of stock solutions. Different aliquots of drug and chromogenic reagent were mixed in varying proportion of mole fraction of drug. These aliquots were then similarly extracted with chloroform as discussed above. A Turner and Anderson plot (Singh, 2002) was plotted (Figure 4) to calculate stability constant of the complex formed.

Estimation of drug in formulation: The PMTH tablets Phenargan were procured from local market. Twenty tablets were weighed and powdered in mortar. An amount of sample powder equivalent to 10 mg of drug was transferred to 100 ml volumetric flask. 0.1 N Hydrochloric acid was added and shaken thoroughly to dissolve the sample powder completely. The volume was made up to the mark and the solution was filtered. Suitable aliquots were mixed with CLM solution and extracted similarly as discussed previously. The amount of the drug present in tablet was then calculated from absorbance of sample and calibration curve. The optical parameters, regression equation (Table 1) and results of error analysis (Table 2) is studied.

*For five observations

RESULTS AND DISCUSSION :

CLM and PMTH form ion pair complex in acidic medium. The drug and CLM are soluble in aqueous medium while the complex formed is insoluble in aqueous medium but highly soluble in chloroform. This makes the basis of the



Globalisation, Climate change and its impact on Agriculture

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Abstract :

The harmful and profound environmental effects of climate change are not limited to the occurrence of severe heat waves and threats to river water systems other phenomena observed worldwide in recent years include : reductions in snow and sea ice extent, rising sea levels, changes in ocean acidity, extended droughts, stronger tropical storms as well as increased frequency of heavy and extreme rainfall events. Already one of the most disaster-prone nations in the world, India is considered to be extremely vulnerable to these effects. Its dense coastal populations could be hit hard by rising sea levels, while changing weather patterns may negatively impact agricultural and food security. They could also lead to acute water shortages and deadly disease outbreaks. The warmer atmospheric temperatures observed over the past decades are expected to lead to a more vigorous hydrological cycle, including more extreme rainfall events, Erosion and soil degradation is more likely to occur. Soil fertility would also be affected by global warming. In India most of the waste electronic item are stored at households as people do not know how to discard than this ever increasing water is very complex in nature and is also a rich source of metals such as gold, silver and copper. Environmental change as a cause of violent conflict has been a contentious issue in the security discourse of the 1990s. Climate change and agriculture are interrelated processes, both of which take place on a global scale. Global warming is projected to have

significant impacts on conditions affecting agriculture, including temperature, carbon dioxide, glacial run-off, precipitation and the interaction of these elements

Keywords : Globalisation, climate change, Global warming

Introduction :

Chronic water shortage are affecting ever more regions of the country. India has the highest volume of annual groundwater overuse in the world. Water mining is taking place at twice the rate of natural recharge in many parts of the country. As aquifers have begun to dry up, water-tables have dropped, sometimes (as in Punjab) at the rate of 3-10 feet per year). As temperatures rise on account of climate change, the per capita availability of water in India is expected to fall from 1820 cubic metres per annum in 2001 to 1140 cubic metres per annum in 2050. Many in developing countries see globalization as a positive force that lifts them out of poverty. Those opposing globalization typically combine environmental concerns with nationalism. Opponents consider governments as agents of neo-colonialism that are subservient to multinational corporations. Much of this criticism comes from the middle class; the Brookings Institution suggested this was because the middle class perceived upwardly mobile low-income groups as threatening to their economic security. Fiss et al., survey showed that, in 1993, more than 40% of respondents were unfamiliar with the concept with the concept of globalization. When the survey was repeated in 1998, 89% of the respondents had a polarized view of globalization as being either good or bad. At the same time, discourse on globalization, which began in the financial community before shifting to a heated debate between proponents and disenchanted students and workers. Polarization increased dramatically after the establishment of the WTO in 1995; this event and subsequent protests led to a large scale anti-globalization movement. Initially, college educated workers were likely to support globalization. Less educated workers, who were more

Self Help Groups and Rural Development

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Abstract :-

Self Help Groups are better equipped to help the rural poor to overcome their day to day problems and increase their socioeconomic status and empowerment of women and marginal people/ Villages face problems related to poverty, illiteracy, lack of skills, health care etc. These problem that cannot tackled individually but can be better solved through group efforts. Today these groups known as self Help Groups have the vehicle of change for the poor and marginalized.

In the 1970s the emphasis moved from mass movements to small group movements in some countries. In Germany, people began to be interested in their ordinary lives than in political abstractions / In 1981 National Bank for Agriculture and Rural Development (NABARD) came into existence. Rural financing has been playing and will continue to play an important role in the development of the Indian Economy.

There is a need to provide then microcredit. The Banks have evolved a new approach to reach out the rural poor named " Self Help Group FINANCING"

Microcredit as a system of lending small loans has been followed world wide i.e. In Asia Africa and Latin America, Philippines, Bangladesh, Shrilanka,

In India, though Nabard initiated microcredit in 1986-87 the real effort has taken after 1991-92 through the linkage of SHGs with bank.

Introduction :-

Recently , as more practitioners, bankers donors and scholars have soldiered forth into the world of self Help Groups, SHGs are better equipped to help the rural poor to overcome their day to day problems and increase their socioeconomic status and made through political life with respect to empowerment of woman and marginalized people.

In the 1980s policy makers took notice of and worked with development organizations and bankers to discuss the possibility of promoting the savings and credit groups. Their efforts and the simplicity of

SHGs helped to spread the movement across the country. State Government established revolving loan funds, which were used to fund SHGs By the 1990s SHGs were viewed by State Government and NGOs to be more than just a financial intermediation but as a common interest group working on other concerns as well. Village face problems related to poverty, illiteracy, lack of skills, health care etc. these are problems that can not be tackled individually but can be better solved through group efforts. Today these groups known as self Help Groups have become the vehicle of change for the poor and marginalized. There is a strong belief that the individual would be able to bring about change only through collective efforts, and this effort is built on mutual trust and mutual support that can be the base for the formation of SHGs.

Self Help Groups are usually in formal clubs or association of people who choose to come together to find ways to improve their life situations. One of the most useful roles for self Help Groups is to provide its members with opportunities to save and borrow and act as a conduit for formal banking services to reach their members. Such group can provide a guarantee system for members who borrow or they may develop into small village banks in their own right, SHG is a social designs in which people participate by making themselves socially and economical accountable to each other.

What is SHG ?

Self Help Groups are groups of 10-20 people in a locality formed for any social or economic purpose most of the SHGs are formed for the purpose of better financial security among its members . SHGs can exists with or without registration. SHGs in India often work in association with banks.

SHG as approved by National Bank for Agriculture and Rural Development (NABARD) the apex banking body in India, is " An SHG is a small , economically homogeneous and affinity group of rural poor , voluntarity formed to save and mutually agree to contribute to a common fund to be lent to its mem-

भारतातील नोटबंदी ते कॅशलेस व्यवहार व त्याचे

भारतीय अर्थव्यवस्थेवरील झालेल्या आर्थिक व

सामाजिक परिणामाचे चिकीत्सक अध्ययन

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प्रस्तावना : ८ नोव्हेंबर २०१६ ला केंद्रसरकारने रु.५०० व रु.१००० च्या नोटा बाद केल्या याचा मुळ उद्देश भ्रष्टाचार काळा पैसा बेनामी व्यवहार खोट्या व बोगस नोटांना चलनातून रोखणे हा होता त्याचबरोबर रोख व्यवहारांचे प्रमाण हळूहळू कमी करून रोखविरहीत (कॅशलेस) व्यवहाराला चालना देणे हे धोरण आहे. काळ्या पैशामुळे सरकारकडे कर उत्पन्न पाहीजे तेवढे जमा होत नसल्याने सरकारच्या कर उत्पन्नास घट होत आहे. त्यामुळे प्रत्यक्ष करदात्यावर अप्रत्यक्षपणे अन्याय होतो मे २०१२ मध्ये जाहीर झालेल्या काळ्या पैशावरील व्हईट पैशानुसार २०१० मध्ये स्विस बँकेत भारतीयांचे ९२.९५ बिलियन रुपये एवढे आहेत.

२०१७ - १८ मध्ये स्विस बँकेत अडीच हजार कोटी डिजिटल व्यवहार व्हावेत असे सरकारचे उद्दिष्ट आहे. नोटबंदीचा भ्रष्टाचार व अतिरेकी कारवायांना पायबंद बसावा हा सरकारचा उद्देश आहे. नोटबंदीचा सकारात्मक परीणाम म्हणजे प्रत्यक्ष व अप्रत्यक्ष करात १५० : ते २०० : पर्यंत वाढ झाल्याचे दिसते.

नोटबंदीचा उद्देश

१. नोटबंदीचा उद्देश हा भ्रष्टाचार मिटविण्यासोबतच समाजातील अंतीम स्तरावरील गरीबांचे कल्याण साधणे हा आहे.

२. जी.एस.टी. कर प्रणालीच्या कुशल उपयोगासाठी काळ्या पैशाची समांतर अर्थव्यवस्थेला समाप्त करणे.

३. डिजिटल व्यवहाराला चालना देणे.

४. काळा पैसा व नकली नोटांचा व्यवहार करणाऱ्यांवर अंकुश आणणे व देशाला आर्थिक बाबतीत सुक्षित करणे.

जगभरातील नोटबंदीची उदाहरणे :-

जगभर निश्चलनीकरणाचे बरेच व्यवहार या पुर्वीही झाले आहेत. नोटबंदी हा काही जगावेगळा प्रयोग सरकारने केला आहे असे जे वातावरण काही राजकीय पक्षांनी आपल्या स्वार्थासाठी व देशाच्या हिताला बाधक ठरेल असा प्रयत्न चालविला आहे ते अयोग्य आहे. सोव्हियत युनियनने १९९१ मध्ये मिखाईल गोर्बाचेव्ह यांच्या नेतृत्वाखाली ५० व १०० च्या रुबल्सवर बंदी आणली होती परिणामतः तेथेही त्या सरकारला काळ्या पैशांवर नियंत्रण मिळविण्यात यश आले होते. काळा पैसा साधारणतः चल व अचल संपत्तीशिवाय चलनाच्या स्वरूपातही ठेवला जात असतो. चल व अचल संपत्ती वर जसे की शेती, प्लॉट्स, घरे, सोने, चांदी, हिरे वगैरेवर सीलींग लिमिट लावून काळा पैसा बाहेर काढला जाऊ शकतो व संपत्तीचे विकेंद्रीकरण केले जाऊ शकते.

चलनाला बाहेर काढावयाचे असल्यास असे जुने चलन रद्द करणे हाच एकमेव मार्ग उपलब्ध असतो

उत्तर कोरीयाने २०१० मध्ये किम जांग इतने या हुकुमशहाने अर्थव्यवस्था रूळावर आणण्यासाठी असा निर्णय घेतला होता. झैरे या देशाचा हुकुमशाहा मोबुतू सेसे यानेही जुने चलन एकदम बंद करण्याचा निर्णय घेतला होता म्यानमारने १९८७ मध्ये असा निर्णय घेऊन प्रचलित ८० टक्के चलन बंद करून काळ्या बाजारावर नियंत्रण मिळवले होते. नायझेरीयामध्ये मुहम्मद बुहारी या लष्करी शासकाने १९८४ मध्ये याच प्रयोगाने अर्थव्यवस्था सुधारण्यासाठी प्रयत्न केले होते. घानामध्ये भ्रष्टाचार रोखण्यासाठी ५० सेंडिरच्या नोटा १९८२ मध्ये रद्द करून अर्थक्रांती घडवून आणली होती.

भारतात ८६ टक्के अर्थकारण हे मोठ्या नोटांनी व्यापले होते परिणामतः समांतर अर्थव्यवस्था निर्माण झाली होती ही व्यवस्था मोडून काढण्यासाठी नोटबंदीचा हुकुमशाही पध्दतीचाच निर्णय घेणे आवश्यक होते.

सर्वच व्यवहार उजागरपणे केले जातील. अखंड ग्राऊंड अर्थव्यवहार संपुष्टात येतील तर अर्थातच याचे सुपरीणाम म्हणजे सरकारचे उत्पन्न तर वाढेलच व आपले जे समाजवादी समाज रचनेचे स्वप्न आहे ते पूर्ण होण्यासाठी याचा परिणाम पाहावयास मिळेल. आज जी गरीब व श्रीमंत यामध्ये प्रचंड दरी आहे. जसे ज्याचे आहे त्याचे जवळ खूप आहे व नाही त्याचे जवळ काहीच नाही हे स्वरूप हे कल्याणकारी राज्य निश्चितपणे बदलेल असे जाणवते आहे.

शोधनिबंधाची उद्दिष्टे :

१. भारतातील नोटबंदीचा भारतीय अर्थव्यवस्थेवरील आर्थिक व सामाजिक परिणामाचा अभ्यास करणे.

२. नोटबंदीचा भ्रष्टाचार, दहशतवादी कारवाया यावर झालेल्या परिणामांचे अध्ययन करणे.

३. काळापैसा व भ्रष्टाचार यातील परस्पर संबंध तपासणे.

४. नोटबंदीचा जनसामान्यांच्या आर्थिक व्यवहारांवर झालेला परिणाम स्पष्ट करणे.

गृहीते : प्रस्तुत शोधनिबंधासाठी खालील गृहीते विचारात घेण्यात आली.

१. नोटबंदीमुळे भ्रष्टाचाराला आळा बसत आहे.

२. नोटबंदीमुळे काळा पैसा उजेडात येत आहे.

३. नोटबंदीमुळे अतिरेकी कारवायांना पैशाच्या टंचाईमुळे पायबंद

- ५) मादक पदार्थाविषयी योग्य शिक्षण देणे
- ६) मद्यविक्रीवर कडक निर्बंध लावणे
- ७) उपचार व पुनर्वसन केंद्राची स्थापना करणे

वरील सर्व उपाययोजनातून व्यसनाधिनतेचे प्रमाण कमी होण्यास मदत होईल पण यात सर्वात जास्त कुटुंबाची प्रभावी भूमिका आहे. आपल्या मुलाशी निखळ सुसंवाद, त्याच्या अडचणी तो आपल्याशी मनमोकळेपणी सांगेल असे कुटुंबातील वातावरण व त्याचे मित्र कसे आहेत यात पालकांनी लक्ष ठेवणे गरजेचे आहे. तरच तरूणांना आपण या मादक पदार्थापासून दूर ठेवू शकू. यात कुटुंब, शाळा, महाविद्यालय, सामाजिक संस्था, डॉक्टर, सामाजिक कार्यकर्ते व शासकीय स्तरावरून प्रयत्न करणारे अधिकारी यांनी प्रमाणिकपणे व्यसनाधिनतेच्या समस्यातून मुक्त होण्यासाठी आपापली भूमिका जबाबदारीने त्यात्या स्तरावर पार पाडणे आवश्यक आहे.

वरील संशोधन अभ्यासावरून खालील निष्कर्ष समोर आली.

□ निष्कर्ष :

- १) मादक पदार्थाचा व्यक्तीच्या कार्यक्षमतेवर विघातक परिणाम होत आहे.
- २) मादक पदार्थाचा दुरुपयोग करणाऱ्याचे प्रमाण शहरी भागातील मुलांपेक्षा ग्रामीण भागातून आलेल्या मुलांचे अधिक आहे.
- ३) तंबाखू तंबाखूजन्यपदार्थांचे सेवन केल्यामुळे कॅन्सर होवून मृत्यू पावणाऱ्यांची संख्या दिवसेंदिवस वाढत आहे.
- ४) मद्यपान करणारांमध्ये अशिक्षितांपासून सुशिक्षितांपर्यंत व्यक्तींचा समावेश असलेला दिसतो.
- ५) मादक पदार्थाचा दुरुपयोग करण्यापाठीमागे मानसिक ताण, दारिद्र्य, बेकारी ही कारणे असल्याचे प्रकर्षाने दिसते.
- ६) तरूणांमध्ये श्रीमंत कुटुंबातील तरूणांचे मद्यपान करण्याचे प्रमाण अधिक आहे.

संदर्भ सूची

- १) प्रा. जयंत घाटगे - १९९९ - "समकालीन भारतातील सामाजिक समस्या" सकाळ प्रिंटिंग प्रेस, कोल्हापूर, पृष्ठ-८१
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भारताच्या विदेशी व्यापाराची दिशा आणि बदलांचे अध्ययन

प्रा. डॉ. आसावरी दुर्गे
तायवाडे महाविद्यालय कोराडी, जिल्हा नागपूर

प्रस्तावना

आर्थिक विकासात व्यापाराला फार महत्त्व आहे. मग तो व्यापार देशी असो अथवा विदेशी असो. पाश्चिमात्य देशांनी आपला आर्थिक विकास व्यापाराच्या माध्यमातूनच घडवून आणला आहे. विकसनशील देशांच्या दृष्टीने तर विदेशी व्यापार अत्यंत फायदेशीर समजला जातो. विदेशी व्यापारामुळे विकसनशील देशांच्या आर्थिक विकासाला गती मिळते. म्हणूनच विकसनशील देश विदेशी व्यापाराला 'विकासाचे इंजिन' असे म्हणतात.

विदेशी व्यापाराद्वारे कोणताही देश स्वतःच्या व विदेशांच्या साधनसामुग्रीचा उपयोग करून मोठ्या प्रमाणावरील उत्पादन आणि तांत्रिक ज्ञान व क्रांतीचा लाभ प्राप्त करू शकतो. विदेशी व्यापाराच्या सुयोग्य नियमाद्वारे व नियंत्रणाद्वारे उत्पादन, रोजगार, उत्पन्न, किंमती औद्योगिकरण इत्यादीवर वांछित प्रभाव पाडता येते.

विदेशी व्यापाराचा अर्थ (Meaning of Foreign)

वस्तू आणि सेवांची खरेदी विक्री म्हणजे व्यापार होय. परंतु हा व्यापार जेव्हा एकाच देशातील दोन व्यक्तींमध्ये घडून येतो तेव्हा त्याला 'देशीय' किंवा 'अंतर्गत व्यापार' असे म्हणतात. याउलट हा व्यापार जेव्हा दोन देश किंवा दोन देशातील व्यक्तींमध्ये घडून येतो. तेव्हा त्याला 'विदेशी व्यापार' असे म्हणतात.

विदेशी व्यापाराचे एकूण तीन भाग आहेत.

- अ) आयात व्यापार ब) निर्यात व्यापार क) पुनिर्यात व्यापार



EFFECT OF OCCUPATIONAL STRESS ON JOB SATISFACTION AND SUBJECTIVE WELLBEING OF EMPLOYEES IN SELECT PUBLIC SECTOR BANKS

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Abstract

Occupational stress- when requirement of the job do not match the capabilities, resources or needs the output is stress. This concept of occupational stress is often confused with challenge but is not same. Occupational stress is nothing but stress derived from work place.

Occupational stress- different views between worker and the conditions off work are primary cause of occupational stress. These different viewpoints important because they suggest different ways to prevent stress at work. These viewpoints lead to preventing strategies that focus on workers and the way to help them cope with demanding occupational concepts. The workplace is an important source of both demand and pressure causing stress and structural and social resources to counter react stress.

Symptoms of work related stress- many symptoms to stress are generalized such as increased anxiety or irritate ability it is easy for them to be ascribed to a characteristic of worker rather than to a condition of work. There are various ranges of symptoms which has verifiable impact on health of workers some degree of stress is a normal part of life. When stress is intense continuous or repeated as is often the case with occupational stress it can results to ill health. Impact of employee stress- absenteeism- employees under stress do not feel motivated to work and therefore take more number of leaves citing different reasons.

Keywords: *Occupational Stress, Impact Of Employee Stress.*

Introduction

Individual work for living and the major aspects of their life is to manage work life balance for that they try to overcome various things which they faces daily. One of the major aspect is job satisfaction and there are many variables that have been inference to be a result of job satisfaction or dissatisfaction. The concept of job satisfaction has emerged and now there are several factors contributing to it which are monetary and non-monetary job satisfaction of employees and performance/success are significantly related to each other. Better understanding of job satisfaction leads to various factors associated with it helps managers to guide employee's activities in a desired direction. The degree of what we have and what we want inference the difference between need and wants.

According to McGillivray 2007, Wellbeing is a notion generally people and policymakers aspire to improve. Wellbeing is generally viewed as a description of the state of people's life situation. However, it is an ambiguous concept, lacking a universally acceptable definition and often faced with competing interpretations. If we see Wellbeing is very difficult to measure as every individual having their own conceptions and having their own objective and related subjective measures because this includes various factors like feelings, aspiration, experience etc. Like in this study we see the what is the Impact of Occupational stress on Job satisfaction amongst the public sector banks and how they react on their subjective wellbeing.

Objectives of the study

The objectives of study are as under.

1. To study and analyses the occupational stress and related factors in study area.
2. To analyses the effects of occupational stress on job satisfaction and subjective wellbeing of the employees.
3. To study and analyses the various strategies practiced in occupational stress and suggest practical suggestion in the study area.

Hypothesis

Hypothesis for the Study Is Given As Under

1. Irrespective of categories, all the respondents experience the same level of occupational stress.
2. There is no significant difference between individual demographic variables and the occupational stress experienced by the respondents.
3. There is no significant difference between the individual demographic variables and the level of job satisfaction of the respondents.

**वाचनसंस्कृती : काल आणि आज****डॉ. कोमल ठाकरे****तायवाडे महाविद्यालय कोराडी****वाचनाचे महत्त्व:-**

ज्या गुणवान, प्रतिभावान, कर्तव्यनिष्ठ व्यक्तींना राजकीय सत्ता श्रीमतांच्या, हुकुमशहाच्या, लढवय्याच्या, घराणेशाहीच्या हातात जाऊ नये असे वाटत असेल तर त्यांनी ज्ञानसंग्रह करणे ही अत्यंत आवश्यक बाब आहे. ज्ञानसंग्रहासाठी वाचन आवश्यक आहे. ही बाब गोपाळ गणेश आगरकरांनी आपल्या लक्षात आणून दिलेली आहे. त्यांना आपला समाज सुसंस्कृत होण्यासाठी बौद्धिक जीवनाची नवी परंपरा निर्माण करण्याची आवश्यकता वाटली व त्यानुसार त्यांनी वाचनाचे महत्त्व सांगितले. त्याचबरोबर त्यांनी ज्ञानसंपादनाची साधने सांगितली गुरुमुख, वाचन, विचार, अवलोकन आणि वाद या साधनांच्या माध्यमातून आपण ज्ञानप्राप्ती करू शकतो. हा विश्वास त्यांनी प्रकट केला. महात्मा फुले यांनीही ग्रंथाचे, शिक्षणाचे वाचनाचे महत्त्व प्रतिपादन केलेले आहे. अनेक थोर पुरुषांनी जे वाचनाचे महत्त्व सांगितले ते चांगल्या वाचनाचेच सांगितले आहेत. ग्रंथ हे चांगल्या मित्राप्रमाणे असतात. सद्गुणी मित्राच्या सहवासात चांगुलपणा वाढत जातो. तसे चांगल्या ग्रंथापासून सद्गुणच जडतात. सन्मित्राच्या सहवासापासून होणारे फायदे चांगलेच होतात. तसेच चांगल्या विचारांच्या वाचनापासून चांगलेच फायदे होतात.

मानवाला मानसिक श्रमाचा मुळातच कंटाळा आहे. कारण मानसिक श्रम शारीरिक श्रमापेक्षा अवघड आहे. मनाला एकदा दुसऱ्यापासून मदत घेण्याची सवय लागली की त्याचे स्वावलंबन सुटते. तो स्वतंत्रपणे विचार करू शकत नाही. स्वतःचे प्रश्न स्वतः सोडवू शकत नाही व्यवहारात येणाऱ्या अडचणींना सोडविण्यासाठी नवनवीन क्लुप्त्या, युक्त्या, आत्मविश्वास त्याच्याजवळ असणे आवश्यक असतो. त्याचे जर भरपूर वाचन असेल तर त्याचा विचार करणारा मेंदू आणि मन तल्लख असते. त्याच्या बुद्धिवर अडचणीचे घण आदळले की, त्या अडचणी सोडविणारे उत्तर लगेच तयार होते. कारण हे मन सदैव तत्पर असते. ज्या मनाला श्रम करण्याच्या सवयी नसतात, ज्यांच्या बुद्धिला अडचणी नसतात, त्यांचे मन आणि बुद्धि अडगळीत पडलेल्या, गंजलेल्या, लोखंडासारखे होते. जे मन आणि बुद्धि सतत वापरात असते ते सतेज असते. म्हणूनच मनाला वाचनाची सवय असेल तर ते मन स्वतंत्र विचार करण्यासाठी तयार झालेले असते. वाचनाने बुद्धिही सुदृढ, चंचल होते. स्मरणशक्ती वाढते. कल्पनाशक्ती वाढते. मनाची विचार करण्याची शक्ती वाढते.

मुद्रणकलेचा विकास झाल्यापासून वाचायला मिळणारे भरपूर ग्रंथ निर्माण झालेत. अनेक ग्रंथांची भांशांतरे झाल्यामुळे आपल्याला अनेक भाशांचा इतिहास समजून घेता आला. व्यवहारात या वाचनाचा अत्यंत उपयोग होतो. ज्यांना वाचायची सवय नसते, जे स्वतःचे विचार स्वतः करण्यास समर्थ नसतात. त्यांना स्वतःवर आलेल्या प्रसंगाचा सामना करण्याचे सामर्थ्य नसते. अनेक लोक शाळा, कॉलेजच्या ज्ञानबळावर जन्मभर व्यापार करतात. व्यवसायातील अनेक लोकांना व्यसन लागते. पैशाची, शरीराची नासाडी होते व प्रसंगी ती व्यक्ती आत्महत्येसही प्रवृत्त होते. पण ज्यांना वाचनाची सवय असते. अशा लोकांची स्थिती वेगळी असते. वाचनाचे जीवन जगण्याची कला गवसते. वाचनाने जन्म-मृत्युतले अंतर



SCREENING & ISOLATION OF EXTRACELLULAR THERMO-STABLE ENZYMES PRODUCED BY BACTERIAL ISOLATES FROM SALBARDI HOT SPRING REGION

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Cite This Article: Madhuri A. Dixit, Arun B. Ingle, Vijay N. Charde & Swapnil P. Magar, "Screening & Isolation of Extracellular Thermo-Stable Enzymes Produced by Bacterial Isolates from Salbardi Hot Spring Region", International Journal of Current Research and Modern Education, Volume 3, Issue 1, Page Number 239-245, 2018.

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Abstract:

A wide range of thermo-stable enzymes is extracted from thermophilic bacteria from hot springs which are utilized in industries and in research. Proteases are the important range of thermo-stable enzymes which constitutes 59% of the global market share of industrial enzymes. The present study is based on Salbardi hot spring in central India which is known for its medically important hot spring water and its different chemical composition. This study is the first microbiological phylogenetic characterization of soil and water samples from salbardi hot spring region. The study reveals the presence of wide range of thermo-tolerant organisms specifically *firmicutes*, *bacilli* which are able to give optimum growth at a higher temperature range of 55-80°C., these bacteria are the major source of economically important thermo-stable enzymes. Protease production at 60°C was shown in this study also its stability from 50-90°C was checked at different incubation time representing maximum enzyme activity 178.95-216.84 U/ml. Salbardi hot spring is proved to be a wide source for thermo-stable bacteria as well as thermo-stable enzymes.

Introduction:

Enzymes are the backbone of any catabolic and anabolic reactions, there is always a need and search for stable and high yield enzymes. Enzyme Technology based industries have shown booming business in various technological areas. Thermo-stable enzymes have phenomenal importance in the research & development and industrial utilization. The actual study of thermophiles and how their proteins are able to function was started early in 1960 by Brock and his colleagues but from past two decades, thermo-stable enzymes and microorganisms have been topics for much research.¹ The major sources of thermo-stable enzymes are thermophilic bacteria from hydrothermal vents. The advantage of using these enzymes is that they are stable at high temperature.² High-temperature stability of these enzymes in any enzymatic reaction allows higher substrate concentrations, lower viscosity; fewer risk of contamination and often higher reaction rates at elevated temperatures.³

Microorganisms have the ability to be cultured in large scale fermentation in lesser time with abundant desire product which makes attractive sources for protease and other enzymes. Gene manipulation is easy in microorganisms than in plants and animals for improvement of the enzyme performance.⁴ In totality, protease constitutes 59% of the global market share of industrial enzymes, which was exceeded \$ 2.9 Billion by 2012.⁵ A wide range of proteases has been commercially used in detergents, leather, food and pharmaceutical industries. Protease has been a group of enzymes whose main catalytic function is to hydrolyze peptide bonds of proteins and break them down into polypeptides or free amino acids.^{6,7}

Geothermal springs including hot springs are substantially higher in temperature than the air temperature of the surrounding region and it has been a rich source of thermo-tolerant microorganisms. Salbardi thermal spring is situated near Maru River, in central India and discharges through the Deccan volcanic and in particular, Salbardi falls along the Satpura fault where DFB (Deccan flood basalt) are in tectonic contact with the sedimentary Archean formations of the 'Gondwana Supergroup'.⁸ Salbardi hot spring has the base temperature of 66°C. The springs flow into a small stone cistern which was formerly divided into compartments for the hot and cold water. Now they are mixed due to the human interference and development. This thermal spring water is Na-Cl-SO₄ type against the Ca-Mg-HCO₃ type regional groundwater. Heat source appears to be normal earth temperature gradient indicated reservoir temperature is 110 ±10°C.^{9,10} The present study focuses on the water and soil sampling from Salbardi hot spring region for the screening and isolation of thermo-stable bacteria for economically important extracellular thermo-stable enzymes.

Materials and Methods:

Isolation and Identification:

Soil and water samples collected from salbardi hot spring region, samples were collected from hot spring including other geological points showing different latitude and longitude which is shown in Table-1, in



Assessment of Antibiotic-potentiating Activity of Aqueous and Methanolic Extracts of *Piper nigrum* Against Multi-Drug Resistant Phenotypes of *Pseudomonas* sp.

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Abstract:

Survey and experimental facts reports the escalating resistance of microorganisms to antibiotics across the globe. This tremendous expansion has stimulated the scientists to discover the alternative strategy that aim and obstruct the consequences of drug resistance. One approach to get rid of this problem could be the adoption of tactics of combination of plant extracts with antibiotics to increase their efficacy. The study was therefore, designed to determine the effects of combining the extract of *Piper nigrum* with selected antibiotics on MDR *Pseudomonas* sp. The *Pseudomonas* isolates were screened from different pathological laboratories of Nagpur (M.S.), India. Identified *Pseudomonas* isolates were then analysed to deduce antibiogram against total 18 antibiotics, most resistance 5 isolates were then evaluated for antibacterial activity of extract alone, and its antibiotic potentiating activity. The antimicrobial activity of each extract was assessed against selected microorganisms and varied results were obtained for each isolate. The hot and cold extracts of herb were prepared in solvents; Methanol and Water. Both hot and cold methanol extract showed very good synergistic effect on most of the antibiotics against Isolate Pseu 3 and water extract showed insignificant effect as compare to methanol extract. Almost all the extracts showed very good synergistic effect on all the antibiotics against Isolate Pseu 19. No significant effect was demonstrated against Isolate Pseu 20 & 26. The overall results denotes the significant antibiotic potentiating activity of some extracts.

Keywords: Antibiotic potentiating activity, Antibacterial activity, Drug resistance. *Piper nigrum*, *Pseudomonas* as sp.

Introduction:

The discovery of antibiotics was landmark discovery to eliminate the infections but the condition seems to ravage because of their indiscriminate use. Arbitrary practicing of antibiotic therapy by medical practitioners and public (self medication) has led to the development of multidrug-resistant (MDR) pathogens (Hemaiswarya S. *et al.*, 2008). The antibiotic resistance not only made the bacteria resistant to commonly available antibacterials but also has acquired augmented virulence (Prabhavathi F. 2006). Researchers are concern about prevention of the emergence of new resistant strains and its spread (Okeke I. N. *et al.*, 2005).

If infection acquire resistant to first line antimicrobials, then treatment procedure is shifted to second line antimicrobials then subsequently to third line antimicrobials. Second and third line drugs are often increases the cost of treatment (Sibanda and Okoh, 2007). The widespread resistance of first-line drugs in poor countries in developing nations increases the mortality and morbidity rates in population (WHO, 2002). The frightening challenge of MDR urges the development of alternative approach and discovery of new antimicrobial compounds (Sibanda and Okoh, 2007). The possible approach in the treatment of infectious diseases could be the use of agent that directly do not kill pathogenic bacteria but modify the bacterial

phenotype that make MDR pathogen susceptible to the antibiotic (Taylor *et al.* 2002). As the research outcomes have shown that active efflux is the main mechanism for the development of antibiotics resistance (Lin J. *et al.*, 2002); inhibition of these active efflux pumps possibly decreases the rank of intrinsic resistance (Lomovskaya O., and Warren M. S., 2001). The duo of antibiotics and efflux pump inhibitors is an effectual approach to resolve the problem of MDR (Lomovskaya O. and Bostian K. A. 2006). The benefit of plants to human life is diverse; as food, as sources of industrial substrate, as sources of medicinal component and many more (Azoro, 2004; Erturk *et al.*, 2006). Medical trials and In vitro evidences proved that plants hold the capacity of combating the problem of antibiotic resistance. Phytomedicine practices have shown remarkable results in the treatment of many infectious diseases including viral infections (Cowan M. M. 1999). Since historic times, mono and poly herbal preparations have been exercised for the treatment of various diseases. In advance studies of phytomedicine, approach have been made to extract a range of natural products and screening of their antimicrobial activity (Abu-Shanab B. *et al.* 2004). Phytochemicals give promising results in combination therapy which may act as multidrug resistance modifiers (Hemaiswarya S. *et al.*, 2008). These phytochemicals can reverse the resistance by several mechanisms including blocking the efflux



ISSN: 0976-3031

Available Online at <http://www.recentscientific.com>

CODEN: IJRSFP (USA)

International Journal of Recent Scientific Research
Vol. 8, Issue, 6, pp. 17930-17938, June, 2017

**International Journal of
Recent Scientific
Research**

DOI: 10.24327/IJRSR

Review Article

HARMONY OF PHYTOCHEMICALS AND ANTIBIOTICS: A BOON IN ANTIMICROBIAL THERAPY

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ARTICLE INFO

Article History:

Received 16th March, 2017
Received in revised form 25th
April, 2017
Accepted 23rd May, 2017
Published online 28th June, 2017

Key Words:

Phytomedicine, Therapeutic agent,
Biological activity, Synergistic action,
Drug resistance.

ABSTRACT

Plants contains bountiful of potentially useful constituents for the development of novel therapeutic agent, hence in recent years drug development in phytomedicine has gained considerable interest. With the emergence of MDR pathogens and insufficient treatment strategy with antibiotic, investigators turned eye in search of alternative potential approach for treatment. Phytochemicals is a unified and unique complex of natural components having therapeutic efficacy. Biological activity of phytochemical is associated with its chemistry. It elaborates the development of natural products, combining it with modern antibiotics to confer its action against MDR pathogens. Present review has been aimed to summarize past practices and latest issues of medicinal plants and its phytoconstituents in medical microbiology against MDR pathogens. It also deals with vast ancient knowledge and its diverse applications, and rejuvenation of therapy with synergistic action of antibiotics and phytochemicals, and its mechanism of action.

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INTRODUCTION

The medicinal potentials of plants have long been recognized and to date plants remain the main source of drugs in the traditional medicine. Plants with curative potentials are known as medicinal plants and have been employed in the treatment of various ailments, and even poisonous properties of phytochemicals were used since pre-historic times for the control of disease causing agents and their vectors (Ghaleb et al., 2010, Olgica et al., 2009). Various plants and their extracts have been exploited for the treatment requiring antimicrobial activity. Since long, honey is being used as one of the popular natural antimicrobial substances, especially for throat infections (Rafa't and Jawad, 2011, Odunbaku and Ashidi, 2012). Most of the herbs have been employed in the traditional herbal medicine exclusively for curative purposes while others serve as food, condiments in food and drugs to control pest, rodents, insects, etc (Hassain, 2002). Some herbs serve as food as well as medicine such as *Treulia africana* and

other species of *Treulia* (Ogbonnia et al., 2008, Maryam et al., 2010).

Morphine was separated from *Papaver somniferum* L. (Opium) and its structure was studied in 1804 although earlier benzoic acid was isolated from plants in 1560 (Maryam et al., 2010). Since then plenty of drugs from plants have been discovered but less than 100 of drugs with defined structure are in use today. In western medicine tentatively 55 or more drugs are being widely employed. Some drugs with defined structure such as aspirin, atropine, artemisinin, colchicine, digoxin, ephedrine morphine, physostigmine, pilocarpine, quinine, quinidine, reserpine, taxol, tubocurarine, vincristine and vinblastine are derived from medicinal plants (Gudrun ulrich-merzenich et al., 2010, UNESCO (1996)).

In the survey of WHO, IHO, almost 70-80% populations living almost solely on conventional medicine for their basic health care needs and nearly 61% of drugs marketed worldwide can be outlined to natural products. Natural product always considered a first choice in the global market. Abundance and availabilities have enforced in the development of native and

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ANTIBIOGRAM STUDY OF METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS AND DEMONSTRATION OF VANCOMYCIN RESISTANCE AMONG MRSA ISOLATES FROM TERTIARY CARE HOSPITAL, NAGPUR (M.S.) INDIA

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ABSTRACT

Staphylococcus aureus has long been recognized as a major pathogen of hospital acquired infections. Over the last decade, Methicillin resistant *Staphylococcus aureus* (MRSA) strains have become endemic in hospitals worldwide. Antibiotic resistant pathogen constitutes an important and growing threat to public health. Healthcare associated

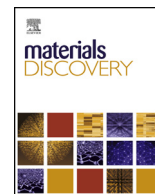
Methicillin-resistant *Staphylococcus aureus* (MRSA) is a major cause of nosocomial infection with significant attribute morbidity and mortality in addition to pronounced healthcare cost. Nagpur region of Maharashtra state is a central part of our country, which have various tertiary care clinical centres. Limited reports were available on development of Methicillin and Vancomycin resistant *Staphylococcus aureus* from this part of India. Vancomycin from glycopeptides category is last resort of drug. Hence there is need of continuous surveillance of antibiotic resistance patterns of *Staphylococcus aureus* and there genotypic variation to controlled antibiotic resistance problem so that we may not fall back into pre-antibiotic era. From Indira Gandhi Medical College and hospitals, Nagpur the total 619 clinical samples were collected from different source and 418 samples were positive for *S. aureus*. Out of these 362 clinical samples were positive for coagulase test. In Nagpur region methicillin resistance among the *S. aureus* isolates was 61.60%. Higher resistance in MRSA was found to

multiple antibiotics, penicillin, Tetracyclin, Erythromycin, nitrofurantoin, Tobramycin and gentamicin and lower resistance was found to Vancomycin, Amikacin and chloramphenicol. Prevalence rate of MRSA was found 61.60 % and Vancomycin resistant among MRSA isolates was found 27.20%. The increasing trend of antimicrobial resistance was observed in present study.

Keywords: MRSA, VRSA, Vancomycin, Methicillin

I. INTRODUCTION

Staphylococcus aureus is one of the members of genus *Staphylococcus*. The genus *Staphylococcus* is currently composed of 41 species and 21 subspecies¹. The *Staphylococci* most frequently associated with human infection are *S. aureus*, *S. epidermidis* and *S. saprophyticus*. Other *Staphylococcus species* may also be associated with human infection². *Staphylococcus aureus* has long been recognized as a major pathogen of hospital acquired infections. Over the last decade, Methicillin resistant *Staphylococcus aureus* (MRSA) strains have become endemic in hospitals worldwide. Antibiotic resistant pathogen constitutes an important and growing threat to public health. Healthcare associated Methicillin-resistant *Staphylococcus aureus* (MRSA) is a major cause of nosocomial infection with significant attribute morbidity and mortality in addition to pronounced healthcare cost. Many hospital struggles with



UV–visible downshifting in $\text{CdWO}_4\text{:Ce}^{3+}$ nanosized phosphor

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ARTICLE INFO

Keywords:

Downshifting

Nanoparticles

Phosphor

Wet chemical method

Lanthanides

ABSTRACT

In this paper, the synthesis of Ce^{3+} doped CdWO_4 nanophosphor and its downshifting properties is presented. The reported nanosized phosphor was synthesized by low cost and low-temperature wet chemical method. Phase purity and crystallite size were measured by XRD and HRTEM techniques, and photoluminescence characterization was carried out for its downshifting properties. The XRD pattern reveals that the CdWO_4 has a monoclinic structure and it is in good agreement with standard PDF pattern. HRTEM images reveal that the phosphor has nanoflakes and nanogranules structural morphology. The present phosphor $\text{CdWO}_4\text{:Ce}^{3+}$ shows good downshifting property and converts the broad ultraviolet band (ranging from 220 to 400 nm and peaking at 285 nm) into a visible spectral band extending from 400 to 650 nm and peaking at 474 nm. The excitation and emission spectra are analyzed by curve fitting using the Gaussian function for the contribution of the 5d-4f allowed transition of Ce^{3+} ion. Such downshifting phosphor may be used to improve the light conversion efficiency of Si solar cells.

1. Introduction

Among the different families of tungstate materials, $\text{Cd}(\text{WO}_4)$ nanocrystals with monoclinic symmetry are interesting due to their high refractive index (RI), high absorption coefficient, low radiation damage, low afterglow and luminescence characteristics [1,2]. Therefore this material is used for X-ray scintillator and laser applications [3,4]. The luminescence from this host materials originates from the WO_4 group. Concerning the luminescence property, the intrinsic luminescence in CdWO_4 crystals originates from tungstate groups of these crystals. According to reported literature, in some cases, the luminescence in cadmium tungstate crystals is related to the WO_6^{6-} groups [5]. Currently Ln^{3+} (Ce^{3+} , Pr^{3+} , Sm^{3+} , Yb^{2+} , Nd^{3+} etc) doped tungstate based host has potential application in Si-solar cell due to its observed luminescence properties in the NIR spectral range. Solar among this solar energy is a clean and natural source of energy which will uses photovoltaic (PV), cells in the emerging energy source. Thus it is a prominent and emerging source of the 21st century [6]. To date, there are different types of solar cells is fabricated and studied such as – an inorganic cell (Si cell), organic (Dye-sensitized cell), Perovskite solar cell, Tandem solar cell, CdTe cell etc [7]. From these options, Si solar cells are the most commercially used over the past few years. However, the efficiencies of this cell are limited and found to be approximately

18% due to a spectral mismatch between absorption edge of Si and the incident sunlight and results in low conversion efficiency [8]. The luminescence downshifting layer has the ability to improve the light conversion of Si solar cell by avoiding spectral mismatch [9]. The use of a down-shift layer on the front side of crystalline silicon solar cells to modify the incident solar spectrum is a promising way to improve the conversion efficiency by converting ultraviolet (UV)–visible light to the NIR emitting photons i.e conversion of high energy photon into one or more low energy photons [10]. There are very few host materials which can be used for downshifting purposes such as tungstate, vanadate, and aluminate. Among the different lanthanides ions, when Ce^{3+} is doped into such a phosphor host, it shows that the broad absorption bands start from UV to visible region and the especially cover a blue spectral region [11–14]. Thus the strong absorption of Ce^{3+} in 300–400 nm is used to improve the spectral response of the solar cell [15–18]. Also, Ce^{3+} -doped phosphors may be used as a scattering layer on dye-sensitized solar cells to enhance the light conversion efficiency (i.e. to improve light absorption and scattering) [19]. Considering such advantages of RE-doped phosphor, here we have proposed a UV–visible downshifting mechanism in Ce^{3+} doped $\text{Cd}(\text{WO}_4)$ phosphor for solar cell application.

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Thermoluminescence Properties of Gamma and C^{5+} Ion Beam Irradiated $Sr_2(1-x)(Dy,Na)_xZnWO_6$ Phosphors

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ABSTRACT

The thermoluminescence study of $Sr_{2(1-x)}(Dy,Na)_xZnWO_6$ phosphors irradiated with γ -ray (Co^{60}) and 75keV C^{5+} ion beam were investigated. The TL glow curves of γ -rays and C^{5+} ion beam irradiate phosphors show similar nature. The glow curve has three distinguishable overlapping components of glow peaks. The relative intensities of component glow peaks are different for both type of irradiation. Glow curves were analyzed by deconvolution and calculation of trapping parameters using Chen's peak shape method for understanding the nature of trapping centers which results different glow peaks.

Keywords: Thermoluminescence, C^{5+} ion beam, Double perovskite tungstate, Phosphors.

I. INTRODUCTION

Thermoluminescence (TL) is emission of light from the material as consequences of heating a material which is previously exposed to ionizing radiation. The glow curve (graph of TL emission intensity vs. temperature) yields important information about the nature of the traps in the luminescent material. TL is an extensive technique used for dosimetry of ionizing radiations as in this process, the intensity of glow peak reflects the absorbed dose [1-7]. Phosphor material show different response to different types of ionizing radiation, this is due to different spatial dose distribution [8].

Heavy ion beams have been used for diagnostic and therapeutic purposes for a long time now. The application of radiotherapy is based on the fundamental principle of achieving precise dose localization in the target lesion while causing minimal damage to surrounding normal tissues. Energy deposition of carbon ion beams increases with penetration depth up to the sharp maximum at the end of their range, known as the Bragg peak. Because the original peak is too narrow and sharp to completely cover the target lesion, broadening of the narrow peak according to the size of the lesion is used in cancer treatment [8,9]. This result in carbon ion

beams allowing a highly localized deposition of energy that can be utilized for increasing radiation doses to tumors while minimizing irradiation to adjacent normal tissues. Nevertheless, the dose of these energetic ions needs to be measured with great precision and accuracy, especially when dealing with human beings. This has triggered investigations to use thermoluminescent dosimeters (TLDs) for dose verification in heavy ion irradiation. In this respects Numan Salah have investigated Carbon ions irradiation on nano and microcrystalline $CaSO_4:Dy$ a well-known TLD material [10].

The tungstates with double perovskite structure offers various interesting physical properties such as electrical [11], magnetic [12], optical [13] and photocatalytic [14] properties, which has attracted researchers' attention since 50 years [15,16]. As the Dy^{3+} doped Sr_2ZnWO_6 phosphors shows excellent photo luminescent properties. Thus, in this context we extend our previous work [17], and investigate the TL properties of $Sr_{2(1-x)}(Dy,Na)_xZnWO_6$ phosphors using γ -rays from Co^{60} source and C^{5+} ion beam.



Taxonomic Study of Potter Wasp (Hymenoptera: Vespidae: Eumeninae) from Koradi Region Dist. Nagpur, India

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Abstract

Wasp is the diverse group of insect belonging to the order Hymenoptera and the sub order Apocrita. Potter wasp are solitary wasp which is mainly feed on nectar but their offspring are carnivorous they mostly feed on pest insect like beetle larvae, caterpillar. Adult wasp paralyzing pest insect and place in to the nest to serve as a food for their offspring this character making wasp valuable in horticulture for biological pest control. In present work comprehensive survey was done during the year 2013-2015 for explore these beneficial creatures, six species of potter wasp belong to three genera are recorded. Four wasp species from the genus *Delta*, *Delta pyriforme pyriforme* (Fabricius, 1775) *Delta conoideum* (Gmelin, 1790) *Delta esuriens* (Fabricius, 1787) *Delta dimidiatipenne* (de Saussure, 1852), one species from genus *Rhynchium*, *Rhynchium brunneum* (Fabricius, 1793) and one species from genus *Xenorhynchium*, *Xenorhynchium nitidulum* (Fabricius, 1798) from the sub family Eumeninae of the family Vespidae are recorded from the koradi region state Maharashtra, India

Key words- Vespidae, Eumeninae, potter wasp, mason wasp, beneficial insect

Introduction

Potter wasp or mason wasps are cosmopolitan insect belonging to the family Vespidae and subfamily Eumeninae it is widely distributed subfamily which includes about 3,000 species more than 200 genera (Pickett and Carpenter, 2010). The potter wasps are recorded from various state of India, some important informative contribution on potter wasp are available by (Van der vecht 1937, 1959, 1961, 1963, 1981). Roy and Kundu 1985, Gupta 1995, 1997, 2003, 2007) note worthy contribution of taxonomy on Indian potter wasp. In present work comprehensive survey was done during the year 2013-2015 for explore these beneficial creatures.

Materials and methods

The survey was conducted during the year 2013-2015 from various sites of Koradi region. Adult potter wasps were collect from various weeds, grassland and houses with help of insect collecting net. Wasp nest also took to laboratory for observe the adult wasp emergence. The specimens study under the stereo zoom microscope identified the species with the help of reference.

Observation

Delta pyriforme pyriforme (Fabricius, 1775)

Image no. -1

Diagnosis: Female- head yellow, a broad black transverse band between the eyes on the vertex; occiput mostly black; antenna reddish- brown; pronotum entirely and mesoscutum anteriorly yellow; tegula, parategula, scutellum and metanotum reddish brown; propleuron black; mesopleuron, metapleuron, propodeum and legs reddish brown with a narrow medial vertical black line; the structure between scutellum, metanotum and propodeum black; petiole and basal third of the second gastral segment reddish brown, the former black at base and with a subapical black band, the middle of the later black, its posterior third and the visible part of the

remaining abdominal segments yellow. Wings deep flavohyaline. Frons and vertex of the head and thorax with close shallow punctures, petiole smooth, the rest of the abdomen with the surface finely longitudinally aciculate; clypeus pyriforme, its apex truncate; petiole broadening towards the apex and slightly flattened. Male are slightly smaller than female. size Female 25-27mm; male 20-25mm.

Delta conoideum (Gmelin, 1790)

Image no.-2

Diagnosis: Female -head yellow except mandibles and antenna reddish, a broad transverse band across the apex between the top of the eyes black, black mark extends behind the vertex to occiput; thorax red with black patches on mesoscutum, metapleuron and median area of propodeum, propleuron entirely black; legs pale reddish; gaster dark red with base of the second tergite and a short transverse medially interrupted band on its middle above black. Forewing basally flavohyaline and apically fuscohyaline, with a slight purplish refringes. Head above the antenna and thorax closely and lightly punctured; clypeus pyriforme, its apex truncate; gaster smooth and shining with the surface minutely aciculate. Male similar to female in general appearance but smaller and slighter size female 23-26mm, male 18-22mm

Delta esuriens (Fabricius, 1787)

Image no.-3

Head yellow to brownish with following black marking: a broad band on vertex including upper half of frons extending behind vertex to outer side of temple and to occiput, a black mark on anterior tentorial pit extending to subantennal suture to dorsal side of antennal scrobe and touches to the black band on frons and vertex (this black marking highly variable and absent in some species); antennae light reddish; pronotum and postscutellum yellow; propleuron and pronotal collar basally black or blackish-brown and

**TEACHER'S ROLE AND RESPONSIBILITY IN QUALITY
UPGRADATION****DR. VISHNU M. CHAVAN**

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ABSTRACT

The present paper is an attempt to depict the teacher's role and responsibility in quality upgradation. To become a good teacher, it is mandatory that you must be a good personality. A good teacher required effective principles of teaching. Teacher's role in the student's life is more important than his biological parents. Teachers are always honoured while parents bring us to the earth. A teacher is responsible to give us the eyes of knowledge. Teacher's role in the social construction of a country is very central. Teacher has been considered the backbone of all round progress and welfare of society. He practically is behind human society. Without teaching and teacher, we cannot expect peaceful society.

Key words: Mandatory, Biological, Principles, Effective, Honour

Teacher should be devoted and dedicated towards their profession. They should be able to motivate learner's spirit to learn. It should be free from carelessness and casual attitude. It is because education is the key factor for all-round progress of any country. Administrations, political events, including parliamentary debates are the result of good teaching. That is why Dr. Radhakrishnan was made the president of India combining the philosophy of Plato's idea of philosopher-king. Only the wise king can better rule. Bertrand Russell very strongly pointed out that teachers' choice is not less than military actions. He said the country's fate is as much in the minds of a teacher as it is in the hands of military. Newsman, in his big volume under the title, *Idea of a University*, emphasized value of a teacher. He said that a single mistake of an engineer continues for generations and a surgeon's mistake can kill limited patients. But a teacher's mistake can metaphorically kill generations.

It means teachers are more important than the creators. In this regard there is a Marathi sloka in behalf to the value for teachers as Sant Dnyaneshwar says:

Guru daviliya vata/ Yevuni vivek Tirthatata/

Dhuvuniya malkata/ Buddhicha jene //

-Sant Dnyaneshwar

Those who honour their teachers they always grow in their life. To be a good teacher, there are various principles of teaching you needed to follow. Let us bring all those effective

Cultural Alination of Indian Women Writers Writing in English

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ABSTRACT:

Women in Indian cultural context have been and even today are being alienated – in the socio-cultural function. The participation of women is almost equal to nothing. In festivals, cultural activities and in social functions women are not being given any status, as a result women themselves are feeling inferior and unfit to participate in such activities. Kamala Das, Anita Desai, Kamala Markandeya, Shobha Day, Ruth Zabwala, Nayantara Sahgal, Arundhati Roy and many other great women novelists have focused on gender inequality in their writings. Gender has remained dominating factor which has created feminine class structure.

Key words: Alienation, Context, Inequality, Gender, Status

Women at all levels are estimated as secondary on account of their feminine gender which has created great gulf between male and female experience to the extent that women are treated not equal with men. This gender differences should be reduced to a genuine level and women should be encouraged to come up shoulder to shoulder with men. Fortunately in Modern times the awareness among women to participate in the work of national building has become visible. Woman journalists, media person, press reporters and thinkers are coming up. This is the new features which is the good sign.

Women writer who have propagated the ideology of feminism through the channel of creative writing in the world Eastern and Western, Mariama Ba, a western writer, wrote in one of her two novels, *So Long A Letter* and *Scarlet Letter* she has demanded a feminine freedom from the clutches deep concern about the freedom of women from the grip of patriarchy. Mariamaba shows her view indicating woman writers dilemma. She states:

The woman writers in Africa have a special task. She has to present the position of women in

Africa in all its aspects. There is still so much justice.....in the family, in the institution, in Society, in the street, in political organization,

Discriminations reign supreme..... we no Longer accept the nostalgic praise to the African Mother, who, in his anxiety, man confuses with Mother Africa. Other women writers are : Kamala Markandeya, Shobha Day, Ruth Zabwala, Nayantara Sahgal, Arundhati Roy, all these women writers have expressed their agonies. Their creative writing have a deep appeal to make free in all walks of life, Socio-cultural, political, emotional, and ideological. These writer show realistic pictures as much as the great western poets like W. B. Yeats and T. S. Eliot showed in their poems.

There are numerous examples all over the world specially the western world. Most shockingly there are also an example even in the writings of women writers in English in Indian writing. Its most illustrative example is Kamala Das's *My Story* which is written in poetry. This book has arrested the attention of world readers. This is her autobiography. Literary scenario in Indian writing in English there are innumerable women novelists who have presented feminine sensitivity, the grievances, and every type of injustice, inequality and ill-treatment.

Anita Desai is such a giant writers in Indian writing in English who wrote *Cry, the Peacock*, *Voice in the City*, *Bye Bye Black bird*, *Fire on the Mountain*, *Clear Light of Day*. Few of these novels shed light on problems of feminine gender. Kamala Markandeya has several novels: *Nectar in a Sieve*, *A handful of Rice*, *Two Virgins*, *Pleasure City* at her credit. Few of them are presenting most adequately and sensitively problems of the world of women. And, this world is full of pathos, suffering, and subordination of women. Atiya Husain who wrote only one novel under the title *Broken Column* is from Muslim community and is an independent thinker. She focused light on the domestic restriction of a Muslim family.

Bapsi Sidhwa is a south Asian major novelist in common wealth literature. She is a very bold women writer who has exposed the restless undercurrent of feminine existence. Her novels are *The Pakistani Bride*, *American Brat*. At global level feminism has

WOMEN, LITERATURE AND SOCIETY: SPECIAL REFERENCE WITH VIRGINIA WOOLF'S ESSAY *A ROOM OF ONE'S OWN*.

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In fact, women have come to feel those differences at all levels - economical, social, and political and gender. All are manmade 'Social Construct' and gender differences in particular are not natural. Clara Nubile writes by quoting the reference of Manusmriti as following: 'in childhood a woman should be under her father's control. In youth under her husbands, and when her husband is dead under her son's, she should not have independence.' (Old. Clara, pg. 1).

Women believe that a woman is not born one but she is made one therefore the study of feminism in feminist approach provides chances for women to express themselves with all their perceptions, sensibilities, and susceptibilities because only a single line by Virginia Woolf's *A Room Of One's Own* (1929) talks in volumes of the delicacy of feminine problems. These problems are related to the sense of security, protection and freedom, though Woolf's literary document under the above title has been interpreted by both categories. It has been admired by some and condemned by others like various levels of critical analysis. Simone de Beauvoir put it as:

One is not born, but rather becomes a woman,
It is civilizations a whole that produces
this Creature... which is described as feminine.

This literary document by Woolf has opened up infinite scope for literary, academic and argumentative debates for establishing dignified status for women. Beauvoir writes: 'Now, woman has always been man's dependent, if not his slave; the two sexes have never shared the world in equality. And even today woman is heavily handicapped, though her situation is beginning to change. Almost nowhere is her legal status the same as man's, and frequently it is much to her disadvantage.' (McCann and Kim, pg. 37.).

Woolf's *A Room of One's Own* is essentially very pivotal and poignant. The basic necessity of attempting to comprehend feminism is, in fact, a very genuine feminine claim for equal rights, freedom and legal protection for women. Thus, feminism becomes an intellectual, philosophical and political discourse. As a very distinct approach to literature, the critical writing related to feminist criticism did not appear in concrete form until late in the 1960s. But behind it, there remained a struggle through out centuries for the recognition of women's cultural roles and their achievements in several fields, including academic and intellectual fields.

The feminine consciousness and awareness for feminine capabilities obviously became more distinct and powerful when inspiring book like that of Mary Wollstonecraft's *A Vindication of the Rights of women* 1792 and another equally powerful book by John Stuart Mill's *The Subjection of women* (1869). John Mill's another book entitled, *Liberty* is a landmark in the field of political philosophy. In respect of igniting awareness among women a masterpiece by the American writer Margaret Fuller's *Women in the 19th century* (1845). The above books have carved an important position to create a space for the comprehension of feminine rights. The liberal politician Carl Welcker, an elected member of the Frankfurt Parliament, expressed the following views:

Nature has created men and women to carry out different functions. ...Man, the stronger, the bolder and the freer of the two, has been designated as protector of the family, its provider, meant for public tasks in the domain of law, production, defence. Woman the weaker, dependent and timid, requires the protection of man. Her sphere is the home, the care of the children, the nurturing of the family...do we require any further proof that given such differences, equality between the sexes would only endanger harmony and destroy the dignity of the family.

The entire corpus of literary and political text claims for legal, social, cultural freedom and equality. Virginia Woolf's *A Room of One's Own* establishes the supremacy of the fact that women need freedom from the 'patriarchal' grip in all fields - political, economical and educational. Numerous other essays and books by women authors have shown that male domination in every walk of life has hindered and prevented women from realizing their productive and creative possibilities.

Conclusion: in this paper, my attempts have been made to see that all possible sources to leave women out of tension of daily existence in the life of billions of women all over the world. It is expected that at least some suggestions cited in my paper will prove great success and benefits for women.

Citation:

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3.3.2 Number of research papers per teachers in the Journals notified on UGC website during Academic Year 2016-17

Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
Nagpurchi Natyachlval	Dr. Mrs. S. B. Taywade	Marathi	ELXIR National Journal of multidisciplinary research	Feb-17	2277-3428	Research Paper Link
Phytochemical analysis and <i>in vitro</i> synergistic efficacy of leaf extracts of <i>Acacia polyacantha</i> and antibiotics against MDR <i>Klebsiella SPP.</i>	Dr. Mrs. S.P. Patil	Botany	American Journal Pharmtech Research	Nov-16	2249-3387	Research Paper Link
Survey on ethno botanical plants used for the Treatment of Skin diseases by traditional healers in Mahur Taluka of District Nanded (M.S), India	Dr. Mrs. S.P. Patil	Botany	Bionano Frontiers	Dec-16	2320-9593 (Online) 0974-0678 (Print)	Research Paper Link
A Fuzzy Logic Multi Criteria Approach For Evaluation of Teachers Performance	Dr. Mrs. N.R. Dhawade	Mathematics	Advances in Fuzzy Mathematics	Jan-17	0973-533X	Research Paper Link
Optimizing Fuzzy Transportation Problem of Trapezoidal Numbers	Dr. Mrs. N.R. Dhawade	Mathematics	International Journal of Fuzzy Mathematics and Systems (IJFMS)	Jan-17	2248-9940	Research Paper Link
A New numerical method a mid-way interpolation formula Akin of Bessel's formula	Dr. Mrs. N.R. Dhawade	Mathematics	ELXIR National Journal of multidisciplinary research	Feb-17	2277-3428	Research Paper Link
Analysis of Probabilistic Parsing in NLP	Dr. G.S. Katkar	Computer Science	International Journal of Innovative Research in Computer & Communication Engineering	Oct-16	2320-9801 (Online) 2320-9798 (Print)	Research Paper Link
Jijabaichya Samajik Kshetratil Samajik Karyache Itihasik Simvhalokan	Dr. S.R. Daware	History	ELXIR National Journal of multidisciplinary research	Feb-17	2277-3428	Research Paper Link



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Title of paper	Name of the author/s	Department of the Teacher	Name of journal	Year of publication	ISSN number	Link
Physiographic study of eastern Ahmednagar area by using remote sensing	Dr. D.S. Samarth	Geography	International Research Journal of Environmental Sciences	Apr-17	2319-1414	Research Paper Link
Impact of Literacy upon population growth in Ahmednagar District (M.S.)	Dr. D.S. Samarth	Geography	ELXIR National Journal of multidisciplinary research	Feb-17	2277-3428	Research Paper Link
Bhartatil Dharmanirapekshatechi Sankalpana	Dr. V.T. Sheikh	Political Science	Vichar Manthan	Dec-16	2347-9639	Research Paper Link
Acharya Vinobanche Dharmachintan	Dr. V.T. Sheikh	Political Science	ELXIR National Journal of multidisciplinary research	Feb-17	2277-3428	Research Paper Link
Bhartiya Mahilanche Badalte Swarup	Dr. R.R. Watane	Marathi	ELXIR National Journal of multidisciplinary research	Feb-17	2277-3428	Research Paper Link
Gharelu Kamgar Mahilaoki Aarthik Aur Samajik Samasyaye Sandarbh Nagpur Shahar	Dr. S.S. Dudhe	Sociology	ELXIR National Journal of multidisciplinary research	Feb-17	2277-3428	Research Paper Link
Yoga as a therapy (Yoga for health and happiness)	Dr. S.S. Bhotmange	Physical Education	ELXIR National Journal of multidisciplinary research	Feb-17	2277-3428	Research Paper Link
Gender, Class and Sexuality in the Works of W.B. Yeats: Special Reference with the Poem "Leda and the Swan."	Dr. Mrs. V.V. Vaidya	English	ELXIR National Journal of multidisciplinary research	Feb-17	2277-3428	Research Paper Link
Parent-Child Relationship: In the novels of ManjuKapur, Arundhati Roy and Shashi Deshpande	Dr. M.R. Wagh	English	ELXIR National Journal of multidisciplinary research	Feb-17	2277-3428	Research Paper Link
The problems of agriculture in current scenario	Dr. A.Y. Bhaik	English	EPRA International Journal of Socio-Economic and Environmental Outlook	Feb-17	2348-4101	Research Paper Link
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Phytochemical analysis and <i>in vitro</i> synergistic efficacy of leaf extracts of <i>Acacia polyacantha</i> and antibiotics against MDR <i>Klebsiella SPP.</i>	Dr. V.N. Charde	Microbiology	Americal Journal Pharmtech Research	Nov-16	2249-3387	Research Paper Link
Survey on ethno botanical plants used for the Treatment of Skin diseases by traditional healers in MahurTaluka of District Nanded (M.S), India	Dr. V.N. Charde	Microbiology	Bionano Frontiers	Dec-16	2320-9593 (Online) 0974-0678 (Print)	Research Paper Link



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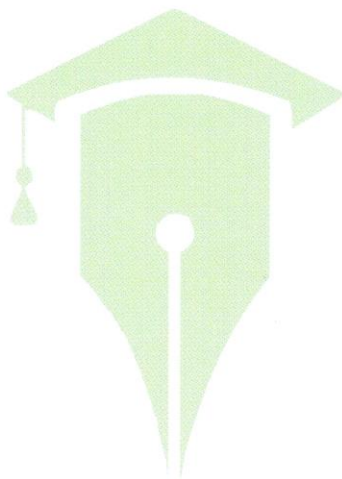
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Gender, Class and Sexuality in the Works of W.B. Yeats: Special Reference with the Poem "Leda and the Swan."	Dr. V.M. Chavan	English	ELXIR National Journal of multidisciplinary research	Feb-17	2277-3428	Research Paper Link


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नागपूरची नाट्यचळवळ

- डॉ. शरयू तायवाडे

प्राचार्य, तायवाडे महाविद्यालय, कोरापड

मराठी नाटकाचा प्रारंभ विष्णुदास भावे यांच्या 'सीतास्वयंवर' नाटकाने झाला. नाटकाचे हे प्रारंभीचे रूप लोककलेच्या जवळ जाणारे असले तरी पुढे त्यातूनच समृद्ध नाट्यपरंपरा आकारास आली. मराठी नाट्यरंगभूमीचा हा समृद्ध वारसा जसा महाराष्ट्राने जोपासला तसाच नागपूरनेही जोपासला आहे. नागपूरने मराठी रंगभूमीचा इतिहास घडवला आहे. विदर्भाची सुजलाम् सुफलाम् भूमीच अशी आहे की इथे पिके जशी तराळून येतात तशीच नाट्यकलाही फुलून आली आहे.

पहिला टप्पा : १८७० ते १८९० - राजाश्रयी नाटके : विष्णुदास भावे यांनी १८४३ मध्ये मराठीतील पहिले नाटक सादर केले. पण त्यांचे नाव इकडील लोकांना माहीत होण्यापूर्वीच नागपुरात पौराणिक नाटके सादर होत असत; असा उल्लेख सुप्रसिद्ध नाट्यसमीक्षक द. रा. गोमकाळे यांनी केल्याचे व. कृ. वऱ्हाडपांडे यांनी म्हटले आहे. नागपूर भागातील नाना साहेनी विष्णुदास भाव्यांच्या नाटकांना पदे तयार करून देत असत. राजे रघुजी भोसले यांचे वडील नानोजीराव भोसले यांची रुक्मिणी नावाची एक र खेल होती. तिच्यासाठी त्यांनी रुक्मिणी पॅलेस बांधले होते. तेच आजचे महाल विभागातील राजेंद्र हायस्कूलच्या बाजूला असलेले रुक्मिणी मंदिर होय. महाराजांच्या कारकिर्दीत इथे नाटके होत असत. हा काळ १८७० ते १८९० चा आहे. नागपूरला अशी राजाश्रयी नाटकांची परंपरा आहे.

दुसरा टप्पा : १८९० ते १९१७ - सुशिक्षितांची नाट्यजाणीव : न्यू इंग्लिश हायस्कूलचे संस्थापक श्रीधरपंत पारधी यांनी १८९० साली नाट्यमंडळ स्थापन केले. त्यांनी स्वलिखित 'सत्यवान-सावित्रीचे अनेक प्रयोग केले. दत्तोपंत गोखले यांनी ही 'संगीत विपाक' हे नाटक सादर केले होते. विठ्ठलराव ऊर्फ दादासाहेब काढीकर यांनी विनायकराव षडांगुलेलिखित 'नलदमयंती' नाटकाचे प्रयोग सादर केले. 'सौभद्र', 'रामायण वियोग' इत्यादी नाटकांचेही प्रयोग या मंडळींनी केले. 'सद्य हृदयाल्हादक नागपूरकर संगीत नाटक मंडळी' ही संस्था पंढरीनाथशास्त्री घाटे यांनी १९१६-१७ मध्ये स्थापन केली. आजवर तंबोऱ्याच्या साथीने होणाऱ्या नाट्यसंगीताला या मंडळाने हार्मोनियमची साथ दिली, हे या मंडळाचे वैशिष्ट्य. १९०२ साली 'नागपूर ऑर्केस्ट्रार क्लब' स्थापन झाला. तोच पुढे 'महाल ऑर्केस्ट्रार क्लब' म्हणून प्रसिद्ध झाला. नारायणराव वैद्य, डॉ. ल. वा. परांजये, वामनराव जोशी यांनी या क्लबतर्फे 'त्राटिका', 'तोतयाचे बंड', 'करीन ती पूर्व' इ. नाटके सादर केली.

तिसरा टप्पा : १९१७ ते १९४८ - आकाशवाणी केंद्राची स्थापना : निराधारांना आधार देणे, अपवाद ग्रस्तांना मदत करणे व देशाचे अंशतः ऋण फेडणे या उद्दत हेतूने १९१७ साली 'सहकारी संस्था सीताबर्डी नागपूर' ही संस्था स्थापन झाली आणि द्रव्यार्जनाचे साधन म्हणून नाट्यप्रयोग सादर केले. प्रा. व्ही. ही. काळे अध्यक्ष व व्ही. आर. घैसास सचिव होते. १९१८ साली 'हाच मुलाचा बाप' या नाटकाचा प्रयोग करून तो पैसा शारीरिक शिक्षण मंडळाला दिला. नंतर १९४४ पर्यंत 'एकच प्याला', 'विचित्र लीला', 'सत्त्वपरीक्षा', 'कीचकवध', 'तोतयाचे बंड', 'खडाष्टक', 'आग्राहून सुटका', 'देवमाणूस', 'भाग्यवान', 'काचेचे घर', 'ऑफेलो' इत्यादी नाटकांचे प्रयोग करून नागपुरातील बहुतेक शाळांना, भूकंपग्रस्तांना, पूरपीडितांना आणि अपवादग्रस्तांना वाटून दिला. या संस्थेची प्रेरणा समाजसेवेची असली तरी ते कलात्मकतेच्या बाबतीत अतिशय दक्ष होते. रा. वि. घारपुरे, ह. ना. नेने, खं. के. रांगोळे, कृ. के. कानगो, सुलभा कुंटे, प्रतिमा गोखले, श्यामला पटवर्धन शरयू टिपणीस प्रवृत्तीच्या नाट्यकलेची न. वि. केळकरांनीही प्रशंसा केली आहे. मानवसेवाधिष्ठित नाट्यकला आणि संकल्पना असणारे हे महाराष्ट्रातील एकमेव नाट्यमंडळ असावे.

'मित्रसमाज' या संस्थेची स्थापना १९२५ साली झाली. रघुजी राजे भोसले हे अध्यक्ष होते आणि श्रीमंत बाबूराव देशमुख हे आर्थिक आश्रयदाते होते. या मंडळाने नागपूर, आर्वी, ब्रह्मपुरी, रामटेक येथे नाट्यप्रयोग केले.

'वसंत विहार नाट्यमंडळ' (१९२५ ते १९३५) ही राजे रघुजी महाराजांची स्वतःची खास संस्था होय. सक्करदरा येथील लालमहाल वा राजवाड्याच्या प्रांगणात ही नाटके होत असत. महाराज संगीताचे ममज्ञे जाणकार होते. वसंतऋतूत साजऱ्या होणाऱ्या वसंतोत्सवात नाटके सादर केली जात, पहिले नाटक म्युनिसिपलटी व नंतर उमाजी नाईक, तंट्या, भिल्ल, बेंबदशाही, आग्राहून सुटका ही नाटके झाली. सर्व नाटके ऐतिहासिक व संगीत होती. चिमासाहेब भोसले हे प्रमुख होते. ऐदान बिंझाणी, श्रीमंत बाबूराव देशमुख, माधवराव देशपांडे हे देणगीदार होते. १९५८ साली रघुजी राजे निवर्तले आणि मंडळ बंद झाले.

'नाटके नाट्यमंडळ' (१९३६) कवी राज बढे, नाना जोग, शं. बा. व. ना. बा. शास्त्री, म. ना. काळे, अं. बा. ओक, बाबूराव चिमटे, सखारामपंत जोशी, म. ना. परांजपे, दि. ब. पंडित, त्र्यंबकराव चाफेकर प्रभृती तत्कालीन तरुणांनी साहित्य संपादक मंडळ स्थापन केले होते. त्याचीच ही स्वतंत्र नाट्यशाखा होती. मंडळाने 'बायकी कावा' हे पहिले नाटक १९३६ साली सादर केले. यातली गीते राजा बढे यांची होती. पुढे त्यांनी भावबंधन, आंधळ्यांची शाळा, सरलादेवी, अंमलदार (पु. ल. च्या नाटकाचा पहिला प्रयोग पु. ल. नी करण्यापूर्वीच नागपूरला झाला).



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Phytochemical analysis and *in vitro* synergistic efficacy of leaf extracts of *Acacia polyacantha* and antibiotics against MDR *Klebsiella SPP*.

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ABSTRACT

Emerging Multidrug-resistant problem is a major concern. *Klebsiella sp.* can lead to a wide range of disease causing pathogen namely pneumonia, urinary tract infections, septicemia, meningitis, diarrhea and soft tissue infections and development of MDR against commonly used antibiotics making the case difficult to manage. Total 525 Clinical samples were screened for isolation of *Klebsiella sp.* Total 36 isolates belonging to *Klebsiella sp.* Were obtained. 29(8.06%) isolates were associated with urinary tract infection (UTI), 6(12%) with sputum and 1(1.54%) was associated with blood. Antibioqram study of these isolates revealed that all these isolates are resistant to several antibiotics out of 34 antibiotics tested. Cold and hot acacia leaf petroleum ether extract, cold and hot acacia leaf chloroform extract, cold and hot acacia leaf acetone extract, cold and hot acacia leaf methanol extract and cold and hot acacia leaf water extract were used for synergistic study. Qualitative phytochemical analysis these leaf extracts showed the prominent presence of alkaloids, Carbohydrates and glycosides, proteins and amino acids and phytosteroids. The studies on these extracts of *Acacia polyacantha* and antibiotics on susceptibility of resistant *Klebsiella* isolates showed that both cold and hot solvent extracts are effective on antibiotics. The effectiveness shown by these extracts may be useful in evaluating the efficacy of combination therapy against MDR-*Klebsiella sp.*

Keywords: Phytochemical, Antibiotics, *Multidrug resistance*, *Klebsiella sp.*

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Received 20 November 2016, Accepted 29 November 2016

Please cite this article as: Charde VN *et al.*, Phytochemical analysis and *in vitro* synergistic efficacy of leaf extracts of *Acacia polyacantha* and antibiotics against MDR *Klebsiella SPP* . American Journal of PharmTech Research 2016.

SURVEY ON ETHNO BOTANICAL PLANTS USED FOR THE TREATMENT OF SKIN DISEASES BY TRADITIONAL HEALERS IN MAHUR TALUKA OF DISTRICT NANDED (MS), INDIA

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Received on : 10.07.2016 and Accepted Revised on : 25.12.2016

ABSTRACT : Mahur taluka is located in northern part of Nanded district. It is bounded North by Yavatmal district, South by Kinwat taluka of Nanded district, East part by Adilabad district of Telangana and West by Pusad taluka of Yavatmal district of Vidarbha region. Mahur taluka is a thick forested area of Nanded District. The present survey provides information on the therapeutic properties of 14 crude drugs used by the natives of Mahur Taluka of Nanded District, Maharashtra, India. For documentation of ethno-botanical information and collection of plant material, study was undertaken during the period from January 2014-August 2015. Data was obtained based on personal observations and interviews with traditional healers. These crude drugs were used as paste of whole plants, leaf, bark and seeds are applied externally. As these crude drugs were not reported earlier from the study area; they are *Acalypha indica* L., *Ammaniabuc cifera* L., *Andrographis paniculata* (Burm.f.) Wall ex Nees, *Azadirachta indica* Juss., *Canscora diffusa* (Vahl) R.Br.ex. Roem. & Schult., *Careyaarborea* Roxb., *Cassia fistula* L., *Cassia occidentalis* L., *Datura metal* L., *Hemidesmus indicus* (L.) R.Br., *Leptadeniareticulata* (Retz.) Wight & Arn., *Maytenusemarginata* (Willd), *Pongamiapinnata* (L) Pierre and *Vernoniacinerea* (L) Less., present study will provides insight for exploring such crude drugs for cracking the knowledge about its use on wider basis.

Keywords: Ethno botanical knowledge, Crude drugs, Skin diseases, Traditional healers.

INTRODUCTION:

Now a days traditional medicine is emerging medical field and herbal therapies are becoming very popular. This medicinal field is preferred by local people because it is recognized to be safe, cheaper and accessible and has more holistic approach (Gessler 1995; Malunga N.P. et.al 2008). The tribal's live and rely on plants and plant products and using traditional medicine system for centuries. The traditional medicinal practices are an important part of the primary health care system in developing world (Ghosh A. 2003). Skin diseases amount to as high as all occupational diseases (Spiewak, 2000). Keeping this in mind we explored the knowledge available with native people/ traditional healers from Mahur Taluka, Dist. Nanded India, to cure different skin diseases.

Mahur taluka is situated in northern part of Nanded district and is dense forested area. Yavatmal district of Vidarbha region is present on North side of Mahur, Kinwattaluka of Nanded district on south, Adilabad district of Telangana on East and Pusad taluka of Yavatmal district on West. Penganga is Main River of this area which flows from the South to North direction. Geographically location of Mahur taluka is in between 19°49' to 19°83' North latitude and 77° 91' to 77°55' East longitude.

FOREST:

The total geographical area of Mahur taluka is 52160 hectares of which 28% area covered with forest and 72 % area are non-forested area.

FOREST DWELLERS:

As per the tribal research and training institute of Maharashtra, Census dated 29-04-2008, the total villages in Mahur taluka are 93, total population of the taluka is 86782, Tribal population is 13,455 and percentage of tribal population is 16% which is inhabited by tribal population of aborigines like Andh, Kolam, Gond, Naikede and Pradhan.

MATERIALS AND METHODS :

For documentation of ethno-botanical information and collection of plant material, several tours were undertaken during the period from January 2014-August 2015. Methodology such as personal observations and interviews with traditional healer e.g. local medicinal men, hakims, and elderly people with knowledge of folklore medicines are used (Jain 1989, Jain and Mudgal 1999). Gathered ethno botanical information on skin disease was documented in data sheets prepared which is summarised in Table No.1. Assistance of local informer was taken for the collection of plant materials, in fact they escorted author at the actual location of plants. Plants used for skin diseases as per knowledge of local traditional healers were compared with published literature for identification (Ambasta 1992, Anonymous 1948-1976, Asolkare et.al. 1992, Chopra et. al. 1956 & 1969, Jain 1991, Jain 1996, Jain 1999, Kapur 2001, Kirtikar & Basu 1933, Pradhan et. al. 2005, Sharma & Singh 2001 and Madhav Chetty et.al., 2013). Uses which are not reported in the literature are considered as uses not as much of known in India and are indicated in Table 1 as only locally known applications.

RESULTS AND DISCUSSION :

The drug yielding plants were arranged in alphabetical order followed by botanical name, family, vernacular name, plant part used (Table 1). Our taxonomic analysis of crude drugs yielded 14 species of flowering plants belong to 13 genera of 14 families, all belong to dicotyledons and their habits are 04 trees, 04 shrubs, 05 herbs and 01 climber. These crude drugs were used as pastes of whole plants, leaf, bark and seed are applied externally. viz; *Acalypha indica* L., *Ammaniabuccifera* L., *Andrographis paniculata*., *Azadirachta indica* , *Canscora diffusa*,

A Fuzzy Logic Multi Criteria Approach For Evaluation Of Teachers Performance

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Abstract

The methods available for evaluation of teacher in educational institute are based on crisp data in the form of rigid boundaries. For any uncertainty this evaluation has limitations. To evaluate the faculty in educational institute there are several sub criteria which can contribute on performance evaluation in the form of linguistic terms. In ranking the quality of teacher's performance, we have proposed fuzzy expert system on the basis of multi inputs as required by the institution. The proposed method introduces fuzzification of crisp data which depends on the extreme value that exists in the data. The use of the model is suitable for evaluating teacher on number of input variables, vagueness and imprecise information in the data. Experimental results are compared with the actual crisp output.

Keywords: Fuzzy Expert System, Linguistic Variable, Fuzzy rule base, Teaching Quality.

1. INTRODUCTION

Performance appraisal system is used by the most of the institutions and organizations to evaluate the teacher's performance. The teacher's performance is very important to the students as well as management, which usually involves crisp and uncertain values to evaluate performance [9]. In this paper we evaluate teacher's performance on the basis of different factors. Evaluation of the overall performance of a teacher is very necessary for betterment of the students, development of institution and betterment of the society & Nation.

Optimizing Fuzzy Transportation Problem of Trapezoidal Numbers

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Abstract

Transportation models play an important role in logistics and supply chain management for reducing cost and improving service. Fuzzy transportation problem is aimed to find the least transportation cost or the least time required for transportation of some goods through a proper network to map the supply and demand of various nodes. In this paper we are using a ranking technique for solving fuzzy transportation problem, where the cost coefficients and the supply and demand quantities are in the form of trapezoidal fuzzy numbers. First, we transform the fuzzy quantities into crisp quantities by using Roubast Ranking Method, then obtain an initial basic feasible solution and finally find an optimum solution by uv method in a fuzzy number or a crisp number form. This is illustrated with a numerical example.

Keywords: Fuzzy Transportation Problem, Trapezoidal fuzzy numbers, Roubast Ranking Method, Optimum solution, uv method.

1. INTRODUCTION

The transportation problem is one of the subclasses of linear programming problems. The theory of fuzzy sets was first introduced by Zadeh [1], in which the objective is to transport various quantities of a single homogeneous commodity, that are initially

A NEW NUMERICAL METHOD A MID-WAY INTEROPLATION FORMULA AKIN OT BESSEL'S FORMULA

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ABSTRACT :

In present paper, we obtain a new Mid-Way Interpolation Formula similar to Bessel's Formula. We know that Bessel's interpolation formula is used when arguments are equally spaced and we want the value of function at some point close to the middle argument. The Bessel's Formula is obtained in terms of forward differences. In this paper, a new mid-way interpolation formula is obtained in terms of backward differences which is more advantageous.

KEY WORDS : Back word differences, Interpolation, Bessel's Interpolation Formula

1. INTRODUCTION

We know Bessel's interpolation formula is used when the arguments are equally spaced and we want the value of function at some point close to the middle argument.

The Bessel's formula is obtained in forward differences. In this paper we have obtained a new mid-way interpolation formula in terms of backward differences.

2. DERIVATION

Let $(x_0, y_0), (x_1, y_1), \dots, (x_i, y_i), \dots, (x_n, y_n)$ be $n+1$ points corresponding to the tabular function y of x . The arguments $x_0, x_1, x_2, \dots, x_i, \dots, x_n$ equidistant with interval of differencing equal to h , that is $x_i - x_{i-1} = h$ for $i = 1, 2, 3, \dots, n$.

Shift the origin to the middle argument, if there is a unique middle argument otherwise shift it to any one of the two middle argument, whichever is convenient.

Now prepare a backward difference table as follows -



International Journal of Innovative Research in Computer and Communication Engineering

(An ISO 3297: 2007 Certified Organization)

Vol. 4, Issue 10, October 2016

Analysis of Probabilistic Parsing in NLP

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ABSTRACT: The most explanatory method for presenting what actually happens within a Natural Language processing system is by means of the ‘levels of language’ approach. This is also referred to as the synchronic model of language and is distinguished from the earlier sequential model, which hypothesizes that the levels of human language processing follow one another in a strictly sequential manner. Psycholinguistic research suggests that language processing is much more dynamic, as the levels can interact in a variety of orders. Introspection reveals that we frequently use information we gain from what is typically thought of as a higher level of processing to assist in a lower level of analysis. For example, the pragmatic knowledge that the document you are reading is about biology will be used when a particular word that has several possible senses (or meanings) is encountered, and the word will be interpreted as having the biology sense of necessity, the following description of levels will be presented sequentially. The key point here is that meaning is conveyed by each and every level of language and that since humans have been shown to use all levels of language to gain understanding, the more capable an NLP system is, the more levels of language it will utilize.

I. INTRODUCTION

LEVELS OF NATURAL LANGUAGE PROCESSING

A. PHONOLOGY

This level deals with the interpretation of speech sounds within and across words. There are, in fact, three types of rules used in phonological analysis: 1) phonetic rules – for sounds within words; 2) phonemic rules – for variations of pronunciation when words are spoken together, and; 3) prosodic rules – for fluctuation in stress and intonation across a sentence. In an NLP system that accepts spoken input, the sound waves are analyzed and encoded into a digitized signal for interpretation by various rules or by comparison to the particular language model being utilized.

B. MORPHOLOGY

This level deals with the componential nature of words, which are composed of morphemes – the smallest units of meaning. For example, the word preregistration can be morphologically analyzed into three separate morphemes: the prefix pre, the root registra, and the suffixation. Since the meaning of each morpheme remains the same across words, humans can break down an unknown word into its constituent morphemes in order to understand its meaning. Similarly, an NLP system can recognize the meaning conveyed by each morpheme in order to gain and represent meaning. For example, adding the suffix –ed to a verb, conveys that the action of the verb took place in the past. This is a key piece of meaning, and in fact, is frequently only evidenced in a text by the use of the -ed morpheme.

C. LEXICAL

At this level, humans, as well as NLP systems, interpret the meaning of individual words. Several types of processing contribute to word-level understanding – the first of these being assignment of a single part-of-speech tag to each word. In this processing, words that can function as more than one part-of-speech are assigned the most probable part-of speech tag based on the context in which they occur. Additionally at the lexical level, those words that have only one possible sense or meaning can be replaced by a semantic representation of that meaning. The nature of the representation varies according to the semantic theory utilized in the NLP system. The following representation of the meaning of the word launch is in the form of logical predicates. As can be observed, a single lexical unit is decomposed into its more basic properties. Given that there is a set of semantic primitives used across all words; these simplified lexical representations make it possible to unify meaning across words and to produce complex interpretations, much the same as humans do.

“जिजाबाईच्या सामाजिक क्षेत्रातील कार्याचे ऐतिहासिक सिंहावलोकन”

— प्रा. डॉ. शरद डवरे

इतिहास विभाग प्रमुख

तायवाडे महाविद्यालय, कोराडी, जि. नागपूर

प्रस्तावना :

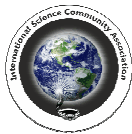
भारताच्या इतिहासाच्या जडणघडणीत ज्या स्त्री-पुरुषांचे योगदान अतुलनीय असे आहेत त्यामध्ये छत्रपती शिवाजी महाराजांच्या मातोश्री जिजाबाईचे स्थान अतिउच्च दर्जाचे आहे. सतराव्या शतकात महाराष्ट्रात छत्रपती शिवाजी महाराजांच्या नेतृत्वात मराठ्यांचे स्वतंत्र राज्य उदयास आले. या कार्यात शिवाजीमहाराजांना मातोश्री जिजाबाईची प्रेरणा आणि मार्गदर्शन मोलाचे ठरले. जिजाबाई केवळ पुत्राला जन्म देणारी व दागण्याचा सोस मिरविणारी सामान्य स्त्री नव्हती, तर आपल्या कर्तृत्वाने समाज घडविणारी युगप्रवर्तक स्त्री होती. स्वतःच्या मार्गदर्शनाखाली मराठ्यांचे संघटीत स्वराज्य उभारून जिजाबाईने स्वराज्याच्या कारभारातही हिरिरीने भाग घेतला. त्याचबरोबर तत्कालीन सामाजिक व्यवस्थेत प्रचलित असलेल्या बुरसटलेल्या प्रतिगामी रितीरिवाजांवर कठोर प्रहार करून महाराष्ट्रात सामाजिक सुधारणेचा पाया घातला. राजमाता जिजाबाईच्या सामाजिक कार्यावर प्रकाश टाकणे हा या शोधनिबंधाचा प्रमुख उद्देश आहे.

विषय विवेचन :

शहाजीराजेना निजामशहातर्फे पुणे, सुपे, इंदापूर व चाकण या परगण्यांची जहागिरी वंशपरंपरागत मिळालेली होती. शहाजीराजेच्या व्यक्तिगत द्वेषापायी आदिलशाही सरदार मुरारजगदेवाने पुणे जहागिरीची दुर्दशा केली. त्या जहागिरीत लोकांनी पुन्हा वस्ती करू नये म्हणून पुणे कसबा उध्वस्त केला. व त्यावर गाढवाचा नांगर फिरविला. तेथे बाराफुटी पहार रोवून त्यावर तुटलेल्या चपलेचा तुकडा, बेकाम झाडू, फुटलेली कवडी टांगून ती भूमी शापीत म्हणून घोषित केली. त्यामुळे पुण्यातील लोक निर्वंश होण्याच्या भीतीने पुणे सोडून इतरत्र निघून गेले, म्हणून अनेक वर्ष पुणे ओस पडून राहिले. इ.स. १६३६ मध्ये शहाजीराजांनी आदिलशाहाची नोकरी पत्करली. त्यावेळेस आपल्या पुणे जहागिरीची संपूर्ण व्यवस्था पत्नी जिजाबाईकडे सोपवून शहाजीराजे कर्नाटकातील कामगिरीवर निघून गेले, तेव्हा जिजाबाई बालशिवाजीला घेवून पुणे जहागिरीत आल्या.

सनातनी वर्गाने निर्माण केलेल्या धार्मिक दहशतीखाली तत्कालीन समाज होता. समाजमनातून धार्मिक दहशत, दैववाद, अंधश्रद्धा व निरर्थक रूढी काढून टाकल्याशिवाय कल्याणकारी राष्ट्रनिर्मितीची बीजे पेरता येणार नाही याची जिजाबाईला जाणीव झाली. म्हणून त्यांनी लोकांचे मनातील भीती कमी करण्याचे हेतूने लोकांना शास्त्रनियमांची निरर्थकता पटवून दिली. पुण्याच्या शापीत भूमीवरून नांगरणी करण्याचा जिजाबाईने निर्णय घेतला. त्याकरीता जहागिरीचा कारभारी दोदोजी कोंडदेव यांना सोन्याचा नांगर तयार करण्याचा आदेश दिला. जिजाबाईने तो सोन्याचा नांगर बालशिवाजीच्या हाती दिला. शिवाजीने आपल्या सवंगड्यासह कसब्याच्या भूमिवरून नांगरणी केली व धार्मिक दहशतीचे प्रतीक असलेली पहार उपटून काढली. धर्मशास्त्राने निषिद्ध ठरविलेल्या व निर्वंश होण्याची दहशत पसरविलेल्या भूमिवर आपल्या पुत्राला नांगरणी करावयास लावणारी जिजाबाई ही सांस्कृतिक व धार्मिक दहशतीतून रयतेला बाहेर काढणारी पहिली स्त्री होय. जिजाबाईच्या या पुरोगामी कृत्यामुळे लोकांच्या मनातील धार्मिक दहशत दूर होवून लोक पुणे कसब्यात वस्ती करू लागले.

जिजाबाईचा सामाजिक व धार्मिक दृष्टीकोन त्या काळातही पूर्णपणे स्वतंत्र होता. त्यांनी धार्मिक बाबतीत केलेली महत्वपूर्ण सुधारणा म्हणजे शुद्धीकरण होय. इस्लामी अत्याचाराला कंटाळून अनेक हिंदू इस्लाम धर्माचा स्वीकार करीत असे. परंतु कालांतराने अशा धर्मांतरितांचे मन पुन्हा आपल्या स्वधर्मात येण्यासाठी घुटमळत असे. मात्र त्याकाळाच्या सनातनी रूढीप्रमाणे हिंदू धर्मातून परधर्मात गेलेल्यांना पुन्हा हिंदू धर्मात प्रवेश नाकारण्यात आलेला होता. अशा परिस्थितीत इच्छेविरुद्ध इस्लाम धर्म स्वीकारण्यास भाग पडलेल्या लोकांना पुन्हा हिंदू धर्मात समाविष्ट करण्यासाठी जिजाबाईने धडपड केली. स्वधर्मात परत येण्याच्या बाबतीत हिंदू धर्मियांनी केलेली मनाई त्यांच्या मनाला बोचत असे. त्यामुळे असा जाचक नियम



Physiographic study of eastern Ahmednagar area by using remote sensing data

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Available online at: www.isca.in, www.isca.me

Received 23rd February 2017, revised 10th April 2017, accepted 18th April 2017

Abstract

The study of topography or physiography was based on visual interpretation of toposheet, aerial photographs, satellite images as well as doing by manually surveying, field visits and local observations. These study methods, somewhat called time consuming, required more human resources, and less accuracy oriented. Today, the trends of physiographic study have been changed and having a more scientific base due to Remote Sensing (RS) data and its incorporation in Geographical Information System (GIS) software. It is probably most used in spatial planning or surface planning with monitoring, mapping, and analysis of environmental parameters. The optical RS data help to generate the digital relief or digital elevation information of the earth surface at higher resolution with more scientific and visualize manner. On the earth surface, the presence of physiographical aspects can be noticed and could be possible to detect by automated or semi-automated techniques from the satellite derived ASTER DEM data. ASTER is Advanced Space borne Thermal Emission and Reflection Radiometer, which has a 30 M. spatial resolution which could be used in physiographic aspects micro level mapping and assessment. In the present study, the mapping of physiography along with slope, contour, aspects etc. parameters were carried out from ASTER DEM data and its incorporation in GIS software. It was proved and suggested that the ASTER data provide more accurate surface view of physiography than the traditional methods in the case of physiographic modelling and analysis. It is useful and resourceful for the earth scientists, researcher, regional planner, spatial planner in several decisions making and surface related planning process. Based on this physiographic analysis it was revealed that, the southern part of the study area is more undulating than the northern part.

Keywords: Physiographic study, Remote Sensing, Geographical Information System.

Introduction

Physiography is the significant part of our earth environment which study was based on field survey and analog data in last few years ago. It was quiet complicated and less accuracy oriented. Digital spatial data are essential to study, recognize dynamic process and to develop the environmental simulation models that are useful for scientific assessment of environmental problems and effects of human interactions on environmental quality¹.

Identification and mapping of topographic situation and related natural and cultural environment is understand a significant exercises for the earth scientists who are interested in the fields of spatial planning, agricultural management, water resource management, engineering, groundwater exploration, flood hazard management etc. There is a continuous transformation of topographic landforms on the earth surface due to various atmospheric, morphological and anthropological agents². Physiographic regime is one of the important units of environment³ which determining the regional environment and allied socio-economic community.

Topographical arrangement, associated geological factors, structures like as lineaments, dyke, landforms and slope determines the water resources, direction of groundwater flow, groundwater recharge and discharge which influencing the socio-economic activities^{4,5}. The slope of a region is seen to control the infiltration pattern and rate of groundwater and is also prospective groundwater suitability indicator. High surface runoff along a slope does not give ample residence time for rainwater to percolate into the ground, whereas along the gentle slope area the runoff is slow, allowing more time to percolate resulting into comparatively more infiltration^{6,7}. Hydrologic phenomena can be correlated with topography, geology and climate that has a prominent impact on scale and quality of running water, soil erosion and soil nature at the scale of a basin⁸⁻¹⁰. Thus, the physiography and allied environment has a multidimensional correlation with other factors of the earth surface and sub-surface environment.

The role of space based input like satellite derived ASTER data is growing in the regional environmental and physiographic study. As compare to convectional data RS data is most useful for aerial mapping, monitoring and tracing the spatial entities

IMPACT OF LITERACY UPON POPULATION GROWTH IN AHMEDNAGAR DISTRICT (M.S.)

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Introduction :

Ahmednagar district is well known as the land of Saint and Godess. It is one of the developing district of Maharashtra State in the various sector such as economical, educational , social , agricultural and agro based industries. The district is known as the biggest district as far as the area is concerned. The population of the district is increasing rapidly. Along with increasing population many problems were created, there fore the researcher tries to explain the basic information regarding the issues erupted due to the increasing the population growth.

It has been observed by the researcher that human being have unchallenged imaginative and creative power. As result life standard of human beings much developed than his primitive stage. However the development in the agricultural sector plays as a crucial role in the present life standards. Approximately, 65 percent of population depends on agricultural and supporting businesses, like poultry, dairy, animal husbandry, goat farming, nursery etc. Inspite of that Indian agricultural field is affected by various elements i.e. irregular monsoon, changing climate, varied topography and deforestation.

Key words :

Population growth, Literacy, Imbalance in rural and urban population.

Objectives :

1. To anylize the causes of high population growth.
2. To study the impact of literacy on population growth.
3. To examine sex – ratio in study area.
4. To printout the cause and the issues erupted due to the high population growth.

Methodology :

The secondary data required for this present research paper was obtained form district census report (1961 to 2011), socio - economic review of Ahmednagar district (2011-12) and the data was made available by the Tahsil Office while the maps, land record etc. were collected from the City-Survey Department and some of the data were made available form the internet. The said statistical was analyzed by using statistical methods according to the need. Considering the comparison of the population growth and literacy in five decades from 1961 to 2011, it seems that population is increasing in rural area and ratio of literacy is more in urban area than rural area. Due to illiteracy in rural area the population is increasing whereas in urban area peoples aware of disadvantages of increasing population.

भारतातील धर्मनिरपेक्षतेची संकल्पना

- डॉ. वकील टी. शेख
नागपूर

आपल्या इतिहासाची नियती अशी आहे की, आपल्या देशात जगातील सर्व धर्मांच्या व सर्व संस्कृतींच्या लोकांचा भव्य संगमच झालेला आहे, त्रिवेणी संगमापेक्षाही व्यापक! रविन्द्रनाथांनी तर त्याला 'मानवतेचा महासागरच' म्हटलेले आहे.

माणसाला माणसाच्या जवळ आणणे हे धर्माचे मूलतत्त्व आहे. माणसाला माणसापासून दूर लोटतो, तो धर्म नसून अधर्मच आहे. कवी मुहम्मद इकबाल यांनी म्हटलेच आहे की, "मजहब नहीं सिखाता आपसमें बैर रखना। हिंदी है हम, वतन है, हिंदोस्ताँ हमारा।।"

जीवन हे नित्य परिवर्तनशील व विकासशील आहे. कोणत्याही जीवनविषयक शब्दाची तर्कशुद्ध व्याख्या करणे अशक्य आहे. स्थल-काल परिस्थितीनुसार शब्दाच्या व्याख्या बदलतात व विकास पावतात. आपल्या देशाच्या संदर्भात जो 'सेक्यूलर' शब्द वापरण्यात आलेला आहे, त्या सेक्यूलर शब्दाचा अर्थ आज बदलून उत्तरोत्तर विकसित होत गेला आहे.

तसे पाहिले तर बहुतेक देशात, निदान युरोप खंडातील देशात एकच धर्म होता, परंतु युरोपात सांस्कृतिक संजीवन ज्या काळात सुरू झाले, त्या काळात धर्माविषयी पुनर्विचार होऊ लागला व त्याचे नवसंस्करण करण्याची आवश्यकता वाटू लागली. धर्माचे काही नियम व चालिरीती माणसाला विघातक वाटू लागल्या, तेव्हा मानवतावादाचे एक नवीन तत्त्वज्ञान उदयास आले आणि धर्मातील जे नियम व आधार मानवता विरोधी असतील, त्यांचा निषेध करण्याची गरज वाटू लागली यातून 'सेक्युलॅरिझम' ही संकल्पना उदयास आली. म्हणजेच धर्मनिरपेक्ष जीवनाचे प्रतिपादन करणाऱ्यांना, धर्मनिरपेक्ष जीवन म्हणजे 'मानवनिष्ठ' जीवन; याच देही आणि याच जगात ऐहिक उत्कर्ष साधावयाच्या, एका नवीन 'दर्शनाचा' आविष्कार होऊ लागला. धर्माचा निषेध केल्या खेरीज भौतिक जीवन संपन्न व समृद्ध होणे शक्य नाही, असा त्याचा आशय होता. याचा अर्थ असा की, सेक्युलॅरिझम, धर्मनिरपेक्ष असला तरी, धर्मविरोधी नाही. ऑक्सफोर्ड असो, चेंबर्स असो की, एनसायक्लोपीडिया ब्रिटानिका असो, सेक्युलॅरिझम म्हणजे वास्तविकता असा अर्थ कुठेही दिलेला नाही.

धर्मनिरपेक्षतावादाला संघटित धर्माचे वावगे आहे. संघटित धर्म म्हणजे संप्रदाय, त्यात मुख्यत्वेकरून विशिष्ट कर्मकांड, परलोकवाद व विशिष्ट उपासना पद्धती यांचा समावेश होतो. संप्रदाय म्हणजे विशिष्ट प्रेषित, विशिष्ट उपास्य व विशिष्ट ग्रंथ. सेक्युलॅरिझम म्हणजे संप्रदाय निरपेक्षता असा अर्थ आहे. सेक्युलॅरिझम धर्मनिरपेक्ष असला तरी, तो निरीश्वरवादी असा अर्थ प्रचलित आहे. परंतु नास्तिक, निरीश्वरवादी असेलच असे नाही. त्याचप्रमाणे तो कुठलाही धर्म मानणारा नसेल असेही नाही, बहुतेक धर्म-ईश्वरवादी असोत किंवा नसोत, परलोक व

मरणोत्तर जीवन यांच्या विश्वासावर अधिष्ठित आहे म्हणून सेक्युलॅरिझम धर्मनिरपेक्ष मानावा लागेल कारण परलोक, पुनर्जन्म यांच्यावर ज्यांची श्रद्धा नाही तो सेक्युलर.

धर्मनिरपेक्षतेमध्ये अनैतिकतेला थारा नाही. धर्माचा नीतिमत्तेशी संबंध असलाच पाहिजे असे नाही, धार्मिक विधी अनैतिकही असू शकतात कारण धर्मात परलोकविषयक कर्मकांडाचेच प्रामुख्य असते. धर्मनिरपेक्षतेचे सर्वधर्मसमभावाशी साम्य जाणवते. सेक्युलॅरिझममध्ये धर्मनिरपेक्षता आहे तर सर्वधर्मसमभावात कुठल्याही धर्माचा आग्रह नाही या अर्थाने दोन्ही शब्दप्रयोगात संघटित धर्माचा म्हणजेच संप्रदायाचा निषेध आहे. परंतु सर्वधर्मसमभाव हा शब्दप्रयोग सदोषच वाटतो; अनेकदा धर्मनिष्ठ व्यक्तिच्या स्वधर्मावरील श्रद्धेला विवेकाची मर्यादा असल्याचे दिसते. या कारणाने कित्येक बाबतीत आपल्या स्वतःच्या धर्मातील काही विधी व उपासना त्याला अनैतिक व आक्षेपार्ह वाटतात. सर्वधर्मसमभावाचे प्रतिपादन करणारे महात्मा गांधी म्हणायचे की, वेद जर अस्पृश्यता - विहित असेल तर वेदांना मी मानणार नाही. या ठिकाणी विवेकाची मर्यादा महात्मा गांधींनी आपल्या धर्मावरील श्रद्धेला लागू केलेली दिसते, आणि म्हणूनच वेदातील नीतिविरोधी विधींचा त्यांनी विरोध केला. परंतु त्यांच्या सर्व-धर्म-समभावात इतर धर्मांच्या बाबतीत त्यांची ही विवेकनिष्ठा त्यांनी लागू केलेली दिसत नाही. आद्यशंकराचार्यांची गादी न मानणाऱ्या महात्मा गांधींनी 'खिलापतीचे' समर्थन केलेले होते. विवेकनिष्ठ धार्मिक व्यक्तीला आपल्या धर्माप्रमाणेच इतर धर्मांच्या बाबतीतसुद्धा विवेकनिष्ठ भूमिकेचा आश्रय घ्यावयास पाहिजे. ज्याला त्याला आपआपल्या धर्माचे अनुष्ठान व प्रचार करण्याचे स्वातंत्र्य असावे, पण त्या स्वातंत्र्याला मानवनिष्ठा व नीतिमत्ता यांची मर्यादा असणे आवश्यक आहे, तसे आपल्या देशात होत नाही व म्हणून सर्वधर्मसमभाव दूषित ठरतो, सर्वधर्माविषयी समान आदराला मानवनिष्ठेचे व नैतिकतेचे अधिष्ठान अगत्याचे आहेच.

'जागतिक कायदा' या नैतिक मूल्यांच्या बाबतीत धर्मनिरपेक्ष आहे. त्यात संप्रदाय, जात, वंश यांना थारा नाही. मानवतावाद व जीवमात्राविषयी करुणा हा त्या कायद्यांचा आधार आहे. कायद्याने मानवमात्रांना लागू पडणारी काही सार्वत्रिक मूल्ये प्रस्थापित केलेली आहेत. 'विज्ञान आणि अध्यात्म दोन्हीही स्वतःच्या क्षेत्रात धर्मनिरपेक्ष आहेत, अध्यात्म निराळे आणि धर्म निराळा. अध्यात्मात परलोकवादाला जागा नाही. मुक्ती याच देहात व याच जगात प्राप्त करावयाची असते, मरणोत्तर मुक्ती नाही, विज्ञानाचे निष्कर्ष सार्वत्रिक असतात कारण ते प्रत्यक्षावर आधारलेले असतात. अध्यात्मातसुद्धा अनुभूतीचेच महत्त्व असते. अध्यात्माची भूमिका अनुभवावर आधारलेली आहे. तरीपण आत्मा, ब्रह्म, परमत्त्व यांच्या बाबतीत अध्यात्मवेत्त्यात एकवाक्यता

आचार्य विनोबांचे धर्मचिंतन

- डॉ. वकील टी. शेख

सहाय्यक प्राध्यापक

तायवाडे महाविद्यालय,

महादुला, कोराडी, जि. नागपूर

विनोबांच्या मते, कोणत्याही धर्माचा दुसऱ्या धर्माला विरोध नाही. सर्वांचा विरोध जर कोणाला असेल तर तो अर्धमाला आहे. अर्धमाच्या विरुद्ध सर्वांनी एक झाले पाहिजे. ते आपआपसात लढतील तर नष्ट होतील.

सर्वधर्मसमभावाची गोष्ट आपण जेव्हा करतो तेव्हा इतर धर्माचा परिचय असणे आवश्यक आहे. आम्हाला एकमेकांच्या धर्माचे चांगले ज्ञान असले पाहिजे. हिंदुना इस्लाम धर्माच्या मुख्य विचाराचा परिचय असला पाहिजे आणि हिंदु धर्मात काय आहे याची मुसलमानांना माहिती पाहिजे. हीच गोष्ट ख्रिश्चन इत्यादी धर्माबद्दल हिंदूंनी 'कुराणसार' वाचावे आणि मुसलमानांनी 'गीता-प्रवचने' दोहोंना दोन्ही ग्रंथांचा परिचय होईल तेव्हा त्यांची हृदये एकमेकांशी जुळू शकतील.

सर्वधर्मसमभावात विनोबांनी चार गोष्टी आवश्यक मानल्या. पहिली गोष्ट सर्वधर्मनिष्ठा, दुसरी इतर धर्मबद्दल आदर, तिसरी सर्वधर्म सुधारणा, ज्याशिवाय मनुष्य पुढे जाऊ शकत नाही आणि चौथी गोष्टी जी या तीन गोष्टीमधून स्वाभाविकपणे निघते - म्हणजे अधर्माचा विरोध या चार गोष्टी एकत्र येतात. तेव्हा सर्वधर्मसमभाव सिद्ध होते. आम्हाला आमचा धर्म पूज्य वाटतो आणि वाटावा. परंतु तो श्रेष्ठ आहे म्हणून नव्हे. येथे श्रेष्ठ कनिष्ठतेचा अर्थ नाही. आपण आपल्या धर्माबद्दल प्रेम ठेवूनही इतर धर्माबद्दल आदर ठेवू शकतो. सर्व धर्म परमेश्वराकडे जाण्याचे मार्ग आहे. म्हणून एकमेकांबद्दल पूज्य भाव पाहिजे. एकमेकांच्या धार्मिक उत्सवात आनंदपूर्वक आणि भक्तिपूर्वक सामील झाले पाहिजे.

हिंदू मुस्लिम एकता भारताची फार मोठी समस्या आहे. जी मनुष्य सोडवू शकला नाही तर कालपुरुष सोडवेल. म्हणून अनंतकाळाच्या पार्ष्वभूमीवर तिचे फारसे मूल्य नाही. परंतु सर्वधर्म समभावाचे, जो या समस्येचे सूक्ष्मरूप आहे. अनंत काळातही एक विशेष महत्त्व आहे. भारताने समन्वयाचा विचार जगाला दिला. सर्वधर्मसमभाव याचाच परिपाक आहे. तो परिपाक आजही पूर्ण झाला नाही. तो आपल्याला पूर्ण करायचा आहे.¹

आज आम्हाला मानवप्रेमाचा धर्म स्थापन करणे गरजेचे आहे. त्यात पूजा अर्चा राहणार नसून मानवसेवा येईल. भक्तीचे सेवेमध्ये रूपांतर करणाऱ्या मानव सेवा धर्माची स्थापना करणे काळाची गरज आहे. प्रेम हा असा महान धर्म आहे की ज्यात सगळे धर्म बुडून जातात. जेथे सूर्याचा प्रकाश असतो तेथे सगळे तारे नाहीसे होतात. त्याचप्रमाणे प्रेमधर्माच्या प्रकाशासमोर दुसरे सगळे धर्म क्षीण होवून जातात. आज त्याच प्रेमधर्माची स्थापना करावयाची आहे. आज हिंदूधर्माचे नाव सांगणारे जसे कोट्यावधी लोक आहेत. त्याचमाणे इस्लाम धर्माचेही लोक आहे. हिंदू किंवा इस्लाम धर्माचे कोणीच नाहीत. आपण भाषा अद्वैताची बोलतो, पण व्यवहारात आपली मने वेगवेगळी ठेवतो. या प्रकारचे विचार व आचार यातील अंतर याला मनातून बाहेर काढून टाकणे आवश्यक आहे.

आपल्या या भारतभूमीमध्ये अगदी प्राचीन वेदकाळापासून आजपर्यंत 'धर्म' हा शब्द सतत चालत आला आहे. या शब्दाला दुसऱ्या कोणत्याही आपल्या या भारतभूमीमध्ये अगदी प्राचीन वेदकाळापासून आजपर्यंत 'धर्म' हा शब्द सतत चालत आला आहे. या शब्दाला दुसऱ्या कोणत्याही भाषेत नेमका प्रतिशब्द मिळत नाही. धर्म हा एक व्यापक शब्द आहे. आपले जीवन ज्या निति-विचारावर आधारलेले असते, त्याला आपण धर्म म्हणतो. धर्म अविचल आहे. त्यांची तत्त्वे पक्की असतात. ज्याप्रमाणे गाणिताची तत्त्वे कुठल्याही देशात आणि कुठल्याही काळात स्थिर असतात. त्याचप्रमाणे धर्माच्या तत्त्वांतही कधी बदल होत नाही. धर्माची तत्त्वे मूलभूत असतात. तिन्ही काळात आणि सगळ्या देशांत ती सारखीच आणि अविचल असतात. उदा. सत्य, प्रेम, करुणा हे सद्गुण देशकालानुसार बदलत नाहीत. भगवंतानी या गुणांना दैवी संपत्ती म्हटले आहे. वस्तुतः जो अविचल, ध्रुव, शाश्वत स्थिर आणि नित्य आहे. तोच सनातन धर्म आहे. आम्ही हे प्राचीन काळापासून मानत आलो आहोत आणि आजही मानतो आहे.

आम्हाला धर्माला फक्त मंदिर-मठाच्या हद्दीपर्यंतच मर्यादित ठेवायचे नाही किंवा स्थितप्रज्ञाच्या सुपुर्दही करायचे नाही. उलट त्याला समाजाच्या रोजच्या व्यवहारात आणायचे आहे. जसे आम्हाला जमिनीचे वाटप करायचे आहे, संपत्तीचे वितरण करायचे आहे. तसेच धर्माचेही

भारतीय महिलांचे बदलते स्वरूप

- डॉ. राजेंद्र वाटणे

सहयोगी प्राध्यापक

तायवाडे महाविद्यालय, कोराडी

विश्वातील बहुसंख्या संस्कृती या पुरुषप्रधान संस्कृती असून त्या लिंगसापेक्ष विषमभावावर आधारित आहेत. त्यामुळे हेतुपुरःसरपणे पुरुषप्रधान संस्कृतीत व समाजरचनेत पुरुषांच्या हितसंबंधांची व स्त्रियांच्या कनिष्ठतेची जपणूक निरनिराळ्या माध्यमातून, प्रसंगानुरूप केली गेली. त्यामुळे ती समाजरचना पुरुषवर्गाला हितकारक तर स्त्रीवर्गाला अहितकारक ठरलेली आहे. शोषणाची जाणीव स्त्रियांना निरनिराळ्या कालखंडातून कमी-अधिक प्रमाणात होत आलेली आहे. परंतु आधुनिक काळात ती जाणीव तिला तीव्रपणे झाल्यामुळे तिने प्रस्थापित पुरुषप्रधान संस्कृतीविरुद्ध जे बंड केले त्याचे आविष्करण तिच्या कृतीतून, वाणीतून व लेखणीतून प्रभावीपणे प्रकट झालेले दिसते. पुरुषप्रधान संस्कृतीत परंपरेचे व 'पुरुषार्थ'चे एकीकडे गोडवे गातानाच दुसरीकडे स्त्रीला पत्नी, सती, दासी, देवदासी, कुलटा, रखेली, वेश्या, अस्पर्शा, परित्यक्ता, हुंडाबळी, बलात्कारबळी इत्यादी असंख्य नावांनी संबोधून तिला दाबण्याचा प्रयत्न झालेला दिसतो. या दबलेल्या स्त्रीदुःखाला व वेदनेला हुंकार फोडण्याचे महत्त्वपूर्ण कार्य स्त्रीवादने केले आहे.

संस्कृतीच्या व धर्माच्या नावावर स्त्रीत्वहरणाची व स्त्रीशोषणाची अमानवीय जोपासना वर्षानुवर्षे केली गेली. त्याचे मूळ शोधून त्यातील वास्तवतेचा शोध घेणे आजच्या स्त्री-पुरुष समानतेच्या व महिलांच्या बदलत्या स्वरूपाच्या बाबतीत महत्त्वाचे ठरते. प्राचीन काळापासून तर आजतागायत समाजापर्यंत धर्म पोहोचविण्याचे कार्य, भारतातील सर्वच धर्मांमध्ये स्त्रियांनी जोपासलेल्या रूढी व परंपरा यांच्यामुळे झाले, हे कुणालाही मान्य करावेच लागते.

आपल्या देशात वैदिक, बौद्ध, जैन व शीख धर्मांची स्थापना, वाढ आणि विस्तार झाला तर इस्लाम आणि ख्रिस्ती धर्म बाहेरून येऊन धर्मात व धर्मप्रसार करण्यात यशस्वी झाले. त्यामुळे अपरिहार्यपणे स्त्रिया या जातिधर्माच्या अविभाज्य घटक म्हणून जीवन जगल्या साहजिकच त्या त्या धर्माची तत्त्वे, कल्पना, रूढी, परंपरा, आचार-विचार यांच्या जोखडात त्या शतकानुशतके राहिला. त्यामुळे ती त्यांची सवय, जीवनपद्धती ठरली. त्यामुळे त्यात त्या धन्यता मानू लागल्या. कारण 'धर्म' हेच प्रत्येक मानवी समाजाचे महत्त्वाचे अंग होते. मनुष्याच्या जन्माबरोबरच कोणत्या ना कोणत्या धर्माशी त्याची नाळ जुळली जात होती. धर्माची निर्मिती ही परमेश्वराच्या संकल्पनेतून झाली असून धर्म हा मानवाच्या जीवनाची दिशा ठरविणारा महत्त्वाचा घटक आहे. प्रत्येकच धर्माचा आधार हा परमेश्वर व परमेश्वरनिर्मित शक्ती हा असून 'धारयति इति धर्मः' म्हणजेच 'समाजाची धारणा करतो तो धर्म' अशी धर्माची संकल्पना सांगितली आहे. ज्या तत्त्वाच्या आधारे समाज व्यवस्थित व सुरळीत चालतो तो धर्म असे धर्माचे उदात्त आणि व्यापक स्वरूप दिसून येत असले तरी धर्माला संस्थात्मक आणि संकुचित करण्याचे प्रयत्न झाले नाही असे नाही व त्यामुळेच आज धर्माचे अधिष्ठान कुठेतरी डळमळीत झालेले दिसते.

भारत हा विविधतेने नटलेला आणि नानाविध धर्मांची जोपासना व आदर करणारा देश आहे. त्यामुळे येथे अस्तित्वात असलेल्या प्रत्येक धर्माची उद्दिष्टे आणि स्त्रियांकडे पाहण्याचा त्यांचा दृष्टिकोन त्यांना देण्यात आलेले स्वातंत्र्य आणि अधिकार भिन्न-भिन्न स्वरूपाचे आहेत. प्रत्येक धर्म संस्थापनाचे कार्य जसे पुरुषांनी केले तसे तो पुढील पिढीकडे हस्तांतरित करण्याचे कार्य स्त्रियांनी केलेले आहे.

भारतातील वैदिक धर्म हा विश्वातील आद्य धर्म असून तो ऋषी-महर्षींनी, श्रुती, स्मृती, पुराणे, इतिहास इ. ग्रंथातून आकाराला आणला आहे. या वैदिक परंपरेचा विचार करता वैदिक युगापासून मध्ययुगापर्यंतच्या काळात महिलांच्या स्थानामध्ये परिस्थितीनुरूप परिवर्तने झालेली दिसते. ई.स. पूर्व ८०० पर्यंत मानल्या गेलेल्या वैदिक काळात शिक्षण, धर्म, दर्शन, वैयक्तिक, उन्नती, सामाजिक जागृती यासर्व क्षेत्रात महिलांनी गौरवास्पद कार्य केलेले दिसते. पुरुषांप्रमाणे सर्व धार्मिक अधिकार त्यांच्याकडे होते. वैदिक मंत्रपठण, यज्ञयाग त्या करीत असत. धर्मकारण, राजकारण, ज्ञानविज्ञान आणि समाजकारण यासर्वच क्षेत्रात स्त्रियांना पुरुषांच्या बरोबरीचे स्थान होते. ऐतरेय ब्राह्मण्यात, 'सखा हजाया' पत्नीला खरा मित्र संबोधले आहे. ती त्याला सावरणारी असून मनाने गुरुलाही जे साध्य होत नाही ते स्त्रीला शक्य होते असा 'शतपथ ब्राह्मणाचा' निर्वाळा आहे. आई ही वडिलांपेक्षा नव्हे तर गुरुपेक्षाही वंदनीय आहे. ही त्याकाळी समाजाची दृढ धारणा होती. इतकेच नव्हे तर संस्कृतीचे उत्थापन, उन्नयन आणि उत्कर्ष स्त्रियांमुळेच साधलेले आहेत असे शतपथ ब्राह्मण सांगते. यावरून वैदिक धर्मात स्त्रीचे सहकार्य व उपस्थिती आवश्यक होती हे सिद्ध होते. त्याकाळी धार्मिक प्रार्थना व यज्ञयाग पती-पत्नी मिळून करीत असे. शिवाय सामाजिक गाण्याची जबाबदारी स्त्रीची होती. पुढे ते कार्य विशिष्ट पुरोहित वर्गाकडे देण्यात आले. याशिवाय यज्ञासाठी तांदूळ कांडणे, बळी द्यावयाच्या पशूला स्नान घालणे, आहुत देणे इ. कार्ये तिला करावी लागत होती. यावरून

घरेलु कामगार महिलाओं की आर्थिक और सामाजिक समस्याएँ संदर्भ नागपुर शहर

- श्रीमती मीनाक्षी बांठिया-धारीवाल

एम.ए. एम.एड.

- डॉ. संजय दुधे

समाजशास्त्र विभागप्रमुख

तायवाडे महाविद्यालय, कोराडी

मनुष्य की निर्मात्री नारी ही है। बालक की आदिगुरु उसकी माता ही होती है। भारतीय समाज में भी महिलाओं का सदैव ही सम्मान रहा है। भारत की जनसंख्या का आधा भाग होने के कारण महिलाओं ने सभी क्षेत्रों खासकर घरेलु क्षेत्र में अपना महत्वपूर्ण योगदान दिया है। नगरीय एवं ग्रामीण दोनों ही क्षेत्रों में। नगरीय क्षेत्रों में अधिकतर महिलाएँ कामकाजी होती हैं अतः वहाँ घरेलु कामों को निपटाने हेतु मदद के रूप में घरेलु कामगारों को रखने का प्रचलन है। अनौपचारिक क्षेत्र में कार्यशील घरेलु कामगार महिलाओं की आय काफी कम व समस्याएँ काफी अधिक होती हैं। ये समाज के निम्न वर्ग से संबंध रखते हैं तथा इनकी सामाजिक, पारिवारिक व आर्थिक स्थिति काफी निम्न होती है। ये लोग दूसरे घरों के विभिन्न कामों को पूर्ण करने में संलग्न रहते हैं। जैसे- बर्तन धोना, झाड़ू-पोंछा, कपड़े धोना, खाना बनाना, बच्चों व घर के बुजुर्गों की देखभाल करना, बाज़ार से सब्जी खरीदना आदि। चूँकि ये सभी कार्य महिलाओं के माने जाते हैं, अतः इस क्षेत्र में उनका ही वर्चस्व है। इसके पीछे कई कारण छिपे हैं जो महिलाएँ बहुत गरीब परिवार से होती हैं तथा जिनकी शैक्षणिक स्थिति भी अच्छी नहीं होती वे इसे अपने व्यवसाय की तरह अपना लेती हैं। घर का गुजर-बसर केवल पुरुष द्वारा होना जहाँ कठिन होता है, वहाँ ये स्त्रियाँ घर से बाहर जाकर काम करती हैं तथा अपने परिवार के उदर-निर्वाह को संभव बनाती हैं। निम्न आर्थिक स्थिति के कारण घरेलु कामगार प्रायः गंदी बस्तियों में रहने को विवश हो जाते हैं। यहाँ रहते हुए उन्हें प्रतिदिन अनेक समस्याओं का सामना करना पड़ता है। हमने इन्हीं समस्याओं में से आर्थिक तथा सामाजिक समस्याओं का अध्ययन किया।

विषय प्रवेश : व्यक्ति की सामाजिक एवं आर्थिक स्थिति उस दर्पण के समान है जिसके द्वारा उसके जीवन के व्यक्तिगत व्यवहारों का पूर्वानुमान ही नहीं लगाया जा सकता वरन् उसके दैनिक क्रियाकलापों, उसकी आदतों, उसकी मानसिकता में भी उसकी सामाजिक आर्थिक स्थिति की अमिट छाप को देखा जा सकता है। मुख्यतः इस वर्ग की निम्न स्थिति के पीछे आर्थिक तत्व मुख्य है। धन की कमी के कारण ये अपना उदर-निर्वाह करने के लिए अनेक समस्याओं का सामना करते हुए काम करते हैं। जैसा व्यक्ति का व्यवसाय होगा वैसी ही व्यक्ति की सामाजिक स्थिति होगी। व्यक्ति की सामाजिक वर्ग स्थिति मुख्य रूप से उसके व्यवसाय से संबंधित होती है। आधुनिक आर्थिक युग में आर्थिक साधन व्यक्ति के जीविकोपार्जन के लिए ही जरूरी नहीं हैं वरन् उसे उन वस्तुओं को भी प्राप्त करने में सहायता प्रदान करते हैं जो उच्च सामाजिक मूल्यों का प्रतीक मानी जाती हैं। इसलिए व्यक्ति का व्यवसाय उसके सम्पूर्ण व्यक्तित्व, मूल्यों, विचारों, व्यवहार के प्रतिमानों को स्थापित करता है। अतः यह जीवन संबंधी सुविधाओं को प्राप्त करने का महत्वपूर्ण साधन है। इस वर्ग द्वारा इतना कठिन श्रम करने के बाद भी इस व्यवसाय में उनकी आर्थिक स्थिति निम्न ही रहती है। नागपुर की घरेलु कामगार महिलाओं का अध्ययन करते समय यह पाया कि इनकी स्वयं की वार्षिक आय सर्वाधिक ३० से ४० हजार है व इनका प्रतिशत ४५.५% है। ऐसी कामगार महिलाओं की संख्या सर्वाधिक है जिनके पति की वार्षिक आय ३० से ५० हजार के बीच है तथा इनका प्रतिशत ५१% है। अधिकांश उत्तरदाताओं के पति की व स्वयं की वार्षिक आय काफी कम है जिससे परिवार का भरण-पोषण करना बहुत बड़ी समस्या है। ९४.५% घरेलु कामगार महिलाओं का मानना है कि परिवार के भरण-पोषण के लिये पति-पत्नी दोनों की आय इस मँहगाई के दौर में काफी नहीं है। अध्ययन में पाया कि ५०% घरेलु कामगार महिलाएँ परिवार का उदर-निर्वाह करने के लिए बचत गट से कर्ज़ लेती हैं। पति-पत्नी दोनों की आय कम होने से परिवार के बुनियादी आवश्यकताएँ भी पूर्ण नहीं हो पाती। अतः परिवार का भरण-पोषण करने हेतु इन्हें या तो अतिरिक्त कार्य कर पैसा कमाना होता है या बैंक से या साहूकर से या रिश्तेदारों से कर्ज़ लेकर अपना घर चलाना होता है।

YOGA AS A THERAPY

(Yoga for health and happiness)

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YOGA THERAPY is the science of applying the various techniques of yoga in a variety of illnesses and conditions, to facilitate optimal health, healing and awakening. Classes are designed for the individual or group with a therapeutic focus for a specific health condition e.g. cancer, heart, prenatal, diabetes, multiple sclerosis.

Yoga Therapy Application :

"If psychotherapy is defined as "interpersonal method of mitigating suffering" then many psychotherapeutic systems have existed in India a long time. Unlike Western systems, these have lacked a clinical bias but have provided a more global framework. The future of psychotherapy in both East and West lies in discovering a conceptual framework with universal validity within which ad hoc therapies—for symptom relief, personality development, or interpersonal adjustment-can be developed."

Purpose of Yoga :

In due course of time, yoga is mainly looked upon as a set of techniques useful for achieving fitness in daily life and prevention and cure of some specific diseases or disorders. But the goal of yoga was different when yoga practices came into existence more than three thousand years ago. Throughout its history, yoga seems to have undergone changes regarding the purpose for which it was practiced. Many different varieties of yoga came to be practiced for different purposes. The main varieties of yoga include

Bhaktiyoga (Yoga of devotion) is the oldest variety of yoga in which the person practicing it invokes the Creator of the universe to shower grace and compassion. This grace and compassion is meant to help the devotee overcome all the travails and hardships of living. Practice of Bhaktiyoga includes prayer, worships of living. Practice of Bhajtiyoga includes prayer, worship, observing austerities and abstinence, and practice of virtue. In the middle ages in India, Many saints cultivated the way of devotion as mass-movement.

Karamayoga (Yoga of duty or action) is described in great detail in the Bhagavad Gita. The main principles of karamayoga include (a) never giving up and never failing in one's duty, and (b) looking equally upon opposites such as success and failure, pleasure and pain, heat and cold, etc., without being effected or swayed away by them.

Jnyanayoga (Yoga of knowledge) is explained thoroughly in the Yogasutra of Patanjali (second century BC.). It consists of eight-fold yoga. Ynyanayoga includes outer and inner aspects of disciplining and training the body and mind. It has three important techniques: postures, breath-control, and meditation.

Hathayoga (Yoga of bodily performances) In recent times, Hathayoga has become very popular . It was popularised by the experts if Tantra, called the Natha-yogis in the periods between twelfth and fifteenth centuries

GENDER, CLASS AND SEXUALITY IN THE WORKS OF W.B. YEATS : SPECIAL REFERENCE WITH THE POEM "LEDA AND THE SWAN"

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Abstract :

The sympathy for the indefinable suffering of women in the writings of W. B. Yeats is rooted in his temperament. He has not chosen to deliberately project feminism but it comes naturally in his writings. This poet has practically seen rampant negligence of women and their exploitation at the hands of men. To show these aspects in particular poem which deal with the theme of gender, class and sexuality have been minutely studied in the critical light of this research article because this article focuses elements of feminism in the poem of the most illustrative poets of the 20th century.

Key Words : Suffering, Negligence, Exploitation, Sexuality, Feminism.

Feminism is both an intellectual commitment and a political movement that seeks justice for women and the end of sexism in all forms. However, there are many different kinds of feminism. Feminists disagree about what sexism consists in, and what exactly ought to be done about it; they disagree about what it means to be a woman or a man and what social and political implication gender has or should have.

Nonetheless, motivated by the quest for social justice, feminist inquiry provides a wide range of perspectives in social, cultural, economic, and political phenomena. Important topics for feminist theory and politics include the body, class and work, disability, the family, globalization, human rights, popular culture, race and racism, reproduction, science, the self, sex work, human trafficking, and sexuality.

W. B. Yeats (1865-1939) was an Irish poet and playwright, and one of the foremost figures of 20th century literature. A pillar of both the Irish and British literary establishments, W. B. Yeats is one of the most powerful voices in modern literature. He is very potent and has a great impact on the minds of modern readers. Impact of feminism is seen on his poems. W. B. Yeats struggle begins with his identity: white, protestant, middle class man of the British Empire who 'belonged to the dominant literary tradition'. It was an interesting time for Yeats to grow up.

The seeds of struggling women must have been planted in youth by his father who was a practitioner of John Stuart Mills, the man who championed the rights of women. When Yeats began his literary career in the 1880s, deep and resounding advances for the rights of women were being enacted. In 1870, the 'Married Women's Property Act' was passed, finally giving married women some sense of relief in securing property. Women also began to acquire greater access to higher education and birthrate fell down as contraception became more widely accessible.

Yeats 'moved in circles sympathetic to emancipation'. Regarding his attitude towards women, it is said and observed that 'Yeats loved, liked, collaborate with, and respected women most of the time. He encouraged their

PARENT-CHILD RELATIONSHIP :

In the novels of Manju Kapur, Arundhati Roy & Shashi Deshpande

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Parent-child relationship, a part of the family relationship, is one of the major subjects of Indian novelists in English. Treatment of family relation, of which parent child relationship is only a part has been the characteristic feature of Indian literature throughout the ages. The treatment of human relationship has a speciality, a distinctiveness of its own. In the treatment of this variety of human relationship we always find an emphasis on high ideals and noble conducts. Indian literature has mostly been idealistic in which the good triumphs over the evil, selfishness has to give way to altruism; and ego of the individual has to retreat before good of society.

In the novels of Manju Kapur, Arundhati Roy and Shashi Deshpande, the delineation of parent child relationship has been in accordance with the demands of their age. There is no feeling of nostalgia for the traditional Indian values, but there is no deliberate debunking either. Almost all of the novels of these writers have had an unhappy childhood and have suffered from some kind of parental neglect. The marital life of the parents has also not been too happy in most of the cases. The mother is either non-existent or is a non-entity. This leads to a lot of instability among children. Lack of parental love and emotional involvement leads to peculiar complexes among the protagonists. In the absence of maternal love, the children develop father-fixation or brother-fixation. This, in its turn, creates problem of adjustment in their married lives. Some of them are childless and other are not particularly attached to their children. In the novels of these selected novelists, parent child relationship has been explained in various ways. The mother-daughter relationship has an important place in the novels of Manju Kapur and Shashi Deshpande which deals with daughters' relationship with their mothers.

In Arundhati Roy's novel the parent-child relationship has been depicted in a poignant manner. Bitter childhood experiences play a diabolic role in shaping the mentality of children when they grow up both in Shashi Deshpande and Arundhati Roy. In Shashi Deshpande these memories stem from gender bias whereas in Arundhati Roy in addition to gender bias they are rooted in the cruelty, violence and tyranny let loose by their parents. Both of these novelists believe that return to the parental house is the most desirable option for distressed daughters' in Indian society. Besides lack of parental affection and isolation from the family make children abnormal in their thoughts and behavior. In novels of Manju Kapur and Arundhati Roy, children suffer from lack of parental affection. Parent child relationship consists of various relations i.e. mother-daughter relationship, father-daughter relationship, mother-son relationship, father-son relationship. Among these relationships mother-daughter relationship is a dominant theme in Indian women novelist in English.

Manju Kapur's 'Difficult Daughters' captures the complex and ambivalent relationships between the mothers and the daughters over tenure of three generations.

These women of the three generations are Kasturi, Virmati and Ida. Virmati, a daughter and a mother is the central figure in the novel. She is the daughter of Kasturi and mother of Ida. Her relationship with her mother, Kasturi is most problematic. Being the eldest of the eleven children, she has to take complete care of her siblings. She has to play the role of a second mother for her brothers and sisters. The mother, Kasturi, is involved in the sole job of procreation leaving the young ones for Virmati to tend upon. The poor girl does best to appease her mother and at the same time pursue her studies. She is most often the one who has to do the



EPRA Journals

EPRA International Journal of
Socio-Economic and Environmental Outlook

ISSN: 2348 - 4101

SJIF Impact Factor (2015) : 4.312

Vol. 3 February - January 2016-17

THE PROBLEMS OF AGRICULTURE IN CURRENT SCENARIO

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ABSTRACT

Today Indian farmers are having so many social, familiar and economical problems. Farmer's suicide is crucial and serious problem in current scenario. Some states in India having the large number of farmer's suicide cases. After Andhra Pradesh, Maharashtra is on second number of farmers suicide affected states. The effects of poor condition definitely fall on the farmer's education system. Because of poorness farmers cannot provide proper education to their children's. Therefore we see the farmers sons becomes farmers and this sequence carry forward generation to generation. The particular cycle of social, familiar and educational problems involve in the life of farmers. A farmer also called an agriculture person, who is a person engaged in farming sector, raises living organisms for food or raw materials, generally including for survive and growing food. Agriculture also called farming or husbandry is the cultivation of animals, plants, other life forms for agriculture supplements and other products used to sustain life.

KEY WORDS: Problems, Development, Society, Government, Issues

INTRODUCTION

Agriculture in India has a significant history. Today, India is on second number worldwide in farm output. Agriculture in India is correlated to various supplementary works like forestry, fisheries etc. which has the total accounted for 16.6 % of the GDP India. GDP is steadily declining with the country's broad-based economic growth. Still, agriculture is demographically the broadest economic sector and plays a significant role in the overall socio-economic fabric of India.

India is the second largest producer of wheat and rice in current scenario. India has shown a steady

average nationwide annual increase in the kilograms produced per hectare for various agricultural items, over the last 60 years. The invention of agriculture is one of the great revolutions of human history. It includes the food production and domestication which led to significant changes in human society. In the social front, globalization signifies closer interaction of people in the society.



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“ विदर्भाच्या नागपूर जिल्हातील सिंचन व पीण्याच्या पाण्याची समस्या ”

सुनील प्र. घुगल, अर्थशास्त्र विभाग
प्रमुख, तायवाडे कॉलेज महादुला ,
कोराडी ता. कामठी जि. नागपूर

प्रस्तावना

पृथ्वीवरील एकुण पाण्यापैकी फक्त ३% पाणी गोड असून त्यापैकी ०.३% पाणी भुपृष्ठावर असून त्यापैकी २% पाणी नद्यांमध्ये उपलब्ध आहे. आपल्या देशाचा विचार करता जगातील पाण्याच्या (चार टक्के) पाणी (४००० घन किमी) आपल्या देशात आहे. व त्यावर जगाच्या २.४% जीमण व १६.५% जनसंख्या यावर अवलंबून आहे. भारतीय संविधानामध्येच राज्यातील नद्यांच्या बाबतीत तंटा लवाद न्यायनिवाडा करत असतात महाराष्ट्र राज्याचा विचार करता देशाच्या एकुण पाणी उपलब्धतेपैकी ४% पाणी (१६३.८२ घन किमी) आपल्या महाराष्ट्र राज्यात उपलब्ध असून विविध पाणी तंटा लवादाच्या आदेशान्वये अनुज्ञेय पाणी हे ३.१४% (१२५.९४ घन किमी) इतके आहे.

राज्यातील जलसंपदेच्या सुयोग्य वापरामुळे राज्याच्या उत्कर्षात भर पडत असते. महाराष्ट्रात सुमारे ३८० नद्या असून त्यांची एकत्रित लांबी सुमारे २०,००० किमी एवढी आहे. महाराष्ट्राच्या जलसंपदा खात्याकडे २५० हेक्टर पेक्षा जास्त सिंचन क्षमता असलेले सिंचन प्रकल्प तसेच जलविद्युत प्रकल्प यांचे सर्वेक्षण, अन्वेषण, नियोजन, संकल्पन, बांधकाम, देखभाल दुरुस्ती व व्यवस्थापन यांची जबाबदारी सोपविण्यात आली आहे. या खात्याला १५० वर्षांचा गौरवशाली इतिहास असून आजतागायत १०४ मोठ्या, ३०२ मध्यम, ३२०४ लघु व ३०१ उपसा सिंचन प्रकल्पांद्वारे ४१.७१ लक्ष हेक्टर एवढी सिंचन क्षमता निर्मिती व ३३.३८५ दशलक्ष घनमीटर जलसाठ्याची निर्मिती केलेली आहे. तसेच खात्याने ३६०६ मे.वॅ. स्थापित क्षमता असलेल्या ५८ जलविद्युत प्रकल्पांची निर्मिती केली आहे. राज्यातील सुमारे २/३ लोकसंख्येची पिण्याची व घरगुती वापराची तसेच औद्योगिक पाणीपुरवठ्याची गरज विभागाने भागविली आहे. यासाठी १०,००० अभियंत्यांसह इतर ३५००० कर्मचाऱ्यांनी अथक परिश्रम केलेले आहे.

राज्यासमोरील पाणीप्रश्न भयावह असून जर त्याबाबत वेळीच उपाययोजना केली नाही तर समाजात असंतोष फोफाऊ शकतो यादृष्टीने जलसंपदा विभागाने राज्यातील प्रत्येकास पुरेसे पाणी उपलब्ध करून देणे , उद्योगधंदे / कारखाने व पर्यावरण विषयक उपक्रमांची गरज भागविण्यासाठी उच्चतंत्रज्ञानाच्या माध्यमातून पाणीवापर कार्यक्षमता वाढविण्यास वसा घेतला आहे. त्यासाठीच व्हिजन २०२० या महत्वाकांक्षी कार्यक्रमाचे नियोजन करण्यात आले असून आम्हाने यशस्वीरित्या पेलून महाराष्ट्र राज्य सुजलाम सुफलाम होण्यास यामार्फत मदत होणार आहे.

Women contribution in Indian Banking Industries: Beginning of New Era

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Abstract:-

Despite banking being a female-dominated industry, women are still under-represented in management and senior management. Empirical evidence shows that women contribute significantly to the running of family businesses mostly in the form of unpaid effort and skills. The value of this effort is underestimated both by the families that take it for granted and in academic studies. The pattern of Indian women's employment has changed markedly since the 1970s. Technology has indeed played a significant role in this change. Increasing women literacy, growing economic pressure, and desire to gain economic and social independence are pushing womenfolk to take up gainful career in banks. The phenomenal growth of banks has created massive employment opportunities for the educated women of our nation. The women job-seekers find jobs in banks more attractive and more suitable to their nature. In this paper an attempt has been made to identify the general sentiments, challenges and opportunities of women employees in the Indian Banking Industry, which is the life blood of the Indian economy.

Introduction

The status of women in India has been subject to many great changes over the past few millennia. From equal status with men in ancient time through the low points of the medieval period to the promotion of equal rights by many reformers, the history of women in India has been eventful. In modern India, women have held high offices in India including that of the President, Prime Minister, Speaker of the Lok Sabha and Leader of the Opposition. As of 2011, the Speaker of the Lok Sabha and the Leader of the Opposition in the Lok Sabha (lower House of the parliament) were women. However, women in India continue to face discrimination and other social challenges and are often victims of abuse and violent crime. According to a global poll conducted by Thomson Reuters, India is the "fourth most dangerous country" in the world for women

and the worst country for women among the G20 countries. In Vedic times women occupied the highest place in society. They were given all opportunities to develop themselves, socially, intellectually and morally. They were given thorough education. Similarly there is a positive change in the present society, which is focusing on women empowerment. The progress of any country is intimately

linked to its ability to develop and use its human resource effectively. This is particularly true in a developing country like India. Women, as a significant part of this human resource pool, play a vital role in the economic, social and political development of India. Nationalization of the Indian Banking Sector in 1969 served as the first major step to reduce gender discrimination against women in banking sector and that provided opportunity for women empowerment. The pattern of Indian

“Analysis of Gap in Employability Skills of Graduate Engineers –with special reference to Recruitment and Selection of Electronic Engineering students in Nagpur”

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Abstract

*A candidate's degree will make him eligible to apply for jobs that specify "must be a graduate" and the subject or class of his degree may also be important to certain employers. But however good is the degree class, however relevant is the subject to the career that he'll be applying for, **it is likely that he will be competing for this job with a number of other graduates who are equally well-qualified academically.***

It is very difficult these days to compete with others just on academics basis. If there are a hundred candidates applying for some ten vacancies with same academic degree then how would one be able to grab attention of the employers and get him selected for the job?

There are certain skill sets which apart from academics help an individual to fetch a job called as employability skills.

It is very important to understand as to how many individuals truly understand their position with respect to industry needs and are aware of the employability scenario. The research aims at understanding what are the current trends in terms of employability skills which are being expected by the employers. Analysis of the data collected analyzed by IBM SPSS application software.

The research concludes whether the engineering graduates possess the employability skills as against the industry expectations.

Keywords: Employability, Employability skills, Soft skills, Employer expectations

नागपूर जिल्ह्यातील ग्रामीण महिला उद्योजकता विकासात महिला बचत गटांची भूमिका



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सहयोगी प्राध्यापक

सारांश

भारत हा सांस्कृतिक दृष्ट्या अती प्राचीन देश आहे. देशातील लोकसंख्येत 49% टक्के महिलांचा सहभाग असून देखील भारताची ख्याती पूर्वीपासून पुरुषप्रधान संस्कृती लाभलेला देश म्हणूनच आहे. कोणत्याही देशाची आर्थिक प्रगती हे तेशील उद्योग विकासावर अवलंबून असते व उद्योग विकासाच्या दृष्टीने महिलांचे स्थान महत्वपूर्ण आहे. एक आई शिकली की संपूर्ण कुटूंब शिकते तर एक महिला उद्योजकाला लागली की संपूर्ण कुटूंब उद्योगाला लागते. अशा दूरबल घटकांना उद्योजक म्हणून कार्यक्षम करण्याचे कार्य बचत गटाने सुरु केले. या बचत गटाचे प्रणेते बांग्लादेशातील 'चितगांव' विद्यापीठातील अर्थशास्त्र विषयाचे प्राध्यापक व बांग्लादेश ग्रामीण बँकेचे प्रणेते व शांतता नोबल पुरस्काराचे मानकरी 'डॉ. महमंद यूनुस' आहे. याच्या कार्यामुळे महिला सशक्तीकरणास सुरवात झाली. ग्रामीण महिलांना उद्योजकता विकासाला प्रोत्साहन मिळू लागले व महिलांमध्ये श्रम शक्तीचे महत्वा वाढू लागले.

महत्वपूर्ण भाव

आर्थिक विकास, महिला उद्योजकता, बचत गट, डॉ. महमंद यूनुस, ग्रामीण महिला विकास

प्रास्ताविक

संस्कृतीक दृष्ट्या भारत हा अती प्राचीन देश आहे. या देशात पूर्वीपासूनच पुरुषप्रधान संस्कृती स्विकारण्यात आलेली आहे. 2011 च्या जनगणनेच्या आधारे भारताच्या एकूण लोकसंख्येत महिलांचे प्रमाण जवळपास 49% आहे. म्हणजेच भारताच्या मानवी भांडवलात महिलांचा हिस्सा जवळपास पुरुषाइतकाच आहे. म्हणून देशाच्या विकासात महिलांची भूमिका महत्वाची आहे. परंतु भारतच नव्हे तर संपूर्ण जगातील बहुतांश देशात "स्त्री" हा समाजातील एक महत्वपूर्ण वर्ग न्यायापासून व आर्थिक बाबीपासून वंचित राहिला आहे. पुरुषप्रधान भारतीय समाज व्यवस्थेत स्त्रियांचे आर्थिक स्थान काय? असा प्रश्न विचारला तर समाजाच्या आर्थिक क्षेत्रात स्त्रियांचे प्रमाण अल्प असल्याचा प्रत्यय वारंवार येतो.

वैदिक काळापासून ते स्वातंत्र्यपूर्व काळापर्यंत

महिलांची अवस्था फार दयनीय असल्याचे आपला लक्षात येईल एकिकडे वेदांमध्ये आदिशक्ती, महाभाषा, देवी या रूपात तीला मान द्यायचा व दुसरीकडे बालविवाह करणे, विद्यार्जनापासून दूर ठेवणे, प्रथा करणे, त्यांचे अधिकार गौण मानने त्यांना पुरुषांच्या तुलनेत हिन समजणे, त्यांना आर्थिक क्षेत्रापासून दूर ठेवणे त्यांचा शारीरिक, मानसिक छळ करणे अशा पद्धतीने त्यांची अडेलना करून दूजा दर्जा दिल्याचे लक्षात येते. परंतु स्वातंत्र्यानंतरच्या काळात मात्र स्त्रियांच्या बाबतीत बरीच समाधानकारक परिस्थिती दृष्टीस पडते. मागवत गौतम बुद्ध, राजा राम मोहन राय, स्वामी विवेकानंद इत्यादी थोर व्यक्तींच्या मार्गदर्शक उपदेशांमुळे महिलांच्या परिस्थितीत बदल झाल्याचे दिसून येते. महात्मा फुले व सावित्रीबाई फुले यांच्यामुळे महिलांमध्ये शिक्षणाचा प्रचार व प्रसार झाला व शिक्षणाने त्यांच्यात अमुलाग्र बदल झाल्याचे दिसून येते.

कोणत्याही देशाचा आर्थिक विकास तेशील सामाजिक, सांस्कृतिक व राजकीय व आर्थिक क्षेत्रावर अवलंबून असतो आर्थिक विकासाच्या प्रक्रियेत जितकी पुरुषांची भूमिका महत्वाची आहे तितकीच महिलांची सुध्दा आहे. तसेच सुरुवातीच्या काळात ही भूमिका दुर्लक्षित होती. परंतु जसे जसे औद्योगीकरण वायला लागले तसे तसा समाजाचा महिलांकडे बघण्याचा दृष्टीकोन बदलत गेला, महिलांनी उत्पादक मानस साधन संपत्ती आहे असे मानले जाऊ लागले.

कोणत्याही देशाची आर्थिक प्रगती फलत असतांना अगोदर औद्योगिक विकास पाहिला जातो. भारताला जगात प्रथम स्थान मिळवून देण्यासाठी पुरुष व महिला या दोघांची भूमिका महत्वाची ठरणार आहे. पुरुष वर्गाने आपल्या प्रयत्नातून व कार्यातून त्यांचा जबाबदारी उचललेली आहे. तर या कार्यात महिला कुठेही मागे नाहीत, त्यांनी सामाजिक, शैक्षणिक, राजकीय, तांत्रिक वैज्ञानिक प्रवेश करून आपले प्रभुत्व सिध्द केलेले आहे.

उद्योजकता हा कोणत्याही राष्ट्राच्या विकासाचा महामंत्र आहे. उद्योजकताच कोणत्याही राष्ट्राला विकासाच्या मार्गावर नेऊ शकते. हि धारणा आता नवीन राहिलेले नाही. आजपर्यंत या क्षेत्रात पुरुष

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'AN ANALYTICAL STUDY OF MICRO INSURANCE PROGRAMS FOR THE PROTECTION OF LOW -INCOME PEOPLE: WITH SPECIAL REFERENCE TO NAGPUR CITY" [2003-2013]

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Company and is in existence since 1956, various schemes in LIC are studied. Geographical limitations are also there. Nagpur city of L.I.C. is considered for the protection of low -income people. The period considered is of Ten years. (2003-2013).

ABSTRACT

Micro Insurance offers an innovative way to combat poverty by helping low-income people systematically, manage financial risk to their livelihood and lives. Reducing poverty requires not just generation of income amongst poor but also the protection of their income. Social Sector includes unorganized sector, the informal sector and economically vulnerable or backward classes and marginalization of persons both rural and urban areas. The unorganized sector will include self-employed workers such as Agricultural Labour, Bidi Workers, Fisherman, Hamals, Lady Tailors, Tannery Workers. As there are many Insurance Companies in General and Life Sector. The Scope of study is restricted to Life Insurance Corporation products only. The study is related to the Micro Insurance Life Schemes. As life Insurance Corporation of India is a

KEYWORDS: Micro insurance programs, Protection of Low, Geographical limitations.

INTRODUCTION

Micro insurance is a powerful tool to reduce the risk which generally low income people face. It also makes the insurance affordable. The main objective of micro insurance model is to reach the people and make them aware of insurance. As many insurance companies are operating on commercial basis so it is not possible for them to give insurance cover at low cost. So IRDA has made compulsory to them to do some business for low income people in rural and urban areas. Due to this compulsion insurance companies are making plans for the low income sector. But the question remains whether the plan floated by them is same as the plan needed for low income people.

So it becomes necessary to study the needs of socially backward and financially weak people. To find out whether the benefits given in the plans are really effective, this research work is done.

There are many villages in Vidharbha having BPL and low income families. Their main source of income is agriculture and the activities related to it. But climatic conditions are not much favourable. There is scarcity of water & rainfall is also not predictable as sometimes it is very heavy leading to flood or sometimes it is too low causing



मराठीतील विज्ञानसाहित्य : संकल्पना व स्वरूप

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तायवाडे महाविद्यालय, कोराडी

मराठीतील विज्ञानसाहित्य हे नाव प्रथमतः मराठी विज्ञान परिशद आणि मुंबई विद्यापीठाचा मराठी विभाग त्यांचे संयुक्त विद्यमाने १९८३ साली झालेल्या चर्चासत्रात स्वीकारल्या गेले. विज्ञान साहित्य ही संज्ञा science fiction या सज्ञेचा पर्याय म्हणून स्वीकारल्या गेली. विज्ञान साहित्याची मूळ प्रेरणा ही पाश्चात्य साहित्यातलीच आहे. 'द रँडम हाऊस डिक्यनरी ऑफ इंग्लिश लँग्वेज (१९७२) या शब्दकोशात (science fiction) "it is a term of fiction which draws imaginatively on scientific knowledge and speculation in its plot setting or theme."

यातील इमॅजिनेटिव्हली व सायंटिफिक नॉलेज अँड स्पेक्युलेशन हे शब्द महत्वाचे मानले जातात. म्हणजेच प्रचालीत ज्ञानावर आपल्या कल्पनेचा आणि अंदाजाचा मालमसाला चढवूनच विज्ञानकथा अस्तित्वात येत असते. असा विचार अनेक पाश्चात्य लेखकांनी व्यक्त केलेला आहे. त्यांनी लेखकांनी भविष्याबद्दलच्या आपल्या कल्पनांना वाव देण्यासाठी आजच्या विज्ञानापेक्षा भविष्याकाळातले विज्ञान कसे असेल. हे गृहित धरले आहे.

मराठी साहित्यातील कथा, कादंबरी, नाटक, कविता या सर्जनशील साहित्यप्रकारांप्रमाणेच ज्या साहित्यकृतीचा आशय विज्ञाननिष्ठ असेल त्या साहित्यकृतीला विज्ञान साहित्य म्हटल्या गेले. ज्या ज्या कथेत, कादंबरीत कवितेत अथवा नाटकात विज्ञाननिष्ठ नाणीव अभिव्यक्त झाल्यात ती कथा कविता कादंबरी अथवा ते नाटक हे विज्ञान साहित्य ठरविण्यात आले." विज्ञान साहित्य म्हणजे विज्ञानातील एखादे वास्तव सत्य, त्यातून निर्माण होणारी कलात्मक स्तरांवरील नवनिर्मिती होय." (डॉ. व. दि. कुलकर्णी, विज्ञानसाहित्य आणि संकल्पना, पृ. ८६) असे व. दि. कुलकर्णी त्यांनी म्हटले आहे ते पुढेही म्हणतात. संभवनीयता आणि शक्यता यांच्या मर्यादेत येथे कल्पित वास्तव असते. हे खरे आहे कारण निसर्ग, पशु, पक्षी, प्राणी आणि मानव यांच्यातील नवनवीन भावनिक नातेसंबंध जन्माला येतात. एकानव्या लौकिकेतर सृष्टीत आपण शिरतो. ही सृष्टी आणि तिच्याशी निर्माण झालेले भावनिक नाते यातून एक कलात्मक आकृतीबंध निर्माण होतो. हा आकृतीबंध आपल्याला विलक्षण आनंद देतो. हा आनंद देणे हेच विज्ञानसाहित्याचे प्रयोजन ठरते. कोणत्याही कलाकृतीचे अंतिम प्रयोजन हे शेवटी आनंद देणेच असते. विज्ञानसाहित्यकृती ही अन्यसाहित्यकृतींप्रमाणे साध्यरूपच असायला हवी ती साधनरूपाने येणे गौणत्वाचे लक्षण ठरेल.

विज्ञान साहित्य हेही मुळातच कल्पित वास्तवावर आधारलेले आहे. ज्याप्रमाणे ऐतिहासिक कथा कादंबरी अथवा नाटकात कल्पित आणि वास्तवाची सरमिसळ असते. त्यात सत्य आणि कल्पित आंतरिक नात्यांनी एकजिव झालेले असतात. पण एखाद्याला कल्पित मजकुरामुळे अथवा मुद्यामुळे इतिहासपुरुषाच्या व्यक्तिमत्त्वाला अथवा मूल्यभावाला धक्का लागणार नाही याची काळजी घेण्यात येते त्याप्रमाणेच विज्ञानसाहित्यात 'कल्पित वास्तव' एक वदतोव्याख्यात वाटतो. पण तो विरोधाभास आहे. आज प्रत्यक्षात जे अनुभवसृष्टीत अस्तित्वात सिध्द झाले नाही अथवा कल्पित विश्वनिर्मितीत विज्ञान साहित्य रमलेले आहे.

विज्ञान साहित्याचा लेखक हा विज्ञान संशोधक किंवा शास्त्रज्ञ असायला हवा किंवा त्याने साहित्यिक असायलाच हवे असा नियम करता येणार नाही. याचे कारण वैज्ञानिकाला साहित्याची आवड असेलच असे म्हणता येत नाही. पण काही अपवादभूत व्यक्तिमत्त्वे असतात जे विज्ञानसंशोधक असून उत्तम साहित्यनिर्मिती करू शकतात. भारतरत्न डॉ. ए. पी. जे. अब्दुल कलाम व पद्मभूषण डॉ. जयंत नारळीकर या वैज्ञानिकांकडून दर्जेदार साहित्यनिर्मिती झालेली आहे. याचे कारण असे असू शकेल त्यांनी संशोधनाचा प्रत्यक्षात अनुभव घेतलेला असतो. अनेक सत्ये त्यांना गवसले असतात. त्या तीव्र अनुभूतीला शब्दांकित करण्याची कलाही त्याला अवगत असते. त्यामुळे वैज्ञानिक उत्तम लेखन करू शकतो. वैज्ञानिक नसलेले लेखक उपलब्ध ज्ञानबळावर आपला कल्पनाप्रवास सुरू करतो. त्याच्या कल्पनाचक्षुना नवी रहस्ये, नवी रूपे दिसतात. तो नव्या सृष्टीची नव्यामनूष नवी जीवनव्यवस्था कल्पित असतो. त्यातून नव्या समस्या नवे संघर्ष निर्माण करतो आणि उदयाच्या मानवी भवितव्याचे संभाव्यचित्र रेखाटतो. हा संभाव्यचित्रांना खऱ्या चित्रांची जागा मिळाली नाही तरी ती खोटी म्हणून दूर ढकलल्या जात नाही. खरी चित्रे पाहता पाहता आपण नकळत सहजपणे संभाव्यचित्रांच्या प्रांतात प्रवेश करतो. तेथील सत्यांना कलेच्या विश्वांतर्गत तर्क न्यायाने स्वीकारतो आणि कलांनंद मिळवितो. श्री अरूण बळेकरांच्या साहित्याच्या संदर्भात असा दर्जेदारपणा साधून कलांनंद दिलेला आहे. याचाच अर्थ असा आहे की, वैज्ञानिक आणि साहित्यिक या दोघांनीही विज्ञानसाहित्य लिहिण्यातून विज्ञानसाहित्याचा दर्जा निश्चितच वाढेल. मराठी भाषेचा माध्यमातून हे विज्ञानसाहित्य लिहिल्यास मराठी विज्ञानसाहित्याचा विकास झाल्याशिवाय राहणार नाही.

"विज्ञानाच्या आणि विज्ञाननिष्ठ तर्काच्या भक्कम भूमीवर पाय रोवून उभे राहायचे आणि विज्ञानाच्या अंतराळात स्वप्नांचे स्वच्छ आणि सुस्पष्ट आकृतीबंध रेखाटायचे ही विज्ञान साहित्यिकाची प्रतिभाक्रीडाच होय. ह्या स्वप्नाशयांची अभिव्यक्त रूपे म्हणजे विज्ञान साहित्य होय. विज्ञान

१३. समर्थाचे वाङ्मयीन कार्यकर्तृत्व

डॉ. कोमल ठाकरे

तायवाडे महाविद्यालय, कोराडी, नागपूर

समर्थाचे व्यक्तित्व त्यांच्या पूर्वयुष्यात फुलले. त्यांनी १२ वर्षे तपश्चर्या केली. बारा वर्षे भारतभ्रमण केले. हिमालयापासून रामेश्वरपर्यंत आणि गंगासागरपासून द्वारकेपर्यंत सर्व देशभर ते फिरले. त्यातच त्यांनी आपल्या कार्याची दिशा निश्चित केली. एकूणच धर्माला आलेली ग्लानी, मतामतांमधली विसंगती व त्यातून निर्माण झालेला विसंवाद, संकुचित दृष्टिकोण, देवदेवतांचे उपासना प्राबल्य आणि त्यामुळे दुंभगलेला समाज, नैराशच त्यांनी जाणवले. तेव्हा क्षात्रधर्माचे तेज वाढविण्यासाठी त्यांनी रामदासी संप्रदायाची स्थापना केली. उपासनेसाठी राम दैवताचा स्वीकार केला. बालसंवर्धनासाठी मारुतीची उपासना केली. प्रपंच आणि परमार्थाची उचित सांगड घालण्याचा प्रयत्न केला महाराष्ट्रात वैदिक धर्माची पुनर्स्थापना केली. स्वतः ब्रह्मचर्य स्वीकारलेल्या रामदासांनी समाजसंसारची रहस्ये उलगडून दाखविली. महाराष्ट्रात चैतन्य निर्माण करण्यासाठी बलभीम मारुतीची गावोगावी स्थापना केली. अन्यायाचा प्रतिकार करून माणसाचे आत्मबल वाढविणारा बलोपासना मंत्र महाराष्ट्राला दिला. तीर्थाटनात देशस्थिती व समाजस्थितीचे सूक्ष्म निरीक्षण केले परकीय सत्तेमुळे निस्तेज होत चाललेली संस्कृती, धर्म, धार्मिक उदासीनता, जनतेतील न्यूनगंड या गोष्टी त्यांच्या संवेदनशील मनाला जाणवल्या व त्यानंतर शिवकालीन समाजाला स्वातंत्र्योन्मुख होण्यासाठी राष्ट्रभक्तीचे धडे दिले. महाराष्ट्रात व महाराष्ट्राबाहेर ११०० मठाची स्थापना त्यांनी केली. त्या मठाच्या माध्यमातून धार्मिक जागृती त्यांनी घडवून आणली. लोकमनातील भीतीचे पटल दूर सारण्यासाठी राम व मारुतीच्या उत्सवाची निर्मिती केली. त्या उत्सवातून लोकशिक्षणाचे कार्य केले. 'जे जे आपणाशी ठावे ते ते इतरांशी शिकवावे' या न्यायाने त्यांनी स्वतःचा शिक्षक वर्ग निर्माण करून त्यांना सद्बर्तनाचे पाठ दिले. दीक्षेच्या अनुग्रहाचा रस्ता स्त्रियांसाठीही खुला ठेवला. त्यांचा विधवा स्त्रियांचा शीष्परिवार देशभर पसरला होता.

देशातील नागरिकांचे चारित्र्य घडविण्यासाठी त्यांनी पारंपारिक रूढी, अंधश्रद्धा, भ्रष्टाचार, दुष्ट चालीरिती निषेध केला.

नारायण-रामदास-समर्थ ही तीन नावे जीवनातील तीन टप्प्यांचे दिग्दर्शन करणाऱ्या तीन अवस्था दर्शविणारी आहेत. संत रामदासांच्या वाङ्मयाकडे वळलो तरी (१) करुणास्तोत्रे, (२) मनाचे श्लोक व (३) ग्रंथराज दासबोध या तीन कलाकृती त्यांच्या वरील तीन अवस्थांशी मिळत्याजुळत्या आहेत. करुणाष्टके नाशिकला रामाच्या देवळात स्फुरलेली आहेत. ईश्वरभक्तीत दंग राहून समाजहीत डोळ्यापुढे ठेवून त्यांनी ग्रंथाचे अध्ययन केले. त्यांनी विचार व क्रियाशीलता याचा पुरस्कार केला. लोकसंवादासाठी वाणी व लेखणीचा मुक्तपणे वापर समर्थांनी केला. रसिकमनाच्या रामदासांनी वक्तृत्वकलेचे महत्त्व जाणलेले होते. संगीतशास्त्राच्या अभ्यासाचीही आवड त्यांना होती. त्यांची काव्यरचना एखाद्या पंडित कवीच्या रचनेप्रमाणे आहे.

झिरपती झरती झरती झरे

न धरिता धरिता निर बावरे

बहुत पाभळ वाघ महितळी

नभकटे धुकटे कट पाभळी

अशा त्यांच्या रचना बघून त्यांना भाषाप्रभू ही उपाधी देण्यात आली. १५०० श्लोक संख्या असलेल्या करुणास्तोत्रांची रचना त्यांनी केली. ही रचना मनाला भिडणारी व परिणामकारक आहे. पारमार्थिक प्रवासातील अडचणीचा अनुभव आल्यानंतर परमेश्वराचा धावा करण्यामधून ही रचना निर्माण झालेली आहे. स्वतःच्या मर्यादांचीही उत्कट जाणीव यात आहे.

मनाचे श्लोक ही एक स्वतंत्र रचना आहे. २०५ श्लोक त्यात आहेत. श्लोकाची रचनाही साधी प्रासादिक अशीच आहे. कुणालाही सहज समजेल अशी रचना आहे. आपल्याच मनाला उद्देशून जिह्वाळ्याचे हितगुज बोलावे असे हे श्लोक आहेत. जनसामान्यांना उपदेश करण्याचे व्रत स्वीकारल्यावर त्यांच्या मनाला आधार देण्यासाठी ही रचना केलेली आहे. एखाद्याला विश्वासात घेऊन त्याच्याशी बोलावे बोलता-बोलता आत्मपरीक्षण करित चार हिताचे शब्द सांगावेत अशा पद्धतीने हे श्लोक सांगितले आहेत.

यात प्रामुख्याने भक्तिमार्गाचा उपदेश आहे. आध्यात्मिक गहन सिद्धांत यात सांगितले नाहीत. मनुष्याचे दैनंदिन आचरण कसे असावे मनाला कोणते वळण लावावेत याचे दिग्दर्शन या श्लोकात आहे. विवेक, वैराग्य, सदाचार, उपासना, इन्द्रियसंयम अशा आशयाने भरलेले हे श्लोक आहेत. 'मरे एक त्याचा दुजा शोक वाहे, अकस्मात तोही पुढे जात आहे.' अशा साध्या सरळ सहजसुलभ शब्दांतून मानवी जीवनाच्या नाशवंत स्वरूपाचे वर्णन त्यांनी केलेले आहे. 'जगी सर्व सुखी असा कोण आहे?' असा प्रश्न करून 'मना त्वरि रे पूर्व संचित केले। तयासारखे भोगणे प्राप्त झाले' असे सरळ उत्तरही यात आहे. 'जनी निंदते सर्व सोडोनी द्यावे। जनी वंदते सर्वभावे करावे' असा व्यवहारपयोगी उपदेशही त्यांनी केलेला आहे.



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Synthesis, Characterizations and Antimicrobial Activities of 1, 2, 4-Triazoles

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ABSTRACT

A series of substituted 1, 2, 4-triazole derivatives have been synthesized, using chloroform mediated phenylimino dichloromethane. It was added to a chloroform suspension of N'-(arylidene) ethanehydrazonohydrazide and the mixture was refluxed over water bath for 3 hours. The evolution of hydrogen chloride gas was noticed. The structures of synthesized compounds are confirmed on spectral analysis like IR; ^1H NMR and ^{13}C NMR data. All newly synthesized compounds were screened for their antimicrobial activity towards *Gram-positive* and *Gram-negative* bacterial strains and antifungal activity including *B. subtilis*, *E. coli*, *S. aureus*, *S. ablong*, *Candida* and *A. niger*. Results showed that most of compounds have measurable antibacterial and antifungal activity.

Keywords: 1, 2, 4-triazoles, hydrazonohydrazide, Synthesis of 1, 2, 4-triazoles.

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Received 01 December 2016, Accepted 08 December 2016

Please cite this article as: Bhaskar CS *et al.*, Synthesis, Characterizations and Antimicrobial Activities of 1, 2, 4-Triazoles. American Journal of PharmTech Research 2016.



AMERICAN JOURNAL OF PHARMTECH RESEARCH

Journal home page: <http://www.ajptr.com/>

Phytochemical analysis and *in vitro* synergistic efficacy of leaf extracts of *Acacia polyacantha* and antibiotics against MDR *Klebsiella SPP.*

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ABSTRACT

Emerging Multidrug-resistant problem is a major concern. *Klebsiella sp.* can lead to a wide range of disease causing pathogen namely pneumonia, urinary tract infections, septicemia, meningitis, diarrhea and soft tissue infections and development of MDR against commonly used antibiotics making the case difficult to manage. Total 525 Clinical samples were screened for isolation of *Klebsiella sp.* Total 36 isolates belonging to *Klebsiella sp.* Were obtained. 29(8.06%) isolates were associated with urinary tract infection (UTI), 6(12%) with sputum and 1(1.54%) was associated with blood. Antibioqram study of these isolates revealed that all these isolates are resistant to several antibiotics out of 34 antibiotics tested. Cold and hot acacia leaf petroleum ether extract, cold and hot acacia leaf chloroform extract, cold and hot acacia leaf acetone extract, cold and hot acacia leaf methanol extract and cold and hot acacia leaf water extract were used for synergistic study. Qualitative phytochemical analysis these leaf extracts showed the prominent presence of alkaloids, Carbohydrates and glycosides, proteins and amino acids and phytosteroids. The studies on these extracts of *Acacia polyacantha* and antibiotics on susceptibility of resistant *Klebsiella* isolates showed that both cold and hot solvent extracts are effective on antibiotics. The effectiveness shown by these extracts may be useful in evaluating the efficacy of combination therapy against MDR-*Klebsiella sp.*

Keywords: Phytochemical, Antibiotics, *Multidrug resistance*, *Klebsiella sp.*

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Received 20 November 2016, Accepted 29 November 2016

Please cite this article as: Charde VN *et al.*, Phytochemical analysis and *in vitro* synergistic efficacy of leaf extracts of *Acacia polyacantha* and antibiotics against MDR *Klebsiella SPP* . American Journal of PharmTech Research 2016.

SURVEY ON ETHNO BOTANICAL PLANTS USED FOR THE TREATMENT OF SKIN DISEASES BY TRADITIONAL HEALERS IN MAHUR TALUKA OF DISTRICT NANDED (MS), INDIA

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Received on : 10.07.2016 and Accepted Revised on : 25.12.2016

ABSTRACT : Mahur taluka is located in northern part of Nanded district. It is bounded North by Yavatmal district, South by Kinwat taluka of Nanded district, East part by Adilabad district of Telangana and West by Pusad taluka of Yavatmal district of Vidarbha region. Mahur taluka is a thick forested area of Nanded District. The present survey provides information on the therapeutic properties of 14 crude drugs used by the natives of Mahur Taluka of Nanded District, Maharashtra, India. For documentation of ethno-botanical information and collection of plant material, study was undertaken during the period from January 2014-August 2015. Data was obtained based on personal observations and interviews with traditional healers. These crude drugs were used as paste of whole plants, leaf, bark and seeds are applied externally. As these crude drugs were not reported earlier from the study area; they are *Acalypha indica* L., *Ammaniabuc cifera* L., *Andrographis paniculata* (Burm.f.) Wall ex Nees, *Azadirachta indica* Juss., *Canscora diffusa* (Vahl) R.Br. ex. Roem. & Schult., *Careyaarborea* Roxb., *Cassia fistula* L., *Cassia occidentalis* L., *Datura metal* L., *Hemidesmus indicus* (L.) R.Br., *Leptadeniareticulata* (Retz.) Wight & Arn., *Maytenusemarginata* (Willd), *Pongamiapinnata* (L) Pierre and *Vernoniacinerea* (L) Less., present study will provides insight for exploring such crude drugs for cracking the knowledge about its use on wider basis.

Keywords: Ethno botanical knowledge, Crude drugs, Skin diseases, Traditional healers.

INTRODUCTION:

Now a days traditional medicine is emerging medical field and herbal therapies are becoming very popular. This medicinal field is preferred by local people because it is recognized to be safe, cheaper and accessible and has more holistic approach (Gessler 1995; Malunga N.P. et.al 2008). The tribal's live and rely on plants and plant products and using traditional medicine system for centuries. The traditional medicinal practices are an important part of the primary health care system in developing world (Ghosh A. 2003). Skin diseases amount to as high as all occupational diseases (Spiewak, 2000). Keeping this in mind we explored the knowledge available with native people/ traditional healers from Mahur Taluka, Dist. Nanded India, to cure different skin diseases.

Mahur taluka is situated in northern part of Nanded district and is dense forested area. Yavatmal district of Vidarbha region is present on North side of Mahur, Kinwattaluka of Nanded district on south, Adilabad district of Telangana on East and Pusad taluka of Yavatmal district on West. Penganga is Main River of this area which flows from the South to North direction. Geographically location of Mahur taluka is in between 19°49' to 19°83' North latitude and 77° 91' to 77°55' East longitude.

FOREST:

The total geographical area of Mahur taluka is 52160 hectares of which 28% area covered with forest and 72 % area are non-forested area.

FOREST DWELLERS:

As per the tribal research and training institute of Maharashtra, Census dated 29-04-2008, the total villages in Mahur taluka are 93, total population of the taluka is 86782, Tribal population is 13,455 and percentage of tribal population is 16% which is inhabited by tribal population of aborigines like Andh, Kolam, Gond, Naikede and Pradhan.

MATERIALS AND METHODS :

For documentation of ethno-botanical information and collection of plant material, several tours were undertaken during the period from January 2014-August 2015. Methodology such as personal observations and interviews with traditional healer e.g. local medicinal men, hakims, and elderly people with knowledge of folklore medicines are used (Jain 1989, Jain and Mudgal 1999). Gathered ethno botanical information on skin disease was documented in data sheets prepared which is summarised in Table No.1. Assistance of local informer was taken for the collection of plant materials, in fact they escorted author at the actual location of plants. Plants used for skin diseases as per knowledge of local traditional healers were compared with published literature for identification (Ambasta 1992, Anonymous 1948-1976, Asolkare et.al. 1992, Chopra et. al. 1956 & 1969, Jain 1991, Jain 1996, Jain 1999, Kapur 2001, Kirtikar & Basu 1933, Pradhan et. al. 2005, Sharma & Singh 2001 and Madhav Chetty et.al., 2013). Uses which are not reported in the literature are considered as uses not as much of known in India and are indicated in Table 1 as only locally known applications.

RESULTS AND DISCUSSION :

The drug yielding plants were arranged in alphabetical order followed by botanical name, family, vernacular name, plant part used (Table 1). Our taxonomic analysis of crude drugs yielded 14 species of flowering plants belong to 13 genera of 14 families, all belong to dicotyledons and their habits are 04 trees, 04 shrubs, 05 herbs and 01 climber. These crude drugs were used as pastes of whole plants, leaf, bark and seed are applied externally. viz; *Acalypha indica* L., *Ammaniabuccifera* L., *Andrographis paniculata*., *Azadirachta indica* , *Canscora diffusa*,

GENDER, CLASS AND SEXUALITY IN THE WORKS OF W.B. YEATS : SPECIAL REFERENCE WITH THE POEM "LEDA AND THE SWAN"

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Abstract :

The sympathy for the indefinable suffering of women in the writings of W. B. Yeats is rooted in his temperament. He has not chosen to deliberately project feminism but it comes naturally in his writings. This poet has practically seen rampant negligence of women and their exploitation at the hands of men. To show these aspects in particular poem which deal with the theme of gender, class and sexuality have been minutely studied in the critical light of this research article because this article focuses elements of feminism in the poem of the most illustrative poets of the 20th century.

Key Words : Suffering, Negligence, Exploitation, Sexuality, Feminism.

Feminism is both an intellectual commitment and a political movement that seeks justice for women and the end of sexism in all forms. However, there are many different kinds of feminism. Feminists disagree about what sexism consists in, and what exactly ought to be done about it; they disagree about what it means to be a woman or a man and what social and political implication gender has or should have.

Nonetheless, motivated by the quest for social justice, feminist inquiry provides a wide range of perspectives in social, cultural, economic, and political phenomena. Important topics for feminist theory and politics include the body, class and work, disability, the family, globalization, human rights, popular culture, race and racism, reproduction, science, the self, sex work, human trafficking, and sexuality.

W. B. Yeats (1865-1939) was an Irish poet and playwright, and one of the foremost figures of 20th century literature. A pillar of both the Irish and British literary establishments, W. B. Yeats is one of the most powerful voices in modern literature. He is very potent and has a great impact on the minds of modern readers. Impact of feminism is seen on his poems. W. B. Yeats struggle begins with his identity: white, protestant, middle class man of the British Empire who 'belonged to the dominant literary tradition'. It was an interesting time for Yeats to grow up.

The seeds of struggling women must have been planted in youth by his father who was a practitioner of John Stuart Mills, the man who championed the rights of women. When Yeats began his literary career in the 1880s, deep and resounding advances for the rights of women were being enacted. In 1870, the 'Married Women's Property Act' was passed, finally giving married women some sense of relief in securing property. Women also began to acquire greater access to higher education and birthrate fell down as contraception became more widely accessible.

Yeats 'moved in circles sympathetic to emancipation'. Regarding his attitude towards women, it is said and observed that 'Yeats loved, liked, collaborate with, and respected women most of the time. He encouraged their