

## Cr(III), Mn(III) AND Fe(III) METAL COMPLEXES WITH DINEGATIVE TRIDENTATE HYDRAZONE SCHIFF BASE: SYNTHESIS AND CHARACTERIZATION

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### ABSTRACT

Cr(III), Mn(III) and Fe(III) complexes of 2,4-dihydroxybenzophenone-4-nitrobenzoylhydrazone ( $H_2L$ ), were prepared, which were structurally characterized by elemental, electronic & infrared spectroscopy, magnetic susceptibility measurements and thermogravimetric analyses. Thermal degradation studies of metal complexes show that the final product is the metal oxide. An octahedral geometry is suggested for the Cr(III) and Fe(III) complexes whereas square pyramidal geometry for Mn(III) complex. Structural analysis reveals that the ligand presents as tridentate ligand with ONO donors and coordinates to the metal center in an enolic form.

**Key word:** hydrazone Schiff base, complexes, infrared spectra, thermogravimetric study

### INTRODUCTION

In recent years, considerable attention has been paid to the chemistry of the metal complexes of Schiff bases containing nitrogen and oxygen donors [1-4] because of their stability and biological activity [5-10]. In addition, the presence of nitrogen and oxygen donor atoms in the complexes makes these compound effective and stereospecific catalysts for oxidation, reduction hydrolysis and other transformations of organic and inorganic chemistry [11-13]. Schiff bases of hydrazone moieties have an additional interest, because they also contain the  $>C=N-$  structural unit, which forms a strong chelate ring giving possible electron delocalization. It is well known that some drugs have increased activity when administered as hydrazone metal complexes. The present work synthesizes and characterizes new metal complexes of hydrazone Schiff base. The hydrazone Schiff base ( $H_2L$ ) of ONO dibasic ligand is synthesized by condensation of 4-nitrobenzoylhydrazide with 2,4-dihydroxybenzophenone (scheme 1). Three new complexes of  $H_2L$  ligand with Cr(III), Mn(III) and Fe(III) are synthesized.

### EXPERIMENTAL MATERIALS AND PHYSICAL MEASUREMENTS

All the reagent and solvents (ethanol, methanol and diethyl ether) were of reagent grade and used without purification. Chromium chloride pentahydrate and ferric chloride hexahydrate were of S. D's fine chemicals.  $Mn(OAc)_3 \cdot 2H_2O$  was

synthesized by reported method [14]. 2,4-dihydroxybenzophenone and 4-nitrobenzoylhydrazide were prepared by general method [15].

Microanalyses of carbon, hydrogen and nitrogen of the compounds were carried at RSIC, CDRI, Lucknow, India. Metal content in each complex was done gravimetrically by decomposing the complexes with conc.  $HNO_3$  and then igniting to metal oxides [16]. The IR spectra were recorded on a Perkin Elmer infrared spectrophotometer in the range  $4000-400\text{ cm}^{-1}$  at CDRI, Lucknow, India. Solid-state electronic spectra of the complexes were recorded on a carry 2300 spectrophotometer at SAIF, Chennai.  $^1H-NMR$  spectra of ligand was recorded on a Bruker Ac 250 spectrometer at 250 MHz, using TMS as a reference in  $DMSO-d_6$ . The magnetic susceptibilities at room temperature were measured on a Gouy balance using  $Hg[Co(NCS)_4]$  as the calibrant. Diamagnetic corrections for various atoms and structural units were computed using Pascal's constants. Thermogravimetric curves of the compounds were recorded in the temperature range  $30-750^\circ C$  at the heating rate of  $10^\circ C/min$ .

### SYNTHESIS OF HYDRAZONE LIGAND ( $H_2L$ )

The hydrazone ligand ( $H_2L$ ) used in the present work was prepared by following general method (scheme 1). An ethanolic solution (40 ml) of 4-nitrobenzoylhydrazide (50 mmol) was added to an

**SYNTHESIS AND CHARACTERIZATION OF A SERIES OF BIOLOGICALLY ACTIVE TRANSITION METAL COMPLEXES INCORPORATING TRIDENTATE ONO DONOR HYDRAZONE LIGAND**

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**ABSTRACT**

A new acid hydrazone ( $H_2L$ ) derived from the condensation of 2-hydroxy-5-methylacetophenone and salicylhydrazide and its metal complexes of Mn(II), Co(II), Ni(II), Cu(II), Ti(III), Cr(III), Fe(III), Zr(IV) and  $UO_2(VI)$  have been prepared. Their structures have been elucidated on the basis of elemental analyses, magnetic moment, spectral (IR and electronic), powder X-ray diffraction and thermogravimetric analysis (TG). The analytical data indicate 1:1 (metal: ligand) stoichiometry for all complexes. The powder X-ray diffraction suggests orthorhombic crystal system for Cu(II) complex. The complexes exhibit an octahedral geometry around the metal centre except Cu(II) ion. Cu(II) complex shows square planar geometry. The IR spectral data suggest that the ligand behaves as tridentate with ONO donor atoms sequence towards central metal ion. Electrical conductivity of the complexes was measured in their compressed pellet form and showed their semiconducting nature over a studied range of temperature. Thermal behaviour of complexes was studied using TG and data have been analyzed for kinetic parameters by Horowitz-Metzger method. The ligand and its complexes were also screened for their antibacterial activity against *E. coli*, *S. typhi*, *P. aeruginosa* and *S. aureus* bacterial strains by disc diffusion method.

Keywords: Acid hydrazone, TGA, Biological Activity, Powder XRD.

**INTRODUCTION**

The Schiff base metal complexes are in a field of coordination chemistry with increasing interest. These compounds have played a major role in the development of the inorganic chemistry due to easily excellent chelating properties, diversity of structural features and providing the effects of steric interactions on coordination geometry. Hydrazone Schiff bases have received a renewed attention in recent years because of their biological importance such as antimicrobial, antituberculosis, and antitumor activities [1-5]. The coordination compounds of hydrazones have been reported as enzyme inhibitors [6]. The metal complexes of hydrazones are also have been reported as potent inhibitors of DNA synthesis [7]. To the best of our knowledge, reports of substituted acetophenone hydrazones are scarce. Therefore, it is interesting to study complexes of hydrazone Schiff base ligands. In present work, we report the results of our study of 2-hydroxy-1-(2-hydroxy-5-methylphenyl)ethylidene]benzohydrazide and its Mn(II), Co(II), Ni(II), Cu(II), Ti(III), Cr(III), Fe(III), Zr(IV) and  $UO_2(VI)$  complexes.

**MATERIALS AND METHODS**

All the chemicals used as starting materials for the synthesis of the ligand and its metal complexes were of AR grade or chemically pure purchased from Qualigens Chemicals. Solvents were purified and dried before the use by the literature methods. Zirconium (IV) acetate was prepared by the known method [8]. Carbon, hydrogen and nitrogen were estimated on a Carlo Erba 1108 C-H-N-S analyzer. The infrared spectra of the ligand and its complexes were scanned in the region  $4000-400\text{ cm}^{-1}$  in KBr pellets on a Perkin Elmer RX-1 spectrophotometer. The  $^1\text{H-NMR}$  spectrum of the synthesized ligand was recorded using the mixture of deuterated chloroform and dimethyl sulfoxide and TMS as an internal standard on a Bruker DRX-300 NMR Spectrophotometer. The magnetic susceptibility measurements of the metal complexes were carried out by Gouy method at room temperature using mercury(II) tetrathiocyanatocobalt(II),  $\text{Hg}[\text{Co}(\text{SCN})_4]$  as the calibrant. Thermogravimetric analysis of the complexes was carried out to study their thermal stabilities. For this a simple manually operated thermobalance set up in our laboratory was used using 50-60 mg sample and temperature upto  $700^\circ\text{C}$  in air atmosphere. The balance used was Adico-80 having the sensitivity of 0.01 mg. The TG instrument was calibrated by using sample of copper(II) sulphate pentahydrate from room temperature to  $700^\circ\text{C}$  at a heating rate of  $\sim 10^\circ\text{C min}^{-1}$ . The antimicrobial activity of the ligand and its complexes was studied by the disc diffusion method against *E. coli*, *S. typhi*, *P. aeruginosa* and *S. aureus*. The media used were nutrient agar and nutrient broth. The plates were inoculated with 24 h cultures. The compounds were tested at a concentration of 500 ppm in DMSO by measuring the zone of inhibition of growth of the microorganisms in millimeter. Electrical conductivity measurements were obtained on the samples in the form of pellets ( $\sim 2-3\text{ mm}$  thick and 12 mm diameter) at a pressure of  $3\text{ tons cm}^{-2}$ . The surface of each sample was covered by a layer of silver foil, then was held between two copper electrodes and inserted with a holder vertically into a cylindrical electrical



**TRANSITION METAL POLYCHELATES WITH SALEN-TYPE SCHIFF BASE:  
SYNTHETIC, SPECTROSCOPIC, THERMAL, ELECTRICAL CONDUCTIVITY,  
BIOLOGICAL, AND COORDINATION ASPECTS**

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**ABSTRACT**

Cr(III), Mn(III), Fe(III), Ti(III), Zr(IV), VO(IV), MoO<sub>2</sub>(VI) and UO<sub>2</sub>(VI) polychelates with salen type Schiff base 4,4'-bis[(N-butanessalicylalimine-5)azo]biphenyl (BNBSAP) prepared from dye 4,4'-bis[(salicylalimine-5)azo]biphenyl and 1,4-diaminobutane have been characterized by elemental analyses, IR and electronic spectra, magnetic susceptibility measurements and thermogravimetric analysis. All the polychelates are dark coloured solid and sparingly soluble in common organic solvents. <sup>1</sup>H-NMR spectrum of ligand clearly indicates the presence of OH and azomethine groups. Thermogravimetric analysis confirms the coordination of H<sub>2</sub>O in polychelates. The thermal data have also been analyzed for the kinetic parameters by using Horowitz-Metzger method. Solid state dc conductivity of ligand and its polychelates was measured in their compressed pellet form over 373-413K range of temperatures and all compounds show semiconducting behaviour. The synthesis of polychelates were also screened for antimicrobial activity against various bacteria.

**KEYWORDS:** Polychelates, Thermal analysis, Electrical Conductivity, Biological Activity.

**INTRODUCTION**

Polymers have increasing interest over the last few decades in the fundamental research as well as in their potential applications in fields such as catalysis, ion exchange, photochemistry, selective separation, biological study, physical and materials chemistry [I-IV]. Chelate polymers are defined as materials in which metal ions are linked together with polyfunctional ligands and chelate polymers are also well known for their thermal stability [V]. The incorporation of transition metals into polymeric Schiff bases not only affects their physical characteristics, but also their chemical activity. Complexation of a metal ion to functional polymeric ligand changes its activity due to polymeric effect. Polymer-metal complexes are in general coordinating polymers containing one or more electron donor atoms such as N, S and O that can form coordination with most of the transition and toxic heavy metals. Among polymers those containing nitrogen as donor atoms have been synthesized and

## ICTs Use in teaching and learning: Challenges for higher learning institutions

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### ABSTRACT

Many teachers are reluctant to use ICTs, especially computers and the internet. Some of the reasons for this reluctance include poor software design, skepticism about the effectiveness of computers in improving learning outcomes, lack of administrative support, increased time and effort needed to learn the technology and how to use it for teaching, and the fear of losing their authority in the classroom as it becomes more learner-centered. In terms of using internet and other ICT as a resource for lesson preparation, most of the teachers interviewed, admitted to never or rarely using it, while very few used the internet to gather information sporadically or regularly.

However, ICTs have not permeated to a great extent in many higher learning institutions in most developing countries due to many socio-economic and technological circumstances. This paper discusses new learning and training technologies considering their pedagogical, cost and technical implications

**Keywords:** information and communication technology, e-learning, teaching and learning technologies, higher learning institutions.

### INTRODUCTION

ICTs stand for information and communication technologies and are defined, for the purposes of this primer, as a —diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage. Information Developments in Information and Communication Technologies (ICTs) have impacted all sectors of society, including the education sector. In higher education, application of ICTs in form

# VARIATION IN LARVAL DURATION, ECONOMIC CHARACTERS, AND LIFE CYCLE OF MULBERRY SILKWORM, BIVOLTINE (CSR2 X CSR4) REARED IN RAINY & WINTER SEASON IN CLIMATIC CONDITION OF WARDHA DISTRICT OF VIDARBHA REGION OF MAHARASHTRA

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## (RESEARCH PAPER IN ZOOLOGY)

### Abstract

The growth and development of silkworm is greatly influenced by environmental condition. The variation in the environment condition in different season considerably affects the larval weight, larval duration, economic characters and life cycle of mulberry silkworm. The present study shows variation in the performance of mulberry silkworm, *Bombyx mori* L. bivoltine (CSR2 x CSR4) in respect of larval weight, larval duration, economic character and life cycle when reared in rainy and winter season in the climatic condition of Wardha District of Vidarbha region of Maharashtra. The silkworm larvae reared during winter season shows higher larval weight, cocoon weight, shell weight, shell ratio and egg laying as compared to the silkworm larvae reared during rainy season, while the larval duration, life cycle duration was recorded shortest in the silkworm larvae reared during rainy season as compared to the winter season, which showed longest larval developmental period and life cycle period during winter season.

**Keywords:** *Bombyx mori*, silkworm, larvae, different season.

### Introduction

Sericulture is an agro-based cottage industry providing high employment and income source to the rural economy of India. The mulberry silkworms, *Bombyx mori* is highly sensitive to environmental fluctuations and have adverse effects of extreme fluctuations in temperature and humidity as they are domesticated since thousands of years. Among the environmental factors temperature and humidity plays an important role thus affecting the growth and development of silkworm. Environment also play an important role in the production of mulberry leaves which is the essential food source of the mulberry silkworm for the production of cocoon crop (Sharma *et al.*, 1995) The seasonal differences in the environmental components considerably affects the genotypic expression in the form of phenotypic output of silkworm crop such as cocoon weight, shell weight and cocoon shell ratio (V K Rahmathulla, 2012). The quality of mulberry leaves and environmental conditions influence the dietary efficiency and growth of silkworm (Rahmathulla *et al.*, 2004). Therefore the present study was undertaken to evaluate the performance of mulberry silkworm, *Bombyx mori* L. bivoltine (CSR2 x CSR4) in respect of larval weight, larval duration, economic character and life cycle when reared in rainy and winter season in the climatic condition of Wardha District of Vidarbha region of Maharashtra.

### Material and Methods

The present study was undertaken in rearing room of Narayanrao Kale Smruti Model College, Karanja (Ghadge), District Wardha to evaluate the rearing performance and economic traits of bivoltine silkworm race CSR2 x CSR4 of mulberry silkworm, *Bombyx mori* during winter and rainy season. Disease free egg laying of Bivoltine hybrid (CSR2 x CSR4) was obtained from "State Silk Park" Department of Sericulture, Dabha, Amravati (Maharashtra). V1 mulberry variety planted in the field of NKS Model College, Karanja (Gh.), District Wardha was used to feed CSR2 x CSR4 bivoltine silkworm, *B. mori*. The newly hatched larvae were brushed. The silkworm rearing was carried out in rainy and winter season as per the rearing technique described by Dandin *et al.*, (2003). The larvae were given feeding 4 times a day till spinning. The rearing of I, II & III instars was carried out in chowki, while IV & V instars was done in plastic tray on rearing stand. When the mature larvae looked translucent and ready for spinning, they were placed on plastic mountages for spinning. The spun cocoons were harvested on 5<sup>th</sup> day of starting of spinning. During rearing temperature and humidity were maintained and recorded. Larval weight, larval developmental period, economic character, fecundity and total life cycle were recorded and compared.

### Results

During rearing from hatching of larvae to spinning stage the minimum and maximum temperature recorded was between 20.4°C to 30.2°C and minimum and maximum humidity recorded was between 70% to 94% during winter season (Table 1), while it was recorded between 25.3°C to 30.5°C and 75% to 99% respectively during rainy season, mostly the weather was rainy during rearing. There were found decrease in temperature and humidity during winter season as compared to the rainy season (Table.2). There were found significant differences in the larval weight, larval duration, economic character and life cycle duration when the larvae were reared during winter and rainy season. The larval weight of 5<sup>th</sup> stage 8<sup>th</sup> day larvae was recorded highest (4.437g) when reared during winter season as compared to the larvae weight (4.210) when larvae reared during rainy season (Table.3). The larval duration was recorded shortest (25 days) when larvae reared during rainy season while it was recorded longest (27 days) when reared during winter season. There were also found differences in economic characters when larvae reared during two different seasons. The economic characters was recorded highest with Cocoon wt (1.840g), pupal weight (1.410g) shell weight (0.430g) and shell ratio (23.36%) when larvae reared during winter season as compared to Cocoon wt (1.625g), pupal weight (1.255g) shell weight (0.370g) and shell ratio (22.76%) when larvae reared during rainy season. The no. of egg laying per female moth was recorded (567) in moths of larvae reared during winter season while it was recorded (562) in moths of larvae reared during rainy season. The total life cycle duration was found to be shortest (40 days) when larvae reared during rainy season while it was recorded longest (43 days) when reared during winter season.

### Discussion

As the silkworm is poikilothermic, among the biotic factors, temperature plays a major role on growth and productivity of silkworm (Benjamin, 1986). Seasonal variation had pronounced effect on the larval growth economic characters of the silkworm. Environmental factors especially temperature and relative humidity play very important role in the life cycle of silkworm. Therefore the result of the present study indicated that the high temperature and low humidity has greater effect on larval development and cocoon parameter. It was noticed that during winter season the larval weight, economic characters such as cocoon weight, shell weight and shell ratio was increased as compared to rainy season. There was a slight difference in the number of egg laying of silk moth of larvae reared during rainy and winter season. The shortest life cycle of the silkworm was during rainy season whereas the life cycle of the silkworm larvae reared during winter season was delayed and took

# DIFFRACTION, FT-IR STUDIES OF AMINO ACID DOPED POTASSIUM DIHYDROGEN PHOSPHATE (KDP) SINGLE CRYSTAL BY MODIFIED CTB THERMOMETER

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## Abstract

Due to very large polarizability and wide transparency window, semiorganic NLO materials have alternative to inorganic materials because of their efficient molecular nonlinearity over a broad frequency range, low cost, low refractive index, low dielectric constant, inherent synthetic flexibility, moderate optical damage density, fast response with the better process ability and ease of fabrication into devices. A Semi organic crystal of amino acid (valine) doped KDP ( $KH_2PO_4$ ) have grown by modified CTB thermometer as well as by rotating seed crystal method (RSCM). The concentration of dopants was altered in every step for different rotation rate. The good quality transparent crystals has been harvested; the dimensions of grown crystal observed from 1mm to 4 cm. crystalline perfection, all lattice parameter of grown single crystal have been determined by powder X-ray diffraction analysis. The functional groups of LV doped KDP were identified using vibration spectra analysis. The chemical composition as weight percentage (wt %) of C, N, K, P and O as obtained from EDAX analysis. A quantitative interpretation of influence of amino acid L-valine verified by mathematical model usually describes a system by a set of variables and a set of equations that establish relationships between the variables.

**Key Words :** crystal growth, XRD, FT-IR, EDAX analysis.

## 1. Introduction

Non-Linear Optics in which the dielectric polarization  $P$  responds nonlinearly to the electric field  $E$  of the light. This nonlinearity is typically only observed at very high light intensities such as those provided by lasers. KDP is a representative of hydrogen bonded materials which posses important piezoelectric, ferroelectric, electro-optic and mainly NLO properties. [1]. Due to their potential application NLO materials was of widely used in optical devices.

In present communication, the doped crystal of KDP by valine amino acid had been prepared by modified CTB as well as by SRCM. Initially pure KDP seeds crystal was prepared by slow cooling and slow evaporation of saturated solution in a clean controlled temperature enclosure. The amount of KDP in a solvent (water) can be calculated by using solubility curve of Pure KDP and the amount of solute ( $m$ ) for different concentration of dopant can be calculated by using mole percentage formula.

The SR method setup has been modified in some aspects in order to grow clear bulk size KDP crystals. A glass ampoule was designed and fabricated at laboratory for the growth of KDP single crystal, by modifying the CTB using spiral glass tube of heating in SR method shown in figure 1. Especially design Spiral glass tube used to surround the bottom of glass ampoule to maintain constant temperature during growth of crystal. A clean defect free Seed along (100) plane which was fixed by

mounted at the bottom of the ampoule in such a way that the seed should be tight at the end of ampoule to avoid bidirectional growth of crystal from the surround area of crystal. The face was exposed to the solution of LVKDP so that the growth of bulk size crystal can be initiated. The solvent get was saturated using pH- 4.8 for L- valine [2-5]. The top open face of the ampoule was covered by a thick plastic sheet with a hole at the center for facilitating controlled evaporation of the solvent. The whole setup was placed in a zero vibration zone area. After 15 days a good quality transparent crystal of LVKDP was observed with growth rate 2mm per day for 10-12 days and dimension reached up to 40 mm in height is shown in figure 2.



Fig. 1 : CTB tank with spiral glass tube of heating in SR method

## Progress of Financial Inclusion in India – The Crisil Inclusive Analysis

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### INTRODUCTION

Financial Inclusion is gaining global priority as it is capable of bolstering sustainable, balanced inclusive economic growth at the macro level and promoting economic and social inclusion at the household and enterprise level especially among financially excluded and under-privileged populations. There are three elements of integral financial strategy i.e. financial education, financial inclusion and financial stability. Financial Inclusion works from the supply side by providing access to various financial services; financial education feeds the demand side by promoting awareness among the people regarding the needs and benefits of financial services offered by banks and other institutions. Further these two strategies promote the third element of financial stability.

### DEFINITION OF FINANCIAL INCLUSION

Financial Inclusion may be broadly defined as universal access to a wide range of financial services at a reasonable cost. These not only include banking products but also other financial services such as insurance and equity products (The Committee on Financial Sector Reforms, Chairman: Dr. Raghuram G. Rajan). If the term 'Financial Inclusion' is elaborated it means that all working age adults (persons at the age 15+) have effective and quality access to and usage of – at a cost affordable to the customers and sustainable for the providers – financial services provided by formal institutions. "Effective access" involves convenient and responsible delivery of services that re responsive to the needs of financially excluded and underserved customers, at a cost affordable to the customers and sustainable for the providers. The demonstration of effective access is usage. The fact that a customer can access services offered by a formal financial service provider does not mean she or he is "financially included". For this, the condition of "effective access" must be met (GPI White Paper, 2016).

Dilip Mookherjee emphasizes two other important aspects of financial inclusion in the context of India. The first is the necessity of wider financial inclusion to improve the efficiency and targeting of government welfare programs. For example, transfers that can be made directly to citizen bank accounts can help to eliminate corrupt and inefficient intermediaries.

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## URBANIZATION DIET AND HEALTH

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### ABSTRACT

Root cause of various disease is urbanization, due to which flora and fauna along with human life are endangered, while keeping abreast with the developmental place of time, we are heading on deterioration and degradation. With the changing life style in diet, use of fast-foods consumption of high calories, inadequate, consumption of proteins, hectic lifestyle, deforestation, toxic gasses are inviting various disease for example insufficiency of oxygen, traction of cells and organs, free radicles, imbalance consumption of junk food. As per the survey and conclusions of WHO, NIN and ICMR the disease which mostly age groups between 60-80 get affected, new age-group between 12 to 15 are getting affecting. To avoid all these, we need to adopt healthy habit like proper physical exercise, Balanced diet yoga and physical movement should be included.

**Keywords:** Urbanization, calories, proteins, junk food.

Urbanization increasing very speedily in today's age. Return to villages is a slogan in previous time, but now, it is a mentality of people to arrive in cities. It impacts on diet preferences methods of diet, physical movement and health in growing and progressive world after industrial evolution in an age of science there should be some impacts on human life due to fast changing scenario. We should know urbanization, diet and health.

What is urbanization? "As a social scientist. He is interested in

the whole complex situation all the inter-relationship that make-up urban social life. He deals with one but with all aspects of the urban social universe-Erickson"

Urbanization deals with the impact of city life on social actions, social relationship, social institution and the type of civilization derived from and based on urban modes of life - E.E.Bergel."

Medical dictionary - "Diet means anything when taken into the body which serves to nourish



समुद्रायाच्या वृत्ती प्रवृत्तीचे दिग्दर्शन करतात.

५) गुर्जरी लोकबोलीतील काही वाक्प्रयोगांची तुलना प्रमाण मराठीतील वाक्प्रयोगांशी करता येत नाही. कारणते खास गुर्जरी बोलीतील आहेत.

६) गुर्जरी बोलीतील वाक्प्रयोगात भावरम्यता, भाषेची लवाचकता, कल्पनारम्यता, चटकदारपणा, व्यक्तीचित्रण, लोकजीवनाचा संदर्भ वगैरे वैशिष्ट्ये आढळतात.

संदर्भ :-

१) खानदेशचासांस्कृतिक इतिहास - (संपादक डॉ. मृ.ब.शहा), खंड -२, का.स.वाणी मराठी प्रगत अध्ययन संस्था, धुळे.

२) गुर्जरी लोकसाहित्य - डॉ. दिलीप पटेल, गुर्जर समाज साहित्य विद्या मन्दिर, जयपुर, प्रथम संस्करण, १९९९.

३) लोकसाहित्यशास्त्रसंस्कृतीदर्शन - डॉ. बापूराव देसाई, मधुराज पब्लिकेशन्स, पुणे, प्रथमावृत्ती-२००२

□ □ □

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## आंबेडकरपूर्व दलित चळवळीतील शिवराम

जानबा कांबळे यांचे कार्य

प्रा.डॉ. वंदना हरिभाऊ तागडे

इतिहास विभाग प्रमुख

नारायणराव काळे स्मृती मॉडेल कॉलेज

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ब्राम्हणी धर्मामुळे समाजात अनेक वाईट प्रथा प्रचलित झाल्या होत्या. यामुळे समाजाचे मोठे नुकसान झाले होते. जातीभेदामुळे समाज अनेक गटात विभागल्या गेला होता. त्यातून समाजात द्वेषाचे, मत्सराने वातावरण निर्माण झाले होते. अस्पृश्यांना समाजात अव्यवहार्य अशी वागणूक मिळत असे. पशूपक्षापेशाही त्यांचे जीवन हलाखीचे झाले होते. सर्व मानव जात एकाच ईश्वराची लेकरे असतांना केवळ उद्योगभिन्नतेस्तव उच्च-निच गणने योग्य नाही. परमेश्वराने जन्म दिलेल्या लेकरांशी तो दुजाभाव कसा करेल? हा प्रश्न अनुत्तरीत होता. अस्पृश्यांना मिळत असलेल्या वाईट वागणुकीमुळे त्यांनी ख्रिश्चन धर्म देखील स्विकारला होता. ब्रिटीश सरकारने दलितांना थोडे शिक्षण देण्याची, पलटणीत व पोलीसात नोकऱ्या देण्याची सोय केल्यामुळे आपल्या आधीच्या स्थितीबाबत विचार करू लागले. ख्रिस्ती मिशनरी, प्रार्थना समाज व बडोदयाचे अधिराज सयाजीराव गायकवाड यांनी अत्यंत जातीच्या उध्दारार्थ शाळा काढल्या. त्यामुळे दलितांच्या स्थितीमध्ये सुधारणा होवून त्यांचे डोळे उघडले. आपली स्थिती इतकी वाईट का झाली यासंबंधी विचार करण्यासाठी काही दलित उध्दारक पृढे आले. त्यांनी दलितांच्या उध्दारासाठी चळवळ उभारली.



## Unsymmetrical Schiff Base Ligand and Its Complexes: Synthesis, Spectroscopic, Thermal, Electrical and Biological Studies

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### Abstract:

Co(II), Ni(II), Zn(II) and Cd(II) complex with an unsymmetrical tetradentate Schiff base ligand 1-(5-chloro-2-hydroxyphenyl)ethylidene-1-(2-hydroxy-5-methyl-3-nitrophenyl)ethylidene carbonohydrazide derived from 5-chloro-2-hydroxyacetophenone, 2-hydroxy-5-methyl-3-nitro acetophenone and carbonohydrazide have been prepared. All the complexes have been characterized by elemental analysis, UV-Vis and IR spectroscopy, magnetic measurements and thermal analysis. The complexes were found to be quite stable and decomposition of the complexes ended with respective metal oxides as an end product. The IR spectral data suggest that the ligand behaves as a dibasic tetradentate ligand with ONNO donor atoms sequence towards central metal ion. The dc electrical conductivity has been measured over 313-403 K temperature range and all the compounds showed semiconducting behavior as their conductivity increases with increase in temperature. The ligand and its complexes have also been screened for their antimicrobial activity using various micro-organisms and all of them were found to be moderately active against the organisms.

**Keywords:** Unsymmetrical Schiff base, Transition metal complexes, d.c. conductivity, TGA, antimicrobial activity.

### Introduction:

Unsymmetrical Schiff base ligands are an important class of organic ligands in coordination chemistry, which increase the chemical and biological aspects of the compounds because of their physiological activity, biological capability and applications in analytical chemistry [1, 2]. Unsymmetrical Schiff base ligands derived from substituted carbonohydrazide have played an important part in revealing the preferred coordination geometries of metal complexes and have valuable importance in the coordination chemistry due to their preparative accessibility and structural variability [3, 4]. The preparation of the metal complexes of unsymmetrical Schiff base of carbonohydrazide and substituted hydroxyl acetophenone has come from the desire to form simple unsymmetrical complexes for their physicochemical characterization and structural elucidation. In this paper synthesis and characterization of the unsymmetrical Schiff base derived from 5-chloro-2-hydroxy acetophenone, 2-hydroxy-5-methyl-3-nitro acetophenone and carbonohydrazide have and its metal complexes.

### Materials and Methods:

All the chemicals and solvents used as starting materials for the synthesis of ligand and its metal complexes were of analytical grade procured from SD's fine chemicals and Qualigens Chemicals. The metal salts used for preparation of complexes i.e, cobalt acetate dihydrate, nickel acetate dihydrate, zinc acetate dihydrate, cadmium chloride monohydrate were used as received.

# 1. Comparative Study on Rearing Performance of 3 Strains of ERI Silkworm, *Samia Ricini* During Early Summer Season in Climatic Condition of Vidarbha Region of Maharashtra

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## Abstract

The rearing performance of 3 strains of eri silkworm, Greenish Blue Zebra (GBZ), Greenish Blue Plain (GBP) and Greenish Blue Spotted (GBS) was evaluated during early summer (February- March) in the climatic condition of vidarbha region of Maharashtra. The evaluation of these 3 strains of eri silkworm was done by considering various parameters such as larval weight, economic characters (cocoon weight, shell weight, shell ratio), ERR% (Effective Rate of Rearing), larval mortality and fecundity. The larval weight, economic characters (cocoon weight, shell weight, Shell ratio) ERR%, egg laying and hatching percentage was recorded highest in GBZ strain followed by GBP and GBS strain of eri silkworm. The larval mortality was also recorded least in GBZ strain as compared to GBP and GBP strain. The larval duration was recorded shortest and similar in GBZ and GBP followed by GBS strain. There were found slightly variations in various parameters between GBZ and GBP strain. The result of study revealed that the performance of the GBZ strain of eri silkworm was better as compared to GBP and GBS strain in early summer in climatic condition of vidarbha region of Maharashtra.

**Key words:** eri silkworm, strain

## Introduction

Sericulture is a viable agro-based industry and suited to the socio-economically poor and rural India. India occupies second position in the overall global silk production and stands as one of the major exporters of silk fabric all over the world. Eri culture is the rearing of eri silkworm (*Philosamia ricini* OR *Samia ricini*) for the production of eri cocoons. The Eri silkworm *S. ricini* is multivoltine and polyphagous and feeds on a wide range of food plants. Castor (*Ricinus communis*) is the primary food plant of eri silkworm. Eri silkworm has several eco-races like

## 20. Occurrence of Insect Pest Complex Associated with Castor (*Ricinus Communis* L.) in Agro-Ecosystem of Karanja (Ghadge) of Wardha District of Maharashtra

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### Abstract

In order to understand the occurrence of insect pests complex associated with Castor (*Ricinus communis*) plantation agro- ecosystem, a regular observation and sampling was done on castor crop field of nearby villages of Karanja (Ghadge) of Wardha district. It was observed that castor being preferred by many insect pests as host plant, many predatory and parasitoid insect for preying on insect pest and for shelter. The collected insects were observed and categorized accordingly; insect pests, predators and parasitoid insects. About ten species of insect pests of different orders viz. lepidoptera, hemiptera, orthoptera and thysanoptera were recorded. Three species of predator and parasitoid insects from order araneae, hymenoptera and coleoptera was recorded. From order lepidoptera insect pest one each from noctuidae (*Spodoptera litura*), and limacodidae (*Latoia lepida*), three from erebidae (*Achaea janata*, *Spilosoma oblique*, *Amsacta albistriga*) and one from crambidae (*Conogethes punctiferalis*) family were recorded. From order hemiptera, insect pest one each from cicadellidae (*Empoasca flavescens*) and from aleyrodidae (*Trialeurodes ricini*) family were recorded. From order orthoptera only one insect pest from pyrgomorphidae (*Atractomorpha crenulata*) family was recorded. From order thysanoptera also only one insect pest from thirpidae (*Scirtothrips dorsalis*) family was recorded. From order araneae only one predatory spider was recorded from family eresidae (*Stegodyphus*). In case of parasitoid insects one wasp from order hymenoptera of family braconidae (*Bracon* sp.) and one beetle from order coleoptera of family meloidae were recorded. The present study provides information about occurrence of different insect pests, predatory and parasitoid insect associated with castor (*Ricinus communis*) in Karanja (Ghadge) of Wardha district of Maharashtra.



## Nuclear Diameter and Neurosecretory Intensity of Cerebral Ganglion: Thermal Relation of Slug, *Semperula Maculate*

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### Abstract

In *Semperula maculata*, A and B neurosecretory cells of cerebral ganglion with respect to warm acclimation was studied. Neurosecretory cells of cerebral ganglion in warm acclimation slugs showed strong vacuolization and very less neurosecretory granules was present in the axon and neuropilar area. Nuclear diameter showed enlargement and neurosecretory intensity was lowered while in control slug, neurosecretory granules seen in perinuclear region of both A and B cells and neuropile with considerable amount of neurosecretory material.

**Keywords-** Slug, Thermal, Cerebral ganglion

### Introduction-

The terrestrial mollusks mainly face scarcity problems in the environment of variable humidity and temperature. The physiological and biochemical changes in the unfavorable conditions have been studied by Florkin and scheer (1972). Land slugs play significant role in ecosystem. Every organism plays an extremely important role on the earth. The perusal of literature indicate that the studies of thermal relation of slug with neurosecretory cells are of great important because of their role in ecosystem.

### Material and Method-

Adult fully matured slugs, *Semperula maculata* were collected from the city garden Paratwada and around Paratwada city, Maharashtra, India from July to September. The temperature of the soil at the time of collection varied generally from 26°C to 28°C. Slugs were brought to the laboratory and were maintained in the glass tough containing sufficient moist soil. They were fed once in a day with plant vegetation. Slugs were acclimated at room temperature (26°C to 28°C) for 3 to 4 days. For acclimation slugs were kept inside the BOD incubator at temperature 32°C+0.5°C and 36°C + 0.5°C for warm acclimation and at temperature 15°C+0.5°C and 10°C+ 0.5°C for cold acclimation for 10 days. The slugs were gradually warmed or cooled until the desired acclimatized temperature was reached. Every after 2 days the soil in jar were replaced with moist soil already brought up to appropriate acclimation temperature. Concomitantly control slug were maintained similarly by keeping animals at a temperature (26°C to 28°C).The slugs were gently handled during experiment so that the slugs did not suffer from any psychosomatic shock. A group of five slug control as well as experimental were sacrificed and cerebral ganglion were carefully dissected out from the slugs quickly as possible and were fixed in Bouins fluid. It was then dehydrated in alcohol, cleared in xylene and embedded in wax at 57.5°C Serial sections were cut at 8 µ in thickness and were stained with Gomoris chrome hematoxylene- Phloxin method (Gomari 1941). The intensity of neurosecretory material of A cell and B cell was determined by adopting a visual arbitrary scale



## Changes in the glycogen content of the foot and hepatopancreas : Thermal relation of the slug *Semperula maculata*

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### ABSTRACT

The study in respect to glycogen content in hepatopancreas and foot of the slug, *Semperula maculata* to acclimatize in changing natural environment at laboratory condition. Carbohydrates are the source of ready energy for organism to overcome stress. On warm acclimation (32°C and 36°C) glycogen content in the hepatopancreas and foot lowered down where as on cold acclimation (10°C and 15°C) these content raised, which shows that the slug, *Semperula maculata* is capable of adapting changes in the environmental temperature by modifying content.

**Keywords:** Slug, Glycogen, Thermal Changes

### INTRODUCTION

The terrestrial slugs and snails are in constant confrontation against exogenous factors for its survival. Because of the restraining influence of the ambient factor, the organisms are not uniformly distributed over the earth, (Edward et al., 1987, Gates., 1993). The animals in diverse environments are confronted with different problems, conversely in the same environment, different animals react to stress in different ways. Biochemical contents, enzymatic reaction rates alter as temperature oxygen and foodstuff changes. In mollusk biochemical correlation occurs with acclimated temperature, (Das, 1967). In mollusca, hepatopancreas is an important digestive gland and storage depot which plays a very important role in physiological process. Certain metabolic reactions are also found in the foot. Hence, these organs were taken for biochemical study. Slug, *Semperula maculata* is most commonly found in Vidarbha region and it is abundantly available in the field and garden. Now a day scenario is gradually changing. This fact provided an incentive to undertake the present investigation.

# Role of Wild Pollinators In Economy of *Gossypium Hirsutum* L

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## ABSTRACT

The present investigations are being carried out during the period of three consecutive years at Amravati. In *Gossypium hirsutum* L. the investigation were done on plant species for visitors dynamics. The main pollinators were *Apis dorsata*, *Apis florea*, *Trigona* spp., Halictidae fly and red colour bee (unidentified), thrips, grass hopper, red beetle and ants. The bees visited 1 to 6 flowers in a single bout. The effect of different treatments on the yield in terms of dry weight of cotton with seeds was found to be 297.17 to 412.68 gm in self-pollination; 336.58 to 518.16 gm in open-pollination and 379.57 to 637.18 gm in insect-pollination. In the present investigation it was found wild pollinator play important role for higher seed yield in *G. hirsutum* and hence to enhance the economy of the cotton growers

Keywords- Amravati, *Gossypium hirsutum* L., pollinators, *Apis florea*, yield, economy.

## INTRODUCTION

*Gossypium hirsutum* an important fiber yielding plant cultivated in many states of India. It is one of the major cash crops cultivated by the farmers of Vidarbha region of Maharashtra. *G. hirsutum* is annual or perennial herb with hairy stem, it is commonly known as "Cotton". It is important to study the flowering phenology and role of wild pollinators in this crop for higher yield. The role of insects as pollinators was first reported by Kolreuter in 1763. Honey bees are important for effecting qualitative and quantitative improvement in crop yields (Deodikar and Suryanarayana, 1977; Suryanarayana et al., 1987; Rao and Suryanarayana, 1988). Insect pollination can play an important role in maintaining a sustainable and profitable agriculture with minimized disruptions to the environment. The present research work was

started with the aim to know the role of insects in general and bees in particular in pollination of the crop *G. hirsutum* L. cultivated in Vidarbha and thus to enhance the yield of this crop and economy of cotton growers.

## MATERIALS AND METHOD

The present investigations are being carried out at Amravati (20054' to 20057' North Latitude and 77043' to 77048' East Longitude) situated in Amravati district of Maharashtra State. The observations were taken from different cultivated fields around Amravati city. Three different study sites were selected for study. The plant species were visited daily or on alternate day, for collection of data. The conduct of insect visitors was observed at different hours of the day during the flowering period at each study sites and the activities of the forager during a visit were noted as per method followed by (Tidke, J.A. 2005). Mature flower buds were selected, bagged and also tagged with cotton thread at the pedicel to know the mode of reproduction. For each test, hundred flower buds were selected from each plant species. Yield comparison of three different pollination treatments, viz., "SP" (self-pollinated), "BP" (insect pollination) and "OP" (open pollination) were done as per the method followed by Panda et al. (1988) and Rao and Suryanarayana (1979).

## RESULTS AND DISCUSSION

The present research work was started with the aim to know the role of insects in general and bees in particular in pollination of the *Gossypium* crop cultivated in Vidarbha and thus to enhance the yield of crops. Bees play important role for higher yield in *Gossypium* crop (Viviane C. P. et al., 2014). The continent Asia carries about three fifth of world population. However crop production in the Asian countries is still low and not enough to supply



## Natural Pollinators and Their Effect on Yield of Sesamum Indicum L.

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### Abstract:

*The present investigations are being carried out during two consecutive years at Amravati. The plant species were visited daily or on alternate day, for collection of data on Pollination. S. indicum is an annual herb. It is the principle oil seed crop plant cultivated in Maharashtra. The important visitors on S. indicum flower were A.florea, A.dorsata, Xylocopa spp., beetle, Halictidae fly and moth which visits regularly. The effect of different treatments on the yield in terms of weight of mature pod was found to be 5.82, 6.18 and 5.66 gm in self-pollination, 6.18, 7.19 and 6.16 gm in open-pollination. It was 7.89, 8.21, 7.42 gm in insect-pollination respectively for three study sites in first year. However, it was 5.40, 5.68 and 6.71 gm in self-pollination, 6.98, 6.68 and 7.20 gm in open-pollination and 7.64, 8.41, and 8.33 gm in insect-pollination respectively for three study sites in second year.*

### Introduction

Indian economy is more depend on agricultural and horticultural practice and this serves as a most important livelihood source. Several agricultural and horticultural crops are being cultivated in various parts in India derived benefit or depended on pollinating insect for maximum fruit and seed yields. The role of insects as pollinators was first reported by Kolreuter in 1763. It was estimated that in nature 5% of flower self-pollinated and 95% are cross-pollinated, out of which 10% depends upon wind and 85% upon the insects. About 100,000 kinds of flowers in this universe are assumed to be dependent on honey bees and other insects (Tewari and Singh, 1983). Honey bees are important for effecting qualitative and quantitative improvement in crop yields (Deodikar and Suryanarayana, 1977; Suryanarayana et al., 1987; Rao and Suryanarayana, 1988 and Panda et al., 1988). Flower being a source of nectar and pollen attract the bee pollinators. Honeybees are adapted to collect the pollen and nectar from flower (Faegri and Pijl, 1979). During the present investigation detail study of these parameters of insect pollinators was carried out for S. indicum crop plants.

### Materials And Methods

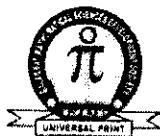
The present investigations are being carried out during three consecutive year at Amravati (20°54' to 20°57' North Latitude and 77°43' to 77°48' East Longitude) situated in Amravati district of Maharashtra State. The observations were taken from different cultivated fields around Amravati city. Three different study sites were selected for study.

### Pollen Load Carried Out by Insect

Pollen load carried out by insect was estimated as per method proposed by (Dafni, 1992).

### Flower Visitors Dynamics, Census and Activity





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**Seed surface characteristics and preliminary phytochemical analysis of *Coriandrum sativum* Linn. seeds of Apiaceae (Umbelliferae)**

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**ABSTRACT**

For the seed surface characteristics the seed coat study is essential. The *Coriandrum sativum* L. seeds of Apiaceae (Umbelliferae) were studied for morphological, anatomical and phytochemical observations. The seeds of *Coriandrum sativum* L. shows thin, yellowish brown seed coat with well developed ridges and cellular networking. Anatomically the transverse section of seed coat shows epidermal layer with parenchyma, elongated scleroid fibrous layer with endosperm. The preliminary phytochemical analysis in different extract carbohydrates, terpenoids, reducing sugars, volatile oil or essential oil occur in more quantity. The qualitative tests were done for the detection of various chemical compounds. Medicinally it is very important. It is used for preparation of various drugs. Seeds are mostly used as a remedy on various diseases and disorders and also used in cooking purpose. The seed powder is used in spices. The plant is also useful as in vegetable. The morphological, anatomical, biochemical and phytochemical analysis of seed helps to determine micromorphological characters, drugs preparation. So it helps to solve many taxonomic problems and therapeutic efficacy.

**KEY WORDS :-** Seed morphology, Scanning electron microscopy (SEM), Seed anatomy, biochemical, phytochemical analysis, Umbelliferae (Apiaceae)

**INTRODUCTION :-**

Seed is a mature ovule and a small embryonic plant enclosed in a covering called seed coat and usually with some stored food. *Coriandrum sativum* L. is an annual, herbaceous plant that grows 25 to 60 cm in height. It has thin, spindle-shaped roots, erect stalk, alternate leaves, and small, pinkish-white flowers (Burdock and Carabin, 2009). For study of seed coat characters all the parameters are very important like seed size, shape, colour, hilum shape, hilum size, surface features, seed weight etc. The scanning electron microscopy is a modern technique for surface identification. Seeds have also the medicinal value. Seeds are evolved as a unique structural and functional entity to face the challenges imposed by changing environmental conditions. Seeds have acquired diversification in both external and internal characteristics so much so that each can be specified independently with definite set of characters. Seed coat surface shows structural marking of great diversity. The plant is grown widely all over the world for seed, as a spice, or for essential oil production (Bhuiyan *et al.*, 2009). Martin and Burkley (1973) indicated the ability to recognize seeds as an important diagnostic feature in modern agriculture, as without it, there will be little merit in perfecting methods of growing useful plants. Seeds are useful economically for increasing the trade and marketing industry. Baldwin (1942) uses tree seeds as potential sources of vegetable, fats, oils and chemicals or drugs. Tree fruits and seeds are also sources of drugs, dyes and other chemicals. The seed oil contained linalool and geranyl acetate (Asgarpanah. *J.et.al.* 2012).



**Seed Surface Characteristics and Preliminary Phytochemical Analysis of  
Pimpinella Anisum Linn. Seeds of Apiaceae (Umbelliferae)  
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**Abstract**

*For the study of seeds of Pimpinella anisum Linn. of Apiaceae (Umbelliferae) the morphological, anatomical, biochemical and phytochemical studies were essential for identification and other seed study. For the seed morphological identification the scanning electron microscopy (SEM) is important. Seed anatomy shows cellular variations in the seed coat. The biochemical and phytochemical analysis of the seeds of Pimpinella anisum Linn. shows that various chemical (secondary metabolites) depositions present in them which is useful for preparation of various drugs. Anise seeds are aromatic and sweet. The seeds contain essential oil which is stimulant, carminative and expectorant. It determine nutritive and pharmaceuticals importance. Seed shows diversification in both external and internal characteristics. The seed shows specific structure on morphological and anatomical study. Seeds are potential source of oil, chemicals or drugs. The anethole is anise seed makes up 80-90% of the oil (Pruthi JS.1976).Medicinally seeds are very important for preparation of various drugs. The micromorphological characters of seed are useful for seed identification. Seeds also constitute an important source in ethanobotanical formulation and have a tremendous potential for pharmaceuticals industry. The seed study is exclusive and as an independent study for identification. Economically the study is important and beneficial for society.*

**Keywords :-** Seed morphology, Scanning electron microscopy (SEM), Seed anatomy, biochemical, phytochemical analysis, Apiaceae (Umbelliferae)

**Introduction**

Seed is the staple food of the world, feed more people as cereals and legumes. Seed being a complex organ of multiple origin and metabolically most active that secretes and synthesizes efficient compounds that can be exploited for drug formulations. History of herbal remedies is very old, there are many medicinal herbs and spices which find place in day-to-day uses. Pimpinella anisum Linn. is an annual important spice and medicinal plants of family Apiaceae considered as a natural raw materials. It's local name is vilayati saunf or patli saunf .It is also used for pharmaceuticals perfumery, food and cosmetic industries (Omidbaigi R.et.al. 2003) Herbs and spices are very useful and invaluable resource as food additives, flavors, fragrances, pharmaceuticals, colors or directly in medicine. The Trans-anethole is the most substance found in Pimpinella anisum (Foroughi A.et.al.2016). It was reported that Pimpinella anisum had several therapeutic effects such as neurologic, digestive, gyneiologic, fungal disease and respiration disorders ( Tunc I.et.al.2000). Many plants shows antimicrobial traits which are due to compound synthesized in the secondary metabolism of the plants (Nascimento G.et.al 2000) . Anise is an annual, herbaceous plant growing up to 60cm in height. The grey-green, pear shaped fruits are thickly covered with hair and consist of two halves with light coloured ridges. The

# Development of Indian Economy In View Of Science and Technology in 21st Century

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## Abstract:

The fundamental key for Developments Indian economy is based on science and technology by the way of people live, connect, communicate and transact. The basic improvement in health systems, education and infrastructure are the role to development of nation. In 21st century the technological revolutions are emerging from entirely new sectors, based on micro-processors, tele-communications, bio-technology and nano-technology. According to the United Nations International Telecommunications Union (UN-ITU), there were an estimated 5.3 billion mobile cellular subscriptions worldwide, including 940 million subscriptions to 3g services. India accounts for about 10% of all expenditure on research and development in Asia and the number of scientific publications grew by 45% over the five years. India is lagging in science and technology compared to developed countries. India has only 140 researchers per 1,000,000 populations, compared to 4,651 in the United States. For comparison, China invested about four times more than India, while the United States invested approximately 75 times more than India on science and technology.

**Keywords:** Indian economy, science & technology, UN report.

## Introduction:

The development of science and technology encourages Industrial development. The researchers conduct research and develop new products to form for industrial development. Industry conducts research on its wastes and develops byproducts like biodiesel from Jatropa

seeds. Due to industrialization, we have made progress in atomic science, satellite communication and missiles etc.[1-4]. Rapid growth of Industrial development helps us for indicant economy and income. The history of economic development of advanced countries shows that there is a close relation between the level of industrial development and the level of national and per capita income.[5-7]

The importance of physics for the economic development of all countries is clear. Physics is the most basic of sciences and its concepts and techniques underpin the progress of all other branches of science. The role of science in sustainable development was recognized at the United Nations Millennium Summit in 2000. A careful analysis of the Millennium Development Goals (MDGs) that came out of the summit shows the importance of science and technology in meeting those goals and as a tool for economic growth. More recently the country also adopted a national policy on science, technology and innovation with four major objectives: knowledge acquisition, creation and transfer, and the building of a culture of innovation. [8,9]. We agree that growth will be determining by the ability to anticipate and navigate the global shift to a low carbon, clean technology economy[10].

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## 30. Risk Management in Indian Banking: A Review

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### Abstract

In day to day life the fast growing of financial and economical environment exposes the banks to various types of risk therefore the concept of risk and risk management are important parts for financial and economical enterprises. The financial sector especially the banking sector is most rising economy in India is passing through a process of change. Rising global competition, increasing de-regulation, introduction of innovative products and delivery channels have pushed risk management to the front position of today's financial environment. Ability of determining the risks and take suitable position will be the key of success in banking or any financial and economical environment. In this paper we discuss and survey the importance of risk management process in Indian banking sector.

**Keywords:** Risk, Risk management,

### Introduction

Today, The Indian Economy is in the process of becoming a world class economy. The Indian banking industry is making great advancement in terms of quality, quantity, expansion and diversification and is keeping up with the updated technology, ability, stability and thrust of a financial system, where the commercial banks play a very important role, emphasize the very special need of a strong and effective control system with extra concern for the risk involved in the business.

Globalization, Liberalization and Privatization have opened up a new methods of financial transaction where risk level is very high. In banks and financial institutions risk is considered to be the most important factor of earnings. Therefore they have to balance the relationship between risk and return. In reality we can say that management of financial institution is nothing but a management of risk. Managing financial risk systematically and professionally becomes an even more important task. Rising global competition, increasing deregulation, introduction of innovative products and delivery channels have pushed risk

## 13. Study of Rural Development Programme

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### Abstract

The Rural Development generally refers to the process of improving the quality of life and economic well being of people living in relatively isolated and sparsely populated areas. In this era reviewing the efforts made to uplift the rural economy through various development programmes. These schemes and policies have largely focus on achieving the sustainable development for Country. In this paper based on secondary data an attempt has been made to comprehensively understand the development effort to rebuild the rural life and livelihood on the basis of various secondary data.

**Keywords:** - RDPs, Sustainable Development, Skill Development

### Introduction

India is Agriculture country having an area of 3.3 million sq. km. It has 6,38,376 villages 4560 regulated markets 22,000 primary rural markets, about 1.5 million rural sales outlet. Most of the population of India is widely scattered in villages. Infact half National income is also generated from rural part of India. 40 % villages are able to reach and are connected with transport and roads still 60% rural market is not reachable or we can say they are not connected with roads. Study shows that there is vast scope is available in rural markets. There are some research organization like NCAER,ORG- MARG have made studies on Rural Markets and that study Shows that Rural Markets are growing at five times than urban Markets.

In post independence period considerable thinking has been laid by the Indian planners in developing the rural areas by giving substantial emphasis on promoting the social and economic status of rural people. The need for overall development started with the second Five year plan which emphasized the implementation of various community development projects in different sectors through the panchayat raj institution (PRIs). Later in 1969 the Government formulated scheme with direct intervention to the real poor. These program and schemes have been designed and implement in rural areas for local needs and programme objectives at micro level. The basic



## Major Problem In Indian Economy

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### Abstract:

The basic characteristics of underdeveloped countries discussed in the research paper might as well be seen as obstacles to economic development. Even if the general characteristics of underdevelopment are not common to all underdeveloped countries. Yet a broad answer to the question of why a poor country is poor is implicit in these characteristics. A number of these characteristics are both the causes and the consequences of poverty, unemployment, education, health care, price controls, agriculture, industry and services. The above factors analyze the causal relationship that inhibits development. Every citizen of the country has the right to lead a decent life. Everyone must be able to meet minimum needs such as food, health care, housing, basic education, etc. However, India is a poor country where a large part of the population cannot afford everything. The situation is compounded by the fact that our economy does not provide adequate employment opportunities, so that the poor cannot find employment and earn an income. Therefore, eradicating poverty and unemployment is a major challenge before the economy achieves a better quality of life in the same way by obtaining adequate education and health care.

### 1. Introduction

While these challenges all have different regional impacts, all European regions face a specific vulnerability. To assess these regional particularities, the concept of regional vulnerability, borrowed from environmental impact assessments, is broadened to include objects of socio-economic investigation. It distinguishes between measuring a region's exposure to influence, specific regional sensitivity, and a region's ability to adapt to negative / positive impacts. Since the challenges analyzed are very complex in nature, more than one indicator should generally be used. In order to reduce complexity, it was decided to divide the challenges into current key vulnerabilities based on the scientific literature. This avoids overly aggregated indicators that are difficult to interpret and makes it possible to break down the challenges into a manageable number of indicators available at regional level. Table 1 presents these twenty key vulnerabilities. The study includes not only a vulnerability assessment of the 27 EU Member States at regional level, but also of the candidate countries Iceland, Turkey, Croatia and the former Yugoslav Republic of Macedonia, the associated EFTA countries Norway, Switzerland and Liechtenstein and all the countries of the European neighborhood policy in the Mediterranean basin and in Eastern Europe. The Libyan Arab Jamahiriya and Russia were included where data were available.

### Challenges and economic inequality

1) Poverty and unemployment according to the government planning commission. from India anyone who is unable to consume 2400 kilo calories (kcal) of food intake in rural areas and 2100 Kcal. of food intake in urban areas is described as poor. This is called the poverty line in India. It is true that food is the first step for our existence, we take food to obtain energy for our body so that we can perform our daily work. Energy is measured in terms of kilo calories. In rural areas, people work hard to earn a living, according to experts, the minimum energy required by a person to perform such work is 2400 kcal. in rural areas and 2100 K cal. urban area.

## Role Of E-Commerce In Indian Economy

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### INTRODUCTION:-

Today e-commerce has become an important part of daily life. Accessibility to e-commerce platforms is not a privilege but rather a necessity for most people, particularly in the urban areas. There are alternative ecommerce platforms available (instead of the traditional physical platforms) for almost every aspect of our lives, starting from purchasing of everyday household items to online brokerage." As in 21st century as internet has become most important and frequently and most necessity device, it will surely race to achieve more growth and sales via internet. "According to e-Marketer, worldwide retail Ecommerce sales will reach \$1.915 trillion by the end of 2017 . with increase in digital penetration all across the globe and cheap and frequent easy accessibility of internet , it is prone to increase the growth of ecommerce all across the world , meanwhile lot of traditional people are quite worried and tensed with change in pattern of sale via internet" , with the availability of cheap and high speed internet with variety and security options , lot of individual and firms have connected their business with e-commerce.(As in recent world it is highly impossible to grow without being available online . Thus to grow more and earn higher profit it is highly recommended to have proper structure availability and easy accessibility of online sites , because it not only determines profit and no. of users but also determines the ranking and position of enterprise of the firm in overall business world. E-commerce allows consumers to electronically exchange goods and services with no barriers of time or distance. Electronic commerce has expanded rapidly over the past seven years and is predicted to continue at this rate or even accelerate. E-commerce or Electronic commerce is a term for any type of business or commercial transaction that involves the transfer of information

across the internet. It covers a range of different types of businesses from consumer based retail sites, to auction and music sites, to business exchanges trading goods and services between corporations. It is currently one of the most important aspects of the Internet to emerge. E-commerce has been used for describing a variety of market transactions, enabled by information technology and conducted over the electronic network. Electronic commerce simply means the capability to buy and sell goods, information, and services online through public networks. Ecommerce utilizes electronic networks to implement daily economic activities such as pricing, contracting, payments, and in some cases even the shipment and delivery of goods and services.

E-commerce is buying and selling of goods and services over the internet. Before e-commerce buying and selling were done without internet physically in the markets but after the arrival of e-commerce in India our life has become more convenient because of its number of advantages. The advantages offered by e-commerce are online shopping of anything at any time and at any place, customers can find the products on e-commerce websites which is not available in physical markets, it reduces cost and time, without stepping out from home we can get our product at home [1]. Along with e-commerce there is also a popular term called e-business due to which the business of enterprises has increased electronically with the help of internet by which they can reach to many customers which increases their sales. The rise of the Indian economy has not given millions of Indians the privilege of technology but also enabled them to utilize the internet in a way to have a great shopping experience. The world seems to be watching on excitedly as India fast becomes a major e-commerce player. There is everything to play for

# The Development of Indian Economy Towards Five Trillion Dollar Economy

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**Abstract :** During the last five years, India's economy has performed well. By opening up several pathways for trickle-down, the government has ensured that the benefits of growth and macroeconomic stability reach the bottom of the pyramid. To achieve the objective of becoming a USD 5 trillion economy by 2024-25, as laid down by the Prime Minister, India needs to sustain a real GDP growth rate of 8%. International experience, especially from high-growth East Asian economies, suggests that such growth can only be sustained by a "virtuous cycle" of savings, investment and exports catalysed and supported by a favorable demographic phase. Investment, especially private investment, is the "key driver" that drives demand, creates capacity, increases labour productivity, introduces new technology, allows creative destruction, and generates jobs.

The research paper departs from traditional Anglo-Saxon thinking by advocating a growth model for India that views the economy as being either in a virtuous or a vicious cycle, and thus never in equilibrium. The traditional view often attempts to solve job creation, demand, exports, and economic growth as separate problems. As these macro-economic phenomena exhibit significant complementarities, the Survey postulates the centrality of the triggering macro-economic variable that catalyses the economy into a virtuous cycle.

## 1. INTRODUCTION

The widespread structural reforms during the past twenty to thirty years implemented by the policymakers in the economy of India have altogether changed the pace of development of the economy. This level of accelerated economic growth has been attained by adopting policies such as making the stock market more accessible to the

foreign ventures, easing the access to foreign technology, lowering the import duties, regulating business possessed by various state government, and lastly, enhancing the segment which is mostly driven by some cluster of people. Additionally, the state governments have also obtained better control with the facilitation of liberalization at the regional level. The involvement, contribution and impact of regional governance cannot be underestimated as resource utilization efficiency at the state level in-turn contributes towards the efficiency at the national level. It has been suggested that economic liberalization limits the functioning of government and its agencies in reduction of provincial mismatch through various policy framework and thus, augments race among different states. On these lines, argued that government at local level helps to improve overall efficiency as they have an advantage in information collection and are more vibrant and better projectors of the preferences of the people in the society.

Governments every year spends large amount of their financial resources to uplift the infrastructure, and other facilitators to ensure a more competent and balanced economic development. Once the resources are utilized it becomes imperative to get a feedback and measure its effectiveness on the outcome of the respective projects for confirming the utilization of funds which are being ploughed in a system are giving actual returns too. The effectiveness of various sectors like banking, infrastructure, and technology etc. can be prominently judged without any delay. Here, it is vital to mention that the progress in the technology can be measured by the improvement and upgradation in the lifestyle of the economy which further brings welfare and affluence in the society. Hence, the efforts in the advancement in technology are always promoted and are quite evident too. The



## भारताच्या पाच ट्रिलियन डॉलरच्या अर्थव्यवस्थेत अडथळे व उपाय

डॉ. संजय धनवटे

प्राचार्य,

नारायणराव काळे स्मृति मॉडेल कॉलेज, कारंजा (घा.)जि. वर्धा.

भारतीय अर्थव्यवस्था जगातील तिसरी मोठी अर्थव्यवस्था आहे. लोकसंख्येच्या बाबतीत भारताचा दुसरा क्रमांक लागतो तर भौगोलिक क्षेत्रफळ २.४ टक्के असून जागतिक लोकसंख्येच्या १७ टक्के लोकसंख्या भारतात आहे. जागतिक बँकनुसार क्रयक्षक्ती समतेच्या आधारावर भारत जगातील तिसरी मोठी अर्थव्यवस्था असून, २०१७ मध्ये भारतीय अर्थव्यवस्था मानक मुल्यांच्या आधारावर जगातील पाचवी मोठी अर्थव्यवस्था आहे. आर्थिक इतिहासकार एंगस मॅडिसन च्या नुसार पहिल्या शताब्दी पासून तर दहाव्या शताब्दी पर्यंत भारताची अर्थव्यवस्था जगातील सर्वात मोठी अर्थव्यवस्था होती. पहिल्या शताब्दीत जीडीपी जगाच्या एकूण जीडीपीच्या ३२.९ टक्के होता, सन १००० मध्ये २८.९ टक्के होता, तर सन १७०० मध्ये २४.४ टक्के होता. तसेच याकाळात जीडीपी जास्त असण्याचे कारण म्हणजे श्रमप्रधान तंत्र व पारंपारीक व्यवसाय पध्दती असू शकते औद्योगिक क्रांती नंतर यांत्रिकीकरणामुळे व वसाहतवादाने १९४७ पर्यंत भारताचा जीडीपीचा स्वर्ण इतिहास लुप्त झाला. १९९१ मध्ये आर्थिक विकास दर ८ टक्के पेक्षा जास्त होता. २००३ मध्ये ८.४ टक्के विकास दर होता. २००६-०७ मध्ये ९.४ टक्के विकासदर होता. २००५-०६ ते २००७-०८ तीन वर्षात सरासरी ९ टक्के विकासदर होता. एकूण २००४-०५ ते २०११-१२ सरासरी ८.३ टक्के विकासदर होता. मंदीमुळे २०१२-१३ आणि २०१३-१४ मध्ये सरासरी ४.६ टक्के विकासदर असल्याचे दिसून येते.

विविध क्षेत्राचे राष्ट्रीय उत्पन्नात योगदान १९९९-२००० प्राथमिक क्षेत्राचे योगदान २३.२ टक्के, द्वितीय क्षेत्राचे योगदान २६.८ टक्के, तृतीय क्षेत्राचे योगदान ५०.०० टक्के. २००७-०८ प्राथमिक क्षेत्राचे योगदान १६.८ टक्के, द्वितीय क्षेत्राचे योगदान २८.७ टक्के, तृतीय क्षेत्राचे योगदान ५४.४ टक्के. २०१२-१३ प्राथमिक क्षेत्राचे योगदान १३.९ टक्के, द्वितीय क्षेत्राचे योगदान २७.३ टक्के, तृतीय क्षेत्राचे योगदान ५८.८ टक्के आहे. २००० मध्ये निर्यात वाटा ०.७ टक्के व आयात ०.८ टक्के होता तो २०१३-१४ मध्ये निर्यात वाटा १.७ टक्के व आयात २.५ टक्के होती.

रोजगार स्थिती १९९९-२००० प्राथमिक क्षेत्रात ५९.९ टक्के, द्वितीय क्षेत्रात १६.४ टक्के, तृतीय क्षेत्रात २३.७ टक्के. २००४-०५ प्राथमिक क्षेत्रात ५८.५ टक्के, द्वितीय क्षेत्रात १८.२ टक्के, तृतीय क्षेत्रात

२३.३ टक्के. २०११-१२ प्राथमिक क्षेत्रात ४८.९ टक्के, द्वितीय क्षेत्रात २४.३ टक्के, तृतीय क्षेत्रात २६.९ टक्के आहे.

२०१५ च्या अंदाजानुसार, २०१५-१६ मध्ये ७.९ टक्के जीडीपी वृद्धीदर आहे, तर विभागानुसार उत्पन्न विचारात घेता असे दिसून येते की, शेती क्षेत्र १६.१ टक्के, उद्योग क्षेत्र २९.५ टक्के, सेवा क्षेत्र ५४.४ टक्के, व्यवसायानुसार रोजगार निर्माती शेती क्षेत्रामध्ये ४९.०० टक्के, उद्योग क्षेत्रामध्ये २०.०० टक्के, सेवा क्षेत्रामध्ये ३१ टक्के. २००४-०५ मध्ये २७ टक्के दारिद्र्य रेषेखाली लोकसंख्या होती.

माननीय वित्तमंत्री निर्मला सितारमन यांनी, २०१९-२० च्या अंदाजपत्रकीय भाषणामध्ये भारत २०२४-२५ पर्यंत पाच ट्रिलियन अमेरिकन डॉलरची अर्थव्यवस्था असेल, तसेच प्रधानमंत्री नरेन्द्र मोदी यांनी पक्ष कार्यकर्त्यांना वाराणसी येथे, संबोधित करतांना या घोषणेचा उल्लेख केला, म्हणजेच भारतीय अर्थव्यवस्थेची विकास वाटचाल पाच ट्रिलियन अमेरिकन डॉलरची अर्थव्यवस्था बनविण्याकडे आहे. अमेरीका, चीन, जपान बरोबर इतर देशांनीही हे लक्ष कमी वेळात गाठले आहे. भारताने हे लक्ष २०२४-२५ पर्यंत पूर्ण करण्याचे ठरविले आहे. या करीता आर्थिक वृद्धी दर ८ टक्के किंवा त्यापेक्षा जास्त असणे आवश्यकता आहे. तरच हे लक्ष गाठले जावू शकते. अमेरिकेने (१९७९-८८) ९ वर्षात पाच ट्रिलियन डॉलरच्या अर्थव्यवस्थेचे लक्ष गाठले. जपानने (१९८७-९४) ८ वर्षात पाच ट्रिलियन डॉलरच्या अर्थव्यवस्थेचे लक्ष गाठले. चीनने (२००५-२००८) ३ वर्षात पाच ट्रिलियन डॉलरच्या अर्थव्यवस्थेचे लक्ष गाठले.

५५ वर्षांनंतर भारत एक ट्रिलियन अमेरिकन डॉलरची अर्थव्यवस्था बनायला. तसेच नंतरच्या पाच वर्षात दोन ट्रिलियन अमेरिकन डॉलरची अर्थव्यवस्थेचे लक्ष साध्य केले. राष्ट्रीय सांख्यिकीय कार्यालयानुसार वित्तीय वर्ष २०१७-१८ वर्ष २०११-१२ च्या किंमतीवर आधारीत पहिल्या तिमाहीत जीडीपी वृद्धी दर ५.६ टक्के, दुसऱ्या तिमाहीत जीडीपी वृद्धी दर ६.३ टक्के, तिसऱ्या तिमाहीत जीडीपी वृद्धी दर ७.० टक्के, चौथ्या तिमाहीत जीडीपी वृद्धी दर ७.७ टक्के, जीडीपी वृद्धी दर .षी क्षेत्र ४.५ टक्के, उद्योग क्षेत्र ८.८ टक्के, सेवा क्षेत्र ७.७ टक्के, राहण्याचा अंदाज आहे. विनिर्माण क्षेत्र ९.१ टक्के, निर्माण क्षेत्र ११.५ टक्के. भांडवली निर्माण वृद्धी दर पहिल्या तिमाहीत वृद्धी दर ०.८ टक्के, दुसऱ्या तिमाहीत वृद्धी



## ग्रामीणविकास : अडथळे व उपाय

डॉ. महेन्द्र पांडूरंगजी गावंडे

अर्थशास्त्र विभाग नारायणराव काळे स्मृति मॉडेल कॉलेज,

भारत हा ग्रामीण समुदायाची भूमी असलेला देश असून वैदिक काळात ग्रामक्षेत्र प्रशासनाचे मुख्य अंग होते. देशाच्या अर्थव्यवस्थेत आजही ग्रामीण क्षेत्राला विशेष महत्व आहे. ग्रामीण भागामध्ये भारतीय लोकसंख्येचा मोठा हिस्सा वास्तव्य करित असलेला आढळतो. १९०१ मध्ये भारताच्या एकूण लोकसंख्येपैकी ८९ टक्के लोकसंख्या ग्रामीण भागामध्ये वास्तव्याला होती. १९५१ मध्ये भारताच्या एकूण लोकसंख्येपैकी ८३ टक्के लोकसंख्या ग्रामीण भागामध्ये वास्तव्याला होती. १९७१ मध्ये भारताच्या एकूण लोकसंख्येपैकी ८० टक्के लोकसंख्या ग्रामीण भागामध्ये वास्तव्याला होती. १९९१ मध्ये भारताच्या एकूण लोकसंख्येपैकी ७४ टक्के लोकसंख्या ग्रामीण भागामध्ये वास्तव्याला होती. २००१ मध्ये भारताच्या एकूण लोकसंख्येपैकी ७२ टक्के लोकसंख्या ग्रामीण भागामध्ये वास्तव्याला होती. २०११ मध्ये भारताच्या एकूण लोकसंख्येपैकी ६९ टक्के लोकसंख्या ग्रामीण भागामध्ये वास्तव्य करते. ग्रामीण क्षेत्रात भारताची बहुसंख्य लोकसंख्या निवास करित असल्यामुळे भारतीय अर्थव्यवस्थेवर ग्रामीण अर्थव्यवस्थेचा प्रभाव पडतो. परंतु आजही ग्रामीणक्षेत्राकडे बघितले असता आपल्याला स्वातंत्र्यप्राप्ती नंतर ७० वर्षे झाले असले, तरी ग्रामीण क्षेत्र पाहिले त्या प्रमाणात विकसीत झालेले दिसत नाही. शासनाने आजपर्यंत अनेक योजना नियोजनाच्या माध्यमाने राबविल्या असल्या तरी ग्रामीण क्षेत्रात आजही विकास मार्गात अडथळे असल्याचे दिसून येते. त्यामुळे ग्रामीण विकास करणे काळाची गरज आहे. कारण ग्रामीण भागात व शहरी भागात आज तफावत निर्माण झालेली आहे. शहरी भागात समस्या आहे पण त्याहीपेक्षा गंभीर समस्या ह्या ग्रामीण भागात आढळतात, त्यामुळे ग्रामीण भागातील लोक शहरी भागात समस्या असूनही आकर्षिले जातात, त्यामुळे खेडी ओस पडत आहे व शहरीक्षेत्रातही समस्या मध्ये भर पडत आहे. कारण असंतुलीत विकास हा अधिक असंतुलन निर्माण करत आहे. ग्रामीण क्षेत्रातील विकास मार्गात अडथळे—

ग्रामीण क्षेत्रातील विकास मार्गात अडथळे—

१. अविकसीत कृषिक्षेत्र—ग्रामीण भागात कृषी हाच प्रमुख व्यवसाय असून त्यावर आधारीत इतर व्यवसाय हे कृषीवर अवलंबून आहे. परंतु कृषी आजही तंत्रज्ञानयुक्त पुर्ण विकसीत झालेली नाही. कृषिक्षेत्रामध्ये अनेक अडचणी आजही उपलब्ध आहे. विकसीत देशाच्या मानाने आजही भारतीय कृषीची उत्पादकता कमी असल्याचे दिसून येते.
२. दळणवळणाची समस्या— ग्रामीण क्षेत्रामध्ये आजही दळणवळणाची व्यवस्था विकसीत झाल्याचे दिसून येत नाही. संचार व्यवस्था कोलमडलेली आहे. तसेच काही खेडी शासकीय वाहतुकी पासून दूर आहे. काही खेड्यांचा संपर्क आजही मुख्य रस्त्यांपासून तुटलेला आहे.
३. अविकसीत ऊर्जाक्षेत्र— आजही आधुनिक ऊर्जा स्रोताची कमतरता ग्रामीण क्षेत्रात दिसून येते. खंडीत विद्युत पुरवठा व वाढती विज कपात त्यामुळे सिंचनात अडथळे, आधुनिक ऊर्जा साधना पासून कोसोदुर जसे. सौर ऊर्जा, पवन ऊर्जा, त्यामुळे परंपरागत इंधनाचा वाढता वापर व वृक्षतोड, पर्यावरण प्रदुषण ग्रामीण क्षेत्रात दिसून येते.
४. वाढती बेरोजगारी— ग्रामीण क्षेत्र विशेषतः कृषी क्षेत्रावर अवलंबून असल्यामुळे लघु व कुटीर उद्योगाची कमतरता असल्यामुळे येथे हंगामी बेरोजगारी दिसून येते तसेच अर्धबेरोजगारी व छुपी बेरोजगारी मोठ्याप्रमाणावर आढळते.
५. दारिद्र्यामध्ये पडणारी भर— कृषी क्षेत्रावर लोकसंख्येचा अतिभार व लघु व कुटीर उद्योगाची कमतरता असल्यामुळे, तसेच योग्य शिक्षण, तंत्र व प्रशिक्षण सोयीचा अभाव असल्यामुळे बेकारीचे प्रमाण जास्त आढळून येते तसेच संधीच्या अभावामुळे अकार्यक्षम लोकसंख्येचे प्रमाण वाढत आहे त्यामुळे दारिद्र्यामध्ये सतत भर पडत आहे.
६. वाढती गरीबी— ग्रामीण क्षेत्रामध्ये दुष्काळ, अवर्षण, रोजगार संधीचा अभाव, योग्य शिक्षण व प्रशिक्षण सोयीचा अभाव, मानव संसाधन विकासाची कमतरता, निकृष्ट आरोग्य सोयी इत्यादीमुळे अकार्यक्षम लोकसंख्येचे जास्त प्रमाण व त्यामुळे वाढती गरीबी दिसून येते.
७. पाण्याची टंचाई व अनिश्चित पाणी पुरवठा— कृषी क्षेत्राला निश्चित पाणीपुरवठ्याच्या सोयीचा अभाव आहे. तर कोठे पिण्याच्या पाण्याची टंचाई दिसून येत असून योग्य दर्जाचे पिण्याचे पाणी उपलब्ध नाही.

## ४. कृषी क्षेत्रातील रोजगार व महिलांची भूमिका

डॉ. महेंद्र पांडूरंगजी गावंडे

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### प्रस्तावना

2011 च्या जनगणनेनुसार भारतात एकूण लोकसंख्येपैकी 68.9 टक्के लोकसंख्या ग्रामिण भागात राहते, महाराष्ट्रात 54.8 टक्के लोकसंख्या ग्रामिण भागात निवास करते. भारतात एकूण लोकसंख्येपैकी 48.53 टक्के महिला आणि 51.47 टक्के पुरुष आहे, तर महाराष्ट्रात एकूण लोकसंख्येपैकी 48.17 टक्के महिला आणि 51.83 टक्के पुरुष आहे. शेतमजुरांचा विचार केल्यास 1901 मध्ये 1.72 कोटी शेतमजुर, 1911 मध्ये 2.40 कोटी शेतमजुर, 1921 मध्ये 1.96 कोटी शेतमजुर, 1931 मध्ये 2.21 कोटी शेतमजुर, 1951 मध्ये 2.75 कोटी शेतमजुर, 1961 मध्ये 3.15 कोटी शेतमजुर, 1971 मध्ये 4.75 कोटी शेतमजुर, 1981 मध्ये 5.94 कोटी शेतमजुर, 1991 मध्ये 7.50 कोटी शेतमजुर, 2001 मध्ये 8.30 कोटी शेतमजुर, 2011 मध्ये 11.43 कोटी शेतमजुर होते. 110 वर्षातील शेतमजुरांचा आढावा घेतल्यास असे दिसून येते की, शेतमजुरांची संख्या सतत वाढत आहे, फक्त 1921 मध्ये कमी झालेली दिसून येते, कारण त्या दशकात महामारी व रोगराईमुळे लोकसंख्येत घट झाली होती.

भारत एक विकसनशील देश आहे. या देशात ग्रामीण अर्थव्यवस्था विशेष महत्त्वपूर्ण आहे. कारण जवळपास 70 टक्के लोकांच्या उपजीविकेचे साधन कृषी क्षेत्र व त्यांच्याशी संबंधित उद्योग आहे, त्यामुळे कृषीक्षेत्र भारताच्या आर्थिक विकासात महत्त्वपूर्ण भूमिका पार पाडते. 1950-51 मध्ये कृषी क्षेत्राचा वाटा 56.5 टक्के, 1960-61 मध्ये कृषी क्षेत्राचा वाटा 52.13 टक्के, 1970-71 मध्ये कृषी क्षेत्राचा वाटा 45.77 टक्के, 1980-81 मध्ये कृषी क्षेत्राचा वाटा 39.6 टक्के, 1990-91 मध्ये कृषी क्षेत्राचा वाटा 32.91 टक्के, 2000-01 मध्ये कृषी क्षेत्राचा वाटा 26.1 टक्के, 1910-11 मध्ये कृषी क्षेत्राचा वाटा 14.2 टक्के, 1911-12 मध्ये कृषी क्षेत्राचा वाटा 18.3 टक्के, 1912-13 मध्ये कृषी क्षेत्राचा वाटा 16.3 टक्के, 1914-15 मध्ये कृषी क्षेत्राचा वाटा 15.08 टक्के, होता. कृषी क्षेत्राचा वाटा राष्ट्रीय उत्पन्नात कमी होत असला तरी राष्ट्रीय उत्पन्न वाढीचा दर हा शेतीच्या उत्पन्न वाढीच्या दरावरच अवलंबून आहे.

2013-14 मध्ये GDP मध्ये कृषी क्षेत्राचा हिस्सा 17 टक्के होता, तर रोजगारी मध्ये जवळपास 50 टक्के हिस्सा होता. एकूण निर्यातीत कृषी निर्यातीचा वाटा हा 1990-91 मध्ये 18.5 टक्के होता, तर 2014-15 मध्ये 14.2 टक्के होता. ग्रामीण अर्थव्यवस्थेची प्रमुख विशेषतः कृषी असल्यामुळे, ग्रामीण विकास कृषी विकासावर अवलंबून आहे. शाश्वत ग्राम विकासाकरिता कृषी क्षेत्राचा विकास होणे आवश्यक आहे. तसेच ज्या प्रमाणे ग्रामविकास कृषी विकासावर अवलंबून आहे, त्याच प्रमाणे कृषी विकास सुध्दा अनेक घटकावर निर्भर आहे. यामध्ये मुख्य घटक श्रमिक आहे. कृषी श्रमिकांमध्ये विशेषतः महिला श्रमिकांचे कृषी विकासात योगदान मोलाचे आहे. कृषी क्षेत्रात महिलांचा सहभाग पूर्वाकाळापासून दिसून येतो, ग्रामीण कृषीप्रधान अर्थव्यवस्थेत महिलांचे स्थान अतिशय महत्त्वाचे आहे. ग्रामीण क्षेत्रातील महिला ह्या कृषी व्यवसायाचा आधारस्तंभ असून, त्यांच्या सहकार्याशिवाय कृषी क्षेत्राला पूर्णत्व



# कृषी व ग्राम विकास : भारताच्या पाच ट्रिलियन डॉलरच्या अर्थव्यवस्थेची आवश्यकता

डॉ. महेन्द्र गावंडे

अर्थशास्त्र विभा

नारायणराव काळे स्मृति मॉडेल कॉलेज, कारंजा(घा.)जि.वर्धा.

२०१९-२० च्या अंदाजपत्रकीय भाषणामध्ये माननीय वित्तमंत्री निर्मला सितारमन यांनी, भारत पाच ट्रिलियन अमेरिकन डॉलरची अर्थव्यवस्था येत्या पाच वर्षांत बनेल असे सांगितले. तसेच प्रधानमंत्री नरेन्द्र मोदी यांनी पक्ष कार्यकर्त्यांच्या सभेत वाराणसी येथे, आपल्या कार्यकर्त्यांना संबोधित करतांना या घोशणेचा उल्लेख केला, म्हणजेच भारतीय अर्थव्यवस्थेची विकास वाटचाल आज तरी पाच ट्रिलियन अमेरिकन डॉलरची अर्थव्यवस्था बनवण्याची आहे. अमेरिकेने (१९७९-८८) ९ वर्षांत पाच ट्रिलियन डॉलरच्या अर्थव्यवस्थेचे लक्ष गाठले. जपानने (१९८७-९४) ८ वर्षांत पाच ट्रिलियन डॉलरच्या अर्थव्यवस्थेचे लक्ष गाठले. चीनने (२००५-२००८) ३ वर्षांत पाच ट्रिलियन डॉलरच्या अर्थव्यवस्थेचे लक्ष गाठले. अमेरिका, चीन, जपान बरोबरच इतर देशांनीही हे लक्ष कमी वेळात गाठले आहे. भारताने हे लक्ष २०२४-२५ पर्यंत पूर्ण करण्याचे ठरविले आहे. तसेच २०३२ पर्यंत १० ट्रिलियन अमेरिकन डॉलरची विकास अर्थव्यवस्था करण्याचे लक्ष आहे. या करीता आर्थिक वृद्धी दर ८ टक्के किंवा त्यापेक्षा जास्त असणे आवश्यक आहे. तरच हे लक्ष गाठले जावू शकते.

आतापर्यंतचा विकास आढावा घेता असे दिसून येते की, देशाला एक ट्रिलियन अमेरिकन डॉलरची अर्थव्यवस्था बनायला ५५ वर्षां लागले. मागील पाच वर्षांत, दोन ट्रिलियन अमेरिकन डॉलरची अर्थव्यवस्था हे लक्ष पार केले. चालू वित्त वर्षाच्या दुसऱ्या तिमाहीत राष्ट्रीय सांख्यिकीय कार्यालयानुसार ४.३ टक्के वृद्धीदर आहे. चालू वित्तीय वर्षात पहिल्या तिमाहीत एप्रिल-जूनमध्ये भारताचा विकास दर ५ टक्के होता मागील वर्षी जानेवारी-मार्च मध्ये ५.८ टक्के होता. मंदी विचारात घेवून आर. बी. आय. ने जी.डी.पी. अनुमानात घट केली असून ती ६.९ टक्के आहे. पुर्वी आर्थिक वृद्धी दराचे लक्ष ७ टक्के होते. या घटीचे कारण म्हणजे सेवा क्षेत्र सोडून इतर क्षेत्रातील विकासामध्ये घट झाली आहे. मुडीज इनवेस्टर्स सर्विसने २०१९-२० मध्ये आर्थिक वृद्धी दराचे लक्ष ६.२ टक्के वरून ५.८ टक्के केले. राजकोशीय घाटा ३.३९ टक्के आहे.

विकसीत अर्थव्यवस्था बनवण्याकरिता मजबुत मुलभूत संरचनेचा ढाचा पाहिजे असतो. तसेच आयात कमी करून निर्याती मध्ये वाढ करावी लागते. याकरीता विकसीत उद्योगधंदे आवश्यक असतात. लघु व

कुटीर उद्योगामध्ये वाढ करावी लागते. त्यामुळे रोजगार वाढेल. जी. एस. टी. च्या स्वरूपामध्ये बदल करावा लागेल. २०१३-१४ मध्ये असे सांगण्यात आले होते की, प्रत्येक वर्षी १ ते २ कोटी रोजगार निर्मिती होईल. परंतु आज ज्या उद्योगात रोजगार संधीची आशा होती, ती सुध्दा कमी झालेली दिसून येते.

२०१८-१९ मध्ये ६.८ टक्के जी.डी.पी.चा वृद्धी दर आहे. त्यामुळे लक्ष साध्य करण्याकरीता गुंतवणूक वाढवीणे आवश्यक आहे. पण अर्थव्यवस्थेचा विचार केल्यास निर्मित मालाला मागणी नाही, त्यामुळे उत्पादित उत्पादन पडून आहे. जसे. अॅटोमोबाईल क्षेत्र, बांधकाम क्षेत्र यामध्ये मंदी सदृश्य स्थिती आहे. येथील रोजगार कमी होत आहे. पारले मध्ये सुध्दा उत्पादनात घट करण्यात आली म्हणजे मागणी कमी असल्यामुळे उत्पादन घट व त्यातून बेरोजगारीची शक्यता दिसून येते. तसेच ज्या क्षेत्रात उत्पादन व गुंतवणूक केल्या जाते तिथे यांत्रिक शक्तीचा वापर जास्त असल्यामुळे उत्पादन अधिक व रोजगार निर्मिती कमी असे चित्र आहे. त्यामुळे उपभोग क्षमता वाढत नसून संपत्तीचे केंद्रीकरण होतांना दिसून येते. आर्थिक विशमता वाढत असल्यामुळे श्रीमंत व्यक्तीजवळ क्रयशक्ती असून उपभोग क्षमता नाही. व गरीबांकडे उपभोग क्षमता आहे पण क्रयशक्ती नाही अशी स्थिती निर्माण झाली.

अर्थव्यवस्थेत मंदी सदृश्य स्थिती असल्यामुळे तसेच उत्पादन अधिक झाल्यामुळे ते मागणी अभावः पडून असल्याकारणाने खाजगी गुंतवणूकदार गुंतवणूक करायला तयार नाही त्यामुळे खाजगी गुंतवणूकीत घट होत असल्याचे दिसून येते. अधिकोश सुध्दा या काळात ऋण देण्यास तयार नाही व गुंतवणूकदार गुंतवणूक करण्यास तयार नाही. वित्तीय कंपन्या संकटात आहे, प्रत्यक्ष विदेशी गुंतवणूक योग्य दरानी होताना दिसत नाही. कारण बाजार हा सध्या भांडवलशाही व्यवस्थेच्या आर्थिक अरिष्टामध्ये सापडल्यासारखा आहे. त्यामुळे बेरोजगारी वाढत आहे. सरकारी खर्च करून निवेश करणे शक्य नाही. कारण सरकार निर्गुंतवणूकीच्याद्वारे निवेश करणार होते, पण सरकारी भाग खरेदी करण्यास खाजगी उद्योजक तयार नाही. निर्यात क्षेत्रात सध्या सुस्ती दिसून येते. जी विकास दर २००५-०६ मध्ये ५.८ टक्के होता, २००९-१० मध्ये ०.४, २०१४-१५ मध्ये -०.२, २०१०-११

महात्मा गांधीजींच्या खादोसंबंधी उत्क्रांत विचारविषयो विनोदा भावे म्हणतात. खादी जर मदतीसाठी असल, तर तिच्यातील करुणा दासो आहे आणि अहिंसक यादीत तो राणी आहे. दासी वनून हिंसेचा संवा करण्याच्या क्रुणेत लढाई बंद करण्याची शक्ती नसते. खादी दासीच्या स्वरुपात राहिली तर, असून नसून सारखीच. त्यामुळे खादी हो विक्रीची वस्तू बनता कामा नये. ती विकण्यासचो वस्तू नाही, ती वापरण्याची आहे. महात्मा गांधीजींना याच खादीच्या माध्यमातून देशात स्वावलंबन याच असे वाटत होते. म्हणून महात्मा गांधीजी म्हणत असत की, 'माझ्या खादोचो विचार म्हणजे वाऱ्याविच्छेद नाच हाकून स्वराज्याची नौका बुडविणे नव्हे किंवा देशाला अंधकार युगाकडे नेणे नव्हे. खादी हे खऱ्या स्वराज्याचे प्रतीक आहे'. खादीचा संदर्भात लोक असे म्हणतात की, खादी म्हणून लोकांना खूप कमी पैसे मिळतात. तसेच त्याच्या विषयी आकर्षण कमी आहे. याबरील अपेक्षाला महात्मा गांधीजो असे उत्तर देतात की, खादी म्हणून कमी उत्पन्न मिळत नसून खादीचा प्रसार भारतात जास्त झाला नाही. तसेच ती कारखान्यातून तयार होणाऱ्या कापडार्शी स्पर्धा करू शकत नाही. या खादीमुळे लोकांतील कार्यभरणा जागृत झाली तरी खूप मोठे काम झाल्यासारखे आहे.

### निष्कर्ष

एकंदरीत महात्मा गांधीजींचे तत्त्वज्ञान हे भारतीय अखिल मानवजातीला दीपस्तंभासारखे मार्गदर्शक आहेत. त्यांचा खादी संबंधी विचार हा स्वदेशीचा पुरस्कार करणारा तसेच शेतकऱ्यांची उत्पादकता वाढविणारा आहे. खादीच्या माध्यमातून कापड उद्योग आणि शोर्ती क्षेत्र या दोन्ही क्षेत्रात रोजगार उपभारता येतो असे विचार त्यांच्या खादी विषयक विचारातून व्यक्त होतात. म्हणजेच मानवाच्या आर्थिक सुबत्तेचा विचार त्यांनी केला आहे.

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- गांधी मो.क., माझ्या स्वप्नातील भारत, साकेत प्रकाशन, औरंगाबाद.

महात्मा गांधींच्या लोकेश्वर व्यक्तिमत्त्वाचे मूल्यमापन करताना अनेकांनी त्यांचा गौरव अत्यंत सार्थ रीतीने केला आहे. थोडे शिक्षणतज्ञ, राजकीय विचारवंत, अस्पृश्याघ्नकार अर्थ तज्ञ एक व्यवहार दक्ष, मुत्सद्दी व असामान्य राजकीय नेता, अलौकिक धर्मसुधारक आणि तत्त्वनिष्ठ समाजसुधारक म्हणून ते चिरसंरक्षित आहेत. पंडित नवाहरलाल नेहरू त्यांना 'राष्ट्रपिता' म्हणूनही संबोधले. सर्व संबोधनात नेहरूंनी त्यांना दिलेले हे सर्वोच्च. तर नामदार गोखले यांनी पराक्रमी, वीरपुरुष व हुतात्मा यांच्या मुशांत घडलेले व्यक्तीमत्त्व असे त्यांचे वर्णन केले. उद्योग संस्कृती आणि तात्वीक प्रबंधनपर विचारपरंपरा यांच्या चौकटीत बौद्ध अस्पृश्या समाजाला एक आध्यात्मिक जीवनशैली राष्ट्र उभारणीकरिता तसेच राष्ट्रहिताकरिता कर्षो योग्य ठरले हे कसोरींनी सांगणाऱ्याचा त्यांनी केलेला प्रयत्न अत्यंत सूक्ष्म आणि परिणामकारक ठरला. वरु आणि राजकारण यांचा समन्वय साधून त्यांनी राजकारणाला व समाजकारणाला एक अध्यात्मवादी दृष्टी प्रदान केली आहे 'सामाजिक स्वातंत्र्य कौ राजकीय स्वातंत्र्य' या विवादात न पडता त्यांनी सामाजिक स्वातंत्र्याबरोबरच राजकीय स्वातंत्र्य महत्त्वपूर्ण आहे. हे स्पष्ट करताना दोन्ही स्वातंत्र्याचा तुलनात्मक साधून राष्ट्राची जडणघडण साधली जाते हा विचार प्रतिपादन केला.

महात्मा गांधींनी छान्यावुऱ्या अर्थाने भारताचा राष्ट्रीय जडणघडण केली. भारताच्या स्वातंत्र्य प्राप्तीकरिता त्यांनी देशव्यापी जनआंदोलनाची विराट चळवळ उभारली आणि शेवटपर्यंत निस्वार्थीपणे तिचे नेतृत्व केले. त्याकरिता लागणारे व्यावहारिक शहणपण त्यांच्यापशी होते. परंतु तेवढ्याने राष्ट्रापिता या संबोधनास ते पत्र झाले नसते. भरतर त्यांच्यामुळे स्वातंत्र्य प्राप्त झाले असते परंतु राष्ट्रनिर्माते झाली नसती. 'राजकारणाला तात्त्विक जोड न देता त्याला नैतिक अधिष्ठाण त्यांनी प्राप्त करून दिले व त्यास त्यांनी एक आचारसंमि चिकटवून ऐतिहासिक स्वरुपाचे कार्य केले. परंतु त्यांनी केलेल्या या कार्याचा आपल्याला विसर पडला आहे. या संदर्भात 'गांधीवादाची शैकीतिक' या लेखामध्ये प्रख्यात अर्थतज्ञ डॉ. वि.म.दांडेकर गांधीवादाची मर्यासा करताना लिहितात. राजकारणाला तात्त्विक, नैतिक अधिष्ठाण नसले तर योग्य कार्य, अयोग्य कार्य यांचा निर्णय करता येत नाही. राजकारणाच्या दृष्टीने हे सर्व प्रश्न अस्पष्ट आहेत. सत्तास्पर्धा एवढेच राजकारणाचे स्वरुप त्यांना समजते. परंतु सत्तास्पर्धेत टिकून राहण्याकरिता राजकारणाला तात्त्विक व नैतिक अधिष्ठाण असावे लागते तत्त्वज्ञान, दिशाहीन, सत्तास्पर्धेत भरकटत जाणारे राजकारण सामान्य जनता फार काळ मान्य करत नाही. हे महात्मा गांधी आपल्या आचरणानून आणि तत्त्वज्ञानानून सांगितले आहे. परत त्यांचे अह आपल्याला विसर पडलेला आहे. " १

### मानवतावाद - स्वाधीमान व स्वनिष्ठा या त्रिसुत्रीचा शिक्षण.

राष्ट्रतरणास मानवतावादचे अधिष्ठाण दिले पाहिजे आणि राष्ट्र उभारणीकरिता स्वाधीमान व स्वनिष्ठा जागृत असली पाहिजे या त्रिसुत्रीचा अवलंब ईश्वरदिन व्यवहारात काढा असा मूलमंत्र महात्मा गांधींनी दिला. गौतम बुद्ध, संत कबीर, महात्मा फुले, राजर्षी शाहू, डॉ. बाबासाहेब आंबेडकर यांच्या आचार विचारांमधून ज्या मानवतावादी मुल्यांची ओळख होते तेमकच त्याच मानवतावादी मुल्यांना महात्मा गांधींच्या तत्त्वज्ञानत मोलाचे स्थान होते. महात्मा गांधींचे संपूर्ण जीवनच आदर्शच होते. कोणत्याही एका विशिष्ट धर्मसंवादाचा त्यांच्यावर प्रभाव नव्हता. 'हिंदू धर्मातील अध्यात्मवाद, बौद्ध धर्मातील अहिंसा आणि जैन धर्मातील पंचतंत्रचे आणि ख्रिस्ता धर्मातील मानवतावादी मूल्ये इ.चा त्यांनी स्वीकार केला. " २

स्वतंत्र्य, समता, बंधुत्व याबरोबरच लोकशाही आणि उदारमतवादी तत्त्वज्ञानाचे प्रतिबिंब त्यांच्या तत्त्वज्ञानत अदृश्य येते. त्यांच्या याच विज्ञान मानवतावादने त्यांनी आपल्या प्रत्येक कार्याला नैतिक अधिष्ठाण दिले. मानवतावाद, स्वाधीमान आणि स्वनिष्ठा यांचा अवलंब करून आपण उभे राहिल्यास किण्यातील कोणतीही ताकद आपणांस रोखू शकत नाही. आपले जे उचित ध्येय आहे ते साध्य करू शकतो हे त्यांनी स्वतःच्या उदाहरणाद्वारे सिद्ध करून दाखविले. त्यांचे जीवनवैयक्य तत्त्वज्ञान अद्भूत स्वरुपाचे होते. सत्य अहिंसा आणि सदाचरण यावर ते

## २०. विदर्भातील संत : ज्ञानेश्वरकन्या गुलाबराव महाराज

डॉ. गणेश भि. मोहोड

नारायणराव काळे स्मृती मॉडेल कॉलेज, कारंजा (धा.) जि. वर्धा.

### प्रस्तावना

भारत ही संतांच्या पावन स्पर्शाने व कार्याने पुनीत झालेली भूमी आहे. समकालीन प्रश्नांचे भान ठेवून समाजमन व राष्ट्रमन जागृत करण्याचे कार्य करणारी एक मोठी उज्वळ परंपरा भारतामध्ये निर्माण झाली. वेगवेगळ्या काळात होऊन गेलेल्या संतांनी सामाजिक व अध्यात्मिक प्रश्नांची जाण ठेवून आपल्या लेखणीद्वारे समाजातील अनेक प्रश्नांना समर्थपणे वाचा फोडली. त्याचबरोबर लोकांच्या आत्मिक व अध्यात्मिक उन्नती साधण्याचे कार्य केले. महाराष्ट्र हा भारताचा एक सर्वदृष्टीने महत्त्वाचा भाग असल्याने महाराष्ट्रातही अशी मोठी व समृद्ध संतपरंपरा उदयाला आली.

संत ज्ञानेश्वरांपासून तर संत तुकाराम, रामदासांपर्यंत ते संत रामदास असे अनेक संत होऊन गेलेत. अठरापगड जातीतील या संतांनी महाराष्ट्रभूमीला आपल्या विचारांनी व साहित्याने अतिशय समृद्ध केले. वारकरी संतांना 'मराठीचिये नगरी' ब्रम्हविद्येचा सुकाळ करायचा होता. मराठी भाषिकांच्या महाराष्ट्र संस्कृतीचा वरुधर ज्ञानेश्वरांनीच पाया घातला. नाचू कीर्तनाचे रंगे। ज्ञानदीप लावू जगी। अशी महाराष्ट्रीय संतांची प्रतिज्ञा होती. संत ज्ञानेश्वरांची प्रतिभा अत्यंत उच्च दर्जाची होती. तोच वसा पुढे वारकरी संतांनी चालविला. हा वसाही ज्ञानाचाच होता. या त्या सर्व संतांची समन्वयवादी दृष्टीच दिसून येते. ही दृष्टी अतिशय डोळस अशाच होती. ज्ञानेश्वर तुकारामादी मराठी संतांचे कार्य हे केवळ सांप्रदायिक स्वरूपाचेच नव्हते तर ती व्यापक चळवळ होती.

गं.वा. सरदार लिहितात, "मराठी संतांचे धोरण हे प्रायः समन्वयशीलतेचे होते. त्यांनी आपल्या आत्मनिरूपणात अध्यात्मनिष्ठा व मानवतावाद, निर्गुणोपासना व सगुणभक्ती, कर्मसिद्धांत व करुणा, अभेदभक्ती व भेदभूलक वर्णभर्म, शास्त्रवचन, गुरुबोध व आत्मप्रतीती इत्यादी गोष्टींचा समन्वय साधला. त्यांची दृष्टी मुख्यतः विधायक होती." महाराष्ट्राच्या सांस्कृतिक इतिहासातील हे संतांचे कार्य फार महत्त्वाचे आहे. अशाच मोठी संतपरंपरा व विचारपरंपरा विदर्भातही उदयाला आली. प्रज्ञाचक्षु गुलाबराव महाराजही याच परंपरेतले. संत ज्ञानेश्वर हेच त्यांचे दैवत.

विदर्भ ही संत आणि कवींची भूमी म्हणून प्रसिद्ध आहे. या संतपरंपरेमध्ये संत गाडगेबाबा, संत तुळडोजी महाराज आणि 'ज्ञानेश्वरकन्या' म्हणून ज्यांचा उल्लेख केला जातो ते 'संत गुलाबराव महाराज' यांचा विशेषत्वाने उल्लेख करावा लागेल. असामान्य प्रतिभाशक्ती आणि अद्वितीय कवित्वशक्ती यांच्या बळावर गुलाबराव महाराजांनी विपुल ग्रंथसंपदा निर्माण केली. वयाच्या आठव्या महिन्यातच त्यांचे डोळे आले असता वृक्षांच्या औषधोपचार झाल्यामुळे कायमचे अंधत्व आले. अंधत्व, परची बेताचीच असलेली आर्थिक परिस्थिती

## मानवाधिकार आणि स्त्री जीवन

डॉ. विजय कृष्णराव काळे

नारायणराव काळे स्मृती मॉडेल कॉलेज, कारंजा घाडगे, जि. वर्धा.

नैसर्गिक हक्क चळवळीतून मानवी हक्क ही संज्ञा जन्माला आली. ही संज्ञा अचानक निर्माण झाली नसून अनेक पिढ्यांचे योगदान, दुर्दम्य इच्छा आणि अनुभव याचा तो परिणाम आहे. मानवी जीवनाच्या इतिहासामध्ये हिंसेचे उत्क्रांत पद्धतीने उच्चाटन झाले तरी सुद्धा आजही मानवी हक्काचे उल्लंघन मोठ्या प्रमाणात होत असते. हे केवळ अविकसित जगामध्ये दिसते असे नसून विकसनशील व विकसित देशामध्ये सुद्धा घडणाऱ्या घटनांमध्ये दिसून येत आहे. हे केवळ अशिक्षित, बर्बर, मागासलेल्या समाजातच नसून सुशिक्षित पुढारलेल्या समाजामध्ये सुद्धा दिसून येते. मानवी हक्काच्या उल्लंघनाचे क्षेत्र हे घरेलू हिंसेपासून तर रोज जगामध्ये कोठेही लढल्या जात असलेल्या युद्धामधील नरसंहारापर्यंत आहे. लहान मुलांच्या हक्कापासून महिला, कामगार, वृद्धांच्या हक्कापर्यंत आहे आणि त्यामुळे या विषयावर अध्ययन करण्याची जागृती आणण्याची आवश्यकता आहे.

हक्क हे समाजा अंतर्गत निर्माण होत असतात. राज्य ह्या संस्थेने त्या हक्काच्या संरक्षण व संवर्धनाची अपेक्षा असते. त्या शिवाय मनुष्य आपला सर्वांगीण विकास साध्य करू शकणार नाही. अर्थात मानवी गरजांतून हक्क निर्माण होतात. सर्व माणासांना समतोल आहार, पिण्याचे शुद्ध पाणी, प्रदूषण विरहित वातावरण आणि समाधारणकारक घरगुती सोयी सुविधा या गोष्टी मिळाल्या पाहिजेत. ज्यामुळे त्यांना चांगले जीवन जगता येईल. माणासांचे मन, भय, चिंता, तसेच मानसिक तणावापासून मुक्त असायला हवे. ज्यामुळे ती व्यक्ती अधिक प्रभाविपणे काम करू शकेल. समाजाची अशी अपेक्षा असते की, प्रत्येकाने सतत परस्पर सहकार्य भावनेने काम करावे, जेणे करून माणसे समाजाशी एकत्र होवू शकतील. व त्यातून त्यांच्या समाजाबद्दल आपले पणाची भावना निर्माण होईल. त्याच प्रमाणे ज्यांच्या सहाय्याने माणासांच्या सर्व आर्थिक गरजा भागविल्या जातील. कामाचा हक्क, समान कामासाठी समान वेतन हे हक्क माणासांच्या आर्थिक गरजापासून किंवा सुखाच्या शोधापासून निर्माण झालेले आहे. ह्या संपुर्ण क्रमशः शारीरिक, मानसिक, सामाजिक व आर्थिक गरजेतून अधिकार निर्माण झालेत.

मानवी हक्क जन्मतः मिळालेले असे हक्क आहेत. जे माणासांच्या व्यक्तीत्व विकासासाठी, मानवीय मुल्यांच्या जपणूकीसाठी, संवर्धनासाठी, बौद्धिक, वैचारिक व सदसद विवेक बुद्धिच्या वाढीसाठी महत्वाची आहेत. तसेच मानवाच्या अध्यात्मिक व इतर गरजा भागविण्याकरिता आवश्यक असतात. जगण्याचा हक्क हा नैसर्गिक आहे. मात्र सन्मानपूर्वक जीवन जगणे हा मूलभूत हक्क आहे. प्रत्येक बालकास जगण्याचा, स्वातंत्र्याचा व सुरक्षिततेचा हक्क आहे. मात्र त्याच बरोबर शिक्षण, आरोग्य आणि इतर हक्क हे त्याला सन्मानपूर्वक जीवन जगण्यासाठी आवश्यक असतात. त्यासाठी मोफत शिक्षण, कोणत्याही परिस्थितीत आरोग्य सुरक्षित राहिले पाहिजे याची कुटूंबाकडून, सरकारकडून काळजी घेतली पाहिजे.

मानवी हक्क हे नेहमिच वैश्विक, अविभाज्य व परस्परावलंबी असतात. मानवी हक्काची वैश्विकता व्यक्तीला ती कोणताही धर्म, जाती, वंश, लिंग, सामाजिक व आर्थिक स्तरातील किंवा भाषा, प्रांत, जन्म स्थानातील असला तरी त्याला मानवी हक्क प्राप्त होतात. याचाच अर्थ हे हक्क सर्वांनाच असतात मग ते कोठेही असो. ती व्यक्ती एका देशातून दुसऱ्या देशात गेल्यावरही. तीचे हक्क तीच्या सोबतच असतात. हक्काची अविभाज्यता हक्क हे निसर्गतः आणि जन्मतः प्राप्त होतात. हे हक्क आपणास कोणी देत नाही अथवा हिरावूनही घेवू शकत नाही. तर हक्काची परस्परावलंबीत्व कोणत्याही हक्काला स्वतंत्र बघत नाही. जसे जीविताने हक्क अन्न सुरक्षा हक्काशीवाय शक्य नाही. अभिव्यक्ती व भाषण स्वातंत्र्य, शिक्षण व माहितीच्या हक्काशिवाय अर्थहीन आहे.

१० डिसेंबर १९४८ ला संयुक्त राष्ट्रसंघाच्या आमसभेने मानवी हक्कांच्या आंतरराष्ट्रीय करारनाम्याचा परिणामकारक अंमलबजावणीसाठी एक मसूदा तयार करण्याची गरज व्यक्त केली. मानवी हक्क आयोगाने ही जबाबदारी स्वीकारून मसूदा तयार केला. आर्थिक व सामाजिक मंडळाने चर्चेस घेतला. नागरी व राजकीय हक्क तसेच आर्थिक, सामाजिक व संस्कृतीक हक्क या बाबत एकच करारनामा असण्याच्या व्यवहारीकतेबद्दल मंडळाले शंक व्यक्त केली. त्यावर चर्चेअंती दोन करारनामे करण्यावर सहमती झाली. त्यातील पाहिला करार नागरी व राजकीय हक्काचा होता. तर दुसरा सामाजिक, आर्थिक व संस्कृतिक हक्काचा होता. या दोन्हीवर मतभेद असले तरी हक्काचे हे दोन्ही प्रकार परस्परपुरक व परस्परावलंबी आहेत. या विषयी राज्यांमध्ये एकमत झाले. त्याचप्रमाणे सभासद राज्यांनी नागरी आणि राजकीय हक्काची तात्काळ अंमलबजावणीची तयारी दर्शविली. मात्र सामाजिक, आर्थिक व संस्कृतिक हक्काची तत्परतेने जबाबदारी घेण्याची अनिच्छा दाखविली.

मानवी हक्कांच्या संरक्षणार्थ अथवा संवर्धनार्थ अनेक देशांच्या संविधानामध्ये मूलभूत अधिकार, मार्गदर्शक तत्त्वे व मूलभूत कर्तव्याच्या प्रकरणामध्ये अल्पसंख्याकांच्या उत्थानासाठीच्या अनेक तरतूदी करण्यात आल्या आहेत. परंतु त्यातील अनेक तरतूदी विकसनशील व अविकसित देशामध्ये गरिबीच्या कारणांमुळे गैरलागू ठरल्या आहेत. गरीब जनता ही नेहमीच उपेक्षित, दुर्लक्षित, वंचित राहिली आहे. गरिबीमुळे मानवी हक्क सहज नाकारले जातात व त्यातूनच अनेक समस्या निर्माण होण्यास कारणीभूत ठरते. त्यामुळे आतंकवाद, दहशतवाद यासारख्या आंतरराष्ट्रीय तर नक्षलवाद सारख्या राष्ट्रीय समस्या निर्माण होत आहे. असमानता आणि भेदभावपूर्ण वागणुकीमुळे ह्या गरिब वर्गाला वंचित ठेवल्या जाते.

जगामध्ये संख्येने जवळपास ५० टक्केच्या घरात असलेला स्त्री हा वर्ग तर सर्वाधिक वंचित, उपेक्षित व मानवीय हक्कांच्या कोसो दूर असलेला घटक आहे. मग ती स्त्री पाश्चात्य असो की गैरपाश्चात्य, प्रगत समाजातील असो की अप्रगत समाजातील, सुशिक्षित असो की अशिक्षित असो. तींची स्थिती ही गुलामासारखीच आहे. त्यावर महात्मा गांधी म्हणतात, इस्त्री मातेच्या रुपात करुणा, प्रेम, त्यागाची मुर्ती आहे पण, समाजात अस्तित्वहीन होण्याचे कारण पुरुष प्रदान समाज. समस्त रुढी, प्रथा, परंपरा आणि सामाजिक नियम पुरुषाद्वारे बनविले गेले आणि ते सर्व स्त्रियांच्या विरुद्ध आहे. समाजात महिलांना जे अधिकार प्राप्त होतात ते कर्तव्य अर्थात धर्मपालन यातून प्राप्त होतात. सामाजिक आचार आणि व्यवहार स्त्री-पुरुष या दोघांच्याही सहमतीने निर्धारित करावे. इ पुरुषांनी स्त्रिला गुलाम न मानता मित्र व साथी मानायला पाहिजे. विकासाच्या धारेमध्ये स्त्रिला जर जोडल्या गेले नाही तर विकासाची अवधारणा मधूरी राहिल. महात्मा गांधी स्त्री अधिकाराच्या प्रश्नावर तडजोड करण्यास तयार नव्हते. स्त्रिला समुचित शिक्षा प्राप्त व्हावी स्त्री जगाच्या प्रगतीमध्ये आपला महभाग पुरुषाची नकल करून किंवा प्रतिस्पर्धा करून करणार नाही. मुलाला शिक्षित करणे याचा अर्थ घरातील एक सदस्याला शिक्षित करणे, तर मुलीला शिक्षित करणे म्हणजे दोन परिवाराला शिक्षित करणे होय असे मत होते. महात्मा गांधीजी स्त्रियांच्या बाबत असणाऱ्या अनिष्ट प्रथेच्या पुर्णतः विरुद्ध होते. जसे पारदा प्रथा, बालविवाह, विधवा पुनर्विवाहा प्रतिबंध, हुंडा पद्धती इत्यादी.



## १२. कृषी समस्या व शेतकऱ्यांची स्थिती

डॉ. विजय कृष्णराव काळे

नारायणराव काळे स्मृती मॉडेल कॉलेज, कारंजा घाडगे, जि. वर्धा.

### प्रस्तावना

भारतीय अर्थव्यवस्थेत कृषीचे महत्त्व अनन्य साधारण आहे. एकूण 195.3 दशलक्ष हेक्टर शेतजमीन लागवडीखाली आहे. त्यापैकी 2011-2012 या वर्षापर्यंत 91.5 दशलक्ष हेक्टर शेतजमीन सिंचनाखाली आणण्यात यश आले आहे. भारताच्या सकल राष्ट्रीय उत्पन्नात कृषी क्षेत्राचा वाटा 2015-2016 नुसार 17.5 टक्के आहे. औद्योगिक व सेवा क्षेत्र विस्तारात कृषीचा मोठा वाटा आहे. अनियमित पारुस त्यातून उद्भवणारे नैसर्गिक संकटे, पुरस्थिती, दुष्काळ, असे असून सुध्दा उत्पादनात वाढ होत आहे. अलिकडे ग्लोबल वार्मिंग मुळे हवामानात प्रचंड बदल होत आहे. परिणामतः कृषी क्षेत्रासमोर हे नैसर्गिक संकट उभे झाले आहे. निसर्गापेक्षा ही मानवनिर्मित संकटे अधिक जीवघेणी होवू पाहत आहे. मोठ्या प्रमाणावर कृषी क्षेत्र सिंचनापासून वंचित असणे पाण्याचा व्यवस्थापनाचा अभाव असणे, सुधारित बी-बियाणाचा अभाव असणे, अत्यल्प वित्त पुरवठा बी-बियाणाचा काळा बाजार व बोगस बियाण्याची विक्री शेतमालाच्या किंमतीतील जोखीम या सर्व गोष्टींचा प्रभाव कृषी व त्यावर अवलंबून असणाऱ्या शेतकऱ्यांवर पडलेला आहे.

प्रस्तुत शोध निबंधाचे उद्दिष्ट्ये

1. कृषी प्रधान देशातील कृषीची व शेतकऱ्यांची स्थिती दर्शविणे.
2. ही स्थिती निर्माण होण्यामागील कारणांचा शोध घेणे.
3. ही स्थिती सोडविण्याबाबत उपाय योजना सुचविणे.
4. शेतकऱ्यांचा व शासनांचा सहभागाचे प्रमाण शोधणे.

### संशोधन पध्दती

1. निरीक्षण
2. परिक्षण
3. सांख्यिकीय विश्लेषण

### तथ्य संकलन

सदर लेख लिहण्यासाठी संदर्भ ग्रंथ, इंटरनेट, नियतकालिके व सरकारी अहवाल याचा आधार घेण्यात आला.

### संशोधनासाठी घेण्यात आलेली गृहीतकृत्ये

1. शेतकऱ्यांची स्थिती हालाखिची आहे.
2. शेतकऱ्यांच्या स्थितीत सुधारणा करण्यासाठी सरकारचे प्रयत्न अपूर्ण किंवा तोकडे पडत आहे.
3. शेतकरी व शासन दोघेही उदासिन आहे.
4. शेतकऱ्यांना शासकीय योजनांच्या माहितीचा अभाव आहे.



## 5. Agricultural Marketing in India

Mohan S. Mendhe

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Agricultural marketing is the main obstacle in Indian marketing system. It is necessary to increase production for prosperous life of farmers. Farmers toiled very hard in their farms and they should get proper remuneration of their labor and production. But, Indian market is totally different. They never get proper value of their goods. They have to face number of difficulties in selling their goods in market. They sell it to local level merchants and usurers. If farmers sold their goods in market, middleman cheated them also. They have a problem of transportation. We deliberate on this topic in detail

1) Sell on local places -- Number of farmers sold their goods in villages rather than in towns in lower rates. They don't get proper price of their goods. There are some reasons for doing this -----

A) Load of loans on farmers -- Farmers are always in burden due to heavy loans of Banks and money lenders. They have to sell it with permission of this people. These people took unlawful benefit of their condition.

B) Need of money --- Due to poverty, farmers are always in need of money. They wait for crops to come their homes as they able to sell it as early as possible. But. At the same time supply increases and they don't get proper value of their production.

C) Lack of transportation -- Farmers get more benefit, if they sold their goods in cities rather than in villages. But, there is no availability of such means of transportation. It becomes impossible for them to pay higher rents to transport owners. So, they decided to sell it on local places.

2) No proper gradation system -- If farmers classified their goods in proper way, they get proper prices for it. But, in India, there was not such a system before Britishers. They granted such rules in 1937 before independence. Agmark was given to products according to the quality of the products. But it is concerned with exporting only.

3) Lack of storage -- If goods are not sell at the time of harvesting, later on prices of goods increased day by day. It is necessary to have a proper storage system to the farmers. There is need of number of go downs. But, farmers in rural areas have no such facility. They restore it

## Social issues and values in R.K. Narayan's Novel

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R.K. Narayan was a leading author of early Indian literature in English along with Raja Rao. Malgudi is an imaginative locale created by Narayan in his novels and short stories. It forms the setting for most of Narayan's works. All the novels of R.K. Narayan related with social issues. Through in his novels, he faithfully presents the social values, norms which have been in existence and still continue to play a major role in shaping the lives of people. Indian Society has undergone a considerable change under the impact of western civilization. O.P. Mathur rightly observes "Narayan does assert the validity of traditional Indian Values, but the wind from the west has changed much of the panorama"<sup>(1)</sup>. Malgudi is seen stepped in tradition and inhabitant's roots in family and religion. Even today, society has entangled in faith and values customs and rituals, dogmas and superstition.

Narayan's novels, depicts rootless situation in the society of those times. It causes disruption and unhappiness. Marital fidelity, the most precious of Indian values is theme of *The Dark Room*. Savitri, the traditional Hindu wife revolted because of insult and maltreatment, but her husband's infidelity is the last straw. She bursts out "Don't touch me ..... you are dirty, you are impure even if I burn my skin I cannot cleanse myself of the impurity of your touch."<sup>(2)</sup> Similarly, Sampath (*The printer of Malgudi*) achieved hardest of kick from life when he gets involved with Shanti, the film actress, when he tries to persuade her, she leaves a note of warning: "If I find you perusing me, I will shave off my head and fling away my jewelry and wear a white sari. You and people like you, run away at the sight of me. I am after all a widow"<sup>(3)</sup> ..... "Margayya (*The Financial Expert*) cannot bear the sign of his graceful daughter-in-law, Brinda in tears on account of his Son's treachery. Even Marco knows about infidelity of his wife Rosie, "But, you are not my wife, you are a woman who will go to bed with any one that flatters your antics"<sup>(4)</sup>

There was always turmoil in husband and wife relationship. Structure is always patriarchal. Woman has to play a pivotal role in family in the Indian household. It is her duty to keep harmony and unity in a family. But at the same time, she has to face number

## Butterfly fauna of Risod tahsil, district Washim of Vidarbha region of Maharashtra, India

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### Abstract

The present study was carried out to record the species diversity of butterfly in nearby area of Risod Tahsil. Risod is situated in Washim District of Vidarbha region of Maharashtra. The survey study has revealed a total 16 species of butterflies belonging to 13 genera and 4 families (Nymphalidae, Pieridae, Papilionidae and Lycaenidae). Among these recorded butterflies' family Nymphalidae is represented by 8 species, family Pieridae by 4 species, family Papilionidae and family Lycaenidae each by two species. The entire butterfly's species recorded in this district are very common and found in different area of Vidarbha region of Maharashtra. During the study and observation not, any rare threatened species were recorded in a given area.

**Key words:** Butterfly, family, species, Risod.

### Introduction

Butterflies belong to Phylum-Arthropoda, Class-Insecta, and Order-Lepidoptera. Order Lepidoptera is a order of insect including butterflies and moth that undergoes complete metamorphosis [1]. Many species of butterflies play an important role in pollination of different flowers. Butterflies are also found to be a good indicator of environmental changes as they are very sensitive to habitat degradation and climate changes [2]. Butterflies are also found to be prey of birds, bats and other insectivorous animals and thus play an important role in the food chain [3]. Tiple [4] have reported

## Study on the incidence of insect pest on some selected agriculture crops grown in Karanja (Ghadge), Tahsil of Wardha district of Maharashtra, India

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### Abstract

Field survey was conducted at some selected farm of Karanja (Ghadge) region where some selected crops viz Cotton, soybean, Castor, Gram, Wheat, Maize, and Bean crops (Lablab and Cowpeas) were grown during Kharif and Rabi season in order to study the incidences of insect pests on these crops. The observation of field study revealed incidence of total 20 insect pests belongs to 4 orders and 12 families. Out of 20 insects, 16 insects were recorded as a pest and 4 insects were recorded as predatory insects. Maximum 9 insects were recorded from order Lepidoptera with maximum 4 insects from family Erebidae. More number of insects were recorded on castor and on bean crop (Lablab beans). The incidence of Red cotton bug *Dysdercus cingulatus* was found to be the most common insect pest on most of the crop.

**Keywords:** Kharif, rabi, insect-pests, crop.

### Introduction

India is an agricultural country. Agriculture and its allied activities act as an important source of livelihood for 80% population of rural India. According to 2011 Agricultural Census of India about 61.5% of the 1300 million Indian populations are rural and dependent on agriculture. Every year agriculture field is facing a very serious problem of insect pests. The insect's pests are damaging various agriculture crops and causing great losses. In India wheat is attacked by



## Domestic violence and role of feminism

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### ABSTRACT

Violence against women is not only restricted in India but also it is world wide. Women's are victim of domestic violence from ancient period of time. Generally domestic violence victim are women, children, adult and men. In our male dominant Indian society most of the percentage of victim is women. There are some reasons like slavery, illiteracy, dowry, emotional, sexual harassment and others for domestic violence. The concept, causes, analysis of domestic violence is well explained here with the help of phenomenon feminism. Feminism, women's movement definitely inspiring and enriching the others. Social, cultural, political movements, theories and moral philosophies for gender inequalities, equal rights also explained the feminism. The women's struggle for their rights is not only restricted in India but in world also focus such serious issues.

**KEY WORDS:-** Domestic violence, Feminism

### INTRODUCTION

India is a country of south Asia. It is seventh largest country of area, the second most populous country and most populous democracy in the world. Officially it is a "Republic India". India is a largest megadiversity with flora and fauna. It contains religious, cultural, spiritual, social importance. Among socio-economic challenges India faces many problems like gender inequality, child malnutrition, poverty, child labour, human trafficking, corruption, population etc. The gender inequality creates imbalance between men and women. This is due to male dominance over women. Nowadays women's empowerment increases strength of women due to education. She has a chance to go in every sector due to her strength, power of intelligence and she is trying to balance equality with men. The gender equality awareness programme run by Government by various ways like social media, newspaper, T.V. channels, educational departments, various offices, schools, colleges etc. The aim of this programme is to remove inequality between men and women but one of the major issues related to this fact is the domestic violence. There is a complex relationship between gender and violence. The male, female, children and adult with their specific behavior in society. Differences in gender roles and behaviours often create inequalities, whereby one gender becomes empowered to the disadvantages to the other. The present paper deals with the issues related to domestic violence in India and world. The term feminism also helps to explain this concept.

**DOMESTIC VIOLENCE :-** For a relationship honesty, emotion, mutuality, respect and love is essential. It makes a good partnership. Domestic violence can be broadly defined as a pattern of abusive behaviors by one or both partners in an intimate relationship such as marriage, dating, family friends or cohabitation. According to the UN, "there is no region of the world, no country and no culture in which women's freedom from violence has been secured. (1) Domestic violence happens between people who are dating, married, separated and divorced. It occurs in heterosexual as well as in gays and lesbian relationships and in adolescent dating relationships. Domestic violence can happen to any one of any race, age, sexual orientation, religion or gender. It can happen to couples who are married, living together or who are dating. This way of life is nothing new to humans. It has gone on for hundreds of years.

Domestic violence is not caused by stress, mental illness, alcohol or drugs. It classifies into criminal domestic violence and non-criminal domestic violence. Generally the physical domestic violence contains hitting, verbal or sexual but in mental domestic violence



## CORONA VIRUS (COVID-19) PANDEMIC AND AGRICULTURE

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### Abstract

COVID-19 is a disease caused by SARS-CoV-2. It spreads through person to person contact. Infections range from mild to deadly. It is highly infectious. In early 2020, after a December 2019 outbreak in China, the World Health Organization identified SARS-CoV-2 as a new type of coronavirus. It spreads all around the world. The countries like America, Italy, England are highly infected and mortality rate is also high in this countries. So the Government declared lockdown. Due to lockdown the economy of all countries totally collapsed. All the activity are stop. Transportation, theaters, hotels, tourism, bars, schools, colleges, educational institutes, offices, companies etc. are closed. WHO declared it as a pandemic because it spreads all around the world. The effect of these pandemic found in each and every sectors like small and large businesses, industrial sectors, educational sectors, agricultural sector, automobile sectors etc. When we studied agriculture sector the huge loss of farmers during lockdown period. The standing crops are as it is in farm due to non availability of labors because they become migrants. The worker lost their jobs, farm instruments are not available during harvest period, fruits and vegetables are rotten due to sealed borders and stop transportations.

Though the government declared many schemes to help the farmers during lockdown period but loss of farmers is much more. The agriculture industry highly affected and the agriculture products also rotten or wastage. So the sustainable development goals related to agriculture collapsed due to slow down world economy. The socioeconomic balance disturbs. So to avoid these crises we have to maintain our balance by inspiring and empowering the farmers, help them, obeying all the rules and regulations given by the government keeping social distancing, stay at home, care your family members, sanitization and all others instructions. Because if we save our life then we will try to developed our economy, balanced and achieve the sustainable development goals.

**Key Words:-** Corona virus COVID-19 pandemic, Effects, Challenges, Measures, Agriculture.

### Introduction :-

India is an agricultural country. Agriculture is the process of producing food, feed, fiber and many other desired products by the cultivation of certain plants and the raising of domesticated animals (livestock). The major agricultural products can be broadly grouped into food, fibers, fuels and raw materials (such as rubber) food classes

**Morphological and anatomical observations and preliminary  
phytochemical analysis of *Caesalpinia bonducella* Fleming. seeds of  
Caesalpiniaceae or Fabaceae.**

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**ABSTRACT**

The *Caesalpinia bonducella* Fleming. belonging to Caesalpiniaceae. The seeds of this plant are medicinally important. The seed surface characteristics show anatomical and morphological observations with biochemical and phytochemical analysis. The morphological surface features studied shows micromorphological characters while anatomically seedcoat shows cellular variations. The preliminary phytochemical analysis shows presence of reducing sugar, steroids, flavonoids, terpenoids, amino acids, volatile oil or essential oil etc. The thin layer chromatography shows presence of no.05 (L-Cysteine hydrochloride), no.13 (Isoleucine), no.16 (L-Methionine), no.17 (DL-Ornithine monohydrochloride) types of amino acids. The chromatography technique also shows detection of sugar in the form of sucrose. The present study gives surface variation for seed identification and phytochemical analysis help for detection of various chemical compounds present in plants. These compounds help for preparation of various drugs and therapeutic efficacy.

**KEY WORDS:-** Seed morphology, Scanning electron microscopy (SEM), Seed anatomy, biochemical, phytochemical analysis, Caesalpiniaceae or Fabaceae.

**INTRODUCTION:-**

## 26. Covid-19 Pandemic Effect on Education and Migration

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### Abstract

The global crisis i.e. COVID-19 Pandemic effect found in most of the countries of the world. The main problem of this disease is that it is an infectious spreads human to human. Due to the lockdown the world faces many problems. The economy slow down. Various sector like industrial sector, educational sector, tourism, automobile sector, businesses, hotels, bars, restaurants, shopping malls are close due to lockdown and pandemic effect. The education sector is most important in which Schools, Colleges, Coaching institutes, Universities, Higher educational centers are closed. Due to this reason online teaching learning have given a more importance. The internet, different educational apps, webinars, online classroom teaching are essential for students' now-a-days. But these digital educational facilities are really available for each and every student? The students belongs to rich family, poor family, middle class family, those lie in urban, rural, dense area have totally benefitted of this digital learning course. The online teaching learning is suitable, smart activity for students. Lockdown doesn't stop the educational activity but coeducation, interaction, is affected. The pandemic effect also seen on migratory peoples. They loss their job, income sources, education of children, faces starvation, temperature effect, water problems, no vehicals, family faces various problems.

**Key Words:-** Corona virus COVID-19 pandemic, education, Migration.

### Introduction

India is a second most populated and underdeveloped country in which it faces a problems like poverty, unemployment, starvation, malnutrition, child labour, dowry and others. The sustainable development based on economic development, Social development and environmental development. In Social development includes participation and inclusion of everyone, eradication of poverty and exclusion, food security, equitable distribution of resources, better life chances and opportunities, protection from exploitative. In the sustainable



**Seed Coat Study And Preliminary Phytochemical Analysis Of *Trachyspermum Ammi* (L.) Seeds Of Apiaceae (Umbelliferae)**

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**Abstract**

From the ancient period of time medicinal plant have great value because it gives remedies on different human diseases. The *Trachyspermum ammi* (L.) plant is highly medicinal. It is also known as 'Ajwain'. Ajwain seeds are important for preparation of various drugs. It's fruit like seeds. It contains useful phytochemical which is use in pharmaceutical industry. The seed also shows morphological and anatomical variations which is very helpful for identification of seed. The scanning electron microscope (SEM) view of seed shows micromorphological characters while seed coat study shows structural cellular variations. The qualitative analysis helps for detection of various chemical constituents which are helpful for drug preparation. The preliminary phytochemical analysis, protein test, carbohydrate test and lipid test, detection of amino acid through TLC method, detection of various secondary metabolites use for drug preparations. Seed contain various chemical constituents having high medicinal value. The study essential for the identification of seeds, detection of various components in it for theruptic efficacy of seeds. So taxonomic identification, detection & analysis are most important for better research for drug preparation in pharmaceutical industry, various purposes and economic use also.

**Keywords :-** Seed morphology, Scanning electron microscopy (SEM), Seed anatomy, biochemical, phytochemical analysis, Apiaceae (Umbelliferae)

**Introduction**

Apiaceae is a large family with about 300 genera and more than 3000 species. The earlier name Umbelliferae derives from the inflorescence being in the form of a compound "Umbell". The Apiaceae or Umbelliferae is a family usually aromatic plants with hollow stems. The Umbelliferae family is named after the shape of its flowers which are called umbells. These distinctive umbrella shaped blooms are attractive in arrangements & loved by numerous beneficial insects. Members of this family are loaded with it, minerals & antioxidants. ([www.organicsforall.org/vegerables&html](http://www.organicsforall.org/vegerables&html)) ([www.nutritionandyou.com](http://www.nutritionandyou.com)). It is commonly known as 'Ajwain'. The biochemical and phytochemical tests are essential for the detection of various components inside the seeds of Apiaceae because it determined nutritive & pharmaceutical importance. Thin layer chromatography is an essential process for the detection of amino acids & carbohydrate. Various seed workers provided information about identification of seed, Seed recognition is an important diagnostic feature and have great applied value in various scientific disciplines. Seeds have acquired diversification in both external and internal characteristics so much that each can be specified independently with definite set of characters. Seed coat surface show structural marking of great diversity. The plant is grown widely all over the world for seed, as a spice, or for essential oil production (Bhuiyan *et al.*, 2009).

**Materials And Methods**

**Sample collection:-** Seeds of family Apiaceae like *Trachyspermum ammi* (L.) were collected from local area. For seed coat study, all the seeds parameters were studied using dissecting and binocular microscope. Digital weighing balance was used for weighing the seeds in mg. The morphological observations of seeds were done followed by their photography, using 1 cm. scale.

**Seed coat morphology (SEM):-** To study the seed coat morphology scanning electron microscopy is most important. For this purpose, the individual seeds were dipped in alcohol for 5-10 min. to remove the dust from them. The seed mounted on pin type stubs using double sided adhesive tape or conductive silver paint to prevent charging of the surface during scanning and then coated with a very thin layer of gold in a polaron sputter coating unit. For spermoderm study of seed photomicrograph were taken in the scanning electron microscope (SEM) (LEO 430) at Birbal Sahani Institute of paleobotany, Lucknow.



## SEED SURFACE CHARACTERISTICS AND PRELIMINARY PHYTOCHEMICAL ANALYSIS OF *JATROPHA CURCAS* LINN. SEEDS OF EUPHORBIACEAE

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### ABSTRACT:

India is richest in biodiversity. Plants are mostly use in medicinal purposes. The medicinal plants use for preparation of various drugs. The part of plant use for various purposes. The *Jatropha curcas* Linn. plant use medicinally as well as biodiesel production. The seeds of this plant use for biodiesel productions. The morphological and anatomical study of seed coat helps for seed identification process. The biochemical and phytochemical analysis helps to detect the various chemical content in them. The preliminary phytochemical observations helps to detect various chemical constituent like alkaloids, carbohydrates, reducing sugars, steroids, glycosides, flavonoids, terpenoids, saponine, protein, tannins, amino acids, volatile oil or essential oil, phenol etc. The thin layer chromatography technique shows the presence of amino acids in the *Jatropha curcas* Linn. seed sample. The Isoleucine and DL-Threonine found in them. From this study the *Jatropha curcas* Linn. seed use for the production of biodiesel which is economically benefited and other constituents also important for preparation of drugs for various diseases. The alkaloid, tannin, flavonoids are found maximum quantity in seeds. The morphological and anatomical observation also helps for taxonomical identification and variations in them.

**Key words:** - Seed morphology, Scanning electron microscopy (SEM), Seed anatomy, biochemical, phytochemical analysis, Euphorbiaceae

### INTRODUCTION:

Food, shelter and cloths etc. are the basic needs of man. Plants play a very important role in human life. From ancient period plants have given a great importance in various field. Naturally plant contain various compound so it is mostly use in medicinal industry like ayurveda, allopathy, homcopathy, herbal and cosmetics, aromatherapy etc. the various chemical constituents, secondary metabolites well present in them. *Jatropha curcas* is a member of the Euphorbiaceae family and is commonly known as Barbados nut, physic nut or purging nut. It is a small tree or bush-like plant that grows up to 5 m high. (MUHAMMAD NISAR UL HAQ *et al.*2016). Naturally plant organs like root, stem, leaves, seeds, fruits,

flowers are mostly use in various purposes. The *Jatropha curcas* Linn. belonging to the family Euphorbiaceae. *Jatropha curcas* variously known as physic nut, purging nut or pig nut (Uche Fl *et al.* 2008) (Igbinosa OO *et al.*2009) and is used in folklore remedies for treatment of various ailments such as skin infections, gonorrhoea, jaundice and fever (Akinpelu DA *et al.*2009). It is also known as ratanjot. So the seed identification is also the important process. For this seed coat study the micromorphological characters also help for the identification process. Jatrophin extracted from the latex has been used to treat various skin diseases, rheumatism and coughs and to promote wound healing (Uche & Aprioku 2008). Oil extracted from the *Jatropha* plant is used as biofuel.



## EFFECTS AND IMPORTANCE OF AYURVEDA DURING CORONA VIRUS (COVID-19) PANDEMIC

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### ABSTRACT

From ancient times traditional herbal medicines given a great importance in India. The Ayurvedic medicinal system is an ancient from 5000 years ago. The system gives herbal remedies, which is important for health benefits. Now-a-days we face a problem of Corona virus COVID-19 Pandemic. The virus is highly infected and spreads worldwide very speedily. The countries like America, Italy, England are highly infected and mortality rate is also high in this countries. So the Government declared lockdown. WHO declared it as a pandemic because it spreads all around the world. Due to lockdown the economy of all countries totally collapsed. There is no specific medicine or vaccine on the disease. The various research institute of the world engaged to develop vaccine. Uptill now there are no successful results found in them. Some remedies gives benefits to patients related to system of Ayurveda. In precautions like kadha, turmeric, ginger, honey, hot water, fresh vegetables and fruits, grains use in daily routine. In recent research Ashwagandha plant use is now effective in drug preparation and cured a patient in some extent on COVID-19. Ayurveda shows no side effects, herbal drugs are effective on the disease and given relief to patients. Relief is very important for patients because no body knows how we escape from these pandemic effects. So with positive attitude, except the situation, face the problem and help each other with taking proper precautions.

**KEY WORDS:-** Corona virus COVID-19 pandemic, Ayurveda, Effects, importance.

### INTRODUCTION:-

Ayurveda means knowledge of life. Ayurveda identifies three basic types of energy or functional principals. The three principles like vata, pitta and kapha which is related to the basic biology of the body. A virus is a small collection of genetic code, either DNA or RNA, surrounded by protein coat. A virus can not replicate alone, Viruses must infect cells and use components of the host cell to make copies of themselves. The virus cannot killed by antibiotics. The vaccines or antiviral medications eliminate or reduce the severity of viral diseases. ([www.genome.gov](http://www.genome.gov))

**Corona virus COVID-19 pandemic:-** A virus is a submicroscopic infectious agent that replicates only inside the living cells of an organism. (Wu, Katherine.J.2020) (Wikipedia virus). Corona virus are a large family of viruses which may cause illness in animals, birds and humans. The most recently discovered coronavirus causes coronavirus disease COVID-19. This new virus and disease were unknown before the outbreak began in Wuhan, China in December 2019, COVID-19 is now a pandemic affecting many countries globally. The most common symptoms of COVID-19 are fever, dry cough and tiredness. Other symptoms that are less common and may affect some patients

# Do Equity Mutual Fund Managers Possess efficient Stock Selection Skills?

Ravindra Sontakke, Anand Muley, Jaspal Gidwani

*Abstract: With a primary and single intent, Investors wants to take a position his hard earning money in such investment product which generate higher returns to him . Bunch of Investment options are there for Today's Investors in this financial world, starting from Equity Stock investments to Gold, from property to Fixed Deposit and From Mutual Funds to Investments in Commodities. Supported risk craving & return desire, Investors can select from these investment avenues. Lagging in knowledge, experience & resources for directly accessing the capital market, also investors generally don't have adequate time, they need to depend upon a mediator, which undertakes informed investment decisions & provides substantial benefits of professional proficiency. Therefore investment firm has been came with this plus point for such kind of investors through which they'll have also access to capital market indirectly. A mutual fund is that the best suited investment for the ordinary saver because it proposes a chance to take a position in a diversified, professionally managed hamper of securities at a moderately squat price. Usually, the main focus in evaluating the performance of a mutual fund has been on fund manager's skill available in stock selection. This paper is a pragmatic measurement of the performance of mutual fund managers in terms of "Stock selectivity", within the structure suggested by Eugene Fama (1972). The study examines the performance of 34 Equity Linked Saving Schemes. The reference period for the study is January 2015 to December 2019. Stock selection is that the nub within the investment administration & management process. It involves identifying and selecting undervalued securities which among other things requires the successful forecasting of the corporate specific events or a capability to predict the final behavior of security prices within the future. If the fund manager is in a position to spot and choose the undervalued securities for the portfolio, then it'll be possible for the fund manager to extend the returns of the schemes and vice versa. In practice fund managers are expected to produce advanced returns for unit holders Constantly as being professionals therefore possess superior skills to gather and analyze the information with the aim to pick the correct style of securities for the portfolio. In this research document stock selectivity skills of fund managers of Equity Linked Savings Scheme were dissected by using Jensen's Alpha and Fama's net selectivity measure. The upshot of the study reveal that bulk of the schemes has shown assenting alpha and most of the fund managers possess finer selectivity skills.*

**Key Words:** Mutual Funds, Equity Linked Saving Schemes, Investment, Returns, stock selection.

## I. INTRODUCTION

After Globalization & Liberalization of 1991, enormous Investment opportunities came into existence for Indian Investors. These Investment opportunities provide attractive

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returns to the investors, at the identical time it carried huge risk to larger extent.

Investors have to understand how risky individual assets are and what their contribution to the full risk of a portfolio would be. At the similar time, allocations of wealth across different asset classes and specific investments became a challenging task for the investors, portfolio managers and with fund managers also. Essentially, investors participate in financial markets over time so as to share and diversify various risks, which arise in their investment decisions. Investors use financial markets not only to share risk but to form risk-return trade-off in a very better way. With the influx of Mutual funds which ultimately help the investors to Participate in optimal trading strategies that's economically feasible to mitigate the risk and optimise the return.

Ample of Mutual Funds are available where the investors can put their money. Before investing investors want to grasp which fund gives more return, which fund is performing well, which fund is more risky etc. of these may be discovered using certain key statistics. With the assistance of those key figures, an investor can analyze diverse mutual funds and locate his/her money within a fund which suits his/ her risk perception. Mutual fund returns can be compared using Arithmetic mean & Compounded Annual Growth Rate. Risk may be analyzed by looking for variance, Beta. Key ratios like Sharpe ratio and Treynor ratio are used for Risk-Return analysis. Funds are compared with a benchmark, industry average, and analysis of volatility and return per unit to seek out how well they're performing with regard to the market price.

These are the predictable measures which are considered usually for evaluating the performance of mutual fund schemes but now during this contemporary era, we even have to judge the fund Management because it also became one of the Parameter for the investors to compose their investment in a particular Mutual fund Scheme since the Professional Fund Management is predicted to reward the investors with higher returns for the risk the funds are exposed too. It's been observed that higher or excess return is that the results of Superior stock selection skills of the fund Manager.

## II. EQUITY LINKED SAVING SCHEMES

### A. Introduction

Variety of Schemes has been introduced by Mutual fund houses from time to time. Plenty of investors have been aware or create aware about large cap funds, mid cap funds, small cap funds and various sect oral funds,



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## जागतिक व्यापार संघटनेला मुक्त व्यापार व्यवस्थेत यश-अपयश

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अँडम स्मिथच्या मते, " व्यक्तीला स्वहिताचे ज्ञान असल्यामुळे राज्याने व्यापार व आर्थिक क्रियांमध्ये हस्तक्षेप करू नये", म्हणजेच आर्थिक क्रिया या मुक्त असाव्या व राज्याचा त्यामध्ये हस्तक्षेप असू नये. याचाच अर्थ असा होतो की, देशाची व्यापार निती स्वतंत्र असावी.

मुक्त व्यापार म्हणजे स्वदेशी बाजारात विदेशी वस्तु येण्यावर कोणताही कायदेशीर प्रतिबंध नसतो, म्हणजेच मुक्तपणे विदेशी वस्तु स्वदेशी बाजारात येत असते.

जगदीश भगवतीच्या मते, " ज्या व्यापाराच्या धोरणात आयात-निर्यात जकाती नसतात, ठरावीक प्रशुल्क ठरविले जात नाही, चलनाच्या देण्या-घेण्यावर कोणतेही निर्बंध, कर नसतील द सरकारकडून अर्थसहाय्य मिळत नसेल तर ते मुक्त व्यापार धोरण होय".

सेम्युलसनच्या मते, " स्वतंत्र व्यापार म्हणजे, ज्यामध्ये बाह्य हस्तक्षेप व एकाधिकार नसतो, तसेच अविभाज्यता व अनिश्चिततेचा अभाव असतो".

परंतु आतापर्यंत वास्तविकतेत कोणताही देश हा मुक्त व्यापार नीतीचे पालन करत आहे असे म्हणता येणार नाही म्हणून कमीत कमी प्रतिबंध लावणा-या देशाला मुक्त व्यापार क्षेत्र संबोधले जाते.

मुक्त व्यापाराचे समर्थन परंपरावादी अर्थशास्त्रज्ञ अँडम स्मिथ, डेव्हिड रिकार्डो, जे. एस. मिल यांनी केले.

मुक्त व्यापारावर निर्बंध असावे याचे समर्थन व्यापारवादी अर्थशास्त्रज्ञ एल्सवर्थ, व्हायनर, हॅबरलर, जॉन्सन यांनी केले. त्यांच्यामते मुक्त व्यापार देशहीताला हानीकारक आहे.

मुक्तव्यापार धोरणाचे समर्थक व विरोधक असले तरी भारताने 1991 पासून मुक्त व्यापार धोरणाचा पुरस्कार केला.

मुक्त व्यापाराला सुरळीत करण्याकरीता गॅटच्या स्थानावर जागतिक व्यापार संघटना ही संस्था निर्माण झाली आहे.

आंतरराष्ट्रीय व्यापाराला गती देणे, व्यापारातील मात्रात्मक नियंत्रणे रद्द कमी करणे, आंतरराष्ट्रीय व्यापारासंबंधी विविध समस्या सोडविणे, या करिता गॅटची स्थापना 30 ऑक्टोबर 1947 ला झाली. त्याचे अस्तित्व 12 डिसेंबर 1995 मध्ये समाप्त झाले. त्या ऐवजी जागतिक व्यापार संघटनेची स्थापना 1 जानेवारी 1995 मध्ये झाली. भारत जागतिक व्यापार संघटनेचा सभासद 30 डिसेंबर 1994 ला करारावर सही करून झाला. आज 164 देश जागतिक व्यापार संघटनेचे सभासद आहे.

### जागतिक व्यापार संघटनेची वैशिष्ट्ये-

- कायदेशीर आधार प्राप्त आहे.
- वस्तु व सेवांच्या व्यापाराचा समावेश असल्यामुळे कार्याची व्याप्ती अधिक आहे.
- जागतिक व्यापार संघटनेचा दृष्टीकोन नियमावर आधारित व वेळेशी संबंधीत आहे.
- संयुक्त राष्ट्रसंघाची जागतिक व्यापार संघटना प्रतिनिधी नाही.



कौटुंबिक हिंसाचार : एक विश्लेषणात्मक अध्ययन

डॉ. गहेन्द्र गावंडे

अर्थशास्त्र विभाग नारायणराव काळे स्मृति मॉडेल कॉलेज, कारंजा(धा.), जि.वर्धा.

आधुनिक युगात जगातील जवळपास सर्वच देशामध्ये १० ते ६९ टक्के स्त्रीयांना आपल्या जिवनकाळात जोडीदाराकडून किंवा कुटुंबातील इतर सदस्याकडून शारीरिक, मानसिक व शाब्दिक हिंसाचाराला बळी पडावे लागते. बहुतेक वेळा स्त्री विरुद्धच्या हिंसाचारात सुत्रधार हा पुरुष असतो. तसेच जवळपास चारपैकी एक स्त्री लैंगिक अत्याचाराला बळी पडते. साधारणतः स्त्रीला जवळच्या पुरुषाकडून जास्त धोका असतो असे प्रत्येक घटनेत दिसून येते. विशेषतः कौटुंबिक हिंसाचार ही समस्या स्त्री किंवा १८ वर्षांखालील बालकांच्या संदर्भात आहे. तसेच इतरही कौटुंबिक सदस्य असू शकतात जसे सावत्र मुलगा, सावत्र मुलगी, वृद्ध स्त्री-पुरुष, परंतु प्रस्तुत शोधनिबंधात महिलांचा विचार केला आहे. तसेच हा शोध निबंध दुय्यम सामुग्री संकलनावर आधारीत असून विश्लेषणात्मक संशोधन पध्दतीचा वापर करण्यात आला आहे.

आज भारतीय समाजात कौटुंबिक हिंसाचार ही एक गंभीर समस्या होत चालली आहे. पुर्वी ही समस्या नव्हती असे म्हणता येत नाही, पण तेव्हाची समाजव्यवस्था ही पुरुषप्रधान संयुक्त कुटुंब पध्दतीची होती व कर्ता सर्व कुटुंबाची जबाबदारी घेत होता, तसेच स्त्रीयांना ती समस्या जाणवत नव्हती कारण त्या पुरुषाच्या इच्छा पूर्ण करणे हीच आपली जबाबदारी व कर्तव्य समजत होत्या, तसा सामाजिकरणातून त्यांच्यावर विचार बिंबवला जात असे. आता विभक्त कुटुंब पध्दती अस्तित्वात असून समाजव्यवस्थेमध्ये बरेच परिवर्तन झाले आहे. सामाजिकरणाचे स्वरूप बदलले आहे अधिकाराची जाणीव प्रत्येकाला होवू लागली आहे, त्यामुळे ही समस्या अमानवी असून तिचे स्वरूपाची असल्याचे वाटते. कारण पुर्वीपेक्षा कौटुंबिक हिंसाचाराचे स्वरूप वेगळे झाले आहे. अर्थातच समाज परिवर्तनासोबत कौटुंबिक हिंसाचाराची समस्या उग्र रूप घेवू लागली आहे.

कौटुंबिक हिंसाचाराचा अर्थ--

कौटुंबिक हिंसाचारामध्ये शारीरिक व मानसिक किंवा भावनीक घटकाचा समावेश होतो. मानसिक किंवा भावनीक हिंसाचाराची व्याप्ती व तीव्रता ही व्यक्तिनिष्ठ व मनोनिष्ठ असल्यामुळे तिचे मापन करणे शक्य नाही. कारण ती व्यक्तीच्या बौध्दीक, मानसिक विकासावर अवलंबून असते.

कौटुंबिक हिंसाचारात खालील घटकांचा समावेश होतो--

शारीरिक गैरवर्तन-- मारहाण करणे, वस्तु फेकून मारणे, लाथ मारणे, चावणे, ढकलून देणे, शरीराला वेदना किंवा इजा होईल असे वर्तन करणे, इत्यादी घटकांचा समावेश हा शारीरिक गैरवर्तनात होतो.

लैंगिक गैरवर्तन-- सक्तीने शरीरसंबंध ठेवणे, अश्लील शब्दाचा वापर करणे, अश्लील चित्र किंवा चित्रपट बघण्याची सक्ती करणे, इत्यादी घटकांचा समावेश हा लैंगिक गैरवर्तनात होतो.

शाब्दिक किंवा मौखिक व भावनिक गैरवर्तन-- टाकून बोलणे, अपत्य न होत किंवा मुलगा न होत असल्यास नावे ठेवणे, चारिव्यावर संशय घेणे, शिक्षण घेण्यापासून वंचित ठेवणे, स्त्रीची इच्छा नसताना विवाह करून देणे, घराबाहेर जाण्यास मनाई करणे, घराबाहेर काढणे, नौकरी करण्यास मनाई करणे, असलेली नौकरी सोडायला लावणे, स्वतः आत्महत्येची धमकी देणे व तीला तिच्या मनाविरुद्ध वागण्यास बाध्य करणे. इत्यादी घटकांचा समावेश हा शाब्दिक किंवा मौखिक व भावनिक गैरवर्तनात होतो.



## मुक्त व्यापार आणि जागतिक व्यापार संघटना

डॉ. महेन्द्र गावडे

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मुक्त व्यापार म्हणजे स्वदेशी बाजारात विदेशी वस्तु येण्यावर कोणताही कायदेशीर प्रतिबंध नसतो, म्हणजेच मुक्तपणे विदेशी वस्तु स्वदेशात येत असते.

स्मिथच्या मते, "व्यक्तीला स्वहिताचे ज्ञान असल्यामुळे राज्याने व्यापार व आर्थिक क्रियांमध्ये हस्तक्षेप करू नये", जी वस्तु आपल्याला विदेशातुन तुलनात्मकदृष्ट्या आपल्या देशापेक्षा स्वस्तदरात मिळते तिची आयात करावी व जी वस्तु आपल्या देशात तुलनात्मकदृष्ट्या स्वस्तदरात उत्पादन होते तिची निर्यात करावी. मुक्त व्यापार हा आंतरक्षेत्रीय श्रमविभाजनाचा प्रत्यक्ष परिणाम आहे.

संन्युलसनच्या मते, "स्वतंत्र व्यापार अशी स्थिती आहे. ज्यामध्ये बाह्य हस्तक्षेप व एकाधिकार नसतो, तसेच अविभाज्यता व अनिश्चिततेचा अभाव असतो". स्मिथच्या मते, "स्वतंत्र व्यापार म्हणजे व्यापार नीतीची अशी प्रणाली आहे की, ज्यामध्ये देशांतर्गत व विदेशी उत्पादनामध्ये कोणताही भेदभाव केला जात नाही". अर्थात ज्या व्यापार धोरणात देशी व विदेशी मालात कोणत्याही प्रकारे भेदभाव करता विदेशीमालाच्या आयातीवर कोणतेही प्रतिबंध लावण्यात येत नाही व देशीमालाच्या निर्यातील कोणत्याही स्वरूपाचे प्रोत्साहन दिले जात नाही, तो मुक्त व्यापार होय. जगदीश भगवतीच्या मते, "ज्या व्यापाराच्या धोरणात आयात-निर्यात जकाती नसतात, ठरावीक प्रशुल्क ठरविले जात नाही, चलनाच्या देवाण-घेवाणीवर कोणतेही निर्बंध, कर नसतील व सरकारकडून कोणतेही अर्थसहाय्य मिळत नसेल तर ते मुक्त व्यापार धोरण होय".

तुलनात्मक लाभाच्या सिध्दांतानुसार अशा वस्तुचे उत्पादन करावे की ज्यामुळे तुलनात्मकदृष्ट्या लाभ प्राप्त होतो व अशा वस्तुची आयात करावी की ज्यामुळे तुलनात्मकदृष्ट्या विदेशातुन, उत्पादना ऐवजी स्वस्तदरात पडते. आतापर्यंत वास्तविकतेत कोणताही देश हा मुक्त व्यापार नीतीचे पालन करतांना दिसत नाही. परंतु कमीत कमी प्रतिबंध लावणाऱ्या देशाला मुक्त व्यापार क्षेत्र संबोधले जाते.

मुक्त व्यापाराचे समर्थन परंपरावादी अर्थशास्त्रज्ञ अँडम स्मिथ, डेव्हीड रिकार्डो, जे. एस. मिल्, यांनी केले.

मुक्त व्यापार योग्य आहे कारण-

1. अधिकतम सामाजिक उत्पादन घडून येते.
2. स्पर्धेमुळे कमीत कमी उत्पादन खर्च व जास्तीव जास्त उत्पादन मिळते.
3. मर्यादीत साधनाचा विवेकपूर्ण व कुशलतेने वापर होतो.
4. बाजार विस्तार व श्रम विभाजन होवुन प्रत्येक देशाचे वास्तविक उत्पन्न वाढते.
5. आंतरराष्ट्रीय व्यापार वाढतो.
6. सर्व राष्ट्रांच्या सुरक्षेत वाढ होते.
7. उपभोक्त्यांचा लाभ होतो.
8. कच्चा माल व निर्मित माल यांना बाजारपेठ मिळते.
9. देशा-देशांमध्ये सद्भावना, सहानुभूती व सहकार्यात वाढ होते.
10. बाजार विस्ताराद्वारे महामान उत्पादनाचे लाभ मिळतात.
11. एकाधिकारावर नियंत्रण प्रस्थापीत होते.
12. पूर्ण रोजगार निर्माण होतो.
13. मुक्त व्यापार हे एक नैसर्गिक



## कोरोना विषाणूच्या महामारीचा भारतीय अर्थव्यवस्थेवर परिणाम

डॉ. महेन्द्र गावंडे

अर्थशास्त्र विभाग

नारायणराव काळे स्मृति मॉडेल कॉलेज,

करंजा (घा.), जि.वर्धा.

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कोरोना विषाणूच्या महामारीमुळे भारताचीच नाही, तर जगाची अर्थव्यवस्था विस्कळीत झालेली आहे. विकसीत व महाशक्ती समजल्या जाणाऱ्या देशांच्याही अर्थव्यवस्था व स्वास्थ्यव्यवस्था ह्या रसातळाला गेल्या आहे. कारण कोरोना विषाणूचा प्रादुर्भाव होवू नये म्हणून जवळजवळ सर्वच देशांनी लॉकडाऊन या शस्त्राचा वापर केला. त्यामुळे अर्थव्यवस्थेच्या सर्वच क्षेत्रावर त्याचे दुर्गामी परिणाम होवून विकासगती अवृद्ध झाली. पण मानवी जिवनाची होणारी फार मोठी हानी रोकण्यात बरेच यश प्राप्त झाले. कारण हा कालावधी स्वास्थ्यव्यवस्था सुदृढ करून जनजागृती करण्याकरिता उपयोगी पडला. भारताचे पंतप्रधान नरेन्द्र मोदी यांनी प्रथम लॉकडाऊनची घोषणा करतांना "जान है तो जहान है!" अशी घोषणा दिली होती व त्या दृष्टीने प्रयत्न करण्याकरिता लॉकडाऊनचा कालावधी वापरण्यात आला. पण देशाच्या अर्थव्यवस्थेच्या विविध घटकाला त्याचा फटका बसून बऱ्याच समस्या निर्माण झाल्या.

### भारतीय अर्थव्यवस्थेसमोरील विविध समस्या—

1. विकासदर घटला— 2019–20 मध्ये 5.3 टक्के विकासदर राहिल असे मूडीज ने सांगितले होते. पण आता 2.5 टक्के विकासदर राहिल असे मूडीजचे म्हणणे आहे. तसेच भारताचे माजी सांख्यिकीय तंज प्रवन सेन यांनी सुध्दा भारताचा विकासदर 3 टक्के पेक्षा कमी राहिल असे भाकीत केले. जागतिक बँक नुसार भारतीय अर्थव्यवस्थेचा विकास दर 2020–21 मध्ये 1.5 ते 2.8 टक्के राहिल. याचा अर्थ असा की, विकासदर लक्षपासून विचलीत होवून फार कमी झाला आहे.
2. मंदीची दाट शक्यता— बराच काळ विकासदरात घसरण झाली तर मंदीनिर्माण होवू शकते त्यामुळे विकास दर वाढवीणे आवश्यक आहे.
3. मोठे उद्योग बंद झाले— कोरोनाचा प्रसार रोखण्याकरिता उद्योग, कारखाने बंद करण्यात आले होते व पुन्हा सुरू करण्याकरिता काही नियम तयार करून त्याच्या पालनाच्या आधारावर



पर्यावरण प्रदुषण : कारणे, परिणाम व उपाय

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अर्थशास्त्र विभाग नारायणराव काळे स्मृति मॉडेल कॉलेज, कारंजा(घा.), जि.वर्धा.

सर्व जगाचे लक्ष आज 'पर्यावरण प्रदुषण' या समस्येवर केंद्रीत झालेले दिसून येते. तसेच जागतीक स्तरावर पर्यावरण संतुलनाकरिता प्रयत्न करणे हे प्रत्येक राष्ट्राचे कर्तव्य आहे, असे न मानल्यास ही समस्या गंभीर स्वरूप धारण करेल. ही समस्या कशी निर्माण झाली? का निर्माण झाली? निर्माण होण्यास कोणते घटक जबाबदार आहे? त्याचे परिणाम काय होवू शकतात? असे अनेक प्रश्न निर्माण होते. 'पर्यावरण प्रदुषण' ही समस्या पूर्वी नव्हती असे नाही, पण आहे इतकी ते तिन्न नव्हती. 'पर्यावरण प्रदुषण' निर्माण करणारे दोन घटक आहे. एक निसर्ग व दुसरे म्हणजे मानव. नैसर्गिक कारणाने घडून येणारे पर्यावरण प्रदुषण हे मर्यादीत स्वरूपाचे असते. पृथ्वीवर वनस्पती, मानव व इतर प्राणी ज्या वातावरणात राहतात, त्या वातावरणात विविध घटकात परस्परावलंबनामुळे संतुलन निर्माण होवून सातत्य राहते. पण वाढत्या लोकसंख्येमुळे मानवी गरजांची पूर्तता करण्याकरिता पर्यावरणात असंतुलन निर्माण होत आहे.

पर्यावरण प्रदुषणाची सुरुवात—

पर्यावरण प्रदुषणाची सुरुवात अन्न शिजविण्याकरिता जळावू लागडाचा जेव्हा पासून उपयोग चालू झाला तेव्हा पासून झाली असे मानतात. हिप्पोक्रेटने वायु प्रदुषणाचा उल्लेख इ. स. ८०० वर्षा पूर्वी केला. पण खऱ्या अर्थाने 'पर्यावरण प्रदुषण' समस्या औद्योगिक क्रांती नंतर दिसू लागली. ही औद्योगिक क्रांती पाश्चात्य देशात व विशेषतः इंग्लंडमध्ये १८ व्या शतकाच्या अखेरीस सुरू होवून १९ व्या शतकाच्या मध्यास पूर्ण झाली. (इ.स. १७७५ ते १८३५) औद्योगिक क्रांतीमधुन अनेक समस्या निर्माण झाल्या. जसे लोकसंख्या वाढ, व्यक्तीवाद, आवास समस्या, सामाजिक समस्या, अपराध व व्यभिचार, शहरीकरण, अतिउपभोगवाद, क्षेत्रीय विषमता, आर्थिक शोषण, पर्यावरण प्रदुषण, विस्थापितांचा प्रश्न गलिच्छ वस्त्या, नैतिक मुल्याचा न्हास इत्यादी, त्यापैकी पर्यावरण प्रदुषण ही प्रमुख समस्या आहे.

पर्यावरण म्हणजे काय?—

पर्यावरण ही संकल्पना व्यापक असल्याचे दिसून येते. "सामान्यतः आपल्या सभोवताली जे काही दिसते. उदा. सजिव, निर्जिव हवा व पाणी, जमिन, वृक्ष, वेली व मानव यातील परस्पर संबंध म्हणजे पर्यावरण होय."

"मानवाला सर्व बाजूने व्यापून टाकणारे व मानवाच्या आजुबाजुला असलेले भौतिक वस्तूंचे आवरण म्हणजे पर्यावरण होय."

सृष्टीत सतत परिवर्तने घडून येत असून त्यांचा जीवांवर विशिष्ट प्रभाव पडत असतो, अशी परिवर्तने ज्यावेळी नैसर्गिक पध्दतीने व गतीने घडून येते, तेव्हा जिवजंतु हे आवश्यक



पूर्वी कोणत्याही भाषा भाषातही

प्रा. डॉ. गणेश भि. मोडोड

वाणिज्य भाषा प्रमुख नारायणराव काळे स्मृती मॉडेल कॉलेज कारजा (घाडगे), जि. वर्धा

संत ज्ञानेश्वर महाराज भक्ति त्यांचो ज्ञानेश्वरी हे मराठी वाङ्मयाचे अलौकिक लेणे आहे. शके १२१२ पर्यंत ज्ञानेश्वर महाराजांचे ज्ञानेश्वरी पूर्ण केली आणि ज्ञानेश्वरोचे सवोगसुंदर पसायदान गाऊन त्यांनी आपले धर्मकीर्तन सिद्धीस आणले. हा अतिप्रथम अलौकिक ग्रंथ 'नेवामे' ग्रंथाने सिद्धेश्वर मोंदरात पूर्ण केला.

जके वाचनते बारांतरे | ते टीका केली ज्ञानेश्वरी |

मत्तियदानंदबाबा आदरे | लेखक जाहला || ज्ञानेश्वरी अ.१८ ओ. १८११

अशा ही ज्ञानेश्वरोतील अठराव्या अध्यायातील शेवटची ओवी आहे. हे धर्मकीर्तन सिद्धीस जात असतांना ज्ञानेश्वर महाराजांचे गुरु श्री निवृत्तोनाथ, बंधू सोपानदेव, भगिनी मुक्ताबाई आणि इतर संतमंडळी त्यांच्या समोर उपस्थित होती.

स्वतः ज्ञानेश्वर महाराज हे नाथपंथीय असून त्यांनी आपली समग्र गुरुपरंपराच ग्रंथाच्या शेवटी देऊन संपूर्ण गुरुपरंपरालाच वंदन केले आहे. स्वतः महाराज लिहितात, भगवान शिवाकडून प्राप्त झालेले हे ज्ञान परंपरेनी मला प्राप्त झाले. हे ज्ञान समाधी धनरूप असून मी ग्रंथरूपाने दिले आहे.

अशा पद्धतीने ज्ञानेश्वरी हा मराठी वाङ्मयातील अलौकिक ग्रंथ 'ज्ञानेश्वरी' सिद्ध झाला. मुळात ज्ञानेश्वरी हो भगवद्‌गीतेवरील टीका आहे. ज्ञानेश्वरी सिद्ध होण्याच्या आधीही भगवद्‌गीतेवर अनेक टीका लिहिल्या गेल्या होत्या. भगवद्‌गीतेवर पूर्वी झालेल्या टीका ह्या बऱ्याचशा संस्कृत भाषेमध्ये होत्या. काही महानुभाव मंडळींनी गीतेवर टीका केल्या होत्या. असे उल्लेख महानुभावांचे वाङ्मय इतिहासकार डॉ. य. खु. देशपांडे यांनी केले आहे. (महानुभावीय मराठी वाङ्मय - लेखक डॉ. य. खु. देशपांडे, प्रथम आवृत्ती) परंतु अद्यापपर्यंत ज्ञानदेव पूर्वकाळातील एकही मराठी गीताटीका उपलब्ध झालेली नाही. म्हणूनच आजही ज्ञानदेवांचे लिहिलेली 'ज्ञानेश्वरी' हीच मराठीतील पहिली गीताटीका ठरते. ज्ञानेश्वरांनी ही गीताटीका शके १२१२ म्हणजे इ.स.१२१० मध्ये निर्माण केली आहे. ज्ञानेश्वरी ही गीतेवरील मराठीतील पहिलीच ओवीवद्ध टीका आहे. ज्ञानेश्वरांचे गुरु व मोठे बंधू श्री निवृत्तोनाथ यांच्या कृपादृष्टीत सजक व गुणवान श्रोत्यांसमोर त्यांनी केलेले काव्यमय, रसाळ व विदग्ध तत्त्वज्ञानाने ओथंबून गेलेला श्रेष्ठ दर्जाचा श्रोतृसंवाद आहे. ही गीताटीका संपूर्ण वारकरी संप्रदायाने शिरसावंध किंवा प्रमाण मानली आहे मराठी भाषेचा मुकुटमणी शोभावा असा हा ग्रंथ आहे. पुढे शके १५०६ मध्ये संत एकनाथांनी या टीकेचे संशोधन करून प्रतिशुद्ध संहिता तयार केली.

शके पंधराशे साहोतरी | तारणनामसंवत्सरी |

एकाजनार्दन अत्यादरी | गीता-ज्ञानेश्वरी प्रति शुद्ध केली ||१||

ग्रंथ पूर्वीच अतिशुद्ध | परि पाठंतरी शुद्ध अबद्ध |

तो शोभुनिषा एंव विष | प्रतिशुद्ध सिद्ध ज्ञानेश्वरी ||२||

नमां ज्ञानेश्वरा निष्कर्तका | जयाची गीतेची वाचितां टीका |

ज्ञान होय लांका | अतिभाविकां ग्रंथाधिया ||३||

बहूकाळ पर्वणी गोमटी | भाद्रपदमास कर्पला घड्डी |

प्रतिपद्येनी गोदातटी | लेखनकामासाठी संपूर्ण जाहली ||४||

(ज्ञानेश्वरी - खंडारकर प्रत)

संत एकनाथ महाराजांनी संशोधन करून प्रतिशुद्ध केलेली प्रतही आज आपल्याला उपलब्ध नाही. संत एकनाथांनी प्रतिशुद्ध प्रत तयार केल्यानंतर त्यांनी ज्ञानेश्वरीत आपली ओवी पुसवणाऱ्याला सज्जद दमही भरला आहे. ते लिहितात "ज्ञानेश्वरीपाठी | जो ओवी करील मन्हाट्री | तेंच अगुताचे ताटी | जाण नरोटी ठेविली ||" या ग्रंथाचे किंवा टीकेचे वारकरी पंथात अतोनात महत्त्वाचे स्थान आहे. तसेच ते संपूर्ण मराठी साहित्यातही या टीकेचे अतोनात महत्त्व आहे. मराठी साहित्यातील कोणताही वाचक, अभ्यासक, संशोधक किंवा समीक्षक ज्ञानेश्वरीची दखल घेतल्याशिवाय पुढे जाऊ शकत नाही. एवढे महत्त्वाचे स्थान या टीकेला आहे.

## महाराष्ट्रातील वारकरी संप्रदाय या संतांचे मूलिक कार्य

पा. डॉ. गणेश धि. मोहोत्रे

वाणिज्य भाषा प्राध्यापक

महाराष्ट्र शासक काले रगुनी महिले कॉलेज, कांठ (धाडगे), जि. वर्धा

## गोष्टवारा :

संपूर्ण महाराष्ट्राच्या व मराठी माणसाच्या सांस्कृतिक, भाषिक, मानसिक, बौद्धिक, धार्मिक जडणघडणीत वारकरी संप्रदायाचे व वारकरी संतांचे कार्य अतिशय भौलिक आहे. मराठी माणसाच्या मनामनावर मोठे अधिराज्य या संतांनी गाजविलेले आपल्याला दिसून येते. आणि म्हणूनच आज सातशे-सव्वासातशे वर्ष उलटूनही भागवतधर्मीय संतांच्या साहित्याची, त्यांच्या कार्याची, त्यांच्या काव्याची यत्किंचीतही लोकप्रियता कमी झालेली नाही. उलट ती दिवसेंदिवस वृद्धिंगतच होताना आपल्या दृष्टीस पडते. ग्रामीण, शहरी, गरीब, श्रीमंत, शिक्षित-अशिक्षित अशा समाजातील सर्वच स्तरावरील जनतेच्या अंतःकरणावर वारकरी पंथाचा व संतांचा विलक्षण पगडा असलेला आपल्याला दिसून येतो.

या वारकरी पंथाचे खरे बीजत्व संत ज्ञानेश्वराकडे जाते। वारकरी संप्रदायाला संत ज्ञानेश्वरांनी 'ज्ञानेश्वरी' खऱ्या अलौकिक ग्रंथाच्या रुपाने एक भरभक्कम अधिष्ठान मिळवून दिले. वारकरी संप्रदायातील बहुसंख्य संत आणि बहुसंख्य भक्त हे ग्रामस्थेतील अठरापगड जातीतले होते. या संप्रदायाला मात्र खरे तात्विक अधिष्ठान मिळवून देण्याचे कार्य संत ज्ञानेश्वर, संत नामदेव, संत एकनाथ, संत तुकाराम या संतांच्या साहित्याने केलेले आपल्याला दिसून येते. या सर्वच वारकरी संतांचे विचार सर्व समावेशक होते.

**बीजशब्द :** महाराष्ट्र, वारकरी संप्रदाय, संत साहित्य, समग्र, संत ज्ञानेश्वर, विठ्ठलभक्ती, जीवनदृष्टी, काव्य, पंढरपूर, सांस्कृतिक, आध्यात्मिक, तत्वज्ञान, अधिष्ठान

## प्रस्तावना :

संतकृपा झाली। इमारत फळा आली।  
ज्ञानदेवे रचिला पाया। उभारिले देवालया॥  
नामा तथाचा किंकरा। तेणे केला हा विस्तार॥  
जनार्दन एकनाथ। खांब दिला भागवत॥  
तुका झालासे कळस। भजन करा सावकाश॥

वरील अभंगातून वारकरी संप्रदायाची इमारत कोणत्या पायावर उभी आहे, हे आपल्या सहज लक्षात येते. महाराष्ट्रातील 'वारकरी संप्रदाय' ही महाराष्ट्राची जीवनवाहिनी आहे. कोणत्याही संप्रदायाचे अंतरंग आणि बाह्यंग समजून घ्यायचे असेल तर त्या संप्रदायाचे 'बीज'रूप तत्वज्ञान कसे आहे, बीजरूप तत्वज्ञानाची सर्व समावेशकता कशी आहे ते समजून घेणे अतिशय महत्वाचे आहे. अनेक शतकांपासून वारकरी संप्रदाय मराठी माणसाच्या मनावर अधिराज्य गाजवत आहे. महाराष्ट्राच्या ताण्याबाण्यातही वारकरी संप्रदायाचे खूप मोठे योगदान आहे. ज्ञानेश्वरीसारखा प्रमाण ग्रंथ या संप्रदायाला लाभलेला आहे. याच मागाने पुढील काळातील संत मंडळी गेलेली दिसते.

या संतांच्या वाणीमध्ये मराठी भाषेच्या अभिमानाचा व प्रतिष्ठेचा हुंकार होता. स्वभाषेबद्दलची आत्मियता होती. मराठीच्या सामर्थ्याचा व रसवत्तेचा अभिनव साक्षात्कार होता. मराठी संतांची दृष्टी विशाल होती. त्यांच्या समोर मानवी जीवनाचे समग्र व विशाल रूप उभे होते. जीवनाचा अतिशय मोठा कॅन्वॉस त्यांच्या दृष्टीसमोर होता. म्हणूनच एक वेगळे सांस्कृतिक व आध्यात्मिक वेगळे वळण महाराष्ट्राला लाभले. संतांच्या विशाल दृष्टीबद्दल गं.वा.सरदार लिहितात. महाराष्ट्रीय संतांपुढे मानवी जीवनाचे समग्र रूप उभे होते. म्हणूनच आपल्या आचारविचारांना त्यांनी एकदेशीय बाधा होऊ दिली नाही. संपूर्ण जीवनावर नवा संस्कार घडवून ते संपन्न करण्याची त्यांची महत्वाकांक्षा होती. अद्वैत आणि

भक्ती, ज्ञान आणि उपासना, श्रद्धा आणि विवेक यांच्या ऐकात्मतेवर त्यांनी भर दिला. वारकरी पंथाने आत्मसिद्धिसाठी विवेकनिष्ठेचा मार्ग सांगितला. त्याप्रमाणे आचार्यधर्माच्या बाबतीत एका समतोल व संग्राहक वृत्तीचा पाठपुरावा केला. इतर प्रादेशिक भक्तिपंथात कोठे त्याग व कायक्लेश यांचे प्रस्थ आहे, तर कोठे भोग व तुष्टी यांचा बडीवार आहे. गृहस्थासाठी विधिनिषेध आणि ऐश्वर्यभोग व संतांसाठी नैष्कर्म आणि विरक्ती असे दोन मानदंड वापरलेले आढळतात. असा भक्तिप्रपंच न करता वारकरी संतांनी सर्वानाच 'मितलेपणाचा' म्हणजे त्याग व भोग, स्वधर्मचरण व नैष्कर्म्य यांचा योग्य मेळ घालण्याचा आवर्जून उपदेश केला आहे.

सर्वच वारकरी संतांनी महाराष्ट्रातील जनांना स्थिर सामाजिक नीतीची शिकवण दिली. संतांनी संग्राहक व समतोल अशी जीवनदृष्टी समाजाला दाखविली. तत्कालिन समाजात जे परंपरागत कर्मकांड, दृष्टरुढी तसेच लौकिक व्यवहारातील जडत्व या संतांना दिसत होते व ते त्यांना घालावयाचे होते. म्हणूनच लोकांमध्ये प्रत्यक्ष मिसळून, त्यांच्या अंतरंगात मिसळून त्यांना लोकांच्या अंतर्बाह्य जीवनात एक नवे चैतन्य निर्माण करायचे होते. त्यासाठी त्यांनी स्वभाषेचा आधार घेतला. त्यांचे साहित्य म्हणजे 'अविवेकाची काजळी फोडून विवेकाचा दीप' प्रज्वलित करणारे होते. संत हे केवळ कवीच नव्हते तर परमार्थाच्या वाटेवरील 'दीपस्तंभ' होते. खऱ्या अर्थाने ते त्या त्या काळाचे युगसुधारकच होते. म्हणूनच वारकरी संप्रदायाने कधीच संकुचित वृत्ती बाळगली नाही. कधीच कशाही बद्दल दुराग्रह बाळगला नाही तर एक विशाल दृष्टीकोन ठेवूनच हा संप्रदाय सतत वाढत गेला. आजही तो वटवृक्षाप्रमाणे वाढतो आहे.

वारकरी संप्रदायात 'विठ्ठल' भक्तीचा महिमा खूप मोठा आहे. 'विठ्ठल' हे आराध्य दैवत आहे. विठ्ठल, पांडुरंग, विठोबा, पंढरीनाथ



## महिला सबलीकरणांत स्वयंसहाय्यता बचत गटाची भूमिका

डॉ. स्मिता म. जाधव

इतिहास विभाग प्रमुख  
कला व विज्ञान महाविद्यालय,  
कुन्हा. जि.अमरावती

डॉ.गणेश भि.मोहोड

वाणिज्य भाषा प्रमुख  
नारायणराव काळे स्मृती  
मॉडेल कॉलेज,कारंजा(घा)

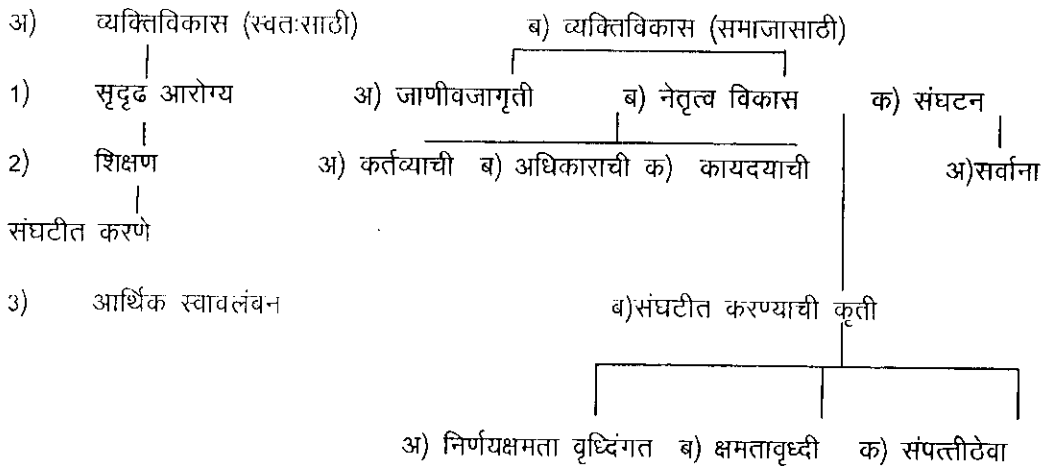
आपल्या राष्ट्राच्या राष्ट्रीय उत्पन्नात महत्वाचा वाटा उचलू शकणारी स्त्री हा अतिशय महत्वाचा घटक आहे. वेगवेगळ्या काळात महिला सबलीकरणासाठी विविध योजना राबविण्यात आल्यात. 2001 हे वर्ष महिला सबलीकरणाचे वर्ष मानले गेले. महिला सबलीकरण म्हणजे,

1. स्त्रीने स्वतःच्या क्षमतांची ओळख करून घेऊन स्वतःच्या क्षमतांचा विकास करावयाच्या घरगुती व सामाजिक निर्णयाच्या प्रक्रियेत सहभागी होण्याचा प्रयत्न करणे होय.
2. स्त्री सक्षमीकरण म्हणजे स्त्रीच्या अंगी निर्णय घेण्याची, नियंत्रण करण्याची, संघटित करण्याची क्षमता, मतप्रदर्शन करणे, कृतिशील कार्यक्रम घडवून आणणे, लोकसंपर्क, जनसंपर्क, संस्थासंपर्क, आर्थिक व्यवहार इ. करण्याची क्षमता व आवड निर्माण होणे होय. - व्हिनेसा ग्रिफेन

थोडक्यात स्त्रीमध्ये स्वविश्वास, स्वक्षमता, स्वजाणीव निर्माण करून तिला आत्मनिर्भर बनविणे व तिच्यामध्ये आत्मसन्मानाची व स्वालंबनाची जाणीव निर्माण करणे होय. स्त्री मध्ये हीच जाणीव निर्माण होण्याकरिता तिला स्वातंत्र्य हवे. याबाबत " ती देशाला उध्दारी या लेखात सौ.सुमती कुळकर्णी लिहितात" भारतातील स्त्री लोकसंख्येचे रुपांतर सक्षम श्रमशक्ती मध्ये करणे हे भारतासमोरील एक आव्हान आहे. त्यासाठीच

स्त्रीयांना शिक्षित व सक्षम करणे गरजेचे आहे. जिच्या हाती पाळण्याची दोरी ती जगाला उध्दारी चा अर्थ म्हणूनच आताच्या काळाच्या गरजेनुसार पाळण्याची दोरी हातात घेण्याच्या बाबतीतलं स्वातंत्र्य तिलाच स्वातंत्र्य असायला हवं." □

महिला सबलीकरणाचे घटक कानेते ? याबाबत प्रा.मूलानी लिहितात,  
सबलीकरणाचे घटक



आधुनिकरणाच्या प्रक्रियेत स्त्री ही पुरुषापेक्षा कुठेच मागे राहता कामा नये, हा त्यामागील उद्देश होता. स्वातंत्र्योत्तर काळात महिलांच्या विकासासाठी जाणीवपूर्वक प्रयत्न करण्यात आले. असे असले तरी, त्याला अपेक्षित यश प्राप्त होवू शकले नाही. परंतु स्वातंत्र्यप्राप्तीनंतर ख-या अर्थाने

## ३६. राष्ट्रसंत तुकडोजी महाराजांची साहित्यसृष्टी

डॉ. गणेश भि. मोहोड

वाणिज्य भाषा विभाग प्रमुख, नारायणराव काळे स्मृती मॉडेल कॉलेज, कारंजा (घा.), जि. वर्धा.

महाराष्ट्र ही संताची पुण्यभूमी आहे. महाराष्ट्रातील सामाजिक, धार्मिक, सांस्कृतिक व नैतिक जीवनात भागवत धर्माचे म्हणजेच वारकरी संप्रदायाचे अतिशय मोठे योगदान आहे. वारकरी हा भक्ती संप्रदाय असला तरी महाराष्ट्रीय जीवनाचे ते अभिन्न अंगच आहे. त्यात आत्मकल्याणची व विश्वकल्याणाची भावना आहे. महाराष्ट्राचा सांस्कृतिक इतिहास समृद्ध करण्याचे काम भागवत धर्माने केलेले आहे. अनेक लोकोत्तर संतांच्या पदस्पर्शाने, कार्याने व लेखणीने पावन झालेल्या या भूमीत तेराव्या शतकापासून तो आजच्या काळापर्यंत फार मोठी व महान संतपरंपरा उदयाला आली. "जगाच्या कल्याणा, संताच्या विभूती" या उक्तीला संतानी सार्थ केले. लोककल्याणाची विलक्षण तळमळ या संताच्या ठिकाणी होती. त्यांनी लोकांना ईश्वरभक्तीतून आत्मोन्नती साधण्याबरोबरच लोकांना मानवतावादाची शिकवण दिली. त्यांनी विपुल प्रमाणात ग्रंथरचना केली. आपले विचार त्यांनी कधी अभंग, भजन, कीर्तन, दोहे, प्रवचनांच्याद्वारे जसे प्रसृत केले त्याचप्रमाणे त्यांनी विविध ग्रंथांच्या माध्यमातूनही लोकजागरण घडवून आणले. ही भूमी अधिकाधिक समृद्ध केली त्यांची भूमिकाही केवळ महाराष्ट्रापुरती मर्यादित नव्हती तर, "हे विश्वची माझे घर" अशी सर्वव्यापक होती.

याच समृद्ध परंपरेत वं. राष्ट्रसंत तुकडोजी महाराज यांचा विशेषत्वाने उल्लेख करावा लागेल. भारताच्या पारतंत्र्य आणि स्वातंत्र्य यांच्या संधीकाळात राष्ट्रसंत तुकडोजी महाराज यांनी प्रबोधन घडवून आणले. त्यांनी विपुल ग्रंथरचना केली. मानवी जीवनाला स्पर्श करणारा असा एकही विषय नसेल की, ज्यावर महाराजांनी लिहिले नसेल. मानवी जीवनाच्या कोणत्याही अंगाकडे त्यांचे दुर्लक्ष झाले नाही प्रबोधन व जनसेवा हाच ध्यास आयुष्यभर त्यांनी घेतला. त्यांचे साहित्य हे बंद खोलीत बसून कल्पना विलासातून निर्माण झालेले नाही, तर ते अनुभवसिद्ध व राष्ट्रधर्माने ओथबून वाहणारे साहित्य होते.

### तुकडोजी महाराजांची साहित्यविषयक भूमिका

तुकडोजी महाराजांचा जन्म अब्बल इंग्रजी आमदानीत झाला. आंग्ल सत्तेच्या काळामध्ये इंग्रजी शिक्षणाचा भारतात मोठ्या प्रमाणावर प्रसार झाला. या शिक्षणामुळे भारतात मोठ्या प्रमाणात सुशिक्षित वर्ग उदयास आला. या सुशिक्षितांमधून राजकीय व सामाजिक क्रांतीची आवश्यकता प्रतिपादन होऊ लागली. परंतु त्यांची भाषा नागर, पांडित्यपूर्ण, संस्कृतप्रचुर असल्यामुळे त्या ज्ञानापासून समाजातील सर्वसामान्य वर्ग दूरच राहिला. विशेष म्हणजे ते ज्ञान सर्व सामान्य माणूस व ग्रामांपर्यंत खऱ्या अर्थाने पोहचू शकले नाही. ते ज्ञान पोहचविण्याचा प्रयत्न जरी झाला असता तरी तेथे या स्वरूपाचे नागर व पांडित्यपूर्ण ज्ञान रुजणे अशक्य होते. कारण ग्रामांमधील लोकांच्या समाजधारणा अतिशय भिन्न होत्या. अशा वेळी राष्ट्रसंत तुकडोजी महाराजांनी

## आजची संस्कृती आणि घरगुती हिंसाचार

प्रा.डॉ. सुनील पखाले,

नारायणराव काळे स्मृती मॉडेल कॉलेज, कारंजा (घा), जि. वर्धा

मानवाच्या एकूणच वर्तनामागे मनोव्यापाराला अत्यंत महत्वाचे स्थान असते. व्यक्त होणे हा प्रत्येक सजीव प्राणिमात्रांचा निसर्गतः अधिकार आहे. कारण प्रत्येकाला मन असून मनाचे नियंत्रण हे व्यक्तीच्या वर्तनाला वळण देत असते. माणूस तर समाजशील प्राणी. समाजाने अधोरेखित केलेले नियम त्याला स्विकारावे लागतात; आणि त्यातूनच प्रथा, परंपरा, रीतिरिवाज, संस्कार, संस्कृतीची निर्मिती व जतन होऊ लागते. काळ बदलला, परिस्थिती बदलली, गरजा बदलल्या तसतशी मानवी संस्कृती जीवन्शीली बदलली. त्यातून चांगले—वाईट परिणाम एकूणच कुटुंब समाजावर होत गेले.

**आजच्या संस्कृतीचे स्वरूप:—**

भारतीय संस्कृती ही ऋषी—मुनी—संतांची संस्कृती आहे. जगाच्या पाठीवर उदात्त असे देणे फक्त या आपल्या संस्कृतीलाच लाभले. ही भूमी ज्ञानेशाची, तुकोबाची तशीच जिजाऊ—शिवबांचीही. ज्ञानदेव म्हणतात, 'हे विश्वची माझे घर' केवढी महानता त्यांच्या पसायदानाने दिली. या शिकवणीचा हात धरून अनेक पिढ्या तयार झाल्यात. परंपरा—परिवर्तन हा निसर्गाचा नियम आहे. हे मान्य करूनच आजच्या संस्कृतीचे स्वरूप विशद करावे लागेल. माहिती तंत्रज्ञानाच्या जगाचा स्वीकार करतांना 'माणूस' पूर्णतः बदलला. आपल्या संस्कृतीचे स्तन्य तो विसरला. केवळ परिवर्तन मान्य करून त्याने परंपरेला तिलांजली दिली. भौतिक सुखाचे बलय त्याच्या भोवती निर्माण झाले. 'एखाद्या समाजाची विशिष्ट काळातील अभिरूची ही त्या विशिष्ट समाज जीवनाच्या त्या काळातील एकूण वस्तुस्तिचा परिपाक असते.'

बरील विधानाचा परामर्श घेतल्यास समाजाची अभिरूचीच व तिची प्रतच पूर्णतः बदललेली दिसते. कारण परिणाम, तेथील परंपरा, गावाच्या अस्तित्वाची सर्वांगीण विशिष्टता हे घटकच आज परिवर्तीत झालेली आढळतात. आज शहर—खेडी बदलली त्यामुळे त्याचे बरील घटकही बदललेत. सभोवतालची घटना, परिस्थिती ही त्याला प्रेरित करित आहे. 'एखाद्याची स्मृती किंवा विचार करण्याची कुवत वा भावना प्रकट करण्याची कुवत यातून 'मन' नावाची संकल्पना स्पष्ट होते. मनाचा संबंध हा व्यक्तीच्या मेंदूशी असतो. मेंदूचे कार्य बंद पडले की मनाचे कार्य बंद पडते.' इ.स.पूर्व ६ व्या शतकात गौतम बुद्धाने मनाला केंद्रस्थानी ठेवून उपदेश केला. विज्ञाननिष्ठ भूमिकेतून व्यक्तीच्या अंतर्बाह्य वास्तवाचा शोध घेतला. 'जे जे वाईट आहे, वाईटाशी संबंधित आहे आणि त्याच्या अधीन आहे ते मनातून उत्पन्न होते. जे जे चांगले आहे, चांगल्याशी संबंधित आहे आणि त्याच्या अधीन आहे, ते ते मनातूनच उत्पन्न होते.' बरील सर्व मुळ आजच्या भारतीय संस्कृतीच्या स्वरूपामध्ये पहायला मिळते.

**कुटुंबव्यवस्था:—**

स्त्री—पुरुष हे मानवी रथाची दोन चाके आहे. हे विदित आहे. माणूस जसजसा उत्क्रांत होत गेला त्याप्रमाणे त्याच्या गरजा, आवश्यकता त्याच्या जाणिवेच्या पातळीवर येऊ लागल्या. माणसाने कष्ट करून कमवावे नि घरच्या स्त्रीने त्याचा विनियोग करून आपल्या कुटुंबासाठी खर्च करावे, रावावे. एकंदरीत बाहेरच जग पुरूषांचे नि घरच जग स्त्रीचे हेच समिकरण समाजाने रूढ केले. अशा या मानवी मनावर उत्क्रांत काळापासून संस्कार होत गेले. १९ व्या



**CRISIS IS INSTRUMENTAL TO THE CREATION OF LITERATURE:  
KIRAN DESAI'S "THE INHERITANCE OF LOSS"**

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**Abstract**

Eco-criticism is a branch of literature where literary scholars interpret and analyze various texts that is concerned with the literature and environment. Many literary figures are worried about the environmental degradation caused by self-centered nature of human beings. They are very conscious about the importance of environment in human beings life. Environmental aspects plays very vital role in literature. Many literary figures use it to glorify their texts. Literature is one of the most effective medium to awaken the environmental consciousness among the people. Kiran Desai is a novelist who meticulously uses her novels to project the environmental degradation caused by human beings. She has satirized natures incongruous transformation into concrete jungle. It also shed light on the negligence of human beings towards nature and its significance in their life.

**Keywords:** *Ecocriticism, Consciousness, Development, Isolation, Miseries.*

**Introduction**

Nature and literature have been part and parcel of human life as both embraced shared concerns and interests in the dynamic relationship of man and nature. This established relationship is explicitly manifested in the literary works of poets and writers. In today's era, profundity of relationship between man and nature is being studied and scrutinized with the purpose of knowledge and development. The critical approaches to nature and environment have been textualized in view of nosedived degradation and deterioration of nature by writers, greens and environmentalists. From the viewpoint of nature's indiscriminately

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