



Sevadal Shikshan Sanstha, Nagpur

**SEVADAL MAHILA MAHAVIDYALAYA**

NAAC Re-Accredited With 'A' Grade

Place for Higher Learning & Research (Research Academy)

Sakkardara Square, Umrer Road, Nagpur - 440 024 (M.S.)

**Dr. Pravin Charde**

M.Sc., Ph.D.

Principal

- Phone No. : 0712-2705037, 2751344 ● Fax No. : 0712-2705037
- E-mail : [smm\\_college@yahoo.co.in](mailto:smm_college@yahoo.co.in) ● [sevamahilamv@gmail.com](mailto:sevamahilamv@gmail.com)
- Website: <http://sevadalimahilamahavidyalaya.ac.in>

## Certificate

Respected Sir

As per your DVV Clarification of 3.3.2

Sr	Particular	Page no
1	Quality Food – The Fundamental Human Right of Every Individual Nutrition and Food Security in India	01-05
2	Status of working women stress, types and preventive measures	06-13
3	Marathi rangbhumi ki Pauranik tatha Ethiasik Parampara for 2017-18	14-21
4	Infrastructure of the amnion and scanning electron microscope appearances in the Megachiropteran bat, <i>Rousettus leschenaulti</i> (Desmerest) at term pregnancy	22-28
5	Sangeet Nirmiti aani Paryavaran	29-37
6	Removal of Cu(II) from Solution using Adsorption Studies of Activated Charcoal and Non-activated Jackfruit Powder for 2018-19 ,	38-43
7	Government Policies and Programmes towards Nutrition Bharatatil Mahilanchya Sanrakshana sambandhit kayde Impact of Covid-19	44-47
8	Pandemic on women's sanitation for 2019-20 ,	48-51
9	The Impact of Formal Education, Reading Habits and Media on Slum Dwellers: A Critical Study of Nagpur Municipal Corporation Region	52-69
10	Biochemical Studies in Soybean Seeds under Tropical Storage Conditions	70-82
11	Bird eye view on use of ICT in Libraries	83-94
12	Recent Advances In Humanities, Commerce, Management, Engineering Science & Technology, Chapter Name: Women's Health Home Science	95-101
13	Skill in Industrial Entrepreneurship for Upliftment of Life, Chapter Name : Recent Technology in Home Science	102-112


for 2021-22 with ISBN numbers, title, author, Department/ School/ Division/ Centre/ Unit/ Cell, name and year of publication.

URL of Document:

[https://sevadalimahilamahavidyalaya.ac.in/app\\_sevadal/assets/images/finger/01670919365.pdf](https://sevadalimahilamahavidyalaya.ac.in/app_sevadal/assets/images/finger/01670919365.pdf)



Principal  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

**SUSTAINABLE DEVELOPMENT GOALS**  
AND DEVELOPMENT OF THE WEAKER SECTIONS IN INDIA

**K. S. PATIL  
SHAILENDRA D. LENDE  
VIKAS K. JAMBHULKAR  
SHYAM I. KORETI**



*[Signature]*  
Principal

Sevada Mahila Mahavidyalaya  
Umrer Road, Nagpur-3

✓ **United Nations Sustainable Development Goals 2030  
and Development of the Weaker Sections in India**

■ **Editors**

**K. S. PATIL  
SHAIENDRA D. LENDE  
VIKAS K. JAMBHULKAR  
SHYAM I. KORETI**

✓ **Published By:**

**Association of Interdisciplinary Policy Research  
and Action (IPRA), Nagpur  
Department of Political Science  
RTM Nagpur University, Nagpur  
And  
Tirpude College of Social Work, Nagpur**

■ **Publisher & Distributor :**

✓ **BSPK Book Publishing Company**  
40, Mahapushpa Society, Behind Lohar Samaj Bhavan  
Beltarodi Road, NAGPUR-440027  
Email : sujitmurmade@gmail.com  
(M) 094230397095

■ **First Edition: 2017**

✓ **ISBN: 978-93-84198-92-3**

✓ **© 2017, Association of Interdisciplinary Policy Research  
and Action (IPRA), Nagpur And  
Tirpude College of Social Work, Nagpur**

■ **Composing:**

**Sivali Graphic Nagpur (M):09881712149**

■ **Printing:**

**Vansh Creation, Nagpur**

■ **Price: Rs.900/-**

- **All rights reserved. No part of this publication should be reproduced, store in retrieval system, or transmitted in any form or by any means: electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the editor in chief, Association of Interdisciplinary Policy Research and Action (IPRA), Nagpur and the publisher.**

**This book has been published in good faith that the material provided by authors is original. Every effort is made to ensure accuracy of material, but the publisher and the printer will not be held responsible for any inadvertent error(s). In case of any dispute, all legal matters are to be settled under Nagpur jurisdiction only.**



  
**Principal**  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur-9.

## CONTENTS

### Introduction

I	United Nations Sustainable Development Goals 2030 and Development of the Weaker Sections in India	Dr. K. S. Patil	13
II	संयुक्त राष्ट्रसंघाची शाश्वत विकास-उद्दिष्ट्ये आणि भारतातील दुर्बल-वंचित वर्गाचा विकास	डॉ. शैलेंद्र लेंडे	24

### POVERTY/ HUNGER AND FOOD

1.	Poverty amongst Dalits in India	Dr. Geeta. D. Hiranwar	33
2.	Poverty	Madhavi V. Peddada	42
3.	Poverty and Inequality in India	Surekha Bharati	48
4.	Poverty-A Main Social Problem of India in Current Scenario	Dr Nilima Dawane	53
5.	Poverty: A Curse on the whole Humanity with special reference to India	Anilkumar N. Daryani	58
6.	Poverty: A Social Problem	Dr. Lokesh Nandeshwar	62
7.	Poverty and Child labour in India	Pramod D. Kanekar	66
8.	गरीबी	डॉ. इलीयास जी. बेपारी	72
9.	दारिद्र्य : संयुक्त राष्ट्र महासंघ आणि भारत लक्ष्य आणि कार्यक्रम	राजू पांडुरंगजी लिपटे	80
10.	भारतीय समाजातील दारिद्र्य	श्रीहरी मा. सानप	84
11.	दारिद्र्य (Poverty) समस्या आणि कारणे	नरेंद्र जगनिक	91
12.	भारतीय दारिद्र्याची दिशा	दिगांबर भाउरावजी टुले	96
13.	भारतातील दारिद्र्य	महेंद्र पखाले	102
14.	भारतातील दारिद्र्य - एक चिंतन	रंजन एम. चव्हाण	107
15.	शाश्वत विकास आणि दारिद्र्य	डॉ.प्रान्जु रामभाऊ हिरेखन	112
16.	भारतातील दारिद्र्याची समस्या : एक विश्लेषण	मनोज के. सरोदे	118
17.	Poverty Alleviation and Women Empowerment	Kavita N. Badwaik	124
18.	दारिद्र्य-एक सामाजिक अभिशाप	सचिन त्रिंबकराव हुंगे	127
19.	दारिद्र्य निर्मुलन : जागतिक आव्हान	संदीप तुंडूरवार	132
20.	भारतातील दारिद्र्याची समस्या	डॉ. ज्ञानेश टी. शेन्डे	137
21.	Poverty among Weaker Sections & Sustainable Development Goals: Initiatives to taken to Achieve the Goal	Dr. Rajani Sontakke	151



Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur-9.

## HEALTH / FOOD / SANITATION / WATER

22. Quality Food - The Fundamental Human Right of Every Individual	Dr. Meghali Johrapurkar	157
23. Mental Health for all with reference to Sustainable Development Goal	Dr. Siddharth Gangale Dr. Vijay Shingnapure	163
24. Health, well-being for all ages	Dr. Meenakshi N. Kubde	173
25. आदिवासी स्त्रियों के स्वास्थ्य संबंधी चुनौतीया	कु. क्रिष्णा पासवान	178
26. Sustainable Development Goals 2030 and India's Hunger Food Security and Nutrition	D. S. Shambharkar	184
27. Nutrition and Food Security in India	Mrs Jyoti D. Kamble	190
28. Effects of Malnutrition on the Development of Tribal People	Chandansingh P. Rotele	194
29. स्त्री आरोग्याच्या दृष्टीने उपेक्षित सामाजिक घटक	डॉ. साधना व्ही. लांजेवार	197
30. वृद्धावस्थेतील सुदृढ आरोग्य राहण्यास घ्यावयाची काळजी	प्रियंका के. अंबादे	201
31. तंत्रज्ञान, विकास आणि सरोगसी	डॉ. नलीनी बोरकर	207
32. Sustainable Management of Water and Sanitation	Deepak S. Magarde	214
33. Mental Health Problems of Adolescent Girls	Neha S. Gaikwad	218
34. Health of Schedule Caste and Schedule Tribe women in India- A social Problem	Alka Patil-Chandrikapure	224
35. Health, well-being for all ages	Meenakshi Surpande	231
36. Achieving Sustainable Food Security and Challenges in India	Dr. Samit L. Mahore	234

## EDUCATION

37. Right to Education: Sustainable Development for Elementary Education in India	Roshan Gajbe	243
38. मानवीय विचार, शिक्षण मुल्योका बाजारीकरण	मिनल एस. गाडवे	246
39. संयुक्त राष्ट्र संघटना शाश्वत विकास लक्ष्य २०३० च्या अनुषंगाने भारताच्या शिक्षणप्रणालीची भूमिका	गोपाल एल. चव्हाण	251
40. Modern education system, Values and Buddhism	Sandeep Mohan Badole	256
41. महिलांच्या विकासात डॉ. आंबेडकरांचे योगदान	डॉ. हिरालाल ना. मेश्राम	268
42. Quality in Higher Education System	Esha Milind Atey	271



Principal  
Sevadai Mahila Mahavidyalaya  
Umrer Road, Nagpur-9.

# QUALITY FOOD - THE FUNDAMENTAL HUMAN RIGHT OF EVERY INDIVIDUAL

■ Dr. (Mrs.) Meghali Joharapurkar

## Introduction

India, with a population of over 1.3 billion, has seen tremendous growth in the past two decades. Gross Domestic Product has increased 4.5 times and per capita consumption has increased 3 times. Similarly, food grain production has increased almost 2 times. However, despite phenomenal industrial and economic growth, while India produces sufficient food to feed its population, it is unable to provide access to food to a large number of people, especially women and children.

## Status of Hunger in India

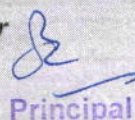
"About 900 million men, women and children around the world are malnourished. Nearly two billion suffer from iron deficiency and anemia particularly women, pregnant women." - M S Swaminathan.

Hunger in India is a complex issue. It is widespread and the causes are different across various regions. According to latest FAO estimates in "The State of Food Insecurity in the World, 2015" report, 194.6 million people are undernourished in India. By this measure India is home to a quarter of the undernourished population in the world. Also 51% of women between 15 to 59 years of age are anaemic and 44% of children under 5 are underweight. Malnourished children have a higher risk of death from common childhood illnesses such as diarrhea, pneumonia, and malaria. The Global Hunger Index 2014 ranks India at 55 out of 76 countries on the basis of three leading indicators -- prevalence of underweight children under 5 years, under 5 child mortality rate, and the proportion of undernourished in the population.

On the other hand, it is estimated that nearly 40 percent of the fruits and vegetables, and 20 percent of the food grains that are produced are lost due to inefficient supply chain management and do not reach the consumer markets.

■ Assistant Professor, Sevadal Mahila Mahavidyalaya, Sakkardara Square, Nagpur



  
Principal

Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur-9.

# Gender Parity and Employability



*[Handwritten signature]*



Principal

Editors  
**Dr. G.Valli**  
**Dr. S.P.Denisia**  
**Dr.S.Meena Priyadharshini**

**CONTENT**

<i>S.No.</i>	<i>Title</i>	<i>Page No.</i>
1.	PREDICTION OF TURNOVER INTENTION AMONG WOMEN POLICE IN TAMILNADU. <b>S.Mangaiarkarasi, Dr.K.Lavanya Latha</b>	1
2.	EDUCATION AND EMPLOYABILITY SKILLS OF WOMEN <b>Dr.K.S.Ramakrishnan, G.Ramakrishnan</b>	7
3.	EMPLOYABILTY SKILLS IN FOOD PROCESSING INDUSTRY FOR WOMEN <b>Dr. S.Parameshwari</b>	10
4.	PERSPECTIVES IN WOMEN EMPOWERMENT – AN INSIGHT INTO THE ISSUES OF INDIAN CONDITION <b>Dr. J.Jayachithra</b>	16
5.	VIOLENCE AGAINST WOMEN –A SOCIAL REVIEW OF WOMEN EMPOWERMENT IN INDIA <b>Dr.D.Rajasekar, Dr.N.Murugeswari</b>	20
6.	AN UNDERSTANDING OF GENDER DISPARITY: LESS TRAVELLED PATH <b>S. Abirami</b>	26
7.	AN APPRAISAL ON WOMEN ENTREPRENEURSHIP IN INDIA; CURRENT STATUS, CHALLENGES AND SCHEMES <b>R.kavitha, V.Punithavathi</b>	30
8.	WOMAN ENTREPRENEURS AND THEIR EMPLOYABILITY IN INDIA <b>Dr. A.Deivendran</b>	36
9.	GENDER DISPARITY IN INDIA <b>G.Sahaya Leoni, Dr.G.Indhumathi</b>	42
10.	ECONOMIC EMPOWERMENT OF DALIT WOMEN THROUGH SELF HELP GROUPS-A CASE STUDY OF PALLATHUR PANCHAYAT IN SIVAGANGI DISTRICT OF TAMILNADU. <b>Dr.R.Nageswari</b>	47
11.	WORK PARTICIPATION AND GENDER PARITY <b>Dr.S.P.Denisia</b>	55
12.	LIVELIHOOD CHALLENGES OF MIGRANT WOMEN HOME-BASED GARMENT WORKERS OF TIRUPPUR IN TAMIL NADU <b>Dr.J.Indirani, Dr.S.Suba</b>	58
13.	GENDER BUDGETING IN INDIA :AN OVERVIEW <b>Dr.S.Jeyashree</b>	64
14.	CHALLENGES OF DISABLED WOMEN IN GETTING ICT RELATED EDUCATION AND EMPLOYMENT <b>Dr. K.Kala</b>	70
15.	STUDY ON EMPOWERMENT OF DISABLED WOMEN THROUGH GOVERNMENT WELFARE SCHEMES AND EMPOWERING STRATEGIES THROUGH ICT <b>Dr.K.Kavitha</b>	74



**Principal**  
Seval Mahila Mahavidyalaya  
Umrer Road, Nagpur.



### **STATUS OF WORKING WOMEN STRESS, TYPES AND PREVENTIVE MEASURES**

**V.Punithavathi**

Project Associate, Department Centre for Women Studies,  
Mother Teresa Women's University

**A.S.Dhoble**

Assistant Professor, Department of Home science Extension,  
Sevadal Mahila Mahavidyalaya, Nagpur.

#### **Introduction**

The Industrial Revolution in part was fuelled by the economic necessity of many women, single and married, to find waged work outside their home. Women mostly found jobs in domestic service, textile factories, and piece workshops. They also worked in the coal mines. For some, the Industrial Revolution provided independent wages, mobility and a better standard of living. For the majority, however, factory work in the early years of the 19th century resulted in a life of hardship and this hardship continues till today.

Women in India have come a long way after independence. From just a skilled homemaker, women today have acquired skills and capabilities of not just being a homemaker but being at par with their male counterparts. This is the new generation of women, who wants to pursue their dream career. But this life is not a bed of roses for all. More conflict arises with the working mother. One has to fulfil the demand at work followed by various demands at home. In today's scenario the husband and wife both work towards creating a balance with their work life as well as at home with their children. But it is still difficult for women as she has to play multiple roles of a cook, a family maid, a tutor, a nurse as well as cater to the demands of office work.

#### **Stress**

We live in stressful times. We are holding down two or more jobs. We are putting up with heavy job loads and unreasonable demands. We are swallowing outrage and frustration with unfair situations and irrational superiors because we cannot afford to be laid off or fired. Or we have already been laid off and we are struggling to find another job. Or we have given up and are coping with unemployment. Outside strains like these are called stressors. Stressors are the barely-tolerable pressures that bring us unhappiness and, eventually, disease. Some people hardly seem to be affected by stressors. They maintain a sense of perspective and a sense of humour. They remain calm in the midst of adversity and catastrophe. Other people are overwhelmed by a lesser number and intensity of stressors and slide downhill, losing relationships, jobs, and eventually their mental and physical health. The physiological and psychological responses to situations or events that disturb the equilibrium of an organism constitute stress.



### Women Employment In India

India's economy has undergone a substantial transformation since the country's independence in 1947. Agriculture now accounts for only one-third of the gross domestic product (GDP), down from 59 percent in 1950, and a wide range of modern industries and support services now exist. In spite of these changes, agriculture continues to dominate employment, employing two-thirds of all workers. India faced economic problems in the late 1980s and early 1990s that were exacerbated by the Persian Gulf Crisis. Starting in 1992, India began to implement trade liberalization measures. The economy has grown-the GDP growth rate ranged between 5 and 7 percent annually over the period and considerable progress has been made in loosening government regulations, particularly restrictions on private businesses. Different sectors of economy have different experiences about the impact of the reforms. In a country like India, productive employment is central to poverty reduction strategy and to bring about economic equality in the society. But the results of unfettered operation of market forces are not always equitable, especially in India, where some groups are likely to be subjected to disadvantage as a result of globalization. Women constitute one such vulnerable group.

Since the times immemorial, worth of the work done or services rendered by women has not been recognized. India is a multifaceted society where no generalization could apply to the entire nation's various regional, religious, social, and economic groups. Nevertheless, certain broad circumstances in which Indian women live affect the ways they participate in the economy. Indian society is extremely hierarchical with virtually everyone ranked relative to others according to their caste (or caste-like group), class, wealth, and power. This ranking even exists in areas where it is not openly acknowledged, such as certain business settings. Though specific customs vary from region to region within the country, there are different standards of behavior for men and women that carry over into the work environment.

Women are expected to be chaste and especially modest in all actions that may constrain their ability to perform in the workplace on an equal basis with men. Another related aspect of life in India is that women are generally confined to home thus restricting their mobility and face seclusion. The women face constraints beyond those already placed on them by other hierarchical practices. These cultural rules place some Indian women, particularly those of lower caste, in a paradoxical situation: when a family suffers economically, people often think that a woman should go out and work, yet at the same time the woman's participation in employment outside the home is viewed as "slightly inappropriate, subtly wrong, and definitely dangerous to their chastity and womanly virtue". When a family recovers from an economic crisis or attempts to improve its status, women may be kept at home as a demonstration of the family's morality and as a symbol of its financial security. As in many other countries, working women of all segments of Indian society faces various forms of discrimination including sexual harassment. Even professional women find discrimination to be prevalent: two-thirds of the women in one study felt that they had to work harder to receive the same benefits as comparably employed men.

### Problems Faced By Working Women In India

#### 1. Mental harassment:

It is an age old convention that women are less capable and inefficient in working as compared to men. The attitude which considers women unfit for certain jobs holds back women. In spite of the constitutional provisions, gender bias creates obstacles in their recruitment. In addition to this, the same attitude governs injustice of unequal salaries for the same job. The true equality



Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

## **Gender Parity and Employability**

---

has not been achieved even after 61 years of independence. In order to achieve success in corporate sector, women feel that they must do better than their male colleagues.

### **2. Sexual harassment:**

Today, almost all working women are prone to sexual harassment irrespective of their status, personal characteristics and the types of their employment. They face sexual harassment on way on transports, at working places, educational institutions, hospitals, at home and even in police stations when they go to file complaints. It is shocking that the law protectors are violating and outraging modesty of women. Public transport system is overcrowded and women become easy targets for physical harassment. Most of the women tend to be concentrated in the poor service jobs whereas men are in an immediate supervisory position, which gives them an opportunity to exploit their subordinate women. It is a difficult situation for woman if the higher officer demands sexual favours. If refused the boss takes out other means to make her life miserable. There have been several cases of sexual harassment recently involving even the senior women officials. If a woman is praised for her work or promoted on merit, her colleagues do not hesitate to attribute it to sexual favours. This psychological pressure can easily lead to a woman resigning from her job.

### **3. Discrimination at Workplace**

However, Indian women still face blatant discrimination at their workplaces. A major problem faced by the working women is sexual harassment at the work place. Further, women employees working in night shift are more vulnerable to such incidents. Nurses, for example, face this problem nearly every day. There is nothing that is done in hospitals to tackle and address the danger they face. Such blatant disregard of current Indian laws is one reason why sexual harassment at the workplace continues to increase.

### **4. Safety of Working Women While Travelling:**

Typically, the orthodox mindset in the Indian society makes it difficult for a working woman to balance her domestic environment with the professional life. In some families, it may not be acceptable to work after six o'clock. Those families that do accept these working hours may experience considerable anxiety every day about a woman's safety while travelling. So many issues affect a working woman because she is closely protected or watched by her family and the society. According to survey conducted by ASSOCHAM, on 1000 women professionals, around 80 per cent of the households expect their daughters-in-law to prioritize household requirements over the official work. Further, many of them are physically and psychologically abused, by their in-laws and husband but they do not complain or let others know about it, particularly if they have children.

### **Literature Reviews**

Various research papers have been reviewed to identify the problems being actually faced by women while going out for job. The issues related to family and society along with workplace has been reviewed. Following are some of the reviews:

- Dr. Kamini B. Dashora in their paper "PROBLEMS FACED BY WORKING WOMEN IN INDIA" published in International Journal of Advanced Research in Management and Social Sciences (2013) states that a gender bias creates lot of hurdles while remunerating the women at the workplace. There is an old belief that women are less capable and less efficient than men and hence deserve unequal salaries and wages for the same job.



## Gender Parity and Employability

- In an article “Working Women face Challenges in Zimbabwe” published in a journal named My Wage, a survey was conducted with the aim of understanding Zimbabwean working women’s perceptions, challenges and experiences of their role in the workplace, sexual harassment topping the problems.
- Muhammad Atif NAWAZ<sup>1</sup> Noreen AFZAL<sup>2</sup> Kiran SHEHZADI<sup>3</sup> in their paper “PROBLEMS OF FORMALLY EMPLOYED WOMEN: A CASE STUDY OF BAHAWALNAGAR, PAKISTAN” published in Asian Journal of Empirical Research (2013) highlight the problems of working women in formal sector in Bahawalnagar. It has highlighted the problems faced by working women in various departments such as academics; Nursing, Colleges, police stations.
- Dr. P. ASHOK KUMAR and DR. K. SUNDAR in their paper “PROBLEMS FACED BY WOMEN EXECUTIVES WORKING IN PUBLIC SECTOR BANKS IN PUDUCHERRY” (2012) states that the role of women was confined to household chores and limited to domestic issues. In the male-dominated Indian society, women suffered to extreme levels of exploitation. The paper seeks to identify the factors preventing women employees from aspiring for higher post and problems faced by women executives in public sector banks related to work performance. Further this aims also at finding out the organizational support for women employees to achieve higher post.
- Owais Shafique and Faiza Anwar, Sahaab Akbar, Uroosa Akhtar Khan in their paper “PROBLEMS ENCOUNTERED BY WOMEN IN EDUCATION SECTOR OF BAHAWALPUR” (2012) states that married women face greater challenges than unmarried women. Although their husbands are co-operative but their children are prominently neglected. Despite the supportive attitude of their parents, unmarried women still face challenges like transportation and managing time between personal and social life. It is believed that whether married or unmarried, women’s salary and promotion system is not satisfactory for which they blame “Favoritism”.
- According to survey done by National partnership organization, it has been observed that For many women, the path to finding and keeping a job with decent wages and advancement opportunities is strewn with obstacles — from lack of adequate child care, to juggling work and family responsibilities, to dealing with on-the-job discrimination. These barriers to employment are especially challenging for women living on the economic margins, particularly welfare recipients, for whom the consequences of lacking or losing a job can be devastating.
- Damaske (2011) found that negative psychological experiences, like gender stereotyping and discrimination in male occupations, caused women’s movement from male-dominated to female-dominated occupations. Feelings of bias and under-utilization amongst women in male-dominated occupations are common.
- MEENU GOYAL and JAI PARKASH (2011) in their paper “WOMEN ENTREPRENEURSHIP IN INDIA-PROBLEMS AND PROSPECTS” stated that the educated Indian women have to go a long way to achieve equal rights and position because traditions are deep rooted in Indian society where the sociological set up has been a male dominated one She has competed with man and successfully stood up with him in every walk of life and business is no exception for this. These women leaders are assertive, persuasive and willing to take risks. They managed to survive and succeed in this cut throat competition with their hard work, diligence and perseverance.



## Gender Parity and Employability

- Pearl Jacobs and Linda Schain in their paper "Professional Women: The Continuing Struggle for Acceptance and Equality" (2008) states that the situation of professional women has changed dramatically. Integration of women from education and nursing, now have been enhanced to other professions like accounting, medicine, law, etc. however, which does not necessarily mean acceptance and equality nor does it mean that the stress created by work family conflict has been resolved. This paper examined some of the issues that continue to plague women as they attempt to progress in their professional fields.
- Dr. Souha R. Ezzedein in their paper "Running Head: Work and Life Strategies of Executive Women" (2008) states that Women's pursuit of an executive career is fraught with obstacles and work-family challenges. This paper examined the work and life strategies of executive women in intimate relationships and inductively derived four career advancement and four life balance categories. The findings call for greater optimism in the study of the career-family dynamics of high achieving women.

### Stress in Women and Its Management By Positive Attitude.

Stress is a complex disorder. There are so many reasons responsible for this problem in women. This research paper lights on those women who are suffering from higher amount of stress. In the paper we discussed about the role of a women in family and outside, the symptoms and effect of stress in women and how a women can manage or cope with the demand of environment so that she can avoid or face the stress.

#### Symptoms

Symptoms of stress are as-

- Insomnia
- Headaches or migraine
- Sadness /Depression
- Change in behavior.
- Anger / Irritability/ Anxiety/ Over-reacting.
- Disorder in digestion.
- lack of energy lack of concentration/ Eating too much or not at all
- weight gain or loss
- heart problems
- Problems of blood pressure Neck and / Back pain
- Lack in sexual desire
- Irregular periods.
- Acting on impulse.
- Using alcohol or drugs.
- Withdrawing from relationships.
- Changing jobs often.
- Feeling agitated most of the time.

Some Techniques to Relax Ourselves in WorkplacE

1. Lie down or sit in a chair.
2. Rest your hands on your stomach. Lose the all body parts.



## Gender Parity and Employability

3. Slowly inhale through your nose. Feel your stomach rise. Hold it for a second.
4. Slowly exhale through your nose. To control how fast you exhale. Your stomach will slowly fall.
5. With each the breath practices feel that your body is being relaxed.
6. Concentration should be completely on your breath.
7. Repeat five to 10 times.
8. Stand up stretch your body and smile. Try it! You'll feel better.
9. Take a short walk. If you're at work, take a bathroom break or get a glass of water.
10. Do something that changes your focus or do the things which you like most. When you come back to the problem you will feel more energetic than before.

### Conclusions

Women going to work are often subject to sexual harassment. Public transport system is overcrowded and men take advantage of the circumstances to physically harass women. Colleagues offer unwanted attention which can still be shaken off but a woman is placed in a difficult situation if the higher officer demands sexual favours. There have been several cases of sexual harassment recently involving even the senior women officials. On the other hand if a woman is praised for her work or promoted on merit, her colleagues do not hesitate to attribute it to sexual favours. The psychological pressure of all this can easily lead to a woman quitting her job. Most of the problems that beset working women are in reality rooted in the social perspective of the position of women. Traditionally men are seen as the bread winner and women as the house-keepers, child bearers and rearers. This typecast role model continues to put obstacles before the working women. A fundamental change is required in the attitudes of the employers, policy makers, family members and other relatives and the public at large.

### References

1. Chhaochharia, Sweta, Targeting Women: A Financial Perspective (2006).
2. [http://www.yorku.ca/laps/people/working\\_papers/SAS-HR2008-03-Ezzedeem.pdf](http://www.yorku.ca/laps/people/working_papers/SAS-HR2008-03-Ezzedeem.pdf)
3. <http://www.icoachacademy.com/blog/coaching-resources/research-papers/himani-tyagi-indian-working-women-and-life-coaching>
4. <http://www.aabri.com/manuscripts/08056.pdf>
5. [http://en.wikipedia.org/wiki/Women\\_in\\_India#Workforce\\_participation](http://en.wikipedia.org/wiki/Women_in_India#Workforce_participation)
6. Singh, S., & Hoge, G (2010). Debating Outcomes for 'Working' Women – Illustration from India, The Journal of Poverty, 14 (2), 197-215
7. [http://www3.weforum.org/docs/WEF\\_GenderGap\\_Report\\_2013.pdf#page=20](http://www3.weforum.org/docs/WEF_GenderGap_Report_2013.pdf#page=20)
8. <http://garph.co.uk/IJARMSS/Aug2013/7.pdf>
9. <http://www.aessweb.com/pdf-files/4-12-3%2810%292013-AJER-1291-1299.pdf>
10. [http://www.academia.edu/1789116/PROBLEMS\\_ENCOUNTERED\\_BY\\_WOMEN\\_IN\\_EDUCATION\\_SECTOR\\_OF\\_BAHAWALPUR](http://www.academia.edu/1789116/PROBLEMS_ENCOUNTERED_BY_WOMEN_IN_EDUCATION_SECTOR_OF_BAHAWALPUR)
11. <http://www.nationalpartnership.org/research-library/more/economic-security/detours-road-employment.pdf>
12. [http://zenithresearch.org.in/images/stories/pdf/2011/Sep/14.Vol\\_01\\_Issue\\_05%20MEENU%20GOYAL%20women%20paper.pdf](http://zenithresearch.org.in/images/stories/pdf/2011/Sep/14.Vol_01_Issue_05%20MEENU%20GOYAL%20women%20paper.pdf)



Principal  
Sevala Mahila Mahavidyalaya,  
Umrer Road, Nagpur

# भारतीय सिनेमा विकास यात्रा

## EVOLUTION OF INDIAN CINEMA

भाग  
1

भारतीय सिनेमा की विकास यात्रा

भाग  
1  
मधुरानी शुक्ला

₹ 1850 (set)  
दोनों भाग

ISBN 978-93-86556-06-6



9 789386 556066



कनिष्क पब्लिशिंग हाउस

4695/5-21 ए, अंसारी रोड, दरियागंज  
नई दिल्ली-110 002

फोन: 2327 0497, 2328 8285

E-mail: kanishkabooks@gmail.com

kanishka\_publishing@yahoo.co.in

संपादक  
मधुरानी शुक्ला

सहसंपादक  
शाम्भवी शुक्ला तो

## अनुक्रम

भूमिका	v
पुस्तक के बारे में...	vii
<b>भाग-1</b>	
1. क्लासिक सिनेमा या काव्यस्पर्शीय फिल्में डॉ. गौतम चटर्जी	3
2. साहित्य एवं हिंदी सिनेमा डॉ. आनंद वर्धन शुक्ल	8
3. सिनेमा के सिपाही मनमोहन चड्ढा	12
4. भारतीय फिल्मों में पानी कथ्य से लेकर गीतों तक संघर्ष और यथार्थ की इबारते सुनील मिश्र	17
5. फिल्म समीक्षाओं का बदलता परिदृश्य डॉ. धनंजय चोपड़ा	22
6. भारतीय सिनेमा में स्त्री प्रो. डॉ. जयश्री विश्राम कुलकर्णी	27
7. शास्त्रीय संगीत तथा फिल्मी संगीत प्रो. अनिता शर्मा	35
8. मराठी रंगभूमि की पौराणिक तथा ऐतिहासिक परंपरा डॉ. शुभदा मांडवगडे	39
9. सिनेमा को प्रभावशाली बनाने में पार्श्व संगीत की भूमिका एवं उसका बदलता स्वरूप सनातन दीप	45



Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

Ssm

S



# भारतीय शिववेद्या

की

विकाश यात्रा

भाग-1

संपादक

मधुरानी शुक्ला

सहसंपादक

शाम्भवी शुक्ला

तोमोका मुशीगा

कनिष्क पब्लिशिंग हाउस

नई दिल्ली-110 002



Principal  
Sevadai Mahila Mahavidyalaya  
Umrai Road, Nagpur

SSM

SS

भारतीय शिववेद्या  
की  
विकाश यात्रा

कनिष्क पब्लिशिंग हाउस

4695/5-21 ए, अंसारी रोड, दरियागंज

नई दिल्ली-110 002

फोन: 2327 0497, 2328 8285

फैक्स : 011-2328 8285

E-mail: kanishka\_publishing@yahoo.co.in

भारतीय सिनेमा की विकास यात्रा

प्रथम संस्करण-2018

© संपादक

ISBN: 978-93-86556-06-6 (Set)

भारत में मुद्रित

कनिष्क पब्लिशिंग हाउस, 4695/5-21 ए, अंसारी रोड, दरियागंज, नई दिल्ली-110 002  
से चैतन्य सचदेवा द्वारा प्रकाशित; क्वालिटी प्रिंटर्स, दिल्ली द्वारा शब्द-संयोजन तथा नाइस  
प्रिंटिंग प्रेस, दिल्ली द्वारा मुद्रित।

## भूमिका

हमारे जीवन में जितने रंग हैं, फिल्मों में उससे कहीं ज्यादा रंग हैं। कारण यह है कि फिल्मों में सिर्फ हमारी कहानी नहीं कहती है बल्कि हम सबकी कहानियाँ कहती हैं।

फिल्मों को आमतौर पर व्यवसाय और उद्योग के रूप में देखा जाता है, जबकि मैं इसे एक कला मानता हूँ—ऐसी कला जिसमें कई तरह की कलाएं एक साथ देखी जा सकती हैं। इसमें अभिनय भी है, छायांकन भी है, दृश्यांकन भी है, कहानी है, कविता और गीत हैं, संगीत और नृत्य हैं, सम्पादन है और न जाने क्या क्या है। शायद इतनी ढेर सारी कलाओं से जुड़ जाने के कारण ही फिल्म जगत को व्यवसाय और उद्योग माना जाने लगा, क्योंकि इस घोर भौतिकतावादी युग में—“एक सच यह भी है कि जो कला अपने कलाकार को दो वक्त की रोटी न दे सके—एक सुविधा संपन्न जीवन न दे सके—उसे कोई क्यों अपनाए?”

मैं एक अति साधारण, आम फिल्मी दर्शक हूँ। फिल्मों के विषय में मुझे कोई भी जानकारी नहीं है... मेरा ज्ञान शून्य है। लेकिन, किसी डायलॉग को बोलते समय अभिनेता के आवाज की उतार चढ़ाव और चेहरे की भाव भंगिमा को देखकर यह अक्सर कह देता हूँ कि वाह! क्या गजब का अभिनय है! यह अलग बात है कि हिंदी फिल्मों के भीष्म पितामह दादा साहेब फाल्के से लेकर दिलीप कुमार, राजकपूर, गुरुदत्त, प्राण, बलराज साहनी, राजेश खन्ना, अमिताभ बच्चन, परेश रावल, अनिल कपूर, नसीरुद्दीन शाह, ओम पुरी, अमरीश पुरी, शाहरुख खान, आमिर खान सलमान खान, अनुपम खेर और इन जैसे अनेक अभिनेताओं ने—मुझे मालूम है कि इनमें कई महत्वपूर्ण नाम छूट गए हैं—ने अभिनय को अलग-अलग आयाम दिया है।

इसी तरह सुरैया, नरगिस, वैजयंती माला, मीना कुमारी, नूतन, वहीदा रहमान, पद्मिनी, हेमा मालिनी, रेखा, शबाना आजमी, स्मिता पाटिल, मीनाक्षी शेषाद्रि, माधुरी दीक्षित, और काजोल आदि अभिनेत्रियों में भी अभिनय की विविधता देखी जा रही है।

संगीत की बात करें तो उस्ताद झंडे खाँ, नौशाद, मदन मोहन, गुलाम हैदर, खैय्याम, शंकर जयकिशन, अनिल विश्वास, सचिन देव बर्मन, सलिल चौधरी,

Principal

Principal Mahila Mahavi  
Ummer Road, Nagpur.

SSM

ध्यान देने वाली बात यह है कि शास्त्रीय संगीत अभ्यास रियाज-साधना-तपस्या का क्षेत्र है। फिल्म-संगीत अथवा सुगम संगीत में शास्त्रीय संगीत के सुनिश्चित ढांचे को, स्वरों की रचना को, रागों की शुद्धता को इतना प्राधान्य नहीं दिया जाता। संगीत के इस विकास प्रवाह के परिणाम स्वरूप तथा आधुनिक जीवनशैली की गतिशीलता के कारण शास्त्रीय संगीत भी सुगमता की ओर अग्रसर होने लगा है।

इसमें संदेह नहीं कि आज फिल्मों में नब्बे प्रतिशत जिस प्रकार की सतही धुनें बनाई जा रही हैं, वे जनता की रूचि को निरंतर विकृत कर रही हैं। इसका उत्तरदायित्व आज के सामाजिक ढाँचे का ही है। व्यक्तिगत संपत्ति के सिद्धांत ने संगीतकारों को इतना अधिक व्यावसायिक बना दिया है कि वे रूचि परिष्करण की ओर ध्यान ही नहीं दे सकते। फिर भी कुछ संगीतकार ऐसे हैं, जो इस ओर सतर्क हैं और संघर्ष कर रहे हैं। आवश्यकता तो इस बात की है कि जिस प्रकार पाश्चात्य संगीत का उपयोग करके नवीन-नवीन स्वर-रचनाएँ निर्मित की जा रही हैं, उसी प्रकार शास्त्रीय रागों, वाद्यों व रसमूलक गायकों आदि का भी फिल्मी संगीत में अधिकाधिक उपयोग किया जाए, ताकि संगीत लोक रूचि को तृप्त करने के साथ-साथ इसका परिष्करण भी कर सके।

### संदर्भ सूची

1. निबंध संगीत - डॉ. मुकेश गर्ग
2. आधुनिक अन्तर्राष्ट्रीयकरण में भारतीय संगीत की भूमिका - नीलमबाला महेन्द्र
3. संगीत निबंधसागर - डॉ. लक्ष्मी नारायण गर्ग



Principal  
Sevaldal Mahila Mahavidyalaya,  
Umre Road, Nagpur.

## 8

### मराठी रंगभूमि की पौराणिक तथा ऐतिहासिक परंपरा

डॉ. शुभदा मांडवगडे

#### प्रस्तावना

कला ही जीवन है। कला का ज्ञान, मानव के सर्वांगीण विकास के लिए आवश्यक है, यह मनुष्य की मानसिक शक्तियों का विकास करके उसे पशुत्व के ऊपर उठता है। कोई भी कलाकृति चाहे वह चित्र हो या काव्य अभिनय, संगीत, नृत्य आदि, वह अपने सौंदर्य से हमारे अतर्जन पर ऐसा प्रभाव डालता है कि उससे शारीरिक प्रतिक्रियाएँ उत्पन्न होती हैं। ललित कलाओं में संगीत को सर्वश्रेष्ठ माना गया है। भारतीय समाज में संसार को रंगमंच, जीवन को नाट्य, मनुष्य या जीव को अभिनेता और ईश्वर को सुत्रधार कहा जाता है। यह माना जाता है कि ईश्वर ही वह सुत्रधार है, जिसके हाथ में सारे सुत्र होते हैं और वह मनुष्य या जीव रूपी अभिनेता को संसार के रंगमंच पर जीवन के नाट्य में संघालित करता है। सुत्रधार की यह नियामक भूमिका हमारी परंपरा में स्पष्ट देखने को मिलती है।

#### मराठी संस्कृति

प्राचीन भारतीय संस्कृति, सभ्यता और ऐतिहासिक घटनाओं के प्रभावों का मिश्रण है। मराठी भाषा और मराठी साहित्य का विकास, मराठी संस्कृति के पड़भान की अभिव्यक्ति है स्थानीय व क्षेत्रीय देवताओं के प्रति भक्ति, ज्ञानेश्वर व तुकाराम जैसे संत कवियों की शिक्षाओं और छत्रपति शिवाजी व अन्य राजनीतिक तथा सामाजिक नेताओं के प्रति आदरभाव महाराष्ट्र की संस्कृति की

पहचान है। महाराष्ट्र के सांस्कृतिक जीवन में त्योहारों का भी महत्त्व कम नहीं है इनके द्वारा लोगों का स्थानीय तथा क्षेत्रीय मेल-मिलाप होता है और ये सामाजिक एकता को बढ़ावा देते हैं मराठी साहित्य की ही तरह महाराष्ट्र में संगीत की भी प्राचीन परम्परा है। लगभग 14वीं शताब्दी में इसका मेल भारतीय संगीत से हुआ।

### मराठी संगीत रंगभूमि का मूल स्वरूप

मराठी रंगभूमि का आरंभ काल तथा उसकी लोकप्रियता के प्रचलन के बारे में विद्वानों में कई मतभेद हैं। सांगली, एलिचपूर, गोवा आदि गाँवों को मराठी रंगमंच तथा मराठी नाटक की उत्पत्ति का श्रेय दिया जाता है। किसी भी रंगभूमि का जन्म एक दिन में संभव नहीं है। मराठी रंगभूमि के संदर्भ में विष्णुदास भावे के प्रयत्नों के पहले दो प्रवाहों को ध्यान में रखना होगा पहला प्रवाह लोकरंगभूमि का तथा दूसरा तन्जावार नाटकों का कठपुतली का खेल, सौगीभजन खेल, ललित भारुड, दशावतार, नमन, तमाशा, गोधूल, पोवाडा, वासुदेव जैसे अनेक कलाओं की बराबरी से रंगभूमि की गंगोजी माने गए कीर्तन इत्यादी कला महाराष्ट्र में दीर्घकाल तक थी तथा अभी भी है।

### मराठी रंगभूमि का इतिहास

मराठी रंगभूमि की परंपरा दीर्घ कालिन है। यह परंपरा अब 150 वर्ष पुरानी है। अनेक प्रसिद्ध नाटककारों ने अपने रंगकर्तव्यों द्वारा मराठी रंगभूमि का विस्तार तथा विकास किया, उनमें बलवंत पांडुरंग अर्थात् अण्णासाहेब किर्लोस्कर, गोविंद बलवंत देवल, कृष्णाजी खाडीलकर, राम गणेश गडकरी, केशव अत्रे जैसे नाटककार थे इन कलाकारों ने 1950 तक मराठी रंगभूमि में अपना विशेष योगदान दिया मराठी रंगभूमि का पहला अर्धशतक (1843 से 1900) प्रमुख रूप से पौराणिक तथा ऐतिहासिक विषयों के नाटकों में विहित था। इसके पश्चात के काल में उन्होंने सामाजिक विषयों पर समाज वास्तविकता की ओर अपनी नजर डाली और प्रथम काल के चालीस पचास वर्षों में कई महत्त्वपूर्ण कार्य संगीत नाटकों के लिए किये गये।

### नाट्य कला की उत्पत्ति और विकास

आज प्रायः नाटक के प्रदर्शन को नाटक कहा जाता है नाट्य या नाटक शब्द मंचन के लिए कठिन हो गये हैं। भरत अपने 'नाट्यशास्त्र' में नाटक को प्रयोग कहाता है नाट्यशास्त्र में 'नाट्य' अभिनय का एक अंग मात्र है। नाटकों में रस का महत्त्व रस को शास्त्रकार बहुत महत्त्व देता है। भरत का कथन है कि रस

के बिना किसी भी नाटयान की अनुभूति नहीं होती। संगीत के द्वारा संगीत नाट्य में गीत, कलाओं, काव्य इत्यादी को व्यक्त करने का एक माध्यम ही नहीं अपितु मनोरंजन का भी स्त्रोत है। सामवेद से संगीत की उत्पत्ति बताई गई है। उसी प्रकार भारतीय शास्त्रीय संगीत का उद्गम भी वेदों के द्वारा हुआ है। शास्त्रीय संगीत आध्यात्मिकता से प्रभावित रहा है। इसलिए संगीत की महत्ता को भारतीय आचार्यों तथा विद्वानों ने पंचम वेद या गन्धर्व वेद की संज्ञा दी है। मराठी नाट्य संगीत का स्वरूप को विस्तृत रूप प्रदान करने से पहले भारतीय शास्त्रीय संगीत का उल्लेख करना महत्त्वपूर्ण है।

### मराठी नाट्य संगीत का इतिहास

महाराष्ट्र के इतिहास में एक अध्याय ऐसा लिखा गया जिसके माध्यम से लोककलाओं और यक्षगान के मिलन से एक नवीन रसायन का निर्माण हुआ जो आगे चलकर मराठी नाट्य संगीत एक अविस्मरणीय विषय बना और इतिहास के पन्नों में स्वर्ण अक्षरों से सुशोभित हुआ इतिहास के पन्नों में मराठी नाट्य संगीत मराठी रंगभूमि का आरंभ काल तथा उसकी लोकप्रियता के प्रचलन के बारे में विद्वानों में कई मतभेद हैं। मराठी रंगभूमि की शुरुवात यह एक सामाजिक और सांप्रदायिक परिवर्तन की शुरुआत कहा जा सकता है। मराठी रंगमंच और नाटक को इतिहास के पन्नों पर जोड़ने का कार्य महान संगीतकार, नाटककारों ने किया है।

मराठी नाट्य संगीत के नाटककार, संगीतकार एवं अभिनेताओं का कालखंड—

1. किर्लोस्कर — देवल काल (1880—1910)
2. खाडिलकर — बालगंधर्व काल (1890—1930)
3. अत्रे — रांगणेकर काल (1930 — 1960)
4. गोखले — कानेटकर काल (1950 — 1980)

जैसे दिग्गज संगीत रचनाकार (संगीतकार) की प्राप्ति से मराठी नाट्य संगीत समृद्ध हुआ इसमें से प्रत्येक संगीत रचनाकार स्वतः उत्तम गायक थे संपूर्ण हिंदुस्तान में भ्रमणकर संगीत का ज्ञान तथा संस्कारों को आगे बढ़ाया इन्हीं के बीच अभिज्ञात शास्त्रीय संगीत गायक बड़े कलाकार भी बैठक में नाट्य संगीत करने लगे।

संगीत नाटक मराठी रंगमंच की विश्व रंगमंच को एक महत्त्वपूर्ण देन है। काव्यानंद और स्वराज का संगम अर्थात् 'नाट्यसंगीत' मराठी नाट्यसंगीत की ऐतिहासिक परंपरा है। इसका प्रारंभ 1843 से हुआ।

नाटक, जिसे भरतमुनि ने पंचम वेद की संज्ञा से अभिहित किया था। महाराष्ट्र की सांस्कृतिक परम्परा का अभिन्न अंग है। संवाद, अभिनय, गीत और रस - इन चार घटकों से बना नाटक मानवी मन का सांस्कृतिक प्रतीक है। किसी भी संस्कृति की विविधता नाट्य आविष्कार के वैविध्य में प्रतिबिम्बित होती है।

1880 में अण्णासाहेब किर्लोस्कर लिखित 'संगीत शाकुंतल' का मंचन हुआ संगीत नाटक किरान, ऑपेरा, शास्त्रीय संगीत, महकिल, तमाशा, कर्नाटक संगीत से एकदम अलग नाट्यविष्कार था। 1990 से मराठी रंगमंच ने स्वर्णकाल देखा। मराठी संगीत नाटक, मराठी रंगभूमि ने वैश्विक रंगभूमि को दी हुई देन है। 1980 से 1930 तक का काल संगीत नाटक का और वैकल्पिक रूप नाट्य संगीत का-सभी अर्थों से स्वर्ण काल था

ऐसे अनेक शास्त्रीय गायकों के नाम आये। नाट्य संगीत को सभी स्तरों पर लोकप्रिय करने का काम संगीतकारों ने किया।

### मराठी नेताओं का संक्षिप्त जीवन परिचय

विष्णूदास अमृतराव भावे (1819 से 1901) ये मराठी नाटककार थे कुछ प्रथम नाटककारों के द्वारा रंगभूमि की नींव रखने और रंगभूमि को सवारने का कार्य किया गया और उनके योगदान से मराठी रंगभूमि और मराठी नाट्य संगीत आज तक जीवित है और आगे भी रहेगा। इन प्रमुख नाटककारों के द्वारा मराठी संगीत नाटक और रंगभूमि को नाटक मंडली रूप से निर्माण कर एक आदर्श रूप समाज के सामने रखा तथा महाराष्ट्र राज्य की प्रतिष्ठा बढ़ाई और दुनिया में एक मिसाल कायम की। रंगभूमि माध्यम का विचार करके उसकी जरूरत को समझ और तब भी अपने तत्वों पर खरा उतरकर महत्त्वपूर्ण नाट्य कार्य किया। उसकी प्रतिभा नाटककार, रंगकर्मी, इसी पद्धति की रही है। परंतु उनके समकालीन या पश्चात के काल में नाट्य लेखन का चित्र ऐसा दिखता है कि साहित्य क्षेत्र के पत्रकारिता क्षेत्र के लोगों ने भी नाट्य लेखन किए हैं। उनमें से भी लोगों के प्रयत्न महत्त्वपूर्ण संस्कृत तथा अंग्रेजी नाटकों के माध्यांतर ना करके उन्होंने स्वयं का नाट्य लेखन किया। इस प्रकार का महत्त्वपूर्ण प्रयत्न मराठी रंगभूमि के संदर्भ में पहली बार ही हुआ था जिसके कारण उनके नाटकों की ओर दर्शकों का ध्यान केन्द्रित हुआ। कोल्हटकर ने जिस प्रकार नाट्य लेखन तथा रचना तंत्र में कुछ बदलाव लाकर वैसे ही उन्होंने संगीत नाटकों को ही नहीं पूरी भारतीय नाटक परंपरा को हिला के रख दिया।

### मराठी रंगभूमि की पौराणिक तथा ऐतिहासिक परंपरा

कुछ प्रमुख नाटककारों के द्वारा रंगभूमि की नींव रखने और रंगभूमि को सवारने का कार्य किया गया और उनके योगदान से मराठी रंगभूमि और मराठी नाट्य संगीत आज तक जीवित है और आगे भी रहेगा इन प्रमुख नाटककारों के द्वारा मराठी संगीत नाटक और रंगभूमि को नाटक मंडली रूप में निर्माण कर एक आदर्श रूप समाज के सामने रखा तथा महाराष्ट्र राज्य की प्रतिष्ठा बढ़ाई और दुनिया में एक मिसाल कायम की। प्रसिद्ध मराठी नाटककार, लेखक, निबंधकार, फिल्म, व टीवी, पटकथा, लेखक, राजनैतिक पत्रकार और सामाजिक कार्यकर्ता के रूप में आज के इस आधुनिक काल में अपने लेखन शैली से संगीत नाटक को जीवित रखा है।

महाराष्ट्र की मराठी रंगभूमि का जहाँ नाम आता है तो नारायण श्रीवादा राजहंस 'बाल गन्धर्व' संगीत रंगमंच पर अनेक कलाकारों ने अपने गान कौशल्य तथा अभिनय की प्रस्तुती दी है। उनके कलात्मक गुणों से रंगभूमि संपन्न हुई इसमें कोई शक नहीं परंतु 1920 तक के रंगभूमि पर जिन गायक कलाकारों का प्रभाव है उनमें सबसे पहले बाल गन्धर्व का नाम आता है बालगन्धर्व ने 50 वर्षों तक रंगभूमि पर काम किया परन्तु उनका प्रमुख कालखंड 1905 से 1933 तक माना जाता है। बालगन्धर्व ने मराठी रंगभूमि का विकास तथा रंगभूमि के लिए उनके किए हुए कार्यों को देखकर ऐसा भी लगता है, कि वह केवल रंगकर्मी न होकर रंग योगी भी थे बालगन्धर्व जी के पश्चात मराठी नाट्य रंगभूमि के गुणी नट और उत्तर गायक, अपने क्षेत्र के कलाकारों को प्रोत्साहित कर साथ में लेकर आगे बढ़ने का कार्य केशवराव भोंसले जी ने किया।

इसके पश्चात इस गायक, नाट्य अभिनेता, संगीतकार को श्रीकृष्ण कोल्हटकर ने मास्टर यह उपाधि दी थी, और तब से ये मास्टर दीनानाथ मंगेशकर, कहलाने लगे इस प्रकार अनेक नाटककारों तथा संगीतकारों का संगीत नाटकों के विकास में योगदान उल्लेखनीय है।

### उपसंहार

सन 1943 से 2000 तक के काल में नाटक रंगभूमि का शोधकार्य तथा महाराष्ट्र का नाट्य संगीत की ऐतिहासिक तथा पौराणिक परंपरा को नजर अंदाज नहीं किया जा सकता मराठी नाटक पहले दशक में जिस विपुलता से निर्माण हुए तथा लिखे गए उसकी तुलना में स्वतंत्रता के पश्चात अधिक संख्या में नाटकों का लेखन कार्य हुआ है। मुख्यतः यह लेखन कार्य एक प्रवाह या प्रवृत्ति में ही

प्रमाण में होते रहा है। इसी बात को ध्यान में रखकर विभिन्न नाटकों की श्रृंखला जैसे दलित नाटक, पथनाटक, ऐतिहासिक नाटक, सामाजिक नाटक, हास्य नाटक, कर्मचारी नाटक इत्यादि, नाटयलेखन, लेखन का कार्य हुआ 150 वर्ष पहले जब मराठी नाट्य रंगभूमि का आरंभ हुआ तब रंगभूमि का लोककला से तथा लोकरंगभूमि से गहरा तथा अटूट संबंध था।

प्रस्तुत काल में और एक घटना घटित हुई वह यह की मराठी तथा अन्य, प्रादेशिक भाषाओं के नाटक विश्व स्तर पर परिचित हुए। अनेक मराठी नाटकों के भाषांतर तथा रूपान्तर अन्य भारतीय भाषाओं में हुए। यह नाट्य रूपांतरण रंगभूमि के विकास में उपयुक्त साबित होने लगे।

इसी प्रायोगिक तथा व्यावसायिक नाटकों का और नाट्य लेखन का परिणाम हमें आज चित्रपट, दूरदर्शन, इंटरनेट इत्यादि के माध्यमों से देखने को मिलता है परिणामस्वरूप इस आधुनिकता से हमें उच्चकोटि के नाटककार तथा अभिनेता मिले हैं जिसका उदाहरण बालगंधर्व, कटयार, कालजात, घुसली, नटसम्राट, नटरंग, इत्यादि विषयों पर सिनेमा के माध्यम से प्रस्तुत हो रहे हैं और जिसको दर्शकों द्वारा प्रोत्साहित किया जा रहा है।

मराठी संस्कृति महाराष्ट्र भारत देश का तीसरा सबसे बड़ा राज्य है। वह संतों, शिक्षाविदों और क्रांतिकारियों की भूमि मानी जाती है, जिसमें महादेव गोविंद रानडे, विनायक दामोदर सावरकर, सावित्रीबाई फूले, बालगंगाधर तिलक, आदि प्रसिद्ध हैं। वारकरी धार्मिक आन्दोलन के मराठी संतों का लम्बा इतिहास है, जिनमें ज्ञानेश्वर, नामदेव, एकनाथ और तुकाराम जैसे संत शामिल हुए हैं। जो महाराष्ट्र या मराठी संस्कृति की संस्कृति के आधार को एक बनाता है।

महाराष्ट्र अपने पुरोगामी संस्कृति के लिए भी जाना जाता है। मराठी रंगभूमि और मराठी नाट्य संगीत आज तक जीवित है और आगे भी रहेगा इस मराठी संगीत नाटक और रंगभूमि की नाटकमंडली का निर्माण कर एक आदर्श रूप समाज के सामने रखा तथा महाराष्ट्र राज्य की प्रतिष्ठा बढ़ाई और दुनिया में एक मिसाल कायम की।

### संदर्भ सूची

1. मराठी नाट्य संगीत का इतिहास — डॉ. वि. बी. देशपांडे "मराठी नाट्य संगीत का कालखंड"
2. मराठी नाट्य संगीत — बाळ सामंत
3. भारतीय संगीत का इतिहास — भगवत शरण शर्मा
4. मराठी संस्कृति तथा मराठी रंगभूमि — डॉ. वि. बी. देशपांडे



Principal  
Sevalal Mahila Mahavidyalaya  
Umre Road, Nagpur 21

Shm



17-18



UGC (CPE) and DST Sponsored  
 International Conference on  
**Recent Trends in  
 Science and Technology**  
 22-23 March, 2018



# PROCEEDINGS



**Organized by**

**Vidya Bharati Shaikshanik Mandal Amravati's**

Principal

Sevadar Mahila Mahavidyalaya  
Dusseer Road, Nagpur-9.

**S.S.S.K.R. Innani Mahavidyalaya**

Karanja (Lad), Dist. Washim (M.S.)

Reaccredited at level 'A' grade by NAAC (CGPA 3.24)

& Conferred CPE status by UGC, New Delhi.

*In collaboration with*

**Department of Mathematics & IQAC**

Sant Gadge Baba Amravati University, Amravati

**Vidya Bharati Mahavidyalaya, Amravati**

**&**

**Shri Dr.R.G.Rathod Science College, Murtizapur**

Venue: S.S.S.K.R. Innani Mahavidyalaya Campus, Karanja (Lad)

Email: ictst2018@gmail.com Website: www.ssskrmv.org.in Contact No.: 07256-222148/222171



LS124	Kothale, K.V. & Deshmukh, M.K.	Antimicrobial And Preliminary Phytochemical Investigation Of <i>Crotalaria Retusa</i> L.	536
LS125	Solanke, A.K.	Toxicity Of Heavy Metal Mercury On Some Biochemical Parameters In Fresh Water Fish, Catla Catla	539
LS126	Joshi, P. & Mishra, R.	An Effect Of Irradiation On Water Bugs- Qualitative Study	542
LS127	Wanjare, P.D. & Anasane, P.Y.	Antimicrobial Activity And Phytochemical Screening Of <i>Ailanthus Excelsa</i> Bract	545
LS128	Shirsat, R., Jasutkar, J. & Aher, S.	Chemoprofiling And Antioxidant Potential Of A Lesser Known <i>Leucas stricta</i>	548
LS129	Wanjari, A.J.	Fish Diversity Of Saikheda Reservoir, Maharashtra State, India	552
LS130	Wankhade, M.R. & Kothale, K.V.	Preliminary Phytochemical Analysis Of <i>Cordia Sebestena</i> L.	555
LS131	Adc, P.P.	Feeding Efficiency Of Male And Female <i>Poecilia Reticulata</i> In Different Water Sample	558
LS132	Khadse, P.M. & Deshmukh, V.R.	Qualitative Phytochemical Analysis And Pharmacological Studies Of <i>Acacia Arabica</i> (Lamk.) Willd	566
LS133	Rewaskar, N.	Health, Food And Nutrition Of Adolescents	569
LS134	Sangole A.A. & Sangole M.T.	Monitoring Airborne Fungal Mycoflora In College Laboratory	571
LS135	Gupta, S.S.	Physico-Chemical Status Of Water Quality From Water Source At Drug Dam, Taluka Kalamb, District Yavatmal, Maharashtra	574
LS136	Wanjari, H.V. & Somatkar J.R.	Diversity Of Avifauna In And Around Ekburji Reservoir, Washim M.S. India	577
LS137	Kadam V. & Deosihale S.	Screening Of Antidiabetic Ethnomedicinal Plants From Painganga Forest Range Umardhed, District- Yavatmal, Maharashtra	586
LS138	Kalode, S. & Dalal, L.	Study Of Fungal Air Abundance, Diversity In Indoor Environment Of College Library	589
LS139	Tapase, B.S. & Nimbarte, S.R.	Chemi-Microbiological Characterisation Of Potable Water Of Nagpur City, Dist. Nagpur, Maharashtra.	593
LS140	Tirpude J.	Infrastructure Of The Amnion And Scanning Electron Microscope Appearances In The Megachiropteran Bat, <i>Rousettus leschenaulti</i> (Desmarest) At Term Pregnancy	596
LS141	Yeole, S.M.	Diversity Of Avifauna In And Around Parbhani Town, Maharashtra, India	601
LS142	Patil, P.S. & Toyade, S.N.	Lecanid Rotifers (Rotifera: Monogononta: Lecanidae) From Ditches Of Washim (MS)	605

■ Ray Induced Variation in Seed Characteristics

■ UVA RAY INDUCED VARIATION IN SEED CHARACTERISTICS OF *CICER ARIENTINUM* L. (VAR- VJAY)

LS143	Kalbende, S.P.	Study Of Fungal Air Abundance, Diversity In Indoor Environment Of College Library	610
LS144	Wanjari, A.J. & Wanjari H.V.	Impact Of Climate Change On Avian Diversity Of Saikheda Reservoir, India	615
LS145	Wankhade, D.M. & Rothe, S.P.	Micropropagation Studies On <i>Schleichera Oleosa</i> (Lour). Belonging To Family Sapindaceae From Vidarbha Region	
LS146	Tekade, R.P.	The Prevalence Of Glucose 6 Phosphate Dehydrogenase Deficiency Among The Endogamous Population Of Vidarbha.	
LS147	Mirge, Y.S. & Tidke, J.A.	Assessment Of Morphotaxonomic Relationship Among Some Species Of <i>Ipomoea</i> Linn.	625



Tools



Mobile View



Share



PDF to DOC



Edit on PC



Principal  
Sevadai Mahila Mahavidyalaya  
Umrer Road, Nagpur.



**INFRASTRUCTURE OF THE AMNION AND SCANNING ELECTRON MICROSCOPE APPEARANCES IN THE MEGACHIROPTERON BAT, *ROUSETTUS LESCHENAUTI* (DESMEREST) AT TERM PREGNANCY.**

**Tirpude, J. \***

Department of Zoology, SevalalMahilaMahavidhyalya, Nagpur.  
jayashreetirpude0@gmail.com

**ABSTRACT**

*In Roussettusleschenaulti at term pregnancy, on SEM at low magnification the single layered amniotic surface appeared to be thrown into folds and the polygonal cells gave a mosaic or "cobblestone" appearance. The spider cells were mostly single. The intercellular junctions appeared to be widely separated. Similarly bleb formation on the surface of the cells has been distinctly seen. At high magnification in Roussettus, at certain places, at the bottom of the prominent recesses or troughs between cells, circular openings or ostia were present and individual cells protrude with deep intercellular ditches. The microvilli (MV) have little adherent material and more electron dense material (M) and appear to be irregular, sometimes branched or pleomorphic. Some of them were shorter, plumper with bizarre shapes and with blebs and the blebbing appeared more frequently. Inter-cellular border (ICC) is tortuous and dilated. The podocyte-like structures seen form the basal side of the cell. Horny cells with thickened membrane and dense cytoplasmic matrix are intermingled with keratohyalin granules. A portion of amniotic epithelial cells and mesenchyme in Roussettusleschenaulti at term shows a continuous layer of dilated micropinocytotic vesicles (PV) at the bases of microvilli and near the basal lamina. The fibrocytes in cellular layer of connective tissue shows abundant pinocytotic vacuoles.*

*Keywords: Infrastructure, amnion, scanning electron microscopy.*

**INTRODUCTION**

Bats had mastered flight eons before man's own lineage began. Their unique volitional mode was obviously advantageous, for adaptive radiation within the group has been little short but extraordinary. Today Chiroptera represent the second largest order of mammals in number of species and the largest in overall abundance, excluding man and possibly rodents, they are also the most widely distributed land based mammals. The order Chiroptera includes over 180 extant species incorporated in 17 families (Simmons, 2005)<sup>1</sup>. Bats are relatively inconspicuous only because they are active by night, hidden by day and wary of human contact. Possibly these are the reasons they are not studied as vigorously as other mammals before the turn of the century. Since then, however, because of the striking and sometimes bizarre specializations of bats a growing awareness of their importance to the economy and health problems of man have stimulated an increased scholarly interest in the group so that today our knowledge of Chiroptera has grown to sizeable proportions.

The amniotic sac is formed by the eleventh to twelfth day after conception and by the eleventh week of gestation it contains about 50ml of colorless fluid in human but the process of amniogenesis studied in all mammalian groups is

common either by fold formation or by cavitation, sometimes most mammals use both the methods, Iry being by cavitation. In advance stages of pregnancy significant exchange of water and solutes between the fetus and amniotic cavity are postulated to include fetal urination, reabsorption through the fetal swallowing, fetal respiration movements, and exchange across the chorionic plate. Usually the dynamic exchange between amniotic cavity, the fetus, the mother keeps the volume of amniotic fluid in physiological balance (Bautzmann and Schroeder, 1955)<sup>2</sup>, (Hebertson et al., 1986)<sup>3</sup>. The amniotic epithelium lines the periphery of the amniotic cavity around the fetus. The amniotic epithelium is one of several possible permeability barriers that could influence fluid exchange between the mother and fetus and ultimate composition of amniotic fluid. Amniotic fluid has been referred to as a "private aquarium" for embryos of air-living forms in which recapitulation of the water existence of ancestral forms occurs. To this fluid has been attributed the protection of the embryo, not only against mechanical injury, but also from adhesion and consequent malformations (Wirtschaster and Williams, 1957)<sup>4</sup>. The amniotic epitheliums have secretory potentialities and to this attributed in part to "fetal maturation" or transudate or dialysate or each element exchanges at its own rate and is in dynamic equilibrium with the maternal system

(Hutchinson et al., 1955)<sup>3</sup>, (Wirtschafter and Williams, 1957)<sup>4</sup>. The amniotic fluid could be regarded as an ultra filtrate of maternal plasma (Makepeace et al., 1931)<sup>6</sup> and the contents corresponding with those of interstitial fluid elsewhere (Gillibrand, 1969)<sup>7</sup>.

The primary purposes of this study are to review the architectural features of the amnion, through the application of scanning electron microscopy.

## MATERIAL AND METHODS

*Rousettus leschenaulti* has a widespread distribution extending from Sri Lanka and Pakistan to Myanmar, Vietnam, Southern China, Java and Bali. In the Indian subcontinent, almost all states show localities of *Rousettus leschenaulti*. In Maharashtra *Rousettus leschenaulti* are distributed in Ghatmatha; Chikalda; Elephanta; Jogeshwari; Kanheri; Khandala; Alibag; Mahabaleshwar; Aurangabad; Ratnagiri (Brosset, 1962)<sup>8</sup>; Marathwada, Satara, Pune, Mansar, Kandri, Ellora (Gopalakrishna and Madhavan, 1970)<sup>9</sup>. This old world Indian fruit bat *Rousettus leschenaulti* (Desmerest) is selected for the present study because of its easy availability in the vicinity of Nagpur City.

### Collection of Animal

The specimens of *R. leschenaulti* were collected from Mansar / Kandri mines near Nagpur, either during March or in early July.

### Collection of amnion

After anaesthetizing the animals with ether, abdomen wall was cut open by a mid-incision. The gravid uteri of full term pregnant bats were slit-open without damaging the amnion.

### Scanning electron microscopy

Amnion from the species were cut into small pieces, were fixed for one to two hours in cold 3% gluteraldehyde in 0.1M phosphate or cacodylate HCl buffer (pH 7.2-7.4) and then rinsed overnight in the same buffer, then was dehydrated in acetone. After drying tissue was mounted on stubs, lightly coated with gold and was examined on Phillips 501 scanning electron microscope.

## RESULTS

### Scanning microscopic studies

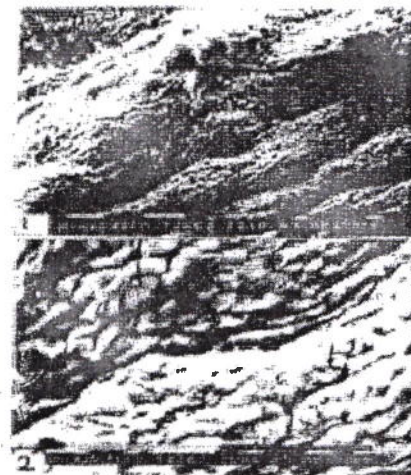
On SEM at low magnification the single layered amniotic surface appeared to be thrown into folds in *Rousettus leschenaulti* near term and the polygonal cells gave a mosaic or "cobblestone" appearance was due to the presence of deep recesses or troughs between adjacent cells. In the

intercellular gaps "openings" or "ostia" were common (figs. 1, 2, 3, 4).

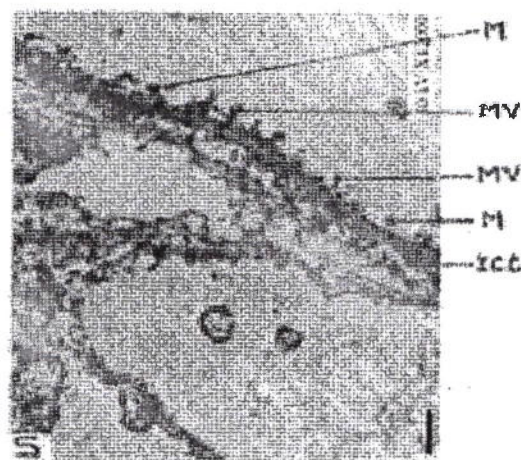
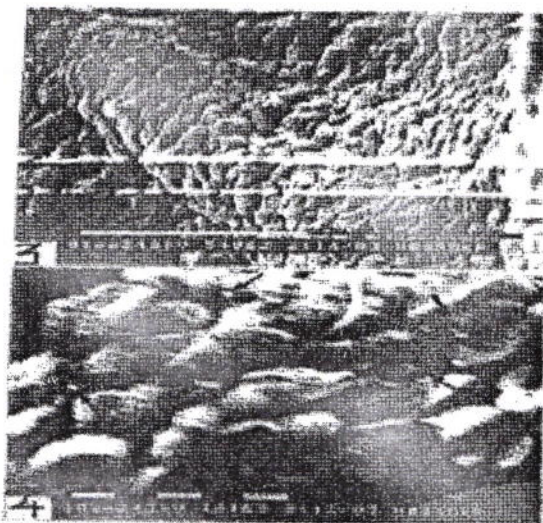
The spider cells were mostly single. The intercellular junctions appeared to be widely separated. Similarly bleb formation on the surface of the cells has been noted (Fig. 1, 2, 3). In *Rousettus*, at certain places at the bottom of the prominent recesses or troughs between cells, circular openings or ostia were present (Fig. 4). Individual cells protrude with deep intercellular ditches.

The undulating cytoplasmic membrane shows presence of microvilli (MV) of variable length in *Rousettus* (Fig. 5). The microvilli (MV) have little adherent material and more electron dense material (M) and appear to be irregular, sometimes branched or pleomorphic. Some of them were shorter, plumper with bizarre shapes and with blebs and the blebbing appeared more frequently. Inter-cellular border (ICC) is tortuous and dilated (Fig. 5). These channels are complicated and run between the lateral sides of the cells. Desmosomes form closer areas of approximation. The podocyte-like structures form the basal side of the cell. Horny cells with thickened membrane and dense cytoplasmic matrix are intermingled with keratohyalin granules (Fig. 5).

A portion of amniotic epithelial cells and mesenchyme in *Rousettus leschenaulti* at term shows a continuous layer of dilated micropinocytotic vesicles (PV) at the bases of microvilli and near the basal lamina (Fig. 6). Fibrocytes in cellular layer of connective tissue shows abundant pinocytotic vacuoles (arrow), also contain moderately well-developed endoplasmic reticulum and a fairly large number of mitochondria (Fig. 6).



*Se*  
Principal



\*M- Electron dense material, MV- Microvilli,  
 ICC- Intercellular Channels, PV-  
 Micropinocytotic vesicles

### DISCUSSION

In the present study, our scanning electron microscopic observations in *Rousettus leschenaulti* are in accord with the various mammalian species such as human (Bergstrom, 1971)<sup>12</sup>, (Ludwig et al., 1974)<sup>13</sup>, (Pollard et al., 1976, 1979)<sup>14</sup>, (Van Herendael, 1978)<sup>13</sup>, (King, 1980)<sup>16</sup>, (Tyden et al., 1981)<sup>17</sup>; mouse (Scott et al., 1982)<sup>18</sup>; cat (Tiedemann, 1979)<sup>19</sup>; ovine (Tiedemann, 1982)<sup>20</sup>; (Shandley et al., 1997)<sup>21</sup>; rat (Backeland et al., 1977)<sup>22</sup> and pig (Tiedemann, 1979)<sup>23</sup>. All the previous workers have described a basic pattern of a single layer of amniotic epithelium with apical microvillous surface either thrown into folds as noted in *Rousettus*. (Backeland et al., 1977)<sup>22</sup> in rat and (Shandley et al., 1997)<sup>21</sup> in ovine have described an increase in the number of microvilli with the advancement of gestation, however, in *Rousettus* microvilli were abundant but many of the cells were denuded only leaving a basement membrane. (Scott et al., 1982)<sup>24</sup> described loss of microvilli but appearance of microridges or microplicae at full term pregnancy in mouse but in our samples both the species failed to show such structures. Such structures are important for increasing the absorptive surface or area. Numerous microvilli at the sides of the cell protrude into these channels, increasing the contact area between the cells and the contacts of the intercellular channels. Apart from microvilli the apical surface of the amniotic cells has many

electron-dense material surrounded by a membrane, so called blebs suggesting apocrine secretion. Similarly in the single layer of amniotic epithelium there is prominent recess or trough in between the adjacent cells in *Rousettus leschenaulti* as described in human (Sonek et al., 1991)<sup>25</sup>. The occurrence of ostia in the intercellular gap reflects the continuity between amniotic fluid and intercellular canals. Some bleb-like extracellular extrusions were distributed on the intercellular ditches correlating to its secretory function. To these extracellular extrusions are the counter parts presence of surface blebs on the ostia in *Rousettus*. A well defined system of cell shedding is observed in scanning studies as observed by surface only with basement membranes indicating its primordial role in preserving the integrity of the amniotic cavity and possibly, an analogy to the kidney, may very well have an important filtering role (Ludwig et al., 1974)<sup>13</sup>; (Pollard et al. 1976)<sup>26</sup>; (Van Herendael et al., 1978)<sup>15</sup>. Similar to this the attenuated and relatively inert amniotic epithelium sloughs off completely around the 54<sup>th</sup> day leaving fibrous connective tissue only in Cat (Tiedemann, 1979)<sup>19</sup>. The shedded cells become the 'plaques' as described in white-tailed deer and human (Sinha et al., 1970)<sup>27</sup>; (Sinha, 1971)<sup>28</sup> but such plaques have not been observed adhering to amniotic epithelium in *Rousettus* due to their fall in the amniotic fluid.

### CONCLUSION

The amnion serves as a covering epithelium, the role in rapid turnover of amniotic fluid, as a permeability barrier that could influence fluid exchange between the mother and the foetus. The ultimate composition of the amniotic fluid and its

functions is to protect the developing embryo against the mechanical injuries, adhesions and consequent malformations. It is concluded from such scanning electron microscopy studies that in term the amniotic epithelium functions as a characteristic typical transport epithelia. It can also

be interpreted that they have basic structure as any other mammalian species including human. The anatomical structure of the amnion is complex, complicated and physiologically capable of taking an active part in some of the amniotic fluid exchange mechanism.

## REFERENCES

1. Simmons NB (2005) Order Chiroptera, In : Wilson DE, DM Reeder (Eds) **Mammal species of the world**. A Taxonomic and Geographic Reference, third edition. The Johns Hopkins. Univ. Press, Baltimore, MD, pp. 312-529.
2. Bautzmann H, Schroder R (1955) Comparative studies of the structure and function of amnions; the amnion of mammals with special reference to the sheep. *Z Zellforsch Mikrosk Anat* 43(1) : 48-63.
3. Hebertson RM, Hammoud ME, Bryson MJ (1986) Amniotic epithelial ultrastructure in normal polyhydramnic and oligohydramnic pregnancies. *Obste and Gyneec*. 68 : 75-79.
4. Wirtschafter ZT, Williams DW (1957) Dynamics of the amniotic fluid as measured by changes in protein patterns. *Am J Obstet&Gynec*. 74(2) : 309-313.
5. Hutchinson DL, Hunter CB, Nelson ED, Plentl AA (1955) *SurgGynec& Obstet*. 100 : 391.
6. Makepeace AW, Fremont-Smith F, Dailey ME, Carroll MP (1931) *SurgGynec Obstet*. 53 : 635.
7. Gillibrand PN (1969) Changes in amniotic fluid volume with advancing pregnancy. *J ObstetGynec Brit Cwlth*. 76 : 527-529.
8. Brosset A (1962) The bats of central and western Indian Part. *IJ Bom Nat Hist Soc*. 59 : 1-57.
9. Gopalakrishna A and Madhavan A (1970) Sex ratio in some Indian Bats. *J Bom Nat Hist* 67 : 171-175.
10. Gopalakrishna A, Choudhary PN (1977) Breeding habits and associated phenomena in some Indian bat *Rousettus leschenaulti* (Desmerest) Megachiroptera. *J Bombay Nat Hist Soc*. 74(1) : 1-16.
11. Gopalakrishna A and Karim KB (1979): Fetal membranes and placentation in Chiroptera. *J ReprodFert* 56:417-429.
12. Bergstrom S (1971) Surface ultrastructure of human amnion and chorion in early pregnancy. *ObstetGynecol* 38 (4) : 513.
13. Ludwig HJ, Metzger IL, Korte H, Wolf H (1974): The internal surface of amniotic epithelium. A scanning electron microscopic study (Author's transl). *Arch Gynakol*. 217(2): 141-54.
14. Pollard SM (1976) Scanning electron microscope appearances of normal human amnion and umbilical cord. *British Journal of Obstetrics and Gynaecology*. 83: 470-477.
15. Van Herendael J, Oberti C, Brosens I (1978) Microanatomy of the human amniotic membranes. A light microscopic, transmission and scanning electron microscopic study. *Am J ObstetGynecol* 131(8): 872-880.
16. King BF (1980) Developmental changes in fine structure of rhesus monkey amnion. *Am J Anat*. 157:285-307.
17. Tyden O, Bergstrom S, Nilsson BA (1981) Surface ultrastructure of amniotic fluid cells and fetal tissues of Rhesus monkey. *Acta ObstetGynecol Scand*. 60(3) : 277-286.
18. Scott JN, Ream LJ, Pendergrass PB (1982) Development changes in mouse amnion: a SEM Study. *J Submicrosc Cytol*. 14(4) : 607-12.
19. Tiedemann K (1979) The allantoic and amniotic epithelia of the pig : SEM and TEM studies. *AnatEmbryol (Berl)*. 156(1): 53-72.
20. Tiedemann K (1982) The bovine allantoic and amniotic epithelia. SEM and TEM studies. *AnatEmbryol (Berl)* 163 : 403-416.
21. Shandley L, Alcorn D, Wintour EM (1997) Ovine amniotic and allantoic epithelia across gestation. *Anat Rec*. 248(4) : 542-53.
22. Baeckeland E, Heinen E, Papart L (1977) Scanning and transmission electron microscope study of amniotic epithelium in the rat at the end of gestation. *Bull Assoc Anat. (Nancy)* 61(172) : 81-91.
23. Tiedemann K (1979) The amniotic, allantoic and yolk sac epithelia of the cat. SEM and TEM studies. *AnatEmbryol (Berl)*. 158(1) : 75-94.
24. Scott JN, Ream LJ, Pendergrass PB (1982) Development changes in mouse amnion : a SEM Study. *J Submicrosc Cytol*. 14(4) : 607-12.

25. Sonek J, Gabbe SG, Iams JD, Kniss DA (1991) Morphologic changes in the human amnion epithelium that accompany labor as seen with scanning and transmission electron microscopy. *Am J Obstet Gynecol.* **164**(5): 1174-1180.
26. Pollard SM (1976) Scanning electron microscope appearances of normal human amnion and umbilical cord. *British Journal of Obstetrics and Gynaecology.* **83**: 470-477.
27. Sinha AA, Seal US, Ericsson AW (1970) Ultrastructure of the amnion and amniotic plaques of the white-tailed deer. *Am J Anat.* **127** (4): 369-396.
28. Sinha AA (1971) Ultrastructure of human amnion and amniotic plaques of normal pregnancy. *Z ZelforschMikrosk Anat.* **122** (1): 1-14.

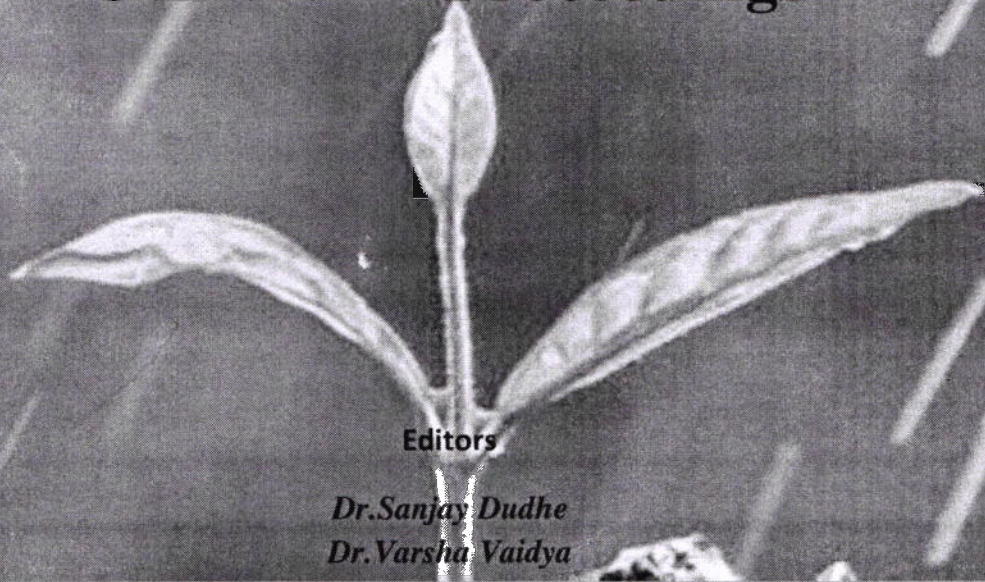


**Principal**  
**Sevadal Mahila Mahavidyalaya**  
Umrer Road, Nagpur-9.

Interdisciplinary National Conference  
On  
Environment and Social Development  
1<sup>st</sup> December, 2018



## Conference Proceedings



**Editors**

*Dr. Sanjay Dudhe*  
*Dr. Varsha Vaidya*

**Organised By:-**  
**Shri Sachhidanand Shikshan Sanstha, Nagpur**  
**Department of Humanities and Social Sciences**  
**Taywade College, Mahadula, Koradi, Nagpur**

**Principal**  
**Sevadal Mahila Mahavidyalaya**  
**Umrer Road, Nagpur.**



**Chief Patron**

**Dr. Babanrao Taywade**

President

Shri Sachhidanand Shikshan Sanstha,  
Nagpur

**Patron**

**Principal**

Dr. S.B. Taywade

Taywade College, Mahadula, Koradi

**Convener**

Dr. Sanjay S. Dudhe

Associate Professor and Head

Department of Sociology

**Organizing Secretary**

Dr. Varsha Vaidya

Associate Professor & Head, Dept of English Taywade College  
Mahadula, Koradi

**Organizing Committee**

Dr. D.S. Samarth

Dr. Sharad Daware

Dr. Rajendra Watane

**Members**

*Dr. V. Sheikh, Dr. S. Ghugal, Dr. M.R. Wagh, Dr. Gajanan Polanwar, Dr. A. Bhaik, Dr. Maya Shirkhedkar, Dr. V. Chauhan, Dr. Komal Thakare, Dr. C. Waghmare*

**ISBN: 978-81937717-6-1**

**-Publication-**

**Sankalp Publication**

**Vidyanagar Nagpur**

**M-8600848950**



**Principal**  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



## Contents

### 1. Environmental Degradation and Impact on Society.....1

Dr.Sanjay Dudhe  
HoD  
Dept. of Sociology  
Taywade College Koradi

### 2. Role of Literature and Natural Environment in Human Life: A Point of View -----4

Dr. Varsha V.Vaidya  
Head, Dept. of English  
Taywade College, Koradi.

Dr. Vishnu M. Chavan  
Dept. of English  
Taywade College, Koradi

### 3. Rehabilitation, Migration and Environmental Issues-----7

Mrs.Asawari Durge  
Dept.of Commerce  
Taywade Cokillege Koradi

### 4. Education for Environmental and Economical Development-----10

Sachin Krushnarao Burde\* and Dr. G.N.Nimbarte\*\*

Visvesvaraya National Institute of Technology, Nagpur

### 5. ENVIRONMENTAL IMPACT ON HEALTH-----15

Dr. Vaishali Malwar (Duke)  
Asst. Professor  
Purushottam Thote College Of  
Social Work, Narsala Road, Nagpur.

### 6. ENVIRONMENTAL DEGRADATION : HAVE WE REACHED THE POINT OF NO RETURN ?-----20

Dr. Poorva V. Bhonde  
Shardchandra Arts & Commerce  
College, Butibori

### 7. Major Issues, Causes and Solutions of Environmental Degradation In India-----25

Dr.Jayashri Barai  
Assistant Professor  
PurushottamThoteCollege  
of Social Work, Nagpur

*Sdm*



*[Signature]*  
Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



६३.परिस्थितिकी पर्यावरण : एक चिकित्सक अध्ययन.....२९३

प्रा.डॉ. विठ्ठल विनमिने

श्री. साईबाबा लोकप्रबोधन कला, महा. वडनेर

६५.ग्लोबलाईजेशन (वैश्वीकरण का प्रभाव).....३००

डॉ. शमापरवीन खान  
अंजुमन गर्ल्स डिग्री  
कॉलेज ऑफ आर्ट्स  
नागपूर

✓ ६६. संगीत निर्मिती आणि पर्यावरण ..... ३०३

डॉ. शुभदा मांडवगडे,  
संगीत विभाग प्रमुख  
सेवादल महिला महाविद्यालय, नागपूर.  
मोबाईल नं. 8371480093

Email- shubhadamandavgade@yahoo.com

  
  
Principal  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

## संगीत निर्मिती आणि पर्यावरण

डॉ. शुभदा मांडवगडे,  
संगीत विभाग प्रमुख

सेवादल महिला महाविद्यालय, नागपूर.  
मोबाईल नं. 9371490093

Email- shubhadamandavgade@yahoo.com

पर्यावरण म्हणजे नक्की काय? तर पर्यावरण निर्मित हा सुंदर निसर्ग आणि हया निसर्गाच्या अभ्यासाचे शास्त्र म्हणजे पर्यावरण शास्त्र, पर्यावरण विज्ञान! हया पर्यावरण शास्त्राची निवड फार प्राचीन काळातील होती का? कारण आपण कथा पुराणांमध्ये एवढच काय पण आजपासून 25-30 वर्षांपूर्वीच्या काळापर्यंत जी निसर्ग वर्णने, प्रवास वर्णने ऐकलित किंवा वाचलीत त्यामध्ये निसर्गाविषयी आणि पर्यावरणाविषयी निर्भळ आनंद व्यक्त केलेला आढळतो. परमेश्वर निर्मित हा निसर्ग सर्व निसर्गवासीयांना आनंद देण्यासाठी तर आहे आणि या निसर्गाचा पर्यावरणाचा सर्वांगिण अभ्यास करुन पर्यावरणाशी अनुसंधान साधण्यासाठी पर्यावरण शास्त्र जन्माला आले.

पर्यावरणाच्या संवर्धनात सध्या असंतुलन दिसत असल्याने सर्वच शास्त्रज्ञांमध्ये आणि पर्यावरण विषयक अभ्यासकांमध्ये अस्वस्थता आणि भविष्याविषयी चिंता दिसून येते आहे. आज अनेक विषयात संशोधन पुढे येत आहे. संगीत हे चिकित्सा म्हणून फार मोठे काम करीत आहे. आज पर्यावरणाचा आणि संगीताचा फार जवळचा संबंध आहे हे देखील सिध्द करता येते.

आपल्याला सदैव खुणावणा-या निसर्गाची बदलती रूपे न्याहाळल्यास आपल्याला काय दिसेल. आपल्या भोवतालचा परिसर हाच संगीताचा मूलस्रोत असल्याचे आपल्या लक्षात येईल. निसर्गातील प्रत्येक हालचालीत संगीत भरलेले आहे. सुर आणि लय ही संगीतातील प्राणभूत तत्वे निसर्गातही आपल्या प्रत्ययाला येतात. ढगांची हालचाल, पानांची सळसळ, फुलांचे डोलणे, पावसाचे रिमझिमणे, ओढ्याची झुळझुळ, नदीचा खळखळाट, समुद्राची घनगंभीर गाज या सर्वात लय आहे, ताल आहे. या सर्व गोष्टींचा लयबध्द आवाज मानवाला खूप काही सांगून जातो. त्याचप्रमाणे ढगांचा गडगडाट, विजांचा कडकडाट, पक्षांचा किलकिलाट, गाईंमहशींचे हंबरणे, यातूनही आपल्याला सप्तसुरांची अनुभूती येते. सोसाट्याचा वारा आपल्याबरोबर वाळलेला पालापाचोळा घेऊन जेव्हा गरगर गिरक्या घेऊ लागतो तेव्हा आपण 'वा-याचे नर्तन' असा शब्दप्रयोग सहजपणे करुन जातो. तसेच खळखळलेल्या समुद्राच्या लाटा अनावर झाल्या की, लाटांचे तांडव सुरु झाल्याचा आपल्याला भास होतो. थोडक्यात संगीतातील लय, सुर, ताल या सर्व गोष्टी मानवाने निसर्गाकडून घेतल्या आहेत असे म्हटल्यास ती अतिशयोक्ती होणार नाही.

303

  
Principal  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



आज या विज्ञानयुगात देवदेवतांचही ही कल्पना पटण्यासारखी नसल्यामुळे संशोधकांना संगीतकलेचे मूळ शोधतांना काही तर्कसुसंगत कल्पना मांडल्या. त्यानुसार आदिमानवाने निसर्गाच्या सानिध्यात राहून निसर्गाकडून संगीतातील सूर, लय, व ताल यांचा स्विकार केलेला असावा असे काही जण मानतात. रानटी अवस्थेतील या मानवाला शिकारीसाठी जंगलांत हिंडतांना अनेक पशुपक्षांचे आवाज एकू आले असावेत व त्यांचे अनुकरण करण्याच्या नादात मानवाच्या कंठातून त्यांचा उच्चार झाला असावा. पूर्वीच्या ग्रंथकारांनी संगीतातील सप्तसुरांचा संबंध पशुपक्षांच्या आवाजांशी जोडला होता. उदा. मोराचा आवाज म्हणजे षड्ज, चातकाचे ओरडणे म्हणजे ऋषभ, बक—याचे ओरडणे म्हणजे गंधार, क्रौंच पक्षाचा आवाज म्हणजे मध्यम, कोकीळेचे कुहूकुहू म्हणजे पंचम, घोड्याचे खिंकाळण म्हणजे धैवत आणि हत्तीचे ओरडणे निषाद, अर्थात ही कल्पनासुध्दा आजच्या काळात मान्य होणे कठीण आहे. पण या सर्व उत्पत्तींमधून आपण मुख्य आशय असा लक्षात घ्यायचा की, आदिमानवाने निसर्गापासून प्रेरणा घेवून आपला विकास साधला व तेथूनच प्राथमिक अवस्थेतील संगीतकलेचा जन्म झालेला असावा. आदिमानवाने जगतात शिकारीसाठी वापरण्यात येणा—या हत्यारांपासून मानवाला निरनिराळी वाद्ये निर्माण करण्याची प्रेरणा मिळाली असावी असे अनुमान काही संशोधक मांडतात. असे असून देखील या पर्यावरणापासून मिळणारा आनंद हळूहळू कुठेतरी लुप्त होत चालला आहे असे वाटते. पर्यावरणाविषयीचे धोके मोठमोठयाशास्त्रज्ञांकडून किंवा अभ्यासकांकडून सांगितले जात आहे. हया पृथ्वीला या सुंदर पर्यावरणाला वाचवणं हे तुम्हा आम्हा सर्वांचच कर्तव्य आहे. अशा या पर्यावरणाच्या संवर्धनाविषयी एका विदूषीचे असे मत आहे की, सर्वांनी तीन R चा वापर करा – **Reduce, Reuse, and Recycle** .

पर्यावरणाची ही समस्या लोकांपर्यंत पोहचून त्यामध्ये अपेक्षित बदल हवा असेल तर संगीत एक यशस्वी माध्यम ठरू शकेल. कारण जेव्हा एक जागतिक स्तरावरील बाब सर्व सामान्य लोकांपर्यंत पोहचवून त्यासाठी प्रत्येक नागरीकांनी आपले कर्तव्य यथोचित पार पाडवा आणि पर्यावरण संवर्धनाचे कार्य यशस्वीतेच्या मार्गावर व्हावे यासाठी सर्व सामान्यांना उमजेल अशा भाषेत त्यांना ही माहिती मिळाली पाहिजे. त्यानंतर अनेक अभ्यासकांनी पाणी वाचवा, वीज वाचवा, उर्जा वाचवा असे सांगितले आहे. एका शास्त्रज्ञांनी तर पर्यावरण वाचवायचे कायदे देखील सांगितले.

पेडेलटीचे – 2012 प्रमाणे जेव्हा आपण पर्यावरणीय आरोग्य, स्थिरता, जैवविविधता आणि पर्यावरणीय न्यायाची रचना करू शकतो, त्या मार्गाबद्दल आपण विचार करतो तेव्हा संगीत हा विषय प्रथम लक्षात घेता येणार नाही. संवादाचे अभ्यास संशोधक प्रो. मार्क पेडेलटी म्हणतात “संगीतशास्त्र आणि पर्यावरणीय अभ्यासातील फरक ओळखा.”

पेडेलटीच्या संशोधनादरम्यान त्यांनी पर्यावरणविषयक समस्यांविषयी आपल्या कल्पनांबद्दल माहिती देणारी कला आणि लोकप्रीय संस्कृती किती महत्त्वपूर्ण आहे हे समजून

घेतले तसेच पर्यावरण विषयक समस्येचे निराकरण करणे, वैज्ञानिक, कलाकार आणि इतर प्रत्येकास या विषयावर बोलणे आणि शिकविणे हे एकेणे किती महत्वाचे आहे. हे मी शिकले आहे. "नागरीक अधिकार मोहिमेसारखा सामाजिक हालचालींमध्ये संगीत किती महत्त्वपूर्ण आहे हे त्यांनी सांगितले. समाजाची भावना आणि सामूहिक संकल्प व्यक्त करण्याचा मार्ग म्हणून पेडेलटीला आशा आहे की, शास्त्रज्ञ, कलाकार आणि इतर व्यावसायिकांद्वारे त्यांनी तपासलेली माहिती आणि कल्पना तरुण संगीतकारांना पर्यावरणाच्या समस्यांसह नविन मार्गाविषयी विचार करण्यास मदत करतील.

संशोधकम्हणून पेडेलटीचे यश उदार कलांचे अखंड लक्ष आणि व्यावहारिक सौंदर्याचे उत्कृष्ट प्रदर्शन आहे. "लिबरल आर्ट्स" आम्हाला ज्ञान व संसाधनांच्या विस्तृत श्रेणीवर गंभीरपणे अभ्यास करण्यास शिकवतात. परंतु आपण सर्वांनाच विद्वान म्हणून खासियत आहेत, आणि एकत्रित कार्य करित आहोत आणि आजच्या विद्यार्थ्यांच्या गंभीर विचारांमुळे प्रेरित आहोत. आम्ही वेगाने बदलणा-या जगाबद्दल विचार करण्याचे आणि गुंतवून ठेवण्याचे नविन मार्ग शिकलो आहोत. त्यांनी उदार कलांना मल्टीपल दृष्टीकोनातून "आम्हाला अधिक प्रभावीपणे, कलात्मकपणे, आणि जगाला सचाटीने व्यक्त कसे करावे हे ठरविण्यास मदत करते. कला, साहित्य, भाषा, नैतिकता, सिनेमा यांच्यातील घनिष्ठ संबंधाची तपासणी करण्यासाठी पेपर व पुस्तके, लोकप्रिय गाण्यांमध्ये मातीचे स्त्रोत कसे दर्शविले गेले याबाबत तपासणी करणा-या कागदाची कमतरता दिसून येते. ही एक विराधाभासी परिस्थिती आहे. कारण आपल्यापैकी बरेचजण आपल्या जीवनातील प्रत्येक गोष्टीकडे नव्हे तर आपल्या व्यावसायिक क्रियाकलापांच्या यांच्या दरम्यान केवळ संगीत महत्त्व घेऊन सिध्द होताना दिसतो. संगीताचे महत्त्व ओळखता येते.

बर्कले येथे पदवी प्रशिक्षण आणि लेखन या विषयातील विद्यार्थ्यांना संस्कृती आणि पर्यावरण विषय अभ्यासामध्ये होता. तरी पेडेलटीने मध्य अमेरिकेतील आणि मेक्सिकोमधील क्षेत्रफळ चालविताना वातावरणाशी संगीताचा संबंधीत संबंध शोधून काढणे सुरु केले. ज्यामुळे इकोसंगोलॉजी मध्ये सध्याचे संशोधन झाले. गेल्या 15 वर्षांच्या संशोधनाने मुख्यत्वे सिनेसोटा, वॉशिंग्टन आणि ब्रिटीश कोलंबिया येथे काम केले आहे. जरी भौगोलिक फोकस हलविले असले तरी पेडेलटीने मेक्सिकन सांगितले, काही काम केले आहे. नविन संशोधन डायरेक्शन इन ईकॉम्प्युलॉजी: म्युझिक कल्चर नेचर येथे प्रकाशित केले आहे. खरतर पर्यावरणाच्या क्षेत्रात आसपासच्या नैसर्गिक पर्यावरणाबद्दल अधिक शिकण्यासाठी संगीत आता एक महत्वाचे योगदान मानले जाते आहे, आणि पर्यावरणाची ही समस्या लोकांपर्यंत पोहचून त्यामध्ये अपेक्षित बदल हवा असेल तर संगीत एक यशस्वी माध्यम ठरू शकेल असा त्यांचा दावा आहे.

हयाच संदर्भात अण्णामलैय्या विश्वविद्यालयाचे वनस्पतीशास्त्र विद्यालय गेल्या काही वर्षापासून प्रयोग करत असून असे सिध्द झाले आहे की, ध्वनी लहरींचा वनस्पतींमधील वाढ आणि त्यांच्या फळा-फुलांच्या वाढीवर प्रभाव पडला. 'संगीत या सशक्त माध्यमाचा प्रभाव

305

  
**Principal**  
 Sevadal Mahila Mahavidyalaya  
 Umrer Road, Nagpur.



ज्याप्रमाणे वनस्पतींच्या उत्पादनावर पडतो हा संगीताच्या भुमिकेचा एक पैलू झाला. दुसरा पैलू म्हणजे प्रत्येक मानवाच्या मनात पर्यावरण संवर्धनाची विचारसरणी जागृत करते. रुजवणं आणि त्याचा यशस्वी परीणाम साधणं ह्या दृष्टीने देखील संगीतच प्रभावी माध्यम ठरू शकेल. ज्याप्रमाणे वनस्पतींच्या संवर्धनासाठी शास्त्रीय संगीताचा आधार यशस्वी ठरतो. त्याचप्रमाणे मानवी मनाची पकड घेण्यासाठी लोकगीत, राष्ट्रगीत आणि भक्तीसंगीत यशस्वी ठरू शकते.

ह्या सांगितीक दैवी शक्तींचा विचार केल्यानंतर असे लक्षात येते की खरोखर संगीताची कास धरून जर पर्यावरण संवर्धन झाले तर ते समाजातील लहानांपासून ते वृक्षापर्यंत सर्वच व्यक्ती कडून केले जाईल. असा विश्वास वाटतो. असा हा संगीताचा महिमा ह्या सृष्टीतील अशी एक ही जागा नाही की जिथे संगीत नाही आणि ह्या पर्यावरण संवर्धनात जर संगीताचा वापर बहुप्रमाणावर आला तर नक्कीच हे कार्य यशस्वी होईल.

संदर्भ सुची :-

1. संगीत निबंध .- लक्ष्मीनारायण गर्ग
2. घरंदाज गायकी - ह. देशपांडे
- 3- संगीत आणि पर्यावरण लिबर <https://cla.umm.edu> -
- 4- द आर्ट ऑफ टरनिंग क्लायमेट <http://www.outsideonline.com>
- 5- संगीत आणि पर्यावरण अभ्यास [www.Tandfonline.com](http://www.Tandfonline.com)



Principal  
Sevadai Mahila Mahavidyalaya  
Umrer Road, Nagpur.

306

### **About the College**

Taywade College, Mahadula, Koradi is well managed by Shri Sacchidanand Shikshan Sanstha which is a premier institution working in the field of Education. The College was founded by a sincere effort of founder Chairman of Shri Sachhidanand Shikshan Sanstha, Dr. B.B. Taywade in 1993. The College is affiliated to the Rashtrasant Tukadoji Maharaj Nagpur University and recognized by the State Government.

The college has all amenities and facilities for holistic development of students. College has focused on disciplined and methodical work culture amongst staff and students by implementation of well planned academic calendar, curriculum and implementation assessment norms that provide conducive academic and working atmosphere for faculties, staff and students for continual improvement.

The main aim of college is to develop a top class infrastructure with technological and socio-economic development with a mission of empowering them to be entrepreneurs and socially competent human being.

College also provides quality education at affordable cost for the upliftment of students from backward class and rural areas. The college has big library, effective canteen, bus facility, internet, play ground, gymnasium, and seminar hall and hostel facilities for students.

### **About the Department of Humanities and Social Sciences**

The Department of Humanities and Social Sciences is one of the important and basic departments of Taywade College which focus the education of sociology, economics, political science and history along with human values, communication skills, soft skills and overall personality development of the students. The Department conducts various social awareness programs to inculcate the social responsibility among the students.

*Dr. Varsha Vaidya*

*Dr. Sanjay S. Dudhe*

*Dr. S.B. Taywade*

*Organizing Secretary*

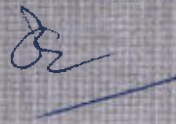
*Convener*

*Principal*

---

**Sankalp Publication, VidhyaNagar Nagpur**

**M-8600848950**



**Principal**  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.







# PROCEEDINGS



Organized by  
**Vidya Bharati Shaikshanik Mandal Amravati's**

## **S.S.S.K.R. Innani Mahavidyalaya**

**Karanja (Lad), Dist. Washim (M.S.)**  
Reaccredited at level 'A' grade by NAAC (CGPA 3.24)  
& Conferred CPE status by UGC, New Delhi

*In collaboration with*

**Department of Mathematics & IQAC**  
**Sant Gadge Baba Amravati University, Amravati**  
**Vidya Bharati Mahavidyalaya, Amravati**  
&  
**Shri Dr.R.G.Rathod Science College, Murtizapu**

Venue: S.S.S.K.R. Innani Mahavidyalaya Campus, Karanja (Lad)  
Email: icrst2018@gmail.com Website : www.ssskrmv.org.in Contact No.: 07256-222148



[Tools icon]  
Tools

[Mobile View icon]  
Mobile View

[Share icon]  
Share

[PDF to DOC icon]  
PDF to DOC

[Edit on PC icon]  
Edit on PC



Principal  
Sevalal Mahila Mahavidyalaya  
Um Road, Nagpur.



35



	Choudhary, P.P., Hedao, D.S. & Wadekar, M.P.	pyrazole carboxylic acid in CO <sub>2</sub> & DMF-water mixtures at 300k using ultrasonic interferometer	
HE58	Thakare, S.S. & Dhote, S.N.	Efficient Synthesis Of Some New Triazines And Its Derivatives	1228
HE59	Adokar, M.R. & Kadu, M.V.	Synthesis Of Some Isoxazoles From Nitro Substituted Acetophenone And Substituted Benzaldehyde Via Chalcone Intermediate And Their Antimicrobial Studies	1231
HE60	Kadu, A.V., Ibrahim, S.G., Gedam, N.N. & Jagtap, S.V.	Preparation and study of alcohol gas sensing behaviour of CuFe <sub>2</sub> O <sub>4</sub> thick film resistors	1234
HE61	Borul, S.B. & Agarkar, S.V.	Synthesis and Characterization of (2E)-1-(Piperazin-1-yl)-3-Substituted Phenylprop-2-one Cinnamamides.	1238
HE62	Ahmad, S.A.Z., Sarode, P.S., Ramteke, G.R. & Kuralkar, P.N.	Synthesis and Biological evaluation of 1,3,4-thiadiazole derivatives	1242
HE63	Ahmad, S.A.Z., Kuralkar, P.N., Ramteke, G.R. & Sarode, P.S.	Synthesis and characterization of Schiff's base amalgamated with 1,3,4thiadiazoles	1244
HE64	Ganar, A.A. & Sheikh, N.A.	Synthesis Approach To Benzimidazole From O-Phenylene Diamine By Using HCl/H <sub>2</sub> O <sub>2</sub>	1247
HE65	Sahare, A.B.	Assessment of water quality of river Wainganga in winter season from Gosekhurd dam to Pauni town	1250
HE66	Paithankar, V.V. & Sharma, V.A.	Title: A Comparative Single Dose Bioequivalence Study of Extended Release Antihypertensive Drug Formulation among Healthy Human Volunteers	1256
HE67	Patil, M.P. & Ambulkar, M.	Removal of Cu(II) from solution using adsorption studies of activated charcoal and non activated jackfruit powder	1262
HE68	Wankhede, S.B. & Patil, A.B.	Transition metal chelates with ONO donor hydrazone ligand: Synthesis, Characterization, Thermal and Antimicrobial activity	1266
HE69	Panchbhaj, D.S.	Synthesis, Characterization and Biological activity of Novel Bis -Diketones	1275
HE70	Tayade, K.D., Pund, D.A. & Meshram, N.J.	Conductometric Measurements Of Substituted Thiocarbamido Naphthol	1282
HE71	D.T.Tayade, & S.P.Ingole,	Green Synthesis Of 2-Substitutedimino-4-Amino-6-Allyl Formamidino-1,3,5-Thiadiazines	1285
HE72	Wadekar, A.B., Isankar, R.D. & Padhen, S.S.	Thermodynamic Parameters Investigation Of Substituted Thiocarbamidonaphthol	1288
HE73	Wakulkar, A.P., Jiotode, S.B. & Lanjewar, M.R.	Water sampling from different regions of Maharashtra and its analysis	1291
HE74	Raut, V.M. & Damre, P.	Green Synthesis and characterization of new conjugated Electroluminescent Polyquinoline Derivative	1294
HE75	Saonere, J.A.	Wheat Grass Powder And Juice - Amazing Health Benefits And Alternative For The Management Of Various Diseases	1298
HE76	Manohare, S.V. & Thakare, S.S.	Synthesis of Schiff bases by condensation of Aromatic amines with 3-(5-bromothiophen-2-yl)-1-phenyl-1-H-	1304



Tools



Mobile View



Share



PDF to DOC



Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.





## REMOVAL OF Cu(II) FROM SOLUTION USING ADSORPTION STUDIES OF ACTIVATED CHARCOAL AND NON ACTIVATED JACKFRUIT POWDER

<sup>1</sup> Patil, M.P. & <sup>2</sup> Ambulkar, M.

Department of Chemistry, Sevadal Mahila Mahavidyalaya, Nagpur - 440024, India.

[manjusha@gmail.com](mailto:manjusha@gmail.com)

### ABSTRACT

*In India heavy metal pollution is a serious problem today and its treatment is of special concern due to their recalcitrance and persistence in the environment. The method of adsorption is used for removal of Cu(II) by taking non activated jackfruit peel powder and it's activated charcoal.*

**Keywords:** adsorption, jackfruit peel powder, activated charcoal, Colorimetry

### INTRODUCTION

Due to rapid industrialization and urbanization in developing countries like India heavy metal pollution is a serious problem today. Like organic pollutants, most of these heavy metals do not undergo biological degradation, resulting into harmless end products [1]. Many industries, like metal plating, mining operations, tanneries, radiator manufacturing, smelting, alloy industries and storage batteries industries, etc. release these severely toxic heavy metal ions in their wastewaters contaminating natural streams where in disposed, which is a major concern due to toxicity to many life forms [2]. Though there are many treatment methods for removal of heavy metals from wastewater like chemical precipitation, membrane filtration, ion exchange, coagulation and flocculation, floatation, electrochemical treatment, adsorption and co-precipitation followed by adsorption etc. yet various researchers have studied and revealed that physical adsorption is a highly effective and economic technique for the removal of heavy metal from waste stream and from ancient times activated carbon has extensively been used as an adsorbent [3] in the water and wastewater treatment plants, but it is found to be an expensive material. Recently, an idea of the production of safe and low cost alternatives to this expensive and commercially available activated carbon has attracted the researchers towards the low cost agro and horticultural wastes and by-products for the

removal of heavy metals from wastewater and it has been investigated successfully [4,5]

Heavy metals are member of a loosely-defined subset of elements that exhibit metallic properties, has high density, which mainly includes the transition metals, some metalloids, lanthanides, and actinides. Certain heavy metals such as iron, copper (Cu), zinc and manganese are required by humans for normal biological functioning. However, heavy metals such as mercury, lead, cadmium are toxic to organisms. Most of the health disorders are linked with specific tendency of heavy metals to bioaccumulate in living tissues and their disruptive integration into normal biochemical processes [6]. Increased use of metals and chemicals in industries has resulted in generation of large quantities of effluent that contains high level of toxic heavy metals and their presence poses environmental-disposal problems due to their non-degradable and persistence nature[7]. Several techniques such as chemical precipitation, oxidation, reduction, coagulation, solvent extraction, ion exchange, filtration, electrochemical treatment, reverse osmosis, membrane technologies, evaporation recovery, and adsorption have been commonly employed for the removal of metal ions [8].

Workers involved in spraying of Bordeaux mixture ( an insecticide with Cu) on grapes, other crops develop acute irritation of respiratory tract and metal fume fever characterized by the development of interstitial pulmonary lesions and nodular fibro hyaline scars containing deposits if

copper. Lung cancer may also develop in many cases. An injection of about 50-80 mg of copper causes gastro-intestinal disturbances, nausea, vomiting etc, larger quantities taken accidentally or intentionally may cause hemolysis hepatotoxic and nephrotoxic of effects. A higher concentration of copper is injurious to blue green algae since this metal tend to suppress nitrogen fixation.

### COLORIMETRIC TECHNIQUE

Colorimetric is the oldest known technique for determining any colour. The intensity of a substance is in direct proportion to its concentration, which is in terms of transmittance (optical density). Concentration of various solution can be determined by colorimetric technique. The

absorbance of different concentrated solution without and with prepared non activated and activated adsorbant was recorded. Concentration of unknown solution can be calculated as follows:-

$$\frac{\text{Concentration of solution}}{\text{initial concentration}} = \frac{\text{Concentration of solution I}}{\text{Concentration of solution II}}$$

For colour determination of different solution five bottles of different concentration was prepared. Colorimetric technique was used to study for removal of metals from contaminated waste water. The solutions of different concentration were prepared. In a conical flask 50ml solution +0.2 gm activated carbon was shaken for 15 min. the optical density at various wavelengths was recorded before and after adsorption. The pH of the solution was also recorded.

**Observation table 1 :- Adsorption of Cu<sup>2+</sup> on jackfruit peel powder**

Initial con.	1M		0.5M		0.25M		0.125M		0.06M	
	before	after	before	after	before	After	before	after	before	after
400	0.589	0.450	0.350	0.398	0.183	0.121	0.100	0.074	0.082	0.066
420	0.428	0.323	0.250	0.210	0.139	0.102	0.086	0.069	0.072	0.059
440	0.360	0.190	0.205	0.169	0.121	0.096	0.073	0.060	0.070	0.058
460	0.211	0.108	0.167	0.125	0.098	0.069	0.065	0.048	0.062	0.043
480	0.180	0.096	0.123	0.096	0.075	0.056	0.059	0.045	0.055	0.039
500	0.171	0.092	0.111	0.088	0.063	0.050	0.057	0.043	0.050	0.038
520	0.190	0.19	0.138	0.092	0.076	0.054	0.052	0.040	0.046	0.038
540	0.198	0.102	0.157	0.125	0.085	0.060	0.049	0.040	0.046	0.038
560	0.230	0.121	0.243	0.189	0.107	0.069	0.053	0.040	0.047	0.039
580	0.319	0.199	0.289	0.251	0.142	0.103	0.078	0.061	0.067	0.045
600	0.426	0.230	0.327	0.291	0.169	0.117	0.097	0.071	0.081	0.061
pH	2.5	4.9	2.7	5.4	2.9	5.8	3.2	6.1	3.5	6.3

**Observation table 2 :-Determination of concentration of Cu<sup>2+</sup> after adsorption by using nonactivated jackfruit peels powder**

Initial conc	1M	0.5M	0.25M	0.125M	0.0625M
400	0.764007	0.425714	0.165301	0.0925	0.050305
420	0.754673	0.42	0.183453	0.100291	0.051215
440	0.527778	0.412195	0.198347	0.10274	0.051786
460	0.511848	0.374251	0.17602	0.092308	0.043347
480	0.533333	0.390244	0.186667	0.095339	0.044318
500	0.538012	0.396396	0.198413	0.094298	0.0475
520	0.52	0.333333	0.177632	0.096154	0.05163
540	0.515152	0.398089	0.176471	0.102041	0.05163
560	0.526087	0.388889	0.161215	0.09434	0.051862
580	0.623824	0.434256	0.181338	0.097756	0.041978
600	0.539906	0.444954	0.173077	0.091495	0.047068
pH	4.9	5.4	5.8	6.1	6.3



Observation table 3 :- Adsorption of  $Cu^{2+}$  on activated jackfruit charcoal

Initial con.	1M		0.5M		0.25M		0.125M		0.06M	
	before	after	before	after	before	After	before	after	before	after
Wave length										
400	0.589	0.450	0.350	0.398	0.183	0.121	0.100	0.074	0.082	0.066
420	0.428	0.323	0.250	0.210	0.139	0.102	0.086	0.069	0.072	0.059
440	0.360	0.190	0.205	0.169	0.121	0.096	0.073	0.060	0.070	0.058
460	0.211	0.108	0.167	0.125	0.098	0.069	0.065	0.048	0.062	0.043
480	0.180	0.096	0.123	0.096	0.075	0.056	0.059	0.045	0.055	0.039
500	0.171	0.092	0.111	0.088	0.063	0.050	0.057	0.043	0.050	0.038
520	0.190	0.19	0.138	0.092	0.076	0.054	0.052	0.040	0.046	0.038
540	0.198	0.102	0.157	0.125	0.085	0.060	0.049	0.040	0.046	0.038
560	0.230	0.121	0.243	0.189	0.107	0.069	0.053	0.040	0.047	0.039
580	0.319	0.199	0.289	0.251	0.142	0.103	0.078	0.061	0.067	0.045
600	0.426	0.230	0.327	0.291	0.169	0.117	0.097	0.071	0.081	0.061
pH	2.5	4.9	2.7	5.4	2.9	5.8	3.2	6.1	3.5	6.3

Observation table 4 :- Determination of concentration of  $Cu^{2+}$  after adsorption by using activated jackfruit charcoal

Initial conc	1M	0.5M	0.25M	0.125M	0.0625M
wavelength					
400	0.764007	0.425714	0.165301	0.0925	0.050305
420	0.754673	0.42	0.183453	0.100291	0.051215
440	0.527778	0.412195	0.198347	0.10274	0.051786
460	0.511848	0.374251	0.17602	0.092308	0.043347
480	0.533333	0.390244	0.186667	0.095339	0.044318
500	0.538012	0.396396	0.198413	0.094298	0.0475
520	0.52	0.333333	0.177632	0.096154	0.05163
540	0.515152	0.398089	0.176471	0.102041	0.05163
560	0.526087	0.388889	0.161215	0.09434	0.051862
580	0.623824	0.434256	0.181338	0.097756	0.041978
600	0.539906	0.444954	0.173077	0.091495	0.047068
pH	4.9	5.4	5.8	6.1	6.3

### RESULT AND DISCUSSION

The adsorption study of non activated powder and activated charcoal of jackfruit peel shows that it can act as a good adsorbent for the removal of Cu

(II) from the solution. The solution also reveals the change in pH also after adsorption. The adsorbent is more economic and can be prepared from waste material.

### REFERENCES

- Brewer GJ, "Copper toxicity in the general population". Clin. Neurophysiol., vol. 121, 2010, pp. 459-60.
- Brewer GJ, "Iron and copper toxicity in diseases of aging, particularly atherosclerosis and Alzheimer's disease", Exp. Biol. Med., vol. 232, 2007, pp. 323-35.
- Haller P, "Copper and zinc binding to amyloid-beta: coordination, dynamics, aggregation, reactivity and metal-ion transfer", Chembiochem., vol.10, 2009, pp. 2837-45.
- Haureau C, and Faller P, "Abeta-mediated ROS production by Cu ions: structural insights, mechanisms and relevance to Alzheimer's disease", Biochimie., vol. 91, 2009, pp. 1212-7.
- Van Genderen EJ, Ryan AC, Tomasso JR and Klaine SJ, "Evaluation of acute copper toxicity to larval fathead minnows (Pimephales



Principal  
 Sevalal Mahila Mahavidyalaya  
 Umrer Road, Nagpur.

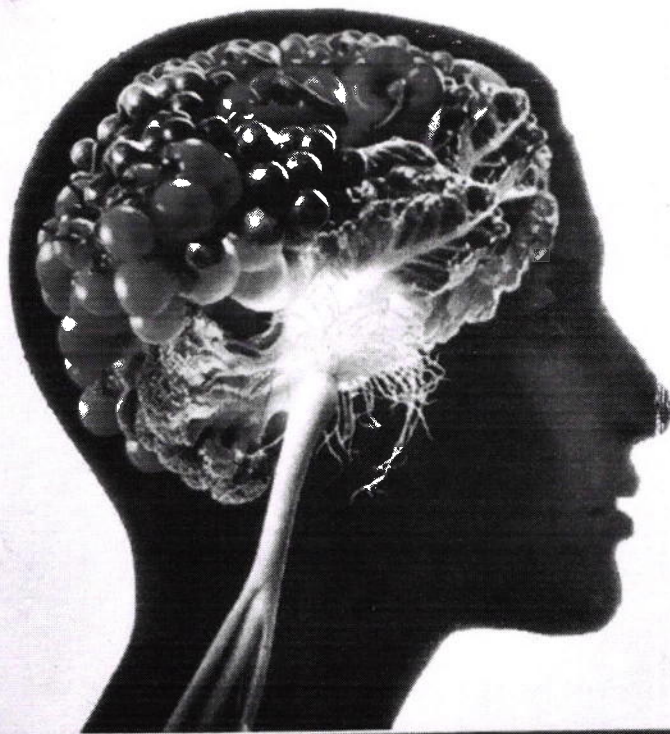
- promelas) in soft surface waters", Environ. Toxicol. Chem., vol. 24, 2005, pp. 408-14.
6. Ayub, S., Ali, S.I., and Khan, N.A. (2002). Adsorption studies on the low cost adsorbent for the removal of Cr(VI) from electroplating wastewater. Environmental Pollution Control Journal 5(6): 10-20.
  7. Ahluwalia, S.S. and Goyal, D., (2005). Microbial and plant derived biomass for removal of heavy metals from wastewater. Bioresource Technology, 98, 2243-2257.
  8. Rengaraj, S., Kim, Y., Joo, C.K., Choi, K., and Yi, J., (2004). Batch adsorptive removal of copper ions in aqueous solutions by ion exchange resins: 1200H and IRN97H. Korean Journal of Chemical Engineering, 21(1), 187-194.



7

# Diet Concept

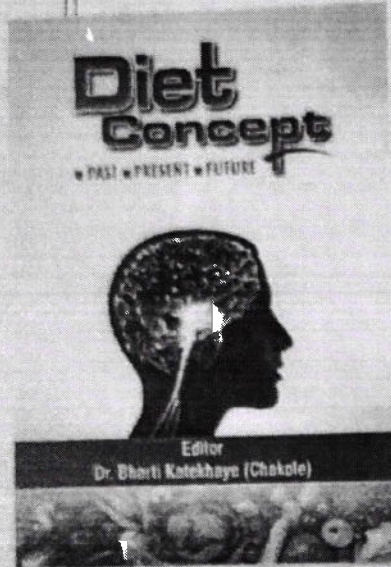
■ PAST ■ PRESENT ■ FUTURE



**Editor**  
**Dr. Bharti Katekhaye (Chakole)**



*[Signature]*  
**Principal**  
Sevada Mahila Mahavidyalaya  
Umrei Road, Nag



# Diet Concept

▪ Past ▪ Present ▪ Future

- **Editor**  
**Dr. Bharti Katekhaye (Chakole)**  
Associate Professor & Head,  
Dept. of Home Economics,  
Seth Narsingdas Mor Arts, Commerce &  
Smt. Godavari Devi Saraf Science College,  
Tumsar
- **Co- Editor**  
**Dr. Goldie Baghmar**  
Assistant Professor, Dept. of English,  
Seth Narsingdas Mor Arts, Commerce &  
Smt. Godavari Devi Saraf Science College,  
Tumsar
- **Edition - April, 2020**  
Copyright© All rights reserved.
- **Published by**  
**Dr. Chetankumar Bhimrao Masram**  
Principal, Seth Narsingdas Mor Arts, Commerce &  
Smt. Godavari Devi Saraf Science College, Tumsar
- **Publication**  
**Trupti Suryakant Kapshikar**  
**Kapshikar Publication,**  
Nagpur, Maharashtra

**ISBN : 978-81-943484-3-6**

**Designed & Printed by**  
**DINESH GRAPHIC**  
Trimurti Nagar, Nagpur-440 022  
M.9422119631 / 9765762211

**Price :**  
**Rs. 400/-**

**Copyright©**  
**All rights reserved.**

No part of this publication may be reproduced stored in a retrieval system or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise with the prior permission of the Editor.

The papers included in this publication have been directly reproduced with minimum editorial intervention, from the files sent by the respective authors. The responsibility for facts states, opinions, expressed or conclusion reached and plagiarism if any, in this book is entirely that of the authors /contributors.

The Editor, Peer Review Committee, Printer, Publisher bears no responsibility for them; whatsoever. In case of any dispute all legal matter are to be settle under Nagpur Jurisdiction only

**Principal**

Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur-9.



## CONTENTS

1. **Food Fortification: Approach to Combat Malnutrition among Vulnerable Group** ..... 01  
Dr. Joglekar A.
2. **Wonder Foods :New Future Foods** ..... 05  
Dr. Shubhangi Dange
3. **A Potential Micro-algae, Spirulina : For Human Nutrition and Health** ..... 08  
Dr. Seema Bodkhe
4. **Adolescent Nutrition Issues** ..... 14  
Dr. Vishakha Kayande
5. **Geographical influence on food habits and Malnutrition** ..... 19  
Dr. Rohini H. Kalikar
6. **Healthy Diet - Need of the hour** ..... 25  
Dr. Sadhana K. Karhade
7. **Government Policies And Programmes Towards Nutrition** ..... 39  
Dr. Meghali Johrapurkar
8. **Man's Eating Habits: History** ..... 44  
Dr. Radheshyam Dipte
9. **Socio-Economic Determinants In Healthcare** ..... 51  
Dr. K J SIBI
10. **Study of Abortifacient plants used by Gonds of Koknagad Village, Bhandara District, Maharashtra.** ..... 56  
Dr. Padmavathi S. Rao
11. **Importance of Healthy, Hygienic And Balanced Diet** ..... 60  
Dr. Rekha A. Aney, Dr. Avinash K. Aney
12. **Effects Of Animal Protein On Human Health With Respect To Plant Protein** ..... 67  
Dr. Amita Watkar
13. **Role of good diet in combating Post Traumatic Stress Disorder (PTSD) and improving mental strength** ..... 73  
Dr. Goldie G Baghmar

# Government Policies And Programmes Towards Nutrition

**Dr. Meghali Joharapurkar**  
Assistant Professor  
Sevadal Mahila Mahavidyalaya, Nagpur.

## Abstract

Food and nutrients are required to maintain good health and overall growth of the body both physically and mentally. The condition of malnutrition and under-nutrition, therefore, reduces work capacity and productivity among adults and enhances mortality and morbidity among children. Government intervention, through its various policies and programmes, ensure food security and nutrition. It can significantly change the scenario and pull out a large number of people from the grips of acute under-nutrition and malnutrition.

Bureaucratic hurdles like policy indecision and corruption have impeded achieving the goal nutrition for all. So a robust mechanism of checks and balance must be implemented to narrow down these leakages through these policies and programs implemented by the government.

This is an attempt to highlight the gross problem of under-nutrition and malnutrition in our country and the response of government machinery to address these core issues which directly concern a myriad population of our country.


**Keywords:** Nutrition, government policies and programmes.

## Introduction

India is a country rich in resources and is self-sufficient in the production of foods but it is facing a food paradox. Today, the country has become a net exporter of food grains. However, India is home to the world's largest population of hungry and underfed people. According to the Global Hunger Index (GHI) though in 2016, India ranked 97 among 118 developing countries, in 2019 it has dipped to 102 out of 117 countries with a score of 30.3, India suffers from a level of hunger that is "Serious". About 15% of under-5 children still suffers from 'wasting' and 39% from stunting. According to NHFS-4 data, though 58.4% of children remained anaemic in 2015-16, there has been a substantial improvement from 2005-06 levels by 11 percentage points. Incidence of anaemia among pregnant women went down by about 8 percentage points between 2005-06 and 2015-16: from 57.9% in 2005-06 to 50.3% in 2015-16. About 53% of the non-pregnant women (15-49 years) suffered from anaemia in 2016 as compared to 55.2% in 2005-06. On the other side of the pendulum, incidence of obesity almost doubled over the decade ending 2015-16: from 9.3% to 18.6% among men and from 12.6% to 20.7% among women. Thus, while the food security situation is progressively improving, access to balanced food with essential nutrients is still a big problem for a vulnerable section of society.

ISBN : 978-81-943484-3-6



  
Principal  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur-9.

39





One Day Interdisciplinary National E-Conference on  
**'Covid-19' & Its Impact On The**  
**Various Factors**

8

26 May 2020 ISBN : 978-81-942797-4-7

● Organised By ●

**M.E.S. Arts & Commerce College**

Mehkar, Dist. Buldana 443301 Maharashtra

Affiliated with

**Sant Gadge Baba Amravati University, Amravati**

**E-Souvenir**

Impact Of COVID-19 lockdown on the Agricultural Sector

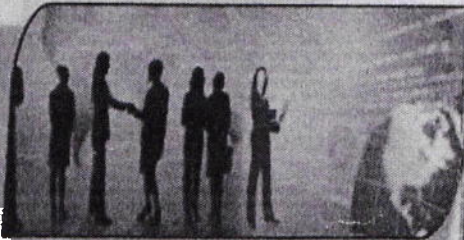


Impact Of COVID-19 lockdown on the Industrial Sector



Corona

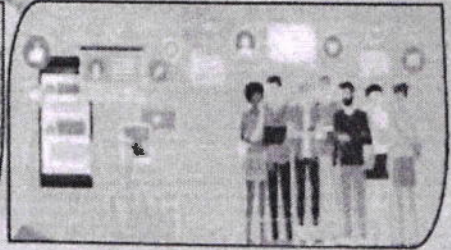
Impact Of COVID-19 lockdown on the Service Sector



Impact Of COVID-19 lockdown on the Unorganised Sector



Impact Of COVID-19 lockdown on the Social & other sector



**Dr. G. N. Parihar**  
Chief Editor

**Dr. U. S. Kale**  
Editor

**Dr. P. A. Joshi**  
Editor

**Prof. G. D. Saoji**  
Editor



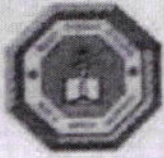
**Painganga Prakashan, Aurangabad**

paingangapublishing@gmail.com 9975132211 9850927424

*[Handwritten signature]*



Principal  
 Sevadal Mahila Mahavidyalaya  
 Umrao Road, Maharashtra



One Day Interdisciplinary National E-Conference on  
**Covid-19 & Its Impact on the Various Factors**

Organized By - M.E.S. Arts & Commerce College Mehkar,  
Dist **Buldana** - 443301 Maharashtra

Date : 26 May 2020

ISBN - 978-81-942797-4-7



## Impact of COVID-19 Pandemic on women's sanitation: A case study

**Dr.Pallavi L. Tagade**  
Assistant Professor  
Department of Extension  
Education (Home Science)  
D.K. Mahila Mahavidyalaya,  
Kurkheda Ta-Kurkheda Dist-  
Gadchiroli

**Dr.(Mrs).Aparna S.Dhoble**  
Associate Professor  
Department of  
Home Science Extension Education  
Sevalal Mahila Mahavidyalaya  
Sakkardara Square Umrer Road, Nagpur

**"Sanitation is a noble mission for the Nation"**

—**Dr.API Abdul Kalam**

### Introduction:-


The entire world today is facing the challenges of COVID-19 Pandemic with full of determination and discipline. The COVID-19 is as an acronym for Corona virus infectious disease which was identified in the year 2019 in Wuhan province of China. As of today there is no vaccine available to curb this contagious disease, more than 45 lakhs of world population has been infected with this novel corona virus disease and more than 3 lakh died of Corona virus disease. To stop the spreading of this virus many countries have imposed lockdown as they believe only social distancing and sanitation plays a crucial role in this matter. When it comes to keeping the surrounding clean and free from infected disease, women have always been playing major role since time immemorial. Any sanitation program (work) without providing women a lead role can not achieve a holistic and lasting impact.

In such a time of becoming highly aware of sanitation due to COVID-19 pandemic, women are still leading the society by taking utmost care of their family. The aim of this paper is to throw ample light on women's awareness and actively participation in sanitation and to discuss their role in keeping the society free from infected disease like COVID-19.

### Objectives:-

- 1) To study the importance of sanitation in COVID-19
- 2) To examine women's maximum participation in sanitation
- 3) To study women's awareness about sanitation in COVID-19 pandemic
- 4) To identify women's role in achieving social distancing and sanitation in Contagious disease period.
- 5) Mapping the desired impact of women's leading role in Covid-19 Pandemic



  
Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



One Day Interdisciplinary National E-Conference on  
**Covid-19 & Its Impact on the Various Factors**

Organized By - M.E.S. Arts & Commerce College Mehkar,  
Dist Buldana - 443301 Maharashtra

Date : 26 May 2020

ISBN - 978-81-942797-4-7



Research Method:- The present research incorporates a case study of 25 respondents from Amgaon(Dighovi) village in Bhandara district. 25 samples were collected from diverse strata of society using survey method as well as telephonic interview.

Table 1.  
Showing impact of COVID-19 on women sanitation

Sr. No	Mode of awareness	Participants	Order of Rank
1)	i) personal awareness about the importance of sanitation	25	I
2)	ii) Sanitation in family by use of Mask and washing hands with sanitizer	21	II
3)	iii) Washing vegetables before cooking them when bring from the market	22	III
4)	iv) Use warm water for drinking in family	15	VI
5)	v) keeping well social distance by avoid others contact	20	V
6)	vi) keeping all the surrounding clean and free from all kinds of infection	25	I
7)	vii) keeping minimum 1meter distance at grocery shop and while purchasing vegetables from vendors.	21	IV

**Description of the table**

It is observed from the data presented in above table that majority of the respondents (25) has knowledge and awareness about the importance of sanitation. By keeping the surrounding clean they are avoiding infection and keeping themselves safe from germs and bacteria. It has denoted by 1st order of rank. A good number of women(21) promote the use of mask and 20 second hand wash with sanitizer. It has been given 2nd rank. 22 Women wash vegetables before cooking to avoid any kind of infection. It has given 3rd rank in order. It has observed that 15 women respondents use warm water for drinking. It has shown 6th order in rank. Most of the respondents ( 20) maintain social





One Day Interdisciplinary National E-Conference on  
**Covid-19 & Its Impact on the Various Factors**

Organized By - M.E.S. Arts & Commerce College Mehkar,  
Dist Buldana - 443301 Maharashtra

Date : 26 May 2020

ISBN - 978-81-942797-4-7



distancing by avoiding close contact with neighbors and others. Its has denoted 5th order in rank. Maximum number of women (25) knows the importance of cleanliness and health of family. They keep their houses as well as environment neat and clean. It has shown 1st rank in order. 21 women wear mask and maintain distance while purchasing essential commodities. It has indicated by 4th rank.

**Conclusion:-**

It is observed that women have become more conscious about sanitation in this period of utmost carefulness. Women are playing a pivotal role in keeping the health well of their families. The responsibility of taking much care of the family has been shouldered on women since time immemorial and still it continues. Mostly women are keen observer of the sanitation. In this situation women are finely maintaining the social distance. Their participation in achieving the goal of government policies in this period of COVID-19 pandemic such as use of mask, social distancing, use sanitizer for hand wash are at front.

**Suggestions:-**

- i) For effective implementation of the sanitation in every region, women from rural area should be made aware about sanitation.
- ii) Increased awareness can be disseminated through mass media method.
- iii) The government official should conduct a periodic inspection COVID-19 hotspot areas. It will add more participation in sanitation.
- iv) Social distancing shall be maintained in all walks of life.
- v) More emphasis should be given on rural women for positive sanitation. They should know the importance of sanitation.
- vi) Objects useful for sanitation should be provided in rural area.

**References:-**

- i) Saxena s.2006:"Sanitation and Health" A journal of Yojana,Hans Bhavan Patiyala House New Delhi Vol.50 pp 23-24
- ii) May 2020 Journal of Infection and Public Health Vol.13 Issue PP 673-667 <https://www.sciencedirect.com> Corona disease 2019 (Covid19) : A literature review of science direct
- iii) May 2020- Introduction to Covid-19 vedio in India Sign Language Open WHO <https://openwho.org> >courses.



Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

# *The Impact of Formal Education, Reading Habits and Media on Slum Dwellers*

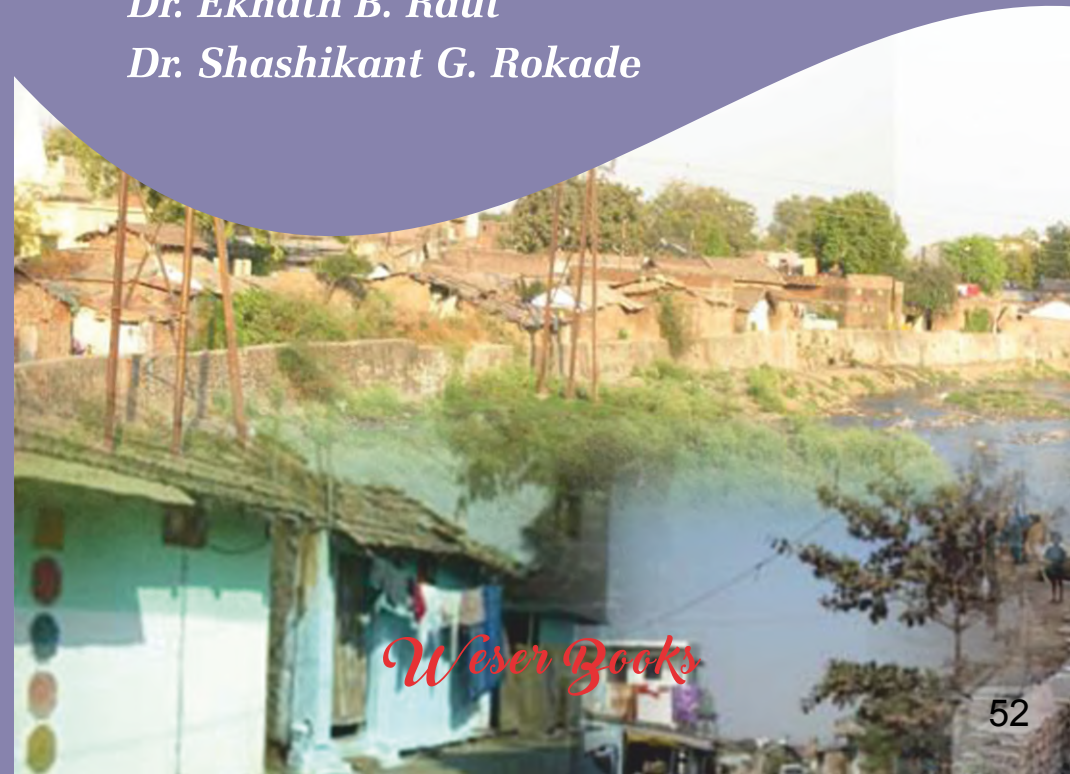
*A Critical Study of Nagpur Municipal  
Corporation Region*

*Dr. Eknath B. Raut*

*Dr. Shashikant G. Rokade*



Published by  
Weser Books, No. 79737  
Äussere Weberstr. 57  
02763 Zittau, Germany  
Email: [weserbooks@gmail.com](mailto:weserbooks@gmail.com)



# ***The Impact of Formal Education, Reading Habits and Media on Slum Dwellers***

*A Critical Study of Nagpur Municipal  
Corporation Region*

## **Authors**

**Dr. Eknath B. Raut**

Associate Professor and Librarian, Shri Mathuradas Mohota College of  
Science, Nagpur

**Dr. Shashikant G. Rokade**

Assistant Professor and Librarian, Sevadal Mahila Mahavidyalaya, Nagpur

*Weser Books*



  
**Principal**  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

**Published By:** *Weser Books*

*Weser Books, No. 79737  
Äussere Weberstr. 57  
02763 Zittau, Germany  
Email: weserbooks@gmail.com*

**Authors:** *Dr. Eknath B. Raut and Dr. Shashikant G. Rokade*

*The author/publisher has attempted to trace and acknowledge the materials reproduced in this publication and apologize if permission and acknowledgements to publish in this form have not been given. If any material has not been acknowledged please write and let us know so that we may rectify it.*

© **Weser Books**

**Edition:** 1<sup>st</sup>

**Publication Year:** 2021

**Pages:** 199

**ISBN:** 978-3-96492-347-9

**Price:** € 15



A handwritten signature in blue ink, appearing to be "Dr. Eknath B. Raut".

**Principal**  
**Sevalal Mahila Mahavidyalaya**  
**Umrer Road, Nagpur.**

## Contents

S. No. Chapters	Page No.
<b>1. Introduction</b>	<b>01-11</b>
1.1 General Introduction	
1.1.1 Formal Education	
1.1.2 Reading Habits	
1.1.3 Media	
1.1.4 Brief Introduction of Nagpur City	
1.1.4.1 Historical and Geographical Background	
1.1.4.2 Present Status of the Nagpur City	
1.1.4.3 Political and Economical	
1.1.4.4 Population	
1.1.4.5 Nagpur Slum	
1.1.5 Statement of the Problem	
1.1.6 Need of the Study	
1.1.7 Concepts Elaboration	
1.2 Conspectus	
1.2.1 Introduction	
1.2.2 Review of Literature	
1.2.3 Research Methodology	
1.2.4 Slum Dwellers	
1.2.5 Formal Education	
1.2.6 Reading Habits	
1.2.7 Media	
1.2.8 Analysis and Data Interpretation	
1.2.9 Findings, Conclusions and Suggestions	
<b>2. Literature Review</b>	<b>12-13</b>
2.1 Introduction	
<b>3. Research Methodology</b>	<b>14-25</b>
3.1 Introduction	
3.1.1 Philosophical View of the Present Study	
3.1.2 Framework of the Study	



  
Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



- 3.1.3 Validity of Collected Information
- 3.1.4 Reliability of Information
- 3.1.5 Un-bias Collection of Information and Interpretation
- 3.2 Aims and Objectives of the Study
- 3.3 Research Hypotheses
- 3.4 Scope and Limitations of the Study
  - 3.4.1 Scope
  - 3.4.2 Limitations
- 3.5 Research Methodology
  - 3.5.1 Literature Review
  - 3.5.2 Research Design
  - 3.5.3 Sample Area
  - 3.5.4 Mode of Data Collection
  - 3.5.5 Size of the Data
  - 3.5.6 Methods and Tools of Data Collection
  - 3.5.7 Data Collection
    - 3.5.7.1 General Information
    - 3.5.7.2 Measures and Scales
    - 3.5.7.3 Data Process and Analysis
    - 3.5.7.4 Findings, Suggestions and Conclusions

**4. Slum and Slum Dwellers 26-58**

- 4.1 Introduction
- 4.2 Slum: Concepts and Definitions
- 4.3 Parameters and Characterizations of Slum
- 4.4 Types of Slums
- 4.5 Facts about Slum
- 4.6 Causes of Slum Development
- 4.7 Slums of India
  - 4.7.1 Slum Population in Mumbai
  - 4.7.2 Slum Population in Delhi
  - 4.7.3 Slum of Nagpur City
    - 4.7.3.1 Slums-Land Ownership Pattern
    - 4.7.3.2 Existing Slum Development Schemes in NMC
    - 4.7.3.3 Urban Sanitation Programme for Nagpur
    - 4.7.3.4 Evaluation of Past Schemes
    - 4.7.3.5 Actions by NMC



  
**Principal**  
 Seval Mahila Mahavidyalaya  
 Umrer Road, Nagpur.

4.7.3.6 City Development Plan-Nagpur, 2006, In Brief

4.8 Conclusion

**5. Formal Education**

**59-65**

- 5.1 Introduction
- 5.2 Meaning and Definitions of Education
- 5.3 Characterization of Formal Education
- 5.4 Education: In the Slum World
- 5.5 Education of Slum Dwellers in India
- 5.6 Formal Education Status in the Nagpur City
  - 5.6.1 Formal Education Status of the NMC Slum Dwellers
  - 5.6.2 Impacts of Formal Education on NMC Slum Dwellers
  - 5.6.3 Educational Capacity of the City
  - 5.6.4 Educational Development in Nagpur City
    - 5.6.4.1 Formal Education Development for Slum Dwellers
      - 5.6.4.1.1 Availability of Schools within the Slum
      - 5.6.4.1.2 Targeting of Compulsory Elementary
      - 5.6.4.1.3 Education
      - 5.6.4.1.4 Problems in Formal Education
- 5.7 Education in the Root of Poverty
- 5.8 Development of Formal Education
  - 5.8.1 The National Policy on Education (NPE, 1968)
  - 5.8.2 NPE-1986
- 5.9 Right to the Education and its Importance
  - 5.9.1 Scope of Right to Education
  - 5.9.2 Importance of Right to Education
  - 5.9.3 Education with Own Convinces
  - 5.9.4 Education for All Summit
- 5.10 Vision of NMC: Formal Education
- 5.11 Informal Education
  - 5.11.1 Needs of the Informal Education for Slum Dwellers
- 5.12 Government and Non-Government Organizations Works for Education Development



Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

5.13 Conclusion

**6. Impact of Reading Habits**

**66-87**

- 6.1 Introduction
- 6.2 Reading Habits: Meaning and Definitions
- 6.3 Reading Habits and Age Group
- 6.4 Types of Readers
- 6.5 Benefits and Importance of Reading Habits
- 6.6 Impact of Reading Habits on Slum Dwellers
  - 6.6.1 Reasons that Affect to Reading Habits on Slum Dwellers
    - 6.6.1.1 Economic Impact on the Slum Dwellers
    - 6.6.1.2 Impact of Improving Knowledge
  - 6.7 Impact of Other Media to Reading Habit on Slum Dwellers
    - 6.7.1 New Technology
    - 6.7.2 E-books
    - 6.7.3 Mass Media
    - 6.7.4 Web Sites
    - 6.7.5 Mobile
    - 6.7.6 Smart Phone
    - 6.7.7 Computer Effect on Reading Habit
  - 6.8 How to Develop Reading Habits Among Slum Dwellers
    - 6.8.1 Four Points Emphasizes for Reading to the General Readers
    - 6.8.2 Most Research Agrees for Developing the Reading Habits
    - 6.8.3 Book Selection is a Key to Developing Reading Habit
    - 6.8.4 Allow to Read Natural Way to Develop Reading Habit153
    - 6.8.5 How to Develop Reading Habit
      - 6.8.5.1 Book-Based Programming
      - 6.8.5.2 Performance-Based Programming
      - 6.8.5.3 Bringing Books to Public
  - 6.9 Government Role for Developing Good Reading Habits
  - 6.10 Role of the Libraries and Librarian to help



A handwritten signature in blue ink, appearing to be "S. S. S.", written over a horizontal line.

Principal  
Sevala Mahila Mahavidyalaya  
Umrer Road, Nagpur.

	Development of Reading Habits	
	6.10.1 Role of the Libraries	
	6.10.2 Role of the Librarian	
	6.11 Role of Private and Local Authorities to Develop Reading Habit	
	6.12 Conclusion	
<b>7.</b>	<b>Impact of Media on Slum Dwellers</b>	<b>88-103</b>
	7.1 Introduction	
	7.2 Meaning and Definition of Media	
	7.3 Characterization of Media	
	7.4 Evolution of Media	
	7.4.1 Print Media	
	7.4.2 Electronic Media	
	7.4.3 New Age Media	
	7.4.3.1 Social Media	
	7.4.3.2 New Electronic Gadgets	
	7.5 Importance of Media	
	7.6 Pros and Cons of Mass Media	
	7.6.1 Pros of Mass Media	
	7.6.2 Cons of Mass Media	
	7.7 Role and Duties of Media	
	7.7.1 Shaping the Public Opinion	
	7.7.2 Providing Entertainment	
	7.7.3 Disseminating Information	
	7.7.4 Link between Government and the People	
	7.7.5 Delivering Justice	
	7.8 Impact of Media	
	7.9 Impact of Media on Indian Society and Economy	
	7.9.1 Social Impact	
	7.9.2 Economic Impact	
	7.9.3 Political Impact	
	7.10 Impact of Media on Slum Dwellers	
	7.11 Conclusion	
<b>8.</b>	<b>Data Analysis and Interpretation</b>	<b>104-142</b>
	8.1 Introduction	
	8.2 Study Area	



*(Handwritten Signature)*

Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

- 8.2.1 Slum Typology
- 8.3 Social Aspects
- 8.4 Impact of Formal Education on Slum Dwellers
  - 8.4.1 Education in Family
  - 8.4.2 Importance of Formal Education
  - 8.4.3 Benefits of Formal Education
  - 8.4.4 Impacts of Formal Education on Slum Dwellers
  - 8.4.5 Suggestion from Slum Dwellers on Educational Facilities
- 8.5 Impact of Reading Habits on Slum Dwellers
  - 8.5.1 Slum Dwellers Like to Read
  - 8.5.2 Personal Book Collection
  - 8.5.3 Types of Book Collection
  - 8.5.4 Fictions Like to Read
  - 8.5.5 Activities: To Develop the Self and Others Reading Habits
  - 8.5.6 Impact of Reading Habits on Slum dwellers
  - 8.5.7 Membership of Libraries
  - 8.5.8 Place for Reading
  - 8.5.9 Source of Book Purchasing
  - 8.5.10 Amount Spent on Reading Habits
  - 8.5.11 Causes that Affect Reading Habits
  - 8.5.12 Nature of Reading Habit
- 8.6 Impact of Media on Slum Dwellers
  - 8.6.1 Knowledge about Media
  - 8.6.2 Favorite Media
  - 8.6.3 Opinion on Effective Media
  - 8.6.4 Language: Preference to Read Newspapers
  - 8.6.5 Preference in Newspaper Reading
  - 8.6.6 Frequency of Library Visits
  - 8.6.7 Impact of Print Media on Personality Development
  - 8.6.8 Internet Use: Time
  - 8.6.9 Internet Use: Purpose
  - 8.6.10 Impact of Internet
  - 8.6.11 Impact of TV
  - 8.6.12 Media Impact on Personality Development
  - 8.6.13 Impact of Media on Slum Community



Principal  
Sevadai Mahila Mahavidyalaya  
Umrer Road, Nagpur.

8.6.14 Attitude Towards Media

8.7 Conclusion

**9. Findings and Recommendations** **143-163**

9.1 Introduction: Linked between Chapters

9.1.1 Background of Study

9.1.2 Review of Literature

9.1.3 Research Methodology

9.2 General Findings of NMC Slum Dwellers

9.3 Major Findings, Observations and Hypothesis Validity

9.3.1 Impact of Formal Education on Slum Dwellers

9.3.2 Impact of Reading Habits on Slum Dwellers

9.3.3 Impact of Media on Slum Dwellers

9.4 Recommendations

9.4.1 General Recommendations

9.4.2 Recommendations for Formal Education

9.4.3 Recommendations for Reading Habits

9.4.4 Recommendations for Media

9.4.5 Hypothesis Testing

9.4.6 Implication for Future Research

9.4.7 Conclusion

**Bibliography** **164-186**

**Annexure** **187-199**

- Annexure-A: Interview Schedule
- Annexure-B: Legislation Acts Related to The Slum Dwellers of Maharashtra
- Annexure-C: Photographs of Nagpur Slums



**Principal**  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



## List of Tables

S. No.	Tables	Page No.
1.	Table 4.7.1: Current Population in India	32
2.	Table 4.7.3.1: Slum Area and Slum Population Status of NMC	33
3.	Table 4.7.3.2: Slum Land Ownership Patterns	33
4.	Table 5.6.1: Literary Status of Maharashtra	44
5.	Table 5.7.2.1: Impact of Formal Education	47
6.	Table 5.7.3.1: Existing and Expecting Schools and Colleges in Future Source	48
7.	Table 5.8.1: Socio-Economic Classes (Sec) Grid	51
8.	Table 6.6.1: Nature of Reading Habit of Slum Dwellers	72
9.	Table 6.6.2: Reasons that Affect to Reading Habits on Slum Dwellers	73
10.	Table 6.6.3: Impact of Reading Habits	74
11.	Table 7.5.1: Media Awareness	93
12.	Table 7.8.2: Impact of Media on Society	98
13.	Table 7.10.1: Slum Dwellers Media Preference	101
14.	Table 8.2.1: Zone Wise Data Collection from NMC	105
15.	Table 8.3.1: Gender	106
16.	Table 8.3.2: Caste Category	106
17.	Table 8.3.3: Religion	107
18.	Table 8.3.4: Language	108
19.	Table 8.3.5: Educational Level	109
20.	Table 8.3.6: Occupation	111
21.	Table 8.3.7: Ownership of House	111
22.	Table 8.3.8: Nature of House	112
23.	Table 8.3.9: Household Amenities	113
23.	Table 8.3.10: Own Vehicle	114
24.	Table 8.3.11: Family Size	115
25.	Table 8.4.1: Education in Family	116



Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



26.	Table 8.4.2: Importance of Formal Education	117
27.	Table 8.4.3: Benefits of Formal Education	118
28.	Table 8.4.4: Impact of Formal Education	119
29.	Table 8.4.5: Suggestion from Slum Dwellers on Educational Facilities	120
30.	Table 8.5.1: Slum Dwellers Like to Read	121
31.	Table 8.5.2: Personal Book Collection	122
32.	Table 8.5.4: Fiction Likes to Read	124
33.	Table 8.5.5: Activities to Help Self and Others to Read More	125
34.	Table 8.5.6: Impact of Reading Habits	126
35.	Table 8.5.7: Membership of Libraries	127
36.	Table 8.5.8: Place for Reading	127
37.	Table 8.5.9: Source of Book Purchasing	128
38.	Table 8.5.10: Amount Spent on Reading Habits	129
39.	Table 8.5.11: Causes that Affect on Reading Habits	130
40.	Table 8.5.12: Nature of Reading Habit	131
41.	Table 8.6.1: Knowledge about Media	132
42.	Table 8.6.2: Media Preference	132
43.	Table 8.6.3: Types of Effective Media	133
44.	Table 8.6.4: Language: Preference in Newspaper Reading	134
45.	Table 8.6.5: Types of News: Preference to Read in Newspaper	134
46.	Table 8.6.6: Frequency of Visiting Library	135
47.	Table 8.6.7: Impact of Print Media on Personality Development	136
48.	Table 8.6.8: Internet Use: Time	137
49.	Table 8.6.9: Internet Use: Purpose	137
50.	Table 8.6.10: Impact of Internet	138
51.	Table 8.6.11: Nature of Programme Likes to be Watched on TV	139
52.	Table 8.6.12: Media Impact on Personality Development	140
53.	Table 8.6.13: Impact of Media on Slum Community	140
54.	Table 8.6.14: Attitude towards Media	142



Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

## List of Figures

S. No. Figures	Page No.
1. Fig 1.1: Nagpur City at a Glance	05
2. Fig 5.7.2.1: Impact of Formal Education	47
3. Fig 6.6.1: Nature of Reading Habit of Slum Dwellers	73
4. Fig 6.6.2: Reasons that Affect to Reading Habits on Slum Dwellers	73
5. Fig 6.6.3: Impact of Reading Habits	74
6. Fig 7.5.1: Media Awareness	94
7. Fig: 7.8.2: Impact of Media on Society	99
8. Fig: 7.10.1: Slum Dwellers Media Preference	102
9. Fig 8.2.1: Slum Typology	105
10. Fig 8.3.2: Caste Category	107
11. Fig 8.3.3: Religion	108
12. Fig 8.3.4: Language	109
13. Fig 8.3.5: Educational Level	110
14. Fig 8.3.6: Occupation	111
15. Fig 8.3.7: Ownership of House	112
16. Fig 8.3.8: Nature of House	113
17. Fig 8.3.9: Household Amenities	114
18. Fig 8.3.10: Own Vehicle	114
19. Fig 8.3.11: Family Size	116
20. Fig 8.4.1: Education in Family	117
118 Fig 8.4.2: Importance of Formal Education	118
22. Fig 8.4.3: Benefits of Formal Education	119
23. Fig 8.4.4: Impact of Formal Education	119
24. Fig 8.4.5: Suggestion from Slum Dwellers on Educational Facilities	120
25. Fig 8.5.1: Slum Dwellers Like to Read	122
26. Fig 8.5.3: Types of Book Collection	124



  
Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

27.	Fig 8.5.6: Impact of Reading Habits	126
28.	Fig 8.5.7: Membership of Libraries	127
29.	Fig 8.5.8: Place for Reading	128
30.	Fig 8.5.9: Source of Book Purchasing	129
31.	Fig 8.5.10: Amount Spends on Reading Habits	130
32.	Fig 8.5.12: Nature of Reading Habit	131
33.	Fig 8.6.1: Knowledge about Media	132
34.	Fig 8.6.2: Media Preference	133
35.	Fig 8.6.3: Types of Effective Media	133
36.	Fig 8.6.4: Language: Preference to Read Newspapers	134
37.	Fig 8.6.5: Types of News: Preference to Read in Newspaper	135
38.	Fig 8.6.6: Frequency of Visiting Library	136
39.	Fig 8.6.7: Impact of Print Media on Personality Development	137
40.	Fig 8.6.10: Impact of Internet	138
41.	Fig 8.6.11: Nature of Programme Likes to be Watch on TV	139
42.	Fig 8.6.12: Media Impact on Personality Development	140
43.	Fig 8.6.13: Impact of Media on Slum Community	141
44.	Fig 8.6.14: Attitude towards Media	142



**Principal**  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

## Abbreviations

1.	ASEAN: Southeast Asian Nations commonly known as ASEAN
2.	AWIC: Associations of Writers and Illustrators for Child
3.	BMC: Brihanmumbai Municipal Corporation
4.	CDI: Compact Disc Interaction
5.	CDP: City Development Plan
6.	CDPI: City Development Programmed Index
7.	CDROM: Compact Disc Read Only Memory
8.	CORO: Mahila Mandal Fedration (Adult Literacy in Low Income Group)
9.	CPM: Capability Poverty Measures
10.	DEA: Department of Economic Affairs
11.	DELNET: Developing Library Network
12.	EWS: Economic Weaker Section
13.	FDI: Foreign Direct Investment
14.	FDI: Foreign Policy of Direct Investment
15.	FEMA: Foreign Exchange Management
16.	FPZ: Export Processing Zone
17.	GDP: Gross Domestic Product
18.	HRD: Human Resource Development
19.	ICDS: Integrated Child Development Programme
20.	ICDS: Integrated Child Development Programme
21.	IFLA: International Federation of Library Association
22.	INFLIBNET: Information Library Network
23.	IUC: Inter-University Centre
24.	JNNURM: Jawaharlal Nehru National Urban Renewal Mission
25.	LIG: Lower Income Group
26.	MDG: Millennium Development Goal
27.	MPI: Multi Poverty Index
28.	MPI: Marginal Poverty Index
29.	NBDBI: National Book Development Board
30.	NBDC: National Book Development Council
31.	NBPC: National Book Promotion Council



  
 Principal  
 Sevalal Mahila Mahavidyalaya  
 Umrer Road, Nagpur.

32.	NBT: National Book Trust
33.	NFE: Non-Formal Education
34.	NGO: Non-Governmental Organizations
35.	NIT: Nagpur Improvement Trust
36.	NLM: National Literacy Mission
37.	NMC: Nagpur Municipal Corporation
38.	NPO: Non-Profitable Organizations
39.	NSDP: Nagpur Slum Development Programme
40.	NSS: National Sample Survey
41.	NSSO: National Sample Survey Organization
42.	OECD: Organizations for Economic Co-operations and Development
43.	RBI: Reserve Bank of India
44.	SIP: Slum Improvement Plan
45.	SPA: Slum Population Authority
46.	SRA: Slum Rehabilitation Authority
47.	SRC: Slum Redevelopment Scheme
48.	SSA: Sarva Siksha Abhiyan
49.	SUP: Slum Upgrading Programme
50.	UBSP: Urban Basic, Services Program
51.	UEE: Universal Elementary Education
52.	UGC: University Grant Commission
53.	UN: United Nation
54.	UNDP: United Nation Development Plan
55.	UNESCO: United Nations Education, Scientific and Cultural
56.	UN-HABITAT: United Nation Human Settlements Programme
57.	UNICEF: United Nations Children Fund
58.	URL: Uniform Resource Locator
59.	USDP: Urban Sanitation Development Programme for Nagpur
60.	UT: Union Territories
61.	WLM: World Literacy Mission
62.	YUVA: Youth Unity for Voluntary Action



Principal  
Sevala Mahila Mahavidyalaya  
Umrer Road, Nagpur.

# Chapter - 1

## Introduction

### 1.1 General introduction

*Beware the ends of the earth and the exotic: the drama is on your doorstep wherever the slums; are, wherever there is malnutrition, wherever there is exploitation and cruelty.*

John Grierson <sup>[1]</sup>

The rapid growth of slums in the recent decades has vastly outpaced the civil infrastructure. Nearly 100 million people of the World live in the urban slums (UN-HABITAT, 2010) <sup>[2]</sup>. Slums are one of the challenges that governments in most developing and the least developed countries are presently faced with. It is vicious cycle of population growth, opportunities in the cities (leading to migration to the cities), poverty with low incomes, tendency to be closer to work hence occupying any land in the vicinity etc. (UN-HABITAT 2007) <sup>[3]</sup>.

As per the recent survey report released by the Government, the country will have about 93.06 million people living in slums by next year, up by over 18 million in the past 10 years (Census 2011) <sup>[4]</sup>.

An expert committee, constituted to look into various aspects of slum census, projected the population living in this cluster, in 2011 at 93.06 million, up from 75.26 million since 2001, Minister of Housing and Urban Poverty Kumari Selja, Alleviate, said in a written reply to a question in the Lok Sabha (Times of India 19, November 2010) <sup>[5]</sup>.

This is the study of Slum Dwellers who live, despite incredibly difficult odds to survive, to share and try to upcoming from their slum life. Education is one of the basic tools of success in the modern era. Without education, one cannot realize their goals and make progress in the world (Baker, J., Basu, R., Cropper, M., Lall, S., & Takeuchi, A. 2005) <sup>[6]</sup>.

Education is a must for each and every member of the society that seeks to become a developed nation and compete with rest of the world. Lack of education is another basic problem among these slum inhabitants (Rao, V. 2000) <sup>[7]</sup>.

Page | 1



# BIOCHEMICAL STUDIES IN SOYBEAN SEEDS UNDER TROPICAL STORAGE CONDITIONS

DR. RAJESH D. GADEWAR AND DR. KIRTI P. DAMBHARE



Published by  
Weser Books, No. 79737  
Äussere Weberstr. 57  
02763 Zittau, Germany  
Email: weserbooks@gmail.com

*Weser Books*

# **BIOCHEMICAL STUDIES IN SOYBEAN SEEDS UNDER TROPICAL STORAGE CONDITIONS**

## Authors

**Dr. Rajesh D. Gadewar**

Associate Professor, Department of Biology (Botany), Sevadal Mahila  
Mahavidyalaya, Nagpur, Maharashtra, India

**Dr. Kirti P. Dambhare**

M.Sc. (Botany), M.Phil., Ph.D.

*Wiser Books*



A handwritten signature in blue ink, appearing to be "R. Gadewar".

**Principal**  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



**Published By:** *Weser Books*

*Weser Books, No. 79737  
Äussere Weberstr. 57  
02763 Zittau, Germany  
Email: weserbooks@gmail.com*

**Authors:** *Dr. Rajesh D. Gadewar and Dr. Kirti P. Dambhare*

*The author/publisher has attempted to trace and acknowledge the materials reproduced in this publication and apologize if permission and acknowledgements to publish in this form have not been given. If any material has not been acknowledged please write and let us know so that we may rectify it.*

© **Weser Books**

**Edition:** 1<sup>st</sup>

**Publication Year:** 2021

**Pages:** 81

**ISBN:** 978-3-96492-306-6

**Price:** € 10



  
**Principal**  
Seval Mahila Mahavidyalaya  
Umrer Road, Nagpur.

## Contents

<b>Chapter I: Introduction</b>	<b>01-30</b>
1.1 Introduction	01
1.2 Importance of Soybean in India	05
1.3 Importance of Soybean in Vidarbha Region	07
1.4 Biochemical Changes Due to Storage	09
1.5 Soybean Storage	10
1.5.1 Soybean Quality during Storage	10
1.5.2 Principle Variations which affect Quality of Stored Grains	11
1.6 Seed Quality	11
(a) Initial Seed Quality	13
(b) Environment during Seed Production	13
(c) Soybean Seed Composition and Genetics	13
(d) Presence of Mycoflora	14
(e) Seed Moisture Content, Relative Humidity and Temperature	15
1.7 Mechanisms of Seed Deterioration	17
1.7.1 The Mechanistic Model	17
1.7.2 The Kinetic Model	17
1.8 Orientation of the Research Work	18
1.8.1 Background of the Study	18
1.8.2 Statement of the Problem	19
1.8.3 Research Justification	20
1.8.4 Research Objectives	20
(a) Overall Objective	20



  
**Principal**  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

(b) Specific Objectives	21
1.8.5 Significance and Output of the Study	21
1.8.6 Framework of the Research Work	21
1.9 References	21
<b>Chapter II: Literature Review</b>	<b>31-53</b>
2.1 Soybean Production in India	31
2.2 Soybean Seed Supply System in India	32
2.3 Factors affecting Soybean Seed Productivity and Quality	32
2.3.1 Causes of Seed Deterioration	32
(a) Biochemical changes	33
(b) Membrane Degradation	33
(c) Free Radical Damage	34
(d) Enzymes Alterations	34
(e) Changes in Chemical Constituents	34
2.3.2 Environmental Factors	35
(a) Ambient Storage	36
(b) Cold Storage	37
2.4 Seed Storage Conditions	37
2.5 Effect of Storage Container on Seed Quality	39
2.6 Biochemical Changes during Storage	42
2.6.1 Protein Content	42
2.6.2 Reducing Sugar	43
2.7 References	45
<b>Chapter III: Material and Methods</b>	<b>54-58</b>
3.1 Statistical Analysis	55
3.2 Biochemical Observations	55
3.2.1 Protein Content	55



**Principal**  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

3.2.2 Reducing Sugar	57
3.2.3 Climatological Data	58
3.3 References	58
<b>Chapter IV: Experimental Results</b>	<b>59-66</b>
4.1 Initial Seed Quality Parameters	59
4.2 Biochemical Studies	60
4.2.1 Protein Content	60
4.2.2 Reducing Sugar Content (%)	63
<b>Chapter V: Discussion</b>	<b>67-78</b>
5.1 Biochemical Studies	68
5.1.1 Protein Content	68
5.1.2 Reducing Sugar	70
5.2 References	72
<b>Chapter VI: Summary, Conclusions and Future Scope of the Study</b>	<b>79-81</b>
6.1 Summary	79
6.2 Conclusions	80
6.3 Future Scope of the Study	80



  
**Principal**  
 Sevadal Mahila Mahavidyalaya  
 Umrer Road, Nagpur.



## List of Tables

Sl. No.		Page No.
Table 1.1:	Area, production and productivity of soybean during 2014-15	02
Table 1.2:	Safe storage period for soybeans	11
Table 3.1:	Climatological data during storage experimentation	58
Table 4.1:	Initial seed quality parameters before storage of JS-335, AMS-99-33, TAMS-38 and TAMS-98-21	60
Table 4.2:	Effect of Varieties (V), Storage Containers (C) and Storage Periods (T) and three factor interaction on Protein content (%) of soybean seeds during storage	60
Table 4.3:	Two factor interaction between Varieties and Containers (VxC) on protein content (%)	62
Table 4.4:	Two factor interaction between Varieties and Storage Period (VxT) on protein content (%)	62
Table 4.5:	Two factor interaction between Container x Storage Period (CxT) on protein content (%)	63
Table 4.6:	Effect of Varieties (V), Storage Containers (C) and Storage Periods (T) and three factor interaction on Reducing Sugar Content (%) of soybean seeds during storage	63
Table 4.7:	Two factor interaction between Varieties and Containers (VxC) on reducing sugar (%)	65
Table 4.8:	Two factor interaction between Varieties and Storage Period (VxT) on reducing sugar (%)	66
Table 4.9:	Two factor interaction between Container x Storage Period (CxT) on reducing sugar (%)	66



  
**Principal**  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



## List of Figures

<b>Sl. No.</b>	<b>Page No.</b>
Figure 1.1 Soybean Plants and Soybean Seeds	03
Figure 1.2 Uses of Soybean in Different Fields	06
Figure 3.1 Storage Containers	54
Figure 3.2 Estimation of Protein content in Soybean by Kjeldahl Method	56
Figure 3.3 Estimation of Reducing Sugar in Soybean by Benedict's Method	57
Figure 5.1 Effect of storage containers on Protein Content (%) in Soybean seed varieties. (a) Polyethylene bag (C1), (b) Cloth bag (C2) and (c) Jute bag (C3)	70
Figure 5.2 Effect of storage containers on Reducing Sugar (%) in Soybean seed varieties. (a) Polyethylene bag (C1), (b) Cloth bag (C2) and (c) Jute bag (C3)	72



  
**Principal**  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.





A handwritten signature in black ink, appearing to be "S. S. S.", written over a horizontal line.

**Principal**  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

# Chapter - I

## Introduction

### 1.1 Introduction

Any agricultural improvement program is the maintenance of quality in the storage of seeds, high temperature and high humidity conditions which are the common ambient feature of subtropical and tropical areas, which induced deterioration of seed quality. Although several reviews are available on the loss of seed viability during storage and its assessment has been standardized.

Soybean; the raw materials for vegetable oils, occupy a significant place in India's national economy. India is the world's biggest oilseed growing country and paradoxically, the world's biggest importer of edible oils as well. The main reason for this can be traced to low productivity per hectare.

Soybean (*Glycine max* L. Merrill) the most well-known oil seed and legume crop belongs to the family-leguminosae. It has a chromosome number of  $2n=40$ . The flour contains approximately 40 percent proteins, 20 percent fats with valuable phosphates, potassium and the important vitamins A, B, and D. Soybean is not only a very cheap source of edible oil but also is a high quality protein rich food for human beings and livestock. Soy-protein is known for the high amounts of lysine, methionine and cysteine. Soybean should prove a boon to the large population of children in India suffering from acute protein malnutrition. Soybean is used for the manufacture of soaps, paints, enamels rubber substitute, printing inks, lubricants etc. As a human food it is used in the form of baked beans, flour, candies, margarine, cocoa, cooking oil etc. It makes an excellent animal feed in the form of hay, posture, soybean oil, milk etc. It is becoming increasingly popular because of its nutritive value and a number of products are flooding in the market. The production and areas under this crop is increasing day by day due to high protein and oil contents in it and requirement of the same in antibiotic industry for medicinal purpose.

The cultivation of soybean has been introduced in India at the end of eighteenth century. In India, soybean is particularly grown in northern parts of the country. Its importance in reducing the oil and protein gap has now

Page | 1



  
Principal  
Seval Mahila Mahavidyalaya  
Umrer Road, Nagpur.

been generally appreciated and ambitious targets have been set up for its cultivation. Maharashtra Government has a program to take up its cultivation. In Nagpur district, large scale cultivation of it has already been taken up by some of the progressive farmers. Some of the promising and recommended varieties of soybean for Vidarbha region are TAMS-38, TAMS-98-21, JS-335 and AMS-99-28. Out of these, JS-335 is an early and high yielding variety.

In Vidarbha region of Maharashtra State, soybean crop is harvested in October-November. The seeds of soybean crops are stored for 7-8 months prior to sowing. Through sun drying after harvest, followed by storage, has been found to reduce the problem of loss of viability. Here the greater part of storage period is covered by the dry and cool winter months. Even keeping the seeds under ambient conditions in ordinary gunny bags would result in significant loss of viability (*Charjan and Tarar; 1992*). However, seed is not dried to relatively safe moisture content after harvest; its storability will be reduced (*Gadewar et. al., 2009*). Sometimes, during harvest there may be occasional rains which may prove detrimental to subsequent seed storage, especially when the seed is not dried to a safe moisture limit after harvest. Otherwise, under normal conditions, the problem of storing seed is not of any major significance. But the maintenance of good germinability of carry over seed is of great importance to seed produces and plant breeders. Table 1.1 shows Area, production and productivity of soybean during 2014-15 in India.

**Table 1.1:** Area, production and productivity of soybean during 2014-15

Region	Year	Area (Lakh ha)	Production (Lakh MT)	Productivity Kg/ha-1
India	2015-2016	110.656	86.426	781
Maharashtra	2015-2016	35.852	27.835	776
Vidarbha	2014-2015	20.720	8.235	397

(Source: *Anonymous, 2015, a, b*) (Source: *Anonymous, 2014, c*)

The demand for seed is fluctuating and very often there are large surplus stocks of seed which need to be preserved till the time of next sowing. Such left-over seed experience in the hot and humid monsoon months, would significantly decline germinability. By the time of next sowing in June-July, the loss in vigour and viability of carry over seeds, may adversely affect field emergence and productivity (*Basu, et al.; 1978, Charjan and Tarar; 1992, and Abdullah M. Alhamdan et al.; 2011*). The oil seeds are poor storer and lose its viability very fast in adverse conditions of temperature and humidity. To have maximum seed vigour and germination, it is necessary to determine the effect of the ambient conditions, under which maximum seed lots are stored in India, with varying temperature and humidity.

Page | 2

  
**Principal**  
 Sevadal Mahila Mahavidyalaya  
 Umrer Road, Nagpur.





M.A., MLib.I.Sc., PhD., working as a Head, Dept. of Library, at Sevadal Mahila Mahavidyalaya, Nagpur, India. He published twenty five research papers in different National and International reputed journals, two books with International publishers and two chapters in a book with National publishers. His interest area of research is e-learning, LIS student's behavioral study and information management.

**About the Book:**

Our generation is the witness of ICT development and how it is growing continuously. Academicians, technocrats, also children's, young ones, old people all have become follower and fond of this technology. Increasing advancement, its applications, facility and then unexpected entry COVID – 19 has made us to realize role and ultimate final and that too the only solution to share ideas, learn new things, complete assignment, teaching plan, video, editing make wise and scientific use ICT and after this save it in most appropriate device drive or in clouds.

**Contents :**

- Introduction : An overview of ICT
- Library Automation
- IT based Stock Verification
- WWW Web Developments
- Google Tools the Most useful application for library professionals
- E-Resources needs careful consideration
- Maintenance of computer system : Antivirus software's
- Cloud storage and libraries : Opportunities and challenges
- DELNET – Developing Library Network
- National Library & Information Services Infrastructure for Scholarly Content (NLIST)
- Open Access E-Resources available for users
- National Digital Library of India
- Search Engines
- Dspace the Best Open Source Software for development of Institutional Repository
- Information Storage Devices



**CAMBRIDGE BOOK HOUSE**

A-20, Chetan Vihar, Near I-8 Scheme, Gopwansari Byepass-Nagpur-460018 (M.P.)  
 Ph: 07724627247, 09097949920  
 E-mail: shashikantgokade@gnaf.com

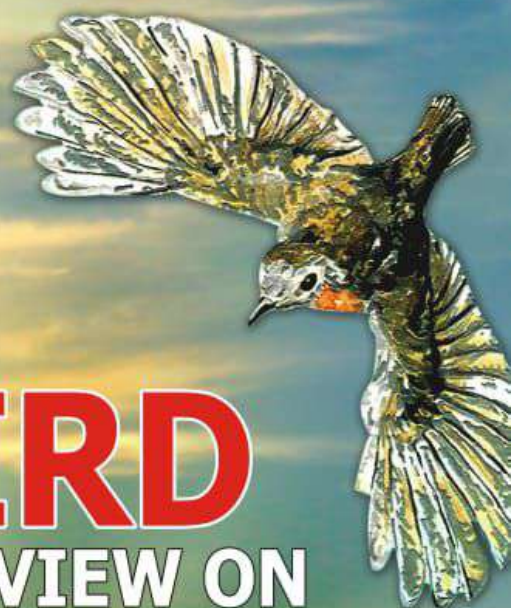
₹ 1795/-



**USE OF ICT IN LIBRARIES**

BIRD EYE VIEW ON

**Dr. SHASHIKANT G. ROKADE**



**BIRD EYE VIEW ON USE OF ICT IN LIBRARIES**

**Dr. SHASHIKANT G. ROKADE**



**Principal**  
 Sevadal Mahila Mahavidyalaya  
 Umrer Road, Nagpur.

# BIRD EYE VIEW ON USE OF ICT IN LIBRARIES



A handwritten signature in blue ink, appearing to be "S. S. S.", written over a horizontal line.

Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



# BIRD EYE VIEW ON USE OF ICT IN LIBRARIES

Dr. Shashikant G. Rokade

**CAMBRIDGE BOOK HOUSE**

Jaipur (India)



A handwritten signature in blue ink, appearing to be "S. G. Rokade".

Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

*Published By :*  
**CAMBRIDGE BOOK HOUSE**  
A-20, Chetan Vihar, 10-B Scheme,  
Gopal Pura Bye Pass, Jaipur - 302018.  
(M) 07734027247, 9079369109  
E-mail : mukesh.prajapat.kumhar10@gmail.com

**Rs. 1795/-**

**First Published - 2022**

**© Author and Publisher**

**ISBN : 978-93-95021-20-3**

**Printed at : JAIPUR**

All rights Author and Publisher. No part of this book may be reproduced in any form or by any mean without permission in writing from the publisher.



  
**Principal**  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



## Preface

---

Our generation is the witness of ICT development and how it is growing continuously. Academicians, technocrats, also children's, young ones, old people all have become follower and fond of this technology. Increasing advancement, its applications, facility and then unexpected entry COVID – 19 has made us to realize role and ultimate final and that too the only solution to share ideas, learn new things, complete assignment, teaching plan, video, , editing make wise and scientific use ICT and after this save it in most appropriate device drive or in clouds. .

Library professionals have to take more responsibility in the age of ICT. Systematic use of computers. It knowledge of electronic devices, applications, basic software and hardware, accessories, connecting devices, ports, etc. Library readers and authority both expect these services from library staff. Therefore keeping this in view and to promote supportive staff of libraries to get well acquainted with ICT and prove themselves that they are good in making use of modern technology this books has been written. This books contains 15 chapter shortly mentioned as under.

Chapter one explains on need of computer literacy and internet among library staff at ground level on priority basis. Well familiar staff discharge variety of services speedily and



  
Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

attract users towards library Perfection in MS-Office, regular use of e-mails for sending or receiving files and documents and net surfing are the basic foundation for smooth and fast functioning in libraries..They should be well versed with the use of compute basics such as MS-Word, MS-Excel MS-Power Point and internet surfing. There is very need to focus on library staff though their API and efforts are not counted for any promotion or any level. They are the real service provider works under supervision of librarians. This fact should understood and due respect should be given to their services as their contribution is also equally important in success of library.

Chapter two describes library automation which explains need, advantages, impacts of automation, challenge before library automation, future prospects, involvement of library staff etc .

Chapter three deals about ICT based stock verification. Library staff is expected to conduct stock verification work at regular intervals i.e annual, alternative year or once in five years. Manual and ICT based stock verification is with its advantages and limitations are described in the chapter.

Chapter four takes review of web developments. Web 1.0, Web 2.0, Web 3.0 and 4.0 are briefly described in the chapter.

Chapter five 'Google Tools' its types, origin and uses are explained shortly in this chapter.

Chapter Six deals about 'e-Resources needs careful consideration'. It electronic resources, its types, selection process, technical requirement, authentication, licensing, pricing, legal issues etc

Chapter seven Maintenance of computer systems :Antivirus software's' explains concepts virus, antivirus, qualities expected of antivirus software's, protection, precautions to be taken are briefly mentioned here.



A handwritten signature in blue ink, appearing to be 'S. J. ...'.

Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

Chapter eight 'Cloud storage and libraries: Opportunities and challenges' describes definition of cloud computing, its role, services of cloud computing, types, applications, properties and other associated concepts.

Chapter nine DELNET -Developing Library Network' describes its role in providing services through Inter Library Loan, database available, terms and conditions required for memberships and services, Objectives, Full Text digital library, resources, links of databases, etc are given in the chapter. More specifically subject wise list of journals listed in order to create effective awareness among users.

Chapter ten 'National Library and Information Services Infrastructure for Scholarly Content (NLIST)' highlights role of N-List e-Resources and other databases in higher education. Availability of e-Journals e-Thesis, e-Books and other databases for colleges are mentioned in the chapter though they are available on site. Taking into consideration users time and attitude and in order to promote them by bringing the list to their notices subject wise list available under different sites such as Indian journals, Oxford University Press , Cambridge University Press, H. W. Wilson are arranged accordingly and provided in usable form for readers..

Chapter eleven 'Open E-Resources (e-Jrls) available for users of science' are mentioned . E-resources made available under DOAJ, NOPR of NISCAIR, Indian Academy of Science Bangalore and other related e-resources included in the chapter.

Chapter twelve 'National Digital Library' highlights information about NDL, its objective, address, membership, guideline about access etc. included in the chapter. Further in order to make awareness among users E-Resources available under Science and Humanities are given in the topic.

Chapter Thirteen is about 'Search Engines'. It describes meaning of search engines, its role, types etc.



  
Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

Chapter fourteen 'Dspace the Best Open Source Software for development of Institutional Repository'

Chapter fifteen 'Information Storage devices' keeping in view the importance of information storage devices historical developmental stages and forms, storage capacity etc are briefly described in the topic.

**Dr. Shashikant G. Rokade**



A handwritten signature in blue ink, appearing to be 'S. G. Rokade'.

**Principal**  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

# Contents

---

• <i>Preface</i>	<i>v</i>
1. Introduction : An overview of ICT	1
2. Library Automation	7
3. IT based Stock Verification	17
4. WWW Web Developments	28
5. Google Tools the Most useful application for library professionals	32
6. E-Resources needs careful consideration	43
7. Maintenance of computer system : Antivirus software's	58
8. Cloud storage and libraries : Opportunities and challenges	66
9. DELNET - Developing Library Network	80
10. National Library & Information Services Infrastructure for Scholarly Content (NLIST)	100
11. Open Access E-Resources available for users	145
12. National Digital Library of India	158
13. Search Engines	165
14. Dspace the Best Open Source Software for development of Institutional Repository	169
15. Information Storage Devices	178
• <i>Selected Bibliography</i>	182



Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



# 1

## Introduction : An Overview of ICT

---

Library professionals are aware that use of computers and applications of ICT have become inseparable part of our day to day activities in libraries. Even small public libraries of D type located in rural area are also implementing use of computers. Such initiative of village libraries are really appreciable and motivational for others to accept ICT environment. Learned employees working in educational libraries specially of colleges are expected to make optimum use of computer and ICT applications. Besides COVID-19 has not kept any other alternative option than use of ICT in college libraries. Therefore library supportive staff should accept ICT technology positively and take initiative in learning use of ICT so that this will help to render variety of services to their readers at wide range. This is right time and opportunity for library staff. Of course it is the moral duty of librarians to provide unconditional support and motivation to acquire ICT skill. Cooperation of the principal and management through financial support is the key factor in development of ICT.

In order to make the successful use of ICT library staff should learned and well versed with basics of



  
Principal  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

# Recent Advances in Humanities, Commerce, Management, Engineering, Science & Technology

## Editors

Dr. Walunj Mahadeo  
Dr. A. A. Keste  
Dr. Sharad Karne  
Santosh P. Mane

Dr. Ranjan Kalita  
Dr. Prashant Chavare,  
Dr. Deka R. M





# **Recent Advances in Humanities, Commerce, Management, Engineering, Science & Technology**

## **Editors**

---

**Dr. Walunj Mahadeo**  
Principal  
College of Arts, Bhigwan ,  
Tal. Indapur Dist. Pune

**Dr. Ranjan Kalita**  
Principal  
Rangapara College, Amaribari  
Assam

**Dr. A. A. Keste**  
Principal  
Dattakala Group of  
Institutions  
Faculty of Engineering

**Dr. Prashant Chavare**  
IQAC Co-ordinator  
College of Arts, Bhigwan,  
Maharashtra

**Dr. Sharad Karne**  
Director.  
Dattakala Group of Institutions,  
Maharashtra

**Dr. Deka R. M.**  
Convener  
Vice- Principal  
Rangapara College

**Santosh P. Mane**  
Assistant Professor  
IQAC Coordinator & Head Department of Geography,  
Sameer Gandhi Kala Mahavidyalaya (Commerce & Science College) Malshiras,  
Solapur, Maharashtra, India

---

**Title** : Recent Advances in Humanities, Commerce,  
Management, Engineering, Science & Technology

**Editors Name** : Dr. Walunj Mahadeo, Dr. Ranjan Kalita,  
Dr. A. A. Keste, Dr. Prashant Chavare,  
Dr. Sharad Karne, Dr. Deka R. M., Santosh P. Mane

**Publishing Agency** : Jyotikiran Publication, Pune  
: Santosh Pandurang Mane

**Publisher Address** : Sr. No. 204, Sahajeevan Society,  
Bhekrinagar, Hadpsar, Pune-8  
Mob- 8888454089  
Email- [jyotikiranpublicationpune@gmail.com](mailto:jyotikiranpublicationpune@gmail.com)

**Printed By** : Amitsons Digital Copier 106, Paras  
Chamber, 1st Floor, Above Bank Of  
India, Near Laxminarayan Theatre,  
Swargate, Pune- 411009

**Edition Details** : I<sup>st</sup>

**ISBN** : 978-93-94819-13-9

**Copyright** : Dr. Walunj Mahadeo, Dr. Ranjan Kalita,  
Dr. A. A. Keste, Dr. Prashant Chavare,  
Dr. Sharad Karne, Dr. Deka R. M., Santosh P. Mane

**Publication Date** : 30/09/2022

**CONTENTS**

<b>Sr No</b>	<b>Paper Title</b>	<b>Page No.</b>
1	Facilitating Transition From School To Work: Empowers Students With Special Educational Needs Towards Independent Livelihood In An Inclusive Society <b>Fr. Baiju Thomas</b>	1-8
2	The Reflection Of Spiritual Elegance In Rabindranath Tagore's Gitanjali <b>Rajkumar Kadam</b>	9-13
3	Women Entrepreneurship: An Indestructible Retaliation To Gender <b>Sadhana Chhatlani, Dr. Caroline David</b>	14-17
4	Women's Health <b>Mrs. Jyoti D. Kamble</b>	18-20
5	Electronic Waste And India's Environment <b>Dr. R. Premalatha, Dr. S. Thangamayan</b>	21-24
6	"Radioactive Pollution " <b>Dr. Smt. Sindhu Parasram Khandare</b>	25-30
7	"Role Of Health Clubs In Promotion Of Health With Refrence To Urban Women's Population" <b>karuna Amruskar, Dr. Rajkumar P. Malipatil</b>	31-32
8	Attitude Of Students Towards Yoga In The District Of Uttar Dinajpur In West Bengal <b>Bidyapati Bala, Dr. Nekram</b>	33-35
9	A Review On Solar Irradiance Forecasting Models For Optimal Photovoltaicpower Generation Using Artificial Intelligence <b>Neha Sehrawat, Sahil Vashisht</b>	36-53
10	E-Books As Part Of The Library Collection Development <b>Dr. Sangaraj Hosamani</b>	54-57
11	Social And Environmental Problems Within The Indian Context <b>Dr. M. P. Khobragade</b>	58-60
12	A Conceptual Study On Collaborative Learning In Open And Distance Education With Special Reference To Netaji Subhas Open University <b>Dipayan Singha, Dr. Anirban Ghosh, Dr. Amit Majumder</b>	61-64
13	Phytochemical Screening And Biological Activity Of Nelumbo Nucifera Seeds <b>Ms. B. Mohanapriya, Ms. A. Sathyapriya, S. Anu, V.L. Divyasree G. Kavinraj</b>	65-67
14	Impact Of Digitalization On Mba Students' Employability And Industry's Resource Management <b>Anuj Suresh Deshmukh</b>	68-70
15	Pedagogical Issues And Changing Trends In Teaching Learning Methods In Social Sciences <b>Dr. Surendra Kumar, Dr. Shweta Verma</b>	71-75
16	"Design And Estimation Of Polymeric Nanoparticles Containing Celecoxib For The Treatment Of Inflammatory Bowel Disease" <b>Mr. Amit Vilasrao Pondkule, Dr. Vishal Bharat Babar, Dr. Sudarshan Nagrale</b>	76-78
17	Fish Diseases And Health Management <b>Dr. Shyam K. Lande</b>	79-81
18	Effect Of Plyometric And Core Training On Skill Related Performance Variables Among Male Medium Fast Bowlers In Cricket <b>Debabrata Sarkar, Dr. Mahesh Singh Dhapola</b>	82-87
19	Language And Reading Difficulties Among Children With Learning Disabilities In An Inclusive Classroom <b>Vidyasagar Maurya, Dr. Bharti Sharma</b>	88-91
20	Developing Social And Language Skills In Young Children Through Folktales <b>Rohit Kant Mishra</b>	92-97
21	Mapping Distribution Of Public Space In Mysore City <b>Sindhu H.M., Prof. Chandrashekara B.</b>	98-103
22	Synthesis Of Bioactive 3,4-Dihydropyrimidin-2(1h)Ones :Green Approach <b>Arshia Parveen</b>	104-109
23	Exploring The Impact Of Artificial Intelligence On Teaching And Learning In Higher Education: Research And Practice In Technology Enhanced Learning	110-113

## WOMEN'S HEALTH

Mrs. Jyoti D. Kamble

Assistant Professor Department of Food And Nutrition, Faculty of Home Science Sevadal Mahila Mahavidyalaya, Sakkardara Square, Nagpur

**Corresponding Author- Mrs. Jyoti D. Kamble**

Email: [jdkamble2012@gmail.com](mailto:jdkamble2012@gmail.com)

DOI-

### **Abstract:**

*Women and health discuss the general perspective of women's problems and health. Related issues the status and role of the women determines the awareness of health. Due to modernization the health condition of women is not a healthy condition. With the help of right to women and health facilities provided by government to prevent and control the health problem and get possible solution for it. Women are considered as one of vulnerable population of society who face various problem affairs at all parts of the society women in developing country have many problems and women in developed countries have right and freedom but also fight for equal rights and liberty women had suffering from physical, mental psychological and social conditions. Women role in political, social psychological spiritual and all sector she covers well so her problems have very importance for maintainance of any society. women role in maternal leadership, corporate sector business education and justice etc. she devote in her work and do it very well may be she is house wife or working women she face reproductive problem menstrual problems disease problems ( Breast Cancer ) Domestic violence specially and depended employment problems all these health related issues of women at rural and urban level solve by women empowerment concept is growing from these issues and women empower through self-earning, entrepreneurship development and government facilities to women Mahila Batchat Gat etc. Women lives have changed from time to time. Historically, life was particularly difficult women drudgery for most women. Besides numerous dangers and diseases women became wives and mothers often when they were just emerging from their own childhood many women had multitude of pregnancies and some had childbirth problem also The immunization and health services are not reach to the women today mediclaim, term plan are the option for medical facility, Jinni Suresh yojna also benefitable to rural women the health programmers need to focus more on women health needs, keeping in mind the role and status of woman.*

**Keywords:** - women problems, health, health issues and facility, women role and society etc.

### **Introduction**

Women's Health play an important role in family development and if family developed there will be good chances for national development women naturally helps in national development that's why women health is very important in all concern. Women health is now important concept and need focus on it always Women health in general and adolescent girls reproductive health are both have importance in women socio economic status social and psychological health of women depends on family background and environment Health is every ones right no doubt women life may be she is home worker /house wife or working women she face so many problems and challenge women life is full of challenges from history women life was very difficult now a days women life is very strong and empowered

education and laws helps women to become strong and empower to solve her problem

### **Impact of violence on women's health**

Violence against women is a major problem and a violation of human right this may due to lack of access to education and opportunity and low social status in communities are linked to violence against women (Ref. T. Kanakraj. & A. Muthu Raman – women and Health edited by Jenitta Mary pg.no. 105 ISBN-978-81-7132-657-0) Violence against socio- economic status of women, physical, mental and psychological health of women Day today the problem of joint family and family members live together is difficult. Because of lifestyle changes and modernization other things also affect the same I e. economic condition, earning problems, un-employment and all such make the things critical and family security

destroys. In such cases Domestic violence occurs. And its impact turns in divorce and family breakdown violence directly affects the family environment Domestic violence reflect the impact on women development domestic violence affects women health

Women health play on important role women issues and its concern always need attention because of above reason for women health and welfare govt. start so many programmes and schemes

- 1) Sukanya Samruddhi Yojana
- 2) Mata Bal Kalyan
- 3) Sarva Shiksha Abhiyan
- 4) Janani Suraksha Yojana

Women health depend on following factors:-

- 1) Diet and Nutrition
- 2) Personal Hygiene and economic status
- 3) Education and awareness, and facilities
- 4) Socio- economic background

Health complications faced by women in India –

- 1) Breast cancer/cervical cancer
- 2) Abortions and delivery problems
- 3) Menstruation and menopause problems
- 4) Nutritional anaemia, Sickle cell anaemia
- 5) Smoking problems, and drink
- 6) Sexual harassment and addiction problem affected health problem
- 7) Dental caries and Dental health problems
- 8) Malnutrition and Deficiency diseases
- 9) Bones and calcium, vit. D. Deficiency health

Ref. 1) Women and Health – I Jenitta Mary – C. Chidambarnathan (2011) ISBN-978-81-7132-657-0, Pointer Publishers, Jaipur. Pg. no. 105.

**National women's Health week celebrated on 9 May to 15 May 2021.**

**Health detections in women—**

1. Birth control
2. Breast Implants
3. Caregiving
4. College and adolescence Health
5. Heart Health
6. Menopause
7. Mammograms
8. Pregnancy
9. Women and bone pain medicine
10. Cosmetics and Nutrition

**Women Empowerment in India:--**

Women Empowerment means the economic development of women. Not only economic

development but also social development and gender justice also are the dimensional strategies.

**Work Participation:-**In rural India women play an important role in agriculture sector and industrial sectors as labour workers. Labour women faced malnutrition and death diseases problems. Their children also suffers.

**Women in Politics:** - Women participation in politics play an important role in national development. The political women have stress in their work. So many mental stress and tensions and it affects impact on women health. Dr. B. R. Ambedkar gives chance to women to enter into politics and other social sector for development in India. As per the 73<sup>th</sup> and 74<sup>th</sup> Indian constitutional Amendment Act 1/3<sup>rd</sup> seats are reserved for women in the Parliament and State Assembly. So, the political and Corporate sectors working women face so many mental stress and tensions and suffering from high B.P., Diabetes, Blood cancer and Breast Cancer etc. Women always face the critical issues of the family and suffer from ignore of Health.

**Effect of sports and Fitness on women Health:**

Health is the basic requirement of all human beings. Yogasans and sports are the cultures of Indian society. Women also do different yoga skilfully and maintain their health. Now a days women are good in sports and winner in different national and international games sports. In the modern days we can witness that many women take part in sports.

And the women who do not get time for sports activities. It is due to the impact of health benefits through physical activities. Now everywhere we can see women take morning and evening walk. She join health club also and go to park with children. This is because of awareness of fitness. Sports gives jobs and security to women. Sports promotes welfare to women. They gate money fame and name through sports.

**Health problems of urban and rural women:**

Rural women have more health problems than that of urban women. Rural women work in fields, agriculture,

And also labour workers. Rural women are suffering from lack of education and support to solve her problems.

Now Mahila swyamrojgar scheme, mahila bachat gat scheme enhanced the value of rural women skills

The risk factors for rural women health are family, society etc.

Rural women empowerment is the need of society. Rural community based on strong will power of women and their work.

#### **Menstrual Problems and Menopause in women:**

Menstrual problems are a major cause of morbidity among the adolescent girls. More than 90% girl are suffering from menstrual pain. Pain is a common complaint of girls and women. Some women have less menstrual period 2-3 days or not cleared having problems 4-5 days of pain and other symptoms women ignore all these problems and secured to refer the physician.

The tendency to ignore is more among rural women than that of urban women low consultation rate and culture of tolerance among women is also linked to their low status in the family and society. Women lack of decision making is also important factor on women health seeking. When menstrual cycle stops menopause is there. Menopause is condition when ovulation process change and secretion of hormones also change. Women are not easier to this change and depression occurs sometimes. Slowly she accept the body changes and familiar with the condition.

#### **Conclusion: -**

Women health play an important role in development of nation .So, women is keyplayer

of society and needs attention on her condition. Women health facility and services provide by government. From history women play so many role in family and complete the needs of not only family also society and nation. Women health problems and issues needs services and alertness taking in action plan. Women empowerment in today life make desirable support to all women.

#### **References:-**

- 1) Women and Health – I. Jenitta Mary –C. Chidambarnathan ISBN-978-81-7132-657-0, Pointer Publishers, Jaipur. Pg. no. 105. Year 2011

2) [www.google.com](http://www.google.com)

## Chief Editor

13



Dr. Chhaya N. Vidhale  
Associate Professor, Department of Communication and Extension,  
Matoshree Vimlabai Deshmukh Mahavidyalaya, Amravati.  
E- Mail:- vidhalechhaya@gmail.com

- Co-supervisor for Ph.D. program Shri. Jagdishprasad Jhabamal Tibrewala University, Rajasthan.  
Research topic - Development of Household Art Training Modules for Empowerment of Women.
- Worked as officiating principal.
- Organizing Secretary of National Workshop.
- Published many research papers in National, International Journals and Proceedings.
- Attended many national and international conferences, seminars workshops.
- Contributing in the social services rendered for welfare of rural, tribal, and slum women.
- Life member of Home Science Association of India (HSAI)

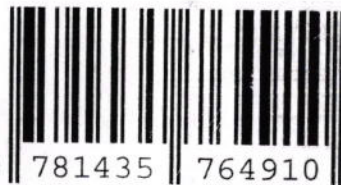


Dr. Sharmila R. Kubde  
Professor, Department of Food and Nutrition  
Matoshree Vimlabai Deshmukh Mahavidyalaya Amravati.  
E- Mail : sharmila.kubde@gmail.com

- Supervisor for Ph.D programme, Sant Gadge Baba Amravati University Amravati
- Co - Guide for Ph.d programme, Shree. Jagdishprasad Jhabamal Tibrewala University Rajasthan
- Organised various cookery competitions and flower arrangement exhibitions in Amravati City .
- Special Interest fields are Food Science, Women Health and Community Nutrition.
- Associated herself with few voluntary organisations in Amravati City. She has presented number of papers at International, National, State and Regional level conference and seminars.
- Associated with National and State Professional Association viz. NIN, HSAI, ICWA, All India Rose Federation, Garden Club .

Published by

.com  
3101, Hillsborough St,  
Raleigh, NC 27607,  
United States.



9 781435 764910



“HOME SCIENCE SKILLS IN INDUSTRIAL ENTREPRENEURSHIP FOR UPLIFTMENT OF LIFE”

Dr. Chhaya N. Vidhale & Dr. Sharmila R. Kubde

# “HOME SCIENCE SKILLS IN INDUSTRIAL ENTREPRENEURSHIP FOR UPLIFTMENT OF LIFE”



Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nag.

Dr. Chhaya N. Vidhale  
Dr. Sharmila R. Kubde

## CONTENT

Sr. No.	Chapter Name	Page No.
1	ROLE OF HOME SCIENCE IN NATION BUILDING <b>Dr. Chhaya Narendra Vidhale</b>	1 to 15
2	RECENT COMPUTER TECHNOLOGY SKILLS FOR ENTREPRENEURSHIP AND OPPORTUNITIES <b>Dr. Devidas Rushiji Bambole</b>	16 to 37
3	ENTREPRENEURSHIP DEVELOPMENT IN FOOD INDUSTRY, HOTEL MANAGEMENT AND THERAPEUTIC FOODS <b>Dr. Sharmila Kubde</b>	38 to 57
4	REVIEW OF RECENT TRENDS IN HUMAN PHYSIOLOGY IN CONTEXT TO HOME SCIENCE FACULTY <b>Dr. Kumud Chaudhary</b>	58 to 68
5	INTRODUCTION OF INDIAN TRADITIONAL TEXTILE CRAFT <b>Archana Prakash Harne</b>	69 to 79
6	HOME SCIENCE FOR BETTERMENT OF LIFE <b>Sadhana S. Mohod</b>	80 to 103
7	ROLE OF ADVERTISING IN ENTREPRENEURSHIP <b>Dr. Vandana Dhawad</b>	104 to 117
8	ENTREPRENEURSHIP THROUGH HOME SCIENCE <b>Dr. Archana Madhavrao Bhojar</b>	118 to 129

Principal  
Sevada Mahila Mahavidyalaya  
Umrer Road, Nagpur.



9	EMERGING TRENDS IN INTERIOR DESIGNING Dr. Ujwala Tikhe Kandalkar	130 to 146
10	RECENT TECHNOLOGY IN HOME SCIENCE Mrs. Jyoti D. Kamble	147 to 159
11	CHOICE BASED CREDIT SYSTEM AN AVENUE OF EMPLOYABILITY FOR HOME SCIENCE STUDENTS Sanyogita V. Deshmukh	160 to 171



  
**Principal**  
 Sevadal Mahila Mahavidyalaya  
 Umrer Road, Nagpur.

## CHAPTER - 1

### ROLE OF HOME SCIENCE IN NATION BUILDING

**Dr. Chhaya Narendra Vidhale**  
*Associate professor, Dept. of Home Science,*  
*Matoshree Vimlabai Deshmukh Mahavidyalaya Amravati.*

#### INTRODUCTION -

The reflection of Home science text back to ancient days when special education on all aspects of life was given to girls for managing harmonious home and family life till formal education for girls in this direction was introduced by Madras mission school in 1915. The girls were educated on aspects like taking good care of children, supplying nutritious food to family, building health of family and managing their homes. This was the initiation of the concept of Home science through the education was not formally named as home science. Efforts were continue to make this education meaningful and suitable to life of a girls who got married in her early teens. Later early 90s witness the boost of special education for girls called home science education. The stepping stone in this direction was introduction of Home science subject in 1927 by educational planner at All India women's conference. The society recognise this education as a symbol of high status and the parents got encouraged to send their daughters for home science education. This was further supported by National Freedom Movement in thirties and forties of 19th century when equality of women was sought in all aspects of their expanded role in home and development of the nation. Even Sargent committee in 1944 highly acknowledge the importance of Home science as subject in schools for girls.

After independence movement, the forward looking nation strived to empower the status of women in all spheres of life and home science education for girls continued to flourish.

---

---

**“HOME SCIENCE SKILLS IN  
INDUSTRIAL ENTREPRENEURSHIP  
FOR UPLIFTMENT OF LIFE”**

---

---

Editor in Chief  
**Dr. Chhaya N. Vidhale**  
**Dr. S. R. Kubde**

---

Lulu Publication  
2022



*Principal*  
Sevadani Mahila Mandali, Nagpur  
Umrer Road, Nagpur.

Therefore, effective and efficient use of the limited space is not just the choice, but the need of the people. With all these developments, interior designing is emerging as a booming career option for people with a creative bent of mind.

#### REFERENCES :

1. John Pile -History of Interior Design by© John Pile
2. Rishabh Sarpal, Concept Architect and Founder of Top 7 Interior Design Trends of 2022 by Industry Experts
3. Karnakar.Livspace Editorial Teamgaging designs that feel both contemporary and futuristic," Interior Design: Principles And Practice Paperback – 7 December 2020
4. Ar. Sanjay Kanvinde, et al. | 1 January 2017Modern Houses In India
5. Seetharaman P.Interior Design And Decoration (Pb 2019) 1 January 2019by Creativity 13,
6. Frida Ramstedt - The Interior Design Handbook Kindle EditionFormat: Kindle Edition
7. Rishabha Sarpal -Interior Designing as career
8. Renu Arora, Importance Of Interior Decoration in Home, Journal Of Civil Engineering and Environmental Technology .
9. [https://sist.sathyabama.ac.in/sist\\_coursematerial/uploads/SDE1102.pdf](https://sist.sathyabama.ac.in/sist_coursematerial/uploads/SDE1102.pdf)
10. [https://en.wikipedia.org/wiki/Interior\\_design](https://en.wikipedia.org/wiki/Interior_design)
11. <https://interiorsinfo.com/Idea/Why-is-interior-design-important>
12. <https://www.quora.com/Why-is-interior-design-important>
13. <https://in.indeed.com/hire/job-description/interior-designer?mna=5&gclid=Cj0KCQjw0P>
14. <https://www.indiatoday.in/education-today/jobs-and-careers/story/interior-designing-as-career-specialisations-salary-and-skills-needed-1636504-2020-01-13>



  
Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

146 | Page



## CHAPTER - 10

### RECENT TECHNOLOGY IN HOME SCIENCE

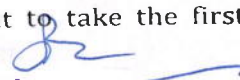
Mrs. JYOTI D. KAMBLE

Assistant Professor, Sevalal Mahila Mahavidyalaya, Nagpur.

#### INTRODUCTION:

Higher education encourages technical know-how, utility skills promote careerism sense of responsibility and prosperity among youth of nation besides dealing with development of moral character and intellectual level of youth. Home science is an applied and integrated science which aims at improving the quality of life for the individual, the family and the community. The history of home science is to teach and learn the student traditional knowledge on graduation level. Home science includes basic 5 subjects i.e. Food and nutrition, Resource management, Textile and clothing Extension education and Human development. History of Home Science was first introduced in secondary schools in the princely state of Baroda (now Vadodara) by Maharaja Sayajirao Gaekwad III in 1913. Home science is concerned with the home health and happiness of all the people living in it. As a field of specialization, Home science draws its content from courses in both science and art. Thus representing an interdisciplinary field that prepares young learners for the two most important goals in their lives caring for their home and family as well as preparing for career or vocation in life, Hence its scope extends to activities associated with setting home based activities.

"Right from conception balanced and nutrition, food health and proper medical care for mother, conducive home and environment to take the first step and plunge in to this wide

  
Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

147 | Page

world in an atmosphere of warmth and affection a sense of belonging and being cared for proper samskaras and a health surrounding and mind space for a sound mind and sound body with the active responsibilities apply, and render ones mite in upliftment to enhance quality not only of one own life but also of others”.

Home Science covers a few areas of specialization such as Food and nutrition Communication and Extension, Resource Management, Human Development, Fabric and apparel science. We learn and develop good interpersonal relationship with in and outside the family. We also learn to manage our resources like time, energy and money so that we get maximum satisfaction. Home science also involves learning the skills intending all this useful to our family or community, especially the underprivileged for better life.

We value our traditional knowledge, experience offered to us by our parents and grandparents, we should continue and value this. They new advance in science and technology and management equip us better and deal with the changing social and economic environment and meet the challenges of the 21st century.

#### **Significance of the study of Home-Science in day to day life :-**

The need for studying each aspect of Home-sci. enables a scientific understanding of the field and allows for research in the discipline. A study of Home-science helps in the ultimate understanding of self, people and various, social, emotional and biological factors necessary for human survival. Home science syllabus draws its strength from both science and arts discipline. This enables the student to develop the ability and understand the concept as well as apply them in various contents situations. This gives home science student an edge above all other disciplines.

#### **Home science is co-education field – Need of Hour**

Both have to succeed in an increasingly competitive world.

Both have to share household Problems and problem of un-employability.

Both need to manage resources.

In case of a problem they have to solve together with other family members.

Home science offers varied vocational and professional avenues for both boys and girls.

Joint knowledge and skills help to improve the standard of living.

Home science means the art of managing yours resources efficiently and the science of achieving a healthy and happy home as well as successful career.

#### **Technology in Home science**

Food technology

Dairy technology

fashion designing and apparel technology

Catering and hotel Management

#### **Recent topics in Home-sci. Syllabus :-**

##### **1) Food and Nutrition :-**

- i) Childhood obesity problem.
- ii) Juvenile Diabetes, Heart disease in child.
- iii) Breast cancer – symptoms & their Hazards.
- iv) smoking and drinking effects on women’s health.
- v) Use and importance of HACCP techniques FSSAI – Food quality.
- vi) Self employment through food preservation techniques.
- vii) Water conservation methods /techniques.
- viii) Kitchen gardening – Assignments and projects give to the students.



**Principal**  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

ix) Food waste management and production of manure from waste vegetables & fruits.

**(Family Resource Management) : (FRM)**

- 1) Home management, event management
- 2) Management of waste food in marriages, birth day parties etc.
- 3) Self employment through Interior decoration, flower arrangements.
- 4) Gardening of Medicinal and herbal plants – i.e. Aloe vera, Tulsi

**Textiles :-**

- 1) Fashion Designing Techniques.
- 2) Different professional clothing
- 3) Recent techniques of stains removals.
- 4) Printing and Designing, Patch works, Embroidery, and lesser formation for sarees.

**Extension Education :-**

- 1) Women empowerment
- 2) Women Entrepreneurship
- 3) Linkages of NGO and GO with common people.

**Human Development :-**

- 1) **Stress management** in school going children's.
- 2) Depression in elder people. Girls Abuse / harrasment /family violence at Home level / Rape etc Its effects & role of law in & society such cases.
- 4) Mental diseases, migraine, mental health cases & symptoms of Major depression & prevention
- 5) Role of play in life and happiness



**Principal**  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



150 | Page



**Principal**  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



**different new Arts concepts use in Home science resource management subject**

**Introduction of Ceramics Arts**

Art is one of the visual arts. While some ceramics are considered fine, as pottery or sculpture, most are considered to be decorative, industrial or applied art objects. Ceramics may also be considered artefacts in archaeology. Ceramic art can be made one person or by a group of people. In a pottery or ceramic factory, a group of people design, manufacture and decorate the art ware. Product from a pottery are sometimes referred to as "art pottery". In a one -person pottery studio, ceramists or potters produce studio pottery.

**Introduction Decoupage Art**

An object by gluing colored paper cutouts onto it in combination with special paint effects, gold leaf and other decorative elements. Commonly, an object like a small box or an item of furniture is covered by cutouts from magazines or from purpose-manufactured papers. Each layer is sealed with varnishes (often multiple coats) until the "stuck on" appearance disappears and the result look like painting or inlay work. The traditional technique used 30 to 40 layers of varnish which were then sanded to a polished

Three-dimensional decoupage (sometimes also referred to simply as decoupage) is the art of creating a three-dimensional (3D) image by cutting out elements of varying sizes from a series of identical images and layering them on top of each there, usually with adhesive foam spacers between each layer to give the image more depth. Pyramid decoupage (also called pyramage) is a process similar to 3Ddecoupage. In pyramid decoupage, a series of identical images are cut into

Progressively smaller, identical shapes which are layered and fixed with adhesive foam spacers to create a 3D "pyramid" effect.

151 | Page

Also need Innovations in science subject related with Home- science. Such as Biology, Biochemistry physics environmental education. English and communication skills. In science subject Disaster management at home level-first Aid Box kit information and knowledge of use, infectious diseases like Dengue, Thalassemia, Ebola etc. their causes, symptoms and prevention. Rain water harvesting techniques teaching to the students. Community health - prevention from accidents, use of basic treatment on accidents etc.

Home science education helps the students to encourage, personal familial, community and professional value for better living standards. It helps students to adjust in the family and have appropriate knowledge and attitudes with regard to the major life events like adulthood responsibilities, solving problems of family.

In this way Home-science play an important role in any family helps to empower the women and there is need to increase above points in the new trends of Home science.

#### **Different techniques method of food preparation (Media)**

1. Microwave Oven
2. Roti Instant Maker
3. Appepatra
4. Induction Cooker
5. Cooking range
6. Food Processor
7. IdliPatra
8. DosaTawa
9. Nirlep Cooker. Nirlep Pan and appepatra.

#### **Microwave Cooking in different cooking methods in food and nutrition subject :**

Electromagnetic waves from a power source magnetron are absorbed by the food and food becomes hot at once, thus

microwaves do not required any medium of transfer at heat in cooking. The microwaves can be absorbed transmitted or reflected they are reflected by metals and absorbed by food. When food is kept in the cavity of the microwave oven for cooking. The microwaves generated by the magnetron strike the food and the metal walls of the oven. Microwaves that strike the metal walls reflected and bounded back so they disperse throughout the oven and accomplish uniform heating of the food.

Cooking with microwaves differs radically from conventional cooking methods because the heat is generated inside the food rather than being transferred to the exterior of the food by conduction, convection radiation.

#### **Advantages Microwave Cooking :**

- 1) Microwave oven cooks many foods in about  $\frac{1}{4}$ th of the time necessary on a gas burner. There is not wastage of energy.
- 2) It saves time in heating frozen foods thawing can be done in minutes or seconds.
- 3) Loss of Nutrients is minimized
- 4) Food gets cooked uniformly
- 5) preserves the natural color of vegetables and fruits.

#### **Tips to Use Microwave Oven**

- 1) Do not use oven for home canning or the heating of any closed jar pressure will be build up and the jar may explode.
- 2) Small quantities of food with low moisture content can dry out, burn or catch on fire.
- 3) Do not dry meat, herbs, vegetables in the oven.
- 4) Do not use paper bags or recycled paper products in the Microwave oven.
- 5) Do not attempt to deep fry in Microwave oven. Cooking oils may burst in to flames microwave utensils may not able to withstand the temp. of the hot oil and cold shatter.



Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

- 6) Most foods will continue to cook by conduction after the microwave oven is turned off.

### **Solar Cooking**

Solar cooking works on solar energy. Solar energy or can use deflected solar energy from a large concentration rays surface. Solar consists of box which is well insulated, the inside of which is painted dull black and is covered by one or more transparent covers. The purpose of these transparent covers is to trap heat inside the solar cooker. These covers allow the radiation from the sun to come inside the heat but not out of the box. So the temp of the box increased and up to 1400C which is adequate for cooking.

### **Advantages**

- 1) It does not require any cooking as or kerosene or fuel.
- 2) Keeps environment clean.
- 3) Constant attention it not required.
- 4) Simultaneously more than one recipe can be prepared.
- 5) No smoke from this cooking.

### **Induction Cooking :-**

Induction cooking is the Recent process of cooking. In this, the food is cooked by direct cooking method and magnetic method.

### **Advantages of Induction Cooking :-**

- 1) It saves time and money and quick cooking.
- 2) It is shockproof and smokeless.
- 3) After cooking the utensils have no cleanliness needs.
- 4) It is protective and good to handle.
- 5) It has no loss of nutrients, vitamins and minerals. There is no need any fuel.

## **General graduation level Home Science subjects at part -I part - II and part -III**

### **Food science and nutrition**

#### **Human development**

- Introduction to Textile and Clothing
- Family resource Management (Interior decoration and design)
- Home Science Extension
- Ecology and Environment
- Basic Chemistry
- Applied Physics
- English and Communication Skills

#### **Family and community Nutrition**

- Preschool Education and Management
- Textiles designing and printing Technology
- Housing and home Furnishing
- Communication and Instructional Technology
- Applied Physiology
- Applied Chemistry
- Applied Physics

#### **Diet Therapy**

- Family Dynamics and counseling
- Advanced pattern making and Fashion designing
- Resource Management
- Extension Training Management
- Community Health and And family Welfare
- Nutritional Biochemistry



Principal  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.



Home science is a multidisciplinary subject and have so many branches for family welfare and development.

**Job Opportunities in Home Science:**

- Preschool teacher
- Owner of home accessories showroom
- Production unit Staff
- Consultancy service Provider
- Research Assistants
- Conducting Hobby Classes
- Owner of a boutique
- Guest house Manager
- School Teacher
- Development Consultant
- Dietitian in Hospitals
- Mess In charge
- Interior Decoration and furniture designer
- Family counselor

**Home science syllabus Framing schemes**

**Principles keep in mind while planning frame of home science Syllabus**

- Principle of Child Centeredness
- Principle of comprehensiveness
- Principle of utility
- Principle of community Centeredness
- Principle of integration
- Principle of variety and elasticity
- Principle of conservation and Creativity
- Principle of Good syllabus
- Principle of Training for Leisure



*[Signature]*  
Principal  
Sevalal Mahila Mahavidyalaya  
Umrer Road, Nagpur.

Main Branch	Area of further specialization
Food and Nutrition	Food Science Nutrition-Clinical Nutrition and Community Nutrition Institutional food service
Fabric and Apparel science	Clothing Construction Textile Science Textile Designing Garment Designing Care and Maintenance of clothes
Resource Management	Resource Management Housing and Equipment Interior Decoration Consumer Education
Human Development	Child – Welfare Adolescence, Marriage and Family Guidance Care and the Elderly Care of special children
Communication and Extension	Media for Communication programme planning and evaluation Training and capacity building Management of Community service organizations

*Source : Table- Home science in daily life - online course home science code(216en01)*

Correlation between Home science and social studies. In social studies. We are interested to study about man and his interaction with other people, with other institution. With the earth and with goods and services. In this way we intend at the development of a well informed. Intelligent person who is keen to accept responsibility of the home as of society. Home is the basic unit of society and of social science. In Home Science. We also deal with home as the basic unit interlinked to community. So Home Science and social studies are closely correlated.

Home science is concerned with the home health and happiness of all the people living in it. As a field of specialization, Home science draws its content from courses in both science and art. Thus representing an interdisciplinary field that prepares



young learners for the two most important goals in their lives caring for their home and family as well as preparing for career or vocation in life, Hence its scope extends to activities associated with setting home based enterprises as well as consultancies.

### Different technology in Home science.

Home science is a subject of skill and development. The branches of home science covers food and nutrition, Human development, Textile And Clothing , Extension Education and science and science field. Textile technology is a division of engineering where the principles of scientific techniques are utilized for manufacturing and development in all types of yarns and textile fabric from textile Fibres, Embroidaries different designs Lesses jute work and other interior clothing, Curtains , Bedsheets, Covers, Carpets etc. Fashion Designing for young generations

Textile technology is a career programme for opportunities in business of Apparel Technology designing and development and also for sports clothing and designing.

Interior designing and event management techniques are developed in Resource Management

Deco page Art, Ceramic work, Work simplification techniques and other Rangoli Paintings and warli Paintings Food technology Catering and hotel Management includes food and confectionary preservation technology, dairy technology and cakes and Bakery Products. Human Development and child Psychology, Mental and physical growth and development. Child rearing Practices and family environment for child health .

### CONCLUSION :

Home Science is a vast and multidisciplinary field covers all area of womens education and trained the students for upliftment of life. Now a days changes of every field occurs so need to change according to time. Responsibilities of all womens are more than before. By use of different Technology of home

science womens develop her personality and family and train their students in that way.

### REFERENCES

1. Ponnana Rama Seshaiah Guntur (A.P.) Dr. DigumartiBhaskara Rao Guntur - Methods of teaching home science) India Discovery publishing house New Delhi .Tarun offset Printing ISBN 81-7141-916-X
2. The Home Science Association of India XXV Biennial Conference 2003 Souvenir L.A.D college for Home science Nagpur.
3. "Food Science and Nutrition"- Shubhagini Joshi
4. News Paper - Lokmat - (Year 2012)
5. Google.com
6. "Food and Nutrition" - Arya publication, New Delhi



**Principal**  
Sevadal Mahila Mahavidyalaya  
Umrer Road, Nagpur.