

## Opportunities in Tourism Marketing

Prof.B.S.Gite

Research Guide KKM College Manwat

### ABSTRACT

Culture & civilization in any country is intimately related to the history of trade, commerce and industry. Culture in all times follows the wake of commerce. This is more true of ancient times than of the modern. The caravans of the olden times were not only the carriers of wars but also of civilization. Because of this tourism has developed in India right from the ancient times. But, with the advent of computers development in the means of transportation and information technology (IT) tourism marketing has been facing a number of challenges yet they are not without opportunities.

The objective of this paper is to present an analytic study of opportunities in tourism marketing. This paper is limited to tourism industry, particularly in the function of marketing. Tourism industry in India has to face a number of challenges which are not without opportunities.

The researcher has selected the field survey method of research. The researcher has further selected the sample of 160 tourist operators in Nanded district working in various tourist segments (Religious, Nature, Adventure etc.). The sample has been selected on the basis of No. of Talukas in Nanded district. There are 16 talukas in Nanded district. The researcher has selected 10 Tourist Operators from each Talukas in Nanded district.

**Keywords :** Opportunities, Promotion, Public Relation, Customer Satisfaction.

## Introduction

India is the cradle of human civilization. It has a variety and rich cultural heritage. India is a country spread over a vast continent from the Himalayas to the North and the Indian Ocean at the south, the Arabian Sea on the west, the Bay of Bengal in the East. India is very rich in natural resources like fertile lands, dense forests, rivers with perennial water flows, rich mineral reserves, her animal kingdom, a variety of plants and herbs, have made this land a center of human habitation right from the dawn of human civilization but not all its resources have been fully tapped. India is known as Bharatvarsh.

Culture & civilization in any country is intimately related to the history of trade, commerce and industry. Culture in all times follows the wake of commerce. This is more true of ancient times than of the modern. The caravans of the olden times were not only the carriers of wars but also of civilization.

Because of this tourism has developed in India right from the ancient times. But, with the advent of computers development in the means of transportation and information technology (IT) tourism marketing has been facing a number of challenges yet they are not without opportunities.

## Objective of the Paper

The objective of this paper is to present an analytic study of opportunities in tourism marketing.

## Limitations

This paper is limited to tourism industry, particularly in the function of marketing.

### **Hypothesis of the paper**

Tourism industry in India has to face a number of challenges which are not without opportunities.

### **Research Methodology**

The researcher has selected the field survey method of research. The researcher has further selected the sample of 160 tourist operators in Nanded district working in various tourist segments (Religious, Nature, Adventure etc.). The sample has been selected on the basis of No. of Talukas in Nanded district. There are 16 talukas in Nanded district. The researcher has selected 10 Tourist Operators from each Talukas in Nanded district.

### **Opportunities in Tourism Marketing**

The researcher has studied various marketing opportunities with the help of primary data such as –

1. Opportunities in Promotion
2. Opportunities in Public Relation
3. Opportunities in Customer Satisfaction

These are analysed in this paper.

### **Opportunities in Promotion**

There are No. of opportunities in Promotional activities in Tourism Industry. The researcher has studied the responses of sample tourist operators regarding opportunities in Promotion. The results are tabulated and shown in the following table.

Table No. 1

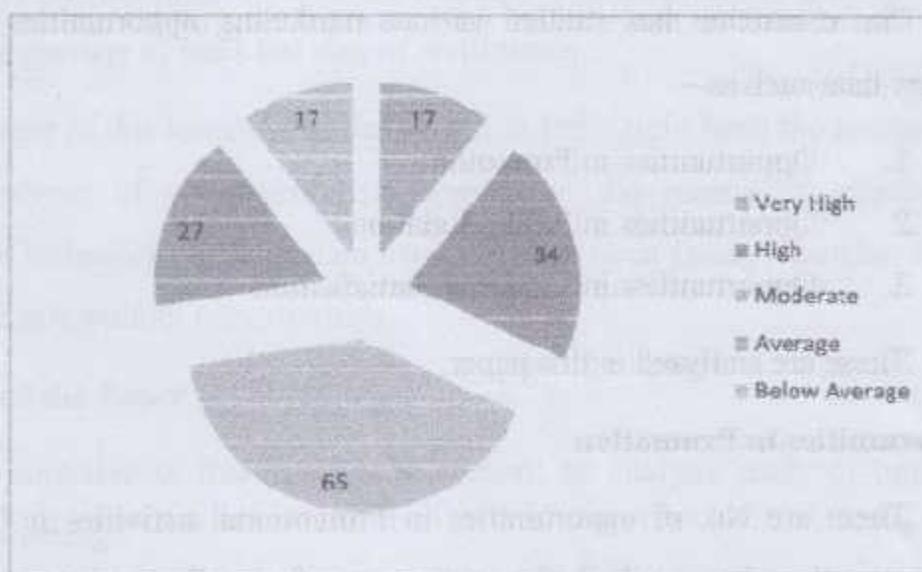
**Opportunities in Promotion**

Sr. No.	Opportunities	Responses	%
1	Very High	17	10.63
2	High	34	21.25
3	Moderate	65	40.63
4	Average	27	16.88
5	Below Average	17	10.63
	Total	160	100.00

Source: Primary Data.

Graph No. 1

**Graph Showing Opportunities in Promotion**



It can be seen from the above table that,

Out of the total 160 tourists operators in Nanded district, 17 (10.63%) have reported that the opportunities in promotion of tourism marketing are 'Very High', whereas, 34 (21.25%) have opined that the opportunities in promotion of tourism marketing are 'High', whereas that of 65 (40.63%) have expressed that the

opportunities in promotion of tourism marketing are 'Moderate', whereas 27 (16.88%) have opined that the opportunities in promotion of tourism marketing are 'Average' and 17 (10.63%) have stated that the opportunities in promotion tourism marketing are 'Below Average'.

### Opportunities in Public Relation

There are No. of opportunities in Public Relation in Tourism Industry. The researcher has studied the responses of sample tourist operators regarding opportunities in Public Relation. The results are tabulated and shown in the following table.

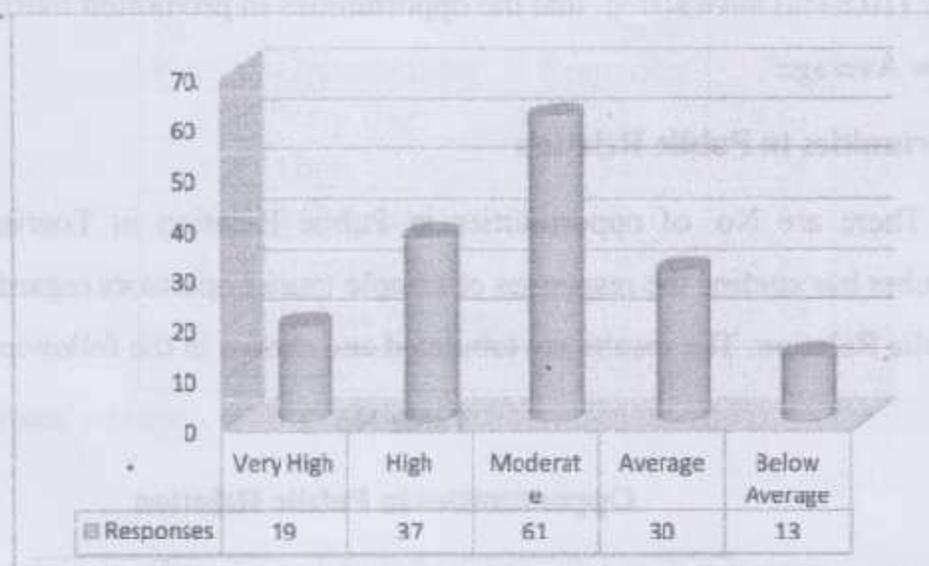
Table No. 2

### Opportunities in Public Relation

Sr. No.	Opportunities	Responses	%
1	Very High	19	11.88
2	High	37	23.13
3	Moderate	61	38.13
4	Average	30	18.75
5	Below Average	13	8.13
	Total	160	100.00

Source: Primary Data.

Graph No. 2

**Graph Showing Opportunities in Public Relation**

It can be seen from the above table that,

Out of the total 160 tourists operators in Nanded district, 19 (11.88%) have reported that the opportunities in Public Relation of tourism marketing are 'Very High', whereas, 37 (23.13%) have opined that the opportunities in Public Relation of tourism marketing are 'High', whereas that of 61 (38.13%) have expressed that the opportunities in Public Relation of tourism marketing are 'Moderate', whereas 30 (18.75%) have opined that the opportunities in Public Relation of tourism marketing are 'Average' and 13 (8.13%) have stated that the opportunities in Public Relation tourism marketing are 'Below Average'.

**Opportunities in Customer Satisfaction**

There are No. of opportunities in Customer Satisfaction activities in Tourism Industry. The researcher has studied the responses of sample tourist operators regarding opportunities in Customer Satisfaction. The results are tabulated and shown in the following table.

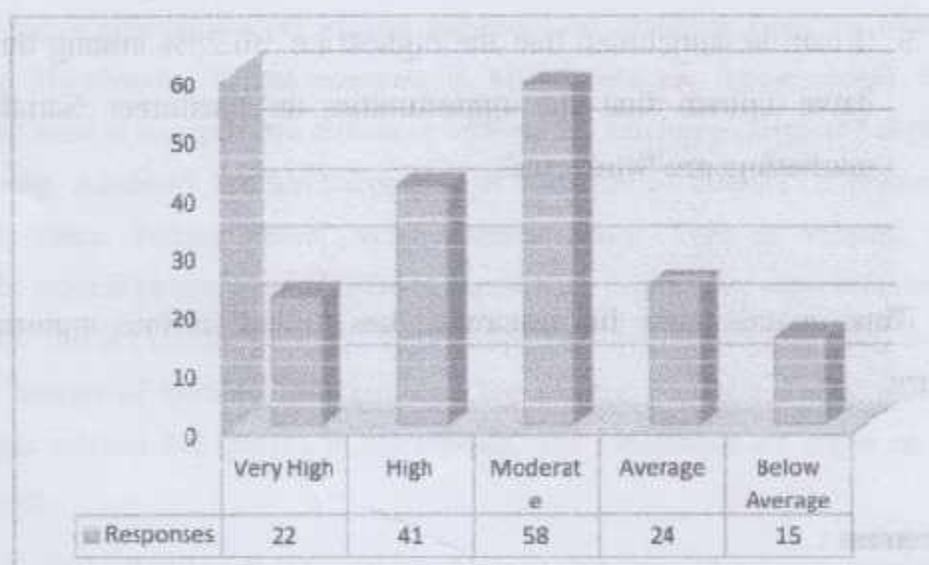
Table No. 3

**Opportunities in Customer Satisfaction**

Sr. No.	Opportunities	Responses	%
1	Very High	22	13.75
2	High	41	25.63
3	Moderate	58	36.25
4	Average	24	15.00
5	Below Average	15	9.38
	Total	160	100.00

Source: Primary Data.

Graph No. 1

**Graph Showing Opportunities in Customer Satisfaction**

It can be seen from the above table that,

Out of the total 160 tourists operators in Nanded district, 22 (13.75%) have reported that the opportunities in Customer Satisfaction of tourism marketing are 'Very High', whereas, 41 (25.63%) have opined that the opportunities in Customer Satisfaction of tourism marketing are 'High', whereas that of 58 (36.25%) have

expressed that the opportunities in Customer Satisfaction of tourism marketing are 'Moderate', whereas 24 (15.00%) have opined that the opportunities in Customer Satisfaction of tourism marketing are 'Average' and 15 (9.38%) have stated that the opportunities in Customer Satisfaction tourism marketing are 'Below Average'.

### Conclusions:

1. It can be concluded that the highest i.e. 40.63% among the tourist operators have opined that the opportunities in promotion of tourism marketing are 'Moderate'.
2. It can be concluded that the highest i.e. 38.13% among the tourist operators have opined that the opportunities in Public Relation of tourism marketing are 'Moderate'.
3. It can be concluded that the highest i.e. 36.25% among the tourist operators have opined that the opportunities in Customer Satisfaction of tourism marketing are 'Moderate'.

Thus, in this paper the researcher has studied various opportunities in tourism industry.

### References :

1. Holloway Christopher (1983), The Business of Tourism, Allied Publishers, London.
2. Hawkins, Shafer & Rovelstad (1980), Tourism Marketing and Management Issues, George Washington University, Washington DC.
3. Seth PranNath (1985), Successful Tourism Management, Sterling Publishers Private Limited, New Delhi.

## Infrastructural Problems of Tourism Services

Prof.B.S.Gite

Research Guide KKM College Manwat

### ABSTRACT

Infrastructure is a broad term, it includes various aspects like premises, flooring of the premises, space and so on. Infrastructure has a direct relationship with office lay out. The sitting arrangements, customer lobbies, safe custodies and record rooms form the part of infrastructure. Infrastructure before and after globalization has changed a lot.

The paper aims to analyse various infrastructural problems faced by tourism industry operators in Marathwada. Tourist operators in Marathwada are facing various infrastructural problems and there is no significant difference between the satisfaction level of Religious Tourism, Nature Tourism, Adventure Tourism the problem of infrastructure facilities i.e. Problems regarding Premises & Space, Parking Space, Accommodation Space, Type of Vehicles, and Service Facilities. The paper is geographically limited to Marathwada Region. The paper is limited to Tourism Industry only. This is a descriptive study. It is an empirical survey. It is a field study concerned with the various aspects of tourism. The researcher has adopted a suitable model of research. The researcher has selected 340 tourists in Marathwada. The conclusions are drawn on the basis of primary survey.

**Keywords :** Tourism, Religious Tourism, Nature Tourism, Adventure Tourism, Infrastructure.

### Introduction:

A socio-economic phenomenon, tourism has become one of world's largest and the fastest growing industries. Travel for holiday is a way of life with more and more people. It is a solution to frantic industrialization, sprawling cities and pillaged environments. Never before in the history of mankind have so many people travelled at home and abroad. Tourism industry in India has a sea

change after the adoption of New Economic Policy. Globalization, Privatization and Liberalization has brought many new trends in tourism industry.

Basically in India, there are many groups of tourists. Some tourists are religious tourists, some are nature tourists and some are adventure tourists. The tourists visiting to the religious places are religious tourists. Nature tourists are lover of nature and some are adventure tourists those who like the adventures.

Infrastructure is a broad term, it includes various aspects like premises, flooring of the premises, space and so on. Infrastructure has a direct relationship with office lay out. The sitting arrangements, customer lobbies, safe custodies and record rooms form the part of infrastructure.

Infrastructure before and after globalization has changed a lot. For example,

1. Before globalization tourism industries were having on a small scale. After globalization the scale has expanded.
2. Before globalization there was no computerization whereas after globalization tourism industry has changed the mode and adopted the computerization system in its working. Due to this the working became fast and accurate.
3. Before globalization much space of the infrastructure was occupied by physical aspects after globalization tourism is moving towards paperless working.

Such radical changes in globalization era have can be seen in tourism infrastructure. The researcher has in this paper studied the satisfaction level of various categories of tourists like Religious Tourism, Nature Tourism, Adventure Tourism with reference to infrastructure aspects, such as –

1. Problems Regarding Premises & Space
2. Problems Regarding Parking Space
3. Problems Regarding Accommodation Space
4. Problems Regarding Type of Vehicles
5. Problems Regarding Service Facilities

These aspects of infrastructure as analyzed in this section on the basis of primary survey.

#### **Objective of the Paper**

The paper aims to analyse various infrastructural problems faced by tourism industry operators in Marathwada.

## Hypothesis

Tourist operators in Marathwada are facing various infrastructural problems and there is no significant difference between the satisfaction level of Religious Tourism, Nature Tourism, Adventure Tourism the problem of infrastructure facilities i.e. Problems regarding Premises & Space, Parking Space, Accommodation Space, Type of Vehicles, and Service Facilities.

## Limitations

1. The paper is geographically limited to Marathwada Region.
2. The paper is limited to Tourism Industry only.

## Research Methodology

This study is related with Impact of Globalization on tourism management with special reference to tourism industry working in the sector such as: Religious Tourism, Nature Tourism, Adventure in Marathwada. This is a descriptive study. It is an empirical survey. It is a field study concerned with the various aspects of tourism. Therefore the researcher has adopted a suitable model of research. The researcher has selected 340 tourists in Marathwada.

### 1. Problems Regarding Premises & Space

Premises is the foundation of infrastructure in tourism industry. Premises as a part of infrastructure has various aspects such as – location of the premises, size of premises, flooring system and so on. The type of premises effects the working efficiency of tourism industry. Therefore, the researcher has analyzed the responses regarding problem of premises & space given by sample tourists Religious Tourism, Nature Tourism, Adventure. The responses are tabulated in the following table.

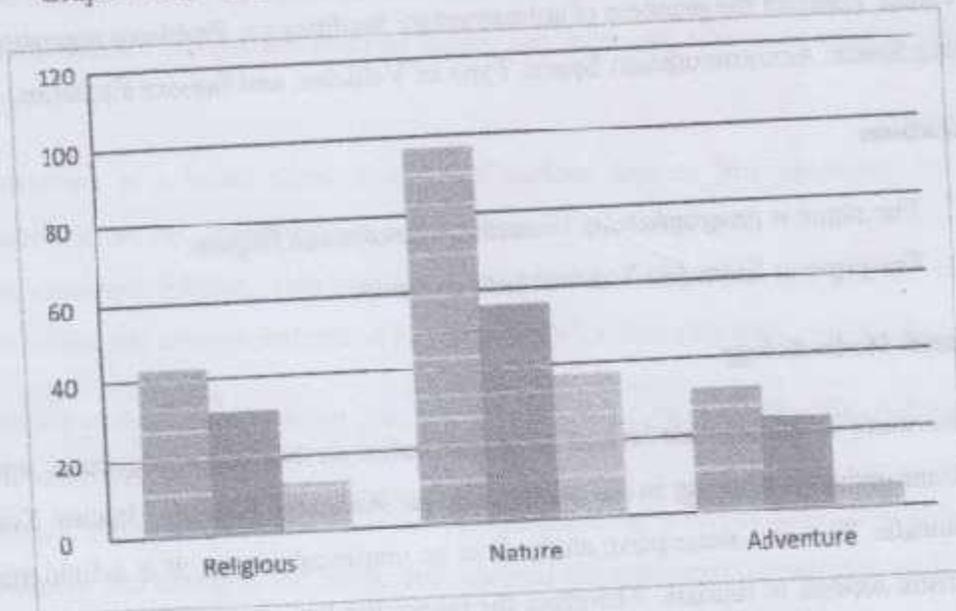
Table No. 1 : Problems Regarding Premises & Space

Sr. No.	Response	Religious	%	Nature	%	Adventure	%	Total	%
1	Severe	43	48.86	97	51.05	32	51.61	172	50.59
2	Moderate	32	36.36	56	29.47	24	38.71	112	32.94
3	Indifferent	13	14.77	37	19.47	6	9.58	56	16.47
	Total	88	100.0	190	100.00	62	100.00	340	100.00



Source: Primary Data.

Graph No. 1 : Graph Showing Problems Regarding Premises & Space



An analysis of the data presented in above table shows that,

Out of the 88 sample Religious Tourists respondents 43 representing 48.86% have reported that the problems regarding premises and space are severe whereas 32 representing 36.36% have reported that the problems regarding premises and space are moderate. On the other hand 13 representing 14.77% have remained indifferent about the problems regarding premises and space.

Out of the 88 sample Nature Tourists respondents 97 representing 51.05% have reported that the problems regarding premises and space are severe whereas 56 representing 29.47% have reported that the problems regarding premises and space are moderate. On the other hand 37 representing 19.47% have remained indifferent about the problems regarding premises and space.

Out of the 88 sample Adventure Tourists respondents 32 representing 51.61% have reported that the problems regarding premises and space are severe whereas 24 representing 38.71% have reported that the problems regarding premises and space are moderate. On the other hand 6 representing 9.68% have remained indifferent about the problems regarding premises and space.

## 2. Problems Regarding Parking Space

Parking space is an important problem for most of the tourists, particularly in the city locations and religious locations the problem of parking space is serious. The efficiency of tourists is

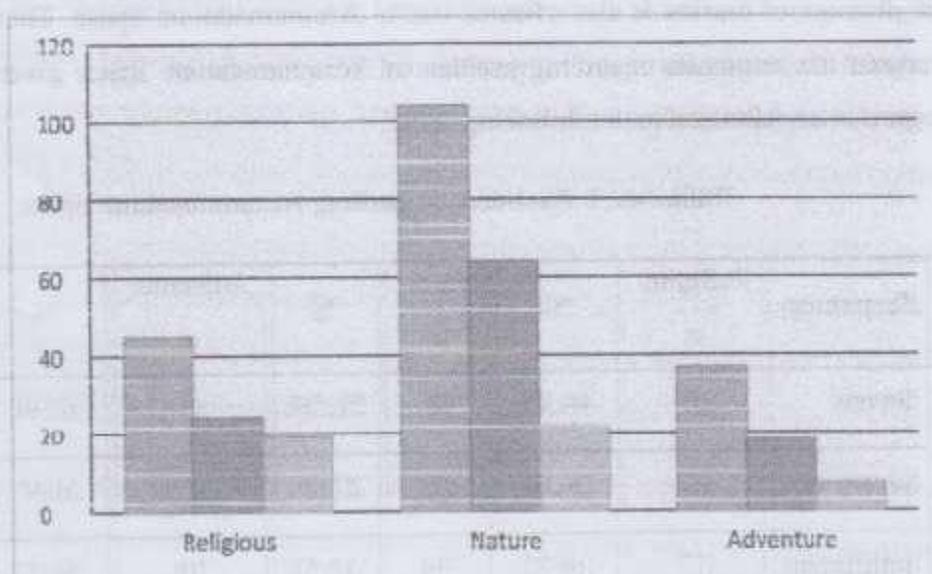
also effected due to parking space. Therefore, the researcher has analyzed the responses regarding problem of parking space given by sample tourists. The responses are tabulated in the following table.

Table No. 2 : Problems Regarding Parking Space

Sr. No.	Responses	Religious	%	Nature	%	Adventure	%	Total	%
1	Severe	45	51.14	104	54.74	37	59.68	186	54.71
2	Moderate	24	27.27	64	33.68	18	29.03	106	31.18
3	Indifferent	19	21.59	22	11.58	7	11.29	48	14.12
	Total	88	100.00	190	100.00	62	100.00	340	100.00

Source: Primary Data.

Graph No.2 : Graph Showing Problems Regarding Parking Space



An analysis of the data presented in above table shows that,

Out of the 88 sample Religious Tourists respondents 45 representing 51.14% have reported that the problems regarding parking space are severe whereas 24 representing 27.27% have reported that the problems regarding parking space are moderate. On the other hand 19 representing 21.59% have remained indifferent about the problems regarding parking space.

Out of the 88 sample Nature Tourists respondents 104 representing 54.74% have reported that the problems regarding parking space are severe whereas 64 representing 33.68% have reported that the problems regarding parking space are moderate. On the other hand 22 representing 11.58% have remained indifferent about the problems regarding parking space.

Out of the 88 sample Adventure Tourists respondents 37 representing 59.68% have reported that the problems regarding parking space are severe whereas 18 representing 29.03% have reported that the problems regarding parking space are moderate. On the other hand 7 representing 11.29% have remained indifferent about the problems regarding parking space.

### 3. Problems Regarding Accommodation Space

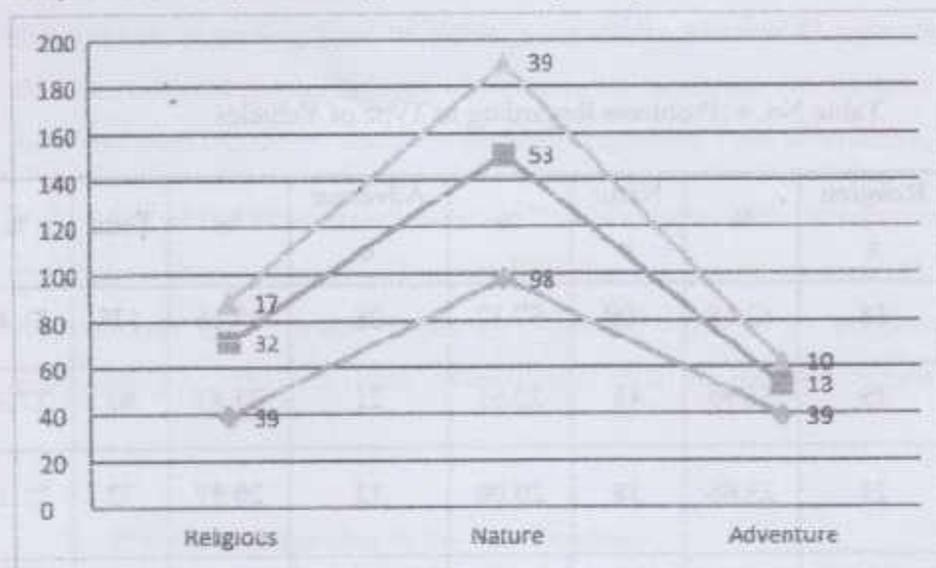
The problem of Accommodation Space cannot be ignored in tourism industry. In major cities, hill stations and religious places good accommodation space is not available. After globalization there is a tendency to manage the tourists within small space as the lodging. Hence the problem of accommodation space. Yet sufficient space is required for tourists accommodation. The efficiency and the pleasure of tourists is also effected due to Accommodation Space. Therefore, the researcher has analyzed the responses regarding problem of Accommodation Space given by sample tourists. The responses are tabulated in the following table.

Table No. 3: Problems Regarding Accommodation Space

Sr. No.	Responses	Religious	%	Nature	%	Adventure	%	Total	%
1	Severe	39	44.32	98	51.58	39	62.90	176	51.76
2	Moderate	32	36.36	53	27.89	13	20.97	98	28.82
3	Indifferent	17	19.32	39	20.53	10	16.13	66	19.41
	Total	88	100.00	190	100.00	62	100.00	340	100.00

Source: Primary Data.

Graph No. 3 : Graph Showing Problems Regarding Accommodation Space



An analysis of the data presented in above table shows that,

Out of the 88 sample Religious Tourists respondents 39 representing 44.32% have reported that the problems regarding Accommodation Space are severe whereas 32 representing 36.36% have reported that the problems regarding Accommodation Space are moderate. On the other hand 17 representing 19.32% have remained indifferent about the problems regarding Accommodation Space.

Out of the 88 sample Nature Tourists respondents 98 representing 51.58% have reported that the problems regarding Accommodation Space are severe whereas 53 representing 27.89% have reported that the problems regarding Accommodation Space are moderate. On the other hand 39 representing 20.53% have remained indifferent about the problems regarding Accommodation Space.

Out of the 88 sample Adventure Tourists respondents 39 representing 62.90% have reported that the problems regarding Accommodation Space are severe whereas 13 representing 20.97% have reported that the problems regarding Accommodation Space are moderate. On the other hand 10 representing 16.13% have remained indifferent about the problems regarding Accommodation Space.

#### 4. Problems Regarding Type of Vehicles

There is problem of proper type of vehicles. Many times tourists need small vehicles on specific religious destinations such as Varanasi, Haridwar. Whereas, sometimes tourists need large and comfortable vehicles for travelling the long distance. The pleasure and enthusiasm tourists is also effected due by Type of Vehicles. Therefore, the researcher has analyzed the responses regarding

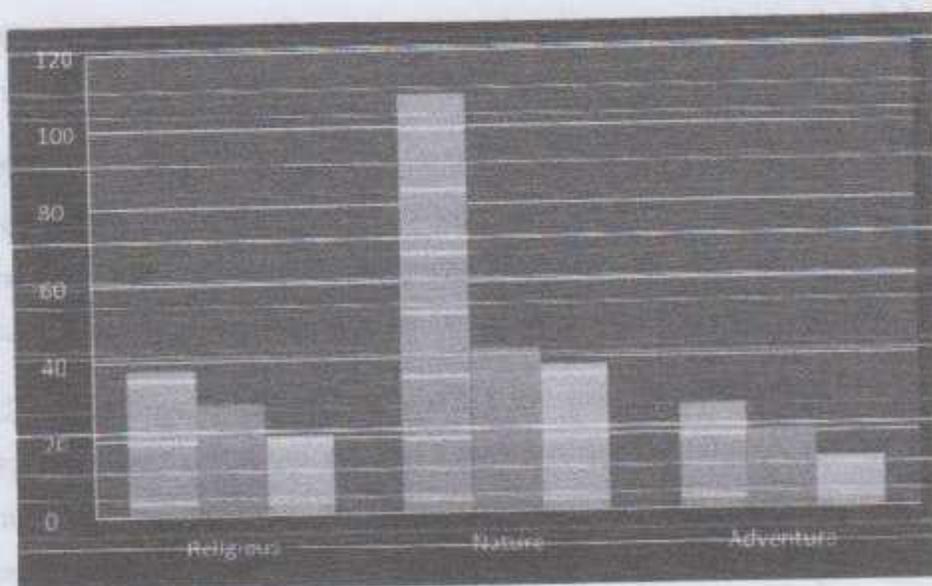
problem of Type of Vehicles given by sample tourists. The responses are tabulated in the following table.

Table No. 4 : Problems Regarding to Type of Vehicles

Sr. No.	Response	Religiou s	%	Natur e	%	Adventur e	%	Total	%
1	Severe	38	43.18	109	57.37	28	45.16	175	51.47
2	Moderate	29	32.95	43	22.63	21	33.87	93	27.35
3	Indifferen t	21	23.86	38	20.00	13	20.97	72	21.18
	Total	88	100.00	190	100.00	62	100.00	340	100.00

Source: Primary Data.

Graph No. 4 : Graph Showing Problems Regarding to Type of Vehicles



An analysis of the data presented in above table shows that,

Out of the 88 sample Religious Tourists respondents 38 representing 43.18% have reported that the problems regarding Type of Vehicles are severe whereas 29 representing 32.95% have reported that the problems regarding Type of Vehicles are moderate. On the other hand 21 representing 23.86% have remained indifferent about the problems regarding Type of Vehicles.

Out of the 88 sample Nature Tourists respondents 109 representing 57.37% have reported that the problems regarding Type of Vehicles are severe whereas 43 representing 22.63% have reported that the problems regarding Type of Vehicles are moderate. On the other hand 38 representing 20% have remained indifferent about the problems regarding Type of Vehicles.

Out of the 88 sample Adventure Tourists respondents 28 representing 45.16% have reported that the problems regarding Type of Vehicles are severe whereas 21 representing 33.87% have reported that the problems regarding Type of Vehicles are moderate. On the other hand 13 representing 20.97% have remained indifferent about the problems regarding Type of Vehicles.

### 5. Problems Regarding to Service Facilities

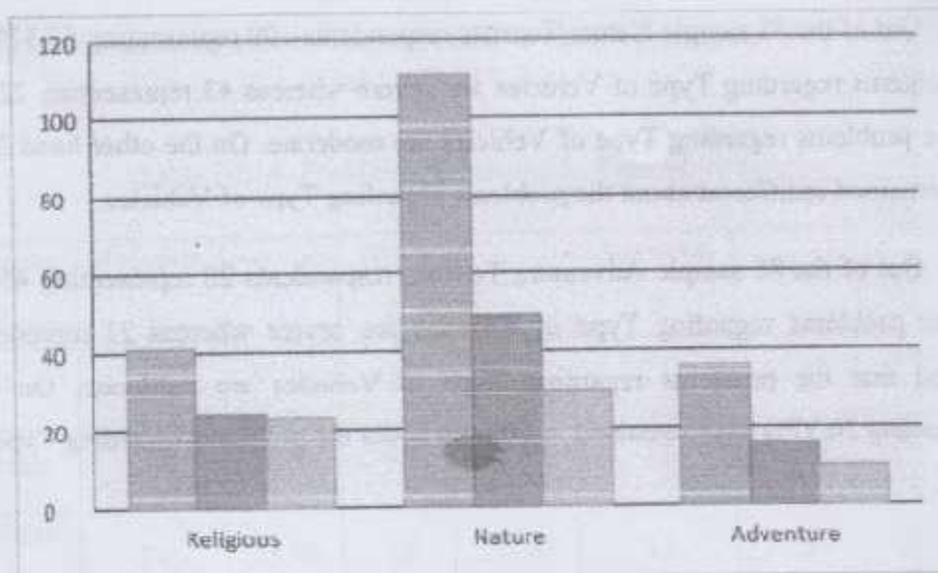
Service is the main criteria of tourism industry. Generally, tourists are facing problems related with service facilities such as: breakfast, tea, meals, sufficient time for site seen etc. Therefore, the researcher has analyzed the responses regarding problem of Service Facilities given by sample tourists. The responses are tabulated in the following table.

Table No. 5 : Problems Regarding to Service Facilities

Sr. No.	Responses	Religiou s	%	Natur e	%	Adventur e	%	Total	%
1	Severe	41	46.59	111	58.42	36	58.06	188	55.29
2	Moderate	24	27.27	49	25.79	16	25.81	89	26.18
3	Indifferent	23	26.14	30	15.79	10	16.13	63	18.53
	Total	88	100.00	190	100.00	62	100.00	340	100.00

Source: Primary Data.

Graph No. 5 : Graph Showing Problems Regarding to Service Facilities



An analysis of the data presented in above table shows that,

Out of the 88 sample Religious Tourists respondents 41 representing 46.59% have reported that the problems regarding Service Facilities are severe whereas 24 representing 27.27% have reported that the problems regarding Service Facilities are moderate. On the other hand 23 representing 26.14% have remained indifferent about the problems regarding Service Facilities.

Out of the 88 sample Nature Tourists respondents 111 representing 58.42% have reported that the problems regarding Service Facilities are severe whereas 49 representing 25.79% have reported that the problems regarding Service Facilities are moderate. On the other hand 30 representing 15.79% have remained indifferent about the problems regarding Service Facilities.

Out of the 88 sample Adventure Tourists respondents 36 representing 58.06% have reported that the problems regarding Service Facilities are severe whereas 16 representing 25.81% have reported that the problems regarding Service Facilities are moderate. On the other hand 10 representing 16.13% have remained indifferent about the problems regarding Service Facilities.

### Conclusions:

1. It is concluded that, out of the total sample of 340 tourists respondents of including Religious Tourists, Nature Tourists & Adventure Tourists 186 representing 54.71% have reported that the problems regarding parking space are severe whereas 106 representing 31.18% have reported

- that the problems regarding parking space are moderate. On the other hand 48 representing 14.12% have remained indifferent about the problems regarding parking space.
2. It is concluded that, out of the total sample of 340 tourists respondents of including Religious Tourists, Nature Tourists & Adventure Tourists 172 representing 50.59% have reported that the problems regarding premises and space are severe whereas 112 representing 32.94% have reported that the problems regarding premises and space are moderate. On the other hand 56 representing 16.47% have remained indifferent about the problems regarding premises and space.
  3. It is concluded that, out of the total sample of 340 tourists respondents of including Religious Tourists, Nature Tourists & Adventure Tourists 176 representing 51.76% have reported that the problems regarding Accommodation Space are severe whereas 98 representing 28.82% have reported that the problems regarding Accommodation Space are moderate. On the other hand 66 representing 19.41% have remained indifferent about the problems regarding Accommodation Space.
  4. It is concluded that, out of the total sample of 340 tourists respondents of including Religious Tourists, Nature Tourists & Adventure Tourists 175 representing 51.47% have reported that the problems regarding Type of Vehicles are severe whereas 93 representing 27.35% have reported that the problems regarding Type of Vehicles are moderate. On the other hand 72 representing 21.18% have remained indifferent about the problems regarding Type of Vehicles.
  5. It is concluded that, out of the total sample of 340 tourists respondents of including Religious Tourists, Nature Tourists & Adventure Tourists 188 representing 55.29% have reported that the problems regarding Service Facilities are severe whereas 89 representing 26.18% have reported that the problems regarding Service Facilities are moderate. On the other hand 63 representing 18.53% have remained indifferent about the problems regarding Service Facilities.
  6. It is concluded that, there is no significant difference between the satisfaction level of Religious Tourists, Nature Tourists and Adventure Tourists regarding the problem of infrastructure facilities i.e. Problems regarding Premises & Space, Parking Space, Accommodation Space, Type of Vehicles, and Service Facilities.

**References:**

1. PadamSudarshan (1990), *Bus Transport in India*, Ajanta Publications (India), Delhi.
2. Baron Raphael Raymond V. (1975), *Seasonality in Tourism : A Guide to Seasonality and Trends for Policy Making*, The Economics Intelligence Unit.
3. K. Rangareddy (2005), *Tourism in India*, Deep & Deep Publishers, Jaipur.

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# *B.Aadhar*

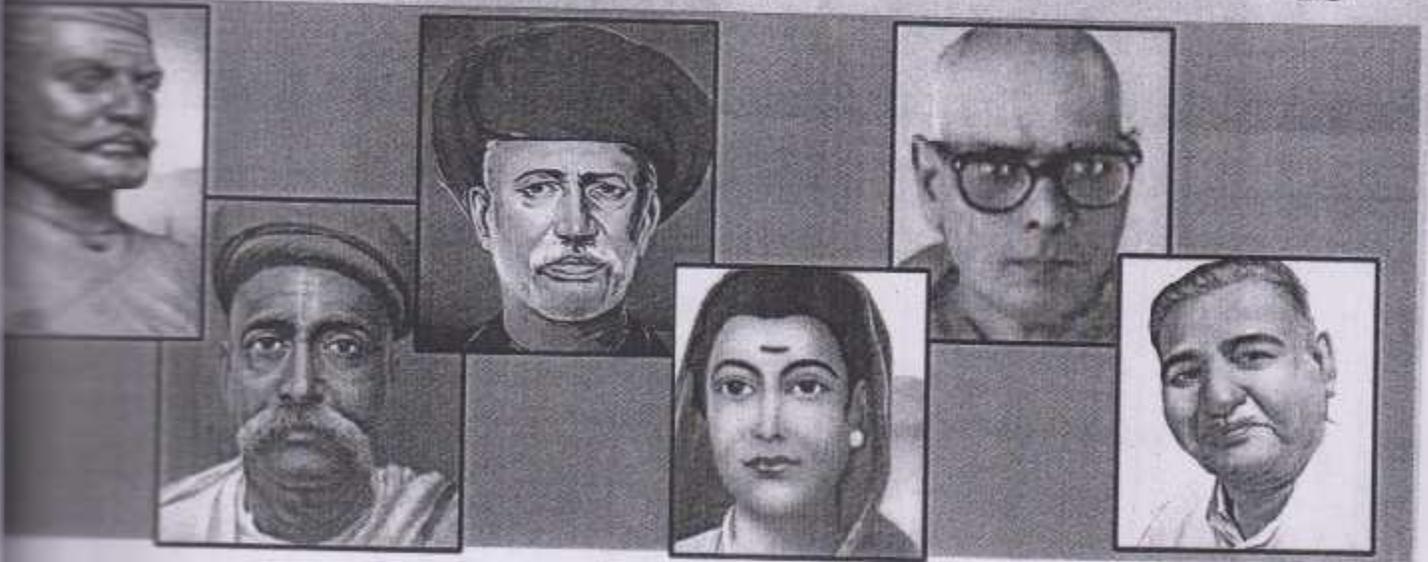
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जिला पारसिल के स्वतंत्रता सेनानी पंडित मीरभद्रजी आर्य का हैदराबाद मुक्ति

आंदोलन में योगदान

प्रा. डॉ. ज्योति श्री. श्री.

के.के.एम.कोलेज, माधवार त्रि.परगणी महाराष्ट्र

सांख्यिक भारत के इतिहास में भारतीय राष्ट्रीय स्वतंत्रता संग्राम के बाद भारत भले ही १५ अगस्त १९४७ को अंग्रेजों के गुलामी से आजाद हुआ । पर भारत में एक ऐसा भी विचार था जो की १५ अगस्त १९४७ से १७ अक्टूबर १९४८ तक विजान की गुलामी, जुलम, अत्याचार सहता रहा । ऐसा विचार जिसे हैदराबाद स्टेट या विजान स्टेट के नाम से जाना जाता है। इस विजान की गुलामी, जुलम, अत्याचार, विना आदी में बाद निकले का प्रयास महाद्वारा के महिलार-गुलाम-बालक, किसान, मजदूर आदी घटकोंने ने किया । इस कार्य में हर स्थान से गण्य विधेय होता रहा। इस प्रदेश को स्वतंत्र बनाने के लिये भारत सरकार द्वारा शासन बलनभारण पर्यटकों को इस प्रदेश में पोलिस एग्रेसन करानी पड़ी थी। उसके बाद ही यह प्रदेश १७ अक्टूबर १९४८ को स्वतंत्र होकर, स्वतंत्र भारत में सम्मिलित हो गया था। इस कार्य में इस प्रदेश के कई व्यक्तियों ने विजान और विजान सरकार का विशेष करने का कार्य कई वर्षों से किया था ।

इस कार्य में विधितो ने अपने हाथ से, विचारों ने अपने हाथ से, बालकों ने अपनी धनरा मुसल सतर्प में अपनी आहुतिदा दी। विचारों को संरक्षितता ही सब में नहीं शक्ति के द्वारा इतिहास का लेख हो है। दालिन में प्रिया योगदान भी महत्व का है । इस मिस्ट्री की शान हेतु विविध क्षेत्रों में कार्यरत संघटना, सैकड़ों प्रमुख, सरावजक नेताओं तथा विचारों का नेतृत्व करती सभी माताओं के साथ हताओं की तहलद में सहिल हुए, स्वतंत्रता संग्राम में संरक्षितता देनेवालों का योगदान तथा उनका ध्यान उन्हें दिया जाना चाहिए । महाष्ट्र के लखू मिले में अंततः शाहजानी नामक गाँव महाराष्ट्र तथा कर्नाटक की सीमावर्ती क्षेत्र में स्थित है । हिन्दुस्थान मुसल साम्राज्य की सहायों के बाद महाष्ट्र के महाद्वारा, कर्नाटक और आंध्रप्रदेश के प्रदेश पर विजान का राज रहा । विजान में भी अपने प्रदेश में किसान मुख्याती दौर में किया । यह किसान जन समुदाय के जनसतों को मस्टेनवर रखकर किया गया नहीं था । उसमें भी विजान के स्वतंत्र की गत यती थी। यह उस समय का नया और बलवान संसामिक जन गण । जो की हिन्दुस्थान के एक बड़े प्रदेश का प्रमुख बन गया था । विजान के शासन काल के इसी प्रदेश को विजान स्टेट या हैदराबाद स्टेट के नाम से जाना जाता था । इस प्रदेश पर आखिर तक यती प्रमुख सत्ता के परभाव और स्वतंत्र भारत के निर्माण तक के बीच के काल में विजान की सत्ता रही । अंग्रेजी शासन और अंग्रेजी विजान के विचार भी इस प्रदेश में नहीं आये । इस प्रदेश का सर्वसर्वा केवल विजान स्वतंत्रता से । विजानोंने इस प्रांत में कुछ विजान जन्य किये ने केवल विजान स्टेट को आगे ले जानेवाले थे, आधुनिक काल में भारत के अन्य स्थानों पर होनेवाले किसान से उन्हें कुछ भी लेना देना नहीं था । विजान के शासन काल में प्रदेश के जनता पर अन्यायद अत्याचार किये जाते। विचारों की-सुख-बालक, मजदूर, किसान, जनसामान्य, व्यापारी कोई भी छुट नहीं पाया । इस में समाज के हर वर्ग पर अन्यायद अत्याचार, अत्याचार, शोषण होता रहा । इन होनेवाले अत्याचार, अत्याचार, शोषण के विरोध में जनता उठने की कियो में मान्य नहीं थी। पर आगे चलकर नयी विचारधारावाले, प्रादेशिक विचारधारावाले, स्वतंत्रता की विचारधारावाले कई लोग समाज में अत्यंत आगे आये । इनमें कई स्त्री, युवा, बालक, किसान, समाजसेवक आदी का योगदान महत्वपूर्ण रहा । इन महत्वपूर्ण व्यक्तियों के कार्य से ही यह प्रदेश स्वतंत्र हो पाया । ऐसे व्यक्तियों ने स्वतंत्रता हेतु किया कार्य भी देश सेवा की दृष्टिसे नवाय नहीं आ सकता । इस मुक्ति मानव ने विज्ञाने समुदाय मातृगण विज्ञा ऐसे व्यक्तों का समाज करने हुए माननीय सरकार ने उन्हें प्रमाण पत्र और पदच्युत की रक्षण प्रवृत्त करके गौरवित किया है ।

महाराष्ट्र के लखू मिले के और शहजानी नामक गाँव के पंडित वीरभद्र आर्य इन्होंने विजान और उनके सक्षियों का विशेष आखती सब तक किया । इसमें उन्हें विजान और उनके सक्षियों का कार्य प्रभाव से प्रभावित भी किया गया। कई बार कोल भी हुई । उनके देशपक्षित पर कार्य से अंततः शाहजानी और परमार के नाम उनके गाँव हैदराबाद मुक्ति आंदोलन में शहजानी हुए । पंडित वीरभद्र आर्य और उनके तरह कार्य करनेवाले सभी लोगों के लिये देशपक्षित पर कार्य को आज समाज के सामने लाना आवश्यक है। इन सर्व के महत्वपूर्ण कार्य में ही विजान स्टेट १७ अक्टूबर १९४८ को स्वतंत्र हो गया और आज के भारत में सम्मिलित हुआ। इस महाद्वारा का इतिहास जो लिखा गया है और इसके आगे लिखा जायेगा इसे इतिहासलेखन को दृष्टि से विचार जान आवश्यक है । इसमें विना-विना व्यक्तियों, समाजों, स्त्री-पुरुषों, स्वतंत्रता सेनानियों, कर्मीकालक, किसान, मजदूर आदीयों ने अपने महत्वपूर्ण योगदान इस कार्य में दिया उनके कार्य का उल्लेख आज आवश्यक है । इस संस्मरण के नया भारत के प्रेरणादायी नेताओं का महत्त्व को है ही, पर विन्हीरे सरास्य क्षेत्र में भी तो मले लगाया, उन सभी मातृसिों का महत्त्व सेमानीयों के समुत्पन्न है । अनेक अत्याचार-उर्द, मराठी, हिंदी, तेलुगू, कन्नड, अंग्रेजी पाया में शुरू हुए विन्हीरे मातृगण को । प्रायः अधिक मात्र में हिंदू होने से अत्याचार भी उदीय हुआ, सैकड़ों गाँव जलते गये, लूटे गये, रक्षाकर्मी द्वारा किये ऐसे कृत्य सत्य होने क्या ? इतिहास इसे कर्तव्य क्षया नहीं करेगा । विचार समाजों में पूर्व हीन भी तथा दुःखान्तरों में लिए प्रायः महिलायों ने रचे गीत, योगार्ण और ग्रेक संकथों का संग्रहण होने भी आवश्यक है । अधिस, सत्य से न शुरूनेवाले शासन के खिलाफ पय निर्माण, उन्हीं के यत्नों की लूट, कर्मीकाली मालों की लूट करनेवाले और धोखा, वग आदी का रगीत करनेवाले जावान देशपक्षितों में से कइयों को बलिदान देना पडा ।

महाद्वारा मुक्ति आंदोलन के इस कार्य में महाराष्ट्र के लखू मिले के और शहजानी नामक गाँव के स्वतंत्रता सेनानी तथा हैदराबाद मुक्ति संग्राम के एक प्रयागी और धीर मल्ले नेगा पंडित वीरभद्रजी आर्य का योगदान महत्वपूर्ण रहा है । पंडित वीरभद्रजी आर्य का जन्म सन १९०२ में हुआ । उनका पूरा नाम वीरभद्र विजाना मुण्डी था । वीरभद्रजी के जन्म के पाँच वर्ष में ही उनके पिताजी का साथ उनपर से हट गया था । वीरभद्रजी को बचपन से ही पिताजी के साथे के विना ही अपना जीवन व्यतीत करना पडा । इस परिस्थिति में समाज तथा अन्य कतिपयों से उन्हें कम उम्र से ही हूँकना पडा । उनके जीवन काल में बचपन से ही कठिनाईयें रही । उन्हें अपने जीवन में इन विपदाओं का सामना बचपन से लेकर बुढ़ापे तक करना पडा । वीरभद्रजी ने अपनी युवकाली शिक्षा की मुकामत करती मात्र गाँव से की । आज उद्योग लखू मिले का एक तहसिल है । उन्हीने अपनी आत्मने पकड़े मुकुल से झण की। वीरभद्रजी अपनी यती की शिक्षा पूर्ण करा १६ वर्ष की आयु में १५ अरने गाँव यानी अंततः शहजानी को लीए आये । इस समय में इस युवा के व्यक्तित्व को देशप्रेम की साथ से उभार आ गया था । इसी वजह से वे देशप्रेम बंदीय रहे, जिससे उन्हें देशप्रेम स्वतंत्रता और अन्याय के विरोध के लिए प्रोत्साहन मिलता रहा । वीरभद्रजी आते चलकर नव की २२ वर्ष की आयु से विजान के अन्याय और अत्याचार से नयी परत के खिलाफ ग्रीत हुए, उन्हीने विजान काल के अत्याचार को विरोध में मुहूर्तक जवान दिया । वीरभद्रजी ने अपने जीवन को और अधिक रज से उभार करने में सतर्प शहजानी और स्वतंत्रता के धीर सावकार की को ही अपने जीवन में प्रेरण स्थान माना । इसी लिए उनके विचारों में प्रखालता दिखती है । उसी के साथ उनमें स्वतंत्रता की ज्वाला को बढावा देने का कार्य कई बन्धुमालों आर्य के विचारों में भी किया । पंडित वीरभद्रजी ने औरत शहजानी नगरी में कई बन्धुमालों आर्य इनको प्रेरणा लेकर सन १९२८ में आर्य समाज की स्थापना इस नाम में करवाई । वीरभद्रजी आर्य स्वतंत्रता के विचारों से प्रभावित थे, साथ ही साथ वे प्रभावी वक्ता भी थे । अतः जोर से लोगों के सामने खड़े होकर भाषण करते तो उनकी गंभीर मुद्रा, तेजस्वी न्याय, पंडित गभीर, शब्दों का माधुर्य, हिंदी की सरलताप लेखन शैली-शापरी, कभी या सतों के जनन न्यायक जीवनानुभवों के अन्ततः अन्याय का घटना और प्रभाव, विज्ञान, सापेक्षी सोचधारण प्रकृती और विचारद आता गंभीर पकड़ी वाणी सब में मुनेनेवालों को मंत्रमुग्ध



और उनके साथियों ने झंडा सत्याग्रह में सहभाग लिया। इसी वजह से पंडित वीरभद्रजी आर्य को १० महीने तक की नजर कैद की गयी थी।

पंडित वीरभद्रजी आर्य और उनके साथियों ने इसी तरह से हैदराबाद मुक्ति आंदोलन का कार्य निजामी अत्याचारी शासन को समाप्त करने तक संपूर्ण जीवन अर्पित रखा। उन्होंने अपने जीवन में निजामी शासन कल्ल और हैदराबाद मुक्ति आंदोलन के पत्र-पत्रों की कई सामाजिक कार्य भी किये। ऐसे महानरम व्यक्ति के स्वर्गवास दि. २४ दिसम्बर १९९४ को हुआ। इस महान व्यक्ति के साथ हैदराबाद मुक्ति आंदोलन से सभी विद्ये को और शहीदों को सार्व प्रणाम।

१. नौद पंडित, १९७३, हैदराबाद के आर्यों की याचना और मार्ग, बोलिविद्यम हसनानंद, दिल्ली
२. आर्य वीरभद्र पंडित, १९९८, क्रांतिकारी रोषण वामनारे, हैदराबाद मुक्ति संग्राम: एक उपेक्षित संघर्ष गाथा, प्रकाशक देवगिरी प्रब्लिशन, औरंगाबाद
३. नौद पंडित, १९७३, हैदराबाद के आर्यों की याचना और संघर्ष, बोलिविद्यम हसनानंद, दिल्ली
४. पौतदार वरत, १९८४, हैदराबाद स्वातंत्र्य संग्राम
५. गदकतत गरी डॉ. १९०९, वीर सेनानी आर्य नेम की रोषण वामनारे, आर्य समाज, निलंगा
६. रोहे सोमनाथ डॉ. २००८, हैदराबाद मुक्ति लड़ा आदि स्वामी रामानंद तीर्थ अश्विनी प्रकाशन, लापुर

७. पाळीकर असोक, १९८८, हैदराबाद पंडित सत्याग्रह
८. कुंभकर नरहर प्रभास, १९९८, हैदराबाद: निमोचन आणि विसर्जन, जगत प्रकाशन, औरंगाबाद
९. कुंभे राम डॉ. स्वतंत्र्य सैनिक चरित्र कोश महाराष्ट्र राज्य मातृभाषा विभाग
१०. सत्याग्रह स्मार्तिका, १९८९, आर्य प्रतिनिधी सभा, हैदराबाद, आंध्रप्रदेश
११. ल्यास पी.जी.जी., १९९८, इतिहासलेखनसाल, अभिर्जन पब्लिकेशन, लापुर
१२. रेव प्रभाकर डॉ., १९९९, हैदराबाद मुक्ति संग्राम स्वातंत्र्य सैनिकोंच्या मौखिक नोंदी, स्वामी रामानंद तीर्थ महाभाषा विद्यापीठ, नांदेद
१३. भालकर अनंत, १९८७, हैदराबाद स्वातंत्र्य संग्राम आणि मातृभाषा. गौज प्रकाशन, मुंबई
१४. गहनकर वि. गो., २०००, हिंदू अस्मितेचा हुंकार, भारतीय इतिहास संकलन समिती, महाराष्ट्र
१५. राजपेची संदेश, १९९५, हैदराबाद मुक्ति संग्राम आणि मी.डी.के.लया पब्लिकेशन, औरंगाबाद
१६. Tirth Swami Ramanand, 1967, Memories of Hyderabad Freedom Struggle
१७. Dhruj B.S., 1988, Contribution of Marathwada to Hyderabadal Freedom Movement. 1938 to 1948 अर्दी.
१८. पाळीकर असोक, १९८८, हैदराबाद पंडित सत्याग्रह



का देती है। जो कि जिनके मुझे के लिए लोग बड़े विचलित करते हैं। इससे कई दुःख-सुखितियों, भावना, की-नजर, दिल के अंदर रहने वाली भावना के सदैव संपर्क के सदैव पाले के होते हैं।

हैदराबाद मुक्ति आंदोलन के महत्वपूर्ण कार्य में पंडित वीरभद्रजी आर्य इनका योगदान महत्वपूर्ण रहा है। इसकी सुलभता उन्होंने और उनके परिवार में भी देते हैं। उन्होंने युवाओं के मन में स्वतंत्रता के अर्थों का विचार प्रसारित करने का काम किया। जिसका उद्देश्य के अंतर्गत और जन समुदाय को संगठित करने का महान कार्य किया। जिसका फलस्वरूप उन्हें हैदराबाद मुक्ति आंदोलन में हुआ परि-परी पंडित वीरभद्रजी का कार्य अब हैदराबाद के निजाम की कठोरता, अत्याचार और अत्याचार के विरोध में बढ़ा रहा। वे निजाम और राजाओं के विरोध में कार्य करते लगे। इसके फलस्वरूप उन्हें कई बार जेल में भी जाना रहा।

अत्याचारी निजाम और अत्याचारी राजाओं के विरोध में उन्हें उनके माध्यम से होना था और किसी ने किसी तरह से उन्हें कोई भी सहायता से जेल भेजा जाता था। सन १९३२ में औरंगजेब ने मोहरण आगे ही दंग-फरार का उद्भव हुआ। निजाम के अधिकारियों ने भीका देवका पंडित वीरभद्रजी को गिरफ्तार किया। अर्थात् पंडित वीरभद्रजी और उनके साथियों ने पहले ही इस समय तयार न ही बनाया हो फिर भी निजामी अधिकारी जरूर तनाव बढ़ा देते थे। इसी तरह अगला प्रसंग का गणतंत्रिय का, इस त्योहार के पहले दिन गुजरोते (अमरा लि. उम्मानाबाद, महाराष्ट्र) के वैदिकशास्त्रियों के गुणों के फंस गये। उन्होंने तो नानों मातृभूमि पर न्योजन करने की प्रशिक्षण कर ली थी। यह कैसे पाप छोड़ा होता कुछ अलग, पठान, इस्लाम के लोगों ने बड़ी कुला से उसका फिर शब्द से अलग कर डाला। वीर वेदप्रकाश ने धर्मिणानी संघर्षों की तरह खुद को न्योजन कर दिया परंतु धर्म परिवर्तन करने मंजूर नहीं किया। ऐसे वैदिकशास्त्र के चरित्र के उपरान्त वेद प्रकाश दिवस की घोषणा की गई। उस समय धर्म बंन्दीकरण आर्य के साथ पंडित वीरभद्रजी भी थे। सन १९३८ में सारास संघर्ष हुआ। इस संघर्ष के दौरान मुक्ति आंदोलन के प्रचार के रूप में निजाम सरकार की नजर पंडित वीरभद्रजी पर सदैव लगी रहती थी। पंडित वीरभद्रजी आर्य को एकदम से लिए सन १९३८ में १०० पुलिस, मोहलानी, कोतवाल इत्यादि प्रमुख और दो पी.एम.आर. राजाओं के साथ औरंगजेब में रहते। इसी शक्ति तथा अधिकारियों की सत्ता से ज्ञान हो जाता है कि उन्हें गिरफ्तार करने निजामी शासन सदैव लालाईत रहता, वे एक अहम व्यक्ति थे और अगुवा नेता थे। इसी से उनके हैदराबाद मुक्ति आंदोलन के बारे में प्रकट विचार, कार्य का हम अनुमान लगा सकते हैं। इस प्रसंग के पश्चात् पंडित वीरभद्रजी आर्य सोलापुर पहुँच गये। उन्होंने अपना अहम संघर्ष रूप से जारी रखा। निजाम सरकार की भी नजर रहते ही उन्हें फिर से पकड़ लिया गया और बिहार के कोर्ट में लया गया। इससे उन्हें ६ महीने की कठोर सजा कैद की गयी।

आगे चलकर सन १९३८ में निजाम से मिलने हेतु प्रतिनिधी मंडल की स्थापना ली गयी। इस प्रतिनिधी मंडल में भी पंडित वीरभद्रजी प्रतिनिधी के रूप में उपस्थित रहे। पंडित वीरभद्रजी औरंगजेब की कृपित स्थित गौरवों में भागण के कारण फिरसे गिरफ्तार किये गये। सन १९४० में भी उन्हें मोहरण के प्रसंग में भी निजाम सरकार ने पंडित वीरभद्रजी आर्य पर शक करते हुए गिरफ्तार किया और निलंगा की जेल में चौदह दिनों तक कठोरता में रखा गया। इसी तरह आगे उन्हें मेहरार (ज.भालकरी, कर्नाटक) जेल में भी भागण देने की वजह फिर से गिरफ्तार किया गया। यह किलकिल निजाम और उनके लोगों की तरह से होना होता रहा। फिर भी पंडित वीरभद्र आर्यजी ने आर्य समाज के तरीके जर्मिहित के भागण देने का कार्य किया। २४ मई १९४० को राजाकारी द्वारा औरंगजेब राजाजी गौज जलया गया। इस समय पंडित वीरभद्रजी आर्य ने इस गौज को रखा करने का कार्य किया। इसी कारण को आगे कर निजामी सरकार ने उन्हें और उनके साथियों को फिर से गिरफ्तार कर लिया और निलंगा की अदालत में पेश किया गया। इसमें उन्हें कई कष्ट दिये गये। दि. २४ फरवरी १९४२ के दिन उन्हें गुलबर्गा की अदालत में पेश किया गया। इस अदालत में उन्हें सात साल की सज़ा कायदा की सजा सुनाई गयी। गुलबर्गा जेल में उन्हें काफी यातनाएँ सहनी पड़ी। जिसमें उन्हें गैरी में कौच का सुरा डालकर दिया जाता। जिससे उनका ऑपरेशन भी हुआ। आगे चलकर पंडित वीरभद्रजी आर्य

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# INSIGHT

Research Analysis

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व

मूर्ती व शिल्प संशोधन संस्था, औरंगाबाद  
यांच्या संयुक्त विद्यमाने

दोन दिवसीय राष्ट्रीय अधिवेशन

## "Sculpture, Art and Architecture"

१० व ११ फेब्रुवारी २०२३

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इतिहास विभाग

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डॉ. व्यास सी.पी.  
इतिहास विभाग प्रमुख,  
के.के.एम.महाविद्यालय,  
मानवता जिपरणी, मो.9421385460  
email- ch:tanikumarvyas@gmail.com

आज नान्वेतिहासाकडे पाहण्याचा दृष्टिकोन व अण्णासाच्या दिशा पूर्वी पेसा खुपच व्यापक झालेल्या दिसतात त्यामुळे एका नगराचा इतिहास हा स्वयंभूच हा स्वयंभूच /अवेधिक न.राहून राष्ट्रीय इतिहासपर्यंत व्यापक दिसू लागतो. विन्हुन त्याचे महत्त्व जागतिक पतमानाही स्पष्ट करू लागते. महाराष्ट्राच्या भूगोलीय ऐतिहासिक नोंदीत ज्या नगरांनी जागतिक तलयांना स्पर्श केले आहे. महाकाव्याच्या भूगोलीय तर आणू जागतिक कीर्ती मिळवून देणा-या स्वळात प्राचीन प्रतिष्ठान. भोकरदन, तेर अजिंठा, वेरूळ, देवगिरीचा किल्ला यांनी नावे ठळकपणे आढळतात. सातवाहन कळात महाराष्ट्राचे सुवर्णयुग साकारते. महाराष्ट्राचे नाव जागतिक नकाशावर झळकते. त्या पूर्वीच्या व नंतरच्या इतिहासात ज्या नगराचे अणुण महत्त्व राहिले त्यापैकी तेर हे एक अंतरराष्ट्रीय व्यापारचे बतवान केंद्र व व्यापारी नगर आहे. काही ठवे रामूळ व प्रसिद्ध होते की त्याचे नाव ग्रीक-रोमनांच्या प्रथातून येणे अनिवार्य झाले. सुवर्ण नगरी तेर हे नगर पूर्वी खूप मोठे (6 ते 6.5 मैलात विस्तारलेले) होते. याची प्रकृती फक्त आजची 8-10 हजारची नसती पाहून इत नाही तर त्याच्या खाण-खुणा, अवशेष वगैरे उर्वरित स्वरूपमूर्तिलेख शिलालेख व ताम्रपट इ मुळे वेळू शकते.

महाराष्ट्रातील तेर हे नगर तन्मानाबाद या जिल्हा कॅम्पास इशान्येस व थोडे उत्तरेस 16 कि.मी. वर तेरणा नदीच्या काठावर वसलेले आहे. बार्शीहून पूर्वेस 48 कि.मी. अंतरावर तो नगर आहे. त्याची भौगोलिक स्थिती लक्षात घेता दक्षिण व उत्तरेला जोरण्याच्या दृष्टीने तेरचे दरम्यान अस्तित्त्व महत्त्वाचे दिसते. वेरित्तस ऑफ पर्विशिण सी या ग्रीक ग्रंथाच्या 51 व्या प्रकरणात तगर (तेर) च्या केवढसंनन व्यापारसाठी बॅरिगाडा (बडोच) सारखे महत्त्व सांगितले आहे. टॉलेमी उलेव्हाडियाचा भूगोलतज्ञ इ.स.च्या दुस-या शतकात तगरची माहिती देताना पूर्व लेखक टीअर व मॅरिससचे आधार घेऊन अर्थिक विस्ताराने विव्हिले एण त्याच्या गुणालखनात भारताच्या आकारात विषयीच्या माहितीत चुका असून काही स्थल नोंदीत ही चुका झाल्या असल्या तर्ष, या नगराची स्थल निश्चिती करण्यात अनेक विद्वानांनी वाटा उचलला आहे. विल्लफोर्ड, व्हिसेंट, मॅग्रे, रिटेर, प्रगवाभक्तले इटली, यून, ग्रॅट डफ, राजवाडे, गजदारकर, लीट, कडिल्लस व त्यानंतरच्या विद्वानांच्या कतत अट्टननातून विद्वानांच्या कतत अट्टननातून झाले. त्यामुळे तेर हेंय हे सर्वनाम्य झाले आहेत.

व्यापारीतगर एक काळी एवढे स्पष्ट व प्रसिद्ध होते की त्याचे नाव ग्रीक-रोमनांच्या प्रथातून येणे अनिवार्य झाले. सुवर्ण नगरी तेर हे नगर पूर्वी खूप मोठे (6 ते 6.5 मैलात विस्तारलेले) होते. याची प्रकृती फक्त आजची 8-10 हजारची नसती पाहून इत नाही तर त्याच्या खाण-खुणा, अवशेष वगैरे उर्वरित स्वरूपमूर्तिलेख शिलालेख व ताम्रपट इ मुळे वेळू शकते.

'तेर' हे नगर महाराष्ट्रातील तन्मानाबाद या जिल्हाच्या कॅम्पास इशान्येस व थोडे उत्तरेस 16 कि.मी. वर तेरणा नदीच्या काठावर वसलेले आहे. बार्शीहून पूर्वेस 48 कि.मी. अंतरावर तो नगर आहे. त्याची भौगोलिक स्थिती लक्षात घेता दक्षिण व उत्तरेला जोरण्याच्या दृष्टीने तेरचे दरम्यान अस्तित्त्व महत्त्वाचे दिसते. वेरित्तस ऑफ पर्विशिण सी या ग्रीक ग्रंथाच्या 51 व्या प्रकरणात तगर (तेर) च्या केवढसंनन व्यापारसाठी बॅरिगाडा (बडोच) सारखे महत्त्व सांगितले आहे. टॉलेमी उलेव्हाडियाचा भूगोलतज्ञ इ.स.च्या दुस-या शतकात तगरची माहिती देताना पूर्व लेखक टीअर व मॅरिससचे आधार घेऊन अर्थिक विस्ताराने विव्हिले एण त्याच्या गुणालखनात भारताच्या आकारात विषयीच्या माहितीत चुका असून काही स्थल नोंदीत ही चुका झाल्या या नगराची स्थल निश्चिती करण्यात अनेक विद्वानांनी वाटा उचलला- विल्लफोर्ड, व्हिसेंट, मॅग्रे, रिटेर, प्रगवाभक्तले इटली, यून, ग्रॅट डफ, राजवाडे, गजदारकर, लीट, कडिल्लस व त्यानंतरच्या विद्वानांच्या कतत अट्टननातून झाली. त्यामुळे तेर हे दोन्ही जनांचे तेर हेंय हे सर्वनाम्य झाले आहेत.

तेर म्हटले की आपल्या समोर सांतश्रेष्ठ गोरोबाकाका कुंभार यांचे नाव उभे राहते. संत गोरोबांच्या निघातस्थानामुळे तेरचे वेगळेपण नजरेत पडत असत तरी, त्यांच्या काळापेक्षाही हजारो वर्षे दुरातान असा वैभवावाली वास्तव व त्यांच्या अवघेच खूण अण-खण्णार घेऊन हे याव आजही इतिहास प्रेक्षीच आकर्षीत स्पष्ट म्हणून कायम चर्चेत राहत आले आहे. खूण काळातील साहित्यक या गावाचा उल्लेख एगर उरसा केलेला आढळतो. प्राचीन लेखांगणीत उल्लेख, अरथा महत्त्वाचे पुरावे व तेष संशोधनात सापडलेल्या अनेक विविध उस्तू, किले यावरून तेरच्या प्राचीन वैभवाचा व प्रगतीशील राजासंघटनेचा अंदाज काढता येतो.

या प्राचीन नगरात येथे सापडलेले तंणण वनाळीचे तंणणदिने, हस्तीरतावरोल गिल्ले, मंदिरे या वाचनाच्या विपूलतेमुळे विविध संशोधकांनी तेरचे अन्वेषण व उत्खनन केले आहे. जुन्या काळातील विद्वानांनी बघलेली घरे, साडपाण्याच कुप, सातवाहन राजांची नाणे, चिनी मातीच्या स्त्री आणि पुरुगाच्या मूर्ती, रंगीतरंगी दगडाचे व काचेचे गणी या वस्तू उत्खननात सापडल्यामुळे सातवाहनकालीन तेरच्या लोकजीवनची काळी-फार कल्पन आपणाय करता येत आहे. उत्खननात सापडलेल्या वस्तू आपल्या तंगोर तण्णणीन तेरचे सुवर्णावाली वैभव उभे करतात. साता समुद्रा रलीकडील ग्रीक व रोमचे व्यापारी केडील तंणण आपणाय करता येत आहे. उत्खननात असत. यावरून तेरची राजासंघट ही हजारो वर्षांपूर्वीची आपल्या भागाली सर्वात महत्त्वाची अशी व्यापारी बाजारपेठ होती. अख आजच्या भाशेत म्हटलं तर ते वावणे तरणार नाही. त्या गावात आजही अत्यंत प्राचीन अशा मंदिराचे अस्तित्त्व दिसते. यात प्रामुख्याने त्रिविक्रम मंदिर, उत्तरेष्वराचे मंदिर, कालेश्वर मंदिर व जैन मंदिर यांचा समावेश आहे. यात त्रिविक्रम मंदिर हे श्रीवैष्णव मंदिर आहे. ही वास्तू पूर्णपणे विटवनी काळाची आहे. मंदिरात अत्यंत सुंदर अशी अलंकार युक्त श्री





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On

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Date : 20<sup>th</sup> & 21<sup>st</sup> March 2023



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Prof. Virag S. Gawande

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## नातूर जिल्ह्यातील दुर्लक्षित खरोसा लेणी

डॉ. व्यास सी.पी.

के.के.एम. महाविद्यालय, मानवत जि.परभणी, Email chetankumarvyas@gmail.com

सारांश-

इतिहासात साधनांना अनन्य साधारण असे महत्व असते. या साधनांमध्ये भौतिक व लिखित साधनांचा समावेश असतो. भौतिक साधनांना पैकी लेण्यांना सुद्धा अनन्य साधारण महत्व असते. कारण यांचा वापर हा विविध प्रकारच्या हेतूसाठी केलेला असतो. लेण्यांना गुहा, गुंफा, शैलगृहे, शिवामंदिरे, प्रस्तरालये अशी अन्य नावेही आहेत. पुढील ठिकाणे डोंगरकपाटीत नैसर्गिकरीत्या तयार झालेली असतात किंवा मानवाने डोंगर खोदून ती तयार केलेली असतात. लेणी ही संज्ञा सामान्यपणे मानवनिर्मित गुहांना वापरली जाते. अश्मयुगीन मानवाचे वास्तव्य बऱ्याच वेळा नैसर्गिकरीत्या पुढे आलेल्या प्रस्तराच्या आडोशानेच होत असे. अशापैकी काही निवडक गुहास्थानांमधल्या खडकांच्या कितीतऱ्या अदिमानवाने चित्रे खोदून आपल्या उत्कृष्ट चित्रकलेचे नमुने मागे ठेवलेले आहेत. प्रारंभीच्या काळात खोदलेली लेणीही त्या त्या डोंगरांच्या पायथ्याशी असून ती माघी, लहान व ओबडधोबड अशी होती.

महाराष्ट्रातील नातूर जिल्ह्यातील औसा जिल्ह्यातील 'खरोसा' एक गाव. हे गाव ऐतिहासिक दृष्ट्या खूपच जुने आहे. प्राचीन लेणी समूहामुळे ते अभ्यासनीय ठरते. नातूर हौऊन बिदर जाणाऱ्या राज्य राजमार्गावरून हे गाव निलंगा या तालुक्यापासून अवघ्या 10 कि.मी. तर नातूरहून साधारणतः 40 ते 45 किमी अंतरावर वसलेले आहे. या स्थळाच्या गुफांचा अभ्यास आरंभी फर्ग्युसन व वर्जेस यांनी केला. हे स्थळ ऐतिहासिक ठेवा साठवण्याचे पहावयास मिळते.

जेथे पाहता खरोसा येथील लोक ग्राम नावाचा रामायण काळखरी संबंध सांगतात. खर-रूपणाच्या काळातले खरोसा नावाची संगती नावली जाते. तसेच खर या प्राण्यासारखा रंग व आकार असलेल्या डोंगराचा हा काळ वाटतो. दोन बाजूंचे डोंगर पाहता (व गाव मध्यभागी) जनावराचे विशाल छूप पसरलेले वाटते. या संदर्भात ज्ञान खरोसा ग्राम नाम झाले असावे. असा तर्क करणे विसंगत ठरणार नाही.

या गावाचा संपूर्ण भाग गुहेच्या डोंगरावरून पाहता येतो. गावात एक गडी असून ती गावाची शोभा वाढवते. डोंगराच्या वरील सपाट व विशाल भागावर गेले की दोन स्थळे मन वेधून घेतात एक रेणुका देवीचे मंदिर जोरवार व दुसरे स्थळ दर्गा ही पीर पाशा रांची आहे. इथून जवळच डाग बंगलाही आहे. येथे हिंदू धर्मीय, बौद्ध धर्मीय यांचे ठेवणाऱ्या लेणीही आहेत. अर्थात हे धार्मिक दृष्ट्या विविध धर्मांचे संमेलन स्थळ ठरते.

खरोसा लेणी व अभ्यासक-

भारतातील डोंगरात कोरलेल्या बाराशे लेणींपैकी जास्तीत-जास्त लेणी ह्या महाराष्ट्रात आहेत. लेणी महाराष्ट्राच्या सर्व भागांत आढळतात. जगाचे आकर्षण ठरलेल्या सर्वोत्कृष्ट वेरूळ अचिठा लेणी मराठवाड्याचेच कला किताब आहे. मराठवाड्यातील लेण्यांकडे वळले तर पितळखोरा, सिरूर, अंबाजोगाई, धाराशिव, औरंगाबाद, खरोसा व इत्यादी येथील गुफा/ लेणींचा उल्लेख करता येईल. यापैकी खरोसा लेणे प्राचीन असूनही दुर्लक्षित राहिल्या आहेत. महाराष्ट्राच्या डोंगरात कोरल्यामुळे त्या खरोसा लेणी म्हणून ओळखल्या जातात. प्रारंभी फर्ग्युसन व वर्जेस यांनी खरोसा लेणी समूहाचा सविस्तर अभ्यास केला. विविध लोकांचा अभ्यास करणाऱ्या संशोधकांमध्ये वॉल्टर स्प्रिंक, शैला किंग, सेला कामरीत तसेच डॉक्टर गुप्ते, डॉ पर्यी, डॉ मोरवंचोकर, डॉ भगवान देशमुख आदींचा उल्लेख करतात. यांनी आपल्या लेखनातून या स्थळाविषयी माहिती दिलेली आहे.

खरोसा लेणी निर्मितीचा काळ व विविध उल्लेख-

नातूर जिल्ह्यातील खरोसा लेणीच्या निर्मिती काळाविषयी विविध उल्लेख मिळतात. यात उस्मानाबाद जिल्हा रॉडेटमध्ये लेणी निर्मिती इ.स.न.च्या सहाव्या शतकापासून दिला आहे. याचा आधार केव टेम्पल्स ऑफ इंडिया, फर्ग्युसन यांचा ग्रंथ ठरतो. खरोसा लेणीच्या निर्मिती विषयी काहींच्या मते सहाव्या शतकाच्या ऐवजी सातवे-आठवे शतक व काही भाग बाराव्या-तेराव्या शतकाच्या पर्यंत ही अर्थ शकतो. तसेच काही नवीन अभ्यासक हा काळ ज्येष्ठ ६ वे शतक सांगतात. जवळपास बाराशे ते पंधराशे वर्षांपूर्वीचा हा प्राचीन ठेवा असून चालुक्य शैली, देवता उपातीचा प्रभाव येथे पहावयास मिळतो. या ठिकाणी चालुक्यकालीन निर्मिती शैली, देवदेवता इत्यादींचा प्रभाव आणखिल पहावयास मिळतो. या लेणीची निर्मिती बऱ्याच शतकांपर्यंत होत राहिली असून, चालुक्यांच्या काळाची ती

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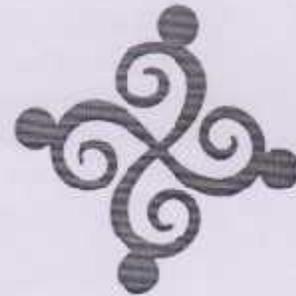
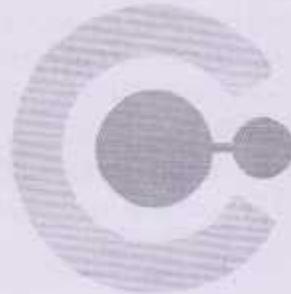
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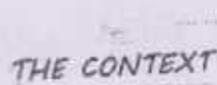


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## Zadhipatti Theatre of Maharashtra and Mobile Theatre of Assam: A Comparative Perception

Dr. Durgesh Bhausahab Ravande

Professor, Department of English,  
 K.K.M. College, Marwath.

### ABSTRACT

The research article with a comparative perspective attempts to unearth the mechanism of Zadipatti Theatre in the Eastern Vidarbha of Maharashtra and Mobile Theatre in hilly districts of Assam which have become a symbol of social life and cultural richness in two different parts of the country for more than hundred years. These theatres have taken the form of people's movement on a larger scale and have become the symbols of the socio-cultural life of the respective regions. The researcher largely relied on the data collected through personal visits and also selective online literature to formulate arguments and illustrate the findings.

*Keywords: Mobile, Performance, Theatre, Zadipatti*

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## FULL PAPER

Indian theatre has secured global recognition as an ancient, experimental, folk-centric and progressive theatre. The relationship of general social elements, small economic groups as well as social groups outside the mainstream with this theatre has been interesting as well as effective at both the principle and experimental levels. The association of this theatre with the epics *Ramayana* and *Mahabharata* is a bond of Indianness irrespective of language, culture, religious and ethnic diversity that binds all Indians together and reinforces the identity of indigenous beings. The exploratory understanding of the diversity, artistry of Indian theatre is seen not only at the national level but also at the global level. Considering the nature of Indian theatre, this theatre is mainly divided into three types namely classical theatre, folk theatre and urban theatre. But ultimately, as the theatre scholar Jacob Samprikal argues that drama aims at interaction and analysis of social problems.

Similarly, the Indian theatre has developed with this central idea, even though there are different stages of its intrinsic development. On the other hand, Indian theatre has repeatedly proved that the type of theatre prevalent in a language or state cannot be confined to that state or linguistic region. Indian drama has often crossed the boundaries of language or region and influenced each other and there are many written evidences of this. For example, one can consider the far-reaching impact of the *Ramllla* and *Raslila* experiments that actually crossed the boundaries of language, region and culture. In this sense, there is no doubt that this basic feature of the development of Indian theatre across the time is noteworthy. Famous theatre scholar Kapila Vatsyayan says "Indian cultural phenomenon that a dramatic form identified with a particular region has often interesting links not only with genres and styles within the region, but also with those which have flourished outside that region" (*Traditional Indian Theatre*:109).

Since ancient times, plays have played a significant role in Indian social life. In course of time, the focus of Indian theatre shifted from the kings and their palaces to the common people and the issues related to their survival. In other words, it was the period of emergence of folk-oriented, folk-centric theatre in India. Considering the contemporaries, theatres such as *Zadhipatti* in rural Maharashtra and mobile theatres in rural Assam have strengthened the common man's relationship with dramatic performances.

The famous dramatist Brecht through his 'Epic Theatre' gave some ideas of solving contemporary problems by thinking empirically. Direct participation of common people was considered important in it. Thus, Augusto Boal, the originator of the 'Theatre of the Oppressed', focuses on the necessity of action in drama. There are no ready-made answers to the problems of human life, but encouraging the

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audience to find possible solutions or answers is the core of the performance through this theatre. Thus, the active participation of the audience becomes a prerequisite for Boal's theatre. It also ensures the participatory role of ordinary men and women in various aspects of performance. In this research article, a comparative study has been made on the basis of some facts of the Zadipatti Theatre and Assam Touring Theatre, which have become a symbol of social life and cultural richness in two different parts of the country, and which have taken the form of people's movement on a larger scale.

With a history of more than one hundred years, the area of influence of Zadipatti theatre has been the majority of villages, small towns in the four districts of East Vidarbha namely Gadchiroli, Bhandara, Chandrapur and Gondia and some other districts of Vidarbha. Zadipatti Rangbhumi is a theatre that has been built by thousands of farmers and non-farmer families on the strength of their direct participation, on the basis of pure love for theatre and has a glorious history of more than a hundred years. For the common people of this region, the theatre is a source of pleasure, recreation and more importantly it has become a means of livelihood. The centre place for the theatre agencies is Wadva, Dist. Gadchiroli that connects most of the villages in these four districts.

There is no such an extensive, evolving theatre movement in the other regions of Maharashtra and with an exception like Mobile Theatres in Assam, in the country. The nature of this movement has remained the same as a theatre movement run by the people, for the people. Dr. Shyam Moharkar, a scholar of this theatre believes that this theatre emerged from the traditional folk dance of 'Dandar'. As the dance associated with the agricultural culture of 'Dandar' had a great influence on the folk culture of the region, the drama in general gradually became influenced by it. Dandar was eventually replaced by complete theatrical experiments. The first decade of the 20th century should be the time of emergence of this theatre. Vyankatesh Narya Mandal, of Navargaon and Balaji Borkar's early theatrical experiments testifies the beginnings of Zadhipatti. It can be seen that this folk theatre has expanded through Lokashraya. The nature of experiments in the region changed rapidly. In the late 1990s, this theatre became more professional and expanded numerically also. At Wadva, District Gadchiroli, the offices of the theatre groups were set up and the profit-oriented tendency started to grow. Although many new actors got an opportunity to act due to these groups but artistic values were greatly damaged.

On the other hand, it cannot be disregarded that Padmashree Dr. Parshuramji Khune, Dr. Shekhar Dongre, Sadanand Borkar, Kamlakar Borkar, Pralad Meshram and many other artists have put lot of efforts to assure this theatre a position of reputation. This theatre has become a legend due to the unconditional love and continuous support of millions of fans who have ordinary financial status but extraordinary artistic vision and artistic sense. Overcoming all kinds of difficulties or

obstacles, this theatre has been flourishing with the participation of writers, artists, technicians, producers, directors, other small groups and with the strength of the blessings of audience. Today's form of this theatre is a presence of more than a hundred troupes, thousands of artists, technicians and millions of spectators. In midst of many challenges, rapid changes, new techniques, changing tastes, emphasis on professionalism, widening ideological gap; the theatre stands strong only on the strength of unwavering support and positive response from the audience. There is no doubt that this relationship of audience with this theatre is an indication of the centuries-old progress of this theatre. On the other hand, let us see the nature of mobile theatres in Assam.

Assam is an important state of our country which is home to multi-ethnic, multi-cultural elements. Many ethnic groups exist in this state and they have contributed or are contributing significantly to the socio-cultural development of the region. From the perspective of theatre, mobile theatres in Assam have played an important role in public participation for the past few decades. Just as Zadhpati Theatre has built a theatrical movement through the direct participation and contribution of the people, so too is the common people's unrequited love for the roots of this touring theatre.

Folk art, folk theatres have been entertaining and educating people for a long time not only in Assam but in various parts of the country. It can be said that the folk traditions of our country have become an effective means of bringing education and spirituality to the common people. Further, the Bhakti movement paved the way for the emergence of various folk-art forms in different parts of the country. We notice that the emergence of *Ankia*, a form of folk drama in Assam, probably occurred in the fourteenth century through Sri Sankaradeva. Shankaradeva's play *Rukmini Harana* was the most popular. He travelled to different areas with the troupe of this play. By this time, Assam became a haven for many ethnic, linguistic and cultural elements from within and outside India. The blend of Eastern Vaishnava and Vaishnava culture was passionately reflected in these theatrical performances. Linguistic affinities often give us an indication of the dynamics between different regions and arenas. *Ankiya*, a form of folk theatre, though a mixture of forms such as *Ramlila*, *Bhagwat Mela*, *Manipuri Dance* is undoubtedly a form of theatre that is in tune with the original Assamese culture as well as unique and it has more cultural and social importance. Traveling from place to place by these *Ankiya* theatre troupes enabled the travel of ideas and became important in socio-cultural changes. The major plays *Ram Vijaya*, *Rakmini Harana*, *Kalia Damana* were presented through this medium. British colonialism negatively affected the natural momentum of *Ankiya Natya* in various parts of Assam. In a later phase, the theatre culture of Assam is seen to have been influenced by western theatre and the popular folk theatre of Bengal i.e., *Yatra*. It is a form of drama performed mainly on festive occasions and especially on mythological subjects.

Theatre Scholar Dr Jayanti Sarma mentions: "...the already existing various folk performance traditions in Assam and the events that lead to the transformation of the traditional theatre form into something as magnificent and intricate as the mobile theatre of Assam" (*Theatre on Wheels*:01). In this sense, it is an indisputable fact that traditional folk theatre is at the root of touring theatre.

Around 1930 AD, Assam began to develop its own form of moving theatre, or traveling theatre, and later became the most popular, visible means of entertainment in Assam. Ina Ross notes that, "Theatre in Assam is not simply an art form but a complex and rich social event" ("The Mobile Theatre...":65). Considering the existing theatre in Assam as well as the popular theatres with which Zadiparti Theatre is directly or indirectly associated: it is found that Grassroots Theatre in Chikwaka, Drama Circle in Bangladesh, PETA in the Philippines, Traditional Performance in Pakistan and Street Theatre in Sri Lanka are known for their folk-oriented performances and significant public response. It is a matter of fact that popular theatre has survived through oral tradition in various parts of the world.

Touring theatre in Assam should be credited for creating social consciousness. Till 2017, six thousand four hundred and eighty plays were written and performed for this theatre. In this sense it has become a mass movement which is working to create public awareness on the social issues of the people of Assam. In this respect, the similarity of this theatre with Zadihiparti is found. Through the well-acclaimed play *Suicide* and some other dramas, Zadihiparti theatre has also tried to fulfil its social responsibility. Touring theatre of Assam has given special emphasis on presenting dramas mainly based on historical, mythological, social themes. Initially, small shows were organized with minimal equipment. But in the end, it turned out that it was not going to work so the first theatre house was built in 1963. Much credit goes to Shri Achyut Lahkar and Shri Ratan Lahkar brothers. The contribution made by these two through their Nataraj and Kohinoor theatres became important in the promising progress of this theatre in the future. Because the initiative taken by them from the point of view of building theatre houses was remarkable. The plays *Jerengar*, *Sati*, *Boliya Ramdhenu*, *Andhkop*, *Bandisala* registered unconditional love of the audience. At present there are more than one hundred and forty-five theatre companies in various parts of Assam. Tihai, Barpeta, Nalbari, Darang, Goalpara and Pathshala districts have most of these theatre groups. The theatre groups mainly include Hangul Theater, Himalaya Theater, Ashirbad Theater and Aahan Theater. To add further, *Gram Panchayats* and *Gram Parishads* share in the actual profit from the performance of the plays. This ratio is 60:40. Construction of schools, colleges, auditoriums, religious places is done with the donations received from these theatre groups. Instalment plan is also offered in ticket booking. On this basis, it can be argued that theatre companies have a better knowledge of actual reality.

Considering Zadhupati Theatre and Mobile Theatres of Assam from a comparative point of view, there are striking similarities in some respects and striking differences in various respects. The most important similarity is the large mass base enjoyed by both these theatres and due to this they have become popular movements. At the same time, the financial turnover through these two theatres is worth cores of rupees. Both these theatres have opened many business opportunities. Due to which the number of dependents on these theatres is very large. These theatres, operating in two different parts of the country, keep the authentic art of India alive. To some extent, the tendency of the young generation to watch and understand drama has been increasing. Also, these theatres have succeeded in curbing the growing urbanization to a small extent. The impact of the films on both the theatres is remarkably similar. The awareness of social issues that both have is particularly remarkable. Decreasing level of humour, fragmented entertainment are points of concern on both sides.

On the other hand, the traveling theatre of Assam is more organized than Zadhupati theatre. This theatre uses technology in a more sophisticated way. The novelty of the subject is found a little more in the theatre of Assam. This does not mean that Zadhupati theatre lacks innovation but rather that innovation should be sought more vigorously. But Zadhupati theatre has a richer legacy. Looking ahead to the future, Zadhupati theatre looks more promising. But along with this, there are some important challenges in front of both these theatres. Such as 1) maintaining originality and acting skills in plays 2) bridging the growing gap between audience and theatre due to mobile culture 3) impact of covid-19 and 4) lack of government support.

Some important findings of the present research can be summarized as:

- 1) Both these theatres create a folk-centric culture.
- 2) Both theatres have become a major source of economy in the respective state.
- 3) Apart from these two theatres, very few theatre institutions are actually functioning in our country today.
- 4) There is a dire need for government assistance to keep both the theatres alive for the future.
- 5) Innovative subjects, acting skills, acting lessons, modern technology should be given priority.

Theatre institutions in Assam as well as theatre institutions in Zadhupati are an integral part of unorganized economy. But there is an urgent need to transform them into an organized economy sector. Therefore, the persons who play a role in the actual functioning of these mobile theatres can get real financial benefits. Folk theatre

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is a medium of entertainment, cultural dissemination and mass communication. Safeguarding the interest of artists and workers and especially women artists and traveling stage workers should be seriously considered. The unexpected shock of Covid-19 has raised some serious questions about the future of this theatre. But if the right policies are implemented, this art can definitely survive this disaster and future disasters also. Most importantly, theatre, not blood, flows through the veins of the people of these regions.

#### Works cited

- Ross, Ira. "The Mobile Theatre Movement in India: A Success Story in Assam"  
Cambridge University Press. N1Q, 33 1 February: 2017.
- Sarma, J. K and Kalita K. K. *Theatre on Wheels: A Brief History of Mobile Theatre in Assam*, Blue Sparrow Books: Guwahati, 2020.
- Vatsyayan, Kapila. *Traditional Indian Theatre: Multiple Streams*. National Book Trust: New Delhi, 1980.

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## MOBILE THEATRES IN ASSAM: HISTORY, CULTURE AND PRESENT

Dr.Durgesh Ravande

Deptt.of English,KKM College,Manwath,Dist Parbhani (Maharashtra)

### Abstract

Theatre has been a cultural recognition of India. It has a glorious past in form of Classical Sanskrit performances, theatrical strategies to illuminate the generations of theatre lovers. The decadence of classical plays in course of time paved a way to folk performances in different parts of the country. There was a concrete bond in these performances even though they were in heterogeneous languages and belonged to different regions. The basis was incidents, stories from the great epics like Ramayana and Mahabharata. The reverence for these epics continued to flow in the veins of the Indians to shape performing culture of the nation.

Assam witnessed a wider acceptance of masses to the folk presentations earlier through Ankiya-Nata and later through Jatra. The Jatra performances were originated in neighbouring state West Bengal but captivated Assamese' minds in course of time. The Mobile or moving theatre, popularly known as Bhramyaman is a twentieth century phenomenon, its roots in Jatra. The towns like Pathshala, Nagaor in lower Assam have more than sixty mobile theatre companies which have been luring the artistic minds of the people from more than six decades. The present research attempts to explore the historical development, culture and the present condition of this theatrical mass movement. The Covid-19 pandemic has certainly created a mountain of problems before these theatre groups but the survival is unquestionable as it illustrates Assamese identity.

Keywords: Amateur, Culture, Groups, History, Performance

### Introduction

Being a popular performing art, theatre has remained a cultural recognition of India for centuries. It witnessed a glorious past in form of Classical Sanskrit performances and also theatrical strategies to illuminate the generations of theatre lovers from different parts of the world. It nourished Classical culture of the nation for a long period of time. The *Arthashastra*, the magnum opus, that was written in earlier centuries, has been a codification of dramatic art.

As the pioneering theatre scholar, has rightly stated in it that "Theatrical spectacle is a total amalgam of all theatrical genres ranging from the spoken word to vocal and instrumental music, gestures, mime, décor costumes and all the other states of being" (Vatsayan: 01). To substantiate: "Theatre is about representing a certain understanding of social life or reported or invented happenings between human beings" (02).

The decline of classical plays during medieval age and also language barriers made its way to decadence of classical plays in different parts of the country. The void created due to this decline was filled by folk performances, cultivated further

through mass patronage, in diverse parts of the nation. Folk traditions and performances became instrumental to spread religious education and spiritual beliefs. On the other hand, Bhakti movement in different parts of the country paved the way for emergence of diverse folk forms in India.

There was a concrete bond in these performances even though they were in heterogeneous languages and belonged to different regions. Kapila Vatsyayan puts it in apt words: "Indian cultural phenomenon that a dramatic form identified with a particular region has often interesting links not only with genres and styles within the region, but also with those which have flourished outside that region" (Vatsyayan:109).

The basis of these performances was incidents, stories from the great epics like Ramayana and Mahabharata. The influence for these epics continued to flow in the veins of the Indians to shape performing culture of the nation. To take further, folk theatres at large unified the nation and elevated community based sentiments. The folk performances continued to attract the rural minds not because they were myth-based only but novelty in them instigated the spectators from nook and cranny of the country. When any art arises from basic things of life; it leaves its permanent mark on civilization. It is much true in case of traditional folk theatre in India.

## Objectives

The present research paper sets following objectives to explore core aspects of a mass movement in Assam popularly known as Mobile Theatres.

To elaborate the historical development of this roving theatre in Assam popularly known as Bhramayaman

To state its role in establishing a rich theatre culture in Assam.

To emphasize the present condition of the theatre groups which have been pivotal for socio-cultural and economical transformations in lower parts of Assam.

To state the challenges before the theatre groups more particularly in post covid scenario.

To explain how these unorganized theatre groups have contributed for artistic enhancement of Assam.

To study the facets behind actual growth of this theatre in course of time.

## Hypothesis

The research is based on the hypothesis that the theatrical movements in Assam remained at the centre of performing culture of Assam in general.



## Research Methodology

The researcher is largely relied on the secondary sources like books and articles to undertake present study. Hence the research methodology incorporated here is critical analysis of the available study sources.

## Significance of the Study

The study will be helpful to apprehend the history and mechanism of almost hundred year old people-centric theatre which has been crucial in artistic enhancement of Assam. It may captivate the researchers taking keen interest in Indian theatre in general and popular theatre in particular.

## Limitations of the Study

This is an earliest attempt to understand the research problem, field based work and actual data collection is missing here. The researcher has not concentrated here on specific theatre groups and actual play scripts.

## Historical Perspective and Cultural Inheritance

Edward Hallett Carr defined 'History as a dialogue between the present and the past' whereas Martin Luther King Jr. was a very interesting way to define history. He states that 'When it is dark enough you can see the stars.' The statements stated here are helpful in discerning the history of performance in Assam.

The impact of folk performances, as stated earlier, continued to entertain and educate the masses for a considerable period of time not particularly in Assam but in different parts of the country. The folk traditions and performances became medium or tool to spread religious education and spiritual beliefs. Adding further, Bhakti Movement in different parts of the country paved the way for the emergence of different folk forms and kinds. Emergence of Ankiya Natas, most probably in 14th century (Shri Sankardeva) remained a very powerful mode to substantiate Assamese culture. Sankardeva's Rukmini Harana had been the most popular play. He travelled with the troop of this play in different parts. In course of time Assam became a meeting ground of many racial, ethnic, linguistic and cultural elements from India and outside. Demarcation of Pre-Vaishnava and Vaishnava culture was keenly reflected in these performances. The linguistic affinities often provided a clue to the mobility among different regions and states. Though a mixture of forms like Ramlila, Bhagvat Mela, Manipuri Dance is found yet Ankiya Nata is unquestionably Assamese, coherent and unique having greater cultural and social significance. Traveling of these Ankiya-Nata groups from one place to another made it possible to have a travel of ideas and become instrumental in socio-cultural changes. Rama Vijaya, Rukmini Harana, Kaliya Damara were among the major plays belonged to Ankiya Nata. In course time, British colonialism affected the natural speed of Ankiya Nata in different parts of Assam. In later phases, the influence of western theatres and Yatra, a popular folk form of Bengal left their mark on theatrical culture of Assam. The Yatra or Jatra troops performed mainly on festive occasions and more particularly on mythological subjects. The participation of audience and involvement throughout went on evolving with Jatra



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performances. Hence these performances channelized the culture of performance in the region. A parallel to performances like these is found in terms of Sonapur fair of Bihar. In both, involvement of masses remained an issue of significant consideration. Somewhere around 1930, Assam originated its own form of moving theatre as the state became a fertile land for theatre and in course of time the roving or moving theatre became the most popular, visible and accessible form of entertainment in Assam. Ina Ross puts on record that "Theatre in Assam is not simply an art form but a complex and rich social event"(Ross:65). It is a mode for community building and also a way to bring community together. If we see the world over phenomenon of Popular Theatre, to which the present theatre in Assam belongs, we find that Grassroots Theatre in Chikwaka, Drama Circle in Bangladesh, PETA in Philippine, Traditional Performances in Pakistan and Street Theatre in Sri Lanka are known for their people-centric performances and noteworthy mass responses. The term "Popular Theatre is still associated with democratic, proletarian, and politically progressive theatre"(Schechter,3). It is matter of fact that popular theatre survived through oral transmission in different parts of the world. As a matter of fact, it believed largely in least preaching and full amusement.

Culture as defined is 'the sum of total of the learned behaviour of a group of people that are generally considered to be the tradition of that people and are transmitted from generation to generation 'and also 'It is a collective programming of the mind that distinguishes the members of one group or category of people from another'.

Assam has been a multi-ethnic, multi-cultural society. Ethnic groups are existed and they have contributed for socio-cultural development of the region. Interaction and interrogation have become a cultural necessity here. Mobile Theatres in Assam should be credited for creating a social consciousness. To put on record, till 2017, Six Thousand Two Hundred and Eighty plays were written and performed. It has become a mass movement that can voice the social issues of people of Assam. The plays are being watched to reinforce social or political consciousness.

There is no doubt that the mobile theatre of Assam is a treasure house in terms of cultural arena. It is clear that personal and community action can be found possible only through the performative forms like Mobile Theatre. For Assam, audience and region for all there is something in it. The theatre type is popularly known as Bhyrman, the name coined by Radha Govind Barua. The theatre has become a collective consciousness and a responsive system.

Mobile Theatres' contribution to drama literature (manuscripts), plays (staged), music, songs (lyrics), dance, dance-drama, development of technical craft, light and sound for stage, has been immense. As history connotes Kohinoor Theatre, the first commercial theatre was established in Pathshala, a town in lower Assam and it became medium to disseminate social and political ideology. This journey was later continued with Nataraj Theatre of Mr. Achyat Lahakar, the authentic mobile theatre of Assam that began in 1963 continued non-stop till 2003 for long forty years. In these years many mobile theatres were born and perished, but the role played by Nataraj Theatre in the history of mobile theatre of Assam stands out in a class apart. In this way, Mr. Achyat Lahakar, started a new era in Assam. The vision of Achyat Lahakar motivated many others to walk this path of theatrical association for a guaranteed income



throughout eight months of a year. His theatre group implemented effect-oriented staging strategy to convey social messages. The response of the audience remained live and participatory.

The actual working of Natra Theatre and many other theatres in Assam has been very interesting. A crew of one hundred and fifty members travel all the way from Assam in six trucks and has the record of setting a dual stage measuring sixty feet in five hours. The audience and performers found a thin line between them as the pioneers of Mobile Theatre always encouraged direct or indirect involvement of masses in actual performances. It catered to certain basic instincts of the crowd, like, i) need for contention, ii) partisanship, iii) credulity, and iv) vulnerability to emotional contagion. The great dramatists usually think of the crowd on all essential questions. The great playwright William Shakespeare tried to think from the common man's position. He understood people and so, he could write and present plays for them.

### Present Scenario

There are more than one hundred and forty five theatre companies in different parts of Assam at present. The places where most of the theatre groups are located are Tihu, Barpeta, Nalbari, Darrang, Goalpara and Pathshala. Public friendly stages have been prepared and the plays are presented on such stages. The subjects of the plays performed today are social issues, family dramas, Bollywood material, dramatization of classical novels and also political events. In certain conditions, singing words are used as mode of communication.

The system for actual performance that has been usually followed is a show of any play is being booked through the committee. It has a good communication with owners of theatre groups. The committees, village panchayat and village council have their share in actual profit. It is 60:40 in proportion. Construction of schools, colleges, halls and religious places takes place with the help of donation received from these theatre groups. In ticket booking instalment plan is also being offered. On the basis of this, it can be argued that the theatre companies have an intimate knowledge of ground reality. There is proper and intense knowledge of regional reality with their theatre groups also. One of the important reasons behind tremendous success for this theatre is their overall understanding.

The plays are mostly based on the subjects like romantic, historical, mythological, social and fantastic. The theatre is cultural entrepreneur. In the beginning, smaller shows with least equipment were organized but in the end it was found that it won't work hence theatre house was built for the first time in 1963. Life time pension for the artists was also given. One unit required at least one hundred and fifty employees. The plays like Jerenger, Sati, Boliya Ramdhonu, Sankalp, Bandisyal, Manikut, Amrapali, Nilakantha, Vishkumbha, Amrit, Jarambhumi, Deenabandhu, Pratibimbo, Sri, Sughajal, Karbala, Mukhymantri, Surangar Seshat received praise and love of the audience. It is a matter of fact that the Mobile Theatre is primarily a commercial cultural enterprise and therefore they have always been trying to satisfy the hunger of entertainment. The travelling theatre groups across the state continue for more than nine months. Revenue generated is close to two hundred crores. Mobile Theatre at large is an unique cultural and business venture and it is equally responsible to satisfy creative urges of the people.



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Dedicated amateur artistes who are farm workers, small business men or women are the actual proprietors of this theatre. It should be kept in mind that profit and business have always remained secondary considerations for these theatre groups. Financial risk on different grounds has always been taken. The rehearsal period for most of the theatre groups is usually between June – August and the actual shows run up to mid-April i.e. till Assamese new year. The concept of Show Money is very interesting. It is amount paid for the first show. In 1963 it was almost one thousand rupees. Except Lahakar brothers' theatre group the other theatre groups like Hengool Theatre, Himalaya Theatre, Star Theatre, Ashirbaad Theatre, Baroichila Theatre, Kamrupa Theatre, Nandini Theatre, Abahan Theatre, Bodo Theatres have contributed to sustain theatre culture in the state. Stating here a loud appreciation of audience response, a mention of 2007-08, Mr. Ashutosh Mukhopadhyay's creation which was presented, scripted by Bhattacharya as Sundari Sanyasini is essential. In 2009-10, a very successful play staged by Abahan Theatre, which, though not directly based on any novelist or writers' work, was, Bhul Nubujiba Bhupenda, based on lyrics and music of the internationally acclaimed Assamese music maestro, Bhupen Hazarika. A mention of play Prithibir Prem is essential because it is the only Mobile Theatre play that won national award. Dharmi Theatre gets the credit of introducing a new technique to this popular theatre form in Assam which is widely known as dimension stage. To add further, Abia Berman is the first ever woman-centric mobile theatre which was established in the year 1977. To precise, The Mobile Theatres in Assam have become socio-political narrative of the state and have significantly contributed for socio-political history of Assam. It has been the history of more than six decades, receiving a concern all the way. It was transformation of traditional theatre into mobile theatre. But the challenges confronted today are not negligible. Most of the Mobile Theatres today face challenges like i) Maintaining quality of plays and acting skills. ii) Growing distance between the real audience and theatre houses iii) Covid-19 pandemic and iv) Lacking Govt support.

## Findings

The findings of the present research are as below:

- Mobile Theatre in Assam generates mass-oriented culture.
- Mobile Theatre has been a source of economy for more than two thousand families in different parts of Assam.
- There are very few theatre groups as such in our country at present except Zadipti Theatre in Maharashtra.
- Financial conditions are quite challenging to keep this performing culture flourishing.
- Mobile Theatre practices are an integral part of ancient performing culture of the nation.
- There is an urgent need of government assistance to make survival of these practices possible.



## Conclusion

The theatres in Assam today are altogether an integral part of unorganized economy. But there is an urgent need to transform them into an organized economy sector therefore economic welfare of the individuals playing their role in actual working of these mobile theatres may be possible. In the present condition, TV and Cinema stars demand a handsome amount. They are paid huge amount because their presence assures a huge response of the audience. The Mobile Theatre has been a medium of entertainment, cultural propagation and mass communication. It epitomizes performing culture of the country hence policy initiatives be taken by the government agencies to make survival of this theatre possible. It should not be forgotten that it is responsible in propagating socially relevant messages at large but cheap and vulgar entertainment be discarded from the performances. Safeguard to the interests of artists and workers and specially women artists and workers of mobile theatre be taken into serious consideration. An unexpected stroke in form of Covid-19 has put some serious questions on future of these performing agencies but implementation of proper policies may rescue the art from this disaster.

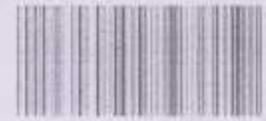
Not only government but non-government agencies and other individuals should always keep in mind that the role of these theatres has been effective in sustaining economy of Assam. The industry generates employment to the thousands of artists and non-artists. As a matter of its social contribution, the funds for constructing schools, colleges, temples and masjids have always been generated. Actually, Assamese culture is a melting pot of different ethnic identities. In course of time or through a historical voyage, theatre became an identity of Assam. It can be concluded on a positive note that mobile theatre in Assam confronts a good number of serious issues but it will survive till the Assamese will survive.

## References

- Ross, Ina. "The Mobile Theatre Movement in India: A Success Story in Assam" Cambridge University Press, NTQ, 33:1 February: 2017.
- Schechter, Joel. (Ed.) (2003). Popular Theatre: A Source Book. Routledge: London. Vatsayan, Kapila. (1980). Traditional Indian Theatre: Multiple Streams. National Book Trust: New Delhi.

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(M.A.,NET,Ph.D)



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II

PROGRESSION TO HIGHER EDUCATION OF SCHEDULED CASTE WOMEN: A CASE STUDY

*Dr. Durgesh Ravande*

*Associate Professor*

*Department of English*

*KKM College, Manwath, Dist. Parbhani  
MS, India*

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**Abstract:**

*The research paper attempts a field based study to unearth the progression to higher education of scheduled caste women in nearby villages of Manwath, Dist. Parbhani (Maharashtra) such as Hattalwadi, Sawali, Sawargaon, Ambegaon, and Bondar wadi. It is a preliminary attempt to elaborate the reasons behind this timid progression of girls from this community to higher education and illustrate possibilities to hike the progression. As it is a purely field based work, the method of research is relied on data collection and its analysis.*

**Keywords:** *Caste Education, Marriage Progression, Security, etc.*

The purpose of education, as Dr. B. R. Ambedkar has considered 'It is to socialize and moralize people.' The educational society can formulate morality as its essence. Dalit society in India even they are in seventeen percent of whole population, could obtain the right of education a bit later and even afterwards the condition of Dalit women remained pathetic for some decades. Mainly the political-legal concept 'scheduled caste' is actually sociological in nature. It indicates a group of people or community which has been constantly experiencing deprivation in terms of educational, economic and social conditions. The educational stature or the percentage of women belong to SC community is worse than percentage men. The GER for women in 2009-20 is 27.3 % as compared to 26.9% for men. Dr. Saidapur observes that "Scheduled caste women in India are targeted for violence and discrimination not just because of their gender but also on the basis of their caste, community, religious affiliation and other factors. The social deprivation of scheduled caste women revealed that these women had to shoulder as a burden, the women belonging to this segment had to bear the brim as they became victims of double discrimination- as part of caste inequity on the one hand and as part of gender inequity on the other." (Saidapur, 2102). The scheduled caste women obtained school education but higher education remained beyond their reach for few more decades. Priyadarshani observes in her book *Scheduled Caste Women and Higher Education* that "Higher education in India today is in a unique state, it has to face the challenge to maintain a fair balance between the indirect demand for better quality and direct demand for expansion in enrolment" (Badiger, 02). Even today the percentage of women in higher education is not much satisfactory in comparison with men from their community and women from other communities. Maharashtra, one of the progressive states in the country, has still educationally backward regions like Marathwada and Vidharbha. The present study illustrates the condition of higher education of scheduled castewomen in the villages such as Hattalwadi, Sawali, Sawargaon, Ambegaon, and Bondarwadi of Parbhani district, Maharashtra. These villages indicate moderate signs of social, educational, economic and cultural development of the scheduled caste residing in respective villages for considerably long period of time. The girls or women from the community obtain moderate chances of progression through education. As per the National Health Survey (2009-2021), 23.3% women married before 18 of their age. It shows prohibition of Child Marriage Act 2006. The act is not much effective in preventing child marriages more particularly

among poor castes and communities in our country. The act is often used against the girls who elope and marry against will of their parents. According to social activists working in different parts of the country, mentality of parents can play a vital role in changing the present scenario. Such marriages need to be stopped for betterment of girls. The girls should be encouraged to acquire higher education and strengthen their life.

#### Research Methodology:

The researcher is mainly relied on short interviews of village heads, some men and women from the community and data from *Grampanchayat* (Village Council) as primary and secondary sources respectively.

#### Research Objective:

The researcher with the help of data collected from authentic sources strives to state small percentage of progression to higher education of scheduled caste women even in last five years. The actual reasons behind this condition and solutions are also suggested.

The data collected from the village Hattalwadi, a tiny village in East of Manwath shows that only seven girls could complete their degree education in last five years. Surprisingly the village is just an three kilometres' distance from the town, Manwath. It is a considerably lesser than the percentage of boys and also general percentage of degree education from the village. The researcher interacted with a few villagers from the scheduled caste community to unveil the reasons behind such a small number of progressions. There was no uniformity in their responses. But at large their reluctance in promoting girls to higher education was found. They were seen interested in educating their boys but not girls. The data and interaction with a few individuals from Bondardai, a nearby village, repeat the same story or it is even worse than earlier as no girl from scheduled caste or community was progressed to higher education in last five years. The population of the village is 3500 among it nearly 600 scheduled caste with thirty to thirty five houses. Girls are taught or allowed to complete their education only up to 12<sup>th</sup> standard. Most of the parents found concerned for security of their girls.

On the other hand, the researcher learnt that only three scheduled caste girls from the village Sawli found themselves in the stream of higher education in last five years of total eight hundred population of scheduled caste in the village. There was no wider difference in the reasons as most of the villagers reiterated the same causes. They responded that there is no benefit in promoting girls for higher education as they have to get married soon. Mostly marriage of girls is being considered as the greatest responsibility. It can be added also that education up to 12<sup>th</sup> standard is sufficient for them. The village Ambegaon has the same story to convey as only one girl could reach at the pedestal of degree education in last five years. Whereas out of twenty five graduated girls in last five years from Sayargaon only one girl from this community could make her mark. The women belong to this marginalized community was found interested in educating their girls but they have little say in family decisions. Like girls from upper class communities they desire to see their own girls completing higher education and having their source of livelihood. As they realize very well that education only can lift them pathetic conditions of life.

The pathetic, disappointing figures of scheduled caste women in relation with the subject of the study denote the reasons such as early marriages, poor economic condition of parents, negligence towards the education of girls, lack of transport facility and also no assurance of security of girls, if they are sent to degree college.

More than seventy years of independence demand for a secured, independent future of women is perceived. But as a matter of fact, this path of security and independence passes through education. Unified and directed efforts from various segments of the society may help to change this situation.



The solutions to the problem are found basically in taking initiatives from different stakeholders of the society. Without their approach of coming together to tackle the situation there seems least possibility in changing the situation. The college teachers should constantly be in touch with the parents of these girls to encourage them for higher education. It is not the only solution but can be a better choice in this regard. The other government agencies like police should produce or create a sense of assurance in the minds of these parents so that they will be ready to send their girls to college without any fear. Even though the age of marriage of girls is increased in recent years but there is no serious consideration or actual implementation of it at ground level. The parents are in hurry to get their daughters marry as soon as they complete their secondary education.

Transport facility is also one of the crucial issues. Proper facility has to be provided to the students. The transport authority should show its social concern in this regard. A nation cannot progress when the women or girls lag behind in getting equal opportunities. Education to girls and more particularly higher education is an opportunity to stand equal. If some serious efforts are taken to resolve the issue; certainly the present scenario can be changed.

To conclude, the study of the research problem is primary in nature. It is a sincere attempt to comprehend the problem through direct or actual interaction with the people belonged to scheduled caste community in select nearby villages of Manwath. Multiple dimensions to the problem cannot be denied. But at large, a serious consideration of the issue is required.

#### References

- Badiger, P. Indira Priyadarshani. *Scheduled Caste Women and Higher Education: A Sociological Study*. Laxmi Book Publication, Pune: 2015. Print.
- Sadapur, S. "Status of Scheduled Caste Women in Higher Education of Karnataka: Micro Analysis" *Parishodh Journal*, Vol IX, Issue II, Feb. 2020. Print.



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# Swami Vivekananda on Freedom

Dr. Gurgesh Ravande

Swami Vivekananda occupies a prominent position in the world for his mesmerising spiritual leadership, his revolutionary thinking and concern for welfare of mankind.

The message of universal brotherhood which was an integral part of his spiritual and moral teaching establishes him as a visionary as well as a preacher of Indian ideology. The message to West and also to his fellow Indians is

contained in his writings and speeches. A 19th-century Indian philosopher, he introduced Indian ideas to the world and guided the development of Indian ethics in the



**PERFORMANCE STRATEGY IN MAHASWETA DEVI'S *MOTHER OF 1084 AND BAYEN*****DURGESH RAVANDE**Associate Professor,  
Department of English,  
K.K.M.College, Manwath.**ABSTRACT:**

*Mahasweta Devi's theatre is an unfinished one as it believes in presenting the real life of subalterns. The objective behind the article is to unearth performance strategy adopted by Mahasweta Devi in the plays *Mother of 1084* and *Bayen*. The researcher also aims at showing her association with oppressed theatre which is keen in demonstrating the issues of off-stream communities through modest means of performance. The researcher is largely relied on the original texts, secondary sources and virtual sources available. The research article is pivotal as the performance strategies in the plays of Mahasweta Devi are rarely discussed.*

**Key-words:** Device, Oppressed Prop, Stage Theatre.

Popularly known for her association with tribal communities in different parts of the country, Mahasweta Devi (1926-2016) occupies a revered position for her life-oriented literary engagements. Her literary contribution substantiates the spirit of her work for which she devoted her entire life. In her oeuvre, there is depiction of brutal oppression of tribal people and the untouchables by potent, authoritarian upper-caste landlords, lenders and government officials showing its relation with an age-old history of domination. Even though she contributed substantially as a novel and short story writer, she purposely chose theatre because she found it the most suitable medium to tackle the issues of deprived people. The theatre of Mahasweta Devi is particularly for oppressed finds its genesis in Augusto Boal's 'Theatre of the Oppressed'. Boal has suggested that "...the theatre of the bourgeoisie is a finished theatre in which images of a complete and perfect world are presented. But since the oppressed classes do not know what their world would be like their theatre is unfinished-so their theatre is a rehearsal for revolution" (Strampikal: 28). Similarly, Mahasweta Devi's theatre is an unfinished one as it believes in presenting the real life of subalterns. The objective behind the article is to unearth performance strategy adopted by Mahasweta Devi in the plays *Mother of 1084* and *Bayen*. The researcher also aims at showing her association with oppressed theatre which is keen in demonstrating the issues of off-stream communities through modest means of performance. The researcher is largely relied on the original texts, secondary sources and virtual sources available. The research article is pivotal as the performance strategies in the plays of Mahasweta Devi are rarely discussed. The stage strategies are often crucial to glimpse the ideas in the plays of Mahasweta Devi. She maintains stage economy throughout her presentation. Though scanty stage prop but enough to undermine the difference between her intention and course of presentation.

The play *Mother of 1084* enacts a day in the protagonist, Sujata Chatterjee's life. It is exactly after two years of her son's death. She sets out to discover the causes behind Brati's death. Her ignorance is predicament of mothers who know little what their sons do outside the home. The play has a firm dramatic structure with a beginning, middle and an end. It is one of the prominent plays of Mahasweta Devi where the structural standard is maintained to elaborate a comprehensive meaning. The playwright goes on making certain shifts from present to past and vice-versa to develop subject of her play. The play begins with the news of Brati's death. In this way, the play begins from middle which continues till forth scene in the play. The scene number fifth, sixth and seventh interact Brati's mission and his death in a mob attack. The stage of Mahasweta Devi is remarkable for simple but

meaningful devices. Talking about her stage, E. Satyanarayana comments: 'The stage is free of superfluous theatrical properties that gives the playwright great freedom to present different situations more by suggestion than by scenic displays without taxing more the belief of the audience (2000:32)'.

As Mahasweta Devi incorporates moderate prop on the stage, the use of lights therefore becomes significant. The shift from earlier to later scene is shown with the help of partial stage darkening. It is cleverly done to the end of forth scene in the play. We shift now from present to past incident and hear a dialogue between Sujata and Brati. There is just a modest use of lights that assists for a repeated transformation. It is repeated to the end of seventh scene as the eighth scene opens with a conversation between Sujata and Somu's mother.

The use of tape recorder as a stage device becomes one of the dominant aspects of the play. The instrument is crucial for the expression of soliloquy. Sujata's voice on the tape itself is a kind of soliloquy. It goes thus "I went to Somu's mother in the afternoon. One can now visit the colony. There's no disturbance any more, no terror, no sirens, no gunshots, no screaming young men - no! (Pause). It was the second time I visited Somu's mother (Pause). I didn't know Brati well enough, Somu's mother knew him better"(9). The audience is allowed here to realize Sujata's inward feelings. The most significant use of tape recorder takes place just before Sujata's address to men and women gathered for the party. All the way, the technicality of *Mother of 1084* suggests Mahasweta Devi's credence in simple, common devices that explain a wicer, crucial meaning and can explore the mind of her characters. The proponent of 'Epic Theatre', Bertolt Brecht precludes the new theatre that insists involvement of the audience in actual performance. Here audience has not a mute presence but desired to remain active through out the performance. It urges breaking the fourth wall. Likewise, Mahasweta Devi's theatre expects active presence of the audience.

The play *Mother of 1084* surprisingly resembles the use of 'Stream of Consciousness' technique in the novels. In its novel form, there is a clear-cut inclination for it whereas in drama form, it is done with a skilful use of tape - recorder. The instrument thus becomes *modus operandi* as Sujata determines her next action in accordance to earlier. The particular day (day of action) from dawn to night has contrasting actions. These actions are communicated through tape recorder. All the way, the stage device is poignant to determine Sujata's mind-set. The transformations undertake throughout. How her perceptions went or changing, her realizations and also confessions are also reflected through her movements.

The technical standard of *Mother of 1084* relies largely on the way she exhibits the modest prop on her stage. Her stage is not conventional or decorative. The performing place just separated from the place where the audience is expected to sit together for watching the play. As a playwright, she believes in conveying the message than decorating or glorifying the stage. She also maintains a balance between past as present events.

The other play, *Bayen* is a paradigm of Mahasweta Devi's theatrical economy. In *Bayen*, Mahasweta Devi implements a clever technique as a part of her theatrical economy. The shift becomes possible with the help of simple gestures. The gestures are quite significant in Brechtian and Boal theatre. In Augusto Boal's Theatre of the Oppressed particularly, the performance reaches to pinnacle with an appropriate or meaningful gesture of the characters. The gestures serve the determined purpose of the actor without any decorative, sublime or expensive prop. Badal Sircar, the proponent of 'The Third Theatre' modelled most of his plays on the similar performance tricks that helped to propagate the subaltern issues in a simple but effective way. The play *Mother of 1084* centres around a bourgeois woman whereas *Bayen* demonstrates predicament of a tribal woman. But in both the plays experience as a woman is not different. Mahasweta Devi emphasizes the issues related to the plight of underdogs with the help of simple dramatic techniques. The stage strategy of Mahasweta Devi demonstrates her attitude 'performing more with least prop'. She aspires to propagate a boarder meaning with the help of limited and inexpensive stage devices in both the plays

for present study is authenticated with a spatial essence. The plays of Mahasweta Devi are generally enacted by the tribal people. Therefore, the simple stage devices help immensely to these off-stream people for an effective and accurate performance. Apart from this, Mahasweta Devi looks at the theatre as the most effective medium to reach people with an indomitable concern to explore social reality. Malinder, husband of Chandi, goes twelve year back by rearranging his hair and dhoti. With the help of effective gestures, he narrates the incident before his son:

*Hey, king, you have things to give to all those who never cared for you when you were in misery.*

*I gave you food then, I gave you clothes. What have you for me? Eh?*

*We are Gangaputas. What are you going to give to our clan? ... What you have for us?*

*For my community?*

*The Brahmins, the sadhus, the sanyasi get cattle, land and gold, and we get all the cremation grounds of the world.*

*... All the cremation grounds of the world for us, for us, for us, for us only" (78-79).*

Malinder narrates the events in such a way that it becomes a live action. The gestures, in this way, are implemented here to present a past incident effectively. Malinder also narrates his romance with Chandi and their marriage, following it, Mahasweta Devi uses a tribal song here with a grace.

*... Drunk with colour, Our bodies too are drunk. The heart's too full of colour. Let the colour spill over the body Let the colour flow all over. (80)*

Her stage strategy goes hand-in-hand with her subject. Mahasweta Devi in both of her plays elaborates the subject and makes an effective presentation with the help of her stage strategy. With simple, ordinary devices, she creates a magnificent impression. The performance strategies in these two plays of Mahasweta Devi signify that playwrights should use woman's body to explore the diverse aspects related to woman's socio-cultural construction. Their social, cultural construction, experience as a woman can be more effective when body doesn't remain just body but performing device. As Helen Cixous has rightly stated: "women must write through their bodies, they must invent the impregnable language that will wreck partitions, classes and rhetoric, regulations and codes, they must submerge, cut through, get beyond the ultimate reserve discourse, including the one that laugh at the very idea of pronouncing the word silence. (1976:879)". The use of woman's body on the stage containing her gestures, movements and language certainly show woman's ability to convey a wide range of experiences related to self and subjectivity. Besides, the specific innovative stage devices in these plays illustrate woman playwrights' excellence in offering something new, significant for the development of Indian English Drama. Though the article restricts to the study of Mahasweta Devi's two plays but her performance strategy can be glimpsed well. The theatre of Mahasweta Devi is unconventional, and least known. It is unorganized to some extent and also unprofessional. The only intention behind the entire practice is let the deprived classes get well aware of their issues and should be united to relieve pains in their lives. The researcher would like to conclude his argument on the basis of following findings.

- 1) Mahasweta Devi as a playwright believes more in effective deliverance of the message than making it decorative or unnecessarily difficult.
- 2) Her theatre should be appreciated for theatrical economy.
- 3) The language of her plays is simple and suggestive.
- 4) Being a playwright she suggests that for performance of a play intensity of the subject, its deliverance is more important than anything else.

- 5) The western schools of theatres like 'The Theatre of the Oppressed' and 'The Epic Theatre' have left an impression on Mahasweta Devi's theatre.

#### REFERENCES:

- 1) Cixous, Helen (1976). "The Laugh of the Medusa." *Signs*. The University of Chicago Press, 14 (Summer), pp. 875-893.
- 2) Devi, Mahasweta, (1997). *Five Plays*. Trans. Samik Bandyopachyay. Seagull Books: Calcutta.
- 3) Satyanarayan, E. (2000). *The Plays of Mahasweta Devi*. Prestige: New Delhi.
- 4) Srampickal, Jacob (1994). *Voice to the Voiceless: The Power of People's Theatre in India*. Hurst and Company: London.

#### Bio-note:

Dr. Durgesh Bhausaheb Ravande has been working as an associate professor in the Department of English, K.K.M. College, Manwath. He has published more than 30 research articles in peer-reviewed/UGC-listed/referred journals and edited books. He is being awarded with **Best Teacher Award-2021** by SRTM University, Nanded. His book on Indian Women's Theatre has been published by Atlantic Publishers and Distributors, New Delhi. It is included in Sage's Journal of Commonwealth Literature editorial note- 2016. His one more book is in the process of publication. One minor research project on a theatre agency associated with Zadipati, a peripheral Theatre in Maharashtra is completed. He has been working on one more research project to explore socio-cultural dimensions of this peripheral theatre. He has organized two webinars on theatre related topics and has completed two spells of Associate (June 2019 & May 2022) at IAS, Shimla. One researcher has been awarded doctorate under his supervision and four researchers have been working under his guidance. Traditional Indian Theatre, Indian Philosophers and Women's Theatre have been the areas of his interest.

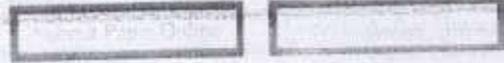


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## Heterocyclic compounds for the sustainability, and existence of human life

Mr. Satish Y. Mane, Dr. K.G. Huge

Associate Professor, Department of Chemistry, Shri Chhatrapati Shivaji Maharaj Vastu Sangrahalaya, Mumbai, India  
Assistant Professor and Head of the Department of Chemistry, K. J. Somaiya Institute of Engineering & Information Technology, Mumbai, India

**Abstract:** Heterocycle are the important precursor of various natural products as well as synthetic drug and hence they acquired significant position in the life of almost all living organisms. In this research paper we are trying to highlights the importance of heterocyclic compounds in the life of living organisms with special reference of human life. Some naturally occurring and some synthetic heterocyclic compounds are discussed in this study.

**Keywords:** Heterocycles, Biomolecules, Sustainability, existence, living organisms

#### INTRODUCTION:

Heterocyclic compounds are organic cyclic compounds which contain at least one of the hetero atoms (Nitrogen, Oxygen, Sulphur) other than carbon and hydrogen atoms. The presence of O, N and S atoms in the heterocyclic compounds gives specific characteristics (reactivity, a range of reactions and hydrogen bonding) and hence they show wide biological activity. Heterocyclic compounds are abundantly in nature. The body of organism contains a number of heterocyclic compounds and biochemical reaction regulated by various heterocyclic compounds. The important role in the metabolic process of almost all living organisms. A heterocyclic compound is a cyclic compound in which at least one of the atoms in the ring is not carbon. The body or parts are animals is composed of carbohydrates, lipids, nucleic acids, proteins, fats which are essential for life and also contain heterocyclic compounds. The structural composition of genetic materials contains heterocyclic bases (DNA and RNA are chemical bases of heredity and variation). The early genetic information from one generation to another is maintaining the identity of different species in organisms by using a kind of copy mechanism (but one generation to another is maintaining the identity of different species in organisms by using a kind of copy mechanism). DNA molecule is capable of self duplication during cell division, hence the copy mechanism is essential in this phenomena.

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# Heterocyclic compounds for the sustainability, and existence of human life

<sup>1</sup>Mr. Satish Y. Mane, <sup>2</sup>Dr K.G.Huge

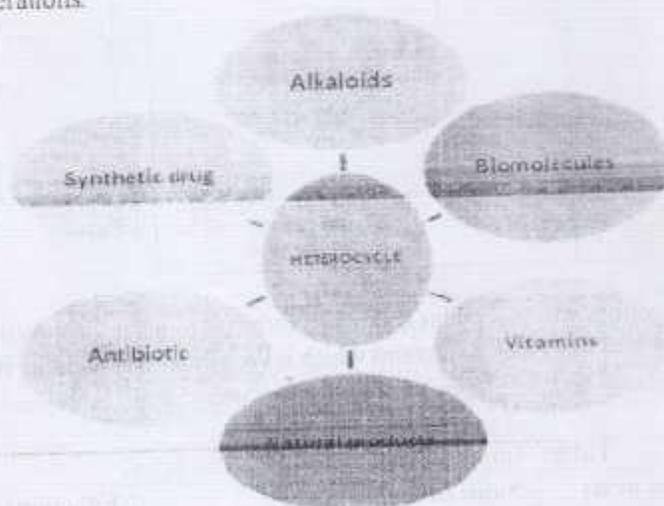
<sup>1</sup>Assistant Professor, Department of chemistry Shivneri mahavidyalaya Shirur Anantpal, Dist-Latur, 413544, Maharashtra, India.  
<sup>2</sup>Assistant Professor and Head of the Department of Chemistry K.K.M. Mahavidyalaya Manvat, Dist-Parbhani Maharashtra, India

**Abstract:** Heterocycle are the important precursor of various natural products as well as synthetic drug and hence they acquired significant position in the life of almost all living organisms. In this research paper we are trying to highlights the importance of heterocyclic compounds in the life of living organisms with special reference of human life. Some naturally occurring and some synthetic heterocyclic compounds are discussed in this study.

**Keywords:** Heterocycles, Biomolecules, Sustainability, existence, living organisms

## INTRODUCTION:

[1] Heterocyclic compounds are organic cyclic compounds which contain at least one of the hetero atoms (Nitrogen, Oxygen, S, etc) other than carbon and hydrogen atoms. The presence of O, N and S atoms in the heterocyclic compounds gives specific characteristics to interact, a variety of interactions like hydrogen bonding, van der Waals interactions, and metal Co-ordination bonds and hence they show wide biological activity. Heterocyclic compounds are abundantly in nature. The body of organism contains a number of heterocyclic compounds and biochemical reactions regulated by various heterocyclic compounds and plays important role in the metabolic process of almost all living organisms. A heterocyclic compound plays a vital role in the physical chemical and biological development of living organisms. The body of plants and animals is composed of biomolecules (carbohydrates, nucleic acids, proteins, fats) which are essential for life and also contain heterocyclic compounds. The structural composition of genetic materials contains heterocyclic bases DNA and RNA are chemical bases of heredity and variation. They carry genetic information from one generation to another to maintaining the identity of different species of organism for a long period of over millions of years. DNA molecule is capable of self duplication during cell division. Hence the same genetic character is expressed in next generations.



**Figure 1: Presence of heterocyclic in various products.**

[2] For the sustainability and development of organisms including human being on earth it is essential to survive in life. During the life cycle of organism i.e. plants and animals it is need to defend itself against various diseases including infectious, deficiency, heredity and physiological diseases, causes by various pathogens like viral, bacterial, fungal infections or by internal dysfunction. To prevent, treat and cure from the disease it is need to develop medicinal drugs and heterocyclic compounds are the main source of synthetic drug. [3] according to various statistics, about 85 percent of all biologically active chemical compounds contains a heterocycles. [4] In the other word overall almost all synthetic heterocyclic compounds shows somewhat biological activity like antiviral, antibacterial, antifungal etc.

### A) Naturally Occurring Heterocycles:

[5] Carbohydrate, nucleic acids, proteins, and fats are known as biomolecules because they are building block of body of almost all living organism. They contains heterocycles discussed below.

#### Carbohydrates:

Carbohydrates are the organic molecules which contains sugar, starch and fibers.

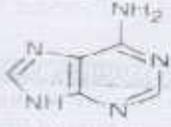
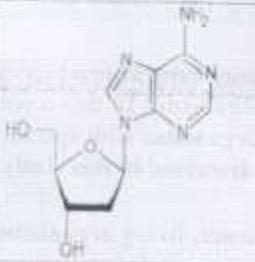
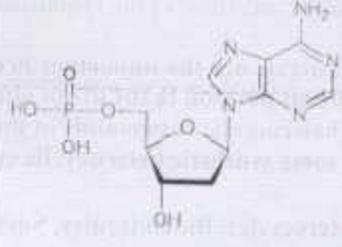
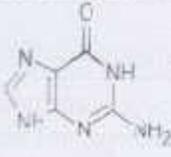
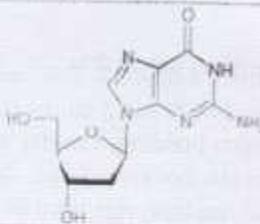
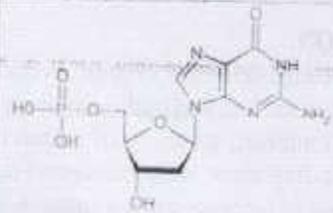
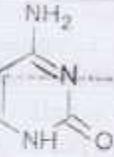
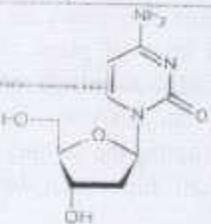
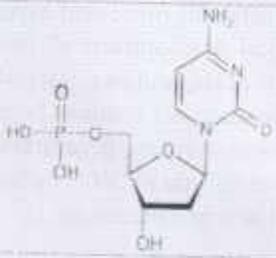
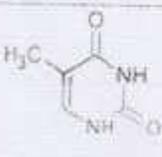
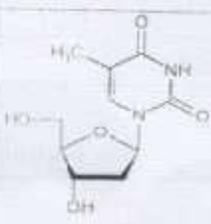
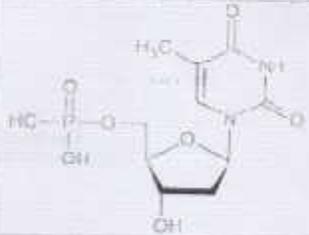
- Fructose: Fructose contains Furan analogous  $\alpha$ -D-(-) Fructofuranose,  $\beta$ -D(Fructofuranose).

### Nucleic Acid

Nucleic acids is a complex organic substance present in living cells, especially DNA & RNA whose molecules consist of many nucleosides and nucleotides.

- DNA molecule having Oxygen containing heterocycle known as Pentose Sugar and four bases Adenine, Guanine, Cytosine and Thymine is Nitrogen containing Heterocycles.
- RNA also contains four bases Adenine, Guanine, Cytosine and Uracil Nitrogen containing heterocycle.

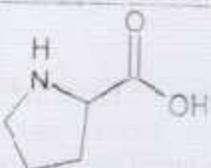
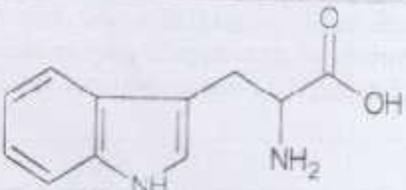
Table: Chemical composition of DNA containing Heterocycles.

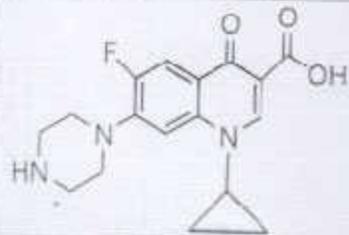
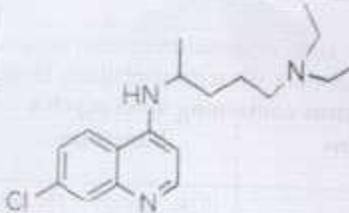
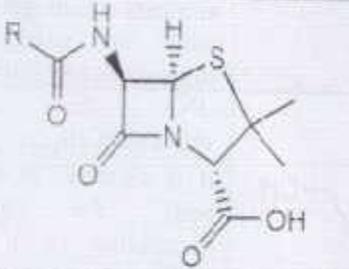
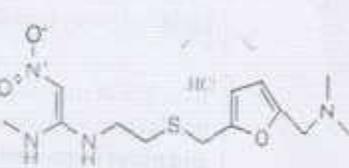
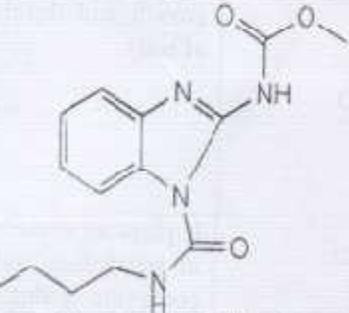
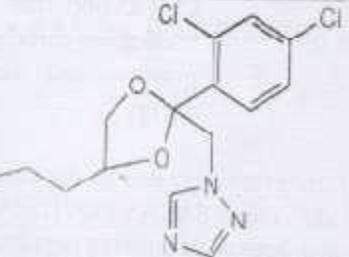
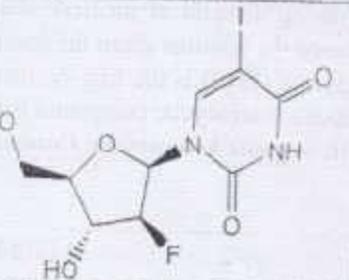
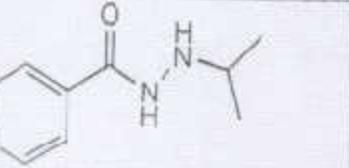
Names of Bases	Structure of heterocyclic Bases	Structure of Deoxyribo-nucleoside	Structure of Deoxyribo-nucleotide
Adenine			
Guanine			
Cytosine			
Thymine			

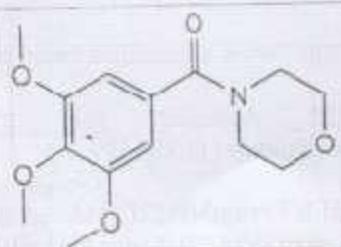
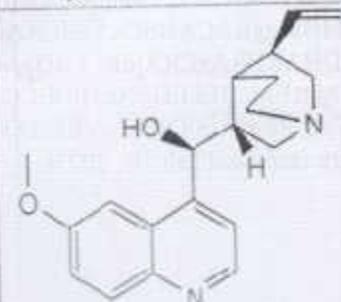
### Natural Amino acids:

[6] Amino acids are the organic compounds which contains amino and carboxyl as main functional groups. Proteins derived from amino acids hence amino acids are the building block of proteins which is very important building block of the body. Protein plays a vital role in the growth and maintenance and development of body. The amino acid Tryptophan, Histidine and Proline are the heterocyclic compounds.

Table: Amino acids containing Heterocycles.

Chemical Structure of Amino acids	Name of amino acids	Functions
	Proline	It plays an important role in cell wall synthesis and plant development, it contribute to the pathogenesis of various diseases caused by various organism.
	Tryptophan	Tryptophan helps the synthesis of melatonin and serotonin which helps sleep-wake cycle, neurotransmitter respectively.

Antibiotic	Ciprofloxacin		[11] In the infection of respiratory, urinary track, pneumonia, sinusitis, diarrhoea, skin, eyes, abdominal cavities, bones, prostatitis, anthrax etc
Antimalarial	Chloroquine		[12] It is antimalarial drug, used to prevent and treat malaria.
Antibacterial	Beta-lactam		[13] It is used as antibiotic against bacterial infections
Anti-inflammatory	Rantidine		[14] Use to treatment of peptic ulcer, gastroesophageal, reflux disease and Zollinger-Ellison syndrome. also used for acid reflux treatment.
Fungicide	Benomyl		[15] Control many plant disease
Fungicide	Propiconazole Triazole		[16] Used in agriculture as a fungicide on turf grasses grown for seed and aesthetic value of food grains.
Antiviral Compound	Fialuridine		[17] Used in disease hepatitis-B
Antidepressant drug	Iproniazid		[18] Used to treat tuberculosis

Sedative agent	Trimetozone		[19]Muscle relaxant, therapeutically used in the treatment of anxiety.
Antimalarial Agent	Quinine		[20]Quinine alkaloid was firstly used to treat malaria in sixteenth century

### CONCLUSION:

From above discussion it may be conclude that the heterocyclic compounds plays an important role in the life of organism from the origin of life to the surveillances, sustainability and development of living organism including human being. Heterocyclic compounds also exist naturally as well as synthetically in human life and it is inseparable part of life. A number of species of plants and animals is extinct on the earth from its origin because they cannot defend itself against the infectious diseases like antiviral, antibacterial, antifungal, and non-infectious hereditary diseases but human exist because human continuously develop itself by researching various medicine to treat epidemic disease and heterocycle plays vital role in the research and development of drug to treat and cure diseases.

### REFERENCES:

1. A. Al-Mulla, "A Review: Biological Importance of Heterocyclic Compounds," 2017.
2. "A review on biological and medicinal impact of heterocyclic compounds | Elsevier Enhanced Reader." <https://reader.elsevier.com/reader/sd/pii/S22117715622003253?token=AC45FBB684F8A22CA5A0F4CA606AD71CF95BF3E31EEA0575CB7B3F49E8B0F49B08FE5A3C878C2B6F82A3E756973AED91&originRegion=eu-west-1&originCreation=20230207090245> (accessed Feb. 07, 2023).
3. "percentage of heterocyclic compounds in medicinal drug - Google Search." <https://www.google.com/search?q=percentage+of+heterocyclic+compounds+in+medicinal+drug&aq=percentage+of+heterocyclic+compounds+in+medicinal+drug&aqs=chrome..69j57j33j160j235625j0j7&sourceid=chrome&ie=UTF-8> (accessed Feb. 07, 2023).
4. H. I. Soni and T. Desai, "Synthesis and Antimicrobial Activity of Some Novel Heterocyclic Compounds," vol. 3, no. 6, 2012. NCERT Books for Class 12 Chemistry PDF Download - NCERT Books" <https://www.ncertbooks.guru/ncert-books-class-12-chemistry/> (accessed Feb. 06, 2023).
6. "Amino acid." *Wikipedia*. Feb. 01, 2023. Accessed: Feb. 07, 2023. [Online]. Available: <https://en.wikipedia.org/w/index.php?title=Amino+acid&oldid=1136927357>
7. "Alfa Aesar." <https://www.alfa.com/en/organic-chemistry-blog/heterocycles-the-chemical-compounds-that-know-no-bounds/> (accessed Feb. 07, 2023).
8. "Vitamins: What are they, and what do they do?" [https://www.medicalnewstoday.com/articles/195878#\\_noHeaderPrefixedContent](https://www.medicalnewstoday.com/articles/195878#_noHeaderPrefixedContent) (accessed Feb. 07, 2023).
9. G. Mohammadi Ziarani, Z. Kheilkordi, and F. Mahajer, "Recent advances in the application of acetophenone in heterocyclic compounds synthesis," *Journal of the Iranian Chemical Society*, vol. 17, no. 2, pp. 247-282, 2020.
10. "Isoniazid." *Wikipedia*. Jan. 30, 2023. Accessed: Feb. 07, 2023. [Online]. Available: <https://en.wikipedia.org/w/index.php?title=Isoniazid&oldid=1136535087>
11. "Ciprofloxacin: Uses, Side Effects, Interactions, Pictures, Warnings & Dosing - WebMD." <https://www.webmd.com/drugs/2/drug-7748/ciprofloxacin-oral/details> (accessed Feb. 07, 2023).
12. "Chloroquine Oral: Uses, Side Effects, Interactions, Pictures, Warnings & Dosing - WebMD." <https://www.webmd.com/drugs/2/drug-8633/chloroquine-oral/details> (accessed Feb. 07, 2023).
13. "Beta-lactam antibiotics." *Wikipedia*. Jan. 16, 2023. Accessed: Feb. 07, 2023. [Online]. Available: [https://en.wikipedia.org/w/index.php?title=Beta-lactam\\_antibiotics&oldid=1133944147](https://en.wikipedia.org/w/index.php?title=Beta-lactam_antibiotics&oldid=1133944147)
14. "Ranitidine." *Wikipedia*. Jan. 25, 2023. Accessed: Feb. 07, 2023. [Online]. Available: <https://en.wikipedia.org/w/index.php?title=Ranitidine&oldid=1135534914>
15. "Benomyl." *Wikipedia*. Sep. 02, 2022. Accessed: Feb. 07, 2023. [Online]. Available: <https://en.wikipedia.org/w/index.php?title=Benomyl&oldid=1108116897>

17. I. of M. (US) C. to R. the F. (FIAU/FIAC) C. Trials, F. J. Manning, and M. Swartz, *Hepatitis B and Other Viral Diseases* National Academies Press (US), 1995. Accessed: Feb. 07, 2023. [Online]. Available: <https://www.ncbi.nlm.nih.gov/books/NBK232079>
18. "Iproniazid - an overview | ScienceDirect Topics." <https://www.sciencedirect.com/topics/neuroscience/iproniazid> (accessed Feb. 07, 2023)
19. "Trimetozine." *Wikipedia*. Dec. 28, 2022. Accessed: Feb. 07, 2023. [Online]. Available: <https://en.wikipedia.org/w/index.php?title=Trimetozine&oldid=1130039589>
20. "quinine" Google Search. [https://www.google.com/search?q=quinine&ei=tifY5LMFPvhjuMPzZ2EiAI&ved=0ahUKEwiS\\_9fTmYP9AhX7sGMGHYkOASEQ4dUDCA8&uact=5&oq=quinine&gs\\_lcp=Cgxnd3Mtd2l6LXNlcuAQAzIICAAQgAQQsQMMyCAgAEIAEELED-MgUIABCABDIFCAAQgAQyCwgAEIAFFI EDEIMBMggILbCABBCxAzIICAAQgAQQsQMMyBQgAEIAEMgUIABCABDIFCAAQgAQ6CAgAELEDEJECog4ILbCxAxDHARDRAxCRAJoRCC4QgAQQsQMgweEQxwEQ0QM6CaguELEDEIAFOgUIABCRAJoLCC4QgAQQsQMgWl6DggUEMcBELEDENEDEJECog4ILbCABBCxAxDHARDRAzoLCC4QgAQQxwEQ0QM6CaguELEDFJFC5gQIQRgASgQIRhgAUJoOWIUcYKkinAFwAIHgAgAHAAogB3wySAQcwLJluNC4xmAEAoAEBsAEAwAEB&scient=gws-wiz-serp](https://www.google.com/search?q=quinine&ei=tifY5LMFPvhjuMPzZ2EiAI&ved=0ahUKEwiS_9fTmYP9AhX7sGMGHYkOASEQ4dUDCA8&uact=5&oq=quinine&gs_lcp=Cgxnd3Mtd2l6LXNlcuAQAzIICAAQgAQQsQMMyCAgAEIAEELED-MgUIABCABDIFCAAQgAQyCwgAEIAFFI EDEIMBMggILbCABBCxAzIICAAQgAQQsQMMyBQgAEIAEMgUIABCABDIFCAAQgAQ6CAgAELEDEJECog4ILbCxAxDHARDRAxCRAJoRCC4QgAQQsQMgweEQxwEQ0QM6CaguELEDEIAFOgUIABCRAJoLCC4QgAQQsQMgWl6DggUEMcBELEDENEDEJECog4ILbCABBCxAxDHARDRAzoLCC4QgAQQxwEQ0QM6CaguELEDFJFC5gQIQRgASgQIRhgAUJoOWIUcYKkinAFwAIHgAgAHAAogB3wySAQcwLJluNC4xmAEAoAEBsAEAwAEB&scient=gws-wiz-serp) (accessed Feb. 07, 2023).



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*[The following text is extremely faint and illegible due to low contrast and blurring. It appears to be a list of references or a detailed description of the chemical structure and its properties.]*



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# “Study the effect of addition of some selected solute on the surface tension of solvent and measurement of the surface tension of carbonated beverages”

<sup>1</sup>Mr. Satish Y. Mane, <sup>2</sup>Dr K.G.Huge

<sup>1</sup>Assistant Professor, Department of chemistry Shivneri mahavidyalaya Shirur Anantpal, Dist-Latur, 413544. Maharashtra, India.

<sup>2</sup>Assistant Professor and Head of the Department of Chemistry K.K.M.Mahavidyalaya, Manvat, Dist-Parbhani, Maharashtra, India.

## Abstract:

This work included an experiment for comparative study of effect of addition of solute on surface tension of solvent by using simple experimental technique. In this experiment we used the Traube's stalagmometer instrument to measure the surface tension of sample liquids. The solutions of different concentrations of  $\text{Na}_2\text{CO}_3$ ,  $\text{NaCl}$ ,  $\text{C}_{12}\text{H}_{22}\text{O}_{11}$  and washing detergent was prepared for measurements. For the preparation of solution water was used as solvent. Some carbonated beverages, oil and ethanol was also experimented with stalagmometer and surface tension of each solution was measured by drop method.

**Keywords:** Surface tension, Concentration, Solute, Solvent, Stalagmometer.

## Introduction:

[1] Surface tension is an important physical property of liquids; it determines the behavior of liquids in various process and phenomenon like rate of evaporation of liquid, interaction of liquid with biological interfaces and hence surface tension plays important role in pharmaceutical and biomedical application to develop new efficient medicinal drugs. Many chemical reactions and physical process is takes place in presence of various liquids which plays vital role in reactions and hence it is necessary to know the physical properties of those particular liquids to check feasibility and some other conditions of reactions. It is a force or force per centimeter acting on the surface at right angle. The surface tension in the liquids is arises due to the presence of intermolecular forces of attraction like hydrogen bonding, London-London force, induced dipole forces of attraction etc. When the surface of some liquids appears concave shape and shape of water drops becomes spherical in water. The temperature variation, surface tension of liquids because temperature affect on intermolecular bonding present in liquids by changing kinetic energy of molecules. The scientist W.Ramsay and J.Shields gave the equation  $\gamma(\text{Mp})^{2/3} = h(\tau - 2/3)$  showing relationship between surface tension of liquids and temperature.

[4] According the review of literature the surface tension of liquid is alter by the addition of small amount of solute. The solute which changes the surface tension of liquid is known as surfactant and the percent decrease or increase of surface tension is depends upon the concentration of surfactants. Sodium carbonate is selected in present study because it having important applications in the number of industrial processes. Similarly sodium chloride also plays in the biological and physicochemical reactions in body of living organisms. [5] Sacrose also plays an important role in biochemical reactions and important for physical health of human being therefore, it is important to know the physical properties of sucrose and effect of percentage of sugar in water. [6] According review of literature the surface tension of water is increases by addition of sucrose.

**Materials:** All the chemicals is easily available in any laboratory of chemistry, chemical used for experiment was already available in our college laboratory.

Experiment was done in four phases.

**Phase I:** In first phase the densities of some selected beverages was measured. To measure the densities of each liquids specific gravity bottle of 25 ml was used.

**Phase II:** In second phase the densities of pure water and prepared solutions of different concentrations was measured at room temperature.

**Phase III:** In third phase the number of drops formed by each beverage was counted, as the liquid travel from upper meniscus marking to lower meniscus marking on stalagmometer at room temperature.

**Phase IV:** In fourth phase the number of drops formed by each solution of different concentrations was counted, as the liquid travel from upper meniscus marking to lower meniscus marking on stalagmometer at room temperature.

#### Calculations:

Calculation of density of liquids by using the general formula.

$$\text{Density } (\rho) = \text{Mass } (m) / \text{Volume } (v)$$

[7] Calculation was done by using the equation  $\gamma_1 / \gamma_2 = (n_2 d_1 / n_1 d_2)$  the surface tension was measured. (Where  $\gamma_1$  is surface tension of standard reference liquid,  $\gamma_2$  is the surface tension of experimental liquids,  $n_1$  is a number of drops of standard reference liquid,  $n_2$  is a number of drops of experimental liquids,  $d_1$  is the density of standard reference liquid and  $d_2$  is the density of experimental liquids)

#### Result and Discussion:

Table 1: Measured densities and surface tension of selected solutions of various concentrations:

Sr.No	Experimental Solutions(Solvent+ Solute)	Concentration in percentage by weight	Measured Density( $\rho$ ) in g cm <sup>-3</sup>	Surface tension ( $\gamma$ ) in dyne cm <sup>-1</sup>
1.	H <sub>2</sub> O + Na <sub>2</sub> CO <sub>3</sub>	5%	1.02	65.49
2.	H <sub>2</sub> O + Na <sub>2</sub> CO <sub>3</sub>	10%	1.07	67.12
3.	H <sub>2</sub> O + Na <sub>2</sub> CO <sub>3</sub>	15%	1.11	68.37
4.	H <sub>2</sub> O + Na <sub>2</sub> CO <sub>3</sub>	20%	1.14	70.53
5.	H <sub>2</sub> O + Na <sub>2</sub> CO <sub>3</sub>	25%	1.18	75.56
6.	H <sub>2</sub> O + NaCl	5%	1.02	70.53
7.	H <sub>2</sub> O + NaCl	10%	1.06	70.89
8.	H <sub>2</sub> O + NaCl	15%	1.08	69.45
9.	H <sub>2</sub> O + NaCl	20%	1.12	66.89
10.	H <sub>2</sub> O + NaCl	25%	1.15	64.09
11.	H <sub>2</sub> O + C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>	5%	1.00	75.56
12.	H <sub>2</sub> O + C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>	10%	1.02	80.56
13.	H <sub>2</sub> O + C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>	15%	1.04	75.60
14.	H <sub>2</sub> O + C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>	20%	1.07	77.78
15.	H <sub>2</sub> O + C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>	25%	1.08	78.51
16.	H <sub>2</sub> O + Detergent	5%	1.0	15.83

Table 2: Measured densities and surface tension of selected liquids.

Sr. No	Experimental liquids	Measured Density ( $\rho$ ) in g cm <sup>-3</sup>	Surface tension ( $\gamma$ ) in dyne cm <sup>-1</sup>
1.	Spite	1.01	78.50
2.	Limonata	1.03	71.25
3.	Jeera masala Aasav	1.05	65.73
4.	Thums-up	1.01	64.77
5.	Sarsc oil	0.92	25.90
6.	Ethanol	0.79	22.75

### Conclusion:

From experimental observations it is concluded that, the densities of liquids are increases by increasing the concentration of solute and surface tension is also changed changing concentration. In case of sodium carbonate surface tension is increased by increasing concentration and in case of sodium chloride the surface tension was decreased by increasing concentration by percent weight. sucrose increases the surface tension of water. Detergent minimizes the surface tension of water so rapidly as compare to other solute and therefore it affect the rate of evaporation of water. The densities of almost all carbonated beverages are equal but there is difference observed in their surface tension. The densities of oil and ethanol are less than other liquids but their surface tension is so very less than other.

### References:

- [1] K. Han, O. E. Woghiren, and R. Priefor, "Surface tension examination of various liquid oral, nasal, and ophthalmic dosage forms," *Chemistry Central Journal*, vol. 10, no. 1, p. 31, Dec. 2016, doi: 10.1186/s13065-016-0176-x
- [2] "Why is surface tension important?" <https://www.linkedin.com/pulse/why-surface-tension-important-susanna-lauren> (accessed Feb. 27, 2023).
- [3] "Analysis of accuracy of burette in determination of surface tension of liquids and study of its variation with detachment time and inclination angle," *IJCA*, vol. 59, no. 11, Nov. 2020, doi: 10.56042/ijca.v59i11.36247.
- [4] W. L. Hsin, Y. J. Sheng, S.-Y. Lin, and H.-K. Tsoo, "Surface tension increment due to solute addition," *Phys Rev E: Stat Nonlin Soft Matter Phys*, vol. 69, no. 3 Pt 1, p. 031605, Mar. 2004, doi: 10.1103/PhysRevE.69.031605.
- [5] S. Z. Navarro and F. P. Llamas, "The importance of sucrose for cognitive functions, knowledge and behaviour"
- [6] A. Docoslis, R. F. Giese, and C. J. van Oss, "Influence of the water-air interface on the apparent surface tension of aqueous solutions of hydrophilic solutes," *Colloids and Surfaces B: Biointerfaces*, vol. 19, no. 2, pp. 147-162, Dec. 2000, doi: 10.1016/S0927-7765(00)00137-5.
- [7] M. Thakur and H. Wadhwa, "Experimenting with stalagmometer and viscometer on day to day drinking liquids"



## Physico-Chemical Analysis of Water Quality of Shivana-Takali Dam, Kannad, Dist.-Aurangabad

Atish R. Mehetre<sup>1\*</sup>, Vilas V. Thakare<sup>2</sup>, Prabhakar Kute<sup>3</sup>, Kailash R. Borude<sup>4</sup>

<sup>1\*</sup>Department of Chemistry, Shivaji Arts, Commerce and Science College, Kannad, Maharashtra, India

<sup>2</sup>Department of Botany, Arts, Science and Commerce College Rahuri, Maharashtra, India

<sup>3</sup>Department of Chemistry, Pratishthan Mahavidyalaya Paithan, Maharashtra, India

<sup>4</sup>Department of Chemistry, KKM College Manvat, Maharashtra, India

### ABSTRACT

Water quality of Shivana-Takali dam of Kannad, Dist- Aurangabad (MH) has been analyzed seasonally by using various physico-chemical parameters like pH, water temperature, alkalinity, dissolved oxygen (DO), biological oxygen demand (BOD), chemical oxygen demand (COD), total dissolved solids (TDS), chloride, sulphate, phosphorous etc. during 2021-2022 and the results obtained varied seasonally. Maximum value of TDS was recorded during monsoon season. In case of some physico-chemical parameters like COD and BOD maximum values were recorded during winter season while maximum values of pH, water temperature, alkalinity, DO, chlorides, sulphate and phosphorus were recorded during summer season. Most of the physico-chemical parameters showed their maximum values in the summer season followed by winter and monsoon season.

**KEYWORDS**-Water Quality, DO, BOD, COD, TDS, Physico-Chemical Parameter.

### 1. INTRODUCTION

The study of fresh water contained within continental boundaries is known as limnology (Roberto Bertoni; 2011). Shivana-Takali dam is constructed across the Shivana river in Kannad Tehsil of Aurangabad district, Maharashtra for different purposes like irrigation, domestic water supply, fish farming as well as industrial purposes. This water reservoir is getting polluted due to increased man made activities in the dam, use of fertilizers in agriculture which affected the water quality of the Shivana-Takali dam very badly and decrease in number of aquatic organisms also observed. Therefore, it is necessary to check the water quality of selected water reservoir seasonally.

Various researchers carried out the limnological study of fresh water including Kadam *et al.*, (2007), Salve and Hiware (2008) Mahor (2011), Khan *et al.*, (2012), Mule *et al.*, (2019) etc.

The study area selected for Shivana-Takali dam which is situated on the Shivna river near Kannad, Dist.-Aurangabad, Maharashtra. In present investigation, an attempt has been made to study seasonal water quality of Shivana-Takali dam by using various physico-chemical parameters during 2021-22.

## II. MATERIAL AND METHODS

### i. COLLECTION OF WATER SAMPLES-

The water samples were collected from 03 different stations of Shivana-Takali dam in plastic transparent bottles in the morning hours between 9 to 11 am regularly during monsoon, winter and summer seasons. The collected water samples were brought to the laboratory to study various physico-chemical parameters. Some physical parameters such as pH and water temperature were recorded on the collection sites of 03 different stations by using pH paper and thermometer respectively.

### ii. PHYSICO-CHEMICAL ANALYSIS

Various physico-chemical parameters like pH, water temperature, alkalinity, dissolved oxygen (DO), biological oxygen demand (BOD), chemical oxygen demand (COD), total dissolved solids (TDS), chloride, sulphate and phosphorous were studied as per standard procedures (APHA; 2005) for water quality analysis.

## III. RESULTS AND DISCUSSION

The water quality analysis by using some physico-chemical parameters was carried out seasonally during June 2021 to May 2022 and the results obtained are summarized in table-1.

### 3.1. pH

pH can affect most of the chemical and biochemical reactions. During monsoon season maximum pH value 7.7 was observed in the month of July while the minimum pH value 7.3 was recorded in the month of September. During present study, maximum pH value 8.2 was recorded in the month of May during summer season while the minimum pH value 7.2 was recorded in the month of October during winter season. It was observed that the pH values observed higher in summer season. Similar type of study was carried out by Kamble *et al.* (2009).

### 3.2. Water temperature

The chemical, biochemical and biological characteristics of the water reservoir are determined by water temperature. During monsoon season the maximum water temperature 33.5°C was recorded in the month of June while minimum temperature 31.3°C was observed in the month of September.

During present investigation, the maximum temperature 36.5°C was observed in the month of May during summer season while minimum temperature 25°C was recorded in the month of January during winter season.

### 3.3. Alkalinity

During monsoon season the maximum alkalinity recorded was 158 mg/L in the month of July while the minimum alkalinity 138 mg/L was observed in the month of August. During present study, maximum alkalinity 172 mg/L was recorded in the month of May during summer season while minimum alkalinity 134 mg/L was observed in the month of November during winter season.

### 3.4. Dissolved Oxygen (DO)

During monsoon season maximum DO 5.5 mg/L was observed in the month of June while minimum DO 4.5 mg/L was recorded in the month of August. During present investigation maximum DO 6.5 mg/L was recorded

in the month of May during summer season while the minimum DO 4.1 mg/L was observed in the month of November. Kadam *et al.*, (2007) carried out similar study.

### 3.5. Biological oxygen demand (BOD)

Maximum BOD value was recorded 3.60 mg/L in the month of December during winter season while minimum value was recorded 2.25 mg/L in the month of April during summer season.

### 3.6. Chemical oxygen demand (COD)

Maximum COD value was recorded 39 mg/L in the month of January during winter season while minimum value 29 mg/L was recorded in the month of July during monsoon season.

### 3.7. Total Dissolved Solids (TDS)

During present study maximum TDS value 133 mg/L was observed in the month of June during monsoon season while minimum TDS value 111 mg/L was recorded in the month of April during summer season.

### 3.8. Chloride

Maximum value 34 mg/L was recorded in the month of April during summer season while minimum value 23 mg/L was observed in the month of November during winter season.

### 3.9. Sulphate

Maximum value 179 mg/L was observed in the month of May during summer season while minimum value 129 mg/L was recorded in the month of November during winter season.

### 3.10. Phosphorus

Maximum value 1.3 mg/L was observed in the month of May during summer season while minimum value 0.6 mg/L was recorded in the month of July during monsoon season.

Table-1: Physico-Chemical Parameters of Seasonal Water Quality Analysis of Shivana-Takali Dam.

Parameter	Monsoon				Winter				Summer			
	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
pH	7.5	7.7	7.4	7.3	7.2	7.6	7.7	7.8	7.7	8.0	7.9	8.2
Water Temp. (°C)	33.5	32	31.4	31.3	32.2	28.5	28	25	26	31	34	36.5
Alkalinity (mg/L)	148	158	138	143	149	134	139	144	150	170	158	172
DO (mg/L)	5.5	4.7	4.5	4.8	5.0	4.1	5.3	5.8	6.0	6.4	6.3	6.5
BOD (mg/L)	2.65	2.75	2.80	2.85	2.90	3.0	3.60	3.40	2.70	2.60	2.25	2.40
COD (mg/L)	30	29	31	32.5	35	37	36	39	33	33.5	34	34.5
TDS (mg/L)	133	121	127	131	125	126	118	115	120	116	111	113
Chloride (mg/L)	30.5	30	29	31	24	23	26	25	33	33.7	34	33.9
Sulphate (mg/L)	159	149	144	139	134	129	139	144	159	164	174	179
Phosphorus (mg/L)	0.8	0.6	0.9	1.1	1	0.9	1	0.9	0.7	0.9	1.2	1.3

#### IV. CONCLUSION

In the present investigation, maximum value of TDS was recorded during monsoon season. In case of some physico-chemical parameters like COD and BOD maximum values were recorded during winter season while maximum values of pH, water temperature, alkalinity, DO, chlorides, sulphate and phosphorus were recorded during summer season.

During present investigation, most of the physico-chemical parameters showed their maximum values in the summer season followed by winter and monsoon season.

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#### V. REFERENCES

- [1] APHA (2005). Standard methods for the examination of water and wastewater. Washington DC: American Public Health Association.
- [2] Kadam, M. S., Pampatwar, D. V. and Mali, R. P. (2007). Seasonal variations in different physico-chemical characteristics in Masoli reservoir of Parthani district, Maharashtra. *Journal of Aquatic Biology*. 22(1): 110-112
- [3] Kamble, S. M., Kamble, A. H. and Narke, S. Y. (2009). Study of physico-chemical parameters of Ruti dam, Tal. Ashti, Dist- Beed, Maharashtra. *Journal of Aquatic Biology*. 24(2): 86-89.
- [4] Khan, Rafiullah, M., Jadhav, Milind, J. and Ustad, I. R. (2012). Physico-chemical analysis of Triveni lake water of Amravati district in (MS) India. *Bioscience Discovery*. 3(1): 64-66.
- [5] Mahor, R. K. (2011). Limnological study of fresh water reservoir Tighra, Gwalior (M.P.). *International referred research journal*. 1 (17): 47-48.
- [6] Mule, Prachiti, Joshi, Nitesh and Joshi, Ambika (2019). Seasonal variation in water quality of a fresh water lake in Palghar, Maharashtra. *Journal of Global Biosciences*. 8(2): 5983-5989.
- [7] Roberto, Bertoni (2011). *Limnology of rivers and lakes*.
- [8] Salve, V. B. and Hiware, C. J. (2008). Study on water quality of Wanparakalpa reservoir Nagpur, near Parli Vajjnath, District Beed, Maharashtra region. *Journal of Aquatic Biology*. 21(2): 113-117.

## To Analyze Intermolecular Interactions among Hydrogen Bonded Liquids by using TDR and FTIR Spectroscopy

Neware S G<sup>a</sup>, Pathan A W<sup>b</sup>, Kumbharkhane A C<sup>c</sup>, Chalikwar P A<sup>d</sup>, Mahajan G R<sup>e</sup>, Shaikh Y H<sup>f</sup>

<sup>a</sup>Maulana Azad College of Arts, Science and Commerce, Aurangabad, MS 431001, India;

<sup>b</sup>Dept. of Physics ASC College, Badnapur, Jalna, MS 431202, India;

<sup>c</sup>School of Physical Sciences, SRTM University Nanded, MS 431604, India;

<sup>d</sup>Department of Physics and Electronics, Shivaji Arts, Science and Commerce College, Kannad, Aurangabad

<sup>e</sup>Dept. of Physics KKM College, Manwath Dist. Nanded (MS).

<sup>f</sup>Sri Datta Arts, Commerce and Science college Hadgaon dist Nanded (MS).

### ABSTRACT

In the present investigation dielectric measurements have been carried out by making the use of TDR technique in the frequency span of 10 MHz-50 GHz at temperatures 0°C, 5°C, 10°C, 15°C, 20°C and 25°C respectively at 11 volume fractions of 1-PENT in ETOH. Excess properties like excess permittivity and excess inverse relaxation time have been explored using the calculated values of dielectric constant and relaxation time which have been reported in our earlier study, "Dielectric relaxation study of 1-Pentanol-Ethanol binary mixtures at 10 MHz-50 GHz frequency range using TDR technique". The values of Bruggemann factor ( $F_B$ ) are calculated at all different aforesaid temperatures and compositions by making the use of least square fit method. Apart from all of these measurements FTIR measurements also been performed to scrutinize the intermolecular interactions in the binary mixture of liquids utilized for the present study.

**Keywords:** Time Domain Reflectometry (TDR); 1-Pentanol; Ethanol; Excess properties; Functional groups; FTIR.

\*Corresponding author

Email address: shaikhyh@gmail.com.(Y.H.Shaikh)

### I. INTRODUCTION

TDR is the authentic and dynamic approach for the study of structure of intermolecular interactions both in pure form and binary mixture of liquids, which allows the researchers in just one quantification for the broadband of frequencies [1, 2]. Dielectric measurements is a crucial tool for estimating intermolecular interactions which are due to dipole-dipole interactions which leads to succeeding molecular structural reposition in a binary mixture, and due to the existence of hydrogen bonds in the binary mixture the dielectric properties of the participating constituent liquids alters significantly [3-4]. Alcohols have allured much attentiveness amongst most of the researchers for the dielectric study due to its polarity, as

## Dielectric Relaxation Studies of Potentised Homeopathic Medicines

Mahajan G. R.<sup>1</sup>, Parimal Patwe<sup>2</sup>, Pathan A.W.<sup>3</sup>, Chalikwar P.A.<sup>4\*</sup>

<sup>1</sup>Department of Physics, Shri Datta Arts, Commerce and Science College Hadgaon, Dist.: Nanded, Maharashtra, India

<sup>2</sup>Radiation Oncology Department, National Cancer Institute, Nagpur, Maharashtra, India

<sup>3</sup>Department of Physics, ASC college, Badnapur, Dist.: Jalna, Dist. Nanded, Maharashtra, India

<sup>4\*</sup>K.K.M. College, Manvat, Dist.: Parbhani, Maharashtra, India

### ABSTRACT

Complex dielectric permittivity measurements in the frequency range 10MHz-30GHz has been carried out for homeopathic medicine Cuprum Metallicum using a time domain reflectometry (TDR) method at different temperatures. The static dielectric constants ( $\epsilon_0$ ), relaxation time ( $\tau$ ) were determined by using least square fit method. Also frequency dependent spectra of for Cuprum Metallicum studied at different potencies. These parameters are used to explain the various processes associated with the dielectric properties of Cuprum Metallicum.

Keywords: Dielectric permittivity; Relaxation time; Time domain reflectometry (TDR).

### I. INTRODUCTION

Ever since its discovery in the eighteenth century, the homeopathic system of medicine has been open to criticism from the scientific world as well as from the practitioners of the allopathic system. The practice of homeopathy was well accepted by the public from the very inception due to safety of medicine and effectiveness. Homeopathic medicine has been one of the world's most widely practiced alternative therapies. The popularity of homeopathy spread across the globe even during the life time of its founder. It was considered as one of the refined medical systems till about 1950s [1, 2].

The dielectric dispersion occurring in potentised homeopathic medicines subjected to variable frequency electric field was studied by using an instrumentation method developed by C R Mahata [3]. The experimental results for three potencies of Cuprum Metallicum (Cuprum met) in the frequency range of 100 kHz - 1 MHz was reported [3]. Dielectric dispersion studies were conducted in a broad range in a frequency range of 100 KHz to 50 MHz with potencies below and above the Avogadro limit by taking 6C and 30C potencies of *Graphite's* and *Cuprum Metallicum* in liquid form. Measurements were made with an Anomalous Dielectric Dispersion Detector (A3D) [4]. Anomalous dielectric dispersion in ordered molecular groups also studied. The homoeo-medicines cannot be anything except specifically ordered molecular groups, is theoretically proposed by Mahata [5, 6].

## Dielectric Relaxation Study of DPG Using a TDR at 20°C

Pankaj A. Chalikwar<sup>1</sup>, Abdulrahman W. Pathan<sup>2</sup>, K. R. Borude<sup>1</sup>, G. R. Mahajan<sup>3\*</sup>

<sup>1</sup>KKM college Manwath, Dist. Parbhani 431505, Maharashtra, India

<sup>2</sup>ASC college Badnapur, Dist. Jalna 431202, Maharashtra, India

<sup>3</sup>Shri Datta Arts, Commerce and Science College, Hadgaon, Dist. Nanded, 431712, Maharashtra, India

### ABSTRACT

Study of Dipropylene Glycol (DPG)-water mixture have been studied by time domain Reflectometry technique in the frequency range of 10MHz to 30GHz. The measurements have been done at temperature 20°C at different volume fractions. The dielectric parameters such as static dielectric constant and relaxation time for mixture have been reported here. The molecular interaction between Dipropylene Glycol and water is discussed using Kirkwood correlation factor ( $g^{eff}$ ) and dielectric constant for mixtures. The dielectric relaxation behavior of binary mixtures of Dipropylene glycol-water has been fitted with Cole-Davidson model having an asymmetric distribution of relaxation time. These parameters have been fitted to the Bruggeman mixture formula in the non-linear case.

Key words: Dielectric relaxation, Time Domain Reflectometry, Glycol, Kirkwood correlation factor

### I. INTRODUCTION

Over the past several years, the aqueous mixtures of glycols and alcohols have been extensively investigated by means of the dielectric relaxation as a function of -OH group to understand the significance of hydrogen bond interaction. [1-2] Dipropylene glycol (DPG) reveals a strong tendency to form H bonds. Terminal hydroxyl groups of DPG may participate in two types of hydrogen bonds: end-to-end and end-to-ether (C-O-C) groups [3] both can lead to inter and intra molecular structures.

The dielectric relaxation study is very helpful for the understanding of intermolecular interaction and the hydrogen bonding interaction in aqueous mixture due to dipole-dipole interaction. The main interest of the study is to understand the structural and dynamical behavior of aqueous DPG using Time Domain Reflectometry (TDR) Technique. Previously different techniques were used for characterization such as light scattering [4-6], optical Kerr-effect [7] as well as photo thermal. Moreover some physical properties of aqueous mono, di and tri propylene glycol have been reported. [8] The dielectric spectra of propylene glycol and tri-propylene glycol have been studied earlier [9-10] using TDR technique.

The objectives of the present work are to investigate temperature dependent dielectric relaxation properties of DPG-water systems using TDR technique in the frequency range of 10 MHz to 30 GHz. The static dielectric constant, relaxation time, Bruggeman factor, Kirkwood correlation factors, excess dielectric permittivity and thermodynamic parameters have been reported for DPG-water mixtures.



# Dielectric Absorption and Loss Study for Propanol in 10MHz to 30GHz Frequency Range

Chalikwar Pankaj A<sup>a</sup>

*Department of Physics, K. K. M. College Manwath, MS 431505, India*

## Abstract

The complex permittivity spectra was obtained for Propanol in pure state at 25°C, and was fitted in Cole-Davidson model, for this purpose time domain reflectometry technique has been deployed in the frequency span of 10 MHz-30 GHz using time domain reflectometry technique. The values of dielectric absorption  $\epsilon'$  and dielectric loss  $\epsilon''$  were also estimated and plotted in the frequency range. The resonance character of the attenuation (the imaginary part of the complex permittivity) can be explained in a similar way. Before the resonance the loss is increasing because the dipoles still can totally orient when the electric field changes direction, so the loss is proportional to the frequency.

**Keywords:** Complex permittivity spectra, Propanol, dielectric absorption, dielectric loss, Time domain reflectometry.

## 1. Introduction

Dielectric relaxation occurs when; a dielectric material is polarized by the externally applied alternating field. The decay in polarization is observed on removal of the field. This depends on the internal structure of a molecule and on molecular arrangement. The orientation polarization decay exponentially with time; the characteristic time of this exponential decay is called relaxation time. This phenomenon may occur as; at low frequencies, the dipoles can "follow" the field and  $\epsilon'$  will be high. At high frequencies, the dipoles cannot follow the rapidly changing field - and  $\epsilon'$  falls off. The resonance character of the attenuation (the imaginary part of the complex permittivity) can be explained in a similar way. Before the resonance the loss is increasing because the dipoles still can totally orient when the electric field changes direction, so the loss is proportional to the frequency. After resonance the frequency is so high that the dipoles do not have enough time to orient, so there is less friction and less loss. The permittivity thus acquires a complex characteristic.

The complex permittivity  $\epsilon^*$  can be written as  $\epsilon' - j\epsilon''$ , where  $\epsilon'$  is a real part proportional to stored energy and  $\epsilon''$  is imaginary part and it is dielectric loss.

When an alternating field of high frequency is applied to a dielectric material, the dipolar polarization can't reach its equilibrium value fast enough or follow the polarizing field. Due to this, dipoles per unit volume decrease with increase in frequency and hence decrease in permittivity.

Propanol contains three numbered carbon chains with alcoholic group in first position as it is a primary alcohol with formula  $C_3H_8O$ , it is highly flammable volatile colorless liquid at room temperature. It is commonly used in dye solutions, lacquer formulations, anti freezing materials etc.

Complex dielectric spectra of certain liquids reported in the literature show multiple relaxation time behavior<sup>1,2</sup>. The spectra of such liquids show deviations from the Debye dispersion curve. The representation of dispersion curve therefore needs some mathematical

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Arts, Commerce and Science College, Canada Corner, Nashik 422002

## CHAPTER : 20

DIELECTRIC RELAXATION  
STUDY OF AQUEOUS GLYCOLS

## ABSTRACT

The dielectric relaxation study of aqueous Glycols (Propylene Glycol, Propylene Glycol-1,3, Dipropylene Glycol and Tripropylene Glycol) have been carried out using Time Domain Reflectometry Technique in the frequency range of 10 MHz to 30 GHz at different temperatures. Using non-linear least square fit method, the dielectric relaxation parameters like static dielectric constant relaxation time were obtained by. The intermolecular hydrogen bonding of glycol-water mixture has been carried out using Kirkwood correlation factor and thermodynamic parameters. The dielectric constant for mixtures has been fitted to Bruggeman mixture formula in non-linear case.

- 20.1 Introduction
- 20.2 Results and Discussion
- 20.3 Conclusions

**20.1 Introduction :**

Glycols are characterized by the formula  $H[OCH(CH_2)(CH_2)]_nOH$ . It is mainly used as a building block in production of some kinds of polymers by the method of condensation polymerization. Glycols having two hydroxyl groups have intermediate properties between single hydroxyl group alcohols and three hydroxyl group glycerin. Due to presence of two hydroxyl groups and longer chain the solubility in aqueous media is more. The dielectric relaxation has been studied as a function of  $-OH$  group in glycols order to understand the significance of hydrogen bond interaction in glycol. For  $n=1$  refers as Propylene glycol also called as diols with  $-OH$  groups are attached to terminal carbon atom. Dipropylene Glycol (DPG) with  $n=2$  and Tripropylene glycol (TPG) with  $n=3$  has

## Dielectric Relaxation Study of DPG Using a TDR at 20°C

Pankaj A. Chalikwar<sup>1</sup>, Abdulrahman W. Pathan<sup>2</sup>, K. R. Borude<sup>1</sup>, G. R. Mahajan<sup>3\*</sup>

<sup>1</sup>KKM college Manwath, Dist. Parbhani 431505, Maharashtra, India

<sup>2</sup>ASC college Badnapur, Dist. Jalna 431202, Maharashtra, India

<sup>3</sup>Shri Datta Arts, Commerce and Science College, Hadgaon, Dist. Nanded, 431712, Maharashtra, India

### ABSTRACT

Study of Dipropylene Glycol (DPG)-water mixture have been studied by time domain Reflectometry technique in the frequency range of 10MHz to 30GHz. The measurements have been done at temperature 20°C at different volume fractions. The dielectric parameters such as static dielectric constant and relaxation time for mixture have been reported here. The molecular interaction between Dipropylene Glycol and water is discussed using Kirkwood correlation factor ( $g^{eff}$ ) and dielectric constant for mixtures. The dielectric relaxation behavior of binary mixtures of Dipropylene glycol-water has been fitted with Cole-Davidson model having an asymmetric distribution of relaxation time. These parameters have been fitted to the Bruggeman mixture formula in the non-linear case.

**Key words:** Dielectric relaxation, Time Domain Reflectometry, Glycol, Kirkwood correlation factor

### I. INTRODUCTION

Over the past several years, the aqueous mixtures of glycols and alcohols have been extensively investigated by means of the dielectric relaxation as a function of -OH group to understand the significance of hydrogen bond interaction. [1-2] Dipropylene glycol (DPG) reveals a strong tendency to form H bonds. Terminal hydroxyl groups of DPG may participate in two types of hydrogen bonds: end-to-end and end-to-ether (C-O-C) groups [3] both can lead to inter and intra molecular structures.

The dielectric relaxation study is very helpful for the understanding of intermolecular interaction and the hydrogen bonding interaction in aqueous mixture due to dipole-dipole interaction. The main interest of the study is to understand the structural and dynamical behavior of aqueous DPG using Time Domain Reflectometry (TDR) Technique. Previously different techniques were used for characterization such as light scattering [4-6], optical Kerr-effect [7] as well as photo thermal. Moreover some physical properties of aqueous mono, di and tri propylene glycol have been reported. [8] The dielectric spectra of propylene glycol and tri-propylene glycol have been studied earlier [9-10] using TDR technique.

The objectives of the present work are to investigate temperature dependent dielectric relaxation properties of DPG-water systems using TDR technique in the frequency range of 10 MHz to 30 GHz. The static dielectric constant, relaxation time, Bruggeman factor, Kirkwood correlation factors, excess dielectric permittivity and thermodynamic parameters have been reported for DPG-water mixtures.

## II. EXPERIMENTAL DETAILS

### Materials and sample preparation

DPG (100% pure) was purchased from Merck India Limited and used without further purification. The HPLC grade double distilled water was used in preparation of aqueous DPG mixtures. 11 different Samples of total volume 5ml each were prepared such that; a volume fraction 0.1 indicates 0.5ml of DPG added to 4.5ml of water, a volume fraction of 0.2 indicates 1.0ml of DPG added to 4.0ml of water and vice versa. For the measurement samples were placed in an electronically temperature-controlled bath within accuracy of  $\pm 0.1$  °C.

The step pulses recorded without sample  $R_1(t)$  and with sample  $R_x(t)$  and are subtracted and added to get

$$p(t) = [R_1(t) - R_x(t)] \quad 1$$

$$q(t) = [R_1(t) + R_x(t)] \quad 2$$

The complex reflection coefficient  $\rho^*(\omega)$  over a frequency range of 10 MHz to 30 GHz were determined as follows.

$$\rho^*(\omega) = \frac{c}{j\omega d} \frac{p(\omega)}{q(\omega)} \quad 3$$

Where  $p(\omega)$  and  $q(\omega)$  are Fourier transforms of  $p(t)$  and  $q(t)$  obtained using summation and Samulon methods [10] respectively,  $c$  is the velocity of light,  $\omega$  is angular frequency and  $d$  is effective pin length (0.16 mm). The complex permittivity spectra  $\varepsilon^*(\omega)$  was obtained from reflection coefficient spectra  $\rho^*(\omega)$  by applying the bilinear calibration method suggested by Cole [11]. Figure 1 shows frequency dependent complex permittivity spectra  $\varepsilon^*(\omega)$  for DPG–water mixtures at 20 °C.

## III. RESULTS AND DISCUSSIONS

### Dielectric Constant and Relaxation time

Dielectric relaxation for aqueous DPG is described by the Havriliak–Negami equation [12]

$$\varepsilon^*(\omega) = \varepsilon_\infty + \frac{\varepsilon_0 - \varepsilon_\infty}{[1 + (j\omega\tau)^{1-\alpha}]^\beta} \quad 4$$

Where  $\varepsilon_0$  is the static permittivity,  $\varepsilon_\infty$  is the permittivity at high frequency,  $\tau$  is the relaxation time,  $\alpha$  and  $\beta$  are the empirical parameters for the distribution of relaxation times with values between 0 and 1. Temperature dependent dielectric relaxation parameters for aqueous solutions of DPG are listed in Table 1. The errors in the least significant digit are also reported.

The Relaxation time increases systematically in aqueous solutions of DPG as shown in table 1 suggests that water structure is modified due to hydrogen bond by the DPG so as to produce an increase in relaxation time in the mixture. In DPG rich regions relaxation time increases rapidly this may due to higher viscosity of DPG as relaxation time and viscosity has linear relationship. [13]

Table 1. Dielectric Relaxation Parameters for aqueous solution of DPG at 20°C

Of DPG	Vol. Fract.		$\tau$ (ps)	$\beta$
	$\epsilon_x$	$\epsilon_0$		
0.0	3.92(3)	79.10(7)	8.82(1)	1.0000(1)
0.1	2.000(1)	72.16(10)	13.16(03)	0.9723(1)
0.3	2.000(1)	58.98(08)	10.47(02)	1.0000(1)
0.2	2.000(1)	63.35(22)	11.57(04)	1.0000(1)
0.4	2.237(2)	52.32(08)	36.00(01)	0.8451(1)
0.5	2.425(2)	48.48(08)	48.28(02)	0.8245(0)
0.6	3.750(3)	42.00(14)	82.42(07)	0.7929(3)
0.7	4.522(2)	37.91(15)	138.56(01)	0.7636(3)
0.8	5.073(2)	35.17(18)	209.30(03)	0.7701(4)
0.9	4.880(2)	28.47(16)	320.07(06)	0.7966(5)
1.0	3.867(1)	20.16(13)	771.20(17)	0.7679(5)

Note: Numbers given in parentheses denote uncertainties in the least significant digits obtained by the least square fit method, e.g. 20.59(14) means  $20.59 \pm 0.14$  and 0.7564(7) means  $0.7564 \pm 0.007$ .

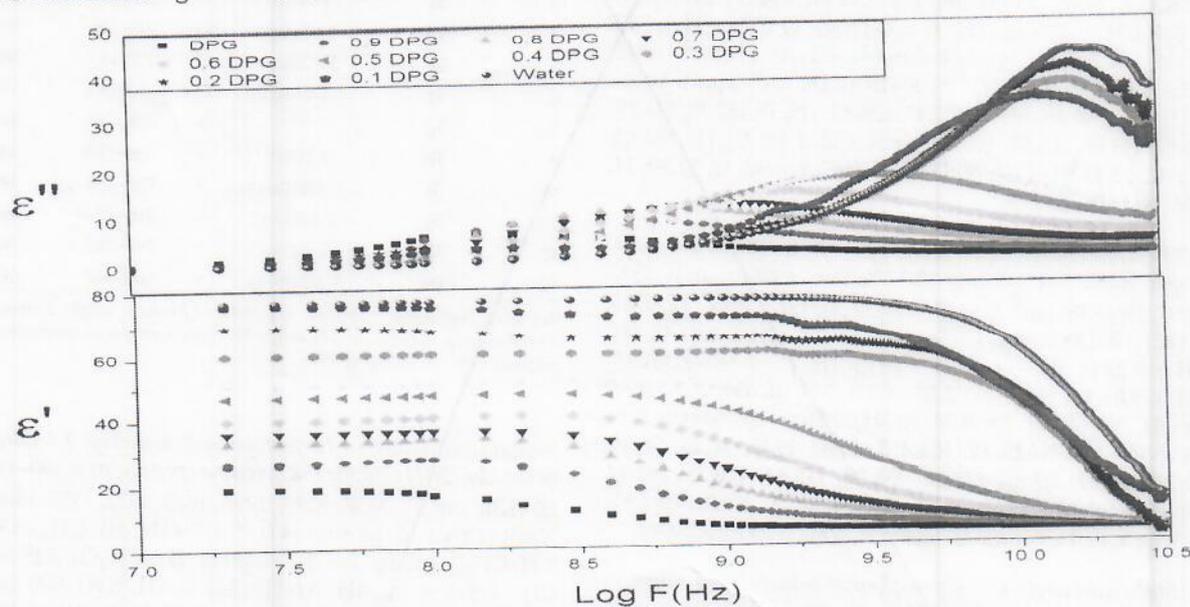


Figure 1 Complex permittivity spectra for DPG-water mixtures at 20°C

**Kirkwood correlation factor**

Static dielectric constant for the mixture can be explained using the Kirkwood-Frohlich equation as follows [14-15],

$$\frac{4\pi N\rho}{9kTM} g\mu^2 = \frac{(\epsilon_0 - \epsilon_\infty)(2\epsilon_0 + \epsilon_\infty)}{\epsilon_0(\epsilon_\infty + 2)^2} \quad 5$$

Where  $\mu$ ,  $\rho$  and  $M$  correspond to the dipole moment in gas phase, density and molecular weight respectively,  $k$  is the Boltzmann constant,  $T$  is the temperature and  $N$  is the Avogadro's number.

The Kirkwood correlation factor "g" determined from the dielectric constant gives information on the collective orientation correlation between molecules.

$$\frac{4\pi N}{9kT} \left[ \frac{\mu_w^2 \rho_w}{M_w} V_a + \frac{\mu_A^2 \rho_A}{M_A} (1 - V_a) \right] g^{eff} = \frac{(\epsilon_{0m} - \epsilon_{\infty m})(2\epsilon_{0m} + \epsilon_{\infty m})}{\epsilon_{0m}(\epsilon_{\infty m} + 2)^2} \quad 6$$

With  $V_a$  and  $1 - V_a$  as volume fractions of liquids  $a$  (water) and  $b$  (DPG), respectively. In the mixtures the values of  $g^{eff}$  show (Table 2) decreasing trend with the increasing concentration of DPG molecules in the mixtures. This indicates the decrease in interaction between the molecules of the system with increase in volume fraction of DPG in the solution. The values of  $g^{eff}$  are greater than unity for all the concentration and all three temperatures suggesting parallel orientation of electric dipoles.

**Table 2. Kirkwood correlation factor for DPG Water Mixture at 200C.**

Volume Fraction of Solute			
0.0	2.79(16)	0.1	2.74(16)
0.2	2.62(15)	0.3	2.68(16)
0.4	2.65(16)	0.5	2.79(16)
0.6	2.82(17)	0.7	3.07(18)
0.8	3.63(22)	0.9	4.09(24)
1.0	4.88(29)		

Note: Numbers given in parentheses denote uncertainties in the least significant digits, e.g. 2.79(16) means  $2.79 \pm 0.16$

**Bruggeman factor**

The Bruggeman equation [16] is another parameter which may be used as an indicator of solute solvent interaction. The Bruggeman factor ( $f_B$ ) is given by,

$$f_B = \left[ \frac{(\epsilon_{0m} - \epsilon_{02})}{(\epsilon_{01} - \epsilon_{02})} \right] \left( \frac{\epsilon_{01}}{\epsilon_{0m}} \right)^{\frac{1}{3}} = 1 - V \quad 7$$

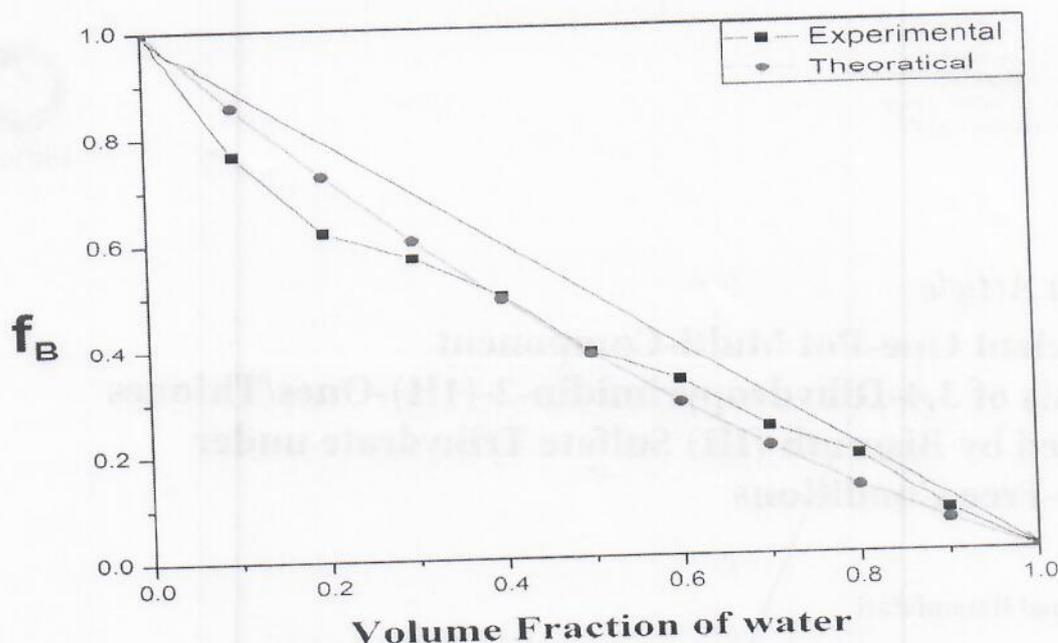


Figure 2 Plot of Bruggeman factor ( $f_B$ ) as function of Volume fraction of water at 20°C

Where  $\epsilon_{0m}$ ,  $\epsilon_{01}$  and  $\epsilon_{02}$  are the static dielectric constant corresponding to mixture, solute and solvent respectively;  $V$ - is the volume fraction of solvent (water). From above equation, the linear relation is expected from a plot  $f_B$  Vs Volume fraction of water. But in binary liquids, there is non-linear relationship.

$$f_B = \left[ \frac{(\epsilon_{0m} - \epsilon_{02})}{(\epsilon_{01} - \epsilon_{02})} \right] \left( \frac{\epsilon_{01}}{\epsilon_{0m}} \right)^{\frac{1}{3}} = 1 - [a - (a-1)V]V \quad 8$$

In this equation, volume fraction ( $V$ ) is changed by a factor ' $a - (a-1)V$ ' of the mixture.

Figure 2 shows variation of Bruggeman factor at 20°C with volume fraction of water. The value of ' $a$ ', equal to 1 corresponds to ideal mixture with no additional interaction between two liquids and reduces to Bruggeman's equation. The value of ' $a$ ', determined by least square fit method is found to be 1.47; its deviation from unity indicates the molecular interaction in the mixture.

#### IV. CONCLUSION

The values of static dielectric constant, relaxation time, Kirkwood correlation factor and Bruggeman factor for DPG-water mixtures are also investigated. It suggests the formation of strong -H bonds between DPG and Water. The Kirkwood correlation factor value of pure Dipropylene is greater than unity, reveals the hydrogen bond interaction and presence of parallel associated molecules. Using Bruggemann factor the nonlinear relationship between DPG and water molecules has been also studied.

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## V. REFERENCES

- [1]. K. Grzybowska, A. Grzybowski, S. Pawlus, S. Hensel-Bielowka, and M. Paluch. Dielectric relaxation processes in water mixtures of tripropylene glycol. *The J of Chem. Phy.* 2005;123:204506.
- [2]. Bo Jakobsen, a\_ Kristine Niss, b\_ and Niels Boye Olsenc. Dielectric and shear mechanical alpha and beta relaxations in seven glass-forming liquids. *The J of Chem. Phy.* 2005;123:234511.
- [3]. Y. B. Mel'nichenko, J. Schüller, R. Richert, B. Ewen, and C.-K. Loong. Dynamics of hydrogen-bonded liquids confined to mesopores: A dielectric and neutron spectroscopy study. *J Chem. Phys.*
- [4]. A. Yoshihara, H. Sato, S. Kojima. Brillouin Scattering Study of Glass-Forming Propylene Glycol. *Jpn. J Appl. Phys.* 1996;35: 2925.
- [5]. J.-H. Ko, S. Kojima, Brillouin scattering study on the polypropylene glycol by using a non-scanning Fabry-Perot interferometer. *Phys. Lett. A.* 2004;321:141-146.
- [6]. R. Bergman, L. Börjesson, L.M. Torell, A. Fontana. Dynamics around the liquid-glass transition in poly(propylene-glycol) investigated by wide-frequency-range light-scattering techniques. *Phys. Rev. B.*
- [7]. M.S. Beevers, D.A. Elliott, G. Williams. Dynamic Kerr-effect and dielectric relaxation studies of a poly(methylphenyl siloxane). *Polymer.* 1980;21:279-282.
- [8]. Tongfan Sun and Aryn S. Teja. Density, Viscosity and Thermal Conductivity of Aqueous Solutions of Propylene Glycol, Dipropylene Glycol, and Tripropylene Glycol between 290 K and 460 K. *J Chem. Eng. Data.* 2004;49:1311-1317
- [9]. Ganesh V. Mashalkar, Pankaj A. Chalikwar & Ashok C. Kumbharkhane. Temperature-dependent dielectric relaxation study of polyhydric alcohols (propane-1, 3 and 1,2-diol) using a TDR technique, *Phy. and Chem. of Liquids.* 2014;53,3:307-317.
- [10]. Pankaj A. Chalikwar, Avdhut R Deshmukh and Ashok C. Kumbharkhane. Dielectric relaxation of Tripropylene glycol-water mixture using time domain Reflectometry, *Phy. and Chem. of Liquids.*
- [11]. Havriliak S, Negami S. A complex plane analysis of  $\alpha$ -dispersions in some polymer systems. *J Polym Sci C.* 1966; 14: 99-117.
- [12]. Hill NE, *Theoretical Treatment of Permittivity and Loss.* Van Nostrand Reinhold Co, London, 1969; Chapter 1: p 1.
- [13]. Frohlich H. *Theory of Dielectrics.* Oxford University Press; London. 1949.
- [14]. Fattepur RH, Hosamani MT, Deshpande DK, Mehrotra SC. Dielectric relaxation and structural study of aniline-methanol mixture using picosecond time domain reflectometry. *J Chem Phys.* 1994; 101:9956.
- [15]. Kumbharkhane AC, Puranik SM, Mehrotra SC. Structural study of amide-water mixtures using dielectric relaxation technique. *J Mol Liq.* 1992; 51: 261.
- [16]. Brüggeman DAG. *Ann Phys (Leipzig).* 1935; 5: 636-679.

# Phytochemical and Antifungal properties of *Tinospora cordifolia* (Wild) Hook F. Thompson Against Fruit Rot Pathogens

Dr. Sawant S. G.  
Department of Botany  
K. K. M. College, Marvat, Maharashtra, India  
sarika.sawant6@gmail.com

**Abstract:** Many studies reveal that the plants are reservoirs of 'active antimicrobial compounds'. The antimicrobial activity of plants is due to the presence of different bioactive compounds of various types such as Flavonoids, terpenoids and some essential oils like Thymol and natural phenolic compounds. Many investigations show the usefulness of all these compounds in human welfare particularly to counteract many kinds of human disorders. This study throws light on the phytochemical and antifungal properties of *T. cordifolia*. In this study preliminary qualitative analysis of leaf and stem extracts of *T. cordifolia*. This is done by using three types of Solvents as Water, Ethanol, Methanol. Data indicates the presence of flavonoid, alkaloid, phenolic compounds, glycosides, phytonutrients and terpenes. Most of the phytochemical compounds were found in methanolic and water solvents as compared to ethanol. The presence of these secondary metabolites and their potential suggests their future inclusiveness to control human as well as plant's antimicrobial attacks.

**Keywords:** Active antimicrobial compound, phytochemicals, *Tinospora cordifolia*, solvent extracts

## I. INTRODUCTION

Fruits are susceptible to attack by a variety of microorganisms during storage, transportation and marketing. In India, where bulk storage facilities are neither available nor affordable such losses are even greater particularly during wet and humid periods (Sil, 1985).

Postharvest diseases due to fungal pathogens posing a major problem to the agriculture industry, where they account to about 50% losses in fruits stored in poor storage conditions. Now a days fungal diseases are controlled by chemical fungicides. But their continuous use complemented with high cost, residue in plants which create toxic effects to the environment and human health.

Therefore, there is a need for the development of safe, eco-friendly and effective strategy to control the postharvest fungal pathogens.

In our ancient world, the consumption of plants as medicine was the only source against various diseases. Fossil records date human use of plants as medicine at least to the middle palaeolithic age, some 60,000 years ago (Fabricant and Fransworth, 2001). At that time the use of plants as was based on visual observation of some local practitioners, and their traditional knowledge pass on generation to generation.

According to WHO, almost 65% of the World's population have incorporated traditional system of medicine in their modality of health care (Fransworth et al, 1985). Now the medicinal plant sector has gained both scientific and social support, the herbal industries are playing a major source of capitalization in both developed and developing countries. Extracts obtained from many plants have recently gained popularity and scientific interest for their antifungal activities (Lee et al., 2007; Varastegui et al. 2008; Santas et al., 2010). Reports on the antimicrobial properties of plant extracts containing different classes of phenolic compounds represent a rich source of preservatives that have been explored for a long time as postharvest alternative control measures to fungicides (Lorenzo 2003; Schemi et al., 2008). Other research workers (Amadioba and Obi, 1999; Amadioba, 2000 and Okigbo, 2009) studied the significance of fungicides of plant origin as possible means of fungal disease control in fruits and vegetables as they are easily biodegradable and nontoxic to human health.



Zhang and Zhang(2005) have also shown that the plant extracts have great potential to be an alternative to synthetic fungicides. This investigation is therefore targeted at the phytochemical and antifungal activities of one of the most important and popular medicinal plant, *Tinospora cordifolia* against postharvest fruit rot pathogens

**Taxonomic Classification of *Tinospora cordifolia*(Willd) Miers ex. Hook and Thompson**

- Kingdom-Plantae
- Subkingdom:Trachacophyta
- Superdivision: Spermatophyta
- Division :Magnoliophyta
- Class:Magnoliopsida
- Subclass: Polypetalae
- Series:Thalimiflorae
- Order: Ranunculales
- Family-Menispermaceae
- Tribe: Tinosporaceae
- Genus: *Tinospora*
- Species: *cordifolia*

**Selected Vernacular Names**

- Sanskrit-Guduchi, Madhuparni, Amrita, Tantrica
- Hindi-Giloya, Guduchi ;Manthi-Gulvel
- Gujarati- Gialo; Kannada- Amrita balli, Madhupa

**Plant Description**

*Tinospora cordifolia*(Willd)Miers, is one of the important of deciduous plant belongs to the family Menispermaceae found throughout the India, Sri Lanka, Bangladesh and China. It is endemic to the tropical region of the India, growing to temperature range of 25°C to 45°C at an altitude of 500 meters(9). It is a perennial twine usually found with scumptions stem and papery bark in India. It often attains a great height and mostly climbs up the trunks of large tree. Roots are long filiform, and fleshy. Bark is thin grey or creamy white in colour with deep spotted dots and large lenticels. Leaves are heart shaped, membranous, juicy and cordate. The leaf blade is broadly ovate to roundish, cordate, cordate, 5 to 12cm in diameter with smooth surfaces. It has greenish flowers which are unisexual and bloom in summer. Male flowers are small, yellow or green coloured occur in clusters whereas female flower occur singly. Fruits are spherical or rounded in shape, fleshy, shiny green which turn red after ripening. Seed is curved.

**Phytochemical Analysis of Different Parts of *Tinospora cordifolia***

Leaves are rich in protein, calcium and phosphorus (5,6). Methanolic extracts of leaves is rich in flavonoids, alkaloids and glycosides(7). Herbal extracts of various forms like infusion, decoction, tinctures, syrup and maceration etc. are commonly used since ancient time for medicinal purpose. Cold infusion of Giloy prepared by using stem is given in chronic conditions of fever. The juice extract from the stem of Giloy is highly effective for the treatment of gout as it helps to neutralise the increased uric acid levels in the body. Strong decoction of giloy with basil leaves offer resistance against swine flu. (Promilla et.al.2017)

The phytochemicals mainly synthesized in all plant parts like stem, leaves, root, bark, flower and fruits. Isolation of these compounds from plants is mainly depending upon the solvents which used for extraction(3). This emphasize there is an urgent need to try as much solvents as possible in qualitative phytochemical screening of plants(4). In the present investigations, three different solvents are used to obtain extracts of leaves and stem of *Tinospora cordifolia*. These extracts were used for preliminary phytochemical analysis by using standard chemical methods.



## II. MATERIAL AND METHODS

## 2.1 Collection of Plant Material

Fresh stem and Leaves of *T. cordifolia* are collected from wild areas of Purbhani District of Maharashtra. Collected plant material washed under the tap water to eradicate dust and microbes. The plant material then air dried under shade at room temperature for 15 days. The plant material then crushed well into fine powder in an electronic grinder and kept into air tight polythene bags for further use and stored at room temperature.

## 2.2 Preparation of Plant Extract

The extracts of selected sample powder were prepared by soaking 50gm of dried powder in 100ml of each methanol, ethanol and water. The solution left at room temperature for 72 hours and then filtered with the help of filter paper. The filtrate of the selected plant sample were taken and used for further phytochemical screening.

## 2.3 Phytochemical Screening

## A. Detection of Alkaloids

A small amount of extract was treated with 2ml of Wagners reagent (1.27g of iodine and 2gm of Potassium iodide in 100ml of water) and observed till the formation of reddish brown precipitation which indicates the presence of Alkaloids.

## B. Test for Carbohydrates

A few drops of Benedicts reagent were added to 2ml of various extracts, boiled in waterbath for for 5min cooled and observed for a reddish brown precipitate (19)

## C. Detection of Glycosides

Extracts were hydrolysed with dil. HCl, and then subjected to test for glycosides.

## Modified Borntragers Test

Extracts were treated with Ferric chloride solution and immersed in boiling water for about 5 minutes. The mixture was cooled and extracted with equal volume of Benzene. The Benzene layer was separated and treated with Ammonia solution. Formation of rose-pink colour in the ammonical layer indicate the presence of anthranol glycosides.

## D. Detection of Saponin

2ml of extract was added 12ml of water in a test tube. The mixture was shaken vigorously and observed for the formation of persistent foam

## E. Detection of Phenol

A fraction of the extracts was treated with aqueous 5% ferric chloride and noticed for formation of deep blue or black colour. (22)

## F. Detection of Flavonoids (Alkaline Reagent Test)

Few drops of 20% sodium hydroxide solution were added to 2ml of extracts. Formation of intense yellow colour, which becomes colourless on addition of dilute hydrochloric acid, revealed the presence of flavonoids (21,23).

## G. Detection of aminoacids and Proteins (1% Ninhydrin Solution)

2ml of filtrate was treated with 2-5 drops of Ninhydrin solution placed in boiling water bath for 1-2 minutes and observed for the formation of Purple colour (24).

## H. Detection for Tannins (Braymers Test)

2ml of extract was treated with 10% ferric chloride solution and observed for formation of blue or greenish colour solution (19).

**I. Detection of Terpenoids (Salkowkis Test)**

2ml of each extract were treated with 1ml of Chloroform followed by a few drops of concentrated Sulphuric acid. A reddish brown precipitate is formed immediately indicated the presence of terpenoids(25)

**III. RESULTS AND DISCUSSION**

**Table 1:** Phytochemical Screening of *Tinospora cordifolia* leaves and stem extracts.

Phytochemical Test	Leaf extracts			Stem Extracts		
	M	E	A	M	E	A
Alkaloids	+	+	+	+	+	-
Carbohydrates	+	+	+	+	-	+
Glycosides	+	+	+	+	-	-
Saponin	+	-	+	-	-	+
Phenol	+	+	+	+	+	-
Flavonoids	+	+	-	+	+	-
Amino acids	+	+	-	-	-	-
Tannins	-	+	+	-	+	-
Terpenoids	+	+	-	-	+	-

In Table-1, where, M-Methanolic extract; E- Ethanolic Extract;

Aqueous extract; +sign indicates presence and -sign indicates absence of respective phytochemical.

There is a consensus that the antifungal effect of plants could be associated with the quality or/and quantity of their secondary metabolites(34). Indeed, correlation analysis revealed that inhibition of mycelial growth and spore germination were very strongly correlated with polyphenol and flavonoid levels.

As reported by E.I.Matti et.al.(34), plant extracts with higher antimicrobial ability had higher phenolic content. Alternatively, Assiri et.al(35) have demonstrated that bioactive lipids including fatty acids and hydrophobic vitamins are implicated in the antimicrobial properties of plant extracts.

All these compounds can work by inhibiting metabolic enzymes, interfering with cell wall synthesis and electron transport, altering cell permeability inhibiting nutrient absorption, and interfering with other cellular metabolic pathways(36).

In fact, the antioxidants have been reported to play a major role in increasing the effectiveness of treatments against plant fungal pathogens when combined as adjuvants with fungicides(37).

Their effect may be due to an increase in membrane permeability, subsequently allowing a greater diffusion of fungicides in cells, or reduced oxidation of intracellular fungicides resulting in higher toxicity for fungi(38).

Available literature indicates that the antimicrobial activity of plant is due to the presence of different bioactive compounds in various types of extracts such as flavanoids, triterpenoids and some essential oils like ThymoI and natural phenolic compounds that are classified as **Active antimicrobial compounds** (Hasan et.al.1994).

Successful anticipation of various herbal chemical compounds from plant is largely reliant on the type of solvent that were used in the extraction procedure. The customary practitioners in our medicinal system suggested water primarily as a good solvent for extraction which has better solubility of bioactive compounds. Later investigations verified that in comparison to water extracts, organic solvents extracts exhibits strong results (Krishana et.al.1997;Singh I. and Singh V.P.2000; Natrajan et.al.2005;Natrajan D.et.al.2005).

Flavanoids are least soluble in water which is the primarily phenolic compound in plants and responsible for several therapeutic activity of plants(Do Boer et.al.2005).

Several studies have been conducted to shed light on the mechanism of action of several active compounds of plant extracts including essential oils(Chang et.al.2001).The crude sap, volatile and essential oil extracted from whole plant or specialized plant parts like root, stem, leaves, flowers, fruits and seeds are widely used in preparing the antimicrobial compounds which are significantly used against the different plant pathogens or diseases (Gurjar, M.S.et.al. 2012).

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Carbohydrates	+	+	+	+	-	+
Glycosides	+	+	+	+	-	-
Saponin	+	-	+	-	-	+
Phenol	+	+	+	+	+	-
Flavonoids	+	+	-	+	+	-
Amino acids	+	+	-	-	-	-
Tannins	-	+	+	-	+	-
Terpenoids	+	+	-	-	+	-

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**3.1 Mode of action of Phytochemicals**

Sr. No.	Class	Subclass	Mechanism
1.	Phenolics	Simple phenols	Membrane disruption
2.	Phenolic acids	Phenolic acids	Bind to adhesions, complex with cell wall, inactivate enzymes
3.	Terpenoid	-	Membrane disruption
4.	Alkaloids	-	Intercalate into cell wall
5.	Tannins	-	Bind to proteins, enzyme inhibition, substrate deprivation
6.	Flavanoids	-	Bind to adhesions, complex with cell wall, inactivate enzymes.
7.	Coumarins	-	Interaction with eukaryotic DNA
8.	Lectins and Polypeptide	-	Form disulphide bridges

However, such mechanisms are still unclear although some studies suggested that these compounds penetrate inside the cell where they interfere with cellular metabolism (Marino et al.2001). The use of plant products or preparations for control of postharvest diseases caused by fungi has not received proper attention. Most of such studies, were preliminary but indicated the possible use of preparation of various plants in actual disease control(Ark and Thompson,1959;Dixit et al,1983).

**REFERENCES**

- [1]. Indian medicinal plant, P.C.Trivedi, 2009, Avishkar Publishers Distributors,pp.1-2
- [2]. Sill, W.H.(1985). Plant protection. Kalyani Publishers, New Delhi, India.
- [3]. Lee, S.H,Chang,K.S.,Su M.S,Huang Y.S. and Jang H.D.(2007). Effects of some Chinese medicinal plant extracts on different fungi.Food Control. 18: 1547-1554.
- [4]. Verstagni, A.; Verde, J.Garcia, S.; Heredia N.; Orandy, A and Rivas, C.(2008).Species of Agave with antimicrobial activity against selected pathogenic bacteria and fungi. World Journal of Microbiology and Biotechnology 24:1249-1252.
- [5]. Santos,J.; Almanjano,M.P.; and Carbo, R.(2010). Antimicrobial and antioxidant activity of crude Onion(*Allium cepa* L.) extracts. International Journal of Food Science and Technology 45: 403-409.
- [6]. Lattanzio,V.(2003). Bioactive polyphenols: Their role in quality and storability of fruits and vegetables. Journal of Applied Botany:77: 124-146.
- [7]. Schemi, L., Nigro, F.and Ippolito,A.(2008). Natural antimicrobial to improve storage and shelf life of fresh fruit, vegetables and cut flowers. In: Microbial biotechnology in Horticulture, vol.2 Science Publishers, Enfield, NH, Ray, R.C. and Ward,O.P.(Eds) USA,pp.259-303.
- [8]. Amadiola, A.C. and Odu, V.I.(1999). Control of Anthracnose disease of Cowpea by *Cymbopogon citrius* and *Ocimum gratissimum*. Acta phytopathology and Entomology 85-89
- [9]. Amadiola, A.C.(2000).Fungitoxic effects of some leaf extracts against *Rhizopus oryzae* causing tuber rot of Potato. Archives of phytopathol, Planto 34:15
- [10]. Okigbo, E.N.(2009). Variation in phytochemical properties of selected fungicidal aqueous extracts of some plant leaves in Kogi State, Nigeria.American-Eurasian Journal of Sustainable agriculture 3(3): 407-409.
- [11]. Zhang,H. and X.Zhang(2005). Biological control of postharvest blue mold of oranges by *Cryptococcus laurentii* (Kufferath)Skinner. Biocontrol 50: 331-342.
- [12]. Meshram A., Bhagyant S.S., Gautam S., Shrivastava N. Potential role of *Tinospora cordifolia* in pharmaceutical sciences.2013;2(6):4615-4625
- [13]. Singa S.S., Pardey S.C., Srivastava S., Gupta V.S, Patro B., Ghosa AC. Chemistry and medicinal properties of *Tinospora cordifolia* (Guduchi). Indian Journal of Pharmacology, 2003; 35:83-91.
- [14]. Sinha K, Mishra N. P., Singh J, Khuntia SPS. *Tinospora cordifolia* (Guduchi): a reservoir plant for therapeutic applications: A review. Indian Journal of Traditional knowledge. 2004;3:257-70.

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REFERENCES

- [1]. Indian medicinal plant, P.C. Trivedi, 2009, Avishkar Publishers Distributors, pp.1-2
- [2]. Sill, W.H. (1985). Plant protection. Kalyani Publishers, New Delhi, India.
- [3]. Lee, S.H., Chang, K.S., Su, M.S., Huang, Y.S. and Jang, H.D. (2007). Effects of some Chinese medicinal plant extracts on different fungi. *Food Control*, 18: 1547-1554.
- [4]. Versagui, A.; Verde, J. Garcia, S.; Heredia, N.; Orandi, A and Rivas, C. (2008). Species of Agave with antimicrobial activity against selected pathogenic bacteria and fungi. *World Journal of Microbiology and Biotechnology* 24:1219-1252.
- [5]. Santos, J.; Almanjano, M.P.; and Carbo, R. (2010). Antimicrobial and antioxidant activity of crude *Orion Allium cepa* L. extracts. *International Journal of Food Science and Technology* 45: 403-409.
- [6]. Lattanzio, V. (2003). Bioactive polyphenols: Their role in quality and storability of fruits and vegetables. *Journal of Applied Botany*, 77: 128-146.
- [7]. Schena, L., Nigro, F. and Ippolito, A. (2008). Natural antimicrobial to improve storage and shelf life of fresh fruit, vegetables and cut flowers. In: *Microbial biotechnology in Horticulture*, vol. 2. Science Publishers, Enfield, NH, Ray, R.C. and Ward, O.P. (Eds), USA, pp. 259-303.
- [8]. Amadioba, A.C. and Obe, V. U. (1999). Control of Anthracnose disease of Cowpea by *Cymbopogon emittis* and *Ocimum gratissim*. *Acta phytopathology and Entomology* 85:89.
- [9]. Amadioba, A.C. (2000). Fungicidal effects of some leaf extracts against *Rhizopus oryzae* causing tuber rot of Potato. *Archives of phytopathol, Plant* 34: 19.
- [10]. Okigbo, R.N. (2009). Variation in phytochemical properties of selected fungicidal aqueous extracts of some plant leaves in Kogi State, Nigeria. *American-Eurasian Journal of Sustainable agriculture* 3(3): 407-409.
- [11]. Zhang, H. and X. Zhang (2005). Biological control of postharvest blue mold of oranges by *Cryptococcus laurentii* Kufferath) Skinner. *Biocontrol* 50: 331-342.
- [12]. Meshram A., Bhatnagar S.S., Ganai S., Shrivastava N. Potential role of *Tinospora cordifolia* in pharmaceutical sciences. 2013; 2(6): 4615-4625.
- [13]. Singh S.S., Pandey S.C., Srivastava S., Gupta V.S., Patro B., Ghosh AC. Chemistry and medicinal properties of *Tinospora cordifolia* (Gaduchi). *Indian Journal of Pharmacology* 2003: 35-83-91.
- [14]. Sinha K, Mishra N. P., Singh J., Khanuja SPS. *Tinospora cordifolia* (Gaduchi), a reservoir plant for therapeutic applications: A review. *Indian Journal of Traditional Knowledge*. 2004; 3: 257-70.



- [15]. Soni H.P., Nayak G., Patel S.S., Mishra K., Singh R.P. Pharmacognostic studies of the leaves of *Tinospora cordifolia*. IJPI Journal of Pharmacognosy and Herbal formulations. 2011; 1:1-6.
- [16]. Promilla, Sushila Singh and Parvesh Devi 2017 Pharmacological Potential of *Tinospora cordifolia* (Wild). Miers ex. Hook and Thomas (Giloy): A review. Z. Journal of Pharmacognosy and Phytochemistry. 6(6): 1544-1647.
- [17]. Jyoti Rani, Lalita Singh, Hoshiyar Singh, Manish Kapoor and Gangadeep Singh. Preliminary phytochemical analysis of different solvent extracts from Leaf and stem of *Tinospora cordifolia*. International Journal of Phytotherapy. 2015, Vol.5 (3) 124-128.
- [18]. M.F.A. El-Matti, S.A. Mahgoub, S.M. Labib, A.M.A. Al-Gaby, and M.F. Ramadan Phenolic extracts of Clove (*Syzygium aromaticum*) with novel antioxidant and antibacterial activities. European Journal of Integrative medicine, vol.8 no.4 pp.494-504, 2016.
- [19]. A.M.A. Assari, K. Elbanna, A. Al-Thubiani, and M.F. Ramadan, Cold pressed Oregano (*Origanum vulgare*) oil: a rich source of bioactive lipids with novel antioxidant and antimicrobial properties. European Food Research and Technology, vol.242, no.7, pp.1013-1023, 2016.
- [20]. M.M. Cowan, Plant Products as antimicrobial agents. In Clinical Microbiology Reviews, vol.12, no.4 pp.564-582, American Society of Microbiology (ASM), 1999.
- [21]. A.M.M. Shomeel, A.M.I.E.J.-Samaduy, R.M.A. E.I. Kholy and I.S. Ibrahim, Effect of fungicides, antioxidants and their mixtures on mycelial growth of some fungi. Middle East Journal of Applied Sciences, vol.8 no.2 pp.645-655, 2018.
- [22]. G. Simonetti, A. Villa, and N. Simonetti, Enhanced contact activity of Flucanazole in association with antioxidants against fluconazole-resistant organisms. Journal of Antimicrobial chemotherapy, vol.50 no.2, pp.257-259, 2002.
- [23]. Limal Dine Tariq Bouhlall, Mgal Derouich, Reda Meziani and Adil Essaroui. Antifungal potential of phytochemicals against *Mauginella seactae*, the plant pathogen causing inflorescence rot of Date palm. Scientifica, vol.2021. Article ID 1896015. 8 pages 2021. Research Article/ Open access vol.2021/ Article ID1896015: <https://doi.org/10.1155/2021/1896015>.
- [24]. Hasan A., Farman M., Ahmed I. Flavanoid glycosides from Indigofera hebecarpa. Phytochemistry 1994;33:275-276.
- [25]. Krishna K.T., Ranjini C.E., Sasidharan V.K. Antibacterial and antifungal activity of secondary metabolites from some medicinal and other common plant species. J. Life Sciences 1997;2:14-19.
- [26]. Singh L and Singh V.P. Antifungal properties of aqueous and organic solution extracts of seed plants against *Aspergillus flavus* and *Aspergillus niger*. Phytomorphology, 2000;50:151-157.
- [27]. Natrajan E., Senthilkumar S., Xavier F.T., Kalaiselvi V. Antibacterial activities of leaf extracts of *Alongium subvittatum*. J. Trop. Med. Plants 2003;4:9-13.
- [28]. Natrajan D., Brato J.S., Srinivasan K., Nagmurgan N., Mohansundari C., Perumal G. Antibacterial activity of *Euphorbia fusciformis*: a rare medicinal herb. J. Ethnopharmacol, 2005, 102:123-126.
- [29]. De Boer EJ, Kool A., Broberg A., Meiray W.R., Heebberg J., Levanfors J.J. Antifungal and antibacterial activity of some herbal remedies from Tanzania. J. Ethnopharmacol, 2005;96:461-469.
- [30]. Chang S.T., Chen P.F., Chang S.C. Antibacterial activity of leaf essential oils and their constituents from *Cinnamomum camphorosmum*. J. Ethnopharmacol, 2001;77:123-127.
- [31]. Marino M., Bersani C., Cami G. Impedance measurements to study the antimicrobial activity of essential oils from Lamiaceae and Compositae. 2001. Int. J. Food Microbiol. 67:187-195.
- [32]. Ark P.A. and Thompson, J.P. (1959). Antibiotic properties of seeds of wheat and Barley. Plant disease Repor. 43:276-282.
- [33]. DIXIES, Dubey, N.K., Tripathi, N.N. and Dixit, S.N. (1983). Cedrus Oil- promising storage fungitoxicant. Journ. Stored Prod. Res. 19:159-162.
- [34]. Gurjar, M.S., Shahal Al. Masood Akhtar, Kangabam S.S. 2012. Scientific Research publishing. Visited at Google Scholar.

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राजर्षी शाहू महाराजांचे शैक्षणिक सशक्तिकरणात योगदान

डॉ. प्रा. सुनिता जगन्नाथराव कुकडे.

के.के.एम.महाविद्यालय मानवत, जि. परभणी.

Sunitakukdekm@gmail.com 9420710101

राजर्षी शाहू महाराजांनी महाराष्ट्रात सामाजिक परिवर्तनाचे कार्य केले. अनेक राज्यात बहुसंख्य समाजातील लोकांना शैक्षणिक शिक्षण, राजकीय सत्ता, प्रतिष्ठा प्राप्त करून देण्याचे काम केले. राजर्षी शाहू महाराजांनी कर्मवीर भाऊराव पाटील, वी. रा. शिंदे, डॉ. बाबासाहेब आंबेडकर यांच्या बरोबरीचे मोलाचे कार्य समाजात प्रचलित करून देण्यासाठी प्रयत्न केले. कुठल्याही समाजाचा विकास करायचा झाला तर शिक्षणाशिवाय पर्याय नाही अशी शाहू महाराजांचे मतांमधील शिक्का होती. प्रजासुविधा करणे म्हणजेच शाहू महाराजांचे मत होते. त्यांचा समाजाचा विकास करणे हेच त्यांचे उद्देश्य होते. समाज सुधारणांची अंमलबजावणी करणे हेच त्यांचे उद्देश्य होते. शाहू महाराजांनी सत्तेवर आल्यावर शैक्षणिक धोरण जाहीर केले आणि कृतीतील उपाययोजना राबविले.

उद्देश :

- 1) सामाजिक समस्या जाणून घेणे.
- 2) शैक्षणिक सशक्तिकरणाचा अभ्यास करणे.

सूचितके

- 1) बहुजनांना शिक्षणाचे संधी मिळावी.
- 2) बहुजनांच्या व्यवसाय व नोकरीत बदलते स्वरूप दिवून देणे.

शैक्षणिक सशक्तिकरणाची आवश्यकता:

शैक्षणिक सशक्तिकरण म्हणजे समाज जीवनातील विषमता नष्ट करून समाजातील सर्व घटकांना समान संधी उपलब्ध करून देणे. भारतात विविध धर्म, जात, पंथ, भाषा यामध्ये विविधता आहे यैकी विषमता मानवाच्या प्रगतीसाठी अडथळा आहे. त्यामुळे मानवी प्रगती ही मानवजातीच्या विकासावर अवलंबून आहे. त्यांचे शैक्षणिक सशक्तीकरण होणे गरजेचे आहे.

1) स्त्री शिक्षण व स्त्री उद्धार :

भारतीय समाज व्यवस्थेत सर्व जातीतील स्त्रियांना दुय्यम व कनिष्ठ स्थान देण्यात आले होते. स्त्रियांच्या समस्या अधिक गंभीर स्वरूपाच्या होत्या बालविवाह, विधवा विवाह, प्रतियोग, केशवपन, लैंगिक अत्याचार, शिक्षण देण्यात बंदी इत्यादी समस्यांना सामोरे जावे लागत असत. स्त्री केंद्र उपभोगाची वस्तू मानली जात तिचा कोणतेही व्यक्तिमत्व नव्हते. एकूणच लोकसंख्येच्या तुलनेत अर्धी लोकसंख्या असलेल्या स्त्रियांना गुलाम दास बनविले त्यांचे मार्ग बंद केले म्हणून स्त्रियांसाठी महात्मा फुले, सावित्रीबाई फुले यांनी ज्ञानाची दारे खुले करून दिली. विधवा विवाहास, बालविवाह, लैंगिक अत्याचारास, हत्या थांबविण्यास बालहत्या प्रतिबंधक कायदा यांनी सोय केली आणि सत्यशोधक चळवळीने स्त्रियांचा उद्धार केला. प्राथमिक शिक्षण सक्तीचे व मोफत असा विचार राजर्षी शाहूंनी १९१२-१३ मध्ये मांडला. 24 जुलै १९१८ ला शाहू महाराजांनी जाहीरनामा प्रसिद्ध केला. सक्तीच्या प्राथमिक शिक्षणाची नियमावली तयार करण्यासाठी शिक्षण तज्ञांची समिती तयार करून सक्तीच्या शिक्षणाचा कायदा केला. कायद्याचा उद्देश स्पष्ट करताना शाहू महाराज नमुद करतात कर्मवीर सैन्यातील अमकाच्या सर्व प्रजासैन्यांना लिहिता बाचता येऊन बापली स्थिती ओळखून मुलांच्यासाठी समर्थ जाणे व भोग्य अशाच्या मुलांना शाळेत पाठवावीत अन्वयाचा पाठवावीत असा कायदा तयार करण्यात येईल. 1918 चा सक्ती व मोफत शिक्षणासाठी एक स्वतंत्र खाते स्थापन केले "एज्युकेशन ऑफिस".



या वरिष्ठ अधिकाऱ्याची नेमणूक करण्यात आली .मुलींच्या शिक्षणाला प्रोत्साहन दिले , त्यांच्यासाठी स्वतंत्र शाळा काढल्या . समाजाला गहाण करून सोडावचे असेल तर कुटुंबातील स्त्रीला विसरून कासे चालेल . शाळेतील शिक्षकांनी मुलाबरोबर मुलींनाही शिक्षण द्यावे ज्या शाळेत जास्त मुली असतील त्या शिक्षकाला बक्षीस दिले जाते . दुसऱ्या मुलींनासाठी पाच शिष्यवृत्ती ठेवल्या होत्या.महिलांमध्ये मागासवर्गीयातील महिलांचे शिक्षणाची सोय केली होती. निवास व भोजनाची व्यवस्था ही केली होती.शाहू महाराजांनी शिक्षण करण्यासाठी कृत्रिम प्रयत्न केले . राजर्षी शाहू महाराजांनी आधुनिक भारताच्या उभारणीत महत्त्वपूर्ण योगदान दिले म्हणून न्यायमूर्ती वेद्य म्हणतात,"शाहू छत्रपती हे आधुनिक भारताचा दुसरा आवाज होते केवळ ब्राम्हण, क्षत्रिय , वैश्य, शूद्र , अति शूद्र यापैकी कोणत्याही एकाचेच नव्हे तर सर्व देशाच्या सर्व भागातील प्रत्येक जाती, धर्म , पंथाच्या वरिष्ठ प्रत्येक व्यक्तीचा तो आवाज होता." 1

शाहू महाराजांनी पुरोहितांचे वर्चस्व नष्ट करून स्त्री अविशुद्धाचा उच्चार करून त्यांना शैक्षणिक अधिकार मिळवून दिला . बहुजातीसाठी राजकीय स्तेचा वापर करून अस्पृश्यता निवारण, अस्पृश्यांना शिक्षणासाठी त्यांना शाळेत प्रवेश , त्यांच्या विद्यार्थ्यांसाठी वस्तीग्रह बांधणे , शिष्यवृत्ती देणे ,संस्थानात नोकरी, व्यवसाय करण्यास प्रोत्साहन देणे इत्यादी कार्य हाती घेतली . भटक्या व गुन्हेगार जमातींना मराठा कुणबी इत्यादींना सामाजिक शैक्षणिक आर्थिक विकासासाठी राखीव जागा ठेवण्यात आल्या . स्त्री शिक्षणाचा आणि विधवा विवाहाला मान्यता देणारा कायदा करून विधवा विवाहास प्रोत्साहन दिले ,बाल विवाहास विरोध करून स्त्रीविषयक समस्या सोडवण्याचा प्रयत्न त्यांनी केला. देवदासी, बाल्या, मुरळी , जोगतीथी स्त्रियांच्या समस्यांना वाचा फोडली आणि त्यांना न्याय मिळवून दिला.

## 2) अस्पृश्यांसाठी शाळा :

शाहू महाराजांनी प्रहाराष्ट्रातील दलित व मागासवर्गीयांची सामाजिक व मानसिकता बदलण्याची गरज वाटली . त्यांना सामाजिक गुलामगिरीतून मुक्त करण्यासाठी सर्वस्वी प्रयत्न केले. समाजातील अस्पृश्यता जाणीवेच दूर करण्यासाठी हरिजननाच्या पंक्तीत त्यांनी उचडपणे जेवण केले . स्पृश्यांसाठी शाळा काढल्या, अस्पृश्य मुलांना सरकारी शाळेत इतर मुलाप्रमाणे दाखल करून पेण्याचे आदेश दिले . उच्चवर्गीय व खालच्या जातीच्या विद्यार्थ्यांना मिळून मिनकून राहण्याची संधी लाभली."कर्मवीर इल्लाक्यात(जागीरदारी सोडवून ) अस्पृश्य लोकांच्या मुलांसाठी स्वयंभू शाळा असतात त्या सर्व येत्या दमन्यापासून बंद करण्यात याव्यात व अस्पृश्यांच्या मुलास सरकारी शाळेतून इतर लोकांच्या मुलाप्रमाणे दाखल करून घेत जावे सरकारी शाळेतून शिवाशिव पाळण्याचे नसल्याचे सर्व जातीच्या व धर्माच्या मुलासएकत्र बनवण्यात येत जावे"2 .शाहू महाराजांनी अस्पृश्यांना शैक्षणिक प्रगतीचे केलेले अधोग प्रयत्न रूप मोठ्या प्रमाणातमध्ये दिसून येतात.

अ.क्र	वर्षे	शाळांची संख्या	अस्पृश्य विद्यार्थ्यांची संख्या
१)	१८९४-९५	०५	१८६
२)	१९९६-९७	१०	१९६
३)	१९०७-०८	१६	४१६
४)	१९१०-११	२२	६३६
५)	१९१२-१३	२४	६९४
६)	१९१३-१४	२५	८५०



3. यावरून असे लक्षात येते की अस्पृश्यांसाठी शाळांची वाढती संख्या एकूण लोकसंख्येच्या तुलनेत अस्पृश्यांचे शिक्षणाचे प्रमाण अल्प वाढत असले तरी शिक्षणापासून वंचित राहिलेल्या समाजासाठी प्रयत्न केलेला दिसतो. कोल्हापूर संस्थानात १९१२-१३ प्रशासकीय अहवालात असे आहे की " पदतलित जाती जमातींना राजर्षीशाहूंनी ज्या विशेष सवलती उपलब्ध करून दिल्या आणि अस्पृश्यांमध्ये शिक्षण प्रसार करण्यासाठी स्थानिक लोकांच्या संघटनेत जे कामातीचे परिश्रम घेतले त्यांच्या संकलित परिणाम म्हणजे अल्पजांच्या शिक्षण प्रसारकायांची झालेली लक्षणीय प्रगती होय. अमानुष वागणुकीचे दुर्दैवी बळी बनलेल्या आपल्या अतिशुद्धा धर्मबांधवांना अल्प प्रमाणात का होईना सहानुभूतीचा आणि सहकार्याचा हात देण्यासाठी उच्चवर्णीय लोक पुढे येत आहेत हे उच्चवर्णीयांच्या मनाला निवडलेली भागसमाजाची किलमिणे करवीर दरबाराच्या शहानपणाचा उदार धोरणाच्या प्रभावाने विरधळून जात असल्याचे द्योतक होय. "4. राजर्षी शाहूंनी कर्मवीर संस्थानात अस्पृश्यांची शिक्षणाची अवस्था पाहिली तेव्हा त्यांच्या लक्षात आले की , शिक्षित केल्याशिवाय अस्पृश्यांचा उद्धार होणार नाही .त्यासाठी मागासवर्गीयांना प्रोत्साहन देणारे ताहू महाराज होते . त्यांची अंमलबजावणी करण्यास त्यांना सुरुवात केली.१९०३-०४ कोल्हापूर संस्थानात एकूण शाळा संख्या २४५ होती . १९२२- ५८८ एवढी होती विद्यार्थी संख्या १८८०० विद्यार्थी शिक्षण घेत होते . तर १९२२ मध्ये २१००० विद्यार्थी संख्या होती.अस्पृश्य महार ,मांग ,फासेपारधी, बडार , चांभार इत्यादी जाती जमातींच्या मुलांना शिक्षणाच्या प्रवाहात आणण्याचा प्रयत्न केला होता.

### ३) वसतिगृह:

अस्पृश्यांच्या विद्यार्थ्यांसाठी राजर्षी शाहू महाराजांनी खाजगी खर्चातून तीन व दरबाराच्या खर्चातून चार अशी एकूण सात वसतिगृह काढली. ती रजपुतवाडी कॅम्प ,स्थान ,बंगला, चकरी कॅम्पा, मिसवलाई वस्तीग्रह आणि आर्यसमाज गुत्कुलहाऊस वस्तीगृह, डोर चांभार तथा इंदुमती राणीसाहेब वसतिगृह, वसतिगृह पंढरपुर याशिवाय सोमवशी डिस्पेन्ड क्लास बॉर्डिंग हाऊस नाशिक चोखायेळा बॉर्डिंग हाऊस नागपूर या दोन अस्पृश्य वस्तीग्रहणांना प्रत्येकी पाच हजार रुपये देणगी राजर्षी शाहूंनी दिली .त्या वस्तीगृहातून बहुजनांना राहण्याची सोय आणण्यापिण्याची सोय या मूलभूत गरजांच्या पूर्तता त्यांनी केली व शिक्षणात अतिशय महत्त्वाने स्थान दिले . त्यानबरोबर " माफी व शिष्यवृत्ती योजना ही राजर्षी शाहू महाराजांनी घोषित केली "5.

### ४) उच्च शिक्षण ,व्यवसाय शिक्षण आणि नोकरभरती:

प्राथमिक शिक्षणाबरोबरच महाराजांनी उच्च शिक्षण व व्यवसाय शिक्षणाची चालना दिली.१८८१ मध्ये कोल्हापुरात एका इंग्रजी शाळेचे रूपंतर इतकी तन १९१८ मध्ये राजाराम महाविद्यालय केले .या महाविद्यालयाच्या माध्यमातून उच्च शिक्षणाच्या विकासाला चालना दिली, तसेच समाजायशे व्यावसायिक शिक्षणालाही महत्त्व दिले .तांत्रिक शिक्षणाची आचड निर्माण करण्यासाठी म्हणून "जयसिंगराव घाडगे टेक्निकल " ची स्थापना केली.या इन्स्टिट्यूटच्या माध्यमातून लोहारकाम, पंचढीकाम ,सुवारकाम यासारखे व्यवसाय शिक्षण दिले . विद्यार्थ्यांना विविधजंती विकास व्हावा म्हणून त्यांनी प्रयत्न केला.राजर्षी शाहू महाराजांनी "१९१७ सालीआपल्या नव्वको फौजात चार अस्पृश्यांची नेमणूक केली त्यापैकी दोघे महार होते तर दोघे मांग होते" 6

व्यवसायाच्या संदर्भात राजर्षी शाहू महाराजांनी बंगाराम कांबळे कोल्हापूर या नावाने "सत्य सुधारक हट्टि " काढले या हट्टिनला स्वतः राजर्षी शाहू नात व चहा भेऊन सोबत असलेल्या ब्राह्मण ,मराठा जातींच्या सर्व मंडळींना त्यांच्या आप्ताने चहा पानत. 7

सर्व जातीतील लोकांमधील वैचारिक दारिद्र्य विषयक विचार मनातून काढून टाकण्याचा प्रयत्न राजर्षी शाहू महाराजांनी केला.सरकारी सेवत अस्पृश्यांच्या नेमणुकी केल्या जातात यासाठी शाहूंनी खास हुकूमती काढला होता "अस्पृश्य जातीच्या लोकांसाठी तलाठी नेमण्याबद्दल अन्नहिवाहुकूम देण्यात आला . सदर वीकारपैकी जे लोक आपले कर्तव्यारीनी व बुद्धिने पुढे घेतिल त्यात भाग कारकून व अर्थव्यय कारकून अशा प्रकारच्या जागा देण्यात आल्यात . 8



**५) मुस्लीम शिक्षणासाठी प्रयत्न :**

सर्ज जावी वर्गातून शैक्षणिक दृष्ट्या मागासलेल्या मुस्लिम वर्गांना शिक्षण देण्याची शाहू महाराजांनी मुस्लिमांच्या 10 विद्यालयांना मराठा बोर्डिंग मध्ये प्रवेश देऊन मुस्लिमांच्या शिक्षणाला सुरुवात केली . पुढे इसवी सन 1906 मध्ये मोहम्मद एज्युकेशन सोसायटीची स्थापना करून महाराज स्वतःच अध्यक्ष झाले.

**सारांश:**

भारतीय शैक्षणिक इतिहासामध्ये छत्रपती शाहू महाराजांचा शैक्षणिक सशक्तिकरणात तिहाय वाटा आहे . बहुजनांच्या शैक्षणिक क्रांतीला शाहू महाराजांच्या धोरणापुढे बळ मिळाले यामध्ये दुमत नाही .छत्रपती शाहू महाराजांच्या शैक्षणिक धोरणाचे अंमलबजावणीआजही प्रामाणिकपणे केव्हास शैक्षणिक प्रवासाचा पारंपारीक गती मिळेल. परंतु सध्याचे शैक्षणिक धोरण,राजकीय नेत्यांमध्ये असलेली निभिसता, धर्म व शिक्षणाचे तांगड , शिक्षणाचे धाजगीकरण ही गंभीर व चिंताजनक बाब आहे .याचे गंभीर परिणाम पुढील पिढीला भोगावे लागतील हे निश्चित .

**संदर्भ सूची:**

1. डॉ. भामरे सज्जराव ( 2013 ) :अखिल महाराष्ट्र इतिहास परिषद .संशोधन व वसुधैव कुटुम्बकम् महाविद्यालय नांदेड पृ.क्र. 335.
2. पवार जयसिंगराव (संपा) (2001) : राजर्षी शाहू स्मारक ग्रंथ कोल्हापूर महाराष्ट्र .
3. सूर्यवंशी कृ. गो(1984) : राजर्षी शाहू राजा व माधुसुप पुणे डोकळ प्रकाशन पुणे पृ.क्र. 383 .
4. किता पृ.क्र. 73.
5. पवार जयसिंगराव(2001) :राजर्षी शाहू स्मारक ग्रंथमहाराष्ट्र इतिहास प्रबोधिनी पृ.क्र.74 .
6. धाटावकर भास्कर(1988) :राजर्षी शाहू छत्रपती चे निवडक आदेश भाग एक मुंबई पुराभिलेख विभाग, महाराष्ट्र राज्य मुंबई . पृ.क्र.137.
7. शिर्के दादासाहेब मल्हारराव(1976) : "दलितांचे राज्य " साळुके पी.बी.राजर्षी शाहू गौरव ग्रंथ मुंबई ,महाराष्ट्र शिक्षण विभाग सचिवालय पृ.क्र.505.
8. जामखेडकर अ. प्र .(1989) राजर्षी शाहू छत्रपती निवडक आदेश भाग 2 मुंबई पुराभिलेखन विभाग महाराष्ट्र राज्य पृ.क्र.20 .

2023, 8:29 AM

Gmail - TEAM ADVISORS - CONFIRMATION OF PROGRAM FOR WOMEN'S FINANCIAL EMPOWERED PROGRAM DATE OF 17th April 2023 AS ON TIME 11:30 am

17-4-23

Gmail

Durgesh Ravande <durgeshravande@gmail.com>

TEAM ADVISORS - CONFIRMATION OF PROGRAM FOR WOMEN'S FINANCIAL EMPOWERED PROGRAM DATE OF 17th April 2023 AS ON TIME 11:30 am

2 messages

Advisors Org <admin.advisorsorg@gmail.com>  
To: durgeshravande@gmail.com

Thu, Apr 6, 2023 at 12:10 PM

Kind Attention: Dr. Durgesh Ravande

Thank you for accepting our proposal of Seminar on " WOMEN'S FINANCIAL EMPOWERED PROGRAM ( FINANCIAL WELLNESS ENHANCEMENT )" for your Women Staff {Teaching + Non Teaching} Members . We are very excited to deliver this amazing session to your valuable Team. It will definitely help to set a goal of finance management, Understand retirement planning or finance management discipline planning. As discussed, all the topics will be covered in the training seminar session.

**Topic** : Seminar on : " WOMEN'S FINANCIAL EMPOWERED PROGRAM ( FINANCIAL WELLNESS ENHANCEMENT )" .

**Date** : 17th April 2023

**Time** : 11:30 AM to 12:30 Pm

**Participants** : Minimum 30-40 ( Women Staff )

**Seminar Duration** : 55 min Session

**Seminar Place** : Conference Hall

**Seminar Fees** : Free of Cost

**Seminar Description** : Participants required a smartphone or Laptop / PC and must install Zoom Application Before Program.

After the training program requires List Of Participants with { name, contact details & Email Id }

Kindly send confirmation mail from your side mentioned with Women's Empowerment Program ( Date, Time & No of Participants )

"HAVE A LOVELY DAY"



Ms. Sana  
Call - 09322977690 / 08087757131  
Eram Paradise Near Western Bakery .Pune- 48

admin@advisorsorg.com

www.advisorsorg.com

Durgesh Ravande <durgeshravande@gmail.com>  
To: Advisors Org <admin.advisorsorg@gmail.com>

Thu, Apr 6, 2023 at 1:22 PM

Yes, I confirm  
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**५) मुस्लीम शिक्षणासाठी प्रयत्न :**

सर्व जाती वर्गातून शैक्षणिक दृष्ट्या मागसलेल्या मुस्लिम वर्गाला शिक्षण देण्याची शाहू महाराजांनी मुस्लिमांच्या 10 दिव्याख्यांना मराठा बोर्डिंग मध्ये प्रवेश देऊन मुस्लिमांच्या शिक्षणाला सुरुवात केली . पुढे इसवी सन 1906 मध्ये मोहम्मेटन एज्युकेशन सोसायटीची स्थापना करून महाराज स्वतःच अध्यक्ष झाले.

**सारांश:**

भारतीय शैक्षणिक इतिहासामध्ये छत्रपती शाहू महाराजांचा शैक्षणिक सशक्तिकारण सिंहाचा वाटा आहे . बहुजनांच्या शैक्षणिक क्रांतीला शाहू महाराजांच्या धोरणामुळे बळ मिळाले यामध्ये दुमत नाही . छत्रपती शाहू महाराजांच्या शैक्षणिक धोरणाचे अंमलबजावणीआजही प्रामाणिकपणे केल्यास शैक्षणिक प्रगतासाठी चापेक्षाही पती मिळेल . परंतु सध्याचे शैक्षणिक धोरण,राजकीय नेत्यांमध्ये असलेली विभिन्नता, धर्म व शिक्षणाचे सांगड , शिक्षणाचे खाजगीकरण ही गंभीर व चिंताजनक बाब आहे . याचे गंभीर परिणाम पुढील पिढीला भोगावे लागतील हे निश्चित .

**संदर्भ सूची:**

1. डॉ. भामरे सज्जेराव ( 2013 ) : अखिल महाराष्ट्र इतिहास परिषद , संशोधन सभ यशवंत महाविद्यालय नांदेड , पृ. क्र . 335 .
2. पवार जयसिंगराव (संपा) (2001) : राजर्षी शाहू स्मारक ग्रंथ कोल्हापूर महाराष्ट्र .
3. सूर्यवंशी कृ. गो(1984) : राजर्षी शाहू राजा व माणूस पुणे . ठोंकळ प्रकाशन पुणे पृ. क्र . 383 .
4. कृता पृ. क्र. 73 .
5. पवार जयसिंगराव(2001) : राजर्षी शाहू स्मारक ग्रंथमहाराष्ट्र इतिहास प्रबोधिनी . पृ. क्र . 74 .
6. धाटावकर भास्कर(1988) : राजर्षी शाहू छत्रपती चे निवडक आदेश भाग एक मुंबई पुराभिलेख विभाग, महाराष्ट्र राज्य मुंबई . पृ. क्र. 137 .
7. शिके दादासाहेब मल्हारराव(1976) : "दलितांचे राज्य " साळुंके पी.बी, राजर्षी शाहू पौरव ग्रंथ मुंबई . महाराष्ट्र शिक्षण विभाग सचिवालय पृ. क्र. 505 .
8. जामखेडकर अ. प्र . (1989) राजर्षी शाहू छत्रपती निवडक आदेश भाग 2 मुंबई पुराभिलेखन विभाग महाराष्ट्र राज्य पृ. क्र. 20 .



## BHABANI BHATTACHARYA'S *HE WHO RIDES A TIGER*: A CRITICAL REVIEW

Subhash Kishanrao Shinde

Head Department of English, KKM College, Manwath District Parbhani

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### ABSTRACT:

*He Who Rides A Tiger*, written by the renowned post-independence Indian novelist Bhabani Bhattacharya, focuses on how racial and class inequality pushes a protagonist away from morality and towards vengeance. When that emotion begins to entrap him in a never-ending cycle of suffering and agony, his confession saves him and gives him the ultimate victory over himself. His writings make obvious the novelist's worries with the social, political, economic, cultural, and spiritual issues that India was experiencing shortly after gaining independence from the British. The purpose of *He Who Rides A Tiger* is to show how the religion and the caste system both are false. A dramatic sequence of events demonstrates the crucial spiritual direction that emerges in times of crisis, even if one is provoked to feelings of retaliation and caught in one's own trap.

**Keywords :** Religion, Caste, Revenge, Hunger, Exploitation

Author and novelist Bhabani Bhattacharya is renowned for portraying contemporary India during a time of change and rapid development. He is concerned with the truths of contemporary society, its problems, and their causes. He does not believe in 'art for art's sake'. The innovative work of Bhabani Bhattacharya is directly related to a critical period in a new nation's development. Both India's recent acquisition of freedom and the massive freedom movements that came before it had significantly altered society. The people's severe sufferings, mental anguish, and humiliation brought on by economic issues and the social evils of caste discrimination were leading them away from the cherished dreams of freedom fighters in a number of different directions. In fact, a growing political, religious, and cultural consciousness in India is closely related to the growth of novels. Bhattacharya's novels reflect his concern for India's current issues. *A Goddess Named Gold* (1960) is concerned to demonstrate the true meaning of freedom and the exploitation of the simple and innocent villagers by the greedy.

*So Many Hungers!* (1947) is about men's hungers against the backdrop of the Bengal famine and the Quit India Movement; *Music for Mohini* (1952) dramatizes the conflict between the old and new ways of life; *He Who Rides A Tiger* (1954) deals with the issues of hunger, poverty, and caste.

In 1967, Bhabani Bhattacharya was given the Sahitya Akademi award for his novel entitled *Shadow from Ladakh* (1966). This novel won the award because of his innovative way of handling the English language, which made it suitable for giving expression to the local feelings of a Bengal village. Additionally, Bhabani Bhattacharya's eye for details and flair for history combined together with his full awareness of the contemporary social, political, economic, and cultural problems.

The two most significant people in Bhabani Bhattacharya's life were Mahatma Gandhi and Rabindranath Tagore, both of them were prominent figures in their time. Their influence on the novelist could be seen clearly in all of Bhattacharya's novels. Bhattacharya was a

lifelong admirer of Rabindranath Tagore and used many of his ideas in his works. Bhattacharya, who, being the contemporary of Tagore and Gandhi, was one of the first people to recognize the potential for religious and spiritual manifestations in human behaviour. He shared their view that human beings' fundamental characteristic is their religious affiliation. Human beings are the pinnacle of God's creative endeavours and were made in the divine likeness. Therefore, just like all of Bhabani Bhattacharya's other works of fiction, *He Who Rides A Tiger* illustrates how essential spiritual qualities of man can ultimately prevail, even when faced with the gravest of difficulties. The book *He Who Rides A Tiger* sheds light on the depraved practices of a false religion that is both empty and pretentious. This religion takes advantage of the blind faith of innocent poor people, and it is also used as a tool to rob wealthy, corrupt people in order to put their troubled conscience at ease. *He Who Rides A Tiger*, much like *So Many Hungers!*, shows clearly the author's preoccupation with hunger; however, in this book, the emphasis is placed more on the moral wrongness of discrimination based on caste in addition to discrimination based on economic status. Poor people's hearts are filled with rage and a desire for vengeance due to the callous attitudes of wealthy and high-caste people.

In spite of his low caste, Kalo, the devoted father of a daughter named Chandralekha who had lost her mother, had lofty goals and expectations for his daughter's future. Even though Chandralekha experienced discrimination at school because of her low caste as she was growing up, the Bengal famine in 1943 had many more unhappinesses in store for both her father and herself. Chandralekha's father Kalo died of starvation. He was forced to leave the village in order to find work in the city, but the meager thefts he committed in order to satisfy

his hunger got him sent to jail. The daughter Chandralekha also travelled to the city, and once she arrived, her father located her in the brothel, where he was also forced to work as a pimp, and he was able to rescue her just in time. Kalo was filled with rage and frustration, which led her to the feelings of vindictiveness. At that moment, he recalled a trick that his fellow inmate Eiten had taught him to fool people of high caste and wealth. First, he transformed himself into the revered priest Mangal Adhikari, who received respect and genuflection from the upper and middle classes. In spite of the fact that the myth of caste and superiority was shattered in his hands, he continued to uphold it and use it as a source of strength. Was he using it as a defense against himself? Or perhaps the sacred thread that he wore across his chest hid his most inner soul as well.

Kalo gradually started enjoying his role and identified himself with the role. Lekha, too, got uplifted in her spiritual status, as she was advertised as the mother of seven blisses and capable of doing miracles. Still, his heart was with the poor and needy in society, and he had to change the old tradition of offering Lord Shiva's used milk to the holy river in the temple. He started giving support to temple gardener to provide milk to the hungry children of the neighborhood. Another step he took in breaking tradition, was to give shelter to Obhijit, a destitute boy. Lekha, however, felt suffocated. When Lekha adopted the orphan boy, Obhijit, the name of her unborn brother, the tension between the father and daughter reached at a high point. The fraudulent behaviour and lie became like a tiger, even when he developed in him the feeling of guilt, Mangal Adhikari could not get down from it.

On the day of Yagna, Kalo confessed his real story before the large gathering. The people of his caste rejoice at this. Lekha, too, was elated at this turn of events. To her, their roles in the

temple were as oppressive as the hold of the brothel. Kalo's confession struck at the root of the false belief of the superiority of Brahmins and the rich. He was freed from the fake roles imposed upon him from time to time and qualms of conscience. From the role of honest blacksmith and affectionate and proud father that he loved, he became a thief, a pimp, and then a fake priest. Kalo fought the unjust social system, where human dignity and honour were devalued and man was compelled to become savage and wicked. So, Kalo's turning into Mangal Adhikar was not only to earn living but to attack back at those who hurt him and the strong feeling of revenge. With the objections raising their heads and Lekha's decision to be Motichand's fourth wife made him question himself his real motives, and he decided to tear the mask of fraud and hypocrisy.

*He Who Rides A Tiger* has a similarity with *The Guide* (1958) of R.K. Narayan, as both the protagonists pose as priests. Bhattacharya's social commitment is obvious at the end of the novel, the protagonist's real purpose was to teach a lesson to society for his humiliation, not to hoard money or power. The power of spiritual inheritance, even in the so-called lower section of society, emerges in the moment of crisis. This is one of the great messages conveyed through the artistic presentation of the emotional upheavals of characters in the novel.

Like the caste system and superstitious beliefs, Bhattacharya's novels show the transition period of India, when after a long time, the newly free country had to find its path, retaining many of its precious cultural and traditional values inherited from the past while rejecting many obsolete customs and western onslaught of materialistic attitudes.

Not only the misery of the poor, the novel records the gap between the rich and poor, affluence and extreme hunger, as well as, the callous attitudes of the rich and corrupt. Since

society has labelled Kalo as a thief, a convict, and an immoral trafficker, out of indignation he decided to expose the hollowness of their religion. When he gets success, he, too, starts enjoying riches and power. Still, inside him, he could hear the roar of the cries of Bengal.

His book centers on the evils and problems as well as the author's balanced approach to life, which is demonstrated dramatically through various scenarios in place of straightforward assertions. Bhabani Bhattacharya shows, through the portrayal of some of the revolting realities of contemporary Indian society, how such cruel practices lead to the rejection of the long-cherished moral values of otherwise virtuous and honest people. The centuries-old custom that formed the basis of Kalo's internal climate is the target of his decision to wage war. Kalo, the protagonist, becomes the representative of all the marginalized people who suffer innumerable humiliations in society by fighting against the powerful and privileged and exposing them to show their real faces to themselves. Ultimately depicting the essential nobility of his soul and heart by renouncing the high position, he demonstrates the eagerness of the novelist to present an aspect of an ideal character. Kalo's story depicts the novelist's desire to present an aspect of an ideal character, acting as a mirror to represent the realistic picture of the society.

#### REFERENCES :

- Bhattacharya, Bhabani. *He Who Rides A Tiger*. Arnold-Heinemann Publishers Pvt. Ltd., 1977.
- Gupta, Monika. *The Novels of Bhabani Bhattacharya*. Atlantic Publishers and Distributors, 2002.
- Singh, Jitendra Prasad. *The Novels of Bhabani Bhattacharya: A Historical and Sociological Study*. Sarup Book Publishers, 2012.



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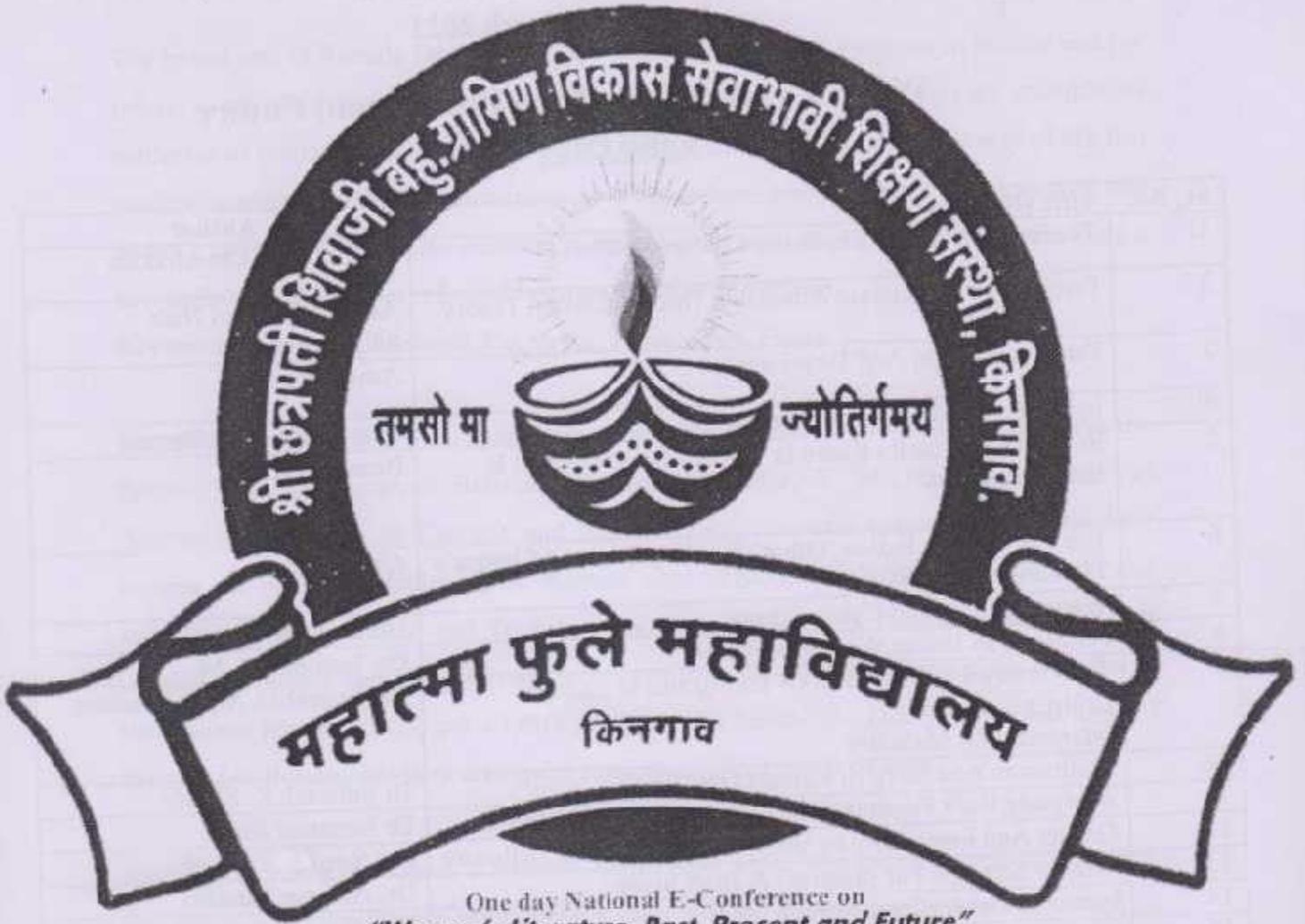
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of

**Mahatma Phule Mahavidyalaya, Kingaon**

Tq. Ahmedpur Dist. Latur  
on the Occasion of International Women's Day  
Date: 10<sup>th</sup> March 2023

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On

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**Confession and Love in Kamala Das' Poetry**

**Dr Subhash K. Shinde**  
Assistant Professor and Head,  
Department of English  
KKM College, Marwath

**Abstract:**

The lyrical cult of Kamala Das is founded on her experiences as a woman in society and her refusal to adhere to the rules established by males. The poetry of Kamala Das are examples of confessional rudiments with authentic details and she confronts the customary way of life that renders women invisible. Ecofeminism is a movement that advocates for women's and nature's equality. Kamala Das intended to disprove the myth of platonic love by providing a new definition of love that reflected her own experiences and pain.

**Keywords:** Love, Confessional, Patriarchy, Kamala Das, Poetry

Kamala Das was born in Punnayurkulam, Kerala, on March 31, 1934. Her mother was the famous Malayalam poetess Balamani Amma. Her father, V. M. Nair, worked for an American corporation in Calcutta and was a highly successful manager there. He later became the editor of *Mathrubhumi*. Kamala went to St. Cecilia's School in Calcutta and schools in Punnayurkulam and Trichur when she was young. In February 1949, she was married to Madhav Das who after his retirement from the position of Executive Director of the Reserve Bank of India, got a UNO posting in Sri Lanka. The Das family spent most of their time in Bombay but they also spent some time in Calcutta and Delhi.

Kamala Das wrote on women's freedom, unlike most poets, who preconceived their themes. Her poetry conveyed intense emotions, real pain, spectral fluctuations, bodily images and so on. Kamala Das inspired young women to reject the victim role and resist the sex exploiter's attempts to passivize and marginalize women.

Kamala Das' poetic cult is based on her experiences as a woman in society and her refusal to follow the rules set by men. Her poems are about the female self and the dryness of love in a

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society where men are in charge. She tried to go against all the rules that made it hard for women to be independent in society. Her poems use a variety of symbols to show how a woman's inner fire burns with rage against patriarchal cruelty and hostility. Kamala Das took a very unique approach to her writing. Instead of trying to hide the bad things that happened to her, she used her poetry to attack the cruel culture of patriarchy. She painted a picture of women that showed them as they really are, not as weak people who want to be on their own. In her writing, she talked about the problems, stereotypes and unfairness that women face in society. Indian English writing has always had many different parts and Kamala Das has given her readers a new way of looking at the human mind. In her poem *An Introduction*, she writes:

"I was child, and later they  
Told me I grew, for I became tall, my limbs  
Swelled and one or two places sprouted hair.  
When I asked for love, not knowing what else to ask  
For, he drew a youth of sixteen into the  
Bedroom and closed the door." (Das 148-149)

In above lines, she does not merely recount the events of her own married life; rather, she endeavors to tell the tales of the lives of all the women in India. Her complaints and sufferings are the complaints and sufferings of every woman in her nation.

Her poems showed how fierce she was and gave her a safe way to get her feelings out. Because of this, her poems are examples of confessional rudiments with real details. Her early poems were about how she wanted to be her own person which later turned into a rebellion against patriarchy. She wrote beautiful poetry with many layers of meaning and tried to be independent in society. In her writing, she doesn't shy away from talking about sexuality or expressing what a woman wants. As a writer, Kamala Das challenges the traditional way of life that makes women seem like they don't exist and puts them in the background.

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In the poem *An Introduction*, Kamala Das expresses her complete dissatisfaction with her marriage and its devastating effects. This is an open protest against her egocentric husband who does not consider anything other than the satisfaction of his sexual urges. One can observe it in the following lines from the poem *An Introduction*:

“He did not beat me  
But my sad woman-body felt so beaten.  
The weight of my breasts and womb crushed me.  
I shrank pitifully.  
Then ... I wore a shirt and my  
Brother's trousers, cut my hair short and ignored  
My womanliness. Dress in sarees, be girl  
Be wife, they said. Be embroiderer, be cook,  
Be a quarreller with servants. Fit in. Oh,  
Belong, cried the categorizers. Don't sit  
On walls or peep in through our lace-draped windows.  
Be Amy, or be Kamala. Or, better  
Still, be Madhavikatty. It is time to  
Choose a name, a role. Don't play pretending games.  
Don't play at schizophrenia or be a  
Nympho. Don't cry embarrassingly loud when  
Jilted in love ... I met a man, loved him. Call  
Him not by any name, he is every man  
Who wants a woman, just as I am every  
Woman who seeks love. In him . . . the hungry taste  
Of rivers in me . . . the oceans' tireless  
Waiting.” (149)

In her writing, Kamala Das has spoken out against the ways men treat women unfairly, as well as the social, cultural, spiritual, moral and physical problems that women face. She uses the body as a symbol to show how a woman feels about how society treats her and she also uses the body as an allegory to show how bad the men around her are. Das says that a woman's body is a symbol of her freedom and that men have taken away her freedom. As a result, Das says that women have nothing in society. As she thought that the female body was holy and caring, all of her work was about freeing the female body from patriarchy which was bound to trap women. Ecofeminism talks about a number of issues that have to do with

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women's freedom and says that women are helpless victims of patriarchy. Ecofeminism recognizes that women and nature are not treated equally, so, it fights for equality for both.

In her another poem *The Old Playhouse*, she discusses the female body as a site for patriarchal endeavours that have corrupted the idea of woman as a self-sufficient individual:

"You were pleased  
With my body's response, its weather, its usual shallow Convulsions.  
You dribbled spittle into my mouth, you poured Yourself into every nook and cranny,  
you embalmed  
My poor lust with your bitter-sweet juices.  
You called me wife, I was taught to break saccharine into your tea and  
To offer at the right moment the vitamins.  
Covering Beneath your monstrous ego I ate the magic loaf and became a dwarf."  
(151)

Das discusses the servitude women must endure, the ardent sterility of men, the wants of the feminine body and so on. Many critics who attempted to understand the poems of Kamala Das discovered that her sexism was not merely patriarchal and that her obsession with nature, birds, and trees affected her views on women. Her writing style is quite forceful, and she rebelled against patriarchal crimes in an unorthodox manner. In a number of her poems, the ecofeminist perspective, her efforts to emancipate women, unconventional expressions of love and sexual imagery are evident.

Through her works, Kamala Das sought to refute the myth of platonic love by introducing a new definition of love. She depicted love as beyond the banal sense of platonic love; she did not merely portray it as something phallic. Throughout her works, she captured her own feelings and anguish, as well as her endless efforts to realize the concept of eternal love as meaningless and the ethos of being a woman. She chastised men for exploiting the meek and delicate nature of women due to their haughty masculinity, and she developed ecofeminist viewpoints to better comprehend the subjection women experience in society. In this regard, P. Mallikarjuna Rao says,

"As she concerns herself with various facets of love, her love poetry can be divided into two phases. While in the first phase her obsessive concern with physical love is

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quite prominent, in the second, her drift towards ideal love can be discerned. By ideal love she means the kind of relation that exists between the legendary Radha and Krishna. She yearns for such a love which does not impede her impulse to freedom."  
(58)

Kamala Das is a modern and Indo - Anglian poetess. She is highly sensitive and feminine. She focuses on the sensitivity of her mind in her poems. Confession and love are predominant themes of her poetry. She expressed her feelings freely through her poems.

### Works Consulted

- Bhatnagar, Manmohan K. Editor. *Indian Writing in English Vol. IV*. Atlantic Publishers and Distributors. 1999.
- Chaudhary, Nandita. *Modern Indian English Poetry*. Swastik Publications. 2014.
- Das, Kamala. "An Introduction, The Old Playhouse." *Twenty-five Indian Poets in English*. Edited by K. S. Ramamurti, 2nd ed., Macmillan India Limited, 1996, pp. 146-153.
- Mittapalli, Rajeshwar and Pier Paolo Piciucco. Editor. *Kamala Das: A Critical Spectrum*. Atlantic Publishers and Distributors. 2001.
- Peeradina, Saleem. Editor. *Contemporary Indian Poetry in English: An Assessment and Selection*. Macmillan India Limited. 1972.
- Ramamurti, K. S. Editor. *Twenty-five Indian Poets in English*. Macmillan India Limited. 1996.
- Rao, Mallikarjuna P. "Body and Beyond: Love Poetry of Kamala Das". *Kamala Das: A Critical Spectrum*, edited by Rajeshwar Mittapalli and Pier Paolo Piciucco. Atlantic Publishers and Distributors. 2001. Pp. 58- 64.
- Tasneem Anjum. *The Poetic Odyssey of Kamala Das*. Creative Publications. 2010.

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### NEW PERSPECTIVES ON SHAKESPEARE'S POETRY

*Dr. Subhash K. Shinde*  
Assistant Professor & Head  
KKM College, Manwath  
Dist. Parbhani, MS, India

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#### **Abstract:**

*William Shakespeare is widely regarded as one of the greatest poets in the history of English literature. He is known for his use of language, his mastery of meter and rhyme and his ability to create vivid and memorable imagery. Shakespeare's poetry includes 154 sonnets and several long narrative poems, including Venus and Adonis and The Rape of Lucrece. His sonnets, which were first published in 1609, are considered some of the finest examples of the sonnet form in English literature. They explore themes such as love, time, beauty and mortality and are known for their intricate wordplay and their use of metaphor and symbolism. There are many debates about his sonnet and characters portrayed in the sonnet. The present paper aims to throw a light on his poetry and its transcendence of life and the enduring power of art as new perspectives of his poetry.*

**Keywords:** Poetry, Sonnet, Shakespeare, Dark Lady, Fair Youth, Perspective, etc.

Shakespeare wrote in a variety of poetic forms, including iambic pentameter, which consists of ten syllables per line with an emphasis on every other syllable and blank verse which is unrhymed iambic pentameter. His poetry is known for its musicality, its ability to convey emotion and its ability to capture complexities of the human experience. In addition to his sonnets, Shakespeare's poetry is also celebrated for its use of meter and rhyme. Shakespeare's influence on English language and literature cannot be overstated and his poetry continues to be studied and celebrated by scholars, poets, and readers around the world.

#### **Shakespeare's Sonnets as a Special Form of Poetry:**

Shakespeare's sonnets are a collection of 154 poems, many of which address various themes related to love, desire, beauty, and mortality. Among the most famous of these sonnets are the ones addressed to the "Dark Lady" and the "Fair Youth."

#### **Part one of Shakespeare's Sonnets:**

The "Fair Youth" sonnets (1-126) describe a young man who is the object of the speaker's admiration and affection. The speaker praises the youth's beauty, intelligence and virtues and expresses a desire for a deep and intimate relationship with him.

### Part Two of Shakespeare's Sonnets:

The "Dark Lady" sonnets (127-152) describe a woman with dark hair and skin, whose beauty is often contrasted with the traditional ideals of feminine beauty popular in Shakespeare's time. The speaker of the sonnets is deeply attracted to this woman, but also experiences feelings of jealousy, betrayal and even disgust towards her.

In both sets of sonnets, Shakespeare explores complexities of love and desire and questions traditional notions of beauty and gender roles. The sonnets reveal a deeply personal and introspective side of Shakespeare's work, as he grapples with his own emotions and experiences.

There are several arguments about Dark Lady and Fair Youth as the identities of the "Dark Lady" and the "Fair Youth" are not definitively known and there is ongoing debate among scholars and critics about who these figures might have been. Some have suggested that they were real individuals known to Shakespeare, while others have argued that they were purely fictional creations. Regardless of their true identities, the sonnets remain a powerful and enduring expression of love and desire and a testament to Shakespeare's skill as a poet and storyteller.

### Shakespeare's Sonnets and His Personal Experiences:

While Shakespeare's sonnets certainly reveal a great deal about his personal experiences, emotions and relationships, it would be inaccurate to view them as a straightforward autobiography in the modern sense of the term.

The sonnets offer glimpses into Shakespeare's personal life, including his relationships with friends, lovers and patrons. They suggest that he was deeply affected by the loss of loved ones, including his son Hamnet, and that he struggled with the demands of his artistic career and the pressures of fame and fortune.

### Writing Style of Shakespeare's Sonnets:

The sonnets of Shakespeare are highly poetic and stylized and employ a variety of rhetorical and literary devices that often obscure their meaning or suggest multiple layers of interpretation. Moreover, while many of the sonnets draw on Shakespeare's own experiences and relationships, they also contain elements of fiction, allegory and myth, which further complicate any straightforward autobiographical reading.

### Features of Shakespeare's Sonnets:

Features of Shakespeare's sonnets are known for their distinctive form and style as well as their rich imagery and complex themes. Here are some of the key features of Shakespeare's sonnet writing:

- a. **Sonnet Form:** Shakespeare's sonnets are written in the traditional English sonnet form which consists of three quatrains (four-line stanzas) followed by a final couplet (two-line stanza). The rhyme scheme is ABAB CDCD EFEF GG.
- b. **Iambic Pentameter:** Each line of Shakespeare's sonnets consists of ten syllables, arranged in a pattern of five iambs (two-syllable units in which the second syllable is stressed). This creates a rhythmic pattern known as iambic pentameter which is characteristic of Shakespeare's writing.
- c. **Rich Imagery:** Shakespeare's sonnets are known for their vivid and striking imagery, which often draws on the natural world and everyday objects to convey complex emotional and psychological states.
- d. **Complex Themes:** Shakespeare's sonnets explore a wide range of themes, including love, desire, friendship, beauty, mortality and the nature of art and poetry. They often explore these themes in a highly nuanced and complex way, drawing on a variety of literary and cultural references to create layers of meaning and interpretation.
- e. **Address to a Beloved:** Many of Shakespeare's sonnets are written as an address to a beloved, whether it is the "Fair Youth" or the "Dark Lady". These sonnets often express a desire for intimacy, love and affection, and explore the complexities of human relationships and emotions.

Thus, Shakespeare's sonnets are known for their beauty, complexity and enduring power and remain some of the most beloved and studied works of English literature. Shakespeare's sonnets are notoriously difficult to interpret definitively and while some of them do express a desire for a deep and intimate relationship with the "Fair Youth", they do not necessarily indicate a desire for marriage.

### **Marriage in Shakespeare's Sonnet:**

The social and cultural context of Shakespeare's time would have made marriage a highly desirable and expected outcome for many people, regardless of their sexual orientation or personal preferences. Marriage was seen as a way to secure social status, financial stability and a secure future, and many people, including Shakespeare, would have been aware of these cultural expectations. Therefore, it is also possible that Shakespeare's sonnets were not intended to be read as literal expressions of his desires or intentions. Many scholars have interpreted the "Fair Youth" sonnets as poetic expressions of platonic love or admiration, rather than romantic or sexual attraction.

**Shakespeare's Sonnets and Autobiographical Approach:** The true meaning and intent behind Shakespeare's sonnets remains a matter of interpretation and debate. Whatever their true meaning, the sonnets remain a testament to Shakespeare's skill as a poet and his enduring influence on English literature and culture. While the true identity of the "Dark Lady" in Shakespeare's sonnets remains a matter of debate among scholars and critics, it is generally not believed that she was intended to represent Shakespeare's wife.

Shakespeare's wife, Anne Hathaway, was significantly older than him and would not have fit the physical description of the "Dark Lady", who is described as having dark hair and skin. Moreover, while the "Dark Lady" sonnets do express a strong attraction to this woman, they also contain elements of jealousy, betrayal, and even disgust, which would be unlikely to apply to Shakespeare's wife.

Instead, it is more likely that the "Dark Lady" was a fictional or composite figure, meant to represent a certain type of woman or archetype. Some scholars have suggested that she may have been based on a real woman known to Shakespeare, while others have argued that she was simply a product of his imagination.

Regardless of her true identity, the "Dark Lady" sonnets remain a powerful and enduring expression of love, desire, and complex human emotion, and a testament to Shakespeare's skill as a poet and storyteller.

### **Theme in Shakespeare's Poetry:**

Shakespeare's poetry encompasses a wide range of themes, reflecting his deep engagement with the human experience and the world around him. Some of the most prominent themes in his poetry include:

- a. **Love:** Shakespeare's poetry explores the complexities and nuances of love in all its forms from romantic passion to friendship and familial bonds.
- b. **Time:** Shakespeare is fascinated by the passage of time and its effects on individuals and societies as well as the tension between the transience of life and the enduring power of art.
- c. **Nature:** Shakespeare's poetry celebrates the beauty and power of the natural world as well as its capacity to inspire and teach.
- d. **Power and Politics:** Shakespeare is acutely aware of the corrupt influence of power and the dangers of political ambition, and his poetry often explores the ethical and moral implications of political authority.
- e. **Identity and Selfhood:** Shakespeare's poetry grapples with questions of identity and selfhood, including issues of race, gender, class and social status.
- f. **Death and Mortality:** Shakespeare's poetry confronts the inevitability of death and the fragility of human life as well as the possibility of transcendence and immortality through art and memory.
- g. **Language and Communication:** Shakespeare is renowned for his mastery of language and his ability to use words to evoke complex emotions and ideas and his poetry often reflects on the power and limitations of language as a means of expression and understanding.

These themes are woven throughout Shakespeare's poetry and continue to resonate with readers and audiences today.

### New Perspectives of Shakespearean Poetry/Sonnet:

Shakespeare's poetry is renowned for its complexity, depth and beauty. His works continue to inspire generations of readers, scholars and artists and they offer a rich source of insight into human nature, society and culture.

- a. One perspective looking towards Shakespeare's poetry is to explore the themes and motifs that are recurrent in his works such as love, death, power, identity and language.
- b. One more perspective is to analyze the formal elements of Shakespeare's poetry such as his use of meter, rhyme and imagery. This can help understand how he creates his distinctive poetic style and how he conveys meaning through his language.
- c. A third perspective is to situate Shakespeare's poetry in its historical and cultural context. This involves studying the literary and cultural traditions that influenced Shakespeare as well as the political and social conditions of his time. This can help us understand how his poetry reflects and challenges the dominant ideas and values of his society.
- d. A fourth perspective is to explore the performance and reception history of Shakespeare's poetry. This involves studying how his works have been staged, adapted and interpreted over time as well as how they have been received by different audiences and communities. This can help us understand how Shakespeare's poetry has been transformed and reinvented for new generations and contexts.
- e. The fifth perspective is that his sonnets provide valuable insights into Shakespeare's life and artistic vision. They reveal his deep and nuanced understanding of love, desire and human relationships as well as his keen observational skills and his ability to capture the nuances of human emotion and experience in poetic language.
- f. The sixth perspective is that Shakespeare's sonnets offer a rich and complex portrait of the man behind some of the greatest works of English literature. They reveal his humanity, his passion and his enduring legacy as one of the greatest poets of all time.

Overall, there are many perspectives looking towards Shakespeare's poetry and each offers a unique perspective on his enduring legacy as a poet and playwright.

### Significance of Shakespeare's Poetry till Today:

Shakespeare's poetry remains highly significant today and centuries after his death till today. Here are some reasons:

- a. **Literary Legacy:** Shakespeare is widely considered one of the greatest poets in the English language and his works continue to be studied and admired by scholars, students and readers worldwide. His poetry is a testament to the power and beauty of language and the enduring appeal of great literature.
- b. **Cultural Impact:** Shakespeare's poetry has had a profound impact on the cultural and intellectual history of the world, shaping the way we think about love, power, politics, identity and many other topics. His influence can be seen in everything from popular culture to academic discourse, and his works continue to inspire new generations of artists, writers and thinkers.
- c. **Relevance to Contemporary Issues:** Shakespeare's poetry addresses timeless human concerns that are still relevant today such as love, power, politics and identity. His works provide insights into the human condition and offer a rich source of inspiration for those grappling with contemporary issues.
- d. **Educational Value:** Shakespeare's poetry is often studied in schools and universities as a means of developing critical thinking skills, literary analysis, and cultural literacy. His works are an essential part of the educational canon and continue to be taught and studied around the world.
- e. **Artistic Inspiration:** Shakespeare's poetry has inspired countless adaptations, interpretations and reimagining in a variety of media from stage productions to films, television shows and graphic novels. His works offer a rich source of artistic inspiration and a platform for creative expression across a wide range of genres and formats.

Thus, Shakespeare's poetry remains highly significant today due to its literary, cultural, intellectual, educational and artistic value as well as its timeless relevance to the human experience. To conclude, Shakespeare's sonnet writing style is characterized by its use of traditional sonnet form, iambic pentameter, rich imagery, complex themes, and an address to a beloved. His sonnets have had a profound impact on English poetry and continue to be studied and admired today. The use of sonnet form, with its strict rhyme scheme and structure, has influenced many poets since Shakespeare's time. The use of iambic pentameter, with its regular rhythm and emphasis on the natural flow of spoken language, has also been widely imitated.

Shakespeare's use of rich and vivid imagery to convey complex emotions and ideas has been particularly influential. Many modern poets continue to draw on Shakespeare's imagery and language to create powerful and evocative poetry. Similarly, the themes explored in Shakespeare's sonnets, including love, desire, beauty and mortality, continue to resonate with readers today. His sonnets offer insights into the complexities of human relationships and emotions that are still relevant in the modern world. Shakespeare's sonnet writing style has had a lasting impact on English poetry, and his works continue to be studied and admired today for their beauty, complexity and enduring relevance.

#### References

- Burrow, Colin., editor. *The Complete Sonnets and Poems*. Oxford University Press, 2002. Print.
- Dobson, Michael and Stanley Wells., editors. *The Oxford Companion to Shakespeare*. Oxford University Press, 2001. Print.
- Duncan-Jones, Katherine., editor. *Shakespeare's Sonnets*. Bloomsbury Arden. 2010. [https://engineeringwithrajdocsupporter.files.wordpress.com/2015/05/william\\_shakespeare\\_shakespeares\\_sonnets\\_arden.pdf/Web](https://engineeringwithrajdocsupporter.files.wordpress.com/2015/05/william_shakespeare_shakespeares_sonnets_arden.pdf/Web).
- Callaghan, Dymna, *Shakespeare's Sonnets*. John Wiley & Sons, 2008. Print.
- Honigmann, E.A.J. "There is a World Elsewhere": William Shakespeare, Businessman" *Images of Shakespeare*. edited by Werner Habicht, Newark: U of Delaware P, 1988. pp40-46. Print.
- Neil, Samuel. *Shakespeare: A Critical Biography*. London: Houlston and Wright. 1861. Print.
- Rollins, H. E., editor. *A New Variorum Edition of Shakespeare: The Sonnets*. Philadelphia: J. B. Lippincott & Co. 1944. Print.
- Schoenbaum, Samuel. *William Shakespeare: A Documentary Life*, Oxford University Press, 1975. Print.
- Dautch, Aviva. (30 March 2017). *Shakespeare. Sexuality and the Sonnets*. British Library. Retrieved 17 April 2023. <https://www.bl.uk/shakespeare/articles/shakespeare-sexuality-and-the-sonnets/Web>.



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*Authored By*

**Dr Subhash K Shinde**

Assistant Professor and Head, Department of English, KKM College, Manwath District Parbhani

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## CHARACTERIZATION OF WOMEN IN BOLLYWOOD MOVIES

Dr Subhash K Shinde Assistant Professor and Head, Department of English, KKM College,  
Manwath District Parbhani

### Abstract

Films are not only made for entertainment but also work as the mirror of our society which depicts the reality of many incidents happening around us and make us aware of many realities of the society. For some time now, many women-centric films have been made in Bollywood, which work as a sarcasm on the conservative thinking of the society by raising questions while exposing the evil practices in the society. The history of Bollywood cinema is more than a hundred years old and important films have been made from time-to-time on several issues including those of women. As an audio-visual art medium, the subject matter of films also portrays the discriminatory views and thoughts and prejudices of the society about women. The current work aims to focus a light on Bollywood movies and woman characterization in them.

**Keywords:** Entertainment, Film, Characterization, Indian Cinema, Bollywood Movies, Woman Characters, Actress etc.

**Introduction:** Films, like literature, are (partly or completely) 'documents of their time'. If we talk about issues related to women and their portrayal in films, there is a huge gap. Where the constitutional institutions talk about equality and protection of women's interests, give decisions in their favour, on the other hand, in the name of tradition, people are not ready to give equal rights to women. Cinema in the western world started in the late 19th century around 1887-88. It was an early period and technically, work continued on many aspects related to cinema. At the end of the 19th century, cinema was emerging as a very influential medium in Europe and America. This was the same time when orchestras, symphonies, etc., especially in Europe, were influencing the minds and hearts of the masses. In India, in 1913, Dhundiraj Govind Phalke alias Dadasaheb Phalke first introduced Indians to cinema and the film was *Raja Harishchandra*. It was a silent film, for the production of which Dadasaheb Phalke had gone to London for several days. He had to bring the film's reels and other materials from London. It is necessary to mention here that there was no female artist in *Raja Harishchandra*.

It is said that the first Indian female artist was Durgabai Kamat, who was introduced by Dadasaheb Phalke in his second film *Mohini Bhasmasur* (1913), along with Durgabai's daughter Kamalabai Kamat. It was a successful film and did decent business in many cities like Mumbai, Lahore, Calcutta and Dhaka.

In every genre of cinema i.e. historical, mythological, social or zonal, women's problems, man-woman relationship, woman's sexuality, women's sexual expressions, women's mental, physical and sexual exploitations, women's bodybuilding, compelling presentation of women's beauty, etc. have been attractive elements of cinema. The presentation of women in cinema has always been from the point of view of men - this is an important feminist concept. Hindi cinema is generally known as Bollywood. This is the special recognition of India's Hindi cinema industry which has got on the lines of Hollywood. Like Hollywood, the term 'Bollywood' has now become stereotyped for the Hindi cinema world. The arrival of women in cinema is a living example of women empowerment. The image 1.1, is the image of Bollywood popular actresses who appeared in films at the beginning of Bollywood movies.



**Image 1.1 The Popular Women Actresses of Bollywood at the Beginning of Cinema**

The above images are of popular actresses of Bollywood during 1960s and 1970s. Today, on one side of the country has the issue of Sabarimala where women are not allowed to enter the temple despite the decision of the Hon'ble Supreme Court. The interesting thing is that women themselves are at the forefront of protesting. On the other hand, the debate is also hot on the issue of triple talaq, while the Hon'ble Supreme Court has given a decision in favour of women in this matter as well. In both cases, women in favour of patriarchal ideology can be seen strongly opposing the right to equality. The ruling male class does not want to let its age-old supremacy diminish, so it opposes and gets the decisions taken in favour of women done even after court orders. Now-a-days, television serials have created such a superstitious atmosphere of ghost-ghost-witch every night that a woman is publicly paraded naked in the market as a witch or sorceress and beaten to death. A society that does such vile and reprehensible acts is flourishing among us. It is very harmful and shameful for a healthy society to gather a crowd and tie lovers to a tree, beat them, humiliate them and consider it necessary work to save respect and tradition. Few selected Bollywood films do raise these issues of Indian women but their number is negligible. Insiya Malik, a minor girl in Aamir Khan's *Secret Superstar*, not only advises her mother to get a divorce to free herself from her abusive and violent father, but also succeeds in getting a divorce at the climax of the film. Mother and daughter celebrate their victory as a war won against patriarchy. Watching this movie gives a pleasant feeling for woman and child who rescued from the exploitation of male i.e. husband and father.

Today, women are active in acting, film production and direction, technical cooperation and all related fields without any taboos and stereotypes. This situation was not there at the beginning of Indian cinema. In that era, cinema was considered a taboo and an immoral area for women. Even watching movies were prohibited for women. In dramas too, male actors used to act as female characters. The same situation existed for female characters during the heyday of cinema. When Dadasaheb Phalke made the film *Raja Harishchandra* in 1913, no female artist was ready to act for the role of Queen Taramati. Even from courtesans, he did not get any woman to act in the film. At the same time, he came to know about a Marathi drama company which was suspending its play performance for some time. He got help from there and was introduced to Kamlabai Gokhale. Dadasaheb Phalke made her act in his next film *Mohani Bhasmasur*. In this way, Kamalabai and her mother Durgabai Kamat got the distinction of being the first female artists of the Indian cinema.

Undoubtedly, due to socio-cultural and political efforts, there has been continuous improvement in the condition of women and their representation has also appeared in Bollywood films. The film *Street /*

*Woman*, released in the year 2018, presented the issue of women's respect in a sensitive manner by covering it with humour and mystery, which, along with entertaining the audience, also treated the secondary status of women in the society and considering them as mere objects of enjoyment and also warns about its side effects.

In these films, not only discrimination against women, but also equality has been given priority. The current work is about such movies which have raised the issue of women's equality while taking a dig at the patriarchal norms in cinema.

***Dil Dhadakne Do* (2015):** The film *Dil Dhadakne Do* is a family drama, but one scene of this film manages to leave a mark in the minds of many viewers. Where Farihan Akhtar, who plays the role of Sunny Gill. He educates Ayesha's (Priyanka Chopra) husband i.e. Rahul Bose about the idea of feminism that a strong woman does not need any man's permission to pursue a career and live life on her own terms. This scene takes a heavy toll on patriarchy and gives a social message that be it a man or a woman, everyone has every right to pursue a career of their choice and lead a life of their own.



Image 1.2 The Poster of *Dil Dhadakne Do*

***Thappad / Slap* (2020):** In many sections of Indian society, where marital rape and serious domestic violence are considered as an 'internal matter' of the family, is it a common thing to get slapped which is called as Thappad in Hindi? The title of the movie has been presented in the best way in it. The slap here in the movie acts as a wake-up call for Taapsee, reminding her how she devoted herself in serving for her husband's needs and made his identity her own. The film explores the basis of male-female relationship and gender equality.

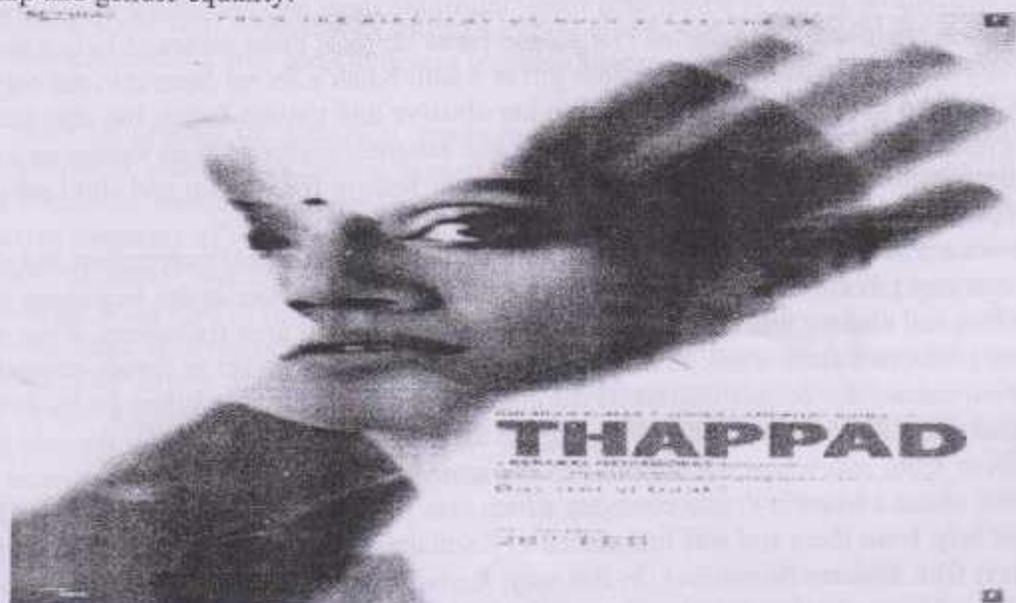


Image 1.3 Poster of Bollywood Movie- *Thappad*

***Lipstick Under My Burkha* (2016):** *Lipstick Under My Burkha* starring Konkona Sen and Ratna Pathak-Shah is one of the strongest feminist movies in Bollywood. The female character of this movie,

which was released in 2016, is seen breaking many conservative chains. This made it difficult to summarize all these path-breaking female characters in the movie. The most common factor among the women in the story of this film was that they all seek fulfilment and to fulfil their desires they become free from fear and shame. The female lead in the film is portrayed exactly as she wants to be for herself. The lead role of the film is seen fighting for the joy, freedom and self-expression in life and the desire to break through the frustration to get equality.



**Image 1.4** Image Bollywood Movie *Lipstick Under My Burkha*

Instead of society, they are women who give more priority to their 'self', who do not hesitate to take risks to keep their public space safe and for the sake of rights.

**Guide (1965):** Long ago, the heroine of the film *Guide* openly challenged the traditional institution of marriage by rebelling for love, leaving her husband and running away with the tourist guide. In *Guide*, Raju, the guide (Devanand) garners sympathy for himself by placing the entire blame on Rosie, inverting the character of Rosie (Waheeda Rehman) from the plot of the novel (*The Guide* by R.K. Narayan). In fact, this portrayal is different and opposite in R. K. Narayan's novel. Male characters have taken advantage of the helpless condition of women in films. Most of the stories of films are fabricated like this. Many such references are visible in Hindi films which depict the helplessness of women who are the victims of male supremacist psychology.

**Dangal (2016):** The film *Dangal*, which gives a wonderful phrase like 'Mhari choriyan chhoron se kam hain kya / my daughters are not any less than men', whose passionate wrestler father, despite listening to the world's taunts and evil, considers his daughters as international level wrestlers, is an inspiring film. This film works to bridge the age-old gap between men and women and works to give a positive message not only to India but to China and the world.

Apart from above, Aamir Khan in his second film *Secret Superstar* (2017) also shows the struggle of a teenage Muslim girl who is a talented singer against the patriarchy. The heroines of the films *Badrinath Ki Dulhania* (2017) and *Shaadi Mein Zaroor Aana* (2017) take independent decisions considering their career and work of choice more important than love and marriage.

Sonam Kapoor has played the role of a lesbian girl in the 2019 film *Ek Ladki Ko Dekha Toh Aisa Laga*, in which her father Anil Kapoor has also acted. *Veere Di Wedding* (2018) four girlfriends enjoy life in a cool way and don't need a man to be with them.

*Tunhara Sulu* (2017), despite being new in its subject matter, portrays the sexuality of women served through the voice of a radio jockey. A typical housewife from Mumbai, a metropolis who is considered vulgar and unfit, she is recognized as a radio jockey of the night who entertains frustrated men because of her unique style of presentation.

The dancing women of *Anarkali of Aarah* (2017) and the urban working girls of *Pink* (2016) who are considered promiscuous for staying out late night, going to parties, laughing and talking to men and are openly enjoyed by influential men.

Hindi films are all suffering from male supremacist gland. *Dil Diya Dard Liya* (1966) is a Hindi adaptation of the English classic Emily Bronte's *Wuthering Heights* (1847), starring Waheeda Rehman (Roopa) as the novel's heroine Catherine, Shankar / Raja Saheb (Dilip Kumar) as her child lover Heathcliff. Thakur agrees to the marriage under the pressure of Ramesh's friend Satish (Rehman) thinking that he is dead. In fact, film makers made many such films to show the supremacy of Indian culture that a girl in western clothing and living is not acceptable, she has to wear saree and transform into ideal sister and daughter-in-law, in *East and West* (1970), heroines of films like Saira Banu, *Deewaar* (1975) and *Julie* (1975) also become acceptable only by being cultured girls. Mother- Nirupa Roy, Sushma Seth, Rakhi, Reema Lagoo, Aruna Irani are the respected mothers of the film screen whom every Indian recognizes.

In the 1935 Hindi film *Hunterwali*, fearless Nadia (Mary Evans) played the role of a stunt-performing Anglo-Asian heroine. This female-oriented film was a tremendous success. As its sequel, *Hunterwali Ki Beti* was made in 1943. Her roles are the super cabaret dancer, 'Helen' served to dispel her years of frustration by showing Indian men's access to Anglo-Asian women on screen in the independent India.

**Conclusion:** Thus, there is a separate category of women character-oriented films in Hindi films. The happy and sad sides of women's life have been depicted equally in Hindi films. In the cinema, the glorified form of qualities like sacrifice, affection, motherhood, love, dedication of the female character has been prominently presented. At the same time, she was also portrayed as a vicious, greedy, scheming, fierce, wrathful, vindictive, immoral, fleshly, malevolent, sensual, and audacious villain. Both depictions contain elements of exaggeration and fantasy. The form of the idealistic 'goddess' of a woman is a moralistic populist image of an Indian woman, which the society aspires for, but its image fades in the mirror of reality. In fact, Hindi (Indian) films are written from a male perspective, barring a few exceptions. Even if the producer director himself is a story writer and an actor or a hero, he often creates the story according to himself. But the cinema which prominently raises women's issues is still seen in Bollywood in very less quantity. Love-love, dance-singing, caste-religion, school-college, guitar, family hero-heroine without any issue and struggle are engaged in becoming billionaires with the help of glitter and visual effects. Dalit-tribal and urban lower-middle-class working women who struggle for water-forest-land and everyday life are missing from the cinema screen. Despite all the changes, the Indian society is still not ready to come out of the confines of caste-religion and under the influence of the hate principle of Love-Jihad, girls are being forced to save their so-called honour by rejecting the 'right of choice' of women engaged in giving ruthless punishments.

### References

- Akhtar, J., and N. M. Kabir. *Talking Films: Conversations on Hindi Cinema with Javed Akhtar*. Oxford University Press, USA, 2002.
- Dangal*. Dir. Nitesh Tiwari. Adapt. Nitesh Tiwari, Piyush Gupta, Shreyas Jain and Nikhil Meharotra. Perf. Amir Khan, Sakshi Tanwar, Fatima Sana Shaikh, Zaira Wasim, Sanya Malhotra and Aparshakti Khurana. UTV Motion Pictures, 2016.
- D'Cunha, Suparna Dutt. "'Why 'Dangal' Star Aamir Khan Is The New King of Bollywood'." *Forbes*, 23 Jan. 2017. Accessed 12 Feb. 2023.
- Dil Dhadakne Do*. Dir. Zoya Akhtar. Adapt. Reema Kagti, Zoya Akhtar and Farhan Akhtar. Perf. Anil Kapoor, Shefali Shah, Priyanka Chopra, Ranveer Singh, Anushka Sharma and Farhan Akhtar. Eros International, 2015.
- file:///C:/Users/Admin/Downloads/Bose\_gwu\_0075M\_10241.pdf
- Forbes*, www.forbes.com/sites/suparnadutt/2017/01/23/why-dangal-star-aamir-khan-is-the-new-king-of-bollywood/?sh=698522cc753d. Accessed 12 Feb. 2023.
- Gokulsing, K. M., and Wimal Dissanayake. *Indian Popular Cinema: A Narrative of Cultural Change*. Stylus Publishing, LLC., 2004.
- Guide*. Dir. Vijay Anand. Adapt. Vijay Anand. Perf. Dev Anand and Waheeda

- Rehman. Navketan Films, 1965.
- Hindu College Gazette Web Team. "Changing Face of Women's Representation in Hindi Cinema." *HCG*, 6 Mar. 2023, [www.hinducollegegazette.com/post/changing-face-of-women-s-representation-in-hindi-cinema](http://www.hinducollegegazette.com/post/changing-face-of-women-s-representation-in-hindi-cinema)
- Hungama, Bollywood. "Akshay Kumar Meets Jackie Chan in Hong Kong." *Bollywood Hungama*, 20 May 2004, [www.bollywoodhungama.com/news/bollywood/akshay-kumar-meets-jackie-chan-in-hong-kong/](http://www.bollywoodhungama.com/news/bollywood/akshay-kumar-meets-jackie-chan-in-hong-kong/). Accessed 12 Feb. 2023.
- Jones, Matthew. "Bollywood, *Rasa* and Indian Cinema: Misconceptions, Meanings and *Millionaire*, *Visual Anthropology*, vol. 23, no. 1, 2009, pp. 33-43. <<https://www.tandfonline.com/doi/abs/10.1080/08949460903368895>>.
- Lipstick Under My Burkha*. Dir. Alankrita Shrivastava. Adapt. Alankrita Shrivastava. Perf. Ratna Pathak, Konkona Sen Sharma, Aahana Kumra and Plabita Borthakur. ALT Entertainment, 2016.
- Rangan, Baradwaj (8 January 2017). 'Masala redux'. *The Hindu*. Accessed 12 Feb. 2023. <<https://www.thehindu.com/entertainment/movies/Masala-redux/article17004306.ccc>>.
- Thappad / Slap*. Dir. Anubhav Sinha. Adapt. Anubhav Sinha and Mrunmayee Lagoo Waikul. Perf. Taapsee Pannu. AA Films, 2020.
- "Urban Movies: The diversity of Indian cinema by Christian Jungen." [fipresci.org/report/urban-movics-the-diversity-of-indian-cinema-by-christian-jungen/](http://fipresci.org/report/urban-movics-the-diversity-of-indian-cinema-by-christian-jungen/).



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**ISSUES AND CHALLENGES AHEAD ACADEMIC LIBRARIES**

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**Dr. Sachin N. Chobe**

Librarian, K.K.M. College, Manwath, Dist: Parbhani

Corresponding Author - Dr. Sachin N. Chobe

Email-[sachinchobe30@gmail.com](mailto:sachinchobe30@gmail.com)

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**Abstract:**

*In this research article, there is a deep and valuable explanation about the various problems before Librarian, such as purchasing of reading material, library staff, library building and library space, library software low fund, of library, readers passiveness etc.*

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**Introduction:**

There are lot of problems and difficulties occurs, when any one do the work of any kind of institution which is related to the public. The institution which is related to the people has to face such kind of problems more than any other institution library is one of such institution related to societies. Dr. S.R. Ranganathan, the founder father of Library Information-Science, has said that the nature and scope of library-science is continuously changing and progressing. Changes, such as reading material, technology, new methods of exchange of books or providing facilities to readers. The library has changed and developed rapidly. Also the new issues and challenger are emerging. The librarian has to face the challenges and difficulties frequently. He tackles the various problems daily. Finally all blames have to face the librarian only. But other factors are also responsible for the problems before library.

The following difficulties or problems have to face librarian.

**The Problems Relating to Reading Material:**

**1) Textbooks:**

Textbooks are essential for academic libraries. The purchasing of textbook for Art, Commerce and Science streams is compulsory for library. Junior and Senior College students need various kind of books to fulfil the students demand, large quantity of textbooks have to maintain in library due to lack of funds these purchasing becomes impossible

**2) References Books:**

Various kind of reference book are essential for college library. Text book can be understood with the help of reference book. For purchasing of these references books the sufficient fund must be provided.

Lack of fund is the prominent difficulty in references books purchasing. The Government, the U.G.C. the administration should provide sufficient fund to libraries

**3) Increasing Demand of Periodicals and their Costly Subscription:**

Subject related periodicals must be kept in library to updating knowledge. But the prices are increasing rapidly. So,

maintaining periodicals is a challenging task. Timely publication of periodicals is a problem also. After dispatching from publisher periodical can't reach in time to the library.

#### 4) E-Books, E- Journals Issues:

UGC suggested the professor and students should use E-Books, E-Journals, INFLIBNET has provided E-Books and E-Journals in Rs 5800 only. But students and college teaching staff ignore these facilities. Their response is so poor. This is one of the problems.

#### Issues Relating to Library Staff:

There are insufficient staffs working in libraries today. Number of staff members necessary for daily work. Because of this problem following difficulties arises

- 1) Untrained staff working improperly.
- 2) Various posts are empty, did not appoint proper candidate.
- 3) Other works, then library works have to do library staff.
- 4) Staff does not work effectively and sincerely.
- 5) Lack of training facilities for library staff.
- 6) Modern technology, Computer handling, Communication methods, there things are not be seen in library staff.
- 7) Government do not approved the essential staff for library.
- 8) So, this insufficient and untrained staff cannot fulfill the demands of students.

#### Issues Related to Fund Availability:

In recent years, there is a sharp decrease of fund allocation to libraries. The purchasing of necessary books, periodicals, textbooks is becoming difficult day by day

Provided fund not sufficient for following things.

- 1) Purchasing of furniture
- 2) Important but costly reference books
- 3) Computers, Xerox Machine, Printer cannot be purchased due to low availability of funds
- 4) Important Technology like RFID has to be ignored due to lack of funds
- 5) Valuable E-resources can't be provided by the librarian
- 6) The damaged books can not send for book-binding due to lack of fund

#### Need of Big Space for Library:

Today a library is a very important institute. It needs big pleasant space. The building of library should be big. Because the number of books, periodicals, newspapers, references books increasing rapidly. For these reading materials a big building needed for library

Also, readers are increasing so big reading room (hall) should be there.

#### Passiveness of Readers:

The present society ignoring knowledge. Readers not coming to read newspaper. Acceptance of new ideas, knowledge is ignored. Only exam related books are read. E-Books, E-Journals, reference books are ignored by readers. This is the major problem of today.

#### Problems of Software:

In every library, software frequently use. Software is the working of library. But some problems are seen there.

- 1) Unavailability of upgrade computers for new software.
- 2) Lack of trained staff for use of new software.
- 3) No supply of electricity. The problem of load shedding arises.

- 4) Fluctuation of electricity damages computers. So the working is badly affected.
- 5) Few software need internet, without internet they cannot work.
- 6) After some months or years, the barcode cannot be read by machine.
- 7) Sometime data can be deleted on a click. This valuable data very hard to regain.
- 8) Continue training is essential for changes in software, but the proper training is unavailable.
- 9) Technical problems in software cannot repaired in short time.

**Other Difficulties the Librarian has to Face:**

- 1) Some students damage the books, do not handle properly loose the books.
- 2) Many important E-resources need to be done but, lack of fund and untrained staff are main obstacles, in this process.
- 3) Periodicals do not send in time. There is always a delay.
- 4) Increasing prices of newspapers, periodicals etc. Put pressure on short funds.
- 5) The librarian has to perform other works also, such as invigilation in exam period, work as a cap-officer, other administrative works, etc. This is also a big problem.
- 6) No funds are there for book-binding.

- 7) Appointment of library staff not done.

**Conclusion:**

The librarian has to face such vast obstacles during his day to day duty. But, administration can solve these problems if they want. Today, librarian is working under tremendous pressure of these problems, solving problems on his level.

**Reference Books:**

- 1) Buwa G.A. (2009) "Granthalay Mahiti Shastra Nav Vichar Pravah". Shri Sai Prakashan, Nagpur. Page No. 30 to 48
- 2) Gaikwad, M. (2014). Library Automation in Academic Libraries: Need, Process and Prospects [https://scholar.google.com/citations?view\\_op=view\\_citation&hl=en&user=hYAbHG8AAAAJ&citation\\_for\\_view=hYAbHG8AAAAJ:Tyk-4Ss8FVUC](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=hYAbHG8AAAAJ&citation_for_view=hYAbHG8AAAAJ:Tyk-4Ss8FVUC)
- 3) Parikh Gangadhar (2006) "GranthalayMahiti Shastra Parichay", Universal Publication Pune. Page No. 38 to 90.
- 4) Vilas Jadhav, Mahesh Gaikwad (2014) Challenges before Academic Library Professionals Working in Maharashtra. 377-381 accessed from [https://scholar.google.com/citations?view\\_op=view\\_citation&hl=en&user=hYAbHG8AAAAJ&citation\\_for\\_view=hYAbHG8AAAAJ:hqOjcs7Di88C](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=hYAbHG8AAAAJ&citation_for_view=hYAbHG8AAAAJ:hqOjcs7Di88C)



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## वाचन साहित्य रद्दबातल धोरण - एक चिकित्सक अभ्यास

डॉ. एस.एन. चोबे

ग्रंथपाल

के.के.एम. महाविद्यालय, मानवत  
sachinchobe30@gmail.com

सार :-

संबंधीत लेखात वाचन साहित्य रद्दबातल धोरण यावर एक प्रकाशझोत टाकला आहे. सुरुवातीला ग्रंथाचे महत्त्व विशद करून या धोरणाची व्याख्या व महत्त्व स्पष्ट केले आहे. तसेच ही प्रक्रिया सुरुवातीपासून कशी पार पाडावी, यामध्ये कोणत्या घटकाचा विचार करावा, ग्रंथ रद्दबातल करतांना कोणते वाचन साहित्य रद्दबातल करावे याचे सविस्तर विवेचन केले आहे.

प्रस्तावना :-

ग्रंथालयाचा ग्रंथ व वाचक हा आत्मा आहे. कारण या दोन्ही घटकाशिवाय ग्रंथालय ही संकल्पना पूर्ण होणार नाही. म्हणून ग्रंथ व वाचकाविना ग्रंथालयाचा विचार शक्य नाही.

ग्रंथालयाचा प्रकार कोणताही असो शैक्षणिक ग्रंथालय, सार्वजनिक ग्रंथालय, संशोधन ग्रंथालय, विशेष ग्रंथालय या सर्वांनाच ग्रंथ खरेदी करावे लागतात. ग्रंथालयाच्या स्थापनेचा कालावधी जितका पुर्वीचा तितकी ग्रंथ संख्या जास्त असते.

ग्रंथालय शास्त्राच्या पाचव्या सुत्रप्रमाणे ग्रंथालय हि वधिष्णु संस्था असल्याने ग्रंथालयाच्या वाचन साहित्या मध्ये मोठ्या प्रमाणात वाढ होत असते. यामुळे वाचन साहित्याचा मोठा भरण्या यात असतो. परंतू काही वर्षांनंतर काही साहित्याचे महत्त्व संपते, काही वाचन साहित्य खराब होते. काही वाचन साहित्य कालबाह्य होते. असे वाचन साहित्य ग्रंथालयातून रद्दबातल करावे लागते. यासाठी ग्रंथालयातील अनावश्यक साहित्य रद्दबातल करणे काही विशिष्ट वर्षांनंतर करावे लागते. ग्रंथालयाचे कामकाज सुरळीत चालण्यासाठी हि एक महत्त्वाची बाब आहे.

weeding out यासाठी श्री.के. अवस्थी यांनी Discard हा शब्द वापरला आहे. कपेवंतक याचा अर्थ निरुपयोगी अथवा कामास न येणारी वस्तु फेकून देणे असा होतो. weed वनज याचा अर्थ निरुपयोगी साहित्य निवडणे बाजूला काढणे असा होतो.

### १. व्याख्या

ग्रंथ रद्दबातल करणे :- ग्रंथालयातील नको असलेली वाचन साहित्य ग्रंथालयातून ठरवून दिलेल्या प्रक्रियेनुसार बाहेर काढणे यास ग्रंथ रद्दबातल करणे असे म्हणतात.

### २. वाचन साहित्य रद्दबातल धोरणाची गरज :-

ग्रंथालयातील ग्रंथसंग्रह अद्यावत ठेवण्यासाठी ज्ञानसाहित्याच संग्रह विकसीत करण्यासाठी व वाचन साहित्याचा प्रभावी पणे उपयोग होण्यासाठी अनावश्यक वाचन साहित्य ग्रंथालयातून रद्दबातल केले जाते त्यामुळे ग्रंथालयाच्या कामात सु-सुत्रता येते.

### ३. वाचन साहित्य रद्दबातल प्रक्रिया :-

ग्रंथालयातील प्रत्येक ग्रंथाला अनन्य साधारण महत्त्व आहे. ग्रंथालय शास्त्राच्या नियमा प्रमाणे १) ग्रंथ हे उपयोगासाठी असतात २) प्रत्येक ग्रंथास त्याचा वाचक मिळावा ३) प्रत्येक वाचकास त्याचा ग्रंथ मिळावा या सुत्रात ग्रंथाचे महत्त्व अनन्य साधारण आहे असे सांगितले. त्यामुळे ग्रंथ रद्दबातल करणे हे अत्यंत जोखमीचे कार्य आहे. कोणते ग्रंथ रद्दबातल करावे, कोणी करावे, कधी करावे यात प्राचार्य, संस्था चालकाची भीती यामुळे खालील प्रक्रियेद्वारे हे कार्य करावे.

#### १) प्रस्ताव मांडणे / ठराव घेणे :-

ज्याही वेळेस वाचन साहित्य रद्दबातल हि प्रक्रिया राबवायची आहे. त्या वेळेस प्राचार्य मान्यता घेवून ग्रंथालय समिती समोर या संदर्भात ठराव घ्यावा.

#### २) कोणते वाचन साहित्य रद्दबातल करावे :-

या संदर्भात लिखित कोण कोणते वाचन साहित्य रद्दबातल करावे हे ठरवून घ्यावे जसे अभ्यासक्रमानुसार बांद झालेले ग्रंथ, जिर्ण झालेले ग्रंथ, फाटलेले ग्रंथ.

#### ३) कोणत्या वेळेला ग्रंथ रद्दबातल करावे :-

ग्रंथ रद्दबातल प्रक्रिया ही ग्रंथ देवाण घेवाण चालू असतांना न करता उन्हाळी किंवा दिवाळीच्या सुट्यात करावी.

**४) कोणी रद्दबातल करावे :-**

ग्रंथ रद्दबातल प्रक्रियेत केवळ ग्रंथालय कर्मचारी असावे किंवा ज्या कर्मचाऱ्याला ग्रंथालय माहिती शाखाचे ज्ञान आहे असा कर्मचाऱ्याचा या प्रक्रियेत समावेश असावा.

**५) ग्रंथबातल प्रक्रियेत ग्रंथाच्या नोंदी खालील तक्त्यात घ्यावा :-**

अ.क्र.	लघुवण	ग्रंथाचे नाव	लेखकाचे नाव	प्रकाशन वर्ष	किंमत

वरील तक्त्यात नोंदणी केल्याने वरील संपूर्ण प्रक्रियेची माहिती विना विलंब कळते.

**रद्दबातल करावयाचे साहित्य :-**

ग्रंथालयातील कोणकोणते वाचन साहित्य रद्दबातल करावे याची सविस्तर यादी जे.एस. शर्मा (१९७८) श्री. के. अवस्थी (१९८२) तसेच एच.आर. चोपरा (१९९४) यांनी या संदर्भात सविस्तर मार्गदर्शन केले आहे.

**१) क्रमीक ग्रंथ :-**

अकरावी ते पी.जी. पर्यंत एक ठरावीक ५ ते ६ वर्षांनंतर अभ्यासक्रम बदलतो या सर्व अभ्यास क्रमांची पुस्तके ग्रंथालयास घेणे क्रमप्राप्त आहे हा अभ्यासक्रम बदलल्यानंतर हे ग्रंथ जर उपयोगात येत नसतील तर अशी ग्रंथ रद्दबातल करावे.

**२) जीर्ण संदर्भ ग्रंथ:-**

बऱ्याच ग्रंथालयाची स्थापना घेवून ५०/७५/१०० वर्षे झालेले आहेत अशा वेळी जीर्ण झालेले हाताळता न येणारे संदर्भ ग्रंथ रद्दबातल करावे.

**३) अनेक प्रती असलेले ग्रंथ:-**

एका ग्रंथाच्या अनेक प्रती ग्रंथालयात असतात. या सर्व प्रती वाचक वाचत नाही. त्यामुळे अशा ग्रंथाला दोन प्रती ठेवून बाकीच्या प्रती रद्दबातल कराव्यात. कारण जास्तीचा उपयोग न येणाऱ्या प्रती संग्रही ठेऊन उपयोग नसतो.

**४) ललीत साहित्य अन्य साहित्या:-**

कथा, कादंबरी, कविता संग्रह, आत्मचरित्र असे ललीत साहित्याचा भरणा ग्रंथालयात असतो. १५ ते २० वर्षांनंतर हे ललीत साहित्य / तसेच अन्य इतर साहित्य खराब होते, जीर्ण होते असे वाचन साहित्य रद्दबातल करावे.

**५) पाने फाटलेले ग्रंथ:-**

ग्रंथ वापरून वापरून खराब होतात. त्याची पाने गळतात तसेच काही विद्यार्थी-विद्यार्थिनी मुद्दाम ग्रंथाचे मधले पाने फाडतात. यामुळे त्या ग्रंथाची उपयोगिता कमी होते. अनेक वाचकांना ग्रंथ समजत नाही यामुळे असे ग्रंथ रद्दबातल करावे.

**६) विज्ञान व तंत्रज्ञानावरील ग्रंथ:-**

विज्ञान तंत्रज्ञान या ज्ञान शाखेतील वारंवार संशोधन होऊन नव नवीन माहिती समोर येते. यामुळे १० ते २० वर्षांनंतर जुने कालबाह्य झालेले ग्रंथ रद्दबातल करून नवीन ग्रंथ खरेदी करावेत.

**७) वार्षिक:-**

ग्रंथालयात संदर्भ ग्रंथ या प्रकारात वार्षिके या घटकामध्ये पंचांग, विविध संस्था/ संघटनांचे अहवाल, राज्यशासन/ केंद्र शासनाचे विविध अहवाल ग्रंथालयात येत असतात. या अहवालाचे महत्व वर्ष संपल्यानंतर किंवा ५ ते १० वर्षांनंतर संपते. यामुळे असे वार्षिके सहज रद्दबातल करता येतात.

**८) प्रश्नपत्रिका संच:-**

विविध परिक्षेचे संच ग्रंथालयात असतात. अभ्यासक्रम संपल्यानंतर प्रश्नपत्रिकेचे महत्व संपते. या प्रश्नपत्रिका संच रद्दबातल करता येतात

**९) प्रकाशन यादी:-**

विविध प्रकाशक ग्रंथ घ्यावे या उद्देशानुसार प्रकाशन यादी पाठवत असतात. यादी पण १० ते १५ नंतर रद्दबातल करता येते.

**१०) भेट देणगी ग्रंथ:-**

काही ग्रंथ भेट म्हणून येत असतात. अशी ग्रंथाची उपयोगिता संपल्यानंतर हे ग्रंथ रद्दबातल करावेत.

**११) नियतकालिके:-**

प्रत्येक ग्रंथालयात विविध प्रकारची नियतकालिके येतात. महत्वपूर्ण नियतकालिकाची बांधणी करून बाकी उपयोगिता संपलेले नियतकालिके रद्दबातल करावी.

**१२) नकाशे:-**

ग्रंथालय अस्तीत्वात आल्यापासून विविध प्रकारचे नकाशे खरेदी करते. यात जिल्हा नकाशा, विभागीय नकाशे, राज्य स्तरावरील नकाशा, देशाचा नकाशा, भौगोलीक नकाशा हे नकाशे कालंतराने फाटतात हे नकाशा पण रदद्बातल करता येतात.

**सारांश:-**

वाचन साहित्य रदद्बातल धोरण एक चिकीत्सक अभ्यास या लेखात सुरवातीस ग्रंथाचे महत्व विशद केले. त्यानंतर ग्रंथ रदद्बातल प्रक्रिया संपूर्णपणे समजावून कोणकोणते ग्रंथ रदद्बातल करावे याचे सविस्तर विविचन केले आहे. त्यामुळे निश्चितपणे ही प्रक्रिया समजण्यास मदत होईल.

**संदर्भ सूची:-**

- १) पाटील सी. श्री. (२००३) "वाचन साहित्य रदद्बातल धोरण" प्रकाशिका या छाया पाटील सिंधुदुर्ग पृष्ठ १ ते ३५.
- २) महाजन शं.ग. (२०००) "दफ्तरखाने व वस्तु संग्रहालय" प्रकाशक य.च.मु.वि. नाशिक पृष्ठ २० ते ३०.



## Role of Information Technology in Agriculture Sector

**Dr. Satyanarayan R. Rathi**

Associate Professor, Dept. of Commerce, K. K. M. College, Manwath Dist. Parbhani. (MS)

E-mail id- rathisrr@gmail.com

### • Introduction:-

Agriculture is a major sector which is vital for the survival of modern man. Agriculture is a wide field which requires the support of disciplines from other sectors for it to fully thrive such disciplines includes economics management and technology which play an integral part in the sector in this article major focus on technology which is essential for provision of information across the agricultural value chain right from production to marketing.

Agriculture is backbone in the Indian economy. India is an agriculture base country, which is directly and indirectly seventy percent. India is self-sufficient in wheat, rice, sugarcane and cotton. Agriculture provides raw material for many industries like paper, leather etc. India is the 2<sup>nd</sup> largest country in the perspective of sugarcane production after Brazil. In India major cash crops are sugarcane, cotton, rice, wheat. Due to increasing population day by day, we need to improve the food security and enhanced acreage yield of wheat as well as others crops in the India. Production can only enhance through adopting modern technology, producing resistance varieties. By adopting modern technology, the living standard of farmer increase day by day. Technology has a massive role in the developing of agriculture industry. Through agriculture biotechnology, it is possible to grow crop in desert areas. Due to biotechnology, plants produce ability in their selves against drought stress. We should be move toward the modern technologies for the quality and quantity production of the food in the world. Before going to detail the benefit of modern technology, we will discuss why technology is more important in agriculture.

### • Concept and Role of Information Technology:-

Information Technology refers to the utilization of computer along with other telecommunication equipment for the storage, retrieval, transmission, and manipulation of data, among other tasks which are aimed to improve the efficiency of different sectors. Information Technology plays a big role in the agricultural sector.

#### Improved productivity-

Farmers need information on latest varieties, changing weather patterns, crop production techniques and improved agronomic practices for them to produce. Information technology plays a vital role in ensuring the farmers get access to this information, regardless of their agro ecological location. Through IT, Farmers in Africa are able to read what farmers in other areas of the globe are doing. Through this gained knowledge, the farmers improve their farming skills thus improved farming which eventually result to high yields.

#### Community involvement -

There are several programs which are made possible by IT applications, and community involvement in agriculture can be increased as well. When a community adopts modern methods for agriculture, the production of local goods can be increased. There are some places where people greatly benefit from the land and their resources for agriculture, and with IT, there can be improved union in local farmers which can lead to their community's overall improved production that may lead to better income for everyone involved.

#### Good post-Harvest practices and Value addition of farm produce.

Most farmers after good crop husbandry get a lot of crop yields after harvesting, however, few months later farmer incur losses due to poor storage. But this does not happen in some Parts of the globe, especially the developed countries which have good storage structure. Information technology has provided the avenue where farmers are able to see and learn about latest post-harvest handling and storage techniques used in other countries, thus they learn and also utilize them, this helps to reduce the losses of their crops.



#### **Improved decision making by the farmer.**

Through the use of information technology, It is easier to develop farm records and follow up on the daily events of the farm. This will enable the farmer to make the correct decisions when it comes to types of fertilizers to be used, the variety of seeds to be planted, when to market his/her produce and how to employ the best farming techniques.

#### **Improved efficiency and service delivery at the farm.**

Crop data, Animal data or any other farm data can be generated and kept much easier with the use of information technology, than manual processes. Information technology has also been utilized in automated farm machines which are scheduled to carry out activities such as irrigation or spraying even in the absence of the farmer, thus it makes service delivery very effective.

#### **Weather forecasting and climate smart farming.**

The climate and weather play a vital role in farming. With the use of IT infrastructure, farmers are able to receive weather forecasts, and therefore they plan when to irrigate, or when to plant, and how much water should be used for irrigation. This plays a vital role in the agricultural production.

#### **Remote sensing and GPS location.**

This are very key in farming. The location of a farm is very important, as it dictates the varieties of seed to be used, the amount of irrigation to be used and above all the type of crop to be planted. With the use of IT, It is easier to locate a farm, even if it is miles away. This is made possible by the use of Information technology through the global positioning system (G.P.S) which has also enabled professionals in the agricultural field to be able to classify different areas into different agro ecological zones

#### **• Research Methodology:-**

The research methodology used for the present research article is traditional Doctrinal research method, as most of the information can be sought from the available literature. So the researcher has chosen doctrinal method as the method of research for the present article and has used books, journals, research articles, internet for preparation of the same.

#### **• Objectives of the Study:-**

- 1) To study the role of agriculture in Indian economy.
- 2) To study the impact of IT in agriculture sector.
- 3) To highlight the advantages and disadvantages of IT in agriculture sector.

#### **• Advantages of Technology in Agriculture Sector:-**

**1. Productivity boosted with technology:** Agriculture has seen a significant boost in productivity as a result of technology; farmers can now do more work with less effort and in less time. There are several sophisticated technology instruments and tools that can help farmers boost their farming production. In agriculture, tractors, automated devices, robotic lettuce harvesters, carrot harvesters and separators, and other technology devices are utilized to boost production. Farmers operate more efficiently with the aid of current technology since it decreases the amount of labor they have to do in the field.

**2. Improved transportation:** Farmers can now travel more easily thanks to technology. Farmers can readily transfer products from one location to other. Trucks and tractors are commonly used to transfer crops from one location to another. Farmers utilized buffalo carts to transfer crops from one location to another before modern technology. This was a challenging task because traveling by buffalo cart took a long time. However, because of advancements in transportation technology, they may now readily travel from one location to another.

**3. Technology helps simple water supply:** The farmers had terrible time getting water to their farms. They used to transport water to the fields in bowls, which took a long time and cost the farmers a lot of money. However, people may now readily obtain water in their fields thanks to current technological machinery and devices. Water delivery to the field may be accomplished with ease using contemporary technologies. For providing water to their farms, farmers can utilize water turbines, pipelines, drones, and many other technologies. It saves the farmers a lot of time and works in terms of field water supply.



**4. Technology saves money:** Using current agricultural technology can help farmers save money. With the help of modern technologies, farmers may work more efficiently, with less effort, and in less time. With modern technology, work that formerly required a big number of people and a lengthy period of time may now be accomplished swiftly and cheaply. Farmers are not compelled to pay a separate price for their services.

**5. Technology saves time:** As we all know, the primary goal of technology is to help individuals save time while they work. In agriculture, technology also saves a lot of time for farmers. Modern technical equipment and machinery operate at a far faster rate than people do. If a farmer can cultivate a field in a week, they can do so in a day with the assistance of technology. This is how much time farmers save thanks to current technologies.

**6. Marketing boosted with the technology:** Agriculture's commerce and business are being boosted by modern technologies. They may simply sell their goods to market and increase their trade and business with the assistance of technology. With the use of technology; Farmers can simply transport and sell their crops to other locations. They may easily contact and interact with purchasers using contemporary technology, and sell their products, fruits, and vegetables. With the use of technology digital marketing develops to sell their harvests, fruits, and vegetables to customers online. This is how agricultural commerce and business may be boosted with the aid of current technologies.

**7. Technology helps to boost soil fertility:** With the help of modern technologies, farmers may easily increase the fertility of their soil farming. There are a variety of devices on the market that can evaluate soil fertility and assist us in caring for our agricultural land in order to increase fertility. A variety of chemicals are also being researched to improve soil fertility. Using this strategy, farmers may improve soil fertility.

**8. Technology saves labor:** The primary goal of modern technology is to lower people's labor efforts so that farmers can work more efficiently. Farmers' efforts in agriculture are greatly reduced by modern technologies. If some farming tasks demand a large number of farmers and a lot of effort, they can be simply completed by contemporary technology with lesser effort and farmers.

• **Disadvantages of Technology in Agriculture Sector:-**

**1. High costs of maintenance:** One of the downsides of agriculture technology is its high maintenance costs. The hefty maintenance costs of the technology make it tough for small enterprises and farmers to handle. Farmers find it difficult to keep up with technology since farmers cannot afford the high maintenance costs of contemporary technical gadgets and machines.

**2. Environmental damages:** The majority of technical machinery and devices pollute our environment, which is extremely detrimental to humans. Tractors, trucks, and a variety of other large machinery are overused, resulting in harmful chemical fumes and carbon dioxide in our environment. As a result, environment has become contaminated and hazardous to people and other living creatures.

**3. Negative impact of fertilizers and pesticides:** Fertilizer and pesticide use generate a slew of issues. Fertilizers and insecticides are good for the health and output of plants. However, it has a number of negative consequences for plants and other living beings. Excessive use of fertilizers and pesticides poisons plants and crops, posing serious health risks to humans and other living creatures. It also pollutes the soil and water.

**4. Digital illiteracy:** The majority of farmers are illiterate, and understanding how to use current technologies in farming is challenging. Instead of traditional methods, using contemporary technology in farming is challenging for them since they don't fully comprehend the benefits and risks of using technology in agriculture. This is also one of the drawbacks of current agriculture technology: not everyone can benefit from it. The majority of farmers are unable to correctly use contemporary technical gadgets and machines.

**5. Reduction in soil fertility:** Excessive use of technology in the fields depletes the soil's fertility. One of the most serious drawbacks of technology in agriculture is that it diminishes soil fertility. The soil of the fields is harmed and fertility is reduced as a result of excessive use of technology. Fertilizers and chemicals can boost productivity, but they can deplete soil fertility over time. Excessive use of fertilizers and many chemicals used for agriculture may also harm the soil.



**6. Impact on health:** Overuse of fertilizers and pesticides has been proven in several studies to have negative health consequences. Overuse of pesticides has the disadvantage of killing soil organisms that are helpful to the plant and aid in its growth. Aside from that, it has the potential to contaminate the topsoil. For the time being, nothing else will grow. Pesticides and fertilizers are both known to have negative effects on human health; even minor skin contact with some of them can cause severe discomfort.

**7. Unemployment:** Workers' services are at risk of being replaced by machines as a result of the adoption of some technological advancement in agriculture. Some of these technologies significantly reduce the demand for human employees, resulting in the development of unemployment, which is harmful to society.

• **Conclusion:-**

Agriculture is backbone in the Indian economy. India is an agriculture base country, which is directly and indirectly seventy percent. By adopting modern technology, the living standard of farmer increase day by day. Technology has a massive role in the developing of agriculture industry. Farmers benefit greatly from the use of new technological advancements in agriculture. It allows farmers to operate more efficiently and effectively. Agriculture employs a large number of technology instruments and machines. For farmers in agriculture, it saves a lot of time and work. Farmers can perform a lot of work in a short amount of time with the aid of contemporary technologies. Technology, on the other hand, has certain negative consequences must remember how much technology harms in agriculture before use it.

• **References:-**

- 1) Gaurav Datt & Ashwani Mahajan (2018) – Indian Economy – S. Chand Publishing, New Delhi.
- 2) VanijyaVishva (August,2011) – Puna Chamber of Commerce, Pune
- 3) Yojana Monthly Magazine
- 4) <https://www.aaaksc.com/information-technology-agriculture/>
- 5) Google search

## Evaluation of Research Report Writing

Dr. Satyanarayan R. Rathi

Associate Professor Department of Commerce  
K.K.M. College, Manwath, Dist- Parbhani (MS)

### INTRODUCTION

Research report writing play limited scope in the earlier time, but now day by day becoming more important and wide range of scope not only in the area of study but also in all the area of administration and management. Research report is the final stage of every research in which research procedure, analysis, findings and so forth aspects of research efforts are presented in systematic and scientific way. The general purpose of research report is to convey the sufficient details of research works. It not only convinces the readers but let them known about the findings of already carried out research or project work or the purpose of the work have been done. Writing a report is both an art as well as science so it relating to certain skills, principles and format suited for proper delivery in orderly and scientific manner.

A report is a written presentation of factual information based on an investigation or research. Reports form the basis for solving problems or making decisions. A report is an interpretation of findings through which the factors that seem to explain what has been observed by researcher in the course of the study can be better understood and it also provides a theoretical conception which can serve as a guide for further researches.

#### • OBJECTIVES OF THE STUDY

- To know the concept of research.
- To know the principles of research report writing.
- To understand the process of research report writing.

#### • RESEARCH METHODOLOGY

The research methodology used for the present research article is traditional doctrinal research method. Most of the information collected from various published sources such i.e. magazines, newspapers, journals, books and various other publications, moreover some important information is also collect from relevant websites. The present study is descriptive in nature.

#### • MEANING OF RESEARCH

The word research is composed with two syllables re and search as defined re means again and search means examine closely and carefully.

According to Robert Ross, "Research is essentially an investigation, a recording and an analysis of evidence for the purpose of gaining knowledge." It can generally be defined as a systematic method of finding solutions to problems.

Research is systematic and scientific efforts to acquiring the knowledge or gaining the knowledge is research or research means search and search new things. Research is careful investigation or inquiry especially trough search for new facts in any branch of knowledge.

#### • PRINCIPLES OF RESEARCH REPORT WRITING

Report wriing differs from person to person depending on personality, imaginative and creative abilities, experience, and training. However, most researchers agree that the following general principles must be kept in mind to produce a better research report. These principles are often called as qualities or requirement of a good report.

##### 1. Selectiveness:

It is important to exclude the matter, which is known to all. Only necessary contents should be included to save time, costs and energy. However, care should be taken that the vital points should not be missed.

##### 2. Comprehensiveness:

Report must be complete. It must include all the necessary contents. In short, it must contain enough detail to convey meaning.

##### 3. Cost Consideration:

It must be prepared within the budgeted amount. It should not result into excessive costs.

**Accuracy:**

As far as possible, research report must be prepared carefully. It must be free from spelling mistakes and grammatical errors.

**Objectivity:**

Report must be free from personal bias, i.e. it must be free from one's personal liking and disliking. The report must be prepared for impersonal needs. The facts must be stated boldly. It must reveal the bitter truth. It must suit the objectives and must meet expectations of the relevant readers.

**Clarity:**

Report must reveal the facts clearly. Contents and conclusions drawn must be free from ambiguities. In short, outcomes must convey clear-cut implications.

**Preciseness:**

Research report must not be unnecessarily lengthy. It must contain only necessary parts with adequate description.

**Simplicity:**

Report must be simple to understand. Unnecessary technical words or terminologies should be avoided.

**Proper Language:**

Researcher must use a suitable language. Language should be selected as per its targets users.

**Reliability:**

Research report must be reliable. Manager can trust on it. He can be convinced to decide on the basis of research reports.

**Proper Format:**

An ideal report is one, which must be prepared as per commonly used format. One must comply with the contemporary practices: completely a new format should not be used.

**Attractive:**

Report must be attractive in all the important regards like size, colour, paper quality etc. Similarly, it should use liberally the charts, diagrams, figures, illustrations, pictures and multiple colours.

**RESEARCH PROCESS:-**

Planning of research means deciding the question to be studied, setting the objectives of the study and determining the means of achieving those objectives. Planning research refers to determining, in advance, various steps to be followed in a research process.

**1. Identifying, Evaluating and Formulating the Research Problems:-**

After creating interest in a research work, a researcher has to think about formulating the problem related to his research work. Selecting a correct problem for study is the most important phase in the whole research process. After selecting the problem, the researcher has to formulate the problem.

**2. Extensive Literature Survey:-**

Before formulating the research it is desirable that researcher review all available literature, both conceptual and empirical. The conceptual literature is one which deals with concepts and theories. Empirical literature means studies made earlier and so it includes many facts and figures observed in the earlier studies.

**3. Writing a Primary Synopsis:-**

After formulating the problems a short summary of it should be written down. A researcher has to write a synopsis of the topic selected for research work mentioning the summary of what is going to be done under his research.

**4. Identifying and Labeling Variables:-**

In any research the problem under study deals with relation between variables. The variables whose change has affected the other variable, is called independent variable. Therefore there is a cause and effect relation between the variables. It is only through this process of establishing the effective relation between variables that meaningful conclusions are derived from the study.

**5. Setting the Hypothesis:-**

Specification of hypothesis is a basic step in the research process. A hypothesis is a tentative conclusion logically drawn. The research work is conducted to test the truth of this hypothesis.

**6. Preparing the Research Design:-**

A research design is a plan that specifies the sources and types of information relevant to the research problem. It is the process of gathering and analyzing the data. It includes the time and cost budgets since

most studies are done under these two constraints. A research design provides a rational approach to research enabling one to decide in advance what to do, how to do, in investigating the subjects.

#### 7. Determining the Sample Design:-

A sample design is a definite plan determined before any data are actually collected for obtaining a sample from a given universe. Sample design refers to the technique or the procedure which the researcher would adopt in selecting some sampling units from the universe for drawing inferences about the universe.

#### 8. Collecting of Data: -

There are several ways of collecting the appropriate data. Some of the methods of collecting primary data are Observation method, direct personal interview method, telephone interview method, questionnaire method, Schedule method. Use one of these methods for the collection of data.

#### 9. Execution of the Project:-

The researcher has to see that the project is executed in a systematic and scientific manner and in time. Researcher should make necessary task for successful conduct of the project.

#### 10. Processing, Analysis and Interpretation of Data with Statistical Methods: -

The processing of data consists of classification, tabulation and coding. By classification and tabulation the unwieldy data can be condense into few manageable and purposeful groups and tables so that further analysis becomes simple. Coding converts the data into symbols and small figures so that the data can be dealt with in an easy manner. Analysis and interpretation of data results in conclusion, induction and deduction. For this various statistical measures are computed.

#### 11. Testing of Hypothesis: -

Depending upon the nature of data and conclusions to be arrived one or two of these tests can be applied. By testing the hypothesis results in either accepting or rejecting the hypothesis. Testing of hypothesis may prove or disprove a theory and a theory facilitates formulating of a further hypothesis. Testing of hypothesis will result in contribution to existing theory or the generation of a new theory.

#### 12. Preparation of the Report:-

A report is a detailed description of what has been done and how it has been done with respect to a particular area. The report should contain the preliminary section, the main body and the end matter. The preliminary section contains only titles, data, acknowledgement foreword and table of contents. The important section of a report is its main body. It carries introduction, methodology, Statements of findings, conclusions and recommendations. The end matter includes appendix, literature selected and bibliography. The appendix includes letters, questions or other tools used. Bibliography is the list of books, journals, Reports, bulletins etc. used for reference.

### CONCLUSIONS

Research report is the final stage of every research in which research procedure, analysis, findings and so forth aspects of research efforts are presented in systematic and scientific way. The general purpose of research report is to convey the sufficient details of research works. It not only convinces the readers but let them know about the findings of already carried out research or project work or the purpose of the work have been done. Writing a report is both an art as well as science so it is relating to certain skills, principles and format suited for proper delivery in orderly and scientific manner.

### REFERENCES

- 1] Dr. Vijay Upagade and Dr. Arvind Shende (2012), Research Methodology, S. Chand Publishing, New Delhi, ISBN-81-219-3222-X.
- 2] Dr. C. R. Kothari (1990), Research Methodology Methods & Techniques, New Age International (P) Ltd. Publishers, New Delhi, ISBN-978-81-224-2488-1
- 3] <https://efgc.kar.nic.in/magadi/GenericDocHandle/32-b29ae961-fb2a-413c-91a7-fc8599f21be0.pdf>
- 4] <https://www.sscasc.in/wp-content/uploads/downloads/MCOM/Business-Research-Methods.pdf>
- 5] Websites

## SWOC Analysis of E-Commerce

**Dr. Satyanarayan R. Rathi**

Associate Professor, Dept. of Commerce  
K. K. M. College, Manwath Dist. Parbhani, (MS)

### Introduction:

In the last two decades internet and smart phone have change the lives of millions of users due to tremendous use of it. The present position is that human being cannot survive without the technology. Internet and smart phone have reached every corner of the world. In the age of technology, the e-commerce has more significant. With the economic growth, infrastructural development and internet connectivity the e-commerce transactions have increased drastically. E-commerce is the buying and selling of goods or the transmitting of funds or data and providing services, over an electronic network, primarily the Internet. E-commerce can help to enhance economic growth.

E-Commerce stands for electronic commerce and eaters to trading in goods and services through the electronic medium such as internet, mobile or any other computer network. E-Commerce is basically, doing business as usual, but across the internet. It involves the use of Information and Communication Technology (ICT) and Electronic Funds Transfer (EFT) in making commerce between consumers and organizations, organization and organization or consumer and consumer. E-Commerce refers to commercial transactions of goods or services conducted over the internet. Over the past several years, e-integrated with the growing use of internet worldwide, Electronic Data Interchange (EDI) has also increased in humungous amounts and so has flourished E-commerce with the prolific virtual internet bazaar inside the digital world which is rightly termed as e-mails. E-Commerce has experienced rapid growth since its humble beginnings with E-Commerce sales projected to grow to 434.2 billion USD by 2017. The power of e-commerce should not be underestimated as it continues to pervade everyday life and present significant opportunity for small, medium and large businesses and online investors.

### Objectives of the study: -

1. To understand the concept of E-Commerce
2. To study the importance of e-commerce through SWOC analysis.

### Research Methodology: -

The paper is descriptive in nature so the data required for the paper is secondary data. Secondary data were collected from various published and unpublished papers, journals, books, articles, reports, magazines and websites.

### SWOC analysis of E-Commerce

It is essential to make analysis E-Commerce by SWOC. Strengths show the favorable and advantages of e-commerce, while weakness shows limitations of e-commerce, Opportunities shows if we decrease the weaknesses then opportunities increase. Challenges show possible problems of e-commerce process.

#### STRENGTHS

Competitive advantages can boost a company's strength. An e-commerce company's strengths are unique features that indicate how they differ from their competitors.

#### Convenience to buyer:

E-Retailers are working to improve the convenience factor in order to get customers to use this channel. Furthermore, as individuals have increased access to the internet 24 hours a day, the expansion of mobile communication has contributed to the growth of e-retailing.

#### Time saving:

By using e-commerce, a customer saves a significant amount of time. The normal person's life has become exceedingly fast in metros and even smaller communities that are rapidly rising. **Price/Product comparison:**

Consumers may compare prices and products without having to go from one store to another to assess the benefits of the product; instead, they can compare features and cost analysis all in one location.

#### Direct communication with consumer:

Online advertising networks and social networking sites can be used to generate buzz about an online store. It is feasible to direct communication to each consumer utilizing effective technology, either through

personalized email or customized web pages when access is granted by a registered user.

#### **Flexible target market segmentation:**

In e-commerce, the target market segment is flexible and can be changed at any time. A significant strategic decision is deciding which market to target. Customers who are most likely to access, choose, and buy online must be targeted by e-retailers.

#### **Simple and easier exchange of information:**

Improve information exchange between e-retailers and e-customers, allowing for faster, just-in-time deliveries. Expanded models see e-commerce as a way to reach consumers who were previously unreachable. It can include capabilities that ease information interchange, streamline business activities, and fully integrate the shared so that it is faster, cheaper, and easier to adjust and extend in response to changing market dynamics.

#### **Faster buying procedure:**

Customer service is better and faster with e-commerce. Customers are pleased when they use online customer service, because there are no intermediaries for purchasing things. As a result, the purchasing process will be quick and easy.

#### **Easy transactions:**

Financial transactions via electronic fund transfer are extremely quick and may be completed from any location on the planet. E-commerce lowers the need for paperwork by automating most procedures. It also saves time for both the e-retailer and the e-consumer by eliminating manual business transactions.

#### **Niche Products:**

Almost everything can be bought and sold via the internet. Even if the product is aimed at a smaller market, the buyer will be found on the internet. For niche products, e-commerce is great. These products usually have a small number of customers.

#### **WEAKNESSES:**

##### **Security:**

Customers are perplexed by the security issue, particularly when it comes to the payment process' integrity. Proactive risk management is critical in an electronic environment where market needs, technical requirements, and security issues evolve at a rapid pace.

##### **Fake websites:**

Fake websites can not only embarrass e-commerce, but also provide a poor name to the industry. Fraud: A major flaw in e-commerce is the fear of financial and personal data being misused.

##### **Long delivery timing:**

The delivery time can be measured in days or weeks, which is inconvenient. Supplier selection is critical in purchasing management because it improves quality, reduces delivery time, and lowers purchasing costs.

##### **No idea about quality and physical condition of the product:**

Products purchased online cannot be touched, worn, or sat on. As a result, neither the consumer nor the store is aware of the product's physical state.

##### **Lack of personal services:**

Physical goods may be available, but personal services, which are intangible, are not.

**More shipping cost:** If we order online, the shipping cost rises. E-commerce makes shopping more easy, but they didn't realize how much of an impact shipping expenses might have on their bottom line.

##### **Limited exposure:**

E-retailers will have no or limited visibility in emerging areas where the internet is unavailable. Because of the lack of a distribution network, availability in rural regions is uncommon.

##### **Customer's satisfaction:**

The customer and the seller have no interaction. As a result, there is no way to persuade the consumer. Customers frequently prefer to purchase products in person rather than on the internet.

#### **OPPORTUNITIES**

##### **Changing trends:**

E-commerce is quick and efficient, and financial transactions may be completed from anywhere in the world. People of the future will feel more at ease purchasing items solely through the internet.

##### **New technologies:**

The number of people using the internet on a daily basis is growing. People prefer to shop online since it is more convenient. Because of the rapid rise of e-commerce and the resulting increase in competence, a keen interest in adopting and upgrading new technologies is becoming increasingly vital.

##### **Global expansion:**

E-commerce businesses can operate at any time and from any location. The future expansion of e-commerce in the worldwide market is projected to be dependent on rapid technology progress and sustained revenue growth in emerging regions.

**High availability (24 hour and seven days a week):** Business is carried out with each and every click of the

business. E-retail has a broad scope and a long-term ambition for expansion.

#### Put down on local competition:

The company's online customer support is a competitive advantage. Through low pricing and local retail acquisition, an e-retailer can reduce local competition.

#### Advertising:

Advertising is less expensive than traditional offline methods. Product awareness can be increased by advertising through various media outlets. While the primary goal is to grow the brand and create top-of-mind brand memory, industry insiders claim that e-commerce companies also utilize television advertising to attract talent and investors.

#### CHALLENGES

##### Competitors:

Big firms have already entered this industry, and competition is expanding day by day. They are instilling habits in people at the expense of their businesses. Due to the danger of internet competitors, more traditional stores are considering adopting even seemingly bizarre technologies.

##### Changes in environment, law and regulations:

Changes in trends, fashion, and fads can cause e-retail to suffer, as can changes in law and regulations. The e-commerce industry rarely has the ability to influence or affect the macro environment; therefore it must react to changes as they occur. Government policies can also stifle e-commerce by adopting cost-increasing rules, such as those demanding the development and integration of new systems or procedures.

##### Innovation:

Customers nowadays are constantly on the lookout for new and inventive products. Innovation might take the form of a product, a location, a promotion, or even a price. The survival of an e-retailer is in jeopardy if it does not innovate. Utilizing technology that has to be updated or replaced with innovation. IT departments are left scratching their brains as to how to stay up with changing technology and system capabilities, as well as new solutions.

##### Privacy concerns:

Fears of information being misused result in spam e-mail and identity theft. Because of worries about the privacy and security of their transactions and click habits, many consumers have stopped purchasing things online or have never started.

##### Fraud:

People that operate e-commerce in an unethical manner can harm the public's trust and confidence. Because e-commerce relies so heavily on the Internet, numerous fraud examiners are consulted for information on fraud.

##### Risk:

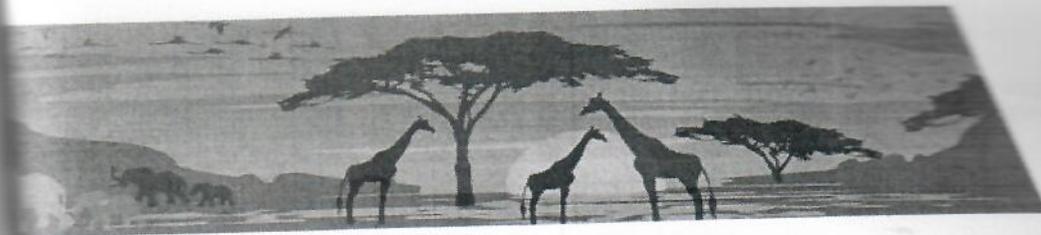
The nature of fraud and risk differs because when a consumer trusts and transacts based on an unseen setup, he trusts and transacts. In this approach, he is prepared to take risks. The level of risk posed by a network or a payment system issue.

##### Conclusions: -

E-commerce is a technological supplement for economy, certainly because of these technology economy has become transparent and dynamic and it will help to economy to become world power economy. Information Technology (IT) has boosted e-commerce universal. Now it's easier to enter to a new market and one can evaluate his/her product and companies' performance. It reduces business overhead and enhances business management. A developing country like India can be more rationalized and mechanized if it utilizes e-commerce effectively and efficiently. But during the use of e-commerce technology people should take some precautions as well as each and every country should create and execute strong laws, rules and regulation to prevent online crime, otherwise because of wrong use of these technology certainly world can destruct.

##### References: -

1. Awais M (2012), "Advanced SWOT Analysis of E-Commerce", International Journal of Computer Science Issues, Vol. 9, Issue 2, No 2, ISSN -1694-0814, pp.569-574.
2. Yadav K (2014), "SWOT Analysis of E-Commerce" Advance in Electronic and Electric Engineering, ISSN 2231-1297, Volume 4, Number 6 (2014), pp. 663-668.
3. Patti D(2014), "E-Commerce SWOT Analysis" International Journal of Management and Commerce Innovations ISSN 2348-7585, Vol. 2, Issue 1, pp.226-231.
4. Wani Z A (2016), "Advanced SWOT Analysis of E-Commerce", International Journal of Commerce, Business and Management (IJCBM), ISSN: 2319-2828, Vol. 5, No.2, pp.285-289
5. Sabha S (2017) "SWOT Analysis of Business or Electronic Commerce (E - Commerce)", International Journal of Education and Research Vol. 5 No. 5, ISSN: 2411-5681, pp105-112.
6. Kumar R R (2017) "SWOT Analysis Of Online Shopping Models" international journal of current engineering and scientific research, ISSN (PRINT): 2393-8374, VOLUME-4, ISSUE-6, pp 28-31.



**Theme**

**Ecology- Animal and Habitat Interaction, Ecological Habitat and Animal Survival**

**EA-51 to EA-66 (PP)**

**EA-51**

**Review on Conservation of Natural Habitats for future life in India**

**Sandip R. Rathod**

Katruwar Arts, Ratanlal Kabra Science & B.R.Mantri Commerce College, Manwath Dist.-  
Parbhani. (MH) India.

**Abstract:**

Natural habitat is natural resources, conserve and protect this natural habitat from destruction. We know about these natural habitats are firms of these living organisms. This habitat destruction occurs by anthropogenic interference by means of hunting, urbanization, and utilization of natural resources. Due to loss of natural habitat climate changes, these changes directly effect on environmental changes, temperature fluctuation should be forms different types of unwanted virus and bacteria and they are badly effect on human beings. India is mega biodiversity in the world, but this biodiversity is not maintained properly. Biodiversity is maintaining by natural habitats. In world India is one of the countries have richest biodiversity but due to destruction of natural habitat extinct many significant species from India.

**Keywords:**Conservation, Natural Habitat, Organism.

**EA-52**

**Molecular marking of fluctuation in temperature: A Novel Method of Genetic Analysis  
assists to analyzeeffect of Global warming**

**Vadekar V. R., More M. B., Gaikwad A. M., Chati R. S. and Salunkhe S. S.**

Department of Zoolgoy  
Shri Shivaji Mahavidyalaya Barshi  
gaikwadanantm@gmail.com

**Abstract**

Present investigation gives the account of effect of fluctuated temperature on the polytene chromosome of Chironomus larvae, significant in to analyze the effect of variation in temperature which referred as global warming. Stresses of variation in temperature observed on polytene chromosome these marked in the genetic sign known as molecular marking.



Sandip R. Rathod

Katrurwar Arts, Ratanlal Kabra Science & B.R. Mantri Commerce College,  
Manwath Dist- Parbhani. (MH)[rathod.sr@gmail.com](mailto:rathod.sr@gmail.com)

## RESEARCH PAPER IN ZOOLOGY

**Abstract:**

Developing country and India is Seventh largest country by area (3,287,263 km<sup>2</sup>) and also have second largest population country in the world. India has mega biodiversity country among the biodiversity countries of the world is 12<sup>th</sup> place. India has four biodiversity hotspot such as the Western Ghats, the Indo-Burma region and the Sundaland. In India human population density on biodiversity hotspots, it is given to maintain biodiversity and ecosystem in future life of India.

**Keywords:** Forest, Biodiversity, conservation, life.

Generally drawn a variety of landscapes in our country. Many have been fixed as Biodiversity Hotspots such areas that have rich and diverse flora and fauna. Many flora and fauna are getting endangered. In India four out of the 36 Hotspots in the world are present. The Himalayas, The Western Ghats, The Indo-Burma region and The Sundaland. Biodiversity hotspot significant global value as they contain species and The term biodiversity hotspots were coined by Norman Myers. Biodiversity very rich at western ghat in India.

India is the most biodiversity region in the world with a Bio D score of 102,718 species of fauna and cover of 23.39% of the country geographical area in 2020 includes a wide range of biomes: deserts, high mountains, tropical and temperate forests, wetlands, plains, grasslands, as well as island archipelagos.

Forest is derived from Latin word 'Fores' are meaning reference being to a village boundary or fence and it is uncultivated land. A great variety of forests are found in parts of India due to unequal distribution of rainfall, as well as their seasonal variation, besides varied biotic and it reduce air pollutions. Accordingly, the forests in India are divided five categories first moist tropical forest, Dry forest, Montane temperate forest, Montane sub tropical forest and Forest. In India, about 20.6% of the country total area is covered by forests. This is much lower than the global average of 30.4%. According to the National Forest Policy, the percentage of forests should be around 33% of the total area. Madhya Pradesh has the largest forest area in India. In terms of percentage of total area, Andaman and Nicobar Islands, Arunachal Pradesh, Nagaland are the most prosperous regions and these regions have more than 80% of the geographical area under forests.

**Conclusion and method:**

Biodiversity hotspots in India have been observed and the current growth, utilization natural resources and developed different strategies for human comfort life and its effect on environment have been studied in various contexts and logically.

**Conclusion:****Importance of Natural Forest:**

Forests have been depends forest from ancient period, but from modern times there has been extensive degradation forest land which has produced a mosaic of natural and managed ecosystem in the landscape. Removal of forest cover has created isolated patches resulting alternation of the composition, structure, extend and pattern of forest land. As ecological pattern, function and structure are associated with the landscape shape, contiguity and fragmentation. Forest fragmentation has series consequence on overall forest ecosystem through disruption of the contiguity of

the landscape. The important of forest fragmentation and its effect on ecosystem structure and function has been recognized for over half centuries (1).

The Government of India has made a constitutional provision, through the 42nd Amendment Act, 1976; the protection of forests and wild animals and birds was transferred from the State to the Concurrent List. Article 51 A (g) of the Constitution states that it shall be the fundamental duty of every citizen and also protect and enhance the natural environment including forests and wildlife. Article 48 A of the Directive Principles of State Policy mandates that the State shall make efforts to protect and improve the environment and protect the forests and wildlife of the country.

In India, about 20.6% of the country total geographical area is covered by forests. This is much lower than the global average of 30.4%. According to the National Forest Policy, the expected percentage of forests should be around 33% of the total area. Madhya Pradesh has the largest forest area in India. In terms of percentage of total area, Andaman and Nicobar Islands, Arunachal Pradesh, Mizoram and Nagaland are the most prosperous regions and these regions have more than 80% of the geographical area under forests. For a prosperous India, there is a need to increase forest area, and for that, there is a need to create natural artificial forests.

**Habitat fragmentation**

Habitat fragmentation leads to further endemic species extinction; we examined the dynamics of species number following sudden habitat loss. It is clear that immediately following the loss of habitat, the first species to go extinct are the ones whose entire populations resided within the lost area. In the course of time, however, further species may go extinct, namely species whose long-term viability was compromised by the elimination of the populations directly affected by habitat loss. Species area relationship (2).

**Impact of climate change**

While there is limited evidence that climate change is causing species extinction, studies suggest that climate change will surpass habitat loss as the greatest global threat to biodiversity in the next few decades (3). At the fundamental level of biodiversity, climate change can reduce genetic diversity. Beyond population diversity due to directional selection and rapid migration that can affect ecosystem functioning and resilience (4). diverse effects on populations are likely to alter webs of interactions at the community level. In short, the effect of climate change on some species may indirectly affect that species (5). We need to create natural artificial forests to prevent climate change, population loss of natural habitats, and genetic diversity. Therefore, there will be no drastic changes in the climate.

**National Zoo parks**

Government of India has created national zoos for conservation of wild animals but here we do not protect wild animals and natural habitats. Wild animals are not properly protected because these national zoos keep the same species in small confined areas and hence they never

their own character and never adapt themselves to the artificial environment so these animals live or die as they are. According to Darwin's theory (6) that if there is no change in nature, there is no variation and therefore no variation, new characters and new species do not arise, so we need different species in that fixed region and there will be environmental, interspecific and intraspecific conflict in that animal community. No adaptation means no variation and no origin of life. Therefore, we will build artificial Natural forests, not only to protect these wild animals but also to protect the natural habitat of these wild animals.

#### Degradation:

According to the land use statistics 2016-2017 the total geographical area of India is 328.7 million hectares of which 139.4 million hectares is forested net sown area and 200.2 million hectares is grass cropped with cropping intensity of 143.6%. The net area sown works out to 139.4% of the total geographical area. The net irrigated area is 68.6 million hectares (7).

Land degradation reflects natural or human processes that negatively affect the functionality and nature of soils in regional ecosystems. Land degradation is related to environmental sensitivity, resilience and carrying capacity and vulnerability of native species, increasing soil erosion (8). As a major environmental threat, land degradation has already reached global critical thresholds (9, 10). Different forms of land degradation can affect soil quality and productivity and limit soil ecosystem services in a given ecosystem. We must maintain soil health and structure and food production and regional resilience to climate change and anthropogenic pressures through sustainable management and reduction of land degradation, especially in areas where environmental vulnerability is already a challenge.

Land degradation is one of the most serious problems in India, due to population growth, urban expansion, industrial activities, climate change, depletion of soil organic matter and disruption of soil biological processes, increasing soil vulnerability, over-exploitation of freshwater resources, over-grazing of open land, etc. Matters are becoming more severe to natural calamities. To stop all this we need to create artificial Natural forests and we can prevent land degradation and help maintain Environment balance.

#### Conservation of species:

Natural resources are an important element in the natural resources that nature has given to humans. Anthropogenic impacts on biological resources. Species extinction affects not only biodiversity but also ecosystem services. Endangered species like some medicinal plants and animals have great importance, for which we need to protect these species for

the better future of India. A natural artificial forest with medicinal plants and animals has to be created to maintain the natural balance.

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#### References:

1. Roy P, Murthy M, Roy A, Kushwaha S, Singh S, et al. (2013) Forest fragmentation in India. *Current Science* (00113891) 105:774-780.
2. Rybicki J, Hanski I (2013) Species-area relationships and extinctions caused by habitat loss and fragmentation. *Ecology letters* 16:27-38.
3. Leadley, P, percira, H.M., Alkemade, R., Fernandz manjarres,j.f., Proenea,V., Scharlmann, J.P.W.et.al. (2010): Biodiversity Scenarios: Projections of 21st Century Change in Biodiversity and Associated Ecosystem Services Secretariat of the Convention on Biological Diversity, Montreal P. 1-132 technical series no. 50.
4. Botkin, D. B., Saxe, H., Araújo, M. B., Betts, R., Bradshaw, R. H., Cedhagen, T. & Stockwell, D. R. (2007). Forecasting the effects of global warming on biodiversity. *Bioscience*, 57(3), 227-236.
5. Koh, L. P., Dunn, R. R., Sodhi, N. S., Colwell, R. K., Proctor, H. C., & Smith, V. S. (2004). Species coextinctions and the biodiversity crisis. *Science*, 305(5690), 1632-1634.
6. Darwin's, C. (1859). On the origin of species. *Published on*, 24, 1.
7. Government of India (2020-21): Annual Report department of agriculture cooperation and farmer's welfare, ministry of agriculture and farmer's welfare.
8. Zorn, M., and B. Komac. 2016. Land degradation. In *Encyclopedia of natural hazards. Encyclopedia of Earth sciences series*, ed. P.T. Bobrowsky. Dordrecht: Springer.
9. Gibbs, H.K., and J.M. Salmon. 2015. Mapping the world's degraded lands. *Applied Geography* 57: 12-21.
10. Ferreira, C., Z. Kalantari, and P. Pereira. 2021a. Liveable cities: Current environmental challenges and paths to urban sustainability. *Journal of Environmental Management* 277: 111458
11. India adds 557 new species to its fauna: Zoological Survey of India Archived 13 September 2021 at the Wayback Machine, The Hindu, 27 Aug 2021.

# मराठी साहित्य व मानवी मूल्ये

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-डॉ. शिंदे सुरेखा सदाशिवराव 405
64. आंबेडकरवादी साहित्यातील मानवी मूल्ये  
-डॉ. ल. न. वाघमारे 410
65. मानवी मूल्यांच्या परिप्रेक्ष्यातून ग्रामगीता एक अवलोकन  
-डॉ. शारदा कदम 416
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-प्र. डॉ. पंजाब लक्ष्मण शिरे 420
67. 'वन पाट बुमन' कादंबरीतील अदृश्य सामाजिक दबाव आणि मानवी मूल्ये  
-राहुल रमेश चिल्लावार

- 263 40. मूल्ये संकल्पन आणि ग्रामीण कादंबरीतील मानवी मूल्ये  
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-डॉ. प्रल्हाद दत्तराव भोणे 285
- 285 42. वारकरी संतांच्या साहित्यातील मानवी मूल्यांचे समाजसुधारणेतली योगदान  
-डॉ. संध्या जाधव 291
- 291 43. संत जनाबाई यांच्या अभंगातील मूल्याविचार  
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- 296 44. साहित्य प्रकारातून व्यक्त होणारी मानवी मूल्ये  
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- 301 45. अनंतफंदी यांच्या फटकातून आलेल्या मानवी मूल्यांचे चित्रण  
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-प्र. डॉ. मधुकुटे पी.एम. 317
- 317 49. अ. दा. आठवले यांच्या वाङ्मयातील मानवी मूल्ये  
-डॉ. नारायण शिवशंभू 324
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-पंजाब पुंजाजी टापरे-डॉ. शत्रुघ्न जाधव 334
- 334 51. विनोद कुमरे यांचा आदिवासी जीवनमूल्ये उजागर करणारा 'आगाजा'  
-सखाराम कदम 340
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- 340 53. आसाराम लोमटे यांच्या कथेतून येणारे मानवी मूल्यांचे चित्रण  
-प्र. डॉ. दत्ता शिंदे/संजय नामदेवराव आठवले

11. महाभारत शल्पपर्व 32.59.
12. अभिज्ञानशाकुन्तलम् चतुर्थ अंक
13. मेघदूतम् श्लोक 20
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16. महाभारत उद्योगपर्व 37.9-11
17. www.livestrong.com. Dr. Jeffrey Traister's article on "Seven Emotions and organ pairs".
18. Psycho-Analysis, Dr. B.N. Gupta, Pub. Kurukshetra, Third Eye Foundation.
19. श्रीमद्भगवद्गीता अध्याय 16.21
20. योगकुण्डल्युपनिषद् 1.43-44
21. नितीशतकम् श्लोक 73
22. नितीशतकम् श्लोक 71
23. महाभारत, शान्ति पर्व 27.12

## 55. संत तुकारामाच्या अभंगातील मानवी मूल्ये

प्रा. विनायक जाधव  
के.के.एम. महाविद्यालय, मानवत

मध्ययुगात भारतात वेगवेगळ्या प्रांतात अनेक संत उदयाला आले. संपूर्ण भारतात संतांनी आध्यात्मिक व सामाजिक चळवळ उभी केली. संतांनी आपल्या अभंगातून पहिल्यांदा प्रादेशिक भाषेचा व प्रादेशिक संवेदनशीलतेचा समृद्ध अविष्कार घडविला आहे. संतांच्या अभंगाची भाषा ही लोकभाषा आहे. म्हणून हे अभंग सर्वसामान्य माणसांना जवळचे वाटते. हे संत बहुजनांचे प्रतिनिधित्व करणारे होते. ते विविध जाती-जमातीतून आलेले आहेत. त्यांची साधी राहणी आणि जनसामान्यांविषयी त्यांना वाटणारा कळवळा यामुळे ते लोकांना जवळचे वाटले. त्यांनी धर्माचे बाह्य अवडंबर आणि निरर्थक कर्मकांड बाजूला सारून निखळ धार्मिक तत्वाचा पुरस्कार करत सदाचाराची शिकवण समाजाला दिली. आपल्या अभंगातून सत्य, अहिंसा, शांती, प्रेम या तत्वांचा पुरस्कार केला. तसा सामाजिक समतेचा आणि बंधूभावाचा संदेशही दिला. अशा मानवी मूल्यांचा शोध तुकारामांच्या अभंगातून घेता येईल.

संत तुकाराम महाराजांचे समाजावर प्रेम होते. म्हणून त्यांचा समाजविषयीचा कळवळा त्यांच्या अभंगातून अनुभवाला मिळतो. समाजहितामुळे ते देवाच्या, धर्माच्या व अध्यात्म्याच्या नावावर चाललेला अनाचार उघड्या डोळ्यांनी पाहू शकत नाहीत. त्यावर ते हल्ला करतात. याविषयी सुहासिनी इल्लेकर म्हणतात, "तुकारामांनी एखाद्या दृष्ट्या महात्म्याप्रमाणे कालातीत होऊन स्वकालीन सामाजिक उणिवा, अज्ञान, अधःश्रद्धा, भोंदूगिरी व स्वार्थाधता यावर आघात केले. त्यासाठी त्यांनी स्वतःच्या जीवनाला युद्धभूमीचे, अभंगवाणीला संघर्षाचे आणि शब्दांना धारदार शस्त्रास्त्राचे भेदक रूप दिले." अशा प्रकारे संत तुकारामांनी मानवी जीवनपयोगी संकल्पना आपल्या अभंगातून उत्स्फूर्तपणे मांडल्या आहेत.

सत्यनिष्ठा, विवेकनिष्ठा या मानवी मूल्यांवर अभंग रचना केली आहे. अज्ञानाच्या अधकारातून बाहेर पडण्याचा मार्ग म्हणजे सत्य होय. सत्यामुळे असत्याचा विरुद्धात दंड थोपटून उभे राहण्याची आक्रमकता येते. वेद, शास्त्रा, पुराणे यांनी जे ज्ञान सांगितले आहे त्यातून त्यांनी सत्याचा मार्ग शोधला आहे. त्यांनी निर्णय घेताना, निर्णय करताना सत्य काय आहे याविषयी विवेकाने मनाला दिलेली खाही प्रमाण मानली आहे.

सत्य असत्याची मन केले खाही / मानियले नाही खुशमत ॥

वर्णन विषयक अतः एतत्कालीन लोकां एकत्र आले तरी त्यांच्या बहुमताला धार देऊ नये. सत्य काय याचा साक्षार बुद्धीने विचार करावा.

त्य सांगताना, सत्य शोधताना, सत्य ऐकतांना वेळप्रसंगी कठोर बनावे लागले तरी चालेल त्यामुळे पुढे होणारे नुकसान टाळता येते.

सत्य आम्हां मनीं / नव्हे गवाळाचे धनी /

ऐस जाणा रे सकळ / शरं शुद्ध टाका मळ /

देतो तीश्या उत्तरे / पुढे कावयासी बरे / (2906)

संत तुकारामाच्या अभंगात विज्ञाननिष्ठा आढळते. त्यांच्या अभंगातील विज्ञाननिष्ठा त्यांच्या दूरदर्शी दृष्टिकोनाची निदर्शक आहे.

नवसाने मुले होत नाहीत. कोणा बाबा बुवीच्या आशीर्वादाने मुले होत नाहीत असा वैज्ञानिक दृष्टिकोन ते अभंगातून देतात.

नवसे वेई संतंती / तरी का करावे लागे पत / (926)

स्त्रीत जननक्षमता नसेल तर तिला मुले होणार नाहीत. तसेच पुरुषच नपुंसक असेल तर बाई प्रजननक्षम असूनही तिला त्याला मुले होणार नाहीत.

वाङ्मा न होती लेकरे / काय करावे भ्रतारें

नपुंसका पुरुषाशी / काय करील बाईल त्यासीस (403)

असे नवसाने, आशीर्वादाने काही होत नसते. असा वैज्ञानिक दृष्टिकोन आपल्या अभंगातून देतात. संत तुकारामांनी आपल्या अभंगातून समतावादी दृष्टिकोन मांडला आहे. त्यांनी विषमतेला धारा दिला नाही. त्यांनी धार्मिक, अध्यात्मिक व सामाजिक क्षेत्रात समतेचा पुरस्कार केला आहे. त्यांच्या मते, परमेश्वर विश्वव्यापक. चराचरव्याप्त असल्याने मानवामानवामध्ये भेदाभेद मानू नये.

तुका म्हणे याती / हो का तयाची भलतीस (366)

यातायाती धर्म नाही / विष्णुदासा /

पुसणे काही जाते कुळ / लागो वेड जळ / (4299)

गुणदोष याती न विचारें काही / (4146)

अशाप्रकारे जात ही परमेश्वरांच्या भक्तीच्या आड येत नाही. याबाबतीत डॉ. ल. रा. मोहरीर यांचे मत विचारात घेण्यासारखे आहे. ते म्हणतात, "विषमता ही मुळात मनुष्यदृष्ट असून समता ही नैसर्गिक आहे. म्हणून सर्वभूत मात्रांत समतेचा व्यवहार घडवावा, हा आग्रह धरलेला आहे. उच्चनीच भेदभाव पसरवणाऱ्या जातीप्रथेचा त्यांनी निषेध केलेला आहे."<sup>2</sup>

या तुकाराम महाराजांच्या अभंगातून व्यक्त झालेल्या भूमिकेचे स्पष्टीकरण डॉ. मोहरीर यांनी अगदी योग्य असे केले आहे. ते पुढे म्हणतात, "तुकारामांचा हा विचार जातिव्यवस्थेच्या मूळ सिद्धांतावरच कठोर प्रहार करणार आहे. त्यातून जातीव्यवस्था निर्मूलनाचा त्यांचा सामाजिक समतेचा दृष्टिकोन स्पष्ट होतो."<sup>3</sup> तुकाराम हे समतावादी

होते.

संतांचा आधार होतो, असे पाहून हे दामिक, पाखंडी लोक संतांना नावे ठेवतात. शिष्यांना जमवून पैसा कमावतात. सत्ता, पैसा व कीर्तीसाठी वाटेल ते करतात. देवाधर्माच्या नावाने समाजाचे आर्थिक शोषण करतात. त्यांच्यावर भावनिक गुलामगिरी लादतात. आपला स्वार्थ साधण्यासाठी समाजाचा साधन म्हणून वापर करतात. आपणच देव आहेत असे हळूहळू भक्तांच्या मनावर बिंबवतात. अशा भोंदूपामून सावध रहावे असे संत तुकाराम आपल्या अभंगातून सांगतात. याविषयी गं.बा. सरदार यांचे मत अगदी योग्य वाटते. ते म्हणतात, "सामाजिक संबंधातून नीतीचा उगम होतो. म्हणूनच तुकारामांनी ठिकठिकाणी धर्माबरोबर नीतीचाही मुद्दाम उल्लेख केला आहे."<sup>4</sup> तुकारामांनी असा पाखंडी लोकांचा समाचार घेतला आहे. हे लोक कर्मकांडाला महत्त्व देतात. शिष्यांचे शोषण करतात. स्वतःचे महत्त्व वाढवितात. स्वतःचे जन्माधिष्ठित श्रेष्ठत्व सांगतात, वर्णाचे श्रेष्ठत्व सांगतात. अशा पाखंड लोकांचे खंडण करून तुकारामांनी उच्च-नीच, श्रेष्ठ-कनिष्ठ, वर्गाच्या व्यवस्थेला विरोध केला आहे.

मानव हा सर्व प्राणीमात्रात विकसित प्राणी आहे. मानवामानवात कोणत्याही शारीरिक भेद नाही. माणूसकी हा मानवाचा सर्वश्रेष्ठ धर्म होय. मानवांमधील समत्व भाव हा आपरभाव नाहीसा करत असतो. अशा माणुसकीच्या धर्मावरच तुकारामांची नीतिमत्ता अवलंबून आहे. तुकारामांनाही मानवी नीती मूल्याची साधी सोपी व्याख्या आपल्या अभंगातून केली आहे.

पुण्य परपकार पाप तें परपीडा / आणिक नाही जोडां दुजा यासी (1026)

परोपकार केल्याने पुण्य मिळते. इतरांना त्रास दिल्याने पीडा किंवा दुःख होते. सत्याचे आचरण करणे हाच खरा धर्म आहे. या संदर्भात डॉ. आदती कुलकर्णी म्हणतात, "षडविकारांपासून दूर राहण्याचा उपदेश इतर संतांप्रमाणे तुकारामांनी केला. विवेक, विचार, संयम, नीती या गोष्टी केवळ तुकारामांनी अध्यात्म्याच्या अंगाने सांगितल्या असे नाही तर जीवनाची ती आचारसंहिता ठरावी अशा दृष्टीनेही त्या सांगितल्या आहेत."<sup>5</sup> हे डॉ. आदती कुलकर्णी यांचे विवेचन तंतोतंत लागू पडते. माणूस मेल्यावर श्राद्ध घालण्यापेक्षा माणूस जिवंत आहे तोपर्यंत त्याची सेवा करावी असे तुकोबांचे सांगणे आहे.

भुके नाही अन्न मेल्यावरी पिंडवान / (1490)

यापेक्षा भुकेल्यांना उपाशीपोटी अन्न द्यावे असे ते म्हणतात.

पर स्त्री विषयी त्यांची नैतिकता उच्च दर्जाची आहे. स्त्री-पुरुषांनी व्यभिचार करू नये. व्यभिचारी स्त्री पुरुषांचे तुकाराम महाराजांनी कडक शब्दात निषेध केला आहे. 'परणारी ज्या घडेल गमन / दावी तो वदन जननीरत्न' (158)

जी गोष्ट परणारीच्या संदर्भात तीच परद्रव्याच्या संबंधात सांगितली आहे.

जोडोनिया धन उत्तम वेव्हारे / उदास विचारे वेच करीता (२०६४)

उत्तम व्यवहाराने धन जोडावे आणि उदार वृत्तीने खर्च करावे. असे करणाऱ्याला उत्तम गती प्राप्त होईल. सावकारी करून, कीर्तन करून, हुंडा घेऊन, भिक्षा मागून धन मिळू नये. धनसंचय करू नये अशी मानवी मूल्ये तुकारामांनी आपल्या अंगातून सांगितले आहेत. अर्थातच ही मानवी मूल्ये आध्यात्मिक निष्ठेवर अवलंबून आहेत.

समारोप : संत तुकारामांचे विचार हे मानवी मूल्ये जोपासणारे आहेत. त्यांनी आध्यात्मिक व सामाजिक क्षेत्रात समता, सत्य, विज्ञानिष्ठा या मूल्यांचा स्वीकार केला. प्रेम, दया, शांती शाश्वत मानवी मूल्यांची आपल्या अंगातून मांडली आहेत. त्यांच्या विचारांची आजही आवश्यकता आहे. एकोणिसाव्या, विसाव्या शतकातील अनेक समाजसुधारकाने त्यांच्या विचारांची पुरस्कार केला आहे.

संदर्भ

१. इलॅकर सुहासिनी, तुकारामांच्या, मराठी संत साहित्यातील कलशाध्याय, चौवाणी, तुकाराम विशेषांक, पृ. ११
२. मोहरीर ल.का., संत तुकारामांची जीवननिष्ठा, सविता प्रकाशन, १९९४, पृ. १५९
३. तत्रैव, पृ. १६४
४. सत्यार गं.बा. संत वाङ्मयाची फलशुक्ती, महाराष्ट्र साहित्य-परिषद प्रकाशन, पुणे, वृ.आ. १९७०, पृ. १०८,
५. कुलकर्णी आरती, युगबोध, संत साहित्य विशेषांक, भारतीय साहित्यसेवक संघ, १९९८, पृ. २६

## ५६. दलित साहित्य आणि मानवी मूल्ये

प्रा. अरुण बळीराम पडयन  
मराठी विभाग प्रमुख  
कै.सौ. कमलताई जामकर महिला  
महाविद्यालय, परभणी

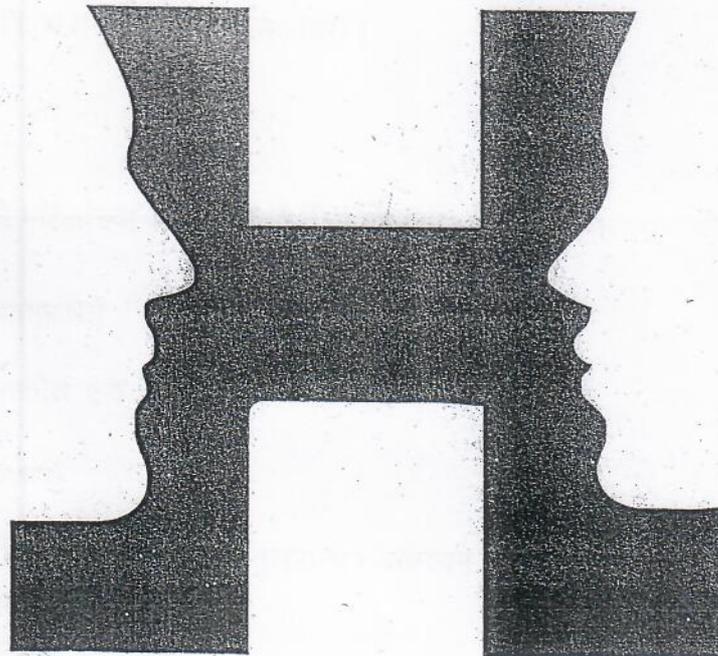
मराठी समाज, संस्कृती आणि साहित्यामध्ये १९६० नंतर आपुलाग्र बदल झाले. आतापर्यंतच्या जीवन जगण्याच्या सर्व पारंपरिक रूढ, संकेत, आचार-विचारांची उलट तपासणी करून मानवतावादी बुद्धीनिष्ठ, समता, स्वातंत्र्य, बंधुभाव, समान न्याय, हक्क अधिकार आदी मानवी जीवन मूल्यांवर आधारित नवसमाज निर्मितीसाठी अनेक सामाजिक परिवर्तनवादी चळवळी मानव मुक्तीसाठी सर्वंकष प्रयत्न करत होत्या. भारताने लोकशाही प्रभावीपणे अंमलबजावणीला सुरुवात केली. संविधानामुळे सर्वसामान्य माणसाला एक भाणस-एक मूल्य, कायदा व सुव्यवस्था, समान न्याय, आरक्षण, शिक्षणेचे सार्वत्रिकीकरण, ग्रामीण राजकारणातील सहभ्रम आदीमुळे समाजातील वंचित मागास समाजघटकामध्ये जनजागृती होऊन आपल्या हक्क व अधिकारासाठी प्रस्थापित व्यवस्थेशी संघर्ष सुरु केला. हजोसे वधप्रसून देव-धर्म, पाप-पुण्य, निसर्ग, संस्कृती, वर्ण-वंश, उच्च-निच्य अशा गुंथमगिरीच्या बंधनामध्ये खितपत पडलेल्या वंचित, मागास समाज समुहाला परिवर्तनवादी चळवळी व समाज सुधारकांच्या कार्यामुळे स्व अस्तित्वाची ओळख झाली. परिणामी आपला इतिहास, आपली संर- ती, आपला निसर्ग, आपले कुटूंब, आपले जीवनमान आपली परंपरा ह्या सर्वांमध्ये 'स्व' चा शोध सुरु झाला. त्यातून भ्रमनिराशा प्राप्त झाल्यामुळे आपले पर्यायाने समस्त समाजबांधवांचे स्थान, दर्जा, बदलत्या काळ व जीवनमूल्यांचा सहप्रवाशी होण्यासाठी प्रस्थापित समाज व्यवस्थेशी मानवमुक्तीचा संघर्ष सुरु झाला. परिणामी ग्रामीण, दलित, आदिवाशी, स्त्री, भटके-विमुक्त ह्या समाज समुहाने पारंपरिक गुलामगिरीच्या श्रुंखला उध्वस्त करत नवसमाज निर्मितीसाठी सामुहीक सर्वंकष प्रयत्न केले. ह्या मानवमुक्तीच्या परिवर्तनवादी चळवळीसाठी साहित्याचा एक प्रभावी माध्यम म्हणून स्वीकार करत त्यातून एक स्वतंत्र व्यासपीठ निर्माण झाले. त्यापैकी दलित साहित्य प्रवाहाला गीतप बुध्द, डॉ. अंबेडकर, म.फुले, शाहू महाराज यांच्या विचारांचे अधिष्ठान अथवा साहित्याने मानवी मूल्यांचा पुरस्कार करून ज्ञान, धर्म, संस्कृतीला नव्या रूपाने सादर केले. स्वातंत्र्य, बंधुभाव, सविधान, प्रेम, विज्ञाननिष्ठा, सत्य, शांती शाश्वत मानवी मूल्ये ही समाजातील अनेक सुधारकाने त्यांच्या विचारांची पुरस्कार केला आहे.

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## मराठी कादंबरीतील शेतकऱ्यांच्या आत्महत्यांचे चित्रण

प्रा.विनायक जाधव  
के.के.एम.महाविद्यालय

प्रस्तावना : मराठीत कादंबरी हा साहित्यप्रकार अगदी अलीकडे विकसित झाला आहे. इंग्रजी कादंबरीच्या अनुकरणातून मराठी या साहित्य प्रकाराचा विकास झाला आहे. भारतीय समाजाचा पाश्चात्य संस्कृतीशी आलेल्या संपर्कातून मराठीत कादंबरी वाङ्मय प्रकार रुजला. आपल्या संस्कृतीत असलेल्या पूर्वकथन परंपरेची नाते जोडून तो विकसित झाला आहे. मराठीत कादंबरीने अनेक विषय हाताळलेले आहे. साठोत्तरी कालखंडात मराठीत कादंबरीत दलित, ग्रामीण, स्त्रीवादी, आदिवासी असे विविध प्रवाह निर्माण झाले.

भारत हा कृषीप्रधान देश असल्याने अगदी वेदापासून ते आजपर्यंतच्या साहित्यात शेतीचे ग्रामीण जीवनाची चित्रण आले आहे. मराठी ग्रामीण कादंबरीही याला अपवाद नाही. ग्रामीण कादंबरीत ग्रामीण जीवनाची वास्तवपूर्ण चित्रण केलेले असते. "ज्या कादंबरीत ग्रामीण संवेदना आविष्कार झाली असेल आणि तिच्या शहरी व नागर संवेदनाचा अभाव असेल ती ग्रामीण कादंबरी म्हणून ओळखली जाते." ग्रामीण कादंबरीत ग्रामीण जीवन त्यातील संस्कृती, आधुनिकरणाने झालेली बदल, ग्रामीण जीवन, शेतकऱ्यांच्या विविध समस्या ही असे आशयसूत्र येतात.

1960 नंतर शिक्षणाचा प्रसार खेड्यापाड्यात झाला. शिक्षण घेऊन उदयाला आलेली नवी पिढी आपले अनुभव, प्रश्न साहित्यातून मांडू लागले. ग्रामीण साहित्याचे एक नवे विश्व मराठी साहित्यात अवतरले. या काळात मोठ्या प्रमाणावर मराठी ग्रामीण कादंबरी लेखन झालेले आहे.

1991 मध्ये भारताने खुले आर्थिक धोरण स्वीकारले. या धोरणाचे अनेक बरे-वाईट परिणाम कृषी क्षेत्रावर झाले आहेत. कृषिमालाचे दर हे आंतरराष्ट्रीय दरावरून ठरत असल्याने भारतीय शेतकऱ्यांना कृषिमालाचे दर कमी मिळत आहेत. कमी दरामुळे शेतकऱ्यांचा तोटा होत आहे. शेतकऱ्यांचे आर्थिक गणितच बिघडले आहे. भांडवलदार व विकसित देशातील शेतकऱ्यांपुढे भारतीय शेतकरी टिकाव धरू शकत नसल्याने भारतात शेती क्षेत्रातील निराशावादी वातावरण बनले आहे. याचा परिणाम अनेक शेतकरी आत्महत्या करत आहेत. शेतकऱ्यांच्या आत्महत्यांच्या कारणाचा शोध घेण्याचा प्रयत्न अनेक मराठी कादंबरीकाराने केला आहे. यात विशेषतः विदर्भातील कापूस उत्पादक पड्यातील शेतकरी 'बारोमास' मधून आला आहे. तर अतिरिक्त उसाच्या उत्पादनाच्या समस्यांना तोंड देणारा शेतकरी 'रिक्त-अतिरिक्त' मधून आल्याची दिसून येते. या दोन्ही

कादंबऱ्यात शेतकऱ्यांच्या आत्महत्यांच्या आलेल्या कारणाचा शोध घेता येईल.

बारोमास

सदानंद देशमुख यांनी 'बारोमास' या कादंबरीतून सुभानराव या कापूस उत्पादक शेतकऱ्यांची कुटुंबकथा चित्रित केली आहे. सुभानराव व त्यांची पत्नी शेवंता माय हे विदर्भातील सांजोळ या छोट्याशा गावातील 26 एकर कोरडवाहू जमीन असलेला शेतकरी आहे. ते कष्टाळू जिद्दी व सुसंस्कारित आहेत. सुभानरावकडे कोरडवाहू शेती असल्याने ते आपल्या शेतात वर्षातून एकच पिक घेतात. त्यामुळे त्यांचे शेतीचे उत्पन्न हे कमी असते म्हणजेच ते दारिद्र्य जीवन जगतात. आपले दारिद्र्य दूर व्हावे, आपल्या वाट्याला आलेले दुःख आपल्या मुलांच्या वाटेला येऊ नये, म्हणून ते पोटाला चिमटा घेऊन आपल्या दोन्ही मुलांना उच्च शिक्षण घेण्यास प्रोत्साहन देतात. मुलेही जोमाने शिक्षण घेतात. त्यांना वाटते की आपल्याला शिकून नोकरी लागली तर आपलं दारिद्र्य दूर होईल. याबाबतीत शेवंताबाई म्हणते, "एकूबाळा... शाळेत जाय बाळा... शाळेबगर कोणाचंच भलं व्हत नाई. शिकला की मंग महा ऐकू साहेब होईल... महा लेक पगारदार झालां की, माद्यापुढं नोटाच्या गड्या आणून देत जाईल. मंग मी तुम्हा लोकाले सोडून कुठेही जाणार नाही. व्हायचं नं तुले साहेब?" अशी शेवंतामायची इच्छा पूर्ण करण्यासाठी एकनाथ एम.ए., बी.एड. प्रथम श्रेणीत उत्तीर्ण होतो. परंतु संस्थाचालकाला द्यावयास एक लाख रुपये नसल्याने त्याला नोकरी लागत नाही. तसेच एकनाथाचा लहान भाऊ मधू तनपुरे हाही सुशिक्षित बेकार असतो. तो साठे नावाच्या व्यक्तीला नोकरी लावण्यासाठी शेताचा तुकडा गहाण ठेवून एक लाख रुपये देतो. नोकरी लागत नाही सावकार कल्याणीचा मळा हा शेतीचा तुकडा नावावर करून घेतो. याचबरोबर 'बारोमास'मध्ये ग्रामीण भागातील भ्रष्टाचाराचे संदर्भ येतात. उदाहरणार्थ बळीमामाला तलाठी सातबारा घेण्यासाठी चकरा मारायला लावतो. तर तुळशीरामच्या मदतीने पन्नास रुपये दिले की सातबारा देतो. आमदाराचा पी.ए. अनेकजणाचे पैसे घेऊन पळून जातो. अशा प्रकारे ग्रामीण भागातील लोकांना भ्रष्टाचार करून अनेक जण लुबाडतात. शेतकऱ्यांना उत्पादन खर्चावर आधारित शेतीमालाचा दर मिळत नाही. हे वास्तव 'बारोमास' मधून शेतकरी संघटनेच्या आंदोलनाच्या निमित्ताने येते. एकनाथ सुशिक्षित असल्याने त्याला ते समजते. तो शेतकरी संघटनेच्या आंदोलनात सहभागी होतो. अशा प्रकारे शेतकऱ्यांच्या अल्प उत्पन्न, दारिद्र्य, उत्पादन खर्च वर आधारित

भाव न मिळणे, मुलांना शिकवून नोकरी न लागणे, खाजगी सावकाराची कर्जबाजारीपणा अशा अनेक कारणाने शेतकरी आत्महत्या करतात. हे वास्तव लेखकाने 'बारोमास' मधून चित्रित केले आहे.

रिक्त-अतिरिक्त

रा.रं. बोराडे यांच्या 'रिक्त-अतिरिक्त' या कादंबरीतून नाथाप्पा खंदारे या अल्पभूधारक ऊस उत्पादक शेतकऱ्यांची कथा आली आहे. नाथा आप्पाला सिदराम आणि केदार दोन मुते आहेत सिदराम विवाहित आहे. त्यांची मुलगी अनिताचा विवाह, हुंड्याचा प्रश्न लेखकाने मांडला आहे. नाथाप्पा आपल्या मुलगा सिदरामला म्हणतात, "सिदराम आपण एक करायचं का... उसाच्या बिलाला आपुन धक्का लावायचा न्हाई. उसाचं बिल आपुन अनूच्या लगनासाठी राखून ठिवायचं." मुलीच्या लग्नात मोठ्या प्रमाणावर खर्च करावा लागतो म्हणून ते मुद्दाम उसाची लागवड करतात. दरम्यान सवंदगावचे पाहुणे येतात. त्यांची सोयरीक होते एक लाख हुंडा आणि दोन अंग उजवून द्यायचे ठरते. नाथाप्पा ऊस गाळपाला गेल्यावर हुंडा देणार होते. परंतु त्यावर्षी उसाच्या अतिरिक्त उत्पादन झाल्यामुळे साखर कारखाना ऊस नेत नाही. परिणामी ठरलेला हुंडा न दिल्यामुळे त्याचा विवाह मोडतो. याचे नाथाप्पाला दुःख होते. साखर कारखान्यांकडून ऊस उत्पादक शेतकऱ्यांची होणारे लुबाडणूक थांबण्यासाठी तसेच ऊसाला एक रक्कमी एफ.आर.पी. मिळावा यासाठी शेतकरी संघटना आंदोलन करते याचे वर्णन या कादंबरीतून आले आहे.

नाथाप्पाचा मुलगा केदार हा बी.ए., बी.एड. शिक्षण घेऊन त्याला संस्थेवर नोकरी लागण्यासाठी डोनेशन द्यायचे असते. त्यासाठी तो आपल्या हिस्साची जमीन विकण्याचे नाथाप्पाला म्हणताच त्यांच्यात वाद होतो. नोकरीसाठी तो संस्थाचालकाचा जिल्हा परिषदेमध्ये प्रचार करतो. आपल्या ऊसाकडे तो लक्ष देत नसल्यामुळे पिता-पुत्राचा संघर्ष होतो. एकंदरीत बारोमास व रिक्त-अतिरिक्त या दोन्ही कादंबऱ्यातून शेतकऱ्यांच्या आत्महत्येचे चित्रण येते. हे शेतकरी

जरी वेगवेगळे पिके घेणारे असले व ते कोरडवाहू किंवा बागायत असले तरी त्यांच्या समस्या जवळपास सारख्याच आहेत. या समस्या आर्थिक प्रश्नाशी संबंधित आहेत. त्यांचे उत्पन्न व असल्यामुळे अनेक आर्थिक समस्या निर्माण होतात. याचे चित्रण या कादंबऱ्यातून आलेले आहे.

समारोप

एकंदरीतच मराठी कादंबरीतून शेतकऱ्यांची मुले ही शेतकरी बेभ्रवश्याच्या व्यवसायातून दूर जाण्यासाठी तसेच आपले दारिद्र्य करण्यासाठी उच्च शिक्षण घेत असतात. परंतु त्यांना नोकरी मिळत नसल्याचे दिसून येते. ते सुशिक्षित बेकार होऊन इकडे तिकडे फिरत असल्याने मुले व वडील यांच्यात अनेकदा संघर्ष होतो. कधी नोकरीसाठी जमिनीचा तुकडा विकला जातो. त्याचबरोबर मुलांचा विवाह, त्यासाठी द्यावा लागणारा हुंडा, शेतीचे घटत चाललेले उत्पादन वाढता उत्पादन खर्च, शेतीमालाला मिळत नसलेला दर अशा अनेक कारणाने शेतकरी आज आत्महत्या करताना दिसत आहे.

संदर्भ:

1. चंद्रकुमार नलगे, ग्रामीण वाड्याचा इतिहास, रिया पब्लिकेशन, कोल्हापूर.
2. डॉ.ए.एल. चौधरी व इतर (संपा.), 21 व्या शतकातील साहित्यप्रवाह, प्रशांत पब्लिकेशन, जळगाव.
3. जयद्रथ जाधव (संपा.), 19 91 नंतरचे ग्रामीण साहित्य : स्वतंत्र संदर्भ, संस्कार प्रकाशन, लातूर.
4. उत्तम बावस्कर, बारोमास मराठीतील गोदान, अंतर्भूत बारोमास, एक अन्वयार्थ प्रा.डॉ.विजय पाटील संपा. अभ्यंकर प्रकाशन, पुणे.
5. रा.रं. बोराडे, रिक्त-अतिरिक्त, साकेत प्रकाशन, औरंगाबाद.

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## मराठी ग्रामीण कादंबरीतील ऊस उत्पादक शेतकरी

प्रा.डॉ. पंढरीनाथ धोंडगे

मराठी विभाग

ज्ञानोपासक महाविद्यालय, जितूर जि.परभणी

प्रा.विनायक जाधव

मराठी विभागप्रमुख

के.के.एम. महाविद्यालय, मानवत जि.परभणी

### प्रस्तावना :

स्वातंत्र्यानंतर देशात पंचवार्षिक योजनेच्या माध्यमातून शेतीक्षेत्राला प्राधान्य देण्यात आले. शेती आणि शेतीशी संबंधित उद्योगाला चालना देणारी धोरणे तत्कालीन शासनाकडून आखण्यात आली. शासनानेही विविध योजनांच्या माध्यमातून सिंचनक्षेत्रात वाढ केली. परिणामी उसाच्या लागवडक्षेत्रात सतत वाढ होत गेली. माळरानावर उसाचे पीक डोळू लागले. उसाचे 'गाळप' करण्यासाठी साखर कारखान्यांची गरज निर्माण झाली. यातूनच महाराष्ट्रात मोठ्या संख्येने सहकारी साखर कारखान्याची उभारणी झाली. सहकारी साखर कारखान्याच्या उभारणीनंतर परिसरात एक वेगळेच वातावरण निर्माण झाले. शेतकऱ्यांचा आर्थिक व्यवहार वाढला. आर्थिक प्रगतीबरोबरच गावांची भौतिक प्रगतीही होऊ लागली. ट्रक, ट्रॅक्टर, जीपगाड्यांची संख्या वाढू लागली. शाळा, महाविद्यालये सुरू झाली. 'दुग्धव्यवसाय', 'कुक्कुटपालन', 'पतसंस्था' सुरू झाल्या. स्थानिकांना रोजगारही मिळू लागला. ग्रामीण भागाची अशी चौफेर प्रगती होऊ लागली.

उसाची लागवड वाढत असल्याने साखर कारखान्याची संख्याही वाढत आहे. परंतु, ऊस उत्पादकांना वाऱ्यावर सोडून स्वतःचेच खिसे भरणाऱ्यांच्या हातात कारखान्यांचे नेतृत्व गेल्यामुळे कधीकाळी वैभवाच्या शिखरावर असलेली महाराष्ट्रातील सहकारी साखर कारखानदारी पार कोलमडून पडली आहे. त्यामुळे ऊस उत्पादक शेतकरी मात्र चांगलाच कात्रीत सापडला आहे. त्याचे शोषण दिवसेंदिवस वाढतच आहे. हे कटू सत्य असले तरी वास्तव आहे. याचे चित्रण पाचरुट, साखरफेरा, रिक्त अतिरिक्त या कादंबऱ्यांतून आले आहे.

सहकारी साखर कारखानदारी क्षेत्रात शेतकरी हा एकाच वेळी ऊस उत्पादक या नात्याने कच्चा माल पुरवठादार व कारखान्याचा सभासद या नात्याने साखर कारखान्याचा मालक अशी दुहेरी भूमिका निभावत असतो. "सहकारी क्षेत्रामध्ये ऊस उत्पादक हेच सहकारी साखर कारखानदारीचे मालक असल्यामुळे ऊस पुरवठा निश्चित करता येतो." हे शेअर्स विक्रीतून शक्य झाले आहे. ऊस उत्पादकाकडून समभाग विक्रीद्वारे पैसा गोळा करून कोट्यावधी

रुपयांच्या भागभांडवलातून साखर कारखान्याची उभारणी करण्यात आली. 'साखरफेरा' या कादंबरीत 'महात्मा सहकारी साखर कारखाना' शेतकऱ्यांचाच आहे याचे वर्णन आले आहे. कारखाना प्रशासन व त्याचे चेअरमन झोंबाडे पाटील म्हणतात, "आम्ही कारखान्याचे विश्वस्त आहोत. साखर कारखाना ऊस उत्पादक शेतकऱ्यांच्या मालकीचा आहे. कारखाना वाचला तरच शेतकरी वाचेल आणि सहकारीही वाचेल."<sup>2</sup> साखर कारखाना उभारणीत ऊस उत्पादक शेतकऱ्याने शेअर्स खरेदीसह आपल्या जमिनी दिलेल्या असल्याचे चित्रण 'साखरफेरा' या कादंबरीतून आले आहे.

ऊस पीक वगळता इतर पिकासाठी केंद्र सरकार किमान आधार भाव जाहीर करते. तर ऊस या पिकासाठी कायदेशीर आधार भाव जाहीर करते. यामुळे अधिकचे पैसे देणारे पीक म्हणून ऊसाकडे पाहिले जाते. शेतकरी स्वतःची आर्थिक परिस्थिती सुधारण्यासाठी 'पाचरूट' या कादंबरीचा नायक कारभारी ऊस पिकाचे महत्त्व सांगताना म्हणतो की, "एकदा का ऊस लागला की चार पैसे मिळतील. दुसऱ्यासारखा आपल्याही वावरात ऊस असला म्हणजे कमीपणा वाटणार नाही."<sup>3</sup> हमखास पैसा मिळत असल्याकारणाने शेतकरी आपल्या मुलींच्या अथवा नातींच्या विवाहासाठी ऊस लागवडीला प्राधान्य देतात. "सिंदराम आपून अेक करायचं... उसाच्या बिलाला आपून धक्का लावायचा न्हाई. उसाचं बिल आपून अनूच्या लग्नासाठी राखून ठिवायचं"<sup>4</sup> यावर्षी अनिताचा विवाह करायचा असल्याने दोन एकरचा ऊस तीन एकर केला जातो. परंतु ऊस अतिरिक्त झाल्यावर गाळपास जात नाही. परिणामी ठरलेला हुंडा न दिल्यामुळे अनिताचा विवाह मोडतो.

सहकारी साखर कारखाने आपल्या कार्यक्षेत्रात ऊसाची लागवड वाढविण्यासाठी ऊस विकास योजना राबवितात. आपल्याच गटातील व्यक्तींना ऊस पीक कर्ज मंजूर करतात. या कर्जासाठी शेतकऱ्यांना अनेक अडथळ्याची शर्यत पार पाडावी लागते. या योजनेतून वाटप करण्यात येणाऱ्या कृषी निविष्ठा या निकृष्ट दर्जाच्या असतात त्याचा परिणाम ऊस उत्पादन होताना दिसतो. या कृषी निविष्ठांच्या दरात सातत्याने होणाऱ्या वाढीच्या तुलनेत ऊसाचे दर वाढताना दिसत नाही. याविषयी किशा खोत म्हणतो "आदिच्याला धा वर्सांमागं जरा सस्ताई हुती. नांगरट स्वस्त होती. नांगरट म्हटल्यावर पाचशात भागायचं. बीबेवळा हजारात बसायचा. पाणीपट्टी कमी होती. खतं जरा स्वस्त हुती... आता सारी म्हागाई. नांगरट सन्यासकट हजार रूपय झाली. एकरी. एकराला बी घ्याचं तर गुठ्याला हजार रूपय. पाणीपट्टी चार हजार...

पुन्हा लावणीचा खर्च."<sup>5</sup> या कादंबरीतील चित्रण हे जवळपास 2005 मधील आहे. इ.स.1995 च्या तुलनेत त्यावेळी डिझेल महागल्याने शेतातील नांगरट महाग झाली, रासायनिक खताचे दर वाढले आहेत त्या तुलनेत ऊसाचे दर वाढले नाहीत. ही खंत किशा खोत व त्याचे मित्र श्यामा बाळा व्यक्त करतात. त्यामुळे आज महागाईच्या काळात ऊस पिकात हवा तेवढा नफा मिळत नाही.

शेतकऱ्यांच्या जीवनात नैसर्गिक आपत्ती ही काही नवीन गोष्ट नाही. ऊस हे कायम हमीचे उत्पन्न देणारे पीक मानले जात असले तरी नैसर्गिक आपत्तीचा परिणाम त्याच्यावर होतो. किशा खोताची 4-5 वर्षापूर्वी पाऊस जास्त झाल्याने त्याची लावण कुचंबली होती. दुबार ऊसाची लावण केली ऊस कसातरी वाढविला परंतु त्यावर्षी उत्पादनात फटका बसला. त्याचा लागवड खर्चही निघाला नाही. त्यानंतर त्याचा ऊस दोन-चार दिवसात खारखान्याला जाणार एवढ्यात ऊसाला आग लागली. तिसऱ्यांदा त्याच शेतात ऊस लावतो. ऊसाची लागवड झाल्यावर ऊसाचे कोंब जमिनीतून बाहेर पडताच रोगराई येते. त्यावेळी किशा म्हणतो, "आयला! बाबशा... आता रं... आजून ऊस भुईतनं वर आला न्हायी तवर माव्याच्या रोगानं हेला गाठला!"<sup>6</sup> नैसर्गिक रोगराईचा ऊसाच्या पिकावर परिणाम होतो. ऊसाचे वजन कमी होते. पाण्याच्या कमतरतेमुळे होणाऱ्या नुकसानीचे वर्णन 'पाचरूट' या कादंबरीतून आले आहे. 'साखरफेरा' या कादंबरीतून किशा खोताच्या उसाला लागलेली आग तसेच लोकरी मावा पडल्यामुळे झालेल्या नुकसानीची दाहकता समजते.

काहीवेळा पाऊसपाणी भरपूर झाल्याने उसाची अतिरिक्त लागवड होते. परिणामी, साखर कारखाने सर्व ऊस गाळपास नेऊ शकत नाहीत. अतिरिक्त ऊस उत्पादनामुळे शेतकऱ्यांच्या जीवनात निर्माण होणाऱ्या भीषण समस्येचे चित्रण 'पाचरूट' या कादंबरीतून येते. यात कारभारी या शेतकऱ्याची झालेली अवस्था पुढीलप्रमाणे "उन्हाळा आता तापू लागला. कारभारी वणवण फिरत होता. काळजीनं मनात झुरून झुरून तो पार निम्मा झाला. सगळीकडं चौकशी करत होता. सगळ्या कारखान्यांची हीच तऱ्हा झाल्याचं त्याला समजलं. सगळ्या कारखान्यांच्या हद्दीत भरपूर ऊस उभा राहिला आहे. त्यात आपलं काय वेगळं."<sup>7</sup> अशी वैफल्याची भावना कारभार्यांच्या मनात निर्माण होते. यातून ऊसतोडीचे प्रश्न निर्माण होतात. 'रिक्त-अतिरिक्त' या कादंबरीत अतिरिक्त ऊसाच्या समस्याने नाथा आप्पा, व्यंकटराव तांगडे, मंडा बोडके हे ऊस उत्पादक शेतकरी त्रस्त असतात. आपआपल्या पध्दतीने वेगवेगळ्या मार्गांचा अवलंब करून

साखर कारखान्याकडून ऊसतोड मिळविण्याचा प्रयत्नही करतात. यात काहीला यश येते तर काहींना अपयश येते. धनेश्वर साखर कारखान्याच्या कार्यक्षेत्रात ऊसाची लागवड अतिरिक्त झाल्याने शेतकऱ्यांचा ऊस लागवड झालेल्या वेळापत्रकाप्रमाणे जात नाही. वेळापत्रक ऊशिराने चालते. ऊस कारखान्याला घालण्यासाठी शेतकरी कारखान्यावर हेलपाटे मारतात. काही शेतकरी वेळापत्रकात गोंधळ करून ऊसतोड चिठ्ठी देणाऱ्या अधिकाऱ्यांना लाच देऊन ऊसतोड मिळवतात. ज्याचे लागेबांधे वा वशिले नसतात त्यांचा ऊस शेतात तसाच उभा राहतो. अतिरिक्त ऊस उत्पादन ही शेतकऱ्यापुढील मोठी समस्या असल्याचे चित्रण 'पाचरुट' व 'रिक्त-अतिरिक्त' या कादंबरीत आलेले आहे.

सहकारी साखर कारखान्याकडून ऊस उत्पादक शेतकऱ्यांची ऊसाच्या वजनकाट्यातून मोठ्या प्रमाणात लूट केली जात असल्याचे सर्वत्र बोलले जाते. "कारखान्यामध्ये टनामागे किमान 50 किलो इतका ऊस कमी येतो. याच उसाचे बाहेरच्या काट्यावर वजन केले तर ते वजन जास्त भरत असल्याचे निदर्शनास येते."<sup>8</sup> यावरून शेतकऱ्यांचा ऊस साखर कारखान्यावर आल्यानंतर वजनकाट्यात होणारी चोरी ठरलेली असते. इलेक्ट्रिक वजनकाट्यात टनाला जेवढी चोरी करायची असते तेवढा फरक अगोदरच सेट केला जातो. यासंबंधीचे चित्रण 'साखरफेरा' या कादंबरीत येते. या कादंबरीत शेतकरी संघटनेचे नेते म्हणतात, "... गेल्या कित्येक वर्षांत कारखाना गरीब शेतकऱ्यांची काटा मारून लूट करतो आहे. संचालक मंडळ दरोडेखोरांची टोळी"<sup>9</sup> असल्याचे राजरोसपणे सांगितले जाते. कारखाना प्रशासन मात्र यास काही प्रतिरोध करताना दिसत नाही. याचा अर्थ शेतकऱ्यांच्या ऊसाच्या काट्यातून लूट केली जात असल्याच्या मताला पुष्टी मिळते.

ऊस उत्पादक शेतकऱ्यांचे ऊसाच्या लागवडीपासून ते कारखान्याला गाळपाला जाईपर्यंत अनेक घटकांकडून शोषण होते. यात ऊस वाहतूकदार व ऊसतोड कामगार, साखर कारखान्यातील कर्मचारी आदी घटकांकडून शोषण होते. 'पाचरुट' कादंबरीत जो शेतकरी गाडीमागे 70 रु. देईल त्यांच्याकडेच हे गाडीवाले जातात. रिक्तअतिरिक्त कादंबरीत मुकादम ऊसतोडीचे बक्षीस अधिक ठरवतात. सहकारी साखर कारखाने हे शेतकरी सभासदांच्या मालकीचे असले तरी ऊसाचा भाव हा साखर विक्री किंमतीनुसार ठरत असतो. साखरेच्या विक्री किंमतीवर आंतरराष्ट्रीय बाजारातील साखरेचा भाव, केंद्र सरकारचे आयात-निर्यात धोरण, लेवी साखरेचे धोरण, बफर स्टॉक अशा अनेक घटकांचा चांगला वाईट परिणाम होतो. साखरेला कमी दर मिळाल्यास साखर कारखाने

ऊसाला कमी भाव देतात. 'साखरफेरा' कादंबरीत साखर निर्यातीला बंदी घातल्यामुळे होणारे नुकसान याचे वर्णन आले आहे. कारखान्याचा मालक या नात्याने सर्वसाधारण सभेत कारखान्याच्या कारभाराविषयी विचारणा करण्याचा अधिकार प्रत्येक सभासदाला असतो. परंतु कारखान्यातील एकाधिकारशाहीमुळे शेतकरी फक्त सभेला उपस्थिती लावण्यापूरताच असतो. त्याच्या मताचा विचार केला जात नाही. साखरफेरा या कादंबरीत वार्षिक सर्वसाधारण सभेसाठी ऊस उत्पादक शेतकरी मोठ्या संख्येने येतात ते ऊसाला 1200 रु. टनाला घोषणा करताच शेतकरी व चेअरमन झोंबडे पाटील यांचे समर्थक यांच्यात मारामारी होते. दगडफेक केली जाते. सर्वसाधारण सभेतील चर्चाही आर्थिक प्रश्नाशी निगडित असल्याने अनेकदा या सभेत वाद होताना दिसतात.

साखर कारखान्याने ऊस न्यावा यासाठी पायपीट करणारा शेतकरी हाच कारखानदाराकडून दिला जाणारा दर आणि उत्पादनासाठी येणारा खर्च याचा ताळमेळ घालू लागला. यातील तफावत पाहून लढ्याशिवाय पर्याय नसल्याची जाणीव त्याला झाली. तो शेतकरी संघटनेच्या झेंड्याखाली एकवटू लागला. साखरफेरा या कादंबरीतील ऊस उत्पादक शेतकरी ऊस दरवाढीसाठी शेतकरी संघटनेच्या नेतृत्वाखाली आंदोलन करतो. "...आता शेतकरी अडाणी राहिलेला नाही. त्याच्या उसाला पहिला हप्ता आठशे रुपये आणि अंतिम दर बाराशे रुपये मिळालाच पाहिजे. नाहीतर येत्या गळीत हंगामात आम्ही कारखाना बंद पाडू. उसाचं एक कांडंही कारखान्याकडे येऊ देणार नाही. चक्का जाम आंदोलन करू."<sup>10</sup> असा कारखाना प्रशासनाला निर्वाणीचा ईशारा देतात. रिक्त अतिरिक्त कादंबरीत ऊस वाहतूक करणाऱ्या वाहनाची हवा सोडून देतात. कारखान्याच्या कर्मचाऱ्याला मारहाण करतात.

### समारोप

प्रस्तुत मराठीतील ग्रामीण कादंबऱ्यात महाराष्ट्रातील ऊस उत्पादक शेतकरी व सहकारी साखर कारखाने यांच्या संबंधाचा, शेतकऱ्यांना ऊस उत्पादनात येणाऱ्या अडचणी, ऊस गाळपात निर्माण होणाऱ्या समस्या यांचे वास्तवदर्शी चित्रण आले आहे.

### निष्कर्ष

1. सहकारी साखर कारखानदारी क्षेत्रात शेतकरी हा एकाच वेळी ऊस उत्पादक या नात्याने कच्चा माल पुरवठादार व कारखान्याचा सभासद या नात्याने साखर कारखान्याचा मालक अशी दुहेरी भूमिका निभावत असतो. यासंबंधीचे चित्रण 'साखरफेरा' या कादंबरीतून आले आहे.

2. शेतकरी स्वतःची आर्थिक परिस्थिती सुधारण्यासाठी तसेच आपल्या मुलींच्या अथवा नातींच्या विवाहासाठी ऊस लागवडीला प्राधान्य देतात.
3. ऊस पिकावर दुष्काळ, महापूर, रोगराई, आग आदी नैसर्गिक आपत्तींचा परिणाम होत असतो. पाण्याच्या कमतरतेमुळे होणाऱ्या नुकसानीचे वर्णन 'पाचरुट' या कादंबरीतून आले आहे. 'साखरफेरा' या कादंबरीतून किशा खोताच्या उसाला लागलेली आग तसेच लोकरी मावा पडल्यामुळे झालेल्या नुकसानीची दाहकता समजते.
4. काहीवेळा पाऊसपाणी भरपूर झाल्याने उसाची अतिरिक्त लागवड होते. परिणामी, साखर कारखाने सर्व ऊस गाळपास नेऊ शकत नाहीत. यातून ऊसतोडीचे प्रश्न निर्माण होतात. यासंबंधीचे चित्रण 'पाचरुट' व 'रिक्त-अतिरिक्त' या कादंबरीत आलेले आहे.
5. सहकारी साखर कारखान्यात शेतकऱ्यांची उसाच्या वजनकाट्यातून लूटही केली जाते. कारखान्यावर इलेक्ट्रॉनिक तसेच कॉम्प्युटराईज्ड वजनकाटे बसविले असले तरी सॉफ्टवेअरमध्ये फेरफार करून वा सेटींग करून शेतकऱ्यांची लूट केली जात असल्याचे चित्रण 'साखरफेरा' या कादंबरीतून येते.
6. शेतकऱ्यांचे ऊस लागवडीपासून ते गाळपापर्यंत अनेक ठिकाणी शोषण होते. ऊसतोड कामगार, ऊस वाहतूकदार तसेच साखर कारखान्यातील शिपायापासून ते अधिकाऱ्यांपर्यंत अशा अनेक घटकांकडून शोषण होत असल्याचे चित्रण 'रिक्त-अतिरिक्त' या कादंबरीमध्ये आलेले आहे.

#### संदर्भ

1. जुगळे वसंतराव, 'महाराष्ट्रातील साखर उद्योग, विनियंत्राचे धोके', अंतर्भूत-समाजप्रबोधन पत्रिका, जुलै-सप्टेंबर 1997, पृ. क्र. 152.
2. पाटील मोहन, 'साखरफेरा', कॉन्टिनेन्टल पब्लिकेशन, पुणे, 2006, पृ.क्र.22.
3. जाखडे अरुण, 'पाचरुट', अभिनुजा प्रकाशन, पुणे, तृ.आ., 1991, पृ.क्र. 48.
4. बोराडे रा.रं., 'रिक्त-अतिरिक्त', साकेत प्रकाशन, औरंगाबाद, 2009, पृ.क्र. 11.
5. पाटील मोहन, 'साखरफेरा', कॉन्टिनेन्टल पब्लिकेशन, पुणे, 2006, पृ.क्र.22.
6. तत्रैव, पृष्ठ क्र.236
7. जाखडे अरुण, 'पाचरुट', अभिनुजा प्रकाशन, पुणे, तृ.आ., 1991, पृ.क्र. 102.
8. पारेकर दशरथ, 'सहकारी साखर उद्योग : उत्कर्ष व वाताहत', तेजस पब्लिकेशन कोल्हापूर, 2015, पृ. क्र. 39.



साहित्य, कला आणि लोकसंस्कृतीला वाहिलेले त्रैमासिक

# तिफण

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एक होऊनी जोमात जीव तोडती फडात ॥१॥

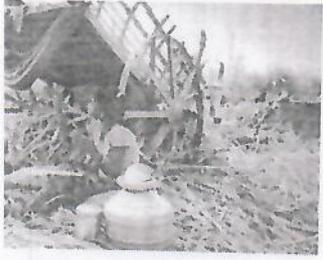
ऊस तोडता तोडता काळ लोटतो फडात  
धन्य माऊलीची कूस नाळ जोडतो कष्टात  
माता मुकदमा बोले नको सतावू मला  
झाला जड जीव बाळ खेळतो पोटात ॥१॥

मनोभावे रातदिन देव कोयता पूजला  
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- श्रावण गिरी





## मराठी कादंबरीतून आलेल्या सहकारी साखर कारखान्यांच्या संस्थापकांचे योगदान

- प्रा. विनायक जाधव

के.के.एम. महाविद्यालय मानवत

मो.नं.- ९९२२१९८२४९

### प्रस्तावना :-

भारत देश आज कृषी उत्पादनात स्वयंपूर्ण बनला आहे आज साखर उत्पादनात व निर्यातीत भारताने ब्राझील सारख्या देशाला पाठी मागे टाकून जगात प्रथम क्रमांकाचे स्थान मिळविले आहे. भारतात महाराष्ट्र राज्य हे साखर उत्पादनात प्रथम क्रमांकाचे राज्य बनले आहे. याचे सर्व श्रेय महाराष्ट्रातील सहकारी साखर कारखानदारीला जाते. हे साखर कारखाने उभारण्यात कारखान्यांच्या संस्थापकांचे योगदान मोठे आहे. याची दखल मराठी कादंबरीने घेतली आहे. याचा आढावा कादंबऱ्याच्या आधारे या शोधनिबंधात घेण्यात येईल.

भारताला स्वातंत्र्य मिळवून देण्यासाठी ज्या स्वातंत्र्यसैनिकांनी महत्वाची भूमिका बजावली होती. त्यातीलच काही ध्येयवादी आणि निःस्वार्थी लोकांनी स्वातंत्र्याप्राप्तीच्या अपेक्षित यशानंतर 'सहकार चळवळ' ग्रामीण भागात रुजवण्याचे जाणीवपूर्वक प्रयत्न केले. याबाबतीत दशरथ पारेकर म्हणतात, "स्वातंत्र्य चळवळीत ज्यांनी लढाऊ भूमिका घेतली. त्यापैकी अनेक नेत्यांनी विधायक कार्याव्दारेदेश उभारणीच्या कामाला हातभार लावण्याचा निर्धार केला. या नेत्यांनी जे विविध मार्ग अवलंबले त्यापैकी

एक होता शिक्षण आणि दुसरा सहकार'. या दोन्ही क्षेत्रांत संस्थात्मक उभारणीच्या प्रयत्नातूनच ग्रामीण भागात 'विविध कार्यकारी सेवा सहकारी सोसायट्या', 'सहकारी खरेदी विक्री संघ', 'जिल्हा मध्यवर्ती सहकारी बँका', 'सहकारी सूतगिरण्या', 'सहकारी दूध संस्था', 'सहकारी उपसा जलसिंचन संस्था' यासह सहकारी साखर कारखाने इत्यादी सहकारी संस्थांचे मोठे जाळे विणले. ग्रामीण भागातील लोकांना मोठ्या प्रमाणावर सहकारामध्ये सहभागी करून घेतले. या संस्था उभारणीस्तव त्यांना प्रचंड मेहनत घ्यावी लागली. साखर कारखान्याची मान्यता मिळविणे, जमीन मिळविणे, भाग भांडवलाची उभारणी करणे शेअर्सची विक्री करणे, इत्यादी करावी लागली. महाराष्ट्रात 'सहकारी चळवळ' हि 'लोकचळवळ' बनवून नावारूपाला आणली. यात संस्थापकांची भूमिका निश्चितच कौतुकास्पद आहे. त्यांच्या या कार्याचे चित्रण मराठी कादंबरीतून आले आहे.

'साखर-सम्राट' या कादंबरीतील काकासाहेबांनी स्वातंत्र्यचळवळीत सक्रिय सहभाग घेतला होता. ते भूमिगत असताना डोंगरदऱ्यात लपून राहत. याबाबतीत काकासाहेब सांगतात, "बेचाळीस च्या स्वातंत्र्य चळवळीत मी भाग घेतला होता... बेचाळीसच्या चळवळीपेक्षा एक नव्या उमिदीने मी ही सहकार चळवळ हाती घेतली होती" त्यांनी निरावती खोऱ्यात निरावती सहकारी साखर कारखान्याची उभारणी करून रचनात्मक कार्य केले.

'चेअरमन' या कादंबरीत भाऊसाहेब पाटील म्हणतात, "माझ्या काकांनी अतिशय प्रतिकूल परिस्थितीत सहकारी साखर कारखाना उभा केला होता. काकांनी साखर कारखान्याच्या कामात स्वतःला झोकूनच दिले होते. काका स्वातंत्र्यसंग्रामातून आल्यामुळे त्यांच्यात एक त्वप्रकारची महान तत्त्वनिष्ठा होती." आपण समाजाचे काहीतरी देणे लागतो ही स्वातंत्र्यसैनिकांच्या ठिकाणी असलेली भावनाच मुळी त्यांना स्वस्थ बसू देत नव्हती. असेच कार्य 'सहकार सम्राट' मधील तात्यासाहेब, 'ताम्रपट' मधील दादासाहेब

भोईटे पाटील यांनी केले आहे.

स्वातंत्र्य सैनिकांना ग्रामीण भागाचा विकास करण्यासाठी 'सहकार चळवळ' हा जवळचा मार्ग वाटू लागला. सहकारी संस्थेच्या या संस्थापकांनी 'सहकार' ग्रामीण भागातील अज्ञानी लोकांपर्यंत पोहोचविण्यासाठी अपरिमित कष्ट उपसले आहेत. 'सहकार सम्राट' या कादंबरीत सहकारी साखर कारखान्याची उभारणी करताना 'संस्थापक' तात्यासाहेब सहकार म्हणजे काय? सहकाराचा फायदा कसा आहे. हे लोकांच्या भाषेत समजावून सांगतात, "सहकारी हि गोष्ट एका माणसाची नाही, अनेक माणसे एकत्र येतात, एकजूट बांधतात आणि कार्याची मुहूर्तमेढ रोवून वाटचाल करतात, याचे नाव सहकार." म्हणजेच अनेकांनी एकत्र येऊन परस्पर सहकार्यातून समाजाचा विकास साधणे यालाच 'सहकार' म्हणतात. या सहकारी तत्वांचा प्रचार व प्रसार या लोकांनी ग्रामीण भागात केला. या तत्वांची प्रत्यक्ष अंमलबजावणी करण्यासाठी अनेक संस्थांची उभारणी केली. 'साखरपेरणी' या कादंबरीत आबासाहेब व आकाराम बापू हे दोघेही एकाच जिल्ह्यातील दोन सहकारी साखर कारखान्यांचे संस्थापक आहेत. या दोघांनीही इतर अनेक सहकारी संस्थांची उभारणी केली आहे. 'साखर-सम्राट', 'ताम्रपट', 'चेअरमन', 'नागकेशर' या कादंबरीतून चित्रित झालेले सहकारी साखर कारखान्यांचे संस्थापकही अनेक योजना सहकारी तत्वावत राबवितात. समाजातील शेवटच्या माणसाचा विकास या सहकाराच्या चळवळीतून होऊ शकतो, ही जाणीव या लोकांना झाली होती. ही 'संस्थापक' मंडळी ध्येयाने झपाटलेली होती. आपल्या परिसराचा विकास हेच त्यांचे ध्येय होते, ते ध्येय त्यांनी योग्य रित्या पूर्ण केले.

मराठी कादंबरीत सहकारी साखर कारखाने उभारणीत कारखान्यांच्या संस्थापकांनी घेतलेल्या मेहनतीचे, परिश्रमाचे चित्रण करण्यात आले आहे. 'साखर खाडना' कादंबरीत विखे पाटलांनी कारखाना उभारणीसाठी घेतलेल्या परिश्रमाविषयी लेखक म्हणतो, "शेतकऱ्यांच्या उन्नतीचा, त्यांना कर्ज मुक्त करून

लंबी बनविण्याचा विखे पाटलांनी ध्यास घेतला...  
; अडीअडचणींना तोंड देत, अविश्रांत श्रम घेत ते  
ाना उभारणीच्या कामाला लागले. प्रतिकूल  
थतीशी संघर्ष करित वाटचालीलासुरुवात झाली.  
भांडवलासाठी ते खेडोपाडी हिंडू लागले.”<sup>4</sup>  
त्यांच्या घरोघरी जाऊन त्यांना शेअर्स विक्री केली.  
च प्रवरानगरीत सहकारी साखर कारखाना उभा  
गा. ‘सहकार-सम्राट’ या कादंबरीतील ‘संस्थापक’  
साहेब हे साखर कारखान्यासाठी गावोगाव हिंडून  
तर मेहनत घेतलीच; पण त्याचबरोबर कार्यकर्त्यांना  
ला लाऊन कामे करून घेतली. ‘ताम्रपट’ या  
बरी ‘संस्थापक’ दादासाहेब भोईटे साखर  
वान्याच्या उभारणीसाठी प्रयत्न करतात. ‘चेअरमन’  
कादंबरीत ‘संस्थापक’ काका हे ‘जयशंकर सहकारी  
र कारखाना’ उभारणीसाठी परिश्रम घेतात.  
केशर’ या कादंबरीत संस्थापक बापूराव डोंगरे हे  
रा’ सहकारी साखर कारखान्याची उभारणी  
यासाठी शिक्षकाची नोकरी सोडतात. कारखान्याचे  
कामे तेच करतात. साखर कारखान्याच्या  
ापकांना कारखान्याची उभारणी करताना अथक  
म घ्यावे लागतात. साखर कारखान्याची उभारणी  
ी ही साधी सोपी बाब नक्कीच नाही, याचे प्रत्यंतर  
रास पूरक कादंबरीतून चित्रित झालेल्या  
ापकांच्या योगदानातून येते.

‘सहकार-सम्राट’ या कादंबरीतील कारखान्याचे  
ापक तात्यासाहेब आपल्या कारखान्याला मान्यता  
विण्यासाठी एक शककल लढवितात. स्वतःच्या  
यब्धी’ चा कार्यक्रम आयोजित करतात. या  
क्रिमाला मुख्यमंत्र्यांना बोलतात. यानिमित्ताने मोठे  
रप्रदर्शन घडवतात. जमलेलीगदी पाहून मुख्यमंत्री  
वून जानात. सभेची संधी साधून तात्यासाहेब  
यमंत्र्यांच्या वाणीतून कारखान्याच्या मंजुरीची घोषणा  
न घेतात. मुख्यमंत्री- आपल्या भाषणात म्हणतात,  
गेली चार पाच वर्षापासून तात्या एका महत्वाच्या  
ीकडे डोळे लावून बसले होते. ती बाब म्हणजे  
कारी साखर कारखाना! या भागातील शेतकरी,

शेतमजूर, सुशिक्षित बेकार यांना हा कारखाना म्हणजे  
एक वरदान ठरणार आहे. ते वरदान तात्यांच्या कर्तृत्वाने  
आपल्याला लाभले आहे. साखर कारखान्याचे तात्यांचे  
प्रपोजल मंजूर झाले आहे.”<sup>5</sup> अशी राज्य शासनाची  
परवानगी मिळविण्यात तात्यासाहेब यशस्वी होताच केंद्र  
शासनाची परवानगी मिळविण्यासाठी दिल्लीला केंद्रीय  
कृषिमंत्री सुखदेवरावाकडे जातात. त्यांना आपलेसे  
करतात आणि रिकाम्या हाताने आलो असलो तरी  
रिकाम्या हाताने जाणार नाही, असा आत्मविश्वास व्यक्त  
करतात. मंत्र्यांना शब्दात पकडून त्यांच्याकडून केंद्राची  
मान्यता मिळविण्यात यशस्वी होतात. ‘साखर-सम्राट’ या  
कादंबरीतील ‘संस्थापक’ काकासाहेब हे मंत्री दादासाहेब  
यांच्या मदतीने कारखान्याची मान्यता मिळवतात.  
‘ताम्रपट’ या कादंबरीमध्ये शेतकरी सहकारी साखर  
कारखान्याला राज्य सरकारची मान्यता मिळण्यासाठी  
‘संस्थापक’ दादासाहेब भोईटे पाटील मुंबईत यशवंतराव  
चव्हाण यांना भेटतात, मंजुरी मिळवतात. ‘साखर  
खासना’ या कादंबरीत जयकाली सहकारी साखर  
कारखान्याचे ‘संस्थापक’जीभाऊ केंद्र सरकारची  
परवानगी मिळविण्यासाठी दिल्लीला अनेक वेळा  
जातात. सहकारी साखर कारखान्यांना केंद्र व राज्य  
सरकारची व इतर विभागाची मान्यता मिळविण्यासाठी  
संस्थापकांना खूप मेहनत करावी लागते. मुंबई, दिल्लीला  
अनेक वाऱ्या कराव्या लागतात. या मान्यता मिळवताना  
अनेक क्लुप्त्या त्यांना वापरावे लागतात.

सहकारी साखर कारखान्याला लागणाऱ्या  
भांडवलाची उभारणी करण्यासाठी संस्थापकांना  
गावोगावी फिरून ‘शेअर्स’ खरेदी करण्यासाठी  
शेतकऱ्यांना प्रवृत्त करावे लागते. संस्थापक वेगवेगळ्या  
क्लुप्त्या वापरून शेतकऱ्यांना ‘शेअर्स’ खरेदी  
करण्यासाठी प्रवृत्त करतात. ‘साखरपेरणी’ या कादंबरीत  
“शेअर्स गोळा करण्यासाठी ज्या सभा होत लावेळी  
आकारामबापू सांगत, आपल्या तालुक्याचा हा नियोजित  
साखर कारखाना म्हणजे तालुक्याच्या सर्वांगीण  
विकासाचा केंद्रबिंदू ठरणार आहे.”<sup>6</sup> विकासात्मक  
दृष्टिकोन लोकांच्या मनावर बिंबवण्याचा प्रयत्न करतात,

पत्रकारांनाही सोबत घेऊन जातात. 'शेअर्स' विक्रीच्या बातम्या वृत्तपत्रातून अधिक याव्यात, यासाठी प्रयत्न करतात. 'साखर खाडना' या कादंबरीत जयकाली सहकारी साखर कारखान्याचे संस्थापक जीभाऊ शेतकऱ्यांना रोखीने रोखीने 'शेअर्स' विकण्यात अडचणी घेतात. तेव्हा ग्रामीण सोसायट्या मार्फत नऊशे रुपयांचे कर्ज देऊन उर्वरित शंभर रुपये गावातील शेत सावकारांना देण्याचे सांगून 'शेअर्स' विकतात. 'सहकार-सम्राट' या कादंबरीत तात्यासाहेब कार्यकर्त्यांना गावोगावी फिरून जास्तीत जास्त 'शेअर्स' विक्रीकरण्याचे प्रयत्न करतात. 'नागकेशर' या कादंबरीत बापूराव डोंगरे घोड्यावर, बैलगाडीतून फिरून 'शेअर्स' विक्री करतात.

साखर कारखाना उभारणीसाठी जमिनीची मोठ्या प्रमाणात आवश्यकता असते. एवढ्या मोठ्या प्रमाणावर कारखान्याला लागणारी जमीन देण्यास शेतकरी सहजासहजी तयार होत नाहीत त्यावेळी जमीन मिळविण्यासाठी कारखान्याच्या संस्थापकांना आपली सर्व शक्ती आणि युक्ती पणाला लावावी लागते. 'सहकार-सम्राट' या कादंबरीतील संस्थापक गावच्या बाजूची साधं गवत सुद्धा न उगवणारी जमीन निवडतात. लोक त्याला 'भुताचा माळ' म्हणत असले तरी तात्यासाहेब त्यांच्यातील अंधश्रद्धा दूर करतात. लोकांच्या दृष्टीने तिला किंमत नसते. तसेच सहकाराचे फायदे पटवून दिल्याने लोक सहज जमीन कारखान्यास देण्यास तयार होतात. 'साखर-सम्राट' या कादंबरीतील कारखान्याचे संस्थापक काकासाहेब आपली स्वतःची जमीन कारखान्यासाठी 'दान' करतात. 'साखरपेरणी' कादंबरीत आकारामबापू भविष्याचा विचार करून इतर औद्योगिक कारखाने उभारणीसाठी तसेच 'शाळा', 'महाविद्यालये' उभारणीसाठी जमीन मोठ्या प्रमाणावर लागेल हे गृहीत धरून नरसिंगपूरच्या विस्तीर्ण माळरान साखर कारखान्यासाठी निवडतात.

स्वातंत्र्योत्तर काळात ग्रामीण भागात कृषी औद्योगीकरणाला चालना देण्याचे महत्त्वाचे कार्य सहकारी साखर कारखानदारीने केले आहे. या कारखान्यात 'हंगामी' कर्मचाऱ्यांना सहा-सात महिने तर

'कायमस्वरूपी' कर्मचाऱ्यांना बारा महिने 'रोजगार' मिळाला. ऊस उत्पादक शेतकऱ्यांनाही या निमित्त वर्षभराचा 'रोजगार' उपलब्ध झाला आहे. या सर्वांचे बरोबर ऊसतोड मजुरांनाही नगदी पैसा देणारे मिळाले. ऊसतोड वाहतुकीसाठी लागणारे ट्रक, ट्रॅक्टर वाहनांच्या 'ड्रायव्हर', 'क्लीनर' आणि त्यांचे मालकांनाही रोजगार मिळाला. या वाहनांची दुरुस्ती करणारे 'गॅरिजमधील कामगार', 'ऑटोमोबाइल दुकानदार', 'हॉटेल मालक', 'किराणा दुकानदार' 'भाजीविक्रेते' इत्यादी लाखो लोकांना रोजगार मिळाला. साखर कारखान्यांनी "वीजनिर्मिती, पशुपालन, कुकुवटपालन, दुग्धव्यवसाय, खरेदी-विक्री, पतपुनर्वसन, मद्यइतर रसायने, कागद यासारखे अनेक लहान-मोठे उद्योग वाढवून सहकारी संस्थांनी मोठ्या प्रमाणात रोजगार निर्मिती साध्य केली आहे." "सहकार-सम्राट' कादंबरीत कारखाना उभारणीपूर्वी तेथील लोकांना रोजगारासाठी पुणे-मुंबईला जावे लागत असत. कारखाना उभारणी मुळे गावातच रोजगार कसा उपलब्ध होई याची माहिती संस्थापक तात्यासाहेब देतात. " 'गवत हटव' ही वल्गना नसून काळाची गरज आहे. बेरोजगारांना काम देईल, शेतकरी कामकाऱ्यांना काम देईल." ही रोजगार निर्मिती करण्यात सहकारी साखर कारखान्याच्या संस्थापकांचे मोठे योगदान आहे. ग्रामीण भागातील सहकारी साखर कारखान्यांनी खऱ्या अर्थाने परिसराचे सोनं केलं आहे. एक साखर कारखान्यास साधारणतः पाच हजार लोकांना रोजगार उपलब्ध करून देतो. या कारखान्यामुळे बेरोजगारीचा प्रश्न थोड्या प्रमाणात सुटला आहे.

सहकारी साखर कारखान्यांनी सामाजिक विकासात मोलाचे कार्य केले आहे. त्यांच्या संस्थापकांनी सामाजिकजाणीवेच्या भूमिकेतून परिसरातील विद्यार्थ्यांच्या शिक्षणासाठी "कारखान्यामार्फत इंग्रजी व मराठी माध्यमांच्या प्राथमिक व माध्यमिक शाळा, कनिष्ठ शिक्षण संस्था व महाविद्यालये चालविली जात आहेत. इतकेच नव्हे, तर काही साखर कारखान्यांनी वैद्यकीय अभियांत्रिकी महाविद्यालयेही सुरू केली आहेत. त्यांच्या

हाराष्ट्राच्या शैक्षणिक विकासास फार मोठा हातभार आला आहे.”<sup>१०</sup> या शैक्षणिक संस्थांमधून शिक्षण घेऊन ग्रामीण भागातील अनेक मुले डॉक्टर, इंजिनियर, शासकीय अधिकारी, सामाजिक नेते, सामाजिक कार्यकर्ते बनले आहेत. तसेच ग्रामीण भागात ‘आरोग्य विधा’ निर्माण झाल्या. रस्ते व दळणवळणाच्या वेधेत वाढ झाली. पशुसंवर्धन सेवा उपलब्ध झाल्या. शा अनेक समाजहितकारक भौतिक सुविधा निर्माण ल्याने ग्रामीण भागाचा चेहरामोहराच बदलला आहे. साखर कारखान्यांचे सामाजिक काम एवढ्यापुरतेच मर्यादित राहत नाही १९७२ च्या दुष्काळी परिस्थिती मधील नंदकुमार झावरे लिहितात, “ग्रामीण भाग या काळाने होरपळून निघालेला असल्याने शिक्षणासाठी राला असलेल्या विद्यार्थ्यांच्या डब्याचा प्रश्न निर्माण झाला. त्यावेळी जिल्ह्यातील सहकारी साखर कारखान्यांच्या नेत्यांनी मदत घेऊन नगरमध्ये जवळपास १ वर्षे खानावळ चालवून दुष्काळी भागातील विद्यार्थ्यांच्या जेवणाचा मोठा प्रश्न सोडवला.”<sup>११</sup> याच काळात चारा छावणी सह अनेक समाज उपयोगी कामे करारी साखर कारखान्यांनी केली आहेत.

‘साखरपेरणी’ या कादंबरीतील आबासाहेब गापक असलेल्या सहकारी साखर कारखान्यांमार्फत आत्मा फुले शिक्षण संस्था’ चालविण्यात येते. खान्यामार्फत चालविल्या जाणाऱ्याया संस्थेचे उद्देश ताना आबासाहेब म्हणतात, “गरीब शेतकरी, मजूर यांची मुलं शिक्षणापासून वंचित होऊ नयेत, उद्देशानं ही संस्था आपण हितं सुरू केलीये... पाला असं आणखी खूप करायचं हाय. पुढं जायचं .. नुसतं साखर निर्माण करनं हे आपलं ध्येय नाय. या माध्यमातनं शिक्षणासारख्या क्षेत्रातही आपण करून दाखवला पायजे.”<sup>१२</sup> ही संस्थापकांची मुरी, कामगारांप्रती तळमळ होती. याच हेतूने ाष्ट्रातील जवळपास सर्वच सहकारी साखर कारखान्यांच्या संस्थापकांनी त्यांच्या परिसरात किमान मारी शाळा, महाविद्यालये सुरू केली आहे. त्यामुळे राज्यांच्या तुलनेत महाराष्ट्र खाजगी शिक्षण संस्थांचे

जाळे ग्रामीण भागात मोठ्या प्रमाणावर निर्माण झाले आहे. याचा उल्लेख ‘साखर-सम्राट’, ‘साखरपेरणी’, ‘ताम्रपट’ व ‘नागकेशर’ यासारख्या काही कादंबऱ्यांतून आला आहे त्यामुळे साखर कारखान्यांच्या संस्थापकांचे शैक्षणिक क्षेत्रातील योगदान समजण्यास मदत होते.

सुरुवातीच्या काळातील सहकारी साखर कारखान्यांच्या संस्थापकांनी स्वातंत्र्यलढ्यात सहभाग नोंदवला, भूमिगत राहून कार्य केले. इंग्रज सत्तेला विरोध केला. वेळप्रसंगी इंग्रज सैनिकांच्या लाठ्या खाल्ल्या. पुढे देशाला स्वातंत्र्य मिळाल्यानंतर त्यांच्यातील ध्येयवादी विचारांमुळे त्यांनी सहकारी साखर कारखान्याची उभारणी केली. आपल्या संबंधांचा वापर करून साखर कारखान्यास परवानगी मिळवली. खेडोपाडी फिरवून कारखान्यांचे ‘शेअर्स’ विकले, अनेक कसरती करून कारखान्यासाठी जमिनी मिळविल्या, कारखान्यांची बांधकामे केली, कारखाने उत्तमप्रकारे चालवून दाखविले. ग्रामीण भागात शैक्षणिक सामाजिक व आरोग्यविषयक समाजोपयोगी अनेक कामेही केली आहेत. याची दखल मराठी कादंबरीने घेतली आहे.

#### निष्कर्ष :

१. सुरुवातीच्या काळात सहकारी साखर कारखाने उभारणारे अनेक संस्थापकांनी भारतीय स्वातंत्र्य चळवळीत सहभाग घेतलेला दिसून येतो.
२. डॉ. धनंजय गाडगीळ, कै. वैकुण्ठभाई मेहता, यशवंतराव चव्हाण, पद्मश्री विठ्ठलराव विखे पाटील, वसंत दादा पाटील, शंकरराव मोहिते, राजाराम बापू पाटील, शरद पवार इत्यादींच्या नेतृत्वामुळे महाराष्ट्रातील सहकार नावारूपाला आला.
३. भारतात इतर राज्यांच्या तुलनेत महाराष्ट्रात सहकारी साखर कारखाने मोठ्या प्रमाणावर निर्माण झाले.
४. सुरुवातीच्या काळात सहकारी साखर कारखाने स्थापन करणारे लोक हे ध्येयवादी, निःस्वार्थी होते. आपल्या परिसराचा विकास हेच त्यांचे ध्येय होते.
५. साखर कारखान्यांची उभारणी करताना

संस्थापकांना शेअर्स विक्री, जमीन संपादन करणे, मान्यता मिळविणे यासाठी अथक मेहनत घ्यावी लागली.

६. सहकारी साखर कारखानदारीमुळे ग्रामीण भागात मोठ्या प्रमाणावर रोजगार निर्मिती झाली.
७. साखर कारखान्यांच्या माध्यमातून ग्रामीण भागात अनेक प्रकारची शैक्षणिक व आरोग्यविषयक कामे झाली आहेत. यात शाळा, महाविद्यालये, हॉस्पिटल इत्यादींचा उल्लेख करता येईल.
८. सहकारी साखर कारखान्यांच्या संस्थापकांची मराठी कादंबरीने पाहिजे तशी दखल घेतलेली दिसून येत नाही.

**संदर्भ :-**

१. पारेकर दशरथ, 'सहकारी साखर उद्योग: उत्कर्ष आणि वाताहत', 'तेजस पब्लिकेशन', कोल्हापूर, २०१५, प्र.आ.पृ.क्र. २१
२. वरे विलास, 'साखर-सम्राट', संपूर्ण प्रकाशन, पुणे, १९८४

- प्र.आ.पृ.क्र. ३१
३. कुलकर्णी अशोक, 'चेअरमन' साज प्रकाशन-पुणे २००६, प्र.आ.पृ.क्र. ४५५
४. सोनावले अरविंद, 'सहकार-सम्राट', योगेंद्र प्रकाशन- मुंबई १९८५, प्र.आ.पृ.क्र. २२-२३
५. पाटील टी.एस., 'साखर खाऽना', अक्षय प्रकाशन -पुणे १९९९, प्र.आ.पृ.क्र. ३०-३१
६. सोनावले अरविंद, उनि.पृ.क्र. ११
७. दत्तदार रवींद्र, 'साखर पेरणी', 'ग्रंथाली वाचक चळवळ' मुंबई १९८४, प्र.आ.पृ.क्र. ३६
८. जहागिरदार दि.व्य. (संपा), 'सेंटरफॉरएकॉनॉमिक अँड सोशल स्टडीज', अमरावती २०१२, पृ.क्र. १०५
९. सोनावले अरविंद, उनि.पृ.क्र. १२८
१०. जहागिरदार दि.व्य. उनि.पृ.क्र. १०५
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*Yogesh J. Bagul, Ramkrishna M. Dhaigude and Sumedh B. Thool\**

*New inequalities for quotients of circular and  
hyperbolic functions*

## ALTERNATIVE PROOFS OF SHAFER'S INEQUALITY FOR INVERSE HYPERBOLIC TANGENT

YOGESH J. BAGUL\* AND RAMKRISHNA M. DHAIGUDE

(Communicated by L. Mihoković)

*Abstract.* We point out that a concise proof of Theorem 2 in the article, 'On a quadratic estimate of Shafer' by L. Zhu contains a small mistake. Correcting this mistake and giving alternative proofs of Theorem 2 is the main aim of this note.

### 1. Introduction and correction

In 2008, L. Zhu [6] published a new proof of the following theorem:

**THEOREM 1.** Let  $0 < x < \sqrt{15}/4$ . Then

$$\frac{\tanh^{-1} x}{x} < \frac{8}{3 + \sqrt{25 - \frac{80}{3}x^2}}. \quad (1)$$

The inequality (1) was originally established by R. E. Shafer [3, 4, 5] and its alternative proof is given in [6] in a concise way. Though the proof of Theorem 1 is given in a simple way in [6], it contains a small mistake which can be explained as follows:

While giving the proof of Theorem 1, it is shown in [6] that the function

$$H(x) = \frac{25 - \left(\frac{8x}{\tanh^{-1} x} - 3\right)^2}{x^2}$$

is decreasing on  $(0, \sqrt{15}/4)$ . This is accomplished by showing

$$I(t) = \frac{-4 \sinh^2 t + 3t \sinh t \cosh t + t^2 \cosh^2 t}{t^4 \cosh^2 t} = \frac{A(t)}{B(t)}$$

to be decreasing on  $(0, \tanh^{-1} \sqrt{15}/4)$  due to the transformation  $H(x) = 16I(t)$ , where  $\tanh^{-1} x = t$ . A careful observation shows that the denominator  $B(t)$  of  $I(t)$  is mistaken as  $t^4 \cosh^2 t$  instead of  $t^2 \sinh^2 t$ . Fortunately, the function  $I(t)$  remains decreasing for either expression for  $B(t)$  and the final conclusion is unaffected. For final conclusion, the following lemma is used.

*Mathematics subject classification (2020):* 26A09, 26D05, 26D15.

*Keywords and phrases:* Shafer's inequality, inverse hyperbolic tangent, increasing-decreasing function.

\* Corresponding author.

Article

# Bounds for Quotients of Inverse Trigonometric and Inverse Hyperbolic Functions

Sumedh B. Thool <sup>1</sup>, Yogesh J. Bagul <sup>2</sup>, Ramkrishna M. Dhaigude <sup>1</sup> and Christophe Chesneau <sup>3,\*</sup>

- <sup>1</sup> Department of Mathematics Government Vidarbha, Institute of Science and Humanities, Amravati 444604, India; sumedhmaths@gmail.com (S.B.T.); rmdhaigude@gmail.com (R.M.D.)
- <sup>2</sup> Department of Mathematics, K. K. M. College, Manwath Dist, Parbhani 431505, India; yjbagul@gmail.com
- <sup>3</sup> Department of Mathematics, University of Caen-Normandie, 14032 Caen, France
- \* Correspondence: christophe.chesneau@unicaen.fr

**Abstract:** We establish new simple bounds for the quotients of inverse trigonometric and inverse hyperbolic functions such as  $\frac{\sin^{-1}x}{\sinh^{-1}x}$  and  $\frac{\tanh^{-1}x}{\tan^{-1}x}$ . The main results provide polynomial bounds using even quadratic functions and exponential bounds under the form  $e^{ax^2}$ . Graph validation is also performed.

**Keywords:** exponential function; inverse trigonometric functions; inverse hyperbolic functions

**MSC:** 26D05; 26D07; 26D20; 33B10

## 1. Introduction

As discussed in [1], functions whose graphs are similar to bell-shaped curves should be studied, and one of the aspects is to investigate the bounds of such functions. For the bounds of this type of functions involving inverse trigonometric and inverse hyperbolic functions, we refer the reader to [2–20] and references therein. Chesneau and Bagul [1] investigated the sharp bounds for ratio functions  $\frac{\cos x}{\cosh x}$  and  $\frac{\sin x}{\sinh x}$ . These inequalities were carefully studied and generalized by Kostić et al. [21] to get several types of bounds using infinite products.

Recently, Bagul et al. [22] corroborated the following double inequalities involving exponential bounds.

**Proposition 1** ([22] Proposition 1). For  $x \in [0, \alpha]$ , where  $\alpha \in (0, \frac{\pi}{2})$ , the inequalities

$$e^{-a_1x^2} \leq \frac{\cos x}{\cosh x} \leq e^{-a_2x^2} \tag{1}$$

hold with the best possible constants  $a_1 = \alpha^{-2} \ln\left(\frac{\cosh \alpha}{\cos \alpha}\right)$  and  $a_2 = 1$ .

**Proposition 2** ([22] Proposition 2). For  $x \in (0, \frac{\pi}{2})$ , the inequalities

$$e^{-b_1x^2} < \frac{\sin x}{\sinh x} < e^{-b_2x^2} \tag{2}$$

hold with the best possible constants  $b_1 = 4\pi^{-2} \ln[\sinh(\frac{\pi}{2})] \approx 0.337794$  and  $b_2 = \frac{1}{3}$ .

**Proposition 3** ([22] Proposition 4). For  $x \in (0, \alpha]$ , where  $\alpha \in (0, \frac{\pi}{2})$ , the inequalities

$$e^{-c_1x^2} < \frac{\tanh x}{\tan x} < e^{-c_2x^2} \tag{3}$$

hold with the best possible constants  $c_1 = \alpha^{-2} \ln\left(\frac{\tan \alpha}{\tanh \alpha}\right)$  and  $c_2 = \frac{2}{3}$ .



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## Convexity and double-sided Taylor's approximations

Y. J. Bagul<sup>1</sup>, C. Chesneau<sup>2</sup>, M. Kostić<sup>3</sup>, T. Lutovac<sup>4</sup>, B. Malešević<sup>4\*</sup>,  
M. Rašajski<sup>4</sup>

<sup>1</sup>Department of Mathematics, K.K.M. College Manwath, Dist: Parbhani(M.S.)-43150 India

<sup>2</sup>LMNO, University of Caen-Normandie, Caen, France

<sup>3</sup>Faculty of Technical Sciences, University of Novi Sad, Serbia

<sup>4</sup>School of Electrical Engineering, University of Belgrade, Serbia

### Abstract

Using convexity and double-sided Taylor's approximations of functions, we establish new general results in this field which can be used to refine and/or sharp some analytic inequalities in the existing literature.

**Mathematics Subject Classification (2020).** 33B10, 26D05, 26D07

**Keywords.** Convexity, double-sided Taylor's approximation, Kober's inequality, Janous inequality

### 1. Introduction

The inequality

$$1 - \frac{2x}{\pi} \leq \cos x \leq 1 - \frac{x^2}{\pi}; \quad x \in \left[0, \frac{\pi}{2}\right] \quad (1.1)$$

was first established by H. Kober [3, p. 22] in 1944, and the inequality

$$\sin x \geq \frac{2}{\pi}x; \quad x \in \left[0, \frac{\pi}{2}\right]$$

was first established by C. Jordan in 1869 [2]. Another inequality of interest is the Janous inequality

$$\frac{\sin x}{x} \geq \frac{2}{\pi} \left(1 + \frac{\pi^2}{24}\right) - \frac{x^2}{3\pi}; \quad x \in \left(0, \frac{\pi}{2}\right]. \quad (1.2)$$

The functions  $\sin x/x$  and  $\cos x$  have been considered many times by researchers, and obtaining sharp boundaries of them has always piqued interest. Concerning the already established results about the polynomial, rational and irrational bounds of functions  $\sin x/x$  and  $\cos x$ , we would like to recommend reading the survey article [10] by F. Qi, D.-W. Niu

\*Corresponding Author.

• Email addresses: yjbagul@gmail.com (Y. J. Bagul), christophe.chesneau@unicaen.fr (C. Chesneau), marco.s@verat.net (M. Kostić), tatjana.lutovac@etf.bg.ac.rs (T. Lutovac), branko.malesevic@etf.bg.ac.rs (B. Malešević), marija.rasajski@etf.bg.ac.rs (marija.rasajski@etf.bg.ac.rs)

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## REFINEMENTS OF SOME CLASSICAL INEQUALITIES INVOLVING SINC AND HYPERBOLIC SINC FUNCTIONS

YOGESH J. BAGUL, SUMEDH B. THOOL , CHRISTOPHE CHESNEAU,  
 RAMKRISHNA M. DHAIGUDE

**Abstract.** Several bounds of trigonometric-exponential and hyperbolic-exponential type for sinc and hyperbolic sinc functions are presented. In an attempt to generalize the results, some known inequalities are sharpened and extended. Hyperbolic versions are also established, along with extensions.

### 1. Introduction

Consider the sinc function defined by  $\text{sinc } x = (\sin x)/x$ , for  $x \neq 0$  and  $\text{sinc } x = 1$ , for  $x = 0$ . A hyperbolic sinc function is defined similarly. Let us now cite some inequalities for sinc and hyperbolic sinc functions pertaining to the main results of this paper. First, the classical inequalities

$$(1.1) \quad \cos\left(\frac{x}{\sqrt{3}}\right) < \frac{\sin x}{x} < \cos\left(\frac{2}{\pi} \arccos\left(\frac{2}{\pi}\right) \cdot x\right), \quad 0 < x < \frac{\pi}{2},$$

were established by K.S.K. Iyengar, B.S. Madhava Rao and T.S. Nanjundiah in a little-known paper [9]. See also [14]. Recently, J. Sándor ([18]) offered

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*Key words and phrases:* trigonometric-exponential, hyperbolic-exponential, Mitrinović-Adamović inequality, Lazarević inequality, Iyengar-Madhava Rao-Nanjundiah inequality.

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# A new bounding technique based on infinite product decomposition

Christophe Chesneau<sup>1</sup> · Yogesh J. Bagul<sup>2</sup> 

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## Abstract

In this note, a new strategy is proposed to obtain bounds for functions having product decompositions. Applications are given for trigonometric and hyperbolic functions, thus improving some existing inequalities in the literature. Some graphics illustrate the findings.

**Keywords** Infinite product · Trigonometric and hyperbolic functions · Exponential bounds.

**Mathematics Subject Classification** 26A09 · 26D07 · 33B10

## 1 Introduction

Analytical inequalities have been an interesting topic among researchers in mathematics. Although l'Hôpital's rule of monotonicity is widely used, there are various other tools and techniques to obtain inequalities. We refer readers to [2–9, 11–18] and references therein for different methods of establishing analytical inequalities: As stated in [9], infinite products are rarely used to establish analytical inequalities. The main aim of this note is to propose a new technique for obtaining bounds of some functions by the excellent use of their infinite product representations.

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✉ Yogesh J. Bagul  
yjbagul@gmail.com

· Christophe Chesneau  
christophe.chesneau@unicaen.fr

<sup>1</sup> LMNO University of Caen-Normandie, Caen, France

<sup>2</sup> Department of Mathematics, K. K. M. College, Manwath, Dist : Parbhani(M.S.) 431505, India

## TIGHT EXPONENTIAL BOUNDS FOR HYPERBOLIC TANGENT

YOGESH J. BAGUL<sup>(1)</sup>, RAMKRISHNA M. DHAIGUDE<sup>(2)</sup>, CHRISTOPHE CHESNEAU<sup>\*(3)</sup>  
AND MARKO KOSTIĆ<sup>(4)</sup>

ABSTRACT. In this article, we aim to obtain very tight exponential bounds for the hyperbolic tangent function. Our inequalities refine a double inequality recently proved by Zhang and Chen. In addition, graphical and numerical analysis are carried out, and a number of auxiliary lemmas may be of use on their own.

### 1. INTRODUCTION

The hyperbolic tangent function is the function  $\tanh : \mathbb{R} \rightarrow (-1, 1)$  defined by  $\tanh x = (e^x - e^{-x}) / (e^x + e^{-x})$ . Clearly, it is a continuous, differentiable, and bounded function that can produce negative, positive, and zero outputs. It occurs in many branches of pure and applied mathematics. In particular, in differential equations, it is at the heart of the so-called “tanh method” (see [10] and [11]), and in statistics, it is known to be one of the most important zero-centered activation function (see [9], and the references therein). The tight and tractable bounds of  $\tanh$  can therefore be useful in the fields of concern, mainly to evaluate mathematical quantities involving it. Even so, very little can be found related to the bounds of this function in the literature. For instance, L. Zhu in [13] proved the following inequalities:

$$(1.1) \quad \left( \frac{r^2 - x^2}{r^2 + x^2} \right)^\beta \leq \frac{\tanh x}{x} \leq \left( \frac{r^2 - x^2}{r^2 + x^2} \right)^\alpha, \quad x \in (0, r),$$

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2010 *Mathematics Subject Classification.* 26A09, 26D07, 33B10.

*Key words and phrases.* Hyperbolic tangent, sigmoidal function, hyperbolic cosine, exponential bounds.

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## On algebraic bounds for exponential function with applications

Yogesh J. Bagul\*, Christophe Chesneau, and Ramkrishna M. Dhaigude

**ABSTRACT.** In this paper, we establish algebraic bounds of the ratio-type in nature for the natural exponential function  $e^x$  involving two parameters,  $a$  and  $n$ , which become optimal as  $a \rightarrow 0$  or  $n \rightarrow \infty$ . The proof is mainly based on Chebyshev's integral inequality and properties of the incomplete gamma function. Subsequently, we focus on the simple case obtained with  $n = 1$ , with comparisons to existing literature results. For the applications, we provide alternative proofs of inequalities involving ratio functions of trigonometric and hyperbolic functions. Graphics are given to illustrate the theory.

### 1. Introduction

The exponential function is “the most significant function in mathematics”, according to the prestigious mathematician Walter Rudin, due to its frequent occurrence in both pure and practical mathematics (see [11]). It can be found in a wide range of applications in the fields of physics, chemistry, computer science, engineering, biology, medicine, finance, and economics. From a mathematical viewpoint, when taken as such, it is a simple function. However, when it appears in a sophisticated mathematical expression (integral, series, partial derivative equations, etc.), it can be particularly hard to manage. For this reason, numerous efforts have been made to find sharp bounds of different natures. The topic is vast; numerous bounds for the exponential function have already been established. See, e.g.,

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2020 *Mathematics Subject Classification.* Primary: 33B10; Secondary: 11A99, 26D05, 26D07.

*Key words and phrases.* Algebraic bounds, optimal bounds, exponential function, ratio functions.

\*Corresponding author



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## हिन्दी कविता में स्वाधीनता आन्दोलन का चित्रण

प्रा. संजू मधुकरराव सूर्यवंशी देशमुख

सहयोगी प्राध्यापक, हिन्दी विभाग के. के.एम. महाविद्यालय, मानवत जि. परभणी  
भ्रमणध्वनि क्रमांक - ७७०९१५६२५३

साहित्य को समाज का दर्पण माना जाता है समाज में घटित होनेवाली हर अच्छी बुरी घटनाओं का प्रतिबिम्ब साहित्य में मुखर होता है। साहित्यकार अपने इर्द गिर्द में होने वाली कीसी भी घटनाओं, परिवेश एवं युग से पृथक नहीं रह सकता साहित्यकार स्रष्टा एवं दृष्टा होता है। वह अपने युगीन सत्य को साहित्य के माध्यम से चित्रित करता है। उसका यह चित्रण युग सापेक्ष होता है। स्वाधीनता आन्दोलन के दीर्घ काल का प्रभाव हिन्दी के साहित्यकारों पर पडना स्वाभाविक था।

भारत पर लंबे समय से अंग्रेजों का शासन था। अंग्रेजों ने भारतीयों का चतुर्दिक शोषण किया था। निसाहाय भारतीय जनता पर अनगिनत अत्याचार किए थे। साधारण अपराध के लिए वे कड़ी से कड़ी सजा देते थे। साहित्यकार प्रबुद्धचेता होता है। वह स्वयं जागता है और दूसरों को जगाता है। ऐसी स्थिति में भारतीयों ने अंग्रेजी शिक्षा के सम्बल से अंग्रेज सरकार के शोषण की नीति के खिलाफ जागरण किया। प्रारंभ में भारतीयों ने सर ए.टयुम के नेतृत्व में सन १८८५ इंडियन नॉनल काँग्रेस की अंग्रेजों को सहयोग देने तथा कुछ माँगें सविनय प्राप्त करने के लिए प्रतिष्ठा की थी। लेकिन कुछ ही सालों में यह स्वाधीनता संस्था में तब्दील हो गयी। तब भारतीयों ने अंग्रेजों को भारत देश छोड़ने और अजादी देने की बात की।

भारतेंदु युग को आधुनिक हिन्दी साहित्य का प्रवेशद्वार माना जाता है। इस काल में पूर्वकालीन परम्परा की तथा आधुनिक राष्ट्रीय भावबोध की कविता लिखी गयी। कविता चाहे किसी भी काल की ही क्यों न हो उसमें राष्ट्रीयता के भावों की अभिव्यक्ति हुई है। भारतेंदु हरिश्चंद्र, भारतेंदु युग के बहुमुखी प्रतिभा संपन्न साहित्यकार थे। उन्होंने अपने युग का नेतृत्व किया था। भारतेंदु सचमुच भारत के चंद्रमा ही थे। उन्होंने हिन्दी साहित्यकाष को अपनी रचनाओं से आलोकित किया था। भारतेंदु की कविता का महत्वपूर्ण उद्देश्य देशप्रेम रहा है क्योंकि भारत माता विदेशी सत्ता की गुलामी की बेडियों में जकडी हुई थी। भारत माता की गुलामी की शृंखलाओं को तोड़ना जरूरी था। भारतेंदु ने अपने युगीन समाज को देखा था। उन्होंने तत्कालीन समाज की दीन हीन दशा, अर्थिक दुरावस्था, राजनीतिक दासता का विरोध किया था। उन्होंने इन सबके लिए जिम्मेदार विदेशी शासकों को के घृणित शडयंत्रों का खुलकर विरोध अपनी कविताओं के माध्यम से किया था। भारतेंदु ने एक ओर अपने देशवासियों को जागृत किया तो दूसरी ओर अंग्रेजों की कुटिल नीति की कड़ी नोंदा की। उनकी कुछ पंक्तियाँ दृष्टव्य है -

“गयो राज धन तेज रोश बल ज्ञान नासाई।

बुद्धि वीरता उछाह सूरता बिलाई

आलस कायरपनों निरुद्धता अब छाई। रही मूढता

वैर परस्पर कलह लराई।

सब विधी नसि भारत प्रजा कहउँ न रह अवलंब।

अब जागो, जागो अब करुणायतन फेर जागी है नाथ कब।”

नये जमाने की मुकरी में भारतेंदु ने व्यंग्य के माध्यम से अंग्रेज सरकार की शोषण नीतियों का विरोध किया है। उन्होंने कहा है -

“भीतर भीतर सब रस चूसे, हँसि हँसि कै तन मन धन मुसै।

जाहिर बातन में अति तेज, क्यों सखी साजन नहिं अंग्रेज। ”

भारतेंदु ने विभिन्न पत्रकारिता के माध्यम से अपने युगीन रचनाकारों को राष्ट्रीय भावनाओं की अभिव्यक्ति के प्रेरित किया। इस काल के रचनाकारों ने राष्ट्रीयता की अभिव्यक्ति के लिए शक्तिशाली परम्परागत पौर्य, भारत की प्राचीन संस्कृति आदि चित्रण कर वीर भावनाओं का अवाहन

किया है। तो दूसरी ओर विदेशी सत्ता से षोशित, प्रताडित भारतीय समाज, संस्कृति का करुण चित्रण किया है। अतित के प्रेरणादायी प्रसंगों को, करुण दशाओं का अंकन व्यंग्योक्ति के माध्यम से करके उन्होंने देशवासियों को जागरण का मंत्र दिया है। पराधिन भारत की दुर्दशा को अभिव्यक्त करते हुए भारतेंदु लिखते हैं -

रोवहु सब मिलि कै आवहुभरत भाई।

हा हाँ भरत दुर्दशा न देखी जाई।

आचार्य महावीर प्रसाद द्विवेदी जी ने सरस्वती इस साहित्यिक पत्रिका के माध्यम से साहित्यिक आन्दोलन चलाया और अपने युग का नेतृत्व किया। मैथिलीषरण गुप्त द्विवेदी युग के प्रमुख कवि थे। उनकी रंग में भंग इस प्रारंभिक रचना में राष्ट्रीय चेतना की स्पष्ट झलक मिलती है। भारत भारती गुप्त जी की कीर्ती का स्थायी आधारस्तंभ है। जयषंकर प्रसाद छायावादी काव्यधारा के प्रमुख रचनाकार थे। जयषंकर प्रसाद जी ने अपनी रचना के माध्यम से स्वतंत्रता आन्दोलन का चित्रण किया है। उनकी 'हिमाद्रि तुग श्रृंग से 'तथा 'अरुण मधुमय देश हमारा' इन कविता के माध्यम से भारत के अतित के वैभव का चित्रण करके देशवासियों को, सैनिकों अपनी मातृभूमि की मुक्ति के लिए बलिदान देने के लिए तत्पर रहने का अवाहन किया है।

निराला की अनेक कविता में मातृभूमि के प्रति आस्था, स्वदेश प्रेम स्वराज्य कल्पना भारतीय संस्कृति के मूल्य एवं अतित के स्वर्णिम इतिहास के चित्र उभरकर सामने आते हैं। निराला राष्ट्रीय चेतना के साथ साथ मातृभूमि के प्रति अपना भावबोध व्यक्त करते हैं परतंत्रता की श्रृंखलाओं से आबद्ध मातृभूमि को स्वतंत्र कराने के लिए दृढ प्रतिज्ञाबद्ध है।

आयेगी भालपर भारत की नई ज्योति,

हिन्दुस्थान मुक्त होगा घोर अपमान से,

दासता के पाष कट जायेंगे

निराला अपने युग के प्रति अत्यंत सजग रचनाकार है, उनका युग दासता का युग था। देश की सभी जनता का एक ही लक्ष्य था, भारत मता की विदेशी सत्ता से मुक्ति। इस राष्ट्रीय आंदोलन में साहित्यकार कैसे दूर रह सकता है। इस दृष्टि निराला की जागो फिर एक बार कविता में देशवासियों को अंग्रेजी सरकार के खिलाफ जागृत होने का संदेश दिया है।

छायावादी काव्यधारा के समकक्ष चलने वाली राष्ट्रीय सांस्कृतिक काव्यधारा में स्वाधीनता आन्दोलनों का बड़े पैमाने पर चित्रण हुआ है। इनमें माखनलाल चतुर्वेदी, बालकृष्ण शर्मा नवीन, सुभद्राकुमारी चौहान, रामधारी सिंह दिनकर उल्लेखनीय हैं।

सुभद्राकुमारी चौहान की राष्ट्रीय कविताओं में असहयोग, सेनानी का स्वागत, बिदा, जालियनवाला बाग, वीरों का कैसा हो वसंत, झाँसी की रानी मातृमंदिर स्वदेश आदि कविता में भारत की संस्कृति और तत्कालीन राजनीतिक स्थिति को स्पष्ट किया है। इनकी कविताओं में देशप्रेम की भावनाओं को उच्चिप्त करने की अद्भुत क्षमता थी। इनकी झाँसी की रानी कविता अत्यंत लोकप्रिय बनी है। उस युग में अबालवृद्ध सभी इस कविता को पूर्ण रूप से कंठस्थ करने के लिए अतुर रहते थे। 'बुंदेलों हरबोलों के मुँह हमने सुनी कहानी थी; खूब लड़ी मर्दानी, वह तो झाँसी वाली रानी थी।'

माखनलाल चतुर्वेदी हिन्दी साहित्य में एक भारतीय आत्मा के रूप में जाने जाते हैं। वे भारत के ऐसे महान स्वतंत्रता सेनानी हैं जो दोहरे मोर्चे पर लड़ रहे हैं। वे सत्याग्रह करके जेल गये थे। बाहर आते ही राष्ट्रीय चेतना की काव्याभिव्यक्ति करने के लिए कलम सँभालते थे। चतुर्वेदी भारतीय स्वतंत्रता आन्दोलन के सक्रिय योद्धा थे और संवेदना संपन्न कवि थे। वे प्रारंभ में क्रान्ति दर्शन से प्रभावित थे, लेकिन बाद में गांधीजी के सिद्धान्तों, विचारों तथा व्यक्तित्व से प्रभावित थे। उनकी कविता में देशप्रेम के प्रति गंभीर प्रेमभाव और अत्मसर्ग का भाव प्रकट हुआ है। इनकी कैदी और कोकिल कविता स्वतंत्रता सेनानियों में अधिक प्रिय रही है। चतुर्वेदी की 'पुष्प की अभिलाशा' यह अत्यंत लोकप्रिय कविता है। यह कविता तो मानो राष्ट्रीय मंत्र बन गयी थी। कवि ने अपना सारा जीवन देशभक्ति में ही बिताया। वे भारत के हर एक आदमी के साथ अपने आपको एकाकार मानते थे। पुष्प की अभिलाशा कविता की कुछ पंक्तियाँ इस प्रकार हैं -



“चाह नहीं,में सूरबाला के के गहनों में गुंथा जाऊँ ,  
चाह नहीं प्रेमी माला में बिंध प्यारी को ललचाऊँ,  
चाह नहीं सम्राटों के षवपर हे हेरि डाला जाऊँ,  
चाह नहीं देवों के सिर पर चढ़ूँ, भाग्य पर इठलाऊँ,  
मुझे तोड लेना वनमाली ! उस पथ पर देना तुम  
मातृभूमि पर षीष चढाने ,जिस पथ पर  
फेक ,  
जावै वीर अनेक । ”

यहाँ फूल एक भारतीय देशभक्त का प्रतीक बन कर आया है । फूल के माध्यम से हर भारतीय की यही मंगल कामना है कि उसका जीवन अपने देश के काम आये । वनमाली यह काल का प्रतीक है । एक आम भारतीय की यही अभिलाशा है कि उसे मृत्यु जब भी आए तो मातृभूमि की सेवा करते करते आये । जीवन में और कोई अकांक्षा नहीं है,बडे से बडे आकर्षण और प्रलोभन त्याग केवल मातृभूमि के वीर सिपाही के चरणस्पर्ष की अभिलाशा है ।

स्वाधीनता आन्दोलन के साथ साथ समाजसुधार और राजनीतिक आन्दोलन भी साथ साथ चलते थे माखनलाल चतुर्वेदी की राष्ट्रीय झंडे की भेट कविता अत्यंत मार्मिक बन पडी है —

माँ रोवे मत षीघ्र लौट घर आऊँगा,  
प्रस्थान करूँ, बाबा दो आषिस,  
पताका पर सब कुछ कुरबान करूँ।

बालकृष्ण षर्मा नवीनहन्दि में राष्ट्रीय आन्दोलन के साथ जुडे हुए रचनाकार है इन पर गांधीवाद, प्रगतिवाद का प्रभाव स्पष्ट दिखाई देता है षोशितों की करुण स्थिति देखकर वे द्रवित होते है ,वे षोशितों को क्रांति करने का संदेश देत है ।

कवि कुछ ऐसी तान सुनाओ,  
जिससे उथल पुथल मच जाए,  
नियम और उपनियमों के ये,  
बन्धन टूट छिन्न भिन्न हो जाए ।

नवीन जी भारतीय स्वतंत्रता संग्राम के सैनिकों को चेतावनी देते है कि विजय सदा से ही त्याग और बलीदान माँगती है । जो जीवन की संपूर्ण जीवन की आषाएँ और अकांक्षाएँ है।यहाँ तक कि यौवन भी समर्पित करना पडता है ।

संदर्भ — ग्रंथ

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|---------------------------------------|------------------------------------|
| १ हिंदी साहित्य : युग और प्रवृत्तियाँ | डॉ. षिवकुमार षर्मा                 |
| २ हिंदी साहित्य का इतिहास             | डॉ. नगेंद्र                        |
| ३ बालकृष्ण षर्मा नवीन                 | डॉ. प्रभाकर माचवे                  |
| ४ हिंदी साहित्य का बृहद् इतिहास       | भाग नवम्(नागरी प्रचारिणी सभा काषी) |