



## “Comparative study of various Organic Manures on Growth of Spinach”

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### **Introduction:**

Nutrients in the soils is necessary to maintain the good quality of soil results as higher crop productivity. To derive maximum benefit, the weed manures should be applied during land preparation and incorporated into the soil having adequate moisture about 2 to 3 weeks before sowing so that nutrients are made available to the plants.

Chemical fertilizers are relatively inexpensive, have high nutrient contents, and are rapidly taken up by plants. However, the use of excess fertilizer can result in a number of problems, such as nutrient loss, surface water and groundwater contamination, soil acidification or basification, reductions in useful microbial communities, and increased sensitivity to harmful insects (Chen 2006).

The decline in productivity has been associated with the onset of deficiencies of nutrients. Integrated use of weed manures has been found to be promising not only in maintaining higher productivity.

Organic manure gives their multiple benefits due to the balanced supply of nutrients as well as increased soil nutrient availability due to increased soil microbial activity, decomposes harmful elements and fillup soils with micronutrients and increased soil water availability, soil texture and structure improvement helps roots and shoots development.

### **Materials and methods:**

Field site and experimental design - The experiment was conducted in the Botanical garden of Dr. Babasaheb Ambedkar Marathwada University's Research farm, Aurangabad. The experimental design was a randomized block design [RBD] with fourteen treatments and three replications of compost, green and dry powder manures, compared with chemical fertilizer along with the control.

Treatments, composting process and pots size - The weeds were collected (uprooted at 10% flowering stage) from roadsides and fields near University campus. They were cut into small pieces as 4"-6" (10-15cm) with the help of traditional iron cutter and buried directly in green manure pots, 745gm/pots of size 29cm x 29cm x 14.5cm i.e. at the rate of 112800 kg/ha. The same amount of vegetation was kept for Natural drying under semi-shade condition for dry powder manure was determined by gravimetric method, and other same amount of vegetation was used for the preparation of compost, using Heap compost pit method (10 lit. water + 50gm Jaggery + 1kg cow dung + 1 lit. Cow's urine mixed well before spreading on every layer then polythene sheets covered on Heap compost pit) After 78 days the well fermented compost manure and dry plant powder manure was also incorporated in the pots of surface area 660.6 sq. cm. of size 29cm x 29cm x 14.5cm pots. The spinach seeds variety "All Green" produced by Sungro seeds limited, 207 Aradhana Bhawan, Azadpur, and Delhi 110033 was sown 2gm/ pot i.e. at the seed rate 30 kg/ha, frequent irrigations were given as per requirement. In a course of time regrowths were studied (recut).

**Plant sampling** - The green foliage was harvested during the early hours of the day at vegetative stage [35 and 72 DAS]. The vegetable yield obtained per pots was recorded on the field itself [3] and samples from each pots [100 gm] were immediately collected. chl.a, chl.b, total chl. [1] & leaf area from each regrowth was recorded and was kept in oven for further analysis.

## **Results and Discussion:**

Estimation of the total leaf chlorophyll, leaf chlorophyll 'a' and 'b' was done using Arnon method (1949) at the age of 35 and 72 days were estimated by using 80 % acetone as a solvent for extraction of pigments [1].

**Fig.1.** Shows the morph-physiological traits of the spinach crop were noted at the age of 35 das, leaf area per plant was highest in the plot treated with *Tephrosia hamiltonni* dry manure followed by *Crotolaria notonni* compost manure and lowest in control followed by Mixed Weed Dry Manure was determined by gravimetric method [6].

**Fig.2.** Shows the effect of legume weed manures on green leafy vegetable spinach at the age of 35 das, total chlorophyll was maximum in the plot treated with *Tephrosia* compost and then in the *Crotolaria notonii* compost manure followed by *Tephrosia hamiltonni* dry manure.

**Fig.3** Shows Spinach contain good quantity vitamin 'C'. It was estimated after 35 days. Highest amount of vitamin 'C' was found on the plot treated with compost manure of *Crotolaria notonii* as 3.95mg/100gm, then dry manure of *Cassia tora* as 3.29mg/100gm and then followed by *Tephrosia hamiltonni* green manure as 3.21mg/100gm and it was lowest on control as 2.42mg/100gm.  $\beta$ -Carotene content was maximum in the compost of *Crotolaria notonii* as 3.92mg/100gm and lowest in the control as 1.98mg/100gm. Estimation of  $\beta$ -carotene and vitamin Cmg/100gm nutrient contents determined by using standard agronomic procedures [4].

**Table. I** Shows the effect of legume weed manures on green leafy vegetable spinach at the age of 72 days. Estimation of chl.a, chl.b, and total chlorophyll in mg/gm was calculated. Total chlorophyll was maximum in the plot treated with dry manure of *Cassia tora* as 0.82mg/gm and then in the green manure of *Cassia tora* as 0.80mg/gm, the plant shows highest leaf area on *Tephrosia hamiltonni* dry manure as 138.02cm<sup>2</sup> followed by *Crotolaria notonii* compost manure as 136.46cm<sup>2</sup> then mixed weed compost manure and dry manure of *Cassia tora* as 127.08cm<sup>2</sup>, and the lowest leaf area found on Control 38.54cm<sup>2</sup> [5].

**Conclusion:** On the basis of result obtained, it can be concluded that all the treatments of organic manure worked well should be considered as an alternative to chemical fertilizers.

**Abbreviations:** Chl.-chlorophyll, Cn.Co.-*Crotolaria notonni* compost manure, Cn.DM.-*Crotolaria notonni* dry manure, Cn.GM.-*Crotolaria notonni* green manure, CFU.-chemical fertilizer urea CON.-control, Ct.Co.-*Cassia tora* compost manure, Ct.DM.-*Cassia tora* dry manure, Ct.GM.-*Cassia tora* green manure, DAS-Days after sowing, ha.-hectare, kg.-Kilogram, Kg/ha-Kilogram per hectare, MxW.Co.-mixed weed compost manure, MxW.DM.-Mixed weed dry Manure, MxW.GM.-Mixed weed green manure, S.E.-Standard error, Th.Co.-*Tephrosia hamiltonni* compost manure, Th.DM.-*Tephrosia hamiltonni* Dry Manure, Th.GM.-*Tephrosia hamiltonni* green manure, wt.-weight.

## **References:-**

- [1] Arnon D.I., (1949) Copper enzymes in isolated chloroplasts. *Plant Physiology* **24**, 1-15.
- [2] Chen J.H. (2006) The combined use of chemical and organic fertilizers and/or biofertilizer for crop growth and soil fertility. *Proceedings of International Workshop on Sustained Management of the Soil-Rhizosphere System for Efficient Crop Production and Fertilizer Use*. Available from [http://www.agnet.org/htmlarea\\_file/library/20110808103954/tb174.pdf](http://www.agnet.org/htmlarea_file/library/20110808103954/tb174.pdf) [Google Scholar]
- [3] Davys M.N.G. and Pirie N.W., (1969) A Laboratory scale pulper for leafy plant material biotechnology. *Bioeng. II*: [517-528];
- [4] Mungikar, A.M. (1997) "*An Introduction to Biometry*." Saraswati Printing Press, Aurangabad;
- [5] Mungikar, A.M. (1999) "*Intercropping Fodder Crops*". Saraswati Printing Press, Aurangabad, pp. [25 - 29];
- [6] Shahane, J. and Mungikar, A. M. (1984) *Indian J. Bot.*, **7(2)**: 135-137;

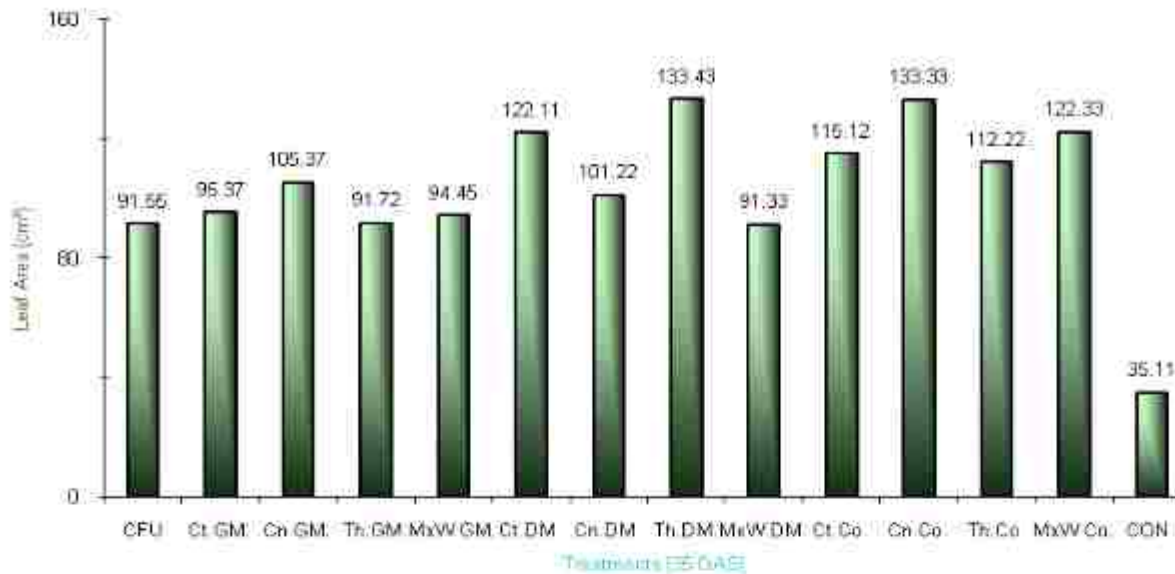


Fig. 1:- LEAF AREA OF SPINACH PLANT LEAVES ON DEFFERENT WEED MANURE

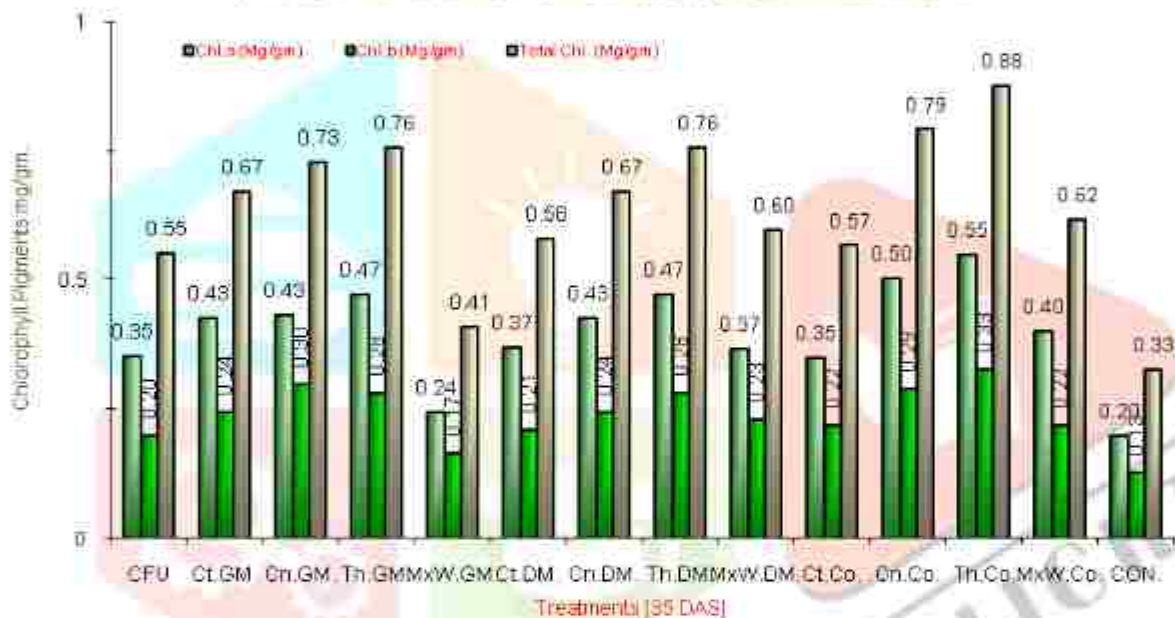


Fig. 2 - ESTIMATION OF CHL a, CHL b, & TOTAL CHL FROM SPINACH VEGETATION

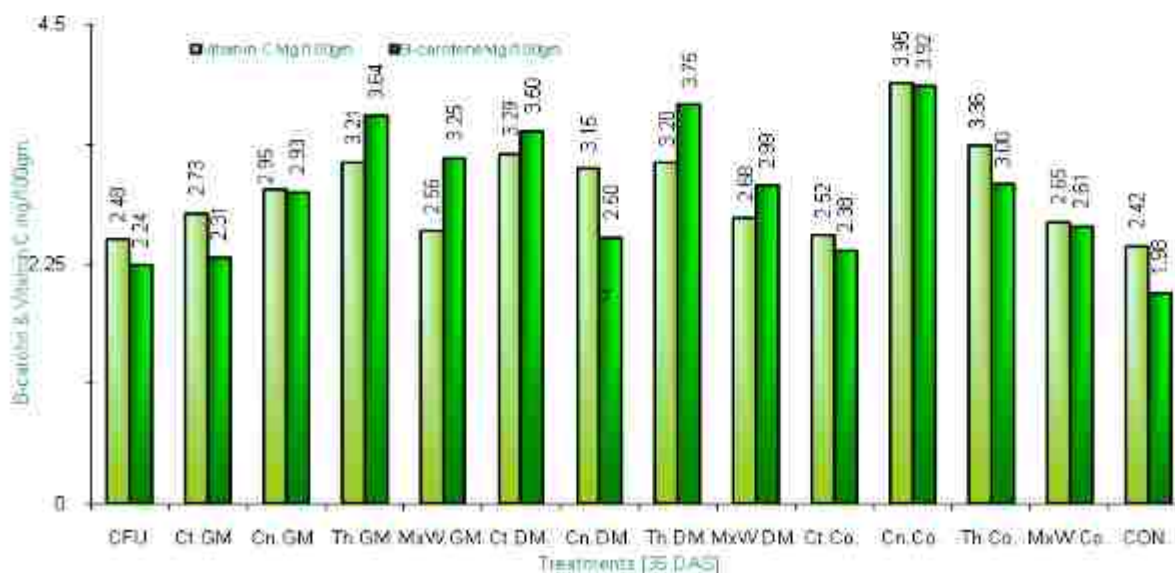


Fig. 3:- ESTIMATION OF Vitamin C (mg/100gm) & β-Carotene FROM SPINACH LEAF VEGETATION

Table :-I: Estimation of 'chl.a', 'chl.b', 'total chl.' & leaf area of spinach vegetation cultivated on diff. weed manure [ 72 DAS ].

Treatments	(Mg/gm)			Leaf Area (c.m <sup>2</sup> .)
	Chl.a	Chl.b	Total Chl.	
1) CFU	0.46	0.25	0.71	93.75
2) Ct.GM.	0.51	0.29	0.80	97.40
3) Cn.GM.	0.41	0.23	0.64	109.38
4) Th.GM.	0.42	0.25	0.66	95.83
5) MxW.GM.	0.39	0.24	0.63	96.88
6) Ct.DM.	0.51	0.30	0.82	127.08
7) Cn.DM.	0.38	0.23	0.60	102.60
8) Th.DM.	0.44	0.27	0.72	138.02
9) MxW.DM.	0.33	0.19	0.52	95.83
10) Ct.Co.	0.42	0.23	0.65	104.17
11) Cn.Co.	0.46	0.27	0.73	136.46
12) Th.Co.	0.50	0.29	0.79	116.67
13) MxW.Co.	0.37	0.21	0.58	127.08
14) CON.	0.22	0.15	0.38	38.54
S.E. =	0.025	0.024	0.042	
C.D. =	0.052			



## “Effect of Various Dry Powder Organic Manure on Sugarcane Crop”

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### Introduction:

Sugarcane (*Saccharum officinarum*) is a member of Poaceae/ Gramineae family, is a perennial grass, which grows well in plenty of sunlight, high temperatures, good drainage, fertile soils and requires large quantities of water (1500 mm of rain per year/ grown with irrigation).

Wastes, weeds and tree leaves are no more wastes but a valuable resource and free of cost current strategy centers around their disposal and eradication only. Economic utilization of these bioresources through green manure, dry manure, compost and vermicompost production can help not only in meeting the challenge of energy crisis but also keeping environment pollution free.

Excessive and imbalanced use of chemical fertilizers has adversely affected the soil, causing decreasing the structure and water holding capacity, reduction in organic carbon and microbial flora of soil results as increasing acidity and alkalinity and harding of soil, to solve this organic manure plays an important role, they are complementary to the chemical fertilizers and many times they have the capacity to replace them [5].

The quantity of soil organic matter depends on the quantity of organic material which can be introduced into the soil either by natural returns through roots, stubbles, sloughed-off root nodules and root exudates or by artificial application in the form of organic manure which can otherwise be called organic fertilizer [1].

### Materials and methods:

Field site and experimental design - The experiment was conducted on the farm located at Khandepargaon, V-P High-tech Research farm, Dist. Beed. The experiment design was a randomized block design [RBD] with seven treatments and four replicates.

Treatments, dry powder manures process and plot size - Tree leaf dry manures like *Azadirachta indica* dry powder organic manure (Azi.DM); *Gliricidia sepium* dry powder organic manure (Gs.DM.); Non-leguminous weeds plants dry powder organic manure like *Achyranthes aspera* dry powder organic manure (A.DM.); *Parthenium hysterophorus* dry powder organic manure (P.DM.); Neem seed cake (N.C.); compared with chemical fertilizers like Nitrogen+Phosphorus+Potassium (NPK); along with Control (CON);

Then aerial biomass of trees leaves and Non leguminous weed plants were cut into small pieces as 1-2 inches by the traditional iron cutter at 10 % flowering stage in morning time then dried under semi-shade sunlight. They were used for preparing dry powder organic manure. After 26 days naturally well dried 12.5kg i.e. at the rate of 13889kg/ha dry powder organic manure/ fertilizer inserted in their randomly selected treatment plots, 100gm of sample from each dry powdered organic manure collected and kept in oven at 105° for drying, after drying the samples were used for the further analysis [4].

The field was irrigated as per requirement. and dry powder organic manure/ fertilizer were allowed to decompose for 76 days then the sugarcane was cultivated on 3 x 3m plots of size 3m x 3m i.e. 09sqm., keeping 45 cm distances in rows.

Plant sampling - The crop was harvested early in the morning and the fresh yield of the aerial part of the crop was noted and calculated as kg/ha. Three kg sample of fresh vegetation was cut into small pieces as 1-2 inches by the traditional iron cutter, in which 100gm was dried in oven at 90°C till it gives constant weight for the determination of dry matter (DM), this dried sample was grinded to fine powder and used for further analysis, [2].

### Results and Discussion:

**Fig.1.** Shows the highest yield of Sugarcane fresh vegetation was on the treatment *A.aspera* dry powder organic manure followed by on Neem cake manure then on *A.indica* dry powder organic manure followed by the treatment of *G.sepium* dry powder organic manure and the lowest yield of Sugarcane fresh vegetation kg/ha on Control followed by on *P.hysterophorus* dry powder organic manure then on the treatment of chemical fertilizers NPK.

**Table 1.** Effect of dry powder organic manure on Sugarcane crop analyses of total plant shows the highest dry matter analyses C:N ratio was in the plot treated with *P.hysterophorus* dry powder organic manure then on *A.aspera* dry powder organic manure followed by Neem seed cake treatment then in the plot treated with *A.indica* dry powder organic manure, the minimum C:N ratio was observed on the treatment Control then followed by *G.sepium* dry powder organic manure then on the treatment of chemical fertilizers NPK [3].

**Conclusion:**

On the basis of result obtained, it can be concluded that all organic manure plays an important role, they are complementary to the chemical fertilizers and many times they have the capacity to replace them.

**References:**

- [1] Agboola, A.A. and J.A. Omueti, (1982) *Soil fertility problem and its management in tropical Africa*. Nigeria pp 25.
- [2] AOAC, (1995) *Official methods of Analysis*, Washington Association of official Analytical chemistry.
- [3] Bailey, R.L. (1967) *“Techniques in Protein Chemistry”*. II Ed., Elsevier Publishing Co., Amsterdam;
- [4] Mungikar, A.M. (1997) *“An Introduction to Biometry.”* Saraswati Printing Press, Aurangabad;
- [5] Gholap P.N., (2021) *“Comparative study of various Organic Manures on Growth of Spinach”*. International Journal of creative Research Thoughts. <https://ijcrt.org/papers/IJCRT2105837.pdf>



Fig. 1 : Fresh Weight S.E = 11953, CD = 25102 and Dry Matter SE = 5045, CD = 10595 (Kg/ha)

Table :- I :- Sugarcane Crop Analyses of Total Plant.

Treatments.	F.wt./plot	%			C/N Ra.
		D.M.	C.	N.	
1) A.DM.	364.0	30.5	8.17	2.17	3.77
2) Gs.DM.	211.3	30.6	7.98	2.83	2.82
3) NPK	209.3	30.6	7.08	2.42	2.93
4) Azi.DM.	220.5	27.9	8.67	2.92	2.97
5) N.C.	308.3	27.8	7.82	2.33	3.35
6) P.DM.	152.5	24.3	8.35	2.08	4.01
7) CON.	80.0	31.2	5.22	1.92	2.72
S.E. =	10.76	1.53	0.0009	0.21	0.005
C.D. =	22.59	3.21	0.0018	0.44	0.011

Table 1 : Effect of Dry Powder Organic Manure on Sugarcane Crop Analyses of Total Plant.



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**CONTENTS**

Sr. No.	Page Title	Page No.
1	Role of MSME in Sustainable development <b>Dr. Satish Laxmanrao Kumbhar</b>	1-2
2	The Economic Impacts of Tourism <b>Dr. Ashok Shamrao Patil</b>	3-4
3	To Study Of Population In Parbhani City <b>Dr.B.T.Patil</b>	5-7
4	Role of the Teachers and parents in value education of India <b>Mr. Sanjay Dandatrao Bagul</b>	8-11
5	Sustainable Development-Factors and Aims <b>Dr. A.P.Barve</b>	12-14
6	'Oppression' as a Social Issue in Mahaweta Devi's <i>Drangool</i> <b>Dr. G.Ramana Reddy</b>	15-17
7	Rainfall Variability In Akola District A Geographical Study <b>Dr. Sunil Ramrao Rapanwad, Mahananda Linguram Dinde</b>	18-20
8	Ground Water Level at Selected Areas in Amravati City <b>Shri Gopal Bhalari</b>	21-23
9	A Study of Cropping Pattern in Jalna District (MS) <b>Mr. Pramod Deybhambh</b>	24-27
10	Role of Kharif crop weeds in human health <b>Anjali B. Shinde</b>	28-31
11	Role of Menstrual Data in Life of Agriculturist, Case Study from Ahmednagar District of Maharashtra <b>Dr. Ganesh K. Chavhan , Dr. Prakash N. Salve, Dr. Raghunath E. Najan</b>	32-37
12	"Talukwise Male And Female Percentage Of Literacy In Osmanabad District (1981-2001): A Geographical Analysis" <b>Mr.Rajaram D.Davankar</b>	38-40
13	Contribution of Literature in Social Development <b>Gangadhar P. Ashlod, Dr. Umakant D. Patilswar</b>	41-42
14	Gender Sensitization for Sustainable Development <b>Dr. Shaikh M. A. Raheman</b>	43-45
15	Cropping Pattern In Gangakhed Taluka: A Geographical Study <b>Dr. S. H. Kolpe</b>	46-49
16	"Effect of wood bio resources on Growth Development of Cash Crop Sugarcane" <b>Prakash N. Ghodap</b>	50-53
17	Landuse Pattern in Solapur District: A Geographical analysis <b>Dr. Dnyanoba Gorakh Shinde</b>	54-56
18	Gender Equality Achi: An Analysis of 'Yuvakbharati' Textbooks of Maharashtra State Bureau of Textbook Production and Curriculum Research-Pune <b>Dr. Sanraal Ashok Jadhav</b>	57-61
19	Empowerment Of Women In India <b>Dr. Mahesh E. Dharmapurkar</b>	62-65
20	Ondise Education in India -- qualities and challenges: A study <b>Mr. Rahul Ramakantrao Kulkarni, Dr. Zampalwad S S, Birajdar S P</b>	66-68
21	Literature is the Mirror of Human Life <b>Prof. Poonam Prakashrao Mane</b>	69-70
22	A Comparative Study Between The College Students' Participation In Sports Before Covid-19 Outbreak And During The Outbreak. <b>Sk Rasid Muhammad</b>	71-74
23	Library Services provided during COVID-19 Pandemic in Competitive Exam Aspirants: A Survey <b>Mr. Guldagad Kiran Dhondiram</b>	75-76
24	Creative Problem Solving <b>Shri. Raju Laxman Koharv, Shri.Abhijit Balasa Giri</b>	77-78
25	A Study on Growth of E-Banking in India: An Year Analysis <b>Jayalakshmi VA</b>	79-85
26	Laser And Their Applications <b>Sanjay Awadhane , Devidas Kendre</b>	86-90
27	Importance Of Environmental Science & Studies <b>Dr. R.D. Khatre</b>	90-92
28	B. R. Ambedkar's Work for Women and Child Workers -- A Study <b>Dr. Prashant M. Purohit</b>	93-95
29	Customer Perception Towards E-Banking-An Innovative Platform <b>Botte Sai Akash</b>	96-99
30	The Study Of Crop Diversification Region Of Pune District. (M.H.) <b>Shashikant Raghunath Menam, DR. Dhanushwar Ramesh Shyamrao</b>	100-103

31	Importance of Yoga in Maintaining Good Health	<b>Khedkar Vishnu Tatyaba</b>	104-106
32	Effect of Gender and Residence on Academic Achievements of Post Graduate Mathematics Students	<b>K. L. Bondar, N. H. Kulkarni, A. P. Gogine</b>	107-110
33	S.D.Gs. and C.S.R - The Potential Partners in Indian 2030 vision	<b>Dr. Sindhu Varghese</b>	111-113
34	Spatio-Temporal Variations Of Rural And Urban Sex Ratio In Chandrapur District : A Geographical Perspectives	<b>Dr. Godawari A. Ganekar</b>	114-115
35	"Talukawise Decadal Variation Of Rural Dependency Ratio In Parbhani District :(1991-2011)"	<b>Dr. Bhagwan P. Shendge</b>	116-118
36	Growth And Changes Of Sex Ratio And Literacy In Satara District	<b>Dr. Rathod Sunil Dbondiram</b>	119-122
37	Green Libraries in India	<b>Mrs. Asha Chandrabok Jirage</b>	123-126
38	Sustainable Development	<b>Dr. Chantrasekhar C. Konkut</b>	127-131
39	Sustainable Development: Basic Legal Aspects	<b>Dr. Suresh G. Seniani</b>	132-134
40	Financial Inclusion and the Role of Self-Help-Groups for Sustainable Rural Development in Rural Assam, North East India	<b>Dr. Diganta Kr. Das</b>	135-137
41	Challenges in Attaining Sustainable Development Goals in India	<b>Ramakant Kasture</b>	138-140
42	Challenges in Good Health and Well Being	<b>Dr. Aparna Ashtaputre-Sisode</b>	141-142
43	The Sustainable Development Goal And Challenge	<b>Dr. I. A. Abasaheb Dhandiba Jadhav</b>	143-145
44	Decent Work & Economic Growth	<b>DR. Bajarang Narayan Jadhav</b>	146-149
45	Sustainable Development through Language Learning	<b>Dr. Shalendra K. Bamode</b>	150-151
46	Circularwise Population Distribution of Rural Settlements in Shrigonda Taluk: A Geographical Analysis	<b>Dr. Vijay J. Dalvi, Dr. Nitin T. Deshmukh</b>	152-155
47	Violence against Girls and Women due to Socio-Economic Factors: Ahmednagar District.	<b>Dr. Prakash N. Selve, Dr. Shalendra K. Bamode, Dr. G. K. Chavhan</b>	156-158
48	Development in Natural Attractions Centers in the Country	<b>Dr. Raghunath E. Najan, Dr. Ganeshi K. Chavhan, Dr. B. G. Rashinkar</b>	159-161
49	The Role of Sustainable City and Community: A Case of Burma	<b>Dr. Shyam Punilkras Patil</b>	162-168
50	Women's Empowerment :A Review	<b>Shilpa Namdevrao Shendge</b>	169-172

## Effect of weed bio resources on Growth Development of Cash Crop Sugarcane

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### Abstract :

For sustainable sugarcane production weeds are a major threat, causing yield loss. Weeds are available in plenty and in most cases free of cost and in large amounts, weeds are no more wastes but a valuable resource. Economic utilization of these bioresources through dry powder manure, green manure and compost manure production can help not only in meeting the challenge of energy crisis but also keeping environment pollution free.

The prices of chemical fertilizers are increasing day by day resulting in an increase in the cost of inputs in agriculture. Biofertilizers are chief source of nutrients and can be used as supplement for chemical fertilizers.

Sugarcane (*Saccharum officinarum*) is a member of Poaceae/ Gramineae family, is a perennial grass, the experiment was conducted on the farm located at Khundepragan, V-P High-tech Research farm, Dist. Beed. The experiment design was a randomized block design (RBD) with seven treatments and four replicates i.e. leafy tree's dry manures like *Azadirachta indica* dry leaf powder organic manure (Az.LDM); *Glicicidia sepium* dry leaf powder organic manure (Gs.LDM); Non-leguminous weeds plants dry manure like *Achyranthes aspera* dry powder organic manure (A.LDM); *Parthenium hysterophorus* dry powder organic manure (P.LDM); Neem seed cake organic manure (N.C.); compared with chemical fertilizers like Nitrogen + Phosphorus + Potassium (NPK); along with Control (CON).

The morpho-physiological traits of the crop were noted at 222 & 256 DAS as plant height, diameter, number of leaves per plant, total weight, 4th upper leaf length, width, weight and leaf area per plant was determined by gravimetric method.

Results shows growth analyses of Sugarcane plant fresh vegetation was highest in nearabout all parameters in the plot treated with *A.aspera* dry powder organic manure followed by plot treated with Neem seed cake organic manure and the lowest in the treatment of Control followed by *P.hysterophorus* dry powder organic manure then followed by the treatment of chemical fertilizers NPK.

Excessive and imbalanced use of chemical fertilizers has adversely affected the soil, causing decreasing the structure and water holding capacity, reduction in organic carbon and microbial flora of soil results as increasing acidity and alkalinity and harding of soil, to solve this organic manure plays an important role, they are complementary to the chemical fertilizers and many times they have the capacity to replace them [4].

**Keywords:** weeds, organic manure

### Introduction:

Sugarcane (*Saccharum officinarum*) is a member of Poaceae/ Gramineae family, is a perennial grass, for sustainable sugarcane production weeds are a major threat, causing yield loss, weeds are available in plenty and in most cases free of cost and in large amounts, weeds are no more wastes but a valuable resource. Economic utilization of these bioresources through dry powder manure, green manure and compost manure production can help not only in meeting the challenge of energy crisis but also keeping environment pollution free.

The prices of chemical fertilizers are increasing day by day resulting in an increase in the cost of inputs in agriculture. Biofertilizers are chief source of nutrients and can be used as supplement for chemical fertilizers.

Excessive and imbalanced use of chemical fertilizers has adversely affected the soil, causing decreasing the structure and water holding capacity, reduction in organic carbon and microbial flora of soil results as increasing acidity and alkalinity and harding of soil, to solve this organic manure plays an important role, they are complementary to the chemical fertilizers and many times they have the capacity to replace them [4].

### Materials and methods:

**Field site and experimental design** - The experiment was conducted on the farm located at Khundepragan, V-P High-tech Research farm, Dist. Beed. The experiment design was a randomized block design (RBD) with seven treatments and four replicates.

**Treatments, dry powder manures process and plot size** - Tree leaf dry manures like *Azadirachta indica* dry leaf powder organic manure (Az.LDM); *Glicicidia sepium* dry leaf powder organic manure (Gs.LDM); Non-leguminous weeds plants dry powder organic manure like *Achyranthes aspera* dry powder organic

manure (A.DM.); *Parthenium hysterophorus* dry powder organic manure (P.DM.); Neem seed cake organic manure (N.C.); compared with chemical fertilizers like Nitrogen+Phosphorus+Potassium (NPK); along with Control (CON);

Then aerial biomass of trees leaves and Non leguminous weed plants were cut into small pieces as 1-2 inches by the traditional iron cutter at 10 % flowering stage in morning time then dried under semi-shade sunlight. They were used for preparing dry powder organic manure. After 26 days naturally well dried 12.5kg i.e. at the rate of 13889kg/ha dry powder organic manure/ fertilizer inserted in their randomly selected treatment plots, 100gm of sample from each dry powdered organic manure collected and kept in oven at 105° for drying, after drying the samples were used for the further analysis [3].

The field was irrigated as per requirement, and dry powder organic manure/ fertilizer were allowed to decompose for 76 days then the sugarcane was cultivated on 3 x 3m plots of size 3m x 3m i.e. 09sqm., keeping 45 cm distances in rows.

**Plant sampling** - The crop was harvested early in the morning and the fresh yield of the aerial part of the crop was noted and calculated as kg/ha. Three kg sample of fresh vegetation was cut into small pieces as 1-2 inches by the traditional iron cutter, in which 100gm was dried in oven at 90°C till it gives constant weight for the determination of dry matter (DM), this dried sample was grinded to fine powder and used for further analysis. [1].

**Analyses:**

**Growth Analyses**- The morph-physiological traits of the crop were noted at 222, 256 DAS as plant height, diameter, number of leaves per plant, total weight, 4th upper leaf length, width, weight and leaf area per plant was determined by gravimetric method [5].

**Statistical Analysis** - All the results were statistically analyzed by analysis of variance [ANOVA] test and treatment means were compared using the least significant difference [CD,P\_0.05] which allowed determination of significance between different applications. The concentration was calculated on the basis of the standard graph prepared by using variable concentration of the standard solution [3].

**Results and Discussion:**

**Fig.2.** Effect of weed bioresources organic manure on morph-physiological growth development analyses of Sugarcane plant done after 256 days shows the highest per plant Weight was in the plot treated with *A.aspera* dry powder organic manure as 1797.75gm followed by *Neem seed cake* as 1487.25gm then as 1108.25gm on *A.indica* dry powder organic manure treatment. However lowest plant weight was found on control as 407.75 gm followed by *P.hysterophorus* dry powder organic manure as 710.25 gm then on the treatment of *G.septium* dry leaf powder manure as 1023.50gm.

The root weight per plant of sugarcane shows highest on *A.aspera* dry powder organic manure 182.0gm then followed by *Neem seed cake* 146.8gm then in *G.septium* dry leaf powder manure 141.8gm. Lowest root weight per plant shows on treatments of control as 21gm followed by *P.hysterophorus* dry powder organic manure as 83.0gm then on chemical fertilizers NPK as 85.3gm.

The fourth upper leaf weight of sugarcane per plant from apex shows highest on *Neem seed cake* 23.25gm then followed by *A.aspera* dry powder organic manure 18.75gm then in *G.septium* dry leaf powder manure 14.50gm. Lowest weight shows on treatments of control as 4.25gm followed by *P.hysterophorus* dry powder organic manure as 7.88gm then on chemical fertilizers NPK as 13.25gm.

The growth development analyses of Sugarcane plant done after 256 days, the estimation of leaf Area from the apex 4<sup>th</sup> leaf per plant shows the highest on *A.aspera* dry powder organic manure as 562.86cm<sup>2</sup> then plot followed by NPK as 442.86cm<sup>2</sup> then on *Neem seed cake* organic manure treatments as 414.29cm<sup>2</sup> and shows lowest leaf area on the treatment of Control as 191.43cm<sup>2</sup> then followed by *P.hysterophorus* dry powder organic manure as 262.86cm<sup>2</sup> then on *A.indica* dry leaf powder organic manure as 335.71cm<sup>2</sup>.

**Table 2.** Shows Effect of weed bioresources organic manure on morph-physiological development of Sugarcane plant were noted at the age of 256 das, per plant height was maximum i.e. 363cm in the treatment of on *A.aspera* dry powder organic manure, followed by chemical fertilizers NPK as 305cm then on treatment of *Neem seed cake* organic manure as 287cm while Minimum plant height shows on Control as 164cm followed by treatment of *P.hysterophorus* dry powder organic manure as 192.5cm then in *A.indica* dry leaf powder organic manure as 235cm.

plant stem diameter was maximum in the treatment of on *A.indica* dry leaf powder organic manure as 10.3cm then on treatment of *Neem seed cake* organic manure as 9.5cm followed by treatment of *P.hysterophorus* dry powder organic manure as 9.4cm, while Minimum plant stem diameter shows on plot Control as 6.8cm then in chemical fertilizers NPK as 8.5cm.

The growth development analyses of Sugarcane plant done after 256 days, the estimation of leaf length from the apex 4<sup>th</sup> leaf per plant was maximum plot treated with *A.aspera* dry powder organic

manure as 132.5cm, followed by *N neem seed cake organic manure* as 129.5cm while Minimum leaf length shows on *Control* as 80.3cm followed by treatment of *P.hysterophorus* dry powder organic manure as 101.0cm then in treatment of chemical fertilizers *NPK* as 110.8cm.

leaf width from the apex 4<sup>th</sup> leaf per plant was maximum plot treated with *A.aspera* dry powder organic manure as 5.2cm, followed by *N neem seed cake organic manure* as 5.1cm while Minimum leaf width shows on *Control* as 2.9cm followed by treatment of *P.hysterophorus* dry powder organic manure as 3.2cm then in treatment of *A.indica* dry leaf powder organic manure as 4.0cm.

The growth development analyses of Sugarcane plant done after 256 days, the No. of fresh leaves per plant was maximum in plot treated with *N neem seed cake organic manure* as 17 followed by *A.aspera* dry powder organic manure as 16, while Minimum No. of fresh leaves shows on *Control* as 5.6 followed by treatment of *P.hysterophorus* dry powder organic manure as 8 then in treatment of *A.indica* dry leaf powder organic manure as 10.1, like wise No. of dry leaves per plant was maximum in plot treated with chemical fertilizers *NPK* as 23 followed by plot of *A.aspera* dry powder organic manure as 22, while minimum No. of dry leaves per plant was observed in plot treated *Control* as 14.

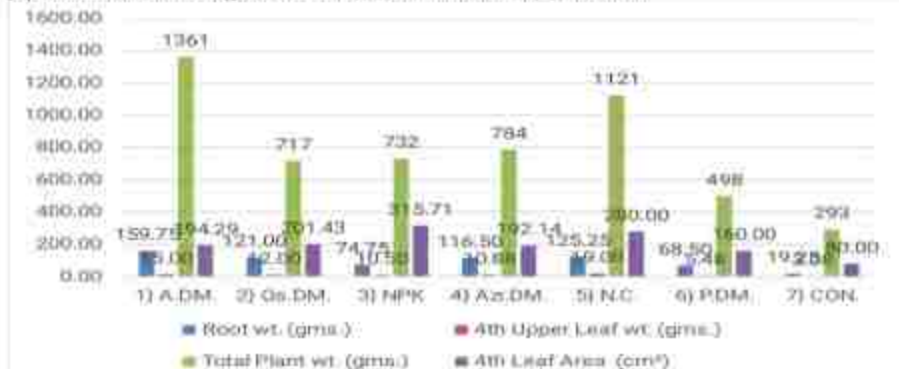
The growth analysis of sugarcane plant on 222 days represented in the form of [Fig.1.] and [Table 1] respectively, these shows all significant over control like explained on the 256 days in the form of [Fig.2.] and [Table 2] growth analysis of sugarcane plant above.

**Conclusion:**

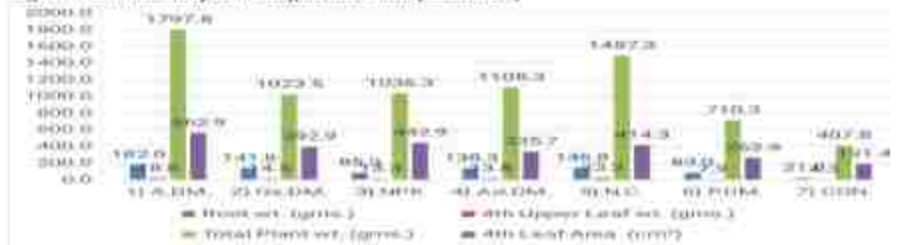
On the basis of result obtained, it can be concluded that Biofertilizers are chief source of nutrients and can be used as supplement for chemical fertilizers.

**References:**

[1] AOAC, (1995) *Official methods of Analysis*. Washington Association of official Analytical chemistry;  
 [2] Bailey, R.J. (1967) "Techniques in Protein Chemistry". II Ed., Elsevier Publishing Co., Amsterdam;  
 [3] Mungikar, A.M. (1997) "An Introduction to Biometry". Saraswati Printing Press, Aurangabad;  
 [4] Gholap P.N., (2021) "Comparative study of various Organic Manures on Growth of Spinach". *International Journal of creative Research Thoughts*. <https://jcr.t.org/papers/IJCRT2105837.pdf>  
 [5] Shahane, J. and Mungikar, A. M. (1984) *Indian J. Bot.*, 7(2): 135-137;



**Fig. 1 : Growth Analyses of Sugarcane Plant [ 222 DAS ]**



**Fig. 2 : Growth Analyses of Sugarcane Plant [ 256 DAS ]**

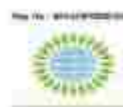
**Table 1 : Growth Analyses of Sugarcane Plant [ 222 DAS ].**

Treatments.	(c.m.)		4th Upper Leaf (c.m.)		No. of Leaves	
	Plant Height	Stem Diameter	Length	Width	Fresh	Dry
1) A.DM.	176	7.40	119	3.58	13.50	15
2) Gs.DM.	186	6.63	103	3.40	12.75	10
3) NPK	219	6.83	96	3.48	8.75	17
4) Azi.DM.	174	7.50	99	3.18	8.18	11
5) N.C.	207	8.08	113	4.68	14.88	10
6) P.DM.	147	6.98	82	2.45	6.28	13
7) CON.	113	5.33	69	2.28	3.83	10

**Table 2 : Growth Analyses of Sugarcane Plant [ 256 DAS ].**

Treatments.	(c.m.)		4th Upper Leaf (c.m.)		No. of Leaves	
	Plant Height	Stem Diameter	Length	Width	Fresh	Dry
1) A.DM.	363.0	9.0	132.5	5.2	16.0	22
2) Gs.DM.	268.5	8.9	119.8	4.4	15.0	14
3) NPK	305.0	8.5	110.8	4.4	10.4	23
4) Azi.DM.	235.0	10.3	115.0	4.0	10.1	17
5) N.C.	287.0	9.5	129.5	5.1	17.0	15
6) P.DM.	192.5	9.4	101.0	3.2	8.0	18
7) CON.	164.0	6.8	80.3	2.9	5.6	14





## "RESIDUAL EFFECT OF NON LEGUMINOUS WEED MANURES ON *LABLAB PURPUREUS*"

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### ABSTRACT:

An application of Non Leguminous weeds (*Achyranthes aspera* and *Parthenium hysterophorus*) manure usually shows a favourable influence on crop yields for several years. These beneficial effects are distributed over a longer time than those of chemical fertilizers. *Parthenium hysterophorus* is a species of flowering plant in the aster family, Asteraceae. In India, it is locally known as carrot grass, congress grass or Gajar Ghas. It is an annual herb that aggressively colonizes disturbed sites. It grows on any type of soil and in a wide range of habitats and affects the production of crops, animals, human and animal health, and biodiversity. *Achyranthes aspera* is a species of plant in the family Amaranthaceae. It is distributed throughout the tropical world. It can be found in many places growing as an introduced species and a common weed.

Present investigation state that the residual effect of organic manures as comparative residual effect of Non leguminous weed compost manure, green manure and dry leaf manure on fodder crop *Lablab purpureus* plant yields. *Lablab purpureus* is a species of bean in the family Fabaceae. It is native to Africa and it is cultivated throughout the tropics for food and fodder crop. It is not only drought resistant but also able to grow in a diverse environmental condition around the world.

The experiment was conducted on the farm located at V-P High-tech Research farm, Dist. Beed. The experiment design was a randomized block design [RBD] with ten treatments and three replicates. Previous work in this laboratory and field shows that input, data for the organic manure in form of chemical fertilizers PK and NPK at the rate of 120N, 80P and 40K and compared with organic Non leguminous weed manures as green manure of *Achyranthes aspera* (AGM), green manure of *Parthenium hysterophorus* (PGM), mixed green manure of both (A&PGM), Dry manure of *Achyranthes aspera* (ADM), Dry manure of *Parthenium hysterophorus* (PDM), compost of *Achyranthes aspera* (ACo) and compost of *Parthenium hysterophorus* (PCo). Result shows that green manure and compost manure of Non- leguminous weeds gives long term residual effect on crop *Lablab purpureus* plant and its improves the soil quality.

**Keywords:** Non-leguminous, organic, residual, weeds, manure.

### INTRODUCTION:

The residual effects of organic matter in soil following manure or compost application on crop yield and soil properties can last for several years. Four years after application, residual effects of one-time application of beef feed lot manure at rates varying from 123 to 590 Mg dry weight ha<sup>-1</sup> (1280–6140 kg N ha<sup>-1</sup>) resulted in a quadratic increase in corn grain yield but

also in increased leaching of NO<sub>3</sub>-N and Na to a depth of at least 1 m [15]

The residual effects of organic materials on soil properties can contribute to improvement I soil quality for several years after application ceases [7].

Application of organic manures increases soil fertility and other properties [9, 11]. Ayoola O.T. and Makinde E. A. [3] Studied that

complementary Organic and Inorganic Fertilizer Application: Influence on Growth and Yield of Cassava/maize/melon Intercrop with a Relayed Cowpea and concluded that complementary application reduces the dependence of the farmer on inorganic fertilizer use. It also reduces the exposure of the soil to the consequences of inorganic fertilizer application.

Organic amendments play a residual role in their ongoing maintenance. Residual amendment effects on total nitrogen (N) and phosphorus (P) were apparent 11.5 yr after application [10]. Residual effects of organic fertilizers on chemical properties of soil was studied by Tabibian et al. [14] and found significant increase in organic matter, electrical conductivity.

Excessive and imbalanced use of chemical fertilizers has adversely affected the soil, causing decreasing the structure and water holding capacity, reduction in organic carbon and microbial flora of soil results as increasing acidity and alkalinity and harding of soil, to solve this organic manure plays an important role, they are complementary to the chemical fertilizers and many times they have the capacity to replace them [5,6].

An application of manure usually shows a favourable influence on crop yields for several years. These beneficial effects are distributed over a longer time than those of chemical fertilizers. Present investigation state that the residual effect of Non-leguminous (*Parthenium hysterophorus* and *Achyranthes aspera*) weeds organic manures as compost, green and dry leaf manure. Effect was studied on growth and yield of *Labiab purpureus*.

*Labiab purpureus* is a species of bean in the family Fabaceae. it is cultivated throughout the tropics for food. It is a very important

fodder crop for tropical people, especially in the dry season and with its enhanced nutritional value. It is not only drought resistant but also able to grow in a diverse environmental condition around the world.

During the dry season *Labiab purpurus* dense green cover protects the soil from the action of sun rays and it can be advantageously used as a cover crop to reduce soil erosion due to wind or rain. *Parthenium hysterophorus* is a species of flowering plant in the aster family, Asteraceae. In India, it is locally known as carrot grass, congress grass or Gajar Ghas. It is an annual herb that aggressively colonizes disturbed sites. It grows on any type of soil and in a wide range of habitats. It affects the production of crops, animals, human and animal health, and biodiversity. *Achyranthes aspera* is a species of plant in the family Amaranthaceae. It is distributed throughout the tropical world. It can be found in many places growing as an introduced species and a common weed.

#### MATERIALS AND METHODS:

**Field site and experimental design** - The experiment was conducted on the farm located at V-P High-tech Research farm, Dist. Beed. The experiment design was a randomized block design [RBD] with ten treatments and three replicates [Table 1].

**Treatments, Seeds variety and plot size** - The present work related to treatments of plots depends on the basis of the previous work of the field. First maize crop was harvested then on bed of previous residual effect of organic manure plots like comparative residual effect of compost, green manure and dry leaf manure. Previous work in this laboratory and field shows that input, data for the organic manure in form of chemical fertilizers PK and

NPK at the rate of 120N, 80P and 40K and Control (CON) compared with Non leguminous weeds organic manures as green manure of *Achyranthes aspera* (AGM), green manure of *Parthenium hysterophorus* (PGM), mixed green manure of both *A.aspera* & *P.hysterophorus* (A&PGM), Dry manure of *Achyranthes aspera* (ADM), Dry manure of *Parthenium hysterophorus* (PDM), compost of *Achyranthes aspera* (ACo) and compost of *Parthenium hysterophorus* (PCo). after 41 days of interval the Variety Lablab purpureus was sown. It was produced by a Patel Seeds Corporation, old Mandi P.O. Padra (Baroda, Gujrat), 36gm/plots of size 3m x 3m i.e. at the rate of 40 kg/ha each.

#### Plant sampling –

After 56 days of age the green foliage of *Lablab purpureus* was harvested during the early hours of the day, 3 kg vegetation was cut in to small pieces and samples from each plot [100 gm plot<sup>-1</sup>] were immediately collected.

Finally the total crop *Lablab purpureus* was harvested at the 56 DAS of age, plant fresh weight of the fodder yield obtained per plot was recorded on the field itself [100 gm plot<sup>-1</sup>] samples of each treatment along with control they were oven dried at 90 ° C for 2 Days till it gives constant weight for the determination of dry matter (DM), this dried sample was grinded to fine powder and stored in sealed polythene bags for further analysis as dry matter N, P, K and ash percentage from each sample [Table 2].

#### Analysis:

##### Chemical Analysis –

Samples of each treatment along with control were kept in oven for further chemical analysis. Ash values were obtained by burning the moisture-free samples in a muffle furnace at 600°C for 2 hours, Carbon (C) was then

calculated by multiplying A value with 0.58 as factor and Calcium (Ca) content was analyzed by titrating the sample solution against 0.01 N KMnO<sub>4</sub> solution using methyl red as indicator [2]. Nitrogen (N) was measured by micro-Kjeldahl's method after digesting the sample with Conc. H<sub>2</sub>SO<sub>4</sub> according to Bailey [4] and crude protein (CP) was expressed N x 6.25 equation as specified by AOAC, [2]. Total Reducing Sugar (RS) was determined by reacting the sample with phosphomolybdic acid at 420 nm using Folin-Wu-tubes and Phosphorus (P) was analyzed by reacting the sample with ammonium molybdate solution at 660 nm following Fiske and Subba Rau (1972) described by Oser [13]. Potassium (K) content was determined on a flame photometer model mediflame- 127 as suggested by Jackson [8]. The concentration of P and K was calculated on the basis of the standard graph prepared by using variable concentration of the standard solution.

##### Statistical Analysis –

All the results were statistically analyzed by using analysis of variance [ANOVA] test and treatments means were compared using the least significant difference [CD,P\_0.05] which allowed determination of significance between different applications [12].

#### RESULTS AND DISCUSSION:

Fig.1. Show that residual effect of Non-leguminous weeds organic manures on *Lablab purpureus* the total plant analysis as fresh weight and Dry matter kg/ha produced highest amount of fresh weight observed in the treatment of *P. hysterophorus* Compost manure as 4889kg/ha followed by the treatment on *P. hysterophorus* Green manure as 4704kg/ha then in *P. hysterophorus* and *A. aspera* Green manure as 4574kg/ha. Lowest

Fresh Weight observed in the Control as 2963kg/ha followed by *P.hysterophorus* dry manure as 3407kg/ha then on chemical fertilizers PK treatment as 3481kg/ha.

Dry matter kg/ha was maximum on the *P.hysterophorus* and *A.aspera* Green Manure as 791kg/ha then *P.hysterophorus* Compost manure as 782kg/ha followed by *A.aspera* Green Manure as 711kg/ha and minimum in the treatment of Control as 523kg/ha then in chemical fertilizers NPK as 526kg/ha followed by *A.aspera* Dry manure as 535kg/ha then in chemical fertilizers PK as 540kg/ha.

Fig.2. Show that total plant Nitrogen kg/ha was maximum in the treatment of *P.hysterophorus* and *A.aspera* Green Manure as 19.77kg/ha followed by *A.aspera* Green Manure as 19.56kg/ha then on *P.hysterophorus* compost manure as 18.24kg/ha and minimum on the treatment of Control as 11.77kg/ha followed by chemical fertilizers PK treatment as 13.93kg/ha then chemical fertilizers NPK treatment as 14.03kg/ha.

The Total Reducing Sugar kg/ha was maximum in the treatment of *A.aspera* Green Manure as 19.79kg/ha then *P.hysterophorus* and *A.aspera* Green Manure as 18.99kg/ha then on *P.hysterophorus* compost manure as 17.62kg/ha and minimum on the treatment of Control as 11.00kg/ha followed by chemical fertilizers NPK treatment as 11.69kg/ha.

Fig.3. Carbon % was maximum in the treatment of *A.aspera* dry manure as 6.1% followed by *A.aspera* green manure as 5.94% then *P.hysterophorus* green manure as 5.65% and minimum observed on the treatment of Control as 4.06% then treatment of *A.aspera* compost manure as 4.79% then of chemical fertilizers NPK treatment as 5.37%

C/N Ratio was maximum in the treatment of *P.hysterophorus* green manure as 2.34 followed by *P.hysterophorus* compost manure as 2.31 then *A.aspera* dry manure as 2.22 and minimum observed in the treatment of Control as 1.81 then treatment of *A.aspera* compost manure as 1.86 then of chemical fertilizers NPK treatment as 2.02.

Table 3. This Table demonstrate the Percent increase over control Fresh weight, Dry matter, Nitrogen, Total Reducing Sugar kg/ha and also Ash, Carbon, Phosphorous, Potassium, Nitrogen as %.

Fresh vegetation percent increase over control kg/ha of *Lablab purpureus* was highest in the treatment of compost of *P.hysterophorus* as 65kg/ha followed by *P.hysterophorus* green manure as 59kg/ha then *P.hysterophorus* and *A.aspera* green manure as 54kg/ha and lowest value were recorded on dry manure of *P.hysterophorus* as 15kg/ha followed by PK then *A.aspera* dry manure as 19kg/ha then chemical fertilizers NPK as 23kg/ha followed by green manure of *A.aspera* as 41kg/ha.

The Total Reducing Sugar kg/ha Percent increase over control was highest in the *A.aspera* Green manure as 80kg/ha followed by green manure of *P.hysterophorus* and *A.aspera* as 73kg/ha then *P.hysterophorus* compost manure as 60kg/ha and lowest values were recorded on treatment of chemical fertilizers NPK as 06kg/ha followed by chemical fertilizers PK as 23kg/ha then *A.aspera* dry manure as 41kg/ha.

Nitrogen percent increase over control kg/ha of *Lablab purpureus* was highest in the treatment of *P.hysterophorus* and *A.aspera* green manure 68kg/ha then on green manure of *A.aspera* as 66kg/ha then followed by compost of *P.hysterophorus* as 55kg/ha and lowest value were recorded on chemical

fertilizers PK as 18kg/ha then on chemical fertilizers NPK as 19kg/ha treatment.

Phosphorous Percent increase over control maximum in the *A.aspera* Compost as 49% followed by *A.aspera* dry manure as 45% then *P.hysterophorus* dry manure as 44% and minimum observed on the treatment of chemical fertilizers PK as 05% then on *P.hysterophorus* and *A.aspera* green manure as 14% then on *P.hysterophorus* compost manure as 21% followed by chemical fertilizers NPK as 22% , *P.hysterophorus* green manure as 27%.

Potassium. Percent increase over control highest in the treatment of *A.aspera* green manure as 33% followed by *P.hysterophorus* and *A.aspera* green manure as 22.48% then on *P.hysterophorus* green manure as 21.71% and Lowest found in the treatment of the chemical fertilizers PK as 04% then followed by *P.hysterophorus* compost manure as 08% and then *P.hysterophorus* dry manure as 12%.

The results show that residual effect of Non-leguminous weeds manure on the crop of *Lablab purpureus* the total plant analysis as fresh weight, Dry matter, Nitrogen, Total Reducing Sugar kg/ha and also Ash, Carbon, Phosphorous, Potassium, Nitrogen as % were calculated on the dry matter basis shows all significant over control.

#### CONCLUSION:

On the basis of result obtained, it can be concluded that residual effect of all Non-Leguminous weeds Manure plays an important role. Among the residual effect of all Composted manure and Green Manure on crop *Lablab purpureus* plant had the highest biological yield and land use efficiency.

#### REFERENCES:

- Agboola, A.A. and J.A. Omusti, (1982), "Soil fertility problem and its management in tropical Africa" Nigeria pp.25;
- AOAC, (1995), "Official Methods of Analytical Chemistry" 16th Ed., Association of Official Analytical Chemists, Washington, DC;
- Ayoola O.T. and Makinde E.A. (2007), "Complementary Organic and Inorganic Fertilizer Application: Influence on Growth and Yield of Cassava/maize/melon Intercrop with a Relayed Cowpea". Australian Journal of Basic and Applied Sciences, 1(3); [187-192];
- Bailey, R.L. (1967), "Techniques in Protein Chemistry". II Ed., Elsevier Publishing Co., Amsterdam;
- Gholap P.N., (2021), "Comparative study of various Organic Manures on Growth of Spinach". International Journal of creative Research Thoughts. <http://www.ijcrt.org/papers/IJCRT2105837.pdf>;
- Gholap P.N., (2021), "Effect of Various Dry Powder Organic Manure on Sugarcane Crop". International Journal of creative Research Thoughts. <http://www.ijcrt.org/papers/IJCRT2105981.pdf>;
- Ginting, D., A. Kessavalou, B. Eghball, and J.W. Doran. (2003), *Greenhouse gas emissions and soil indicators four years after manure and compost applications*. J. Environ. Qual.32: [23-32];
- Jackson, M.L. (1973), "Soil Chemical Analysis." Prentice Hall of India Pvt. Ltd., New Delhi;

Karami M, Afyuni M, Rezainejad Y, Schulin R, (2009), "Heavy metal uptake by wheat from a sewage sludge amended calcareous soil" *J.Nutr. Cycl. Agro.*83:[51–61];

Larney FJ, Janzen HH, Olson AF, (2011), "Residual effects of one-time manure, crop residue and fertilizer amendments on a resurfaced soil" *Canadian Journal of Soil Science*, 91(6):[1029–1043];

Mkhabela M and Warman P R, (2005), "The influence of municipal solid waste compost on yield, soil phosphorus availability and uptake by two vegetable crops, grown in a P-awash sandy loam soil in Nova Scotia" *J.Agric. Ecosyst. Environ.* 106:[57–67];

Mungikar, A.M. (1997) "An Introduction to Biometry." Saraswati Printing Press, Aurangabad;

Oser, B. L. (1979) "Hawk's Physiological chemistry". XIV Ed., Tata McGraw Hill Publishing Co. Ltd., New Delhi;

Tabibian B, Hoodaji M and Yazdani N, (2012), "Residual Effects of Organic Fertilizers on Chemical Properties of Soil and lead Concentration" The 1st International and The 4 th National Congress on Recycling of Organic Waste in Agriculture, April 2012 in Isfahan, Iran [26–27];

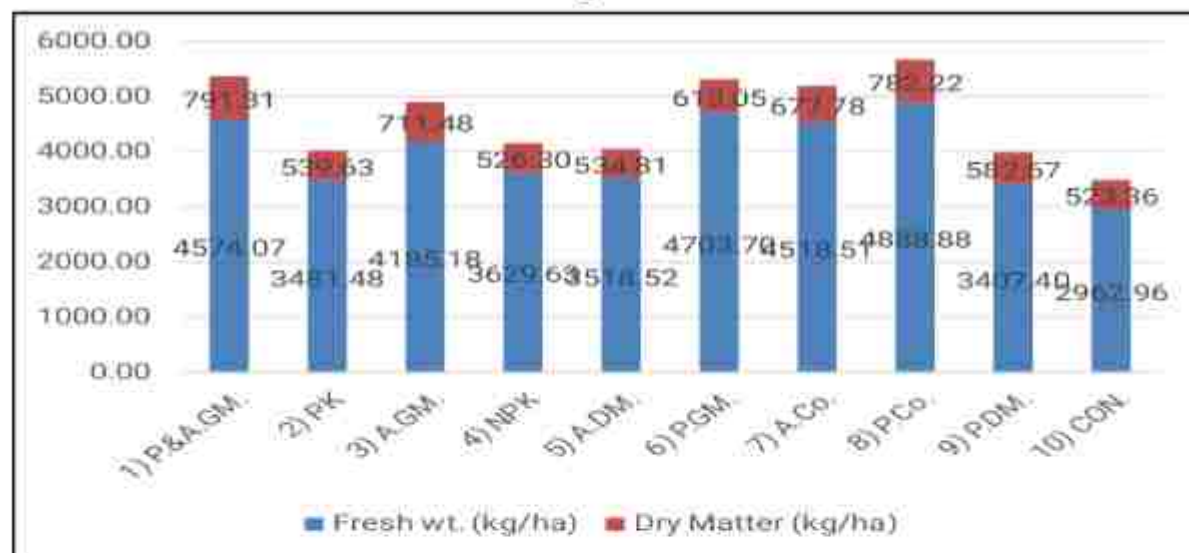
Wallingford, G.W., L.S. Murphy, W.L. Powers, and H.L. Manges: [1975] "Disposal of beef-feedlot manure: *Effects of residual and yearly applications on corn and soil chemical properties*" *J. Environ. Qual.* 4 :[526–531];

		East				
	1) P.&A.GM.	2) PK	3) A.GM.	4) NPK	5) A.DM.	
North	6) P.GM.	7) A.Co.	8) P.Co.	9) CON.	10) P.DM.	South
	11) A.Co.	12) CON.	13) P.GM.	14) P.&A.GM.	15) A.DM.	
	16) A.GM.	17) P.Co.	18) PK	19) NPK	20) P.DM.	
	21) P.GM.	22) PK	23) P.&A.GM.	24) P.Co.	25) A.GM.	
	26) A.DM.	27) A.Co.	28) CON.	29) NPK	30) P.DM.	
		West				

**Table 1:** Randomised Block Design Residual Effect of Non-leguminous weeds organic manure on crop Lablab purpureus.

Sr. No.	Field Activities	Period [DAS]	Sr. No.	Field Activities	Period [DAS]
1	Weed Collection: Achyranthes, Parthenium	00 DAS	7	Growth Analyses of Crop - I	27 DAS
2	Preparation of Dry Manure	15 DAS	8	Chlorophyll Analyses of Crop - I	28 DAS
3	Preparation of Compost Manure	30 DAS	9	Growth Analyses of Crop - II	43 DAS
4	Treatments given to R. B. D. plots	32 DAS	10	Chlorophyll Analyses of Crop - II	44 DAS
5	Sowing of Crop <i>Lablab purpureus</i>	145 DAS	11	Harvesting of Crop	56 DAS
6	Field Activities ( <i>Lablab purpureus</i> )	[ 00 DAS ]	12	Chemical Analyses	74 DAS

**Table 2:** Field Activities of crop *Lablab purpureus* on Plots of Residual Effect of Non-leguminous weeds organic manure.



**Fig. 1 :** Graph of Residual Effect of Non-leguminous weeds organic manure on *Lablab purpureus* crop analyses of total plant Fresh wt. S.E. = 124, C.D. = 260 and Dry matter S.E. = 50.66, C.D. = 106 [kg/ha].

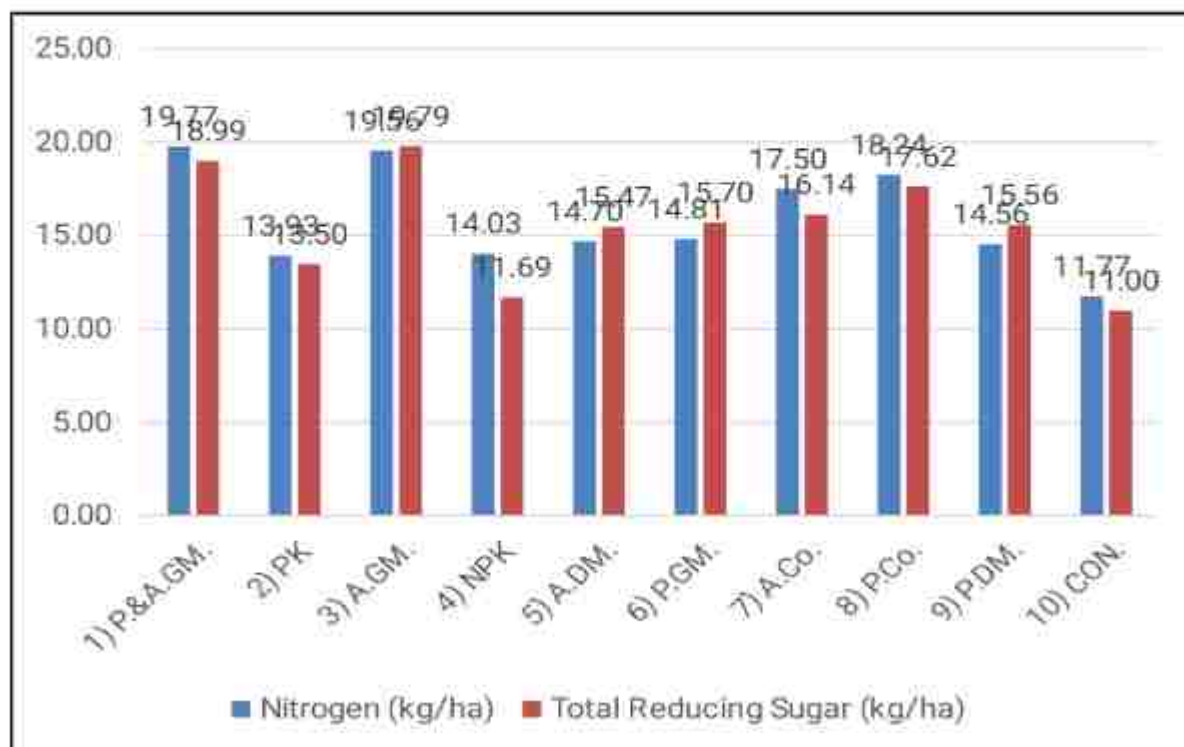


Fig. 2 : Graph of Residual Effect of Non-leguminous weeds organic manure on Lablab purpureus crop analyses of total plant Nitrogen kg/ha S.E. = 1.8, C.D. = 3.8 and Total Reducing Sugar kg/ha S.E. = 1.2, C.D. = 2.6 [kg/ha].

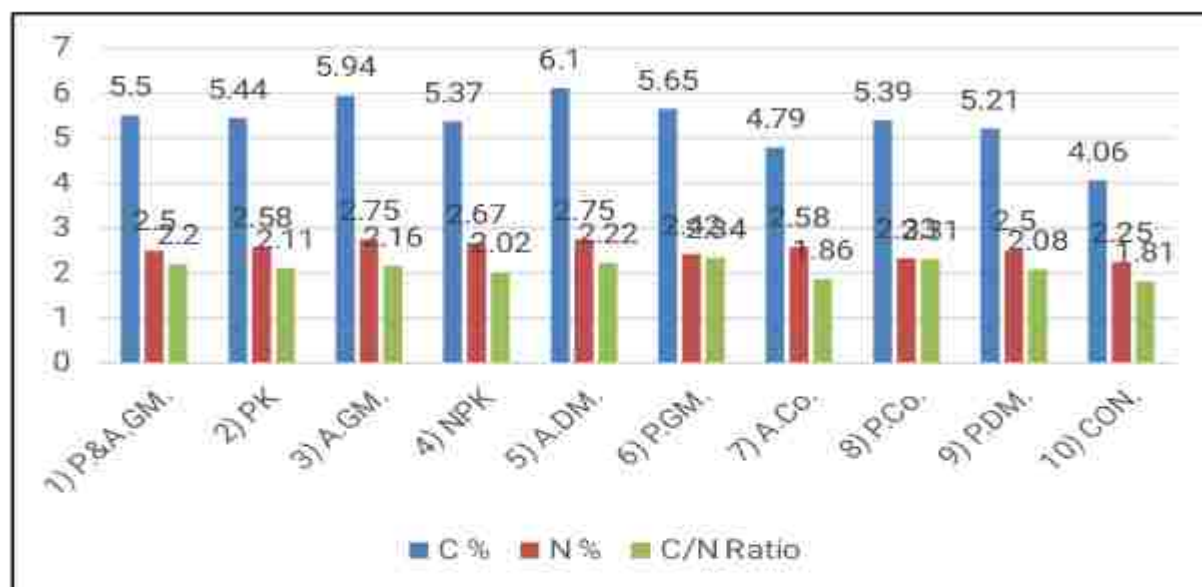


Fig. 3 : Graph of Residual Effect of Non-leguminous weeds organic manure on Lablab purpureus crop analyses of total plant Carbon% S.E. = 0.25, C.D. = 0.52 Nitrogen% S.E. = 0.19, C.D. = 0.39 and C/N Ratio S.E. = 0.19, C.D. = 0.39



Treatments	Kg./ha.					%					
	F.wt.	D.M.	N.	C.P.	R.S.	D.M.	P.	K.	A.	C.	N.
1) CON.	0	0	0	0	0	0	0	0	0	0	0
2) P.&A.GM.	54	51	68	68	73	33	14	22	35	35	11
3) PK	18	3	18	18	23	19	5	4	34	34	15
4) A.GM.	41	36	66	66	80	30	33	33	46	46	22
5) NPK	23	1	19	19	6	11	22	15	32	32	19
6) A.DM.	19	2	25	25	41	17	45	13	50	50	22
7) P.GM.	59	17	26	26	43	36	27	22	39	39	7
8) A.Co.	53	30	49	49	47	15	49	14	18	18	15
9) P.Co.	65	49	55	55	60	23	21	8	33	33	4
10) P.DM.	15	11	24	24	42	31	44	12	28	28	11

**Table 3:** % increase over control of crop *Labiab purpureus* on Plots of Residual Effect of Non-leguminous weeds organic manure.

## To Study of Various Plants Grafting For the Home-Gardening Purposes

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### ABSTRACT

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In India, almost all people parches grafted varieties of fruit plants from nursery at near from home and very high rate without knowing about how to select and grafted properly infection free, rare and tasty fruit plant varieties using proper techniques at near home open space or Garden.

Grafting is a horticultural technique where by tissues of plants are joined to continue their growth together. The upper part of the plant is said the scion while the lower part is named the rootstock. The success of this joining requires that the vascular tissues grow together and such joining is known as inosculation. The technique is most ordinarily utilized in asexual propagation of commercially grown plants for the horticultural and agricultural trades.

The experiment was conducted on the farm located at Khandepargaon, V-P High-tech Research farm, Dist. Beed. One plant was selected for its roots and was called the stock or rootstock. The other plant was selected for its stems, leaves, flowers or fruits are called the scion or cion. The scion contains the specified genes to be duplicated in future production by the stock/scion plant. I used some modern facility available near and use of it increased the success rate of grafting some popular current trends in ornamental & fruit plant grafts take appropriate and it ideally suited to garden conditions.

On the basis of result obtained it was concluded that favorite varieties are not grown by seed sowing. Many of popular fruit & ornamental plants of desirable characters like smell, texture, taste, color, size, etc. was grown by vegetative propagation method (artificial) named as grafting.

**Keywords:** asexual, propagation, techniques, section, scion, rootstock.

### I. INTRODUCTION

As humans began to domesticate plants and animals, horticultural techniques that could reliably propagate

the desired qualities of long-lived woody plants needed to be developed.

For successful grafting to take place, the vascular cambium tissues of the stock and scion plants must be

placed in contact with each other. Both tissues must be kept alive until the graft has "taken", usually a period of a few weeks. Successful grafting only requires that a vascular connection take place between the grafted tissues. Joints formed by grafting are not as strong as naturally formed joints, so a physical weak point often still occurs at the graft because only the newly formed tissues inosculate with each other. The existing structural tissue (or wood) of the stock plant does not fuse.

In stem grafting, a common grafting method, a shoot of a selected, desired plant cultivar is grafted onto the stock of another type. In another common form called bud grafting, a dormant side bud is grafted onto the stem of another stock plant, and when it has inosculated successfully, it is encouraged to grow by pruning off the stem of the stock plant just above the newly grafted bud.

## II. MATERIALS AND METHODS:

### Field site:

The experiment was conducted on the farm located at Khandepargaon, V-P High-tech Research farm, Dist. Beed. One plant was selected for its roots and was called the stock or rootstock. The other plant was selected for its stems, leaves, flowers or fruits are called the scion or cion. The scion contains the desired genes to be duplicated in future production by the stock/scion plant. I used some modern facility available near and use of it increased the success rate of grafting some popular current trends in ornamental & fruit plant grafts take appropriate and it ideally suited to garden conditions. "Scientific information was collected from different authentic websites, journals and e-contents related to topics, near about all are highlighted in references".

### Cutting tools:

It is good procedure to keep the cutting tool sharp to minimize tissue damage and clean from dirt and other substances to avoid the spread of disease. A good knife

for general grafting should have a blade and handle length of about 3 inches and 4 inches respectively. Specialized knives for grafting include bud-grafting knives, surgical knives, and pruning knives. Cleavers, chisels, and saws are utilized when the stock is too large to be cut otherwise.

### Disinfecting tools:

Treating the cutting tools with disinfectants ensures the grafting site is clear of pathogens. A common sterilizing agent is absolute alcohol.

### Graft seals:

Keeps the grafting site hydrated. Good seals should be tight enough to retain moisture while, at the same time, loose enough to accommodate plant growth. Includes specialized types of clay, wax, petroleum jelly, and adhesive tape.

### Tying and support materials:

Adds support and pressure to the grafting site to hold the stock and scion together before the tissues join, which is especially important in herbaceous grafting. The employed material is often dampened before use to help protect the site from desiccation. Support equipment includes strips made from various substances, twine, nails, and splints.

## III. ARTIFICIAL GRAFTING TECHNIQUES

Artificial Grafting is an artificial method of asexual reproduction used to produce plants combining favorable stem characteristics with favorable root characteristics. The stem of the plant to be grafted is known as the scion, and the root is called the stock.

### Approach (T budding):

Approach grafting or inarching is used to join together plants that are otherwise difficult to join. The plants are grown close together, and then joined so that each plant has roots below and growth above the point of union. Both scion and stock retain their

respective parents that may or may not be removed after joining. Also used in pleaching. The graft can be successfully accomplished any time of year.

#### **Bud Grafting:**

Bud grafting (also called chip budding) uses a bud instead of a twig. Grafting roses is the most common example of bud grafting. In this method a bud is removed from the parent plant, and the base of the bud is inserted beneath the bark of the stem of the stock plant from which the rest of the shoot has been cut. Any extra bud that starts growing from the stem of the stock plant is removed. Examples: roses and fruit trees like peaches. Bud wood is a stick with several buds on it that can be cut out and used for bud grafting. It is a common method of propagation for citrus trees.

#### **Cleft Grafting:**

In cleft grafting a small cut is made in the stock and then the pointed end of the scion is inserted in the stock. This is best done in the early spring and is useful for joining a thin scion about 1 cm ( $\frac{3}{8}$  in) diameter to a thicker branch or stock. It is best if the former has 3-5 buds and the latter is 2-7 cm ( $\frac{3}{4}$ -2  $\frac{3}{4}$  in) in diameter. The branch or stock should be split carefully down the middle to form a cleft about 3 cm (1  $\frac{1}{2}$  in) deep. If it is a branch that is not vertical then the cleft should be cut horizontally. The end of the scion should be cut cleanly to a long shallow wedge, preferably with a single cut for each wedge surface, and not whittled. A third cut may be made across the end of the wedge to make it straight across. Slide the wedge into the cleft so that it is at the edge of the stock and the centre of the wedge faces are against the cambium layer between the bark and the wood. It is preferable if a second scion is inserted in a similar way into the other side of the cleft. This helps to seal off the cleft. Tape around the top of the stock to hold the scion in place and cover with grafting wax or sealing compound. This stops the cambium layers

from drying out and also prevents the ingress of water into the cleft.



1. Approach (T budding)



2. Bud Grafting



3. Cleft Grafting

#### **Whip Grafting:**

In whip grafting the scion and the stock are cut slanting and then joined. The grafted point is then bound with tape and covered with a soft sealant to prevent dehydration and infection by germs. The common variation is a whip and tongue graft, which is considered the most difficult to master but has the highest rate of success as it offers the most cambium

contact between the scion and the stock. It is the most common graft used in preparing commercial fruit trees. It is generally used with stock less than 1.25 cm (½ in) diameter, with the ideal diameter closer to 1 cm (¾ in) and the scion should be of roughly the same diameter as the stock.

The stock is cut through on one side only at a shallow angle with a sharp knife. (If the stock is a branch and not the main trunk of the rootstock then the cut surface should face outward from the centre of the tree.) The scion is similarly sliced through at an equal angle starting just below a bud, so that the bud is at the top of the cut and on the other side than the cut face.

In the whip and tongue variation, a notch is cut downwards into the sliced face of the stock and a similar cut upwards into the face of the scion cut. This act as the tongues and it requires some skill to make the cuts so that the scion and the stock marry up neatly. The elongated "Z" shape adds strength, removing the need for a companion rod in the first season (see illustration).

The joint is then taped around and treated with tree-sealing compound or grafting wax. A whip graft without a tongue is less stable and may need added support.

#### Stub Grafting:

Stub grafting is a technique that requires less stock than cleft grafting, and retains the shape of a tree. Also scions are generally of 6–8 buds in this process.

An incision is made into the branch 1 cm (¾ in) long, then the scion is wedged and forced into the branch. The scion should be at an angle of at most 35° to the parent tree so that the crotch remains strong. The graft is covered with grafting compound. After the graft has taken, the branch is removed and treated a few centimeters above the graft, to be fully removed when the graft is strong.

#### Four-flap Grafting:

The four-flap graft (also called banana graft) is commonly used for pecans, and first became popular with this species in Oklahoma in 1975. It is heralded for maximum cambium overlap, but is a complex graft. It requires similarly sized diameters for the rootstock and scion. The bark of the rootstock is sliced and peeled back in four flaps, and the hardwood is removed, looking somewhat like a peeled banana. It is a difficult graft to learn.



4. Whip Grafting



5. Stub Grafting



6. Four-flap Grafting

### Awl Grafting:

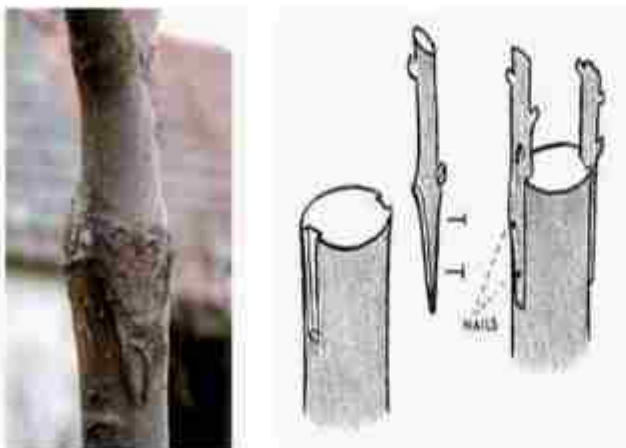
Awl grafting takes the least resources and the least time. It is best done by an experienced grafter, as it is possible to accidentally drive the tool too far into the stock, reducing the scion's chance of survival. Awl grafting can be done by using a screwdriver to make a slit in the bark, not penetrating the cambium layer completely. Then inset the wedged scion into the incision.

### Veneer Grafting:

Veneer grafting, or inlay grafting, is a method used for stock larger than 3 cm (1 ¼ in) in diameter. The scion is recommended to be about as thick as a pencil. Clefs are made of the same size as the scion on the side of the branch, not on top. The scion end is shaped as a wedge, inserted, and wrapped with tape to the scaffolding branches to give it more strength. May alternately be named a rind graft or a bark graft.

### Air Layering:

Air layering is a propagation method for woody plants that allows you to root branches while still attached to the parent plant. It is useful for plants that are hard to propagate by cuttings or if you want your new plant to have a larger size than could be accomplished by taking cuttings.



7. Awl Grafting



8. Veneer Grafting



9. Air Layering Grafting

## IV. RESULTS

Grafting methods give the plant a certain characteristic of the rootstock - for example, hardiness, drought tolerance, or disease resistance. Methods require extensive knowledge of nursery crop species and their compatibility, grafting techniques that are usually practiced only by more experienced nursery operators. Ornamental & fruit plant grafting is very popular in India. The main advantage of grafting is for disease-resistant rootstocks.

## V. CONCLUSION

On the basis of result obtained it was concluded that favourite varieties are not grown by seed sowing. Many of popular fruit & ornamental plants of desirable characters like smell, texture, taste, color,

size, etc. was grown by vegetative propagation method (artificial) named as grafting.

## VI. REFERENCES

- [1]. Citrus Budwood Certification Program, 2017. Texas A&M University-Kingsville Citrus Center. September 29, 2015. Retrieved 13 September 2017.
- [2]. Citrus Budwood Program, 2017. Florida Department of Agriculture and Consumer Services. Retrieved 13 September 2017.
- [3]. Core, J. 2005. Grafting Watermelon Onto Squash or Gourd Rootstock Makes Firmer, Healthier Fruit. AgResearch Magazine, United States Department of Agriculture. (7):53.
- [4]. Garner, R., 1958. Grafters Handbook. New York: Oxford University Press. :79-100.
- [5]. Garner, R., 1988. Grafters Handbook, Cassell Illustrated. ISBN 978-0-304-32172-(8):131.
- [6]. Grafting (PDF), 2011. Archived from the original (PDF) on September 16, 2011.
- [7]. Herbaceous Plant Grafting (Tomato)URL: [https://www.youtube.com/watch?v=by-ZAAY4G\\_4](https://www.youtube.com/watch?v=by-ZAAY4G_4)
- [8]. Hogan, C. Michael, 2008. California Black Oak *Quercus kelloggii* iGoTerra. Archived from the original on 2012-02-13. Retrieved 2017-09-14.
- [9]. Hottes, A.C., 1925. Practical plant propagation: an exposition of the art and science of increasing plants as practiced by the nurseryman, florist and gardener. New York: A.T. De La Mare.
- [10]. Jump up to:a b c Kumar, G., 2011. Propagation of Plants by Grafting and Budding (PDF). Pacific Northwest Extension.:3-5.
- [11]. Jump up to:a b Hartmann, H.T.; Kester, D.; Davies, F.; Geneve, R., 2001. Plant Propagation: Principles and Practices, 7th ed.. Prentice Hall. ISBN 978-0-136-79235-2.
- [12]. Jump up to:a b Loehle, C. & Jones, R.H., 1998. Adaptive Significance of Root Grafting in Trees Functional Ecology. JSTOR 2389347, 4 (2): 268-271.
- [13]. Kobayashi, Ken; Suzuki, Masato; Sasaya, Sadao, 1999. Grafting Robot, Journal of Robotics and Mechatronics, doi:10.20965/jrm.1999, 11 (3): 213-219.
- [14]. Matej Lexa 29 April, 1996. Herbaceous Plant Grafting Manual. Retrieved 14 September 2017.
- [15]. Melnyk, Charles W.; Schuster, Christoph; Leyser, Ottoline; Meyerowitz, Elliot M., May 2015. A Developmental Framework for Graft Formation and Vascular Reconnection in *Arabidopsis thaliana*. Current Biology. 25 (10): 1306-318.
- [16]. Nelson, Alexander, 2007. Principles of Agricultural Botany. United Kingdom: Read Books. ISBN 978-1-4067-4662-(4):101.
- [17]. Onoda, A.Kobayashi, Ken, Suzuki, Masato, 1992. The Study of the Grafting Robot. Acta Horticulturae. International Symposium on Transplant Production Systems. 319, International Society for Horticultural Science. doi:10.17660/ActaHortic.1992.319.(84):535-540.
- [18]. Ted Bilderback, R. E. Bir, T. G. Ranney, 2014. "Grafting and Budding Nursery Crop Plants".
- [19]. June 30, 2014, <https://content.ces.ncsu.edu/grafting-and-budding-nursery-crop-plants>
- [20]. Terms and Conditions of Supply of Budwood by CCPP, 2017. Citrus Clonal Protection Program. University of California, Riverside. Retrieved 13 September 2017.
- [21]. Wikipedia: <https://en.m.wikipedia.org/wiki/Grafting>



*International journal of global Science Research*

## Research Paper

### Changes in the glycogen content of *Lammellidens marginalis* after exposure of acute toxicity of Cadmium in winter season.

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**Abstract:** Toxicity of cadmium on some metabolic processes can lead to disturbances and imbalance of various physiological activities. The present study reflects the effect of cadmium chloride on glycogen in some vital organs of the fresh water Bivalve mollusks *Lammellidens marginalis*. The bivalve were treated with different concentrations of cadmium chloride mortality rate was noted up to 96 h. The carbohydrates were estimated to study the stress caused by the cadmium chloride as a toxicant. The results showed a significant decline in the total carbohydrates in different. The significant role of cadmium chloride in some vital organs of the experimental animal is discussed and the results correlated and corroborated with the findings of the earlier researchers.

**Keywords:** *Lammellidens marginalis*, Cadmium chloride, glycogen, Toxicity

## INTRODUCTION:

Cadmium is a ubiquitous, non essential element which possesses high toxicity to both human and aquatic organisms. It is classified as the second most dangerous metal in our environment. It occurs naturally in the environment and in insignificant amount. In the recent past, its concentration in aquatic systems is steadily and considerably increasing due to anthropogenic activities (Bryan and Langston 1992). Its deleterious effects on aquatic flora and fauna by adverse effect on various physiological, biochemical and cellular processes have been reported (Gill et. al., 1988). Cadmium toxicity has become the focus of intense research globally next to mercury as the most notorious of heavy metal pollutant. After absorption into the gastro-intestinal tract it is transferred to the liver, kidney and finally excreted via urine. It becomes toxic when it is not metabolized by the body and accumulates in soft tissues, liver, kidneys and mostly as metalloprotein (Nodberg and Nodberg, 2000).



Cadmium toxicity to aquatic ectotherms depends on complex biochemical interaction and a balance between rates of absorption, detoxification and excretion. It has been found that cadmium could change glycogen reserves and serum glucose levels in aquatic animals by affecting the activities of liver enzymes that have pivotal role in the carbohydrate metabolism such as gluconeogenesis, glycogenesis and glycolysis. Thus, the several biochemical parameters of aquatic animals could be used as an indicator of heavy metal toxicity and health status of aquatic population. The *Lammellidens marginalis* is well known for its high nutritive value and is commonly cultured by the local farmers. Cadmium causes instantaneous physiological disorders and alteration in the pathways of carbohydrate metabolism in tissues and organs. Biochemical parameters are the best indicator of stress caused by heavy metals and thus toxicity testing becomes an essential tool for assessing the effect and fate of a toxicant. Therefore, the studies were conducted to estimate the toxicity and variations in carbohydrate levels; in *Lammellidens marginalis* exposed to cadmium.

#### MATERIALS AND METHODS:

The freshwater bivalves *Lammellidens marginalis* (90 – 100 mm in shell length) were collected from Kutlaq Lake, Daultabad near Aurangabad (Maharashtra State) India. After bringing to the laboratory, the fouling biomass and mud on shell valves were removed without disturbing the siphonal regions. The equal sized animals were grouped and kept in sufficient

quantity of water (animal / litre) in aquaria with aeration for 24 hours to adjust the animals to laboratory conditions with renewal of water at interval of 12 to 13 hours. No food was given during this time and during experiments. After 24 hours animals of equal size (90 – 100mm shell length) were grouped in 10 and exposed to different test concentrations of cadmium. After 96hrs acute toxicity tests the biochemical constituent like glycogen from different body parts viz. mantle, gill, gonad, hepatopancreas, foot, was estimated from control, LC0 and LC50 groups. During each estimate pooled samples from five animals belonging to each group were used to determine the content of glycogen (De zwann and Zandee, 1972). The values of estimate for different tissues were subjected to statistical analysis using replicate of multiple variances to find out the significant differences between control, LC0 and LC50 groups. The results are expressed on wet weight basis (mg/gm).

#### RESULT AND DISCUSSION:

Table: Changes in the glycogen from different body parts of *Lammellidens marginalis* after exposure of acute toxicity tests of Cadmium in winter season. In Control group increased value from mantle ( $11.628 \pm 0.442$ ) followed by gill ( $6.288 \pm 0.177$ ), hepatopancreas ( $5.298 \pm 0.172$ ), gonad ( $5.196 \pm 0.197$ ) and foot. In LC0 group glycogen content was highest value showed in foot ( $11.335 \pm 0.398$ ) followed by mantle ( $7.263 \pm 0.298$ ), gill ( $5.119 \pm 0.223$ ), gonad ( $4.503 \pm 0.141$ ) and hepatopancreas ( $3.268 \pm 0.127$ ).

**Table: Changes in the glycogen from different body parts of *Lammellidens marginalis* after exposure of acute toxicity tests of Cadmium in winter season.**

Body Parts	Control	LC0 Group	LC50 Group
Mantle	11.628 ±0.442	7.263±0.298 (37.53%) ***	3.738±0.131 (67.85%) *** (48.53%)000
Gill	6.288 ±0.177	5.119±0.223 (18.59%) ***	4.417±0.127 (29.75%) *** (13.71%)000
Gonad	5.196 ±0.197	4.503±0.141 (13.33%) **	6.832±0.272 (231.4%) *** (51.72%)000
Hepatopancreas	5.298 ±0.172	3.268±0.127 (38.31%) ***	4.729±0.261 (189.26%) *** (44.70%)000
Foot	3.317 ±0.148	11.335±0.398 (241.7%) ***	8.276±0.288 (349.5%) *** (26.98%)000

(Bracket values shows percentage difference \*, 0-P<0.05; \*\*, 00-P<0.01; \*\*\*, 000-P<0.001. \*- compared to control group; 0-compared to LC0 group)

In LC50 group content of glycogen was highest value showed in foot (8.276±0.288) followed by gonad (6.832±0.272), hepatopancreas (4.729±0.261), gill (6.832±0.272) and mantle (3.738±0.131).

LC0 group compared with control group highest value of significantly found in foot (241.7% P<0.01) followed by hepatopancreas (38.31% P<0.001) and mantle (37.53%P<0.001) and gill (18.59% P<0.001). Decreased value of significant found in gonad (13.33% P<0.01).

LC50 group compared with Control group high content of significant found in foot (349.5% P<0.001) followed by gonad (231.4%P<0.001), hepatopancreas (189.26% P<0.001), mantle (67.85% P<0.001) and gill (29.75%P<0.001).

When LC50 compared with LC0 group high value of significantly found in gonad (51.72% P<0.001) followed by mantle (48.53% P<0.001), hepatopancreas (44.70% P<0.001), foot (26.98. % P<0.001) and gill (13.71% P<0.001).

Glycogen is considered to be the major source of energy in animal tissues and maintenance of glycogen reserves is an essential feature of the normal organismal metabolism. It also plays an important role in the structural part of the cell membranes De Zwaan and Zandee, (1972). The decrease in glycogen content form the whole body of the bivalve, *L. marginalis* suggests the possibility of the glycogenolysis which in turn produce energy to cope up the adverse stress conditions.

According to (Berthelin, *et. al.*, 2000) energy metabolism affected by exogenous factors such as food availability and temperature as well as by endogenous factors such as energy demands for reproduction, metabolic reserves accumulated in tissues may be used in energy production or converted into various biochemical components. Bivalves store energy in the form of glycogen (Naimo, *et. al.*, 1998). High values of glycogen and carbohydrate were reported in bivalves when they are sexually inactive (Nagabhushnam and Deshmukh, 1974). Any stressful

condition alters the biochemical composition. The change in metabolic rate leads towards the change in biochemical composition hence, the change in biochemical composition is an indicator of stress of chemical or physical nature in the surrounding which mainly affects glycogen contents.

Glycogen content in the gill tissue of exposed animals showed a general trend of reduction when compared with the controls. The reduction in glycogen values was found to be significant at almost all exposure periods significant depletion in glycogen level suggests possibility of its rapid utilization to provide excess energy for cellular biochemical process through glycolysis. Hypoxic condition might have been prevailed in the bivalve to provide excess energy by its utilization.

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#### REFERENCES:

Bryan G. W. and Langston W. J. (1992) Bio availability, accumulation and effects of

heavy metals in sediments with special reference to United Kingdom estuaries: A Review. *Environmental Pollution*, 76(2), 89-131.

Gill T. S., Pant J. C. and Tewari H. (1998) Bronchial pathogenesis in a fresh water fish, *Puntius conchonus*, chronically exposed to sub lethal concentration of cadmium. *Ecotoxicol Environ Saf*, 15(2), 153-161.

Nodberg M and Nodberg G. F. (2000) Toxicological aspects of metalloprotein. *Cell Mol Biol*, 46, 667- 680.

De zwann, B. and Zandee D. I. (1972) The utilization of glycogen and accumulation of some intermediates comp. *Biochem. Physiol.*, 43 B, 47-54.

Berthelin C., Kellner K., and Mathieu M. (2000) Storage metabolism in the Pacific oyster (*Crassostrea gigas*) in relation to summer mortalities and reproduction cycle (West coast of France). *Comp. Biochem. Physiol.*, 125, 359-369.

Naimo T. J., Damschon E. D., Rada R. G., and Manroe E. M., (1998) *Journal of the North American Benthological Society*, 17: 121-128.

Nagabhushanam R. and Deshmukh R. S. (1974) *Indian J. Fish.* 21, 531-542.



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**INDEX**

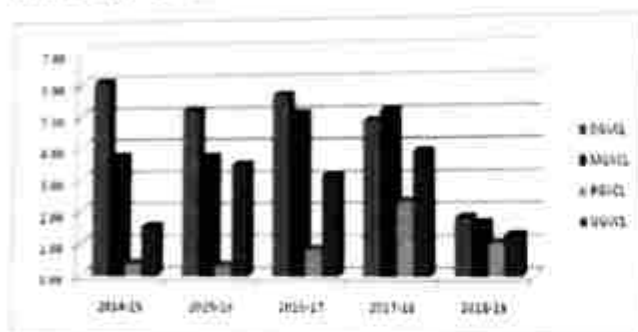
- 01) Knowledge management: Practices and challenges  
DR. HD GOPAL, RAMANAGARA (DIST) ||14
- 02) Communal Violence and Psychosis in Mahesh Dattani's Final Solutions  
Mohammad Asif, Raichur ||24
- 03) Hill-Kharia-An Assessment of their Religious Life  
Bhakta Charan Pradhan, Keonjhar, Odisha ||27
- 04) SEASONAL OCCURRENCE OF CAMALLANUS SP (CAMALLANIIDAE:NEMATODA) ...  
ASHISH KUMAR, Nawada, Bihar, India ||33
- 05) TRIBAL FESTIVALS IN ODISHA  
Dr. Sanghamitra Bhanja, Bhubaneswar, Odisha ||36
- 06) Effect of COVID-19 in India: A study with special reference to some ...  
Gourab Das ||38
- 07) Indian Pluralism: Development and Contemporary Constitutional Values  
Mohammad Asif ||42
- 08) Poetry and criticism  
Dr. Rashmi Nagwanshi, Junnardeo ||47
- 09) Role of Agriculture in the Development of Indian Economy  
Dr. Pankaj Kumar, Patna ||48
- 10) FDI in India: Leading to Economic Growth  
Vijaysing B. Pawar & Dr. Pradip Ghorpade, Gadchiroli ||54
- 11) Role of Bonda Development Agency in Changing Socio-Economic Life of ...  
Dr. Bhakta Charan Pradhan, District of Keonjhar, Odisha ||59
- 12) Education and Intercaste Marriage  
Dr. Sanjay Dyanoba Sawant, Dist. Kolhapur ||65
- 13) Localism Vs Cosmopolitanism Value Orientation of Secondary School ...  
Dr. Gouravjeet Singh & Dr. Neena Sawhney ||66

14) Maltreatment of minorities in India: A Study of Arundati Roy's 'The ... Tahir Mahmood	72
15) Structuralist Approach Dr. Nilish A. Tare, Distt. Amravati	78
16) A COMPARATIVE FINANCIAL ANALYSIS OF MARUTI SUZUKI AND TATA MOTORS Dr. Rupali A. Shah & Prof. Trusha P. Gajjar, Surat	80
17) DuPont Analysis of Electricity Distribution Companies of Gujarat Urja Vikas ... Dr. Rupali A. Shah & Varsha Vora, Surat	83
18) FUZZY FULLY LINEAR FRACTIONAL PROGRAMMING PROBLEM UNDER FUZZY ... Mr. Ramesh B. Ghadge & Mr. Sasane P. G., Dist. Beed	86 ✓
19) मनोविश्लेषणात्मक कादंबरीतील नायक वसंत बाजीराव शिंदे, नांदेड	91
20) अरूण काळे यांची कविता : 'ग्लोबलचं गावकूस'च्या संदर्भात प्रा.डॉ.संजय हापगुंडे, नांदेड	96
21) बीड जिल्ह्यात पाटोदा तालुक्यातील आत्महत्येचाग्रस्त शेतकरी कुटुंब - ... प्रा.डॉ. यादव घोडके, जि. बीड	101
22) डॉ. पंजाबराव देशमुख यांचे आर्थिक, सामाजिक, राजकीय कार्ये कु. उज्वला गिरीधर नागोसे	106
23) १९९० नंतरची मराठी कविता डॉ. कल्याणी शेजवळ, वज्रेश्वरी	109
24) अभिजीत बॅनर्जी आणि गरीबी निर्मूलन एक दृष्टीकोण प्रकाश जंगले, ठाणे	114
25) स्थानिक स्वराज्य संस्थांमध्ये मातंग समाजाचे राजकीय नेतृत्व : एक अध्ययन प्रा. जोगदंड मकरंद बळीराम, जि. बीड	116
26) इ.स. २००० नंतरची मराठी कविता : शोध आणि बोध प्रा. डॉ. व्यंकटी पावडे, नांदेड	119

shows increasing trend except 2018-19. Financial leverage reveals decreasing trend. Table 5 showing Du-Pont analysis of DGVCL, MGVCL, PGVCL & UGVCL

Company	2014-15	2015-16	2016-17	2017-18	2018-19
DGVCL	6.05	5.18	5.94	4.82	1.80
MGVCL	3.75	2.68	3.03	3.11	3.84
PGVCL	3.81	0.33	0.84	2.02	0.33
UGVCL	1.34	1.46	1.11	0.87	0.29

Graph 5 showing Du-Pont analysis of DGVCL, MGVCL, PGVCL & UGVCL



#### Conclusion :

The DuPont Return on Equity is highest 6.05 in 2014-15 of DGVCL and lowest 0.33 in 2015-16 of PGVCL. The Return on Equity earned by DGVCL is highest among all companies in every year except the year 2017-18.

#### References:

[www.dgvcl.com](http://www.dgvcl.com)

[www.mgvcl.com](http://www.mgvcl.com)

[www.pgvcl.com](http://www.pgvcl.com)

[www.ugvcl.com](http://www.ugvcl.com)

[www.slideshare.com](http://www.slideshare.com)

Hak-seon Kim (2016) "A Study of Financial Performance using DuPont Analysis in Food Distribution Market" *Culinary Science & Hospitality Research* 22(6):52-60

*Culinary Science & Hospitality Research*. 2016;22(6):52-60.

DOI: 10.20878/cshr.2016.22.6.005

*Culinary Science & Hospitality Research*. 2016;22(6):52-60.

DOI: 10.20878/cshr.2016.22.6.005

Mehta Piyush Ramesh (2015) "ASIAN JOURNAL OF MANAGEMENT RESEARCH" Volume 5 Issue 4, 2015

## FUZZY FULLY LINEAR FRACTIONAL PROGRAMMING PROBLEM UNDER FUZZY CIRCUMSTANCES

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**Keywords** :- Linear programming problem, Triangle Fuzzy numbers, Fuzzy mathematical programming.

**Abstract** :- Several methods currently exist for solving fuzzy fractional programming problems under non negative fuzzy variables.

However, due to the limitation of these methods they cannot be applied for solving fully fuzzy linear fractional programming [FFLEP] problems where all the variable and parameters are fuzzy numbers.

So this paper is planning to fill in this gap and in order to obtain the fuzzy optimal solution. We propose a new efficient method for FFLFP problems utilized in daily life circumstances.

Here, FFLFP problem transformed into an equivalent Multi-objective linear fractional programming [MOLFP] problem.

Then MOLFP converted into an equivalent multi objective linear programming problem by using Mathematical programming approach.



This proposed is based on crisp linear fractional programming and has a simple structure.

To show the efficiency of our proposed method some numerical examples have been illustrated.

**Introduction :-** The Fuzzy linear fractional programming problems in which all the parameters and variables are represented by Fuzzy numbers are known as fully fuzzy linear fractional programming [FFLFP] problems.

In the actual cases the parameters may be uncertain or a vague estimation about the variable is known as those are found in general by some experiment.

To overcome the uncertainty and vagueness one may use the fuzzy numbers in the place of the crisp numbers.

Thus the crisp system of linear fractional programming problem becomes a fuzzy system FLEP problem or FFLFP problem.

In the FFLFP problem all the parameters and variables are considered to be Fuzzy numbers. Nowadays the problem of FLFP problems has significant application in different real life areas such as production planning financial sector, health care and all engineering fields.

For this reason, this is an important area of research in the recent years.

In this we consider the FFLFP problem.

Nowadays the problem of linear fractional programming has significant application in different real life areas such as production planning, financial sector, health care and all engineering fields.

However in real world applications certainty reliability and precision of data is often illusory.

The optimal solution of an Lp only depends on a limited number of constraints therefore much of the collected information has little impact on the solution.

It is useful to consider the knowledge of

experts about the parameters as Fuzzy data.

In recent years many methods currently exist for solving FFLFP problem under non-negative fuzzy variables.

The concept of Fuzzy set and fuzzy numbers was first introduced the authors proposed a method to solve multi-objective linear fractional programming [MOLFP] problem under a fuzzy satisfied.

The FFLFP problem by establishing all the coefficients and variable of linear program as being fuzzy quantities was introduced.

Recently pop and minasian, proposed a method for solving fully falsified linear fractional programming problems where all the parameters and variables are triangular fuzzy numbers.

They considered the same problem of for solving fully fuzzy linear fractional programming problem. In this we modified the methods of first we transform the FFLFP the methods of problem into a FFLFP problem with the help of Charnes-Cooper method.

Then using a new technique, the FFLFP problem will be converted into a multi-objective linear programming [MOLP] problem, We also prove that this solution can be considered as an exact solution of FFLFP problem.

Finally we show that advantages of the proposed method over the existing method.

This is organized as follows. Some basic definitions and notations are present in section.

We discuss the LFP problem. We present out proposed method. A real life example is provided to validate the proposed method.

**Preliminaries: -**

We have presented some basics concept of fuzzy triangular number, which was very useful in this paper.

**Definition :-** 0.1 Let X denotes a universal set.

Then a fuzzy subset  $\bar{x}$  of X is defined by its membership function  $\mu_{\bar{x}}: x \rightarrow [0, 1]$ , which assigned a real number  $\mu_{\bar{x}}(x)$  in the interval [0, 1] to each element  $x \in X$  where the values of

$\mu_{\bar{A}}(x)$  at  $x$  shows the grade of membership of  $X$  in  $\bar{A}$  can be characterized as a set of ordered pairs of element  $x$  and grade  $\mu_{\bar{A}}(x)$  and is often written.

$\bar{A} = \{(x, \mu_{\bar{A}}(x)) \mid x \in X\}$  is called Fuzzy set.

Definition :- 0.2 A fuzzy number  $\bar{A} = (b, c, a)$  is said to be a triangular fuzzy number if its membership function is given by

$$\mu_{\bar{A}}(x) = \begin{cases} \frac{x-b}{(c-b)}, & b \leq x < c \\ \frac{x-a}{(c-a)}, & c \leq x \leq a \end{cases}$$

Definition : 0.3 Two triangular Fuzzy number

$$\bar{A} = (b, c, a) \text{ and } \bar{B} = (e, f, d)$$

Definition : 0.4

A ranking is a function  $R : F(R) \rightarrow R$  where  $F(R)$  is a set of fuzzy number defined on set of real numbers, which maps each fuzzy number into the real line, where a natural order exists :

Let  $\bar{A} = (b, c, a)$  is a triangular fuzzy number then

$$R(\bar{A}) = \frac{b+a}{4}$$

\* Definition 0.5

Let  $\bar{A} = (b, c, a) = \bar{B} = (e, f, d)$  be two triangular fuzzy numbers then :

- $\bar{A} + \bar{B} = (b, c, a) + (e, f, d) = (b+e, c+f, a+d)$
- $\bar{A} - \bar{B} = (b, c, a) - (e, f, d) = (b-d, c-f, a-e)$

\* If  $\bar{A} = (b, c, a)$  be any triangular fuzzy number and  $\bar{B} = (e, f, d)$  be a non-negative triangular fuzzy number then,

$$\bar{A} \times \bar{B} = \bar{A}\bar{B} = \begin{cases} (be, cf, ad) & \text{if } b \geq 0 \\ (bd, cf, ad) & \text{if } b < 0, a \geq 0 \\ (bd, cf, cd) & \text{if } c < 0 \end{cases}$$

\* Definition : 0.6 Let  $\bar{A} = (b, c, a)$ ,  $\bar{B} = (e, f, d)$  be two triangular fuzzy numbers. We say that  $\bar{A}$  is relatively less than  $\bar{B}$ . If and only if

- $b < e$  or
- $b = e$  and  $(b-c) > (e-f)$
- $b = e$ ,  $(b-c) = (e-f)$  and  $(a+b) = (d+e)$

Note : It is clear from the definition

That,  $b = e \wedge (b-c) = (e-f)$  and  $(a+b) = (d+e)$

IF and only if  $\bar{A} = \bar{B}$ .

\* Linear Fractional Programming :-

The general form of LFP may written as:

$$\frac{c'z + q}{d'z + r} = \frac{F(Z)}{G(Z)} \text{ Subject to :}$$

$$Az \leq z \leq b$$

Where  $Z, c', d' \in R^n$  and  $A \in R^{m \times n}, \alpha, \beta \in R, \dots (I)$

For some values of  $Z, G(Z)$  may be equal

to zero,

To avoid such cases, one requires that

either

$$[Z \geq 0, AZ \leq z \leq b, \Rightarrow G(Z) > 0] \text{ OR}$$

$$[Z \geq 0, AZ \leq z \leq b, \Rightarrow G(Z) < 0]$$

For satisfaction we assume that (I)

satisfies the condition that :

$$[Z \geq 0, AZ \leq z \leq b, \Rightarrow G(Z) > 0] \dots (II)$$

**Theorem : Assume that no point  $(x, 0)$  with  $x \geq 0$  is feasible for the following linear programming (LP)**

**Problem :**

$$\text{Max } c'x + q'$$

$$d'x + r = 1$$

$$Ax - bt = 0$$

$$t \geq 0, x \geq 0$$

....III

Now assume that the equation (II) then the LFP(I) is equivalent into linear programming problem (III)

\* **Fully Fuzzy linear Fractional programming problem :**

Linear fractional programming problem is evidently an uncertain optimization problem due to its variations in the maximum daily requirements.

So the amount of each product of ingredient Fuzzy linear fractional programming problem where all the variables and all the parameters are triangular fuzzy numbers to avoid uncertain.

Let us consider a general format of fully Fuzzy linear fractional programming problem as follows :

$$\text{Max } \bar{Z} = \frac{\bar{c}'x + \bar{q}}{\bar{d}'x + \bar{r}}$$

$$\text{s.t } \bar{A}x \leq \bar{b}, \dots \dots \dots *$$

$$\bar{x} \geq 0$$

Consider that Let  $\bar{x} = (x, y, z)$  can be optimal solution of this FFLFP. Furthermore let all the parameters  $\bar{a}, \bar{c}, \bar{q}, \bar{d}, \bar{r}, \bar{h}$  and  $\bar{z}$  are represented by triangular fuzzy numbers.

$(x, y, z), (p, q, r), (a, u, a), (u, v, w), (\beta, \beta, \beta), (b, b, b)$  and  $(z_1, z_2, z_3)$  respectively. Then we can rewrite the mentioned FFLFP as follows :

$$\text{Max } (z_1, z_2, z_3) = \frac{(p, q, r) + (x, y, z) + (a, u, a)}{(u, v, w) + (x, y, z) + (\beta, \beta, \beta)}$$

Subject to

$$(b, c, a) + (x, y, z) \leq (b_1, b_2, b_3) \quad (x, y, z) \geq 0$$

**Numerical Example :**

In Jamshedpur city, India A wooden company is the producer DF two kinds of products A and B with profit around (5, 1, 3) and around (4, 1, 6) dollar per unit respectively. However, the cost for each one unit of the above product is around (4, 6, 5) and around (6, 3, 9) dollars respectively. It is assume that a fixed cost of around ( 1, 2, 6) dollar is added to the cost function due to expected duration through the process of production.

Suppose the raw material needed for manufacturing product A and B is about (3, 2, 1) units per pound and about (6, 4, 1) units per pound respectively the supply for this raw material is restricted to about (13, 5, 2) pounds. Man-hours per unit for the product A is about (4, 1, 2) hour and product B is about (6, 5, 4) hour per unit for manufacturing but total man-hour available is about ( 6, 3, 9) hour daily. Determine how many products A and B should be manufactured in order to maximize the total profit.

This real life problem can be formulated to the following FLFP problem :

$$\text{Max } \frac{(5, 1, 3)(x_1, y_1, z_1) + (4, 1, 6)(x_2, y_2, z_2)}{(4, 6, 5)(x_1, y_1, z_1) + (6, 3, 9)(x_2, y_2, z_2) + (1, 2, 6)}$$

$$\text{S.t } (3, 2, 1)(x_1, y_1, z_1) + (6, 4, 1)(x_2, y_2, z_2) \leq (13, 5, 2)$$

$$(4, 1, 2)(x_1, y_1, z_1) + (6, 5, 4)(x_2, y_2, z_2) \leq (6, 3, 9)$$

$$(x_1, y_1, z_1), (x_2, y_2, z_2) \geq 0$$

The problem is converted into the MOLFP problem as follows :

$$\text{Max } \left\{ \frac{5x_1 + 4x_2}{4x_1 + 6x_2 + 1}, \frac{y_1 + y_2}{6y_1 + 3y_2 + 2}, \frac{z_1 + z_2}{6y_1 + 3y_2 + 2} \right\}$$

$$\text{Subject to } 3x_1 + 6x_2 \leq 13$$

$$2y_1 + 4y_2 \leq 5$$

$$z_1 + z_2 \leq 2$$

$$4x_1 + 6x_2 \leq 6$$

$$y_1 + 5y_2 \leq 3$$

$$x_1, x_2, y_1, y_2, z_1, z_2 \geq 0$$

The problem is transformed into an equivalent multi objective linear programming problem as follows :

$$\text{max } Z = 5y_1 + 4y_2$$

$$\text{max } Z_2 = Z_1 + Z_2$$

$$\text{max } Z_3 = 3x_1 + 6x_2$$

$$\text{Subject to } 4y_1 + 6y_2 + t \leq 1$$

$$6x_1 + 3x_2 + 2t \leq 1$$

$$5x_1 + 9x_2 + 6t \leq 1$$

$$3y_1 + 6y_2 - 13t \leq 0$$

$$2z_1 + 4z_2 - 5t \leq 0$$

$$x_1 + x_2 - 2t \leq 0,$$

$$4y_1 + 6y_2 - 6t \leq 0,$$

$$z_1 + 5z_2 - 3t \leq 0,$$

$$2x_1 + 4x_2 - qt \leq 0,$$

$$x_1, x_2, y_2, z_1, z_2 \geq 0$$

The problem can be written as follows :

$$\text{max } Z = 5y_1 + 4y_2$$

$$\text{max } Z_2 = 5y_1 + 4y_2 - z_1 - z_2$$

$$\text{max } Z_3 = 5y_1 + 4y_2 + 3z_1 + 6z_2$$

$$\text{Subject to } 4y_1 + 6y_2 + t \leq 1$$

$$4y_1 + 6y_2 + t - 6z_1 - 3z_2 - 2t \leq 0,$$

$$4y_1 + 6y_2 + 5x_1 + 4x_2 + 6t \leq 2,$$

$$3y_1 + 6y_2 - 13t \leq 0,$$

$$3y_1 + 6y_2 - 13t - 2z_1 - 4z_2 + 5t \leq 0,$$

$$3y_1 + 6y_2 - 13t + x_1 + x_2 - 2t \leq 0,$$

$$4y_1 + 6y_2 - 6t \leq 0$$

$$4y_1 + 6y_2 - 6t - z_1 - 5z_2 + 3t \leq 0$$

$$4y_1 + 6y_2 - 6t + 2x_1 + 4x_2 - qt \leq 0$$

Solving the problem we get  $y_1 = 0.214, y_2 = 0,$

$$x_1 = 0$$

$$x_1 = 0.0166, x_2 = 0.26, z_1 = 0.202, z_2 = 0.14$$

Hence the solution of the problem is

$$x_1 = 1.07, z_1 = 0.166, z_2 = 0.06$$

**Example :-**

In TATA Hospital Jamshedpur, India has two nutritional experiments with two products milk (glass) and salad (500 mg) with profit around 6 dollars and around 2 dollars per unit respectively. However, the cost for each one unit of the above product is around 1 and around 1 dollars respectively consider that a fixed cost of around 2 dollars as added to the cost function determine the maximum profit of these two products.

**Table information of Example**

Resource	Experiment 1	Experiment 2	Max. Resource Available
Vitamin A	1	1	2
Calcium	1	1	27

**Solution :**

In this case let  $x_1$  and  $x_2$  to be the amount of units of vitamin A and calcium to be produced then the above problem can be formulated as :

$$\text{Max. } \bar{z} = \frac{6x_1 + 2x_2}{x_1 + x_2 + 2}$$

$$\text{Subject to : } \bar{x}_1 + \bar{x}_2 \leq 7$$

$$2\bar{x}_1 + 2\bar{x}_2 \leq 27$$

$$\bar{x}_1, \bar{x}_2 \geq 0$$

$$\text{Let } \bar{x}_1 = (y_1, z_1, x_1), \bar{x}_2 = (y_2, z_2, x_2), \bar{z} = (z_1, z_2, z_3)$$

Now consider the coefficients

$$\bar{r} = (3, 7, 11), \bar{c} = (7, 17, 27), \bar{d} = (4, 6, 8)$$

$$\bar{e} = (1, 2, 3), \bar{f} = (2, 3, 4)$$

$i = (0, 1, 2)$ . The problem can be as follows :

$$\text{Max}(z_1, z_2, z_3) = \frac{4.6.8x_1 + 2.3x_2 + (1.2.3)(x_1 + x_2 + 2)}{(0.1.2)x_1 + (0.1.2)x_2 + (1.2.3)}$$

**Subject**

$$(0, 1, 2) \times (y_1, z_1, x_1) + (0, 1, 2) \times (y_2, z_2, x_2) \leq (3; 7, 11)$$

$$(0, 2, 3) \times (y_1, z_1, x_1) + (2, 3, 4) \times (y_2, z_2, x_2) \leq (7, 17, 27)$$

$$y_1, y_2, z_1, z_2, x_1, x_2 \geq 0$$

Then, we obtain the fuzzy optimal solution as :

$$\bar{x}_1 = (y_1, z_1, x_1) = (5, 5, 7) \text{ and } \bar{x}_2 = (y_2, z_2, x_2) = (0, 0, 0)$$

And the optimal value of the problem as :

$$\bar{z}_1 = (y_1, z_1, x_1) = (3, 14, 4.6, 28)$$

**Conclusions :**

In this paper a new solving procedure has been suggested to solve the FFLFP problem. Using charnes-cooper transformation method. We transformed the fully fuzzy linear fractional programming problem into fully fuzzy linear programming problem. After that the fully Fuzzy linear programming problem is converted into its equivalent MOLp problem It is our belief that the proposed method for solution of FFLFP problem in real life problem as well as simple problem may be of considerable insert for mathematician working in this field.

**References :**

- 1) Prof. A.K. Bhargava, Fuzzy Set Theory Fuzzy Logic and their Applications, S. Chand Publication, Delhi -2013.
- 2) Fuzzy Logic with Engineering Applications John Wiley & Sons Ltd. 3<sup>rd</sup> Edition
- 3) Franco Montagna, PetrHájek on Mathematical Fuzzy Logic, Springer Nature Switzerland AG
- 4) D. Dutta R.N. Tiwari J.R. Rao. Multiple objective linear fractional programming A Fuzzy sets (1992)
- 5) J.J. Buckley T. Feuring, Evolutionary algorithm solution to Fuzzy problem Fuzzy linear programming, Fuzzy sets and systems (2000)
- 6) R. Ezzati E. Khorram R. Enayati A new algorithm to solve fully Fuzzy linear programming problems using MOLpproble. Applied Mathematical Modeling (2015)
- 7) M. Sakawa H. Yano and J. Takhashi Pareto Optimality for multi objective linear fractional programming problems with Fuzzy parameters (1992).
- 8) L.A. Zadeh, Fuzzy sets. Information control (1965)
- 9) Anojevic I. M. Stancil – Minasian on solving fuzzified linear fractional programs advanced modeling and optimization (2009)

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## Application to Cryptography Number of Theory Theoretic Functions

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### ABSTRACT

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The cryptography is the art of achieving security by enclosing messages to make them non Readable.in Mathematics. A function domain is the set of natural numbers is called a number theoretic function. These types of functions having special importance in the discuss some important number of theory in Mathematics. Theoretic function.

**Keywords:** - The military, Lovers, diarists, the diplomatic corps, secret writing functions Mobius function Theory of Numbers in Mathematics.

### I. INTRODUCTION

A cryptography comes from the Greek word which means it has a long and colorful history going back historically, four groups of people have used and contributed to the art of cryptography.

Out of the se the military has had the most important role and had shaped the field over the centuries by applying the cryptographic. Before discussing more about the cryptography some common terms used with the study of cryptography.

Let a function  $T(N)$  to give the number of positive integer divisors of any given positive integer  $n$ . such a function must be of very different from the functions usually studies in algebra or analysis for it depend in critical way not only upon the value of  $n$ , but also upon the standard representation of  $N$ .

If  $f(n)$  is an arithmetic function not identically zero such that  $f(mn) = f(m).f(n)$  for every pair of positive integers  $m, n$  satisfying  $(m, n) = 1$ .then  $f(n)$  is said to be multiplicative function.

It  $f(mn) = f(m) f(n)$  whether  $m$  and  $n$  are relatively prime .may or may not equal to.1 then  $f(n)$  is said to totally multiplicative. If  $f$  and  $g$  multiplicative functions such that  $f(p) = g(P)$  for all primes  $p$  and all positive integers then  $(n) = g(n)$  for all positive integers  $\alpha$ .

### II. CRYPTOGRAPHY

The art of devising the ciphers is called cryptography.

**Decryption:** The process of converting ciphertext into plaintext is known as decryption or deciphering.

**Cryptanalysis:** - The art of breaking the cipher is known as cryptanalysis.

**Encryption:** - The process of converting plaintext into cipher text is known as encryption or enciphering.

**Cryptology:** - The cryptography and cryptanalysis together are called cryptology

**Ciphertext:** - The coded message is known as the cipher text.

**Plaintext:** - The original message the is to be encrypted is known as plaintext.

**Substitution Cipher Technique:** - Substitution cipher technique characters of a plain text message are

replaced by other characters. Substitution cipher preserves the order of the plain text symbols but disguise some techniques using the substitution cipher.

**Caesar cipher:-** This substitution technique was first proposed by the Julius Caesar and so is named as Caesar cipher in this technique each alphabet in the message is replaced by the third forthcoming alphabet in the series **scheme**.

Plaintext	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Chiphertext	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A	B	C

**Encryption with modified Caesar cipher:** - The cipher text NKRRU LXOKIJ for the plain text message hello friend by replacing each alphabet of the original message by the next sixth alphabet in the sequence. On the other hand, decryption with modified Caesar cipher is not very simple. Each alphabet has 25 possibilities of replacement.

We have to test all these possibilities to get the original message. Now suppose the original message from the cipher text NKRRU LXOKIJ. We have to try all the 25 possible replacement for each alphabet in the cipher text.

The steps as shown in the table:-

Cipher text replacement order (k)	N	K	R	R	U		L	X	O	K	T	J
1	O	L	S	S	V		M	Y	P	L	U	K
2	P	M	T	T	W		N	Z	Q	M	V	L
3	Q	N	U	U	X		O	A	R	N	W	M
4	R	O	V	V	Y		P	B	S	O	X	N
5	S	P	W	W	Z		Q	C	T	P	Y	O
6	T	Q	X	X	A		R	D	U	Q	Z	P
7	U	R	Y	Y	B		S	E	V	R	A	Q
8	V	S	Z	Z	C		T	F	W	S	B	R
9	W	T	A	A	D		U	G	X	T	C	S
10	X	U	B	B	E		V	H	Y	U	D	T
11	Y	V	C	C	F		W	I	Z	V	E	U
12	Z	W	D	D	G		X	J	A	W	F	V
13	A	X	E	E	H		Y	K	B	X	G	W
14	B	Y	F	F	I		Z	L	C	Y	H	X
15	C	Z	G	G	J		A	M	D	Z	I	Y
16	D	A	H	H	K		B	N	E	A	J	Z
17	E	B	I	I	L		C	O	F	B	K	A
18	F	C	J	J	M		D	P	G	C	L	B
19	G	D	K	K	N		E	Q	H	D	M	C

20	H	E	L	L	O		F	R	I	E	N	D
21	I	F	M	M	P		G	S	J	F	O	P
22	J	G	N	N	Q		H	T	K	G	P	F
23	K	H	O	O	R		I	U	L	H	Q	G
24	L	I	P	P	S		J	V	M	I	R	H
25	M	J	Q	Q	T		K	W	N	J	S	I

Thus we obtain the plain text message HELLO FRIEND against cipher text NKRRU LXOKTJ from the table thus breaking the code with modified clear cipher is not as simple as was in Caesar cipher. Modified Caesar cipher is also not very secure. An attacker has only 25 possibilities to try out. An attacker just need the three information to break the code substitution technique is used encrypt the message. 25 possibilities to try. Language of plain text is English .thus by knowing the above information one can easily break the code produced by the modified Caesar cipher technique. Mono alphabetic cipher the main disadvantage with Caesar cipher technique is its predictability and brute force attack to break the code an attack is said to a brute force attack if an attacker attempts to use all possible permutation and combination for breaking the code for example in modified Caesar cipher there are only 25 possibilities for break-in the code and the attacker is assured of a success. The uniform substitution scheme for all the alphabets in a given text message but a random substitution scheme. In words in a given text message each A can be replaced alphabet B through Z each B can be replace by random alphabet like A,C,D the possibilities of permutations or combinations this scheme becomes hard to break.

**Definition: -Positive Divisors:** - For each positive integer  $n$ ,  $Z(n)$  is the number of positive divisors of  $n$  including 1 and  $n$ .

Where,  $\sum 1$  denotes the sum of as many 1,s as there are positive divisors of  $n$ .

**Example (1)** Evaluate  $\sum (12)$  and  $\sum (28)$ .

**Solution:** -Let, positive divisors of 12 are 1, 2, 3, 4, 6, and 12.

So,  $\sum (12) = 1+2+3+4+6+12=28$

The positive divisors of 28 are 1, 2, 4,7,14 and 28.

SO,  $\sum (28) = 1+2+4+7+14+28=56$

**Theorem:** - If  $f$  is a multiplicative function and  $S(n) = \sum f(d)$  then  $S(n)$  is also multiplicative.

**Proof:** Let  $m, n$  be relatively prime integers.

$$S(mn) = \sum f(d)$$

$$= \sum f(d_1 d_2)$$

$$= \sum f(d_1) f(d_2)$$

$$= (\sum f(d_1)) (\sum f(d_2))$$

$$= S(M) S(N).$$

**Example:** Evaluate  $T$  and  $\sum$  for  $N = 3000$

**Solution:** -Let,  $N = 3000$

$$3000 = 2^3 \cdot 3^1 \cdot 5^3.$$

$$T(3000) = (3+1) \cdot (1+1) \cdot (3+1)$$

$$= 4 \cdot 2 \cdot 4$$

$$= 32$$

$$\sum(3000) = (2^3-1)/2-1 \cdot (3^1-1)/3-1 \cdot (5^3-1)/5-1$$

$$= (16-1)/1 \cdot (9-1)/2 \cdot (625-1)/4$$

$$= 15 \cdot 4 \cdot 156$$

$$= 9360$$

Mobius function the number of divisors is given.

$f$  is a multiplicative function. = 9360.

**Definition: - Function Euler:** - The Euler function  $\phi$  function is widely used number theoretic function represented by  $p(n)$ . for  $n = 1$  we  $p(1) = 1$  and when  $n > 1$  we define  $p(n)$  to be the mumble of positive integers less than  $n$  and relationally prime  $n$ .

**Example:** - The  $p(12) = 4$  because the only positive integers less than 12 and relatively prime to 12 are 1, 5,7,11.

**Recurrence Functions:** - The arithmetic function  $f(n)$  satisfies a linear recurrence or recursion

$$\text{If } f(n) = a + f(n-1) + bf(n-2) \text{ for } n = 2, 3, \dots$$

Where, a, and b are fixed number which may be real or complex.

**Integers square free:** - A number a is said to be square free if 1 is the largest square dividing a.

Thus, a is square free if and only if the exponents take only the values 0 and 1.

In other words an integer  $> 0$  is called square free if it is not divisible any square greater 1.

**General form** the general form of a square free integer is  $P_1 P_2 \dots P_n$  where each  $P_i$  are distinct primes.

**Function:** - The function  $p(n)$  as  $p(n) = p(1) + p(2) + \dots + p(n)$   
 $= \sum_{r=1}^n p(r)$

It is known as symmetry function of  $p(n)$ .

**Example:**  $p(8) = p(1) + p(2) + \dots + p(8)$   
 $P = 1+1+2-2+4+2-6+4 = 22$ .

**Integer function greatest:** - If x is any real number then the largest integer less the or

Equal to x denoted by  $(x)$  is the unique integer such that,  $x-1 < (x) < x$ .

- $(5) = 5$
- $(20/3) = 6$
- $(-5/2) = -3$
- $(p) = 3$
- $(2//3) = 0$
- $(e) = 2$

$X = (x) + \{x\}$  where  $\{x\}$  is the fractional part of x.

**Public key cryptography in mathematics:** - The RSA algorithm is based on the asymmetric key cryptography, also called as public key cryptography. With public key cryptography there are two different keys for encryption decrypting public key cryptography requires the surety that each user must have two keys public key a public key is used by all the parties for encrypting the message to be sent to that user a private key a private key is used for decrypting the message private key is kept secret Suppose user X wants to send a message to user Y.X encrypts his message with the public key of user Y.

Sends this message to user Y. user Y decrypts the message of X by using Y. s private key .only Y knows his private key. User-X-Encrypts text with user Y, s public key -cipher text -Decrypts the cipher text with Y, s private key -plaintext-User -SENDER-RECEIVER. RSA A algorithm The RSA algorithm is the most popular public key cryptography this scheme was developed by divest, Shamir and adleman. The RSA method is based on some pimpls from Number Theory. The rsa scheme works.

**Simple Columnar Transposition Technique:-** In this technique, we write the plaintext message in a predefined size of rectangle row by row .then we read the message column by column in any random order. The sequence of characters obtained in this manner will be cipher text message .look at the suppose we decided the size of rectangle with seven columns and want to encrypt the plain text message simple columnar technique. Arrange this text into rectangle of seven columns.

C1	C2	C3	C4	Cs	C6	C7
S	I	M	P	L	E	C
O	L	U	M	N	A	R
T	E	C	H	N	I	Q
U	E					

Now, we have to decide the random sequence of column readings suppose -4,2,6,7,1,3,5.by reading columns in the sequence we get the cipher text message .

PMH	ILEE	EAI	CRQ	SOTU	MUC	LNN
C1	C2	C6	C7	C1	C3	C5

This technique is also very simple to break crypt analyst has to try few permutations and combinations of rectangle size and column orders to get the original plaintext message cipher text also contains the frequencies of the alphabets as in original plaintext message diagram and trigram frequency sequence can also be useful to decrypt the message to add more



complexity to the simple columnar transposition technique more than once.

The plaintext message  $N$  is assumed to be less than in the enciphering modulus so that it would be possible to distinguish  $n$  from any larger integer congruent to modulo the message is very lengthen and possible to handle a single integer the numeric form  $n$  of the plaintext is converted into cipher text  $R$  as a number the transmitted message the authorized person the user chooses an arbitrary positive integer is placed in a public file but the factors of  $n$  are kept secret.

**Example:** - Encrypt the message no using  $N=1415$  RSA system?

**Solution:** - First convert plaintext number of the message is given by  $N = 1415$

Let,  $p = 19$

$q = 23$

$n = 19 \cdot 23 = 437$

$\phi = (n) = (19-1) (23-1)$

$= 18 \cdot 22$

$= 396$ .

Since, we require  $N < n$  we split  $N$  in to blocks of two digits each given

$N_1 = 14$

$N_2 = 15$

$K = 29$

We, have

$K_i \equiv 1 \pmod{\phi(n)}$

$29j \equiv 1 \pmod{396}$

This gives  $j = 41$

Now,  $N_1$  encrypts as  $14^{29} \equiv 203 \pmod{437}$

$(203)^{41} \equiv 14 \pmod{437}$

Thus the secret transmission of  $N$  is 203

The authorized recipient recovers calculating

$(203)^{41} \equiv 14 \pmod{437}$   $N_2 = 15$

$15 = -35 \pmod{437}$

$= 402 \pmod{437}$

Thus secret transmission of  $N_2$  is 402

Therefore cipher text is 203402.

RSA system to be safe it must not be computationally feasible to recover the plaintext from the public key the large is the enciphering modulus the safer is the

message coded from deciphering. If  $d$  is a positive divisor of a positive integer  $m$  the number of integers in the complete residue system mod  $m$ , with  $m$  have the greatest common divisor  $d$  is we know that in complete residue system modulo the multiples of  $d$  are of the form  $kd$  for the number of  $k$  is  $p = m/n$ . the fundamental theorem of arithmetic on being expressed in canonical form if  $d$  is any positive divisor of  $n$  the  $\phi(d)$  is equal to the value of one and only one term in the product rail fence technique is the simplest example of transposition cipher in the technique plaintext is written down as the sequence of diagonal and then read row by row to produce the cipher text for example to encrypt the message rail fence transposition manner.

### III. REFERENCES

- [1]. Inan Niven, herbet Zuckerman An introduction to theory of numbers Ltd New Delhi 1997.
- [2]. S.G Telang Number Theory Tata McGraw hills New Delhi-1988.
- [3]. C.Y hsing elementary theory of numbers allied publishers Ltd New Delhi-1992.
- [4]. S.B. Malik basic Number Theory allied publishers Ltd New Delhi-1987.
- [5]. Pundir Theory of Numbers pragati Prakash a Meerut-2004.
- [6]. G.E. Andrews Number Theory Hindustan publishing corporation New Delhi-2003.
- [7]. David Burton Elementary Number Theory McGraw Hill Education India Edition- 2012.
- [8]. Hari Kishan Number Theory Krishna Prakash and media (p) Ltd. - 2004.
- [9]. Dr. Rimple pundir Theory of Numbers pragati Prakash and Meerut First Editon-2009.
- [10]. Dr. Sudhir k. pundir Theory of Numbers pragati prakashan Meerut fifth Editon-2017.

## A facile and efficient synthesis of [1,2,4]-triazolo-quinazolinone derivatives using citric acid under solvent free condition: An Eco-friendly protocol

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### Abstract:

An efficient and green protocol has been developed for the synthesis of [1,2,4] triazoloquinazolinone derivatives via the condensation of 3-amino-1,2,4-triazole as amine sources with dimedone or ethyl acetoacetate and various aromatic aldehydes in the presence of citric acid as a catalyst under solvent-free conditions. It is noteworthy advantages is environmental friendly protocol shows high to excellent yields, short reaction times and no need of chromatographic separation. Moreover, naturally green, low-cost, easily biodegradable and non-toxic catalyst made this protocol economic and sustainable.

**Keywords:** [1,2,4] triazoloquinazolinone, 3-amino-1,2,4-triazole, dimedone or ethyl acetoacetate, aromatic aldehydes

### Introduction

One pot multi-component reactions (MCRs) can be classified roughly as cascade, domino, or tandem reactions<sup>1-3</sup>. The development of one pot methods are important for growth of organic synthesis due to the less waste, atom-economy, operational simplicity, structural diversity, shortness of the synthetic pathway, eco-friendly save time and minimize cost<sup>4-6</sup>. In pharmaceutical and agrochemical industries heterocyclic compounds containing nitrogen are played important role because of their potent physiological properties, which have resulted in numerous applications<sup>7</sup>. Five and six-membered heterocyclic compounds are frequently studied owing to their diverse properties. So that there has been increasing interest in 1,2,4-triazoloquinazolinone and quinazolinones derivatives<sup>8-9</sup>. Many of them show antihypertensive<sup>10</sup>, antihistaminic<sup>11</sup>, analgesic and anti-inflammatory<sup>12</sup>, anticancer<sup>13</sup>, and anti-HIV<sup>14</sup> activities.

Because of their importance in a pharmaceutical, industrial, and synthetic point of view, a few methods are reported for their preparation in literature. These include a three-component condensation of dimedone, various aldehydes with 3-amino-1,2,4-triazole in the presence of Nafion-H<sup>®</sup><sup>15</sup>, molecular iodine<sup>16</sup>, Amberlyst-15<sup>®</sup> in PEG<sup>17</sup>, DMF<sup>18</sup>, H<sub>6</sub>P<sub>2</sub>W<sub>18</sub>O<sub>62</sub>·18H<sub>2</sub>O<sup>19</sup>, acetic acid<sup>20</sup>, 1-*n*-butyl-3-methylimidazolium tetrafluoroborate ([Bmim] BF<sub>4</sub>)<sup>21</sup>, [DABCO](SO<sub>3</sub>H)<sub>2</sub>Cl<sub>2</sub> and [DABCO](HSO<sub>3</sub>)<sub>2</sub>(HSO<sub>4</sub>)<sub>2</sub><sup>22</sup>, p-toluenesulfonic acid monohydrate<sup>23</sup>, sulfonic acid functionalized nanoporous silica (SBA-Pr-SO<sub>3</sub>H)<sup>24</sup>, anthranilic acid<sup>25</sup>, Sulfamic acid<sup>26</sup>.

However, many of these methods suffer from some disadvantages such as requirement of strong acidic conditions, expensive reagents, and low to moderate yields, requirement of excess amounts of reagent and use of toxic reagents, relatively long reaction times and high temperature. Therefore, there is a strong demand for the development of highly efficient, clean, high yielding and environmentally friendly approaches is desirable.

Use of naturally as well as easily available and biodegradable catalyst for organic transformation is acquire most of the significance in the last few years as a result of both the novelty of the concept and more importantly, the fact that the efficiency and selectivity of these reactions meet the standards of established organic reactions. In this point of view, Citric acid keeps the potentially performing the role of ideal catalyst. It is a relatively strong organic acid. Citric acid and its salts are widely used because they are nontoxic, relatively non-corrosive, safe to handle, and easily biodegradable. There are reports in the literature on the use of Citric acid as catalyst in organic synthesis<sup>27-31</sup>.

## Experimental

All chemicals and reagents are purchased from Sigma Aldrich, Alfa asar, S.D. fine and Spectrochem. All commercially available reagents used without further purification and the reaction were monitored by thin layer chromatography (TLC) Merck 60 F<sub>250</sub> silica gel plates. Synthesized compound melting points were recorded by open tube capillary method and are uncorrected. <sup>1</sup>H and <sup>13</sup>C NMR spectra were recorded using 500 and 125 MHz Bruker spectrophotometer respectively in DMSO solvent with TMS as a internal standard. Chemical shift values (δ) were expressed in parts per million (ppm) and coupling constant (*J*) are expressed in Hertz (Hz). Mass spectra were recorded on a macro mass spectrometer, applying electro-spray ionization (ESI) method.

*General procedure for the synthesis of [1,2,4]triazolo[5,1-b]quinazolin-8(4H)-ones and [1,2,4]triazolo[1,5-a]pyrimidine-6-carboxylate*

A mixture of 3-amino-1,2,4-triazole (1.0 mmol), aromatic aldehyde (1.0 mmol), dimedone (1.0 mmol) or ethyl acetoacetate (1.0 mmol) was taken in a round bottom flask and added citric acid (15 mol %) and condensed at 90-100 °C for 5-15 min. After completion of the reaction, was monitored by TLC and then ice cold water poured into the reaction mixture. Solid residue separated by filtration and washed with water and dried at reduced pressure.

*6,6-dimethyl-9-(4-nitrophenyl)-5,6,7,9-tetrahydro-[1,2,4]triazolo[5,1-b]quinazolin-8(4H)-one (4d)*

Pale yellow crystal, Yield: 94%; melting point: 300.2-302 °C. IR (KBr): 2962, 1545, 1336, 1253, 732  $\text{cm}^{-1}$ .  $^1\text{H}$  NMR (DMSO- $\text{D}_6$ , 400 MHz):  $\delta$  11.31 (s, 1H), 8.17 (d,  $J = 8\text{Hz}$ , 2H), 7.74 (s, 1H), 7.50 (d,  $J = 8\text{Hz}$ , 2H), 6.37 (s, 1H), 2.57 (d,  $J = 16\text{Hz}$ , 1H), 2.50 (d,  $J = 16\text{Hz}$ , 1H), 2.21 (d,  $J = 16\text{Hz}$ , 1H), 2.07 (d,  $J = 16\text{Hz}$ , 1H), 1.05 (s, 3H), 0.96 (s, 3H).  $^{13}\text{C}$  NMR (DMSO- $\text{D}_6$ , 100 MHz):  $\delta$  27.45, 28.78, 32.72, 50.17, 58.01, 105.24, 124.06, 128.97, 147.33, 147.43, 148.90, 150.92, 151.48, 193.52;

ESI-MS:  $m/z$  340  $[\text{M}+\text{H}]^+$ .

## Result and Discussion

In order to optimize the reaction conditions, model reactions of 3-amino-1,2,4-triazole **1**, benzaldehyde **3** and dimedone **2** or ethyl acetoacetate **5** were carried out in the presence of citric acid catalysts. We have initially investigated the amount of catalyst required for this organic transformation. While there was did not any desired product form in the absence of the catalyst, when the same reaction was carried out in the presence of citric acid catalyst under similar reaction conditions, brought about a dramatic change in the yield and optimize the reaction conditions. During this study, we observed that 15 mol% of citric acid was proved to be an efficient catalyst to conduct the reaction smoothly (Table 1 Entry 5).

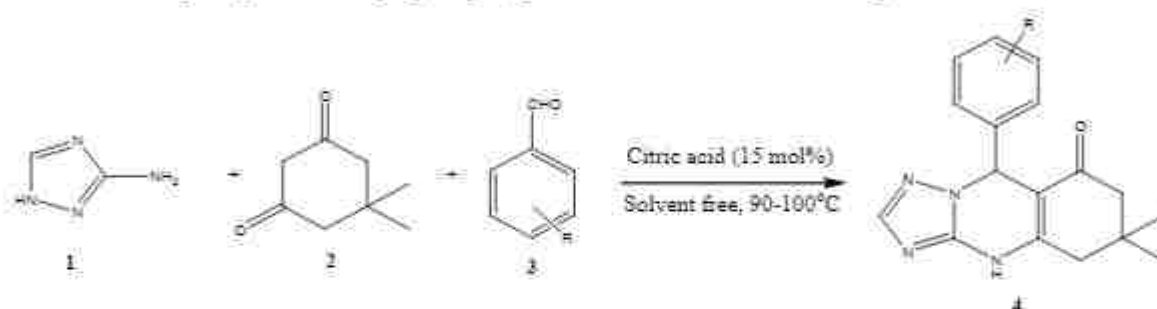
We also determined the effect of temperature on this reaction (Table 1). During the examination, it was found that the optimum temperature was 100 °C from the point of view of yield and reaction time (Table 1 Entry 5). Further, no improvement on the yield and reaction time was observed at higher temperatures. On the other hand, the reaction did not proceed at room temperature (Table 1 Entry 1). The reaction proceeded smoothly and almost complete conversion of the reagent was observed at 100 °C temperature.

**Table-1** Optimization of catalyst and temperatures<sup>a</sup>

Entry	Amount of catalyst mol%	Temperature °C	Time (min)	Yield <sup>b</sup> %
1	-	R.T.	120	Trace
2	2	30	60	25
3	5	60	40	50
4	10	90	20	80
<b>5</b>	<b>15</b>	<b>100</b>	<b>10</b>	<b>94</b>
6	20	120	10	94

<sup>a</sup>Reaction conditions: Dimedone (1 mmol), Aromatic aldehydes (1 mmol), 3-amino-1,2,4 triazole (1 mmol), Citric acid under solvent free conditions. <sup>b</sup>Isolated yield.

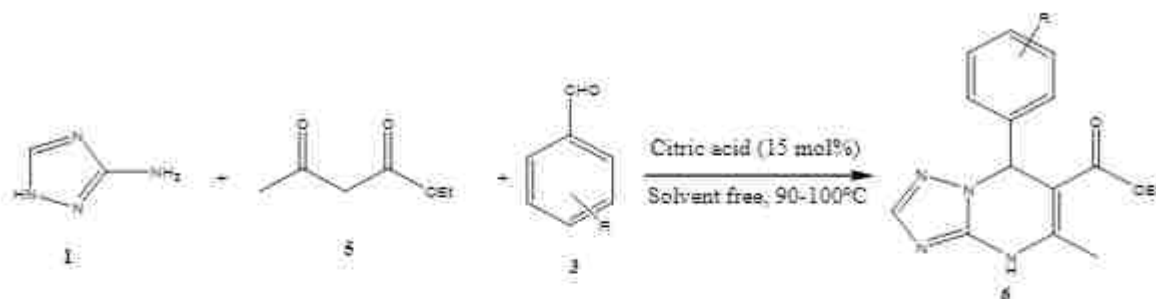
To explore the scope of the procedure, we extended this reaction for the synthesis of [1,2,4]triazolo[5,1-b]quinazolin-8(4H)-one derivatives from various substituted aromatic aldehydes were reacted with 3-amino-1,2,4 triazole and dimedone or ethyl acetoacetate in the presence of citric acid catalyst and solvent free reaction conditions **4a-i**. Aromatic aldehyde bearing electron-withdrawing (NO<sub>2</sub>, Cl) and electron-donating (Me, OMe) substituents were converted to [1,2,4]triazolo[5,1-b]quinazolin-8(4H)-one derivatives in good to excellent yields within 5-15 min. All the entire results summarized in **Table 2** and **Table 3** show that the substituent groups did not play any significant role in the reactivity of the substrate.



**Table-2** synthesis of 1,2,4-triazoloquinazolinone derivatives using citric acid under solvent free conditions<sup>a</sup>

Entry	Aldehyde	Time (min)	Yield <sup>b</sup> (%)	Melting point °C
4a	C <sub>6</sub> H <sub>5</sub> -CHO	10	94	250-252
4b	4-CH <sub>3</sub> O-C <sub>6</sub> H <sub>4</sub> -CHO	8	93	224-226
4c	4-Cl-C <sub>6</sub> H <sub>4</sub> -CHO	7	94	302-303
4d	4-NO <sub>2</sub> -C <sub>6</sub> H <sub>4</sub> -CHO	9	94	300-302
4e	4-Br C <sub>6</sub> H <sub>4</sub> -CHO	12	90	284-286
4f	2,4-Cl <sub>2</sub> -C <sub>6</sub> H <sub>4</sub> -CHO	15	88	322-324
4g	3-NO <sub>2</sub> -C <sub>6</sub> H <sub>4</sub> -CHO	10	92	265-266
4h	4-Me-C <sub>6</sub> H <sub>4</sub> -CHO	8	92	264-266
4i	4-OH C <sub>6</sub> H <sub>4</sub> -CHO	10	90	304-306

<sup>a</sup>Reaction conditions: Dimedone (1 mmol), Aromatic aldehydes (1 mmol), 3-amino-1,2,4 triazole (1 mmol), Citric acid (15 mol%) under solvent free conditions at 90-100 °C. <sup>b</sup>Isolated yield.

**Scheme 2****Table-3** synthesis of 1,2,4-triazoloquinazolinone derivatives using citric acid under solvent free conditions<sup>a</sup>

Entry	Aldehyde	Time (min)	Yield <sup>b</sup> (%)	Melting point °C
6a	C <sub>6</sub> H <sub>5</sub> -CHO	10	94	191-192
6b	4-Cl-C <sub>6</sub> H <sub>4</sub> -CHO	5	95	252-254

6c	4-NO <sub>2</sub> -C <sub>6</sub> H <sub>4</sub> -CHO	5	94	256-258
6d	3-NO <sub>2</sub> -C <sub>6</sub> H <sub>4</sub> -CHO	7	92	208-210
6e	4-OH C <sub>6</sub> H <sub>4</sub> -CHO	8	90	272-275

<sup>a</sup>Reaction conditions: Ethyl acetoacetate (1 mmol), Aromatic aldehydes (1 mmol), 3-amino-1,2,4-triazole (1 mmol), Citric acid (15 mol%) under solvent free conditions at 90-100 °C.

<sup>b</sup>Isolated yield.

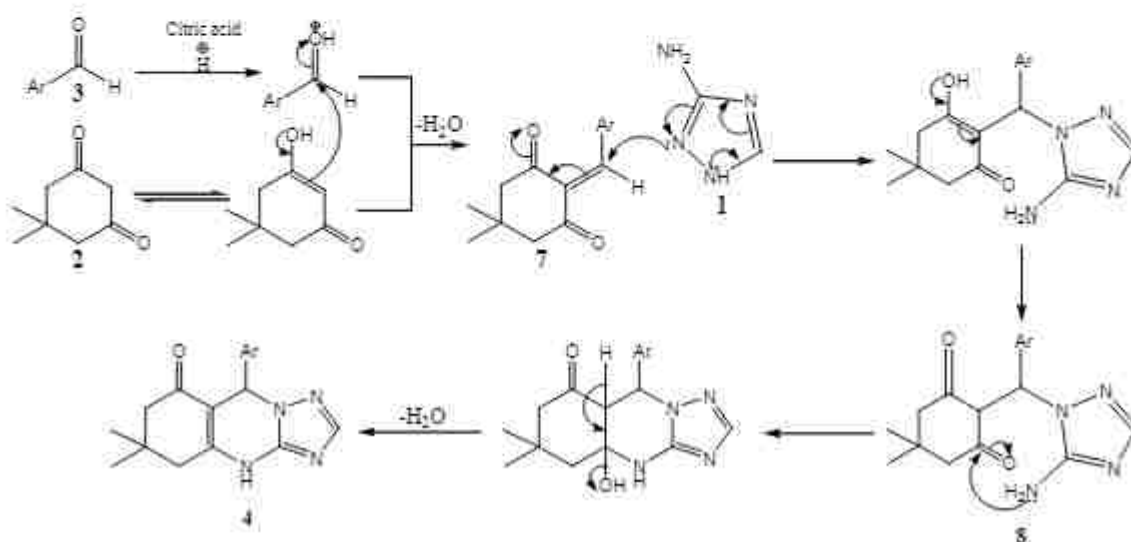
In order to understand the efficiency and greenness of the method, we compared our present work with reported data from the literature. As shown in the Table 4, many of the previously reported methodologies suffer from some drawbacks such as requirement of excess amount of catalyst and strong acidic conditions, high temperature, ultrasound irradiation, relatively long reaction times, and use of volatile and toxic organic solvents. Thus, the present method avoids the disadvantages of the previously reported methodologies.

The possible mechanism for the citric acid catalyzed transformation is shown in Schemes 3. In regard to reaction mechanism, we suggest that initially, the solid acid catalyst protonates the carbonyl group of aromatic aldehyde, which then condenses with dimedone to produce the intermediate product 7. Michael addition reaction takes place undergoing more nucleophilic endocyclic nitrogen attack in the 3-amino-1,2,4-triazole 1 to  $\alpha$ ,  $\beta$ -unsaturated carbonyl compound 7 creates acyclic intermediate 8. Due to, the endocyclic nitrogen is more nucleophilic than the primary amino group<sup>52-53</sup>. Further intermediate 8 undergoes intramolecular cyclisation followed by loss of water molecule giving rise to corresponding triazolo-quinazolinones derivatives 4

**Table 4** comparison study of the efficiency of various catalyst with citric acid for the synthesis of [1,2,4]-triazolo[5,1-b]quinazolin-8(4H)-ones derivatives

Entry	Catalyst / condition	Time	Yield (%) <sup>b</sup> [Ref.]
1	Acetic acid (5 mL) / 60 °C	25 min	95 [20]
2	Anthranilic acid(30 mol%) / Ethanol, Reflux, 80 °C	6 h	95 [25]
3	<i>p</i> -TsOH.H <sub>2</sub> O (15 mol%) / CH <sub>3</sub> CN, 40-50 °C	30 min	96 [23]
4	Iodine (10 mol %) / reflux	10 min	81.2 [16]

5	$\text{NH}_2\text{SO}_3\text{H} / \text{CH}_3\text{CN}$ , reflux, 80 °C	30 min	95 [26]
6	$\text{H}_6\text{P}_2\text{W}_{13}\text{O}_{62} \cdot 18\text{H}_2\text{O} / \text{CH}_3\text{CN}$ , 80 °C	30 min	95 [19]
7	<b>Citric acid (15 mol%)/ solvent free, 90-100 °C</b>	<b>7 min</b>	<b>94 present work</b>



Scheme-3

## Conclusion

In summary, green protocol has been developed for the synthesis of 1,2,4-triazoloquinazolinone derivatives using citric acid from the reaction of cyclic substituted 1,3-diketone or ethyl acetoacetate, 3-amino 1,2,4-triazole and aromatic aldehydes under solvent free conditions at 100 °C. Present methodologies have several advantages such as easily biodegradable catalyst, eco-friendly, inexpensive catalyst, highly efficient, high yield, safe to handle and no need of chromatographic separation.

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## References:

1. B. A. Seigal, C. Fajardo and M. L. Snapper, *J Am Chem. Soc.*, **127**, 16329 (2005).
2. D. E. Fogg, and E. N. dos Santos, *Coord Chem Rev.*, **248**, 2365 (2004).



3. A. Ajamian, and J.L. Gleason, *Angew Chem Int Ed.*, **43**, 3754 (2004).
4. L. Weber, *Drug Disc Today*, **7**, 143(2002).
5. A. Domling, *Curr Opin Chem Biol*, **6**, 306 (2002).
6. A. Domling, *Curr Opin Chem Biol*, **4**, 318 (2002).
7. D. O'Hagan, *Natural Product Reports*, **17**, 435 (2002).
8. T. L. Gilchrist, *Heterocyclic chemistry, 3rd edn. Addison- Wesley Longman, England (1998).*
9. D. Lednicher, *Strategies for organic drugs synthesis and design. Wiley & Sons, New York (1998).*
10. V. Alagarsamy, V. R. Solomon and M. Murugan, *Bioorg Med Chem*, **15**, 4009 (2007)
11. V. Alagarsamy, *Pharmazie*, **59**, 753 (2004).
12. V. Alagarsamy, G. Muruganathan and R. Venkateshperumal, *Biol Pharm Bull*, **26**, 1711 (2003).
13. M. J. Hour, L. J. Huang, S. C. Kuo, Y. Xia, K. Bastow, Y. Nakanishi, E. Hamel and K. H. Lee, *J Med Chem*, **43**, 4479 (2000).
14. V. Alagarsamy, R. Revathi, S. Meena, K.V. Ramaseshu, S. Rajasekaran and E. De Clercq, *Indian J Pharm Sci*, **66**, 459 (2004).
15. M. Kidwai and R. Chauhan; *J Molecular Catalysis A: Chemical*, **377** 1– 6 (2013).
16. R. G. Puligoundla, S. Karnakanti, R. Bantu, N. Kommu, S. B. Kondra and L. Nagarapu; *Tetrahedron Lett.*, **54** 2480 (2013).
17. M. Kidwai, R. Chauhan, D. Bhatnagar; *Sci China Chem*, **55**, 2154 (2012).
18. Aboul-Fetouh E. Mourad, Ashraf A. Aly, Hassan H. Farag, Eman A. Beshr; *Beilstein J. Org. Chem.*, **3** (2007) doi:10.1186/1860-5397-3-11
19. M. M. Heravi, L. Ranjbar, F. Derikvand, B. Alimadadi, H. A. Oskooie and F. F. Bamoharram; *Mol Divers*, **12**, 181 (2008).
20. R. M. Mir, T. M. Malek, Hazeri Nourallah and M. H.K. Sayyed; *J Iran Chem Soc*, DOI 10.1007/s13738-015-0609-9
21. Kumkum Kumari, D. S. Raghuvanshi and K. N. Singh, *Org. Prep. Proced. Int*, **44**, 460 (2012).
22. N. Seyyedi, F. Shirini, Mohaddeseh S. Nikoo Langarudi, and S. Jashnani; *J Iran Chem Soc*, DOI 10.1007/s13738-017-1125-x
23. Rasul M. Mir, Taher M. Malek, *Monatsh Chem*, DOI 10.1007/s00706-014-1273-y
24. G. Mohammadi Ziarani, A. Badiei, Z. Aslani, N. Lashgari, *Arab. J. Chem.*, **8**, 54 (2015).

25. S. Vibhute, D. Jamale, S. Undare, N. Valekar, G. Kolekar, P. Anbhule, *Res. Chem. Intermed.*, doi:10.1007/s11164-017-2896-5 (2017)
26. M. M. Heravi, F. Derikvand, L. Ranjbar, *Synth. Commun.*, **40** 677–685 (2010).
27. E. Ramu, V. Kotra, N. Bansal, R. Varala, S. R. Adapa, *Rasayan J. Chem.*, **1**, 188 (2008).
28. Q.-S. Ding, J.-L. Zhang, J.-X. Chen, M.-C. Liu, J.-C. Ding, and H.-Y. Wu, *J. Heterocyclic Chem.*, **49**, 375 (2012).
29. Sami Sajjadifar, *Int. J. Chem. Tech. Res.*, **5**, 422 (2013).
30. M. Z. Ahmed, N.T Patel, K.A Shaikh, M.A Baseer, Shahid Shaikh and V.A. Patil, *Elixir. Org. Chem.* (**43**) 6583 (2012).
31. V.B. Ningdale, U.N. Chaudhar and K.A. Shaikh, *IJGHC*, **2**, 1102 (2013).
32. M. R. Shaaban, *J Fluorine Chem*, **129**, 1156 (2008).
33. A. Shaabani, A. Rahmati, and S. Naderi, *Bioorg Med Chem Lett*, **15**, 5553 (2005).

## Ionic Liquid Ethyl Ammonium Nitrate (EAN): An Efficient Catalyst for the Synthesis of Dipyrromethane under Room Temperature

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### ABSTRACT

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A simple, convenient efficient and eco friendly one-pot synthesis of dipyrromethane derivatives using ionic liquid i.e. ethyl ammonium nitrate by the reaction of aromatic aldehydes and pyrrole was reported. Short reaction time, room temperature solvent free reaction condition, high yields and environmental friendliness are the main advantages of this method.

**Keywords:** Dipyrromethane, Aromatic aldehydes, solvent free

### I. INTRODUCTION

The development of a chemical reaction which eliminates to reduce the hazardous products through the chemical reaction is known as the green chemistry [1-2]. In order to achieve this goal various synthetic organic chemists are working in this area for the development of efficient transformation reaction. Environment friendly catalyst and solvent free reactions these are the important aspects for the synthesis in an organic chemistry [3-5]. High yield, low reaction cost and eco-friendly these the main advantages of the solvent free reactions. In this context, several organic chemists are in this field of green chemistry to develop the best route in the

organic reactions using solvent-free reaction conditions at room temperature [6-8].

Several porphyrins and porphyrin analogues which are widely used in several areas were synthesized by using the dipyrromethanes as a starting compound. It is also well known that the pyrrole chemistry is closely associated with the natural products [9-11]. In this regard several efforts have been taken by the researchers to develop the dipyrromethanes using aldehydes and pyrrole [12-15]. Moreover, the reported methods till this date are having several disadvantages like expensive catalyst, toxic solvent, long reaction time etc.

Thus the present work deals with the successful synthesis of substituted dipyrromethanes using ionic liquid i.e. ethyl ammonium nitrate (EAN) by the

reaction of aromatic aldehydes and pyrrole. The results show the improved the quantum efficiency of the reaction.

## II. EXPERIMENTAL

All solvents and chemicals which are used in this reaction are of analytical grade quality without any purification and were produced from sigma-aldrich. The progress of the reaction was monitored through thin layer chromatography using silica gel coated aluminium sheets. Melting points were measured by an open capillary tube method and are uncorrected.  $^1\text{H}$  NMR was carried out Bruker AMX-500 MHz spectrometer at 500MHz, IR spectra recorded from KBr disk on the Nicolet Nexus FTIR 670 spectrophotometer.

**Typical procedure for the synthesis of dipyrromethane derivatives using EAN as a catalyst at room temperature-**

The mixture of aromatic aldehyde (1mmol), pyrrole (2mmol) and 7mmol% EAN was taken in a round bottom flask and stirred it for 30 minutes on magnetic stirrer. The progress and completion of the reaction was monitored through thin layer chromatography using silica gel coated aluminium sheets. Recrystallization method was used to purify the product using ethyl alcohol as a solvent to get products (3a-k). All the compounds were synthesized, characterized and compared using their data in literature.

**Spectroscopic Data for representative and newly synthesized compounds is listed below:**

**3a:** Pale yellow solid, m.p. 96-99°C;  $^1\text{H}$  NMR (500 MHz)  $\delta$ : 6.71 (s, 1H), 6.03 (s, 2H), 5.95 (q,  $J=3.3$  Hz, 2H), 7.75 (t,  $J=3.3$  Hz, 2H), 6.80-6.90 (m, 5H, ArH), 8.05 (s, 2H, NH); IR (KBr)  $\nu$ : 3355, 3105, 1605, 1495, 1507, 1305, 997, 690, 670  $\text{cm}^{-1}$ .

**3d:** Light Yellow solid, m.p. 121-123°C;  $^1\text{H}$  NMR (500 MHz)  $\delta$ : 3.24 (s, 6H), 4.93 (s, 1H), 6.20 (s, 2H), 5.92 (q,  $J=3.1$  Hz, 2H), 7.11-7.22 (m, 4H), 8.40 (s, 2H, NH); IR (KBr)  $\nu$ : 3386, 3102, 1706, 1594, 1560, 1512, 1259, 988, 764  $\text{cm}^{-1}$ .

**3g:** Light brown solid, m.p. 174-177°C;  $^1\text{H}$  NMR (500 MHz)  $\delta$ : 6.63 (t,  $J=3.1$  Hz, 3H), 7.23 (q,  $J=3.4$  Hz, 2H), 7.11 (d,  $J=2.3$  Hz, 2H), 8.23 (q,  $J=2.3$  Hz, 2H), 8.49 (t,  $J=6.9$  Hz, 1H), 8.30 (d,  $J=8.1$  Hz, 1H), 8.50 (s, 2H, NH); IR (KBr)  $\nu$ : 3242, 2944, 1752, 1746, 1344, 1352, 988, 659  $\text{cm}^{-1}$ .

**3k:** Light yellow solid, m.p. 84-86°C;  $^1\text{H}$  NMR (500 MHz)  $\delta$ : 3.95 (s, 2H), 6.12 (s, 2H), 5.94 (q,  $J=3.1$  Hz, 2H), 7.01 (q,  $J=2.5$  Hz, 2H), 8.10 (s, 2H, NH); IR (KBr)  $\nu$ : 2995, 3113, 1614, 1511, 1395, 1112, 997, 823, 691  $\text{cm}^{-1}$ .

## III. RESULTS AND DISCUSSION

The dipyrromethane derivatives were synthesized by the condensation of mixture of aromatic aldehyde (1mmol), pyrrole (2mmol) and 7mmol% EAN as a catalyst. The products (3a-k) obtained were purified by recrystallization method using ethyl alcohol as a solvent. Several lewis, bronsted acids and ionic liquids were studied were by different researchers till this date. The EAN gives remarkable results during the synthesis of dipyrromethanes derivatives at room temperature. The effect of the catalyst concentration was also studied. The 7 mmol% was observed as an optimum concentration of the catalyst for the successful formation of the product. It is also observed that the aromatic aldehyde with electron withdrawing group shows the enhanced yield. In this regard the EAN acts as an efficient reaction for this green reaction.

Table 1

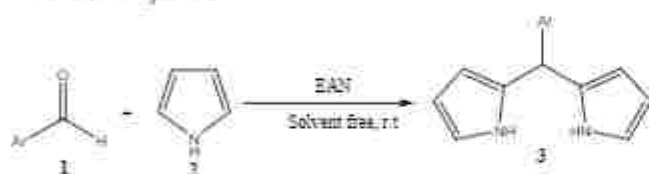
Effect of the catalyst concentrationa

Entry	EAN (mmol%)	Yieldb
1	3	82.3
2	7	91.2
3	10	86.4
4	15	83.4
5	20	79.9

Note- Bold values indicate optimized condition

a Reaction condition: 1a(1mmol) and 2(2mmol), rt

b Isolated yield



Scheme 1: Synthesis of dipyrromethane derivative

Table 2

EAN catalyzed synthesis of dipyrromethane -

Entry	Aldehyde (1)	% Yield
3a		89.3
3b		88.1
3c		81.7
3d		88.4
3e		88.8
3f		81.3
3g		88.4
3h		81.1
3i		88.8

3j		88.8
3k		91.5
3l		87.7

Isolated Yields.

## IV. CONCLUSION

In conclusion we have developed an eco-friendly protocol for the synthesis of dipyrromethane derivatives by using aromatic aldehydes and pyrrole in the presence of EAN as a catalyst. Short reaction time, low cost, high reaction yield and room temperature reaction these are the advantages of this procedure.

## V. ACKNOWLEDGMENT

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## VI. REFERENCES

- [1]. S.A.R. Mulla, A. Sudalai, M.Y. Pathan, S.A. Siddique, S.M. Inamdar, S.S. Chavan and R.S. Reddy, RSC Adv., 2012, 2, 3525.
- [2]. H. Xiang, L. Zhou, Y. Feng, J. Cheng, D. Wu and X. Zhou, Inorg. Chem., 2012, 51, 5208.
- [3]. M. Ak, V. Gancheva, L. Terlemezyan, C. Tanyeli and L. Toppare, Eur. Polym. J., 2008, 44, 2567.
- [4]. S. Verma, S. Kumar, S.L. Jain and B. Sain, Org. Biomol. Chem., 2011, 9, 6943.
- [5]. H. Mori, T. Tanaka, N. Aratani, B. S. Lee, P. Kim, D. Kim and A. Osuka, Chem. Asian J., 2012, 7, 1811.

- [6]. R. Sharma, A.K. Pandey and P.M.S. Chauhan, *Synlett.*, 2012, 23, 2209.
- [7]. C.D. Gabbutt, B.M. Heron, C. Kilner and S.B. Kolla, *Dyes and Pigments*, 2012, 94, 175.
- [8]. J. Jaratjaroonphong, S. Tuengpanya, R. Saeeng, S. Udompong and K. Srisook, *Eur. J. Med. Chem.*, 2014, 83, 561.
- [9]. E.A. Mikhalitsyna, V.S. Tyurin, S.E. Nefedov, S.A. Syrbu, A.S. Semeikin, O.I. Koifman and I.P. Beletskaya, *Eur. J. Inorg. Chem.*, 2012, 14, 5979.
- [10]. Y. Wu, J. Feng, H. Gao, X. Feng and L. Jiang, *Adv. Mater.* 2019, 31, e1800718.
- [11]. J.H. Clark, *Acc. Chem. Res.* 2002, 35, 791.
- [12]. J.K. Laha, S. Dhanalekshmi, M. Taniguchi, A. Ambroise and J.S. Lindsey, *Organic Process Research & Development* 2003, 7, 799.
- [13]. B. Temelli and C. Unaleroglu, *Tetrahedron* 2006, 62, 10130.
- [14]. A.S. Amarasekara, *Chem. Rev.* 2016, 116, 6133.
- [15]. L.M. Kantam, A. Ravindra, C.R.V. Reddi, B. Sreedar and B.M. Choudary, *Adv. Synth. Catal.* 2006, 348, 569.

## An Efficient and Reusable Succinimide-*N*-Sulfonic Acid Catalyst for the Synthesis of Benzimidazole at Room Temperature

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A facile and efficient protocol has been developed for the synthesis of benzimidazole from condensation reactions of *o*-phenylenediamines with aromatic aldehyde in presence of Succinimide - *N* - sulfonic acid (SuSA) as an efficient, cheap and reusable catalyst under mild reaction conditions.

**Keywords:** SuSA, *o*-phenylenediamines, aromatic aldehyde, recyclable

### I. INTRODUCTION

The chemistry and biological study of heterocyclic compounds has been an interesting field for a long time in medicinal chemistry. A number of heterocyclic derivatives containing nitrogen and sulphur atom serve as a unique and versatile scaffolds for experimental drug design [1]. The benzimidazole moieties are usually present in a large number of natural products in addition to pharmacologically active compounds [2]. It shows a wide range of biological and pharmacological properties such as antifungal [3], antimicrobial [4], anthelmintic [5, 6], antiviral [7, 8], topoisomerase inhibition [9] and

anticancer activities [10]. A number of their derivatives are marketed as antifungal drug (Carbendazim) [11], anthelmintic drug (Mebendazole and Thiabendazole) [12], antipsychotic drug (Pimozide) [13] and antiulcer agent (Omeprazole) [14]. Due to their attractive pharmacological properties, huge attention has been paid to the synthesis of benzimidazoles.

Because of their wide range of synthetic, industrial and pharmacological application, many methods for the preparation of benzimidazole are reported in the literature. The most common method is direct condensation of 1,2-phenylenediamine and carboxylic acids [15, 16] or their derivatives [17], that

require strong acidic conditions and sometimes need high temperature or the use of microwave [18]. In recent years, solvent-free synthesis of benzimidazoles under microwave irradiation using Yb(OTf)<sub>3</sub> [19], KSF clay[20], PPA[21], Na<sub>2</sub>SO<sub>4</sub> [22], K-10 clay[23], metal halide supported alumina[24] and solid support[25] have been reported.

However, a variety of catalysts have been reported for the synthesis of 2-aryl benzimidazole most of them suffer from disadvantages such as long reaction times, forceful conditions, low yields, low selectivity, tedious workup, and use of toxic or expensive reagents. Consequently, a new procedure that avoids these drawbacks is desirable. We report herein an efficient, low cost and environmentally benign protocol for the synthesis of benzimidazole using reusable SuSA catalyst under mild reaction condition.

## II. METHODS AND MATERIAL

All purchased chemicals were of analytical grade and used without further purification. Silica gel coated aluminum sheets (Merck made) were used for thin layer chromatography (TLC) to monitor progress of reactions. Melting points were determined in an open capillary tube and are uncorrected. <sup>1</sup>H NMR spectra were recorded using DMSO as solvent and TMS as internal standard at 300 MHz on Bruker Avance spectrophotometer. All the products were characterized by IR spectral data and comparison of their melting points with those reported in literature and found to be identical. Also, the some products were confirmed by <sup>1</sup>H NMR spectral data.

### Preparation Succinimide-N-sulfonic acid:

SuSA was easily prepared by addition of an equivalent amount of chlorosulfonic acid to succinimide (Su)<sup>26</sup>.

### General procedure for the Synthesis of 2-aryl benzimidazole:

SuSA (15 mol %) was added to a stirred solution of the aldehyde (1 mmol) and o-phenylenediamines (1

mmol) in acetonitrile (3 ml), and the mixture was stirred at room temperature for appropriate time (Table 1). After completion of the reaction monitored by TLC, the solvent was removed under reduced pressure and ethyl acetate (5 ml) was added, and the catalyst was recovered by filtration and washed with ethyl acetate (5 ml). The filtrate was washed with water and then dried over anhydrous Na<sub>2</sub>SO<sub>4</sub>. Evaporation of the solvent under reduced pressure gave the highly pure product obtained. Further recrystallization was done in ethyl alcohol.

Selected spectral data:

### 5-methyl-2-(4-nitrophenyl)-1H-benzimidazole (Table 2, entry 3c)

IR(KBr pallets):Vmax3109, 1605, 1511, 1463, 1354, 1176, 739, 701 and 657 cm<sup>-1</sup>; <sup>1</sup>H NMR (300 MHz, DMSO-d<sub>6</sub>):δ 8.39 (s, 4H+1H, overlapped Ar-H and N-H), 7.54 (d, J = 8.0 Hz, 1H, Ar-H), 7.43 (s, 1H, Ar-H), 7.09 (d, J =8.3 Hz, 1H, Ar-H) and 2.44 (s, 3H, -CH<sub>3</sub>); <sup>13</sup>C NMR (75 MHz, DMSO-d<sub>6</sub>):δ 159.0, 153.6, 143.2, 136.3, 131.0, 129.3, 127.9,119.4, 114.7, 114.6, 111.5 and 31.1. Mass (EI, m/z): 254 [M<sup>+</sup>].



Scheme 1: Synthesis of benzimidazoles

## III. RESULTS AND DISCUSSION

To explore the use of SuSA as a catalyst for the reaction of benzaldehyde and o-phenylenediamines for the preparation of 2-arylbenzimidazole compound 3a was considered as a standard model reaction (Table 2). Model reaction in the absence of catalyst did not led to desired product formation. It means interference of catalyst was must for initiation of the reaction. To determine exact requirement of catalyst for the reaction, we used model reaction at different



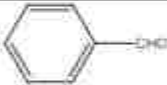





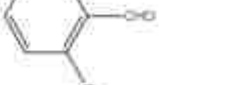

concentrations of SuSA (Table 1). During this study, we observed that, 15 mol% catalysts proved to be an efficient catalyst to carry out the reaction smoothly.

Encouraged by this result, in further set of experiments, in order to build the generality of the reaction, variety of aromatic aldehydes with either electron-donating or electron-withdrawing groups were converted to 2-arylbenzimidazoles derivatives in good to excellent yields. All the results are summarized in Table 2.

**Table 1** Optimization of the catalyst

Entry	Catalyst (mol %)	Isolated Yield %
1	---	Trace
2	5	55
3	10	80
4	15	92
5	20	92

**Table 2** Synthesis of 2-arylbenzimidazole in the presence of SuSA<sup>a</sup>

Entry	Aldehydes	Time (min.)	Yield <sup>b</sup> (%)
3a		65	91
3b		55	90
3c		52	92
3d		55	92
3e		75	85
3f		75	88
3g		60	88
3h		60	90

<sup>a</sup>Reaction conditions: Aromatic aldehydes (1 mmol), o-phenylenediamines (1 mmol), SuSA (15 mol%) at room temperature. <sup>b</sup> Isolated yield

#### IV. CONCLUSION

The Bronsted acid SuSA is a catalyst that has high efficiency in the synthesis of benzimidazoles. The reaction of the condensation of aromatic aldehyde with o-diphenylamines in acetonitrile as a solvent at room temperature gave maximum yields. The present protocol has numerous advantages such as high reaction rates and excellent yield, ease of preparation and handling of catalyst, inexpensive with lower loading and a simple experimental procedure.

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#### VI. REFERENCES

- [1]. N.B Patel, F.M Shaikh: New 4-thiazolidinones of nicotinic acid with 2-amino-6-methylbenzothiazole and their biological activity. *Sci Pharm.* 2010, 78: 753-765.
- [2]. G. Balboni, C. Trapella, Y. Sasaki et al., "Influence of the side chain next to C-terminal benzimidazole in opioid pseudopeptides containing the Dmt-Tic pharmacophore," *Journal of Medicinal Chemistry*, vol. 52, no. 17, pp. 5556-5559, 2009.
- [3]. W. A. Maxwell and G. Brody, "Antifungal activity of selected benzimidazole compounds," *Applied microbiology*, vol. 21, no. 5, pp. 944-945, 1971.
- [4]. D. Sharma, B. Narasimhan, P. Kumar, and A. Jalbout, "Synthesis and QSAR evaluation of 2-(substituted phenyl)-1H-benzimidazoles and [2-(substituted phenyl)-benzimidazol-1-yl]-pyridin3-yl-methanones," *European Journal of*

- Medicinal Chemistry, vol. 44, no. 3, pp. 1119–1127, 2009.
- [5]. A. A. Farahat, E. Paliakov, A. Kumar et al., "Exploration of larger central ring linkers in furamide analogues: synthesis and evaluation of their DNA binding, antiparasitic and fluorescence properties," *Bioorganic & Medicinal Chemistry*, vol. 19, no. 7, pp. 2156–2167, 2011.
- [6]. D. Valdez-Padilla, S. Rodríguez-Morales, A. Hernandez-Campos et al., "Synthesis and antiprotozoal activity of novel 1-methylbenzimidazole derivatives," *Bioorganic & Medicinal Chemistry*, vol. 17, no. 4, pp. 1724–1730, 2009.
- [7]. Y. F. Li, G. F. Wang, P. L. He et al., "Synthesis and anti-hepatitis B virus activity of novel benzimidazole derivatives," *Journal of Medicinal Chemistry*, vol. 49, no. 15, pp. 4790–4794, 2006.
- [8]. H. Banie, A. Sinha, R. J. Thomas, J. C. Sircar, and M. L. Richards, "2-phenylimidazopyridines, a new series of golgi compounds with potent antiviral activity," *Journal of Medicinal Chemistry*, vol. 50, no. 24, pp. 5984–5993, 2007.
- [9]. P. S. Charifson, A. L. Grillo, T. H. Grossman et al., "Novel dual-targeting benzimidazole urea inhibitors of DNA gyrase and topoisomerase IV possessing potent antibacterial activity: intelligent design and evolution through the judicious use of structure-guided design and structure-activity relationships," *Journal of Medicinal Chemistry*, vol. 51, no. 17, pp. 5243–5263, 2008.
- [10]. J. Chen, Z. Wang, C. M. Li et al., "Discovery of novel 2-aryl-4-benzoyl-imidazoles targeting the colchicine binding site in tubulin as potential anticancer agents," *Journal of Medicinal Chemistry*, vol. 53, no. 20, pp. 7414–7427, 2010.
- [11]. H. Goker, C. Kus, D. W. Boykin, S. Yıldız, and N. Altanlar, "Synthesis of some new 2-substituted-phenyl-1H-benzimidazole-5-carbonitriles and their potent activity against *Candida* species," *Bioorganic & Medicinal Chemistry*, vol. 10, no. 8, pp. 2589–2596, 2002.
- [12]. G. N. Vazquez, L. Y´epez, A. H. Campos et al., "Synthesis and antiparasitic activity of albendazole and mebendazole analogues," *Bioorganic & Medicinal Chemistry*, vol. 11, no. 21, pp. 4615–4622, 2003.
- [13]. K. J. Spivak and Z. Amit, "Effects of pimozone on appetitive behavior and locomotor activity: dissimilarity of effects when compared to extinction," *Physiology & Behavior*, vol. 36, no. 3, pp. 457–463, 1986.
- [14]. P. Lindberg, P. Nordberg, T. Alminger et al., "The mechanism of action of the gastric acid secretion inhibitor omeprazole," *Journal of Medicinal Chemistry*, vol. 29, no. 8, pp. 1327–1329, 1986.
- [15]. S. B. Mohan, T. P. Behera, and B. V. V. Ravi Kumar, "Microwave irradiation versus conventional method: synthesis of benzimidazolyl chalcone derivatives," *International Journal of ChemTech Research*, vol. 2, no. 3, pp. 1634–1637, 2010.
- [16]. A. K. Tiwari and A. Mishra, "Synthesis and antiviral activity of N-substituted-2-substituted benzimidazole derivatives," *Indian Journal of Chemistry B*, vol. 45, pp. 489–493, 2006.
- [17]. R. J. Perry and B. D. Wilson, "A novel palladium-catalyzed synthesis of 2-arylbenzimidazoles," *Journal of Organic Chemistry*, vol. 58, no. 25, pp. 7016–7021, 1993.
- [18]. K. Bourgrin, A. Loupy, and M. Soufiaoui, "Trois nouvelles voies de synthèse des dérivés 1,3-azoliques sous micro-ondes," *Tetrahedron*, vol. 54, no. 28, pp. 8055–8064, 1998.
- [19]. L. Wang, J. Sheng, H. Tian, et al., *Synth. Commun.*, 2004, 34, 4265.
- [20]. A. Loupy, A. Petit, J. Hamelin, et al., *Synthesis*, 1998, 9, 1213.

- [21]. J. Lu, B. Yang, Y. Bai, Synth. Commun., 2002, 32, 3703.
- [22]. M.P. Surpur, P.R. Singh, S.B. Patil, et al, Synth. Commun., 2007, 37, 1375.
- [23]. S. Perumal, S. Mariappan, and S. Selvaraj, ARKIVOC, 2004 (viii) 46.
- [24]. G. V. Reddy, V. V. V. N. S. Ramarao, B. Narsaiah, et al, Synth. Commun., 2002, 32, 2467.
- [25]. G. Penieres, I. Bonifas, G. Lopez, et al, Synth. Commun., 2000, 30, 2191. K. Bougrin, A. Loupy, A. Petit, et al, Tetrahedron, 2001, 57, 163.
- [26]. F. Shirini and N. Ghaffari Khaligh, succinimide-N-sulfonic acid: A mild, efficient and reusable catalyst for the chemoselective trimethylsilation of alcohols and phenols, Phosphorus, Sulfur, and Silicon, 186:2156–2165, 2011

## Antibacterial and X-ray Diffraction Study of Cr(III) and Fe(III) metal Complexes of Thiosemicarbazone Ligand

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### Abstract

Comparative study of X-ray diffraction patterns of transition metal complexes like Cr (III) and Fe (III) of Thiosemicarbazone is carried out. These metal complexes has different crystal system and their x-ray diffraction studies also used for determination of various parameters such as unit cell volume and miller indices values like h, k and l. Antibacterial screening also done of these metal complexes and ligand in comparison with standard drug ciprofloxacin.

**Keywords:** N-4-Ethyl, propyl thiosemicarbazone, X-ray diffractogram, Biological Screening.

### Introduction

Thiosemicarbazones constitute important class of drugs with several types of pharmacological actions.[1] A series of metal complexes of Cr(III) and Fe(III) with (E)-1-(2-Hydroxybenzylidene)-4-ethyl,propyl thiosemicarbazone (LH) have been synthesized and successfully characterized using various spectroanalytical techniques. The molecular structure of metal complexes was determined by X-ray diffraction studies. Additionally, ligand (LH) and all the complexes screened against antibacterial strains. Complexes were most effective against bacteria (Staphylococcus aureus and Bacillus subtilis) which are compared with standard (Ciprofloxacin). The complex forming nature of transition metal complexes with thiosemicarbazones shows antitumor activity [2,3] Thiosemicarbazone metal complexes exhibit characteristic important properties and potential biological activities. [4-8]

The X-ray diffractogram of complexes were recorded in the range of 5-80° 2θ value. The wavelengths are important part of crystal system of complexes to determine the peak position, miller (h,k,l) value, unit cell parameters and 2θ value with d radiation source of CuKα by used as X-ray diffractometer range.[9, 10]

### Materials and Methods

All the chemicals used were as AR grade obtained from commercial source.

Synthesis of Schiff's Base Ligand: The Schiff's base ligand (E)-1-(2-Hydroxybenzylidene)-4-ethyl,propyl thiosemicarbazone prepared by modifying reported method of scovil.[11]

Synthesis of Metal Complexes: Hot ethanolic solution of (0.01mmol) of metal salt is mixed with (0.02mmol) of solution of (E)-1-(2-Hydroxybenzylidene)-4-ethyl, propylthiosemicarbazone (LH). The reaction mixture is refluxed for 4-5 hours and allows keeping for 3-4 hours at R.T and decomposes above 300°C.

### Results and Discussion

NMR Spectral Data:

The experimental assignments of the IR spectral bands to confirm the structural identity of the ligands and its metal complexes. The H-NMR spectra of Thiosemicarbazone showed one proton signal at 8.4-8.9 ppm which corresponds to azomethine linkage formed by reaction in between Salicylaldehyde and N-4 disubstituted thiosemicarbazide. It confirms the formation of Thiosemicarbazone. The H-NMR assignments are in good agreement with the values already reported.[12,13,14]

The observed NMR signals are phenolic -OH, (11.79) (s), -C=N- (8.96) (s), -NH (11.06) (s), Aromatic protons 6.8-7.3 (m), -CH2- (3.7) and -CH3: 1.09 (t), -CH2-(1.01) (m).

## IR Spectral Data:

The IR spectral bands confirm the structural identity of Ligand and its metal complexes. According to coordination to ligand to metal ion IR spectra of ligand shows ligand should be in thione form. A sharp  $\nu$  (N-H) band observed at 2976 cm<sup>-1</sup> for ONS donor ligands. A sharp  $\nu$  (C=S) and low intensity  $\delta$  (C=S) band observed in ligand at 1276 cm<sup>-1</sup> while in metal complexes it is in the range of 1240-1270 cm<sup>-1</sup> and 700-753 cm<sup>-1</sup>. Ligand shows  $\nu$  (-OH) band at 3220 cm<sup>-1</sup> due to intramolecular hydrogen bonding. Bands in the range of 420-440 cm<sup>-1</sup> due to M-O, M-N and M-S bonding.

**Table 1:** FTIR Spectral data of ligand and its metal complexes in (cm<sup>-1</sup>)

Ligand/complex	$\nu$ (-OH)	$\nu$ (N-H)	$\nu$ (C=N)	$\nu$ (C=S)	$\nu$ (C-O)	M-S	M-N	M-O
LH	3220	2976	1538	1276,753	1186			
Cr(III)	-	-	1575	1276,701	1203	458	582	489
Fe(III)			1597	1291,707	1206	414	521	485

## X-Ray Diffraction study:

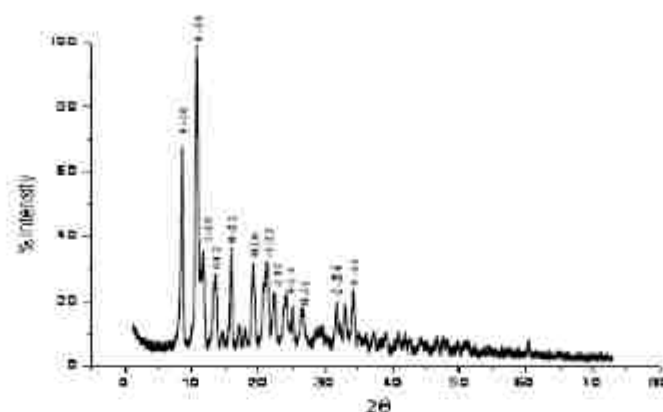
X-ray diffraction study of metal complexes gives probability related to the structure of complexes. The diffractogram of metal complexes were recorded in the range of 0-80° 2 $\theta$  value and wavelength of 1.5405 Å. Major reflexes were calculated and related values were determined by using Bragg's equation. All major reflections were indexed for h,k,l values using reported method.[15] Cr (III) complex having triclinic crystal system while Cr(III) complex have monoclinic crystal system. Unit cell volume for each system is determined by respected equation.

**Table 2:** Lattice constant, unit cell volume, crystal system and interplanar spacing of metal complexes.

Unit complex	Lattice Constant			Unit Cell Volume (Å <sup>3</sup> )	Inter axial angle	Crystal system	2 $\theta$	d value (Å)
	a (Å)	b (Å)	c (Å)					
Cr(III)	8.236	10.98	15.36	110.61	$\alpha \neq \beta \neq \gamma \neq 90$	Triclinic	11.90	7.43
Fe(III)	11.89	13.02	7.02	106.03	$\alpha = \beta = 90 \neq \gamma$	Monoclinic	9.18	9.66

**Table 3:** Miller Indices and Interplanar distance of Cr(III) complex

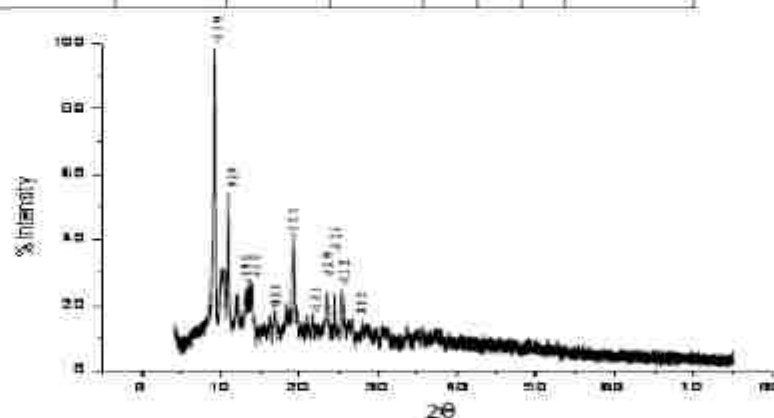
2 $\theta$ (obs)	2 $\theta$ (cal)	d(obs)	d(cal)	h	k	l	Intensity
9.85	9.89	8.97	8.93	0	-1	1	66.61
11.90	11.91	7.43	7.41	0	-1	2	100
12.41	12.44	7.12	7.10	1	-1	0	24.78
12.77	12.44	6.92	7.10	1	-1	0	30.60
14.51	14.20	6.08	6.22	0	0	2	22.62



**Fig.1.** X-ray diffractogram of Cr(III) complex

**Table 4:** Miller Indices and Interplanar distance of Fe(III) complex

2θ (obs)	2θ(Cal)	d(obs)	d(cal)	h	k	l	Intensity
10.302	10.17	8.57	8.68	-1	1	0	22.54
9.18	10.17	9.66	8.68	-1	1	0	100
12.64	12.85	6.99	6.88	0	0	1	12.61
14.49	14.54	6.10	6.08	0	1	1	16
20.76	20.44	4.37	4.34	-2	2	0	11.52



**Fig.2.** X-ray diffractogram of Fe(III) complex

#### Biological screening:

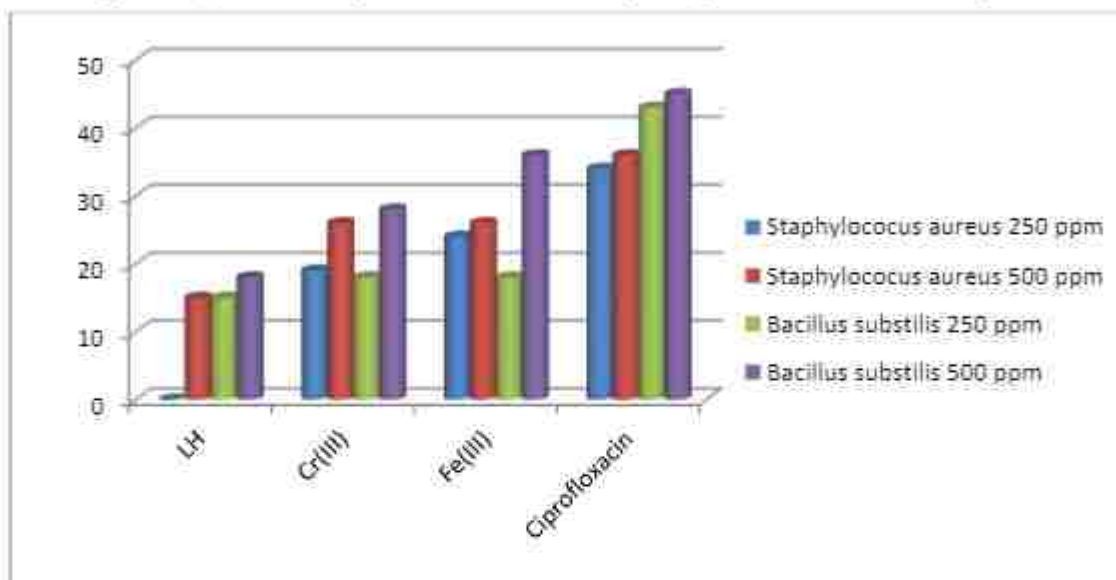
Thiosemicarbazone ligand and its Cr(III) and Fe(III) metal complexes has wide range of biological activity, [16,17] Thiosemicarbazone complexes has large pharmaceutical applications. [18] The antibacterial activity of ligand and its metal complexes are given in below table. The ligand as well as metal complexes are more active against bacteria which are compared with standard ciprofloxacin.

**Table 5:** Antibacterial activity of ligand and its metal complexes

Ligand/complex	Staphylococcus aureus		Bacillus subtilis	
	250ppm	500ppm	250ppm	500ppm
Ligand (LH)	00	15	15	18

Cr(III)	19	26	18	36
Fe(III)	24	26	18	36
Ciprofloxacin	34	36	43	45

**Fig.3.**Comparative study of antibacterial activity of Ligand and its metal complexes.



### Conclusion

The Cr(III) and Fe(III) metal complexes of Thiosemicarbazone ligand were studied by x-ray diffraction method shows monoclinic and triclinic crystal system are crystalline in nature and have octahedral geometry also shows potential antibacterial activity.

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### References

1. S. Padhye and G.B Kauffinan, *Coord. Chem. Rev.*, 1985,63,127.
2. Z. Simon, M. Mracec, A. Maurer, S. Policec and D. Draegulescu, *Rev. Roum. Biochim.*, 1977,14,117
3. B. V. Agaewala, *Spect Lett.*, 1981,14,187
4. S. P. Chandra, Shikha and K.Yatender, synthesis, spectroscopic and antimicrobial studies on bivalent zinc and mercury complexes of 2-formylpyridine thiosemicarbazones. *Bioinorg. Chem. Appl*;10.1155/2009/851316
5. R. Kothari and B. Sharma, "Synthesis, Characterization and In-vitro antimicrobial investigation of some transition metal comlxes with the Schiff base of aromatic aldehyde". *J. Chem and Chem. Sci* 2011;1:158-163.
6. U. Kumar and S.Chandra;"Synthesis, Spectroscopic characterization of some Schiff base complexes derived from 2-methyl cyclohexanone and their activity against some fungi". *J. Saudi. Chem. Soc.*2011;15:19-24.
7. S.Chandra, G.K Lokesh and Swati Agarwal: "Synthesis, Spectroscopic and Biological Approach in the characterization of novel N-4 macrocyclic ligands and its transition metal complexes" *Transition of Meta chemistry*;2007;32:558-563.

8. S. Chandra, Ruchi: "Spectrochimica Acta PartA: Molecular and Biomolecular Spectroscopy 2013;103:338-348.
9. D. L.Bis and J. E. Post, Editors, Modern Powder Different Reviews in Minerology, V.20, Minerological Society of America 1990.
10. B.Wall, J. Driscoll, Strong and E. Fisher., The suitabilities of different preparations of thermoluminescent Lithium borate for medical dosimetry, Physical Medical Biology, 1982, 1023-1034.
11. P.Scovil, D.L.Klayman, C.F Franchino, J. Med. Chem 1982,25,1261.
12. P. Bindu, M. R. P. Kurup, Trans. Met. Chem (1993), 18-85
13. Jayashri, S. Arvindakshan, K.K. Indian J. Chem., 36 A(1997) 1094.
14. M. Nzimuddin, M.A. Ali, F.E. Smith, Polyhedron, 10(1991), 1327.
15. N. Saxena, H.D. Jueja and K.N. Munshi, J. Indian Chem. Soc., 1993, 70,943.
16. T. D. Thangadurai, M. Gowari and K. Natarajan, Synthesis and Reactivity in Inorganic, Metal oranic and Nano Metal Chemistry, 2002,32,329.
17. Kizileki, Y. D. Kurti, B-Akkurt, A. Y. Genel, Birtteksoz, G.Otut and B. Uikuseven., Folia Microbial, 2002, 52,15.
18. K.Sharma, S. Shrivastava and A. Shrivastava, Bioinorganic Chemistry and Applications, Article ID 68888375.2007., 10 pages.



## Synthesis, Characterization and Antimicrobial Studies of the Metal Complexes of $\beta$ -Diketone

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### ABSTRACT

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The ligand 1-(2-bromo-5-methoxyphenyl)-3-(2-hydroxyphenyl) propane-1, 3-dione (L) and its transition metal complexes have been synthesized. The ligand synthesized using 2-hydroxy acetophenone and 2-bromo-5-methoxy benzoic acid. Each metal complex synthesized by metal nitrate with  $\beta$ -diketone in the ratio 1:2 stiochimetry. The characteratation were carried out by elemental analysis, UV-Visible spectroscopy, infrared spectroscopy, <sup>1</sup>H-NMR, <sup>13</sup>C-NMR, magnetic susceptiblity, molar conductance, powder XRD and TGA for structural formulae study. The synthesized  $\beta$ -diketones and their transition metal complexes have been screened for in vitro antibacterial, and antifungal activity using Resazurin 96 well plate method. This method is simple, sensitive, rapid, and reliable. It achieves more accurate minimum inhibitory concentration (MIC). The transition metal complexes and ligand showed moderate antimicrobial activity against all tested bacteria and fungi.

**Keywords:** Antimicrobial activity, Antioxidant,  $\beta$ -diketones, Metal-complexes, Magnetic susceptiblity, TGA, XRD.

### I. INTRODUCTION

In pharmaceutical industries metal containing drugs widely used. In particular transition metal series are more important in human body. Metal are easily loose electrons towards the molecules (ligands) forms co-ordinate bond and metal exits as positively ions soluble in biological fluids. Hemoglobin is an important constituent in blood contain Fe metal which give binding side for O<sub>2</sub>. Cis-platin (cis-Pt(NH<sub>3</sub>)<sub>2</sub>Cl<sub>2</sub>) is a first introduced in anti-cancer drug

contains platinum metal. Zn metal that regulate the function of genes in the nuclei of cells and component of insulin. Nickel (II) forms an important component in different enzymes, viz. urease, carbon monoxide dehydrogenase and hydrogenase<sup>1</sup>.

The previous research found that 1, 3-diones showing antiviral, insecticidal, antibacterial, antitumor, antioxidant, HIV-1 Integrase (IN) inhibitors<sup>2-6</sup>. The  $\beta$ -diketones (1,3-diketone) are intermediate key for the synthesis of different hetero-cyclic compounds<sup>7-12</sup>. In addition, 1,3-diketones ( $\beta$ -diketones) have also been

used as an anti sunscreen agent that filters U.V rays to protect from skin cancer<sup>13</sup>. 1, 3-dionemetal complexes are used as catalyst in reaction of olefin oxidation and epoxidation<sup>14-15</sup>. Europium (III)-diketonates have excellent luminescent property<sup>16</sup>. It is also used as chelating agent<sup>17</sup> and extractants for lanthanide ions<sup>18</sup>. As a result, considerable effort has been directed towards synthesis of beta-diketones and its metal complexes.

Here we report the synthesis of ligand and their metal complexes characterized by various spectral techniques and also look the in vitro antibacterial screening was carried out by using micro titre plate based resazurin assay against Gram positive (*Bacillus subtilis* and *Staphylococcus aureus*) and Gram negative (*Escherichia coli*, *Pseudomonas aeruginosa*) bacterial cultures. The antifungal susceptibility of ligand and its metal complexes was tested against *Candida albicans* and *Saccharomyces cerevisiae*. In micro titre plate based resazurin assay technique colorimetric indicator was resazurin.

## II. EXPERIMENTAL

All chemicals were of reagents grade, purchased from commercial source and used directly. All metal salts were used as nitrate. Melting points were recorded by the open tube capillary method and are uncorrected. The progress of the reaction and the purity of compounds were monitored by thin-layer chromatography (TLC) analytical silica gel plates (Merck 60 F250). <sup>1</sup>H NMR and <sup>13</sup>C NMR spectra were recorded on a Jeol-400 MHz instrument in CDCl<sub>3</sub> solution. Mass spectra were taken on a macro mass spectrometer by the electrospray ionization (ESI) method. The C, H and N analyses were carried out using a Euro-E 3000. Infrared spectra were recorded on SHIMADZU FT-IR spectrometer. The conductivity of metal-complexes measured by ELICO CM 180. The TGA analysis were carried out by Ramp method using SDT Q600 V20.9 Build 20 instrument.

### A. Synthesis of 1-(2-bromo-5-methoxyphenyl)-3-(2-hydroxyphenyl) propane-1,3-dione (L):

The 2-hydroxy acetophenone (0.01 mol) and 2-bromo-5-methoxy benzoic acid (0.01 mol) was dissolved in dry pyridine (30 ml) and cooling the mixture at 0°C then POCl<sub>3</sub> (2-3 ml) was added drop wise with constant stirring maintain temperature below 5°C. The progress of reaction was monitored by TLC. After completion of reaction, the reaction mixture was poured on crushed ice and acidified with dil. HCl. The crimson colored solid (ester) product (3) was obtained. It was washed with water and filtered off and crystallized from alcohol. The ester (0.01 mol) dissolved in pyridine (25 ml) and add powdered KOH (1.12 g, 0.02 mol) and the reaction mixture stirred at room temperature for 5-6 hours which undergoes Baker-Venkataraman rearrangement. The progress of reaction was monitored by TLC. After the completion of reaction, the reaction mixture was poured in dil. HCl in crushed ice. The yellow solid product obtained was washed with water and filtered off. The product crystallized from alcohol.

<sup>1</sup>H-NMR: δ=15.18 (s, 1H), 11.98 (s, 1H), 7.71 (d, J=7.9 Hz, 1H), 7.57 (d, J=8.9 Hz, 1H), 7.48 (t, J=7.2 Hz, 1H), 7.18 (d, J=3.1 Hz, 1H), 7.01 (d, J=8.2 Hz, 1H), 6.93-6.88 (m, 2H), 6.73 (s, 1H), 3.84 (s, 3H)  
<sup>13</sup>C-NMR: δ=195.97, 177.06, 162.66, 55.66; IR -1618 ν (C=O), 1581 ν (C=C), 1220 ν (C-O), 3280 ν (-OH) MS: m/z 346.9 (M - 1); Anal. calcd. for C<sub>15</sub>H<sub>13</sub>BrO<sub>4</sub>: C, 55.04; H, 3.75; found: C, 55.18; H, 3.89; yield: 65%; M.P-106°C; Yield-66%.

### B. Synthesis of metal complexes:

The ligand (L) 4 mmol dissolved in 35 ml of anhydrous ethanol and add 2 mmol of appropriate transition metal nitrate [Fe(III), Co(II), Ni(II), Cu(II), Zinc(II)] and stirred at 60-65°C for 2-3 hour. After the addition of alcoholic ammonia solution complex precipitation occurs and colored solid complex obtained was washed with ethanol and then crystallized by with ethyl acetate. The yield of the all metal complexes was in the range of 66-71%.

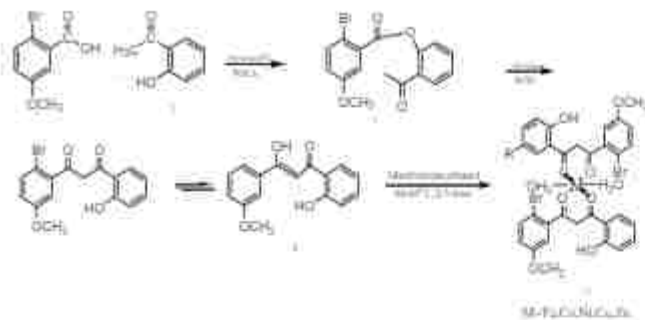


Fig 1. Synthesis of 1,3-dione and its metal complexes

### III. RESULTS AND DISCUSSION

All the metal complexes were found to be highly stable at room temperature and readily soluble in dimethyl formamide and dimethyl sulfoxide other than common organic solvents. The results of elemental analysis confirmed stoichiometry of ligand to metal 2:1 for all metal complexes. The TGA data confirms two water molecules associated in the metal complexes reveals octahedral geometry.

#### 1. IR spectra

The infrared spectral data of ligand (L) and their metal complexes are reported in Table 1. The carbonyl group ( $>C=O$ ) stretching frequency of ligand (L) appearance at  $1618\text{ cm}^{-1}$ . The appearance of frequency at  $1581\text{ cm}^{-1}$  represents ( $-C=C-$ ) double bond and the bond ( $C-O$ ) appear at  $1220\text{ cm}^{-1}$ . The metal complexes of ligand (L) show IR frequency of carbonyl group ( $>C=O$ ) at  $1617-1619\text{ cm}^{-1}$  which were nearly same or slightly lower than ligands (L)<sup>19</sup>. The slightly change in stretching frequency indicates that ligand (L) coordinated with the transition metal ions. Also a new band at  $509-533\text{ cm}^{-1}$  observed due to metal-oxygen (M-O) bond vibrations in metal complexes which were absent in ligands<sup>20</sup>. This confirms of metal ions coordinate with oxygen in complexes.

Table 1. FTIR ( $\nu/\text{cm}^{-1}$ ) data of ligand and metal complexes.

Compounds	$\nu(C=O)$	$\nu(C-O)$	$\nu(C=C)$	$\nu(M-O)$
L	1618	1220	1581	---
(L) $_2$ -Fe	1618	1238	1581	522
(L) $_2$ -Co	1617	1249	1585	533
(L) $_2$ -Ni	1617	1213	1586	509
(L) $_2$ -Cu	1619	1241	1585	523
(L) $_2$ -Zn	1618	1249	1587	533

#### 2. $^1\text{H}$ NMR and $^{13}\text{C}$ NMR spectra

The  $^1\text{H}$  NMR spectral data of the 1-(2-bromo-5-methoxyphenyl)-3-(2-hydroxyphenyl)propane-1,3-dione (L) show singlet at  $\delta$  15.18 ppm due to enolic proton, a singlet at  $\delta$  11.98 ppm due to phenolic proton adjacent to the carbonyl group which confirms the formation of  $\beta$ -diketone.

In the  $^{13}\text{C}$  NMR of ligand (L) 4, peak appeared at  $\delta$  195.97 ppm corresponds to carbonyl carbon ( $C=O$ ) and enolic carbon ( $C-O$ ) at  $\delta$  177.06 ppm. The signal at  $\delta$  96.08 ppm appeared shows methine linkage.

#### 3. Magnetic Susceptibility and Molar Conductance

The molar conductance values recorded in  $\Omega^{-1}\text{cm}^2\text{mol}^{-1}$  at room temperature using DMSO as a solvent and results are recorded in Table 2. The molar conductance values were obtained in the range 18-42  $\Omega^{-1}\text{cm}^2\text{mol}^{-1}$ . The conductance values of the metal complexes very low which indicate non-electrolytic in nature<sup>21</sup>. The magnetic susceptibilities values of all metal complexes indicates paramagnetic in nature except Zinc complexes were diamagnetic due to non-availability of unpaired electrons.

Table 2. Physical parameter of metal complexes.

Metal Complexes	Magnetic moment $\mu_{\text{eff}}$ (B.M)	Molar conductance	M. W.	Melting point	Elemental analysis (%)	
					Found/(Calcd.)	
(L) <sub>2</sub> Fe	5.81	39	790.23		C	H
(L) <sub>2</sub> Co	3.22	42	793.32	221	48.12(48.64)	3.75(3.83)
(L) <sub>2</sub> Ni	2.41	27	793.08	219	47.99(48.45)	3.80(3.81)
(L) <sub>2</sub> Cu	1.11	18	797.93	277	48.97(48.46)	3.59(3.81)
(L) <sub>2</sub> Zn	Dia	34	799.77	163	47.61(48.17)	3.51(3.79)
					48.59(48.06)	3.61(3.78)

#### 4. Powder XRD Studies

X-ray powder diffraction study basically used for phase identification of a materials and can provide information on unit cell dimensions. Single crystals of the metal complexes could not be possible therefore powder diffraction data used. The XRD data recorded in the range 10-80 ( $2\theta$ ) values. Average particle size was calculated using Debye Scherrer's formula,  $D = 0.9 \lambda / \beta \cos \theta$  where  $\theta$  is the Bragg diffraction angle and  $\beta$  is the full width at half maximum (FWHM) <sup>22</sup>. All metal complexes show monoclinic crystal system.

Table 3. Summary of XRD data of Metal Complexes

Parameter	(L) <sub>2</sub> -Fe complex	(L) <sub>2</sub> -Co complex
Temperature (k)	298	298
Wavelength	1.540598	1.540598
Radiation	Cu K $\alpha$	Cu K $\alpha$
Crystal System	Monoclinic	Monoclinic
a (Å)	6.014	9.32
b (Å)	26.3	13.21
c (Å)	6.99	12.49
$\alpha$ (°)	90.1	90
$\beta$ (°)	116.7	102
$\gamma$ (°)	91.2	90
Average Particle Size (nm)	8.476	7.989

#### 5. Thermo gravimetric study of some metal complexes

Thermal gravimetric study used to evaluate the thermal stability of metal complex here some selected metal complexes was carried out at a heating rate of 10°C min<sup>-1</sup> under nitrogen atmosphere over the temperature range 25–600 °C. Thermo gravimetric analysis of bis-1-(2-bromo-5-methoxyphenyl)-3-(2-hydroxyphenyl) propane-1,3-dione Fe(III) complex shows some loss of weight (4.153%) at 179.18°C indicating that surface and coordinated water molecules are present in the complex<sup>23-24</sup>. A sudden weight loss (22.24%) from 179.18°C to 331.57°C due to loss of one phenyl ring with two hydroxy and one carbonyl group. Further, the weight loss (54.43%) from 331.57°C to 534.00°C corresponds to the decomposition of two phenyl ring and a propane-1, 3-dione moiety. On further heating above 534.00°C the weight remaining corresponds to that of only Ferric oxide.

Thermo gravimetric analysis of bis-1-(2-bromo-5-methoxyphenyl)-3-(2-hydroxyphenyl)propane-1,3-dione Co(II) complex shows some loss of weight (5.018%) at 175.77°C indicating that surface and coordinated water molecules are present in the complex. A sudden weight loss (50.55%) from 175.77°C to 496.47°C due to loss of one phenyl ring with two hydroxy and one carbonyl group. Further, the weight loss (11.06%) from 496.47°C to 597.69°C corresponds to the decomposition of two phenyl ring and a propane-1, 3-dione moiety. On further heating

above 597.69°C the weight remaining corresponds to that of only Cobalt oxide.

## 6. Antimicrobial Activities

The antimicrobial activity of ligand and its metal complexes carried out by resazurin method which is developed by Drummond and Waigh in 2000 <sup>25</sup>. The resazurin method simple, sensitive, rapid, reliable and achieve more accurate minimum inhibitory

concentration (MIC). In this method resazurin used as an indicator and it was prepared by dissolving 270 mg tablet in 40 ml of sterile distilled water. The value of minimum inhibitory concentration (MIC) taken at color changes from purple to pink or colorless were recorded as positive. MIC value taken as color change occurs at lowest concentration as a average of three values of MIC for the test material and bacterial strain.

Table 4: MIC ( $\mu\text{g/ml}$ ) determination using modified resazurin assay

Compounds	Antibacterial activity				Antifungal activity	
	Gram positive		Gram negative		<i>C.albicans</i>	<i>S.cerevisiae</i>
	<i>B.subtilus</i>	<i>S.aureus</i>	<i>E.coli</i>	<i>P.aeruginosa</i>		
L1	<50	<50	100	50	100	150
L2	100	50	100	50	150	150
(L):Fe	50	50	100	50	150	150
(L):Co	50	<50	50	50	100	150
(L):Ni	50	<50	100	50	100	100
(L):Cu	50	<50	100	50	150	100
(L):Zn	50	<50	100	50	100	150
Tetracycline	2	1	4	1	-	-
Amphotericin B	-	-	-	-	1.25	1.25

## 7. 1,1-Diphenyl-2-picrylhydrazyl Assay (DPPH Assay)

The antioxidant activities of ligand and its metal complexes were examined according to DPPH method. In DPPH method stock solution of DPPH prepared in methanol. The percentage of inhibition was calculated. Ascorbic acid was used as a standard reference and dissolved in distilled water to make the stock solution with the same concentration of metal complexes. Control sample was prepared containing

the same volume and reference ascorbic acid; 95% methanol was used as blank and % scavenging of the DPPH free radical was measured using the following equation:

$$\% \text{ inhibition} = \left[ \frac{(A \text{ control} - A \text{ sample})}{(A \text{ control})} \right] \times 100$$

A control = absorbance of DPPH alone

A sample = absorbance of DPPH along with different concentrations of complexes.

**Table 5:**Antioxidant study of using DPPH method.

Concentration µg/mL	Ascorbic Acid	(L)	(L):Fe	(L):Co	(L):Ni	(L):Cu	(L):Zn
	% Inhibition	% Inhibition	% Inhibition	% Inhibition	% Inhibition	% Inhibition	% Inhibition
10	9.34	4.51	9.34	13.33	9.34	20.40	9.34
20	29.40	8.86	9.34	58.18	9.34	29.71	9.34
30	39.48	44.31	29.47	71.80	13.42	43.09	9.34
40	47.87	69.88	32.18	72.71	15.87	46.94	58.18
50	81.75	78.06	32.91	86.13	51.93	65.46	87.08

#### IV. CONCLUSIONS

The present research work, we synthesized new ligand and its transition metal complexes. In the metal complexes reveals that 1, 3-diones and metal 2:1stoichiometry ratio for all the prepared metal complexes. These complexes were characterized by various physicochemical and spectral analyses. It shows non-electrolytic nature and octahedral geometry with center of symmetry. Powder XRD study of complexes show monoclinic crystal system. The thermal stability were evaluated by TG method whose results revealed good thermal stability for the synthesized metal complexes. As per results, it can be seen that the newly synthesized ligands and its metal complexes shows considerable antimicrobial activity against all tested bacteria and fungi compared with antibiotics Tetracycline and Amphotericin B.

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#### VI. REFERENCES

- [1]. S. Ragsdale *J. Biol. Chem.*, 284, 18571 (2009).
- [2]. I. Bennett, N. Broom, R. Cassels, J. Elder, N. D. Masson and P. O'Hanlon., *Bioorg. & Med. Chem. Lett.*, 9,1847 (1999)
- [3]. G. Diana, P. Carabateas, R.E. Johnson, G.L. Williams, F. Pancic and J.C.Collins, *J. Med. Chem.*, 21, 889 (1978)
- [4]. G.D. Crouse, M. J. McGowan and R.J. Boisvenue, *J. of Med. Chem.*, 32, 2148 (1989)
- [5]. T. Nishiyama, S. Shiotsu and H. Tsujita , *Polymer Degradation and Stability*. 76, 435 (2002)
- [6]. N. Acton, A. Brossi, D.L. Newton and M. B. Sporn , *J. of Med. Chem.*, 23, 805 (1980)
- [7]. S. T. Heller, S. R. Natarajan, *Org.Lett.*, 8, 2675 (2006).
- [8]. D.Simoni, F.P.Rondanin, S.Grimaudo, G.Cannizzo, E.Barbusca, N.A.Porretto, F.D.Lessandro and M. Tolomeo, *J. Med Chem.*, 42, 4961 (1999).
- [9]. H. Valizadeh, M. Amiri and E. Khalili, *Mol. Diver.*, 16, 319 (2012).
- [10]. L. Tang, S. Zhang, J. Yang, W. Gao, J. Cui and T. Zhuang, *Molecules*, , 9, 842 (2004).
- [11]. R. Kumar and Y. C. Joshi, *J. Chem. Sci.*, 121, 497,( 2009)

- [12]. J. P. Edwards, R. I. Huguchi, D. T. Winn, C. L. F. Pooley, T. R. Caferro, L. G. Hamman, L. Zhi, K. B. Marschke, M. E. Goldman, T. K. Jones, *Bioorg. Med. Chem. Lett.*, 9, 1003 (1999).
- [13]. I. Andrae, A. Bringhen, F. Bohm, H. Gonzenbach, T. Hill, L. Mulroy and T.A. Truscott, *J. of Photochem. and Photobiol. B: Biology*, 37, 147(1997).
- [14]. a) W. R. Cullen and E. B. Wickenheiser, *J. Organomet. Chem.*, 370, 141 (1989) b) C. D. Rao and H. F. Rase., *Ind. Eng. Chem. Prod. Res. Dev.* 20, 95 (1981)
- [15]. F. D. Lewis, A. M. Miller And D. G. Salvi , *Inorg. Chem.*, 34, 3173 (1995)
- [16]. J. Bunzli, *J. Alloys Compds.*, 408, 934 (2006)
- [17]. A. D. Dunbar, S. T. Omiatsek , C. Kendrex, L. Grotzinger and W. Boyko , *Ind. Eng. Chem. Re.*, 45, 8779(2006)
- [18]. K. Binnemans, *Chem. Rev.*, 107, 2592 (2007).
- [19]. J. Sheikh, H. Juneja, V. Ingale, P. Ali, T.B. Hadda, *J. of Saudi Chem. Soc.*, 17, 269(2013).
- [20]. M. Vijayalakshmi, *Rasayan J. Chem.*, 11, 857,(2018).
- [21]. W.J. Geary, *Coord. Chem. Rev.*, 7, 81 (1971).
- [22]. M. A. Estermann, W.I.F. David, K. Shankland, B. Mccusker, Ch. Baerlocher (Eds.), Oxford Science Publications, New York, p.202 (2002).
- [23]. A.P. Mishra, M. Khare, S.K. Gautam, *Synth. React. Inorg. Met. Org. Chem.*, 32, 1485 (2002).
- [24]. P.R. Mandlik, , M.B. More, A.S. Aswar, *Indian J. Chem. – Section A*, 42, 1064 (2003).
- [25]. A.J. Drummond, R.D. Waigh , *Recent Research Developments in Phytochemistry*, 4, 143 (2000).

## An one-Spot Synthesis of 1, 3, 4-Thiadiazole Derivative by Conventional and Modern Technique

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### ABSTRACT

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An efficient and one-pot synthesis is described for the 1, 3,4-thiadiazole derivatives by a conventional and modern technologies such as microwave irradiation. The reaction of chloro and fluoro substituted aromatic carboxylic acid with thiosemicarbazide carried in the presence of phosphorus oxychloride heating at 110 °C and . The synthesized compounds were characterized by <sup>1</sup>H NMR, IR, and mass spectroscopic techniques. The present approach offers the advantages such as simplicity of the workup procedure, low cost and mild reaction condition.

**Keywords:** One pot, 1,3,4-thiadiazole, thiosemicarbazide, modern technique.

### I. INTRODUCTION

1,3,4-thiadiazoles is important and well-known heterocyclic compounds containing nitrogen and sulphur exhibit a wide variety of biological activities [1-4].

Thiadiazole is a 5-membered ring system containing a hydrogen-binding domain, sulphur atom, and two-electron donor nitrogen system. It has various applications in agriculture, drugs, dyes and photographic materials and was further developed by Busch and his co-workers. Also, it has producing useful intermediates in several organic preparations [5]. 1, 3, 4-Thiadiazoles derivatives ring represents an interesting class of hetero compounds with a wide

spectrum of pharmacological activities which include antimicrobial [7], antibacterial [8], anticancer [9], anti-inflammatory [10], anti-proliferative activity [11], anti-oxidant [12], and antiviral [13]. It also displays the diagnostic section exhibits a complete investigation of the isomeric form and the anticancer activity of bio caster 1, 3, 4-thiadiazoles due to therapeutic potential [14].

### II. EXPERIMENTAL

**Experimental: General:** All the chemical and reagents used were of analytical grade and the completion of reaction and purity of the synthesized compounds were checked by TLC (0.5 mm thickness) using silica



gel-G coated Aluminium plates (Merck). Melting points of the compounds were determined in open capillary tube by digital Melting Point Apparatus and were uncorrected.

**General procedure for one spot Synthesis of 5-phenyl substituted 1,3,4-thiadiazol-2-amine.** The mixture of chloro and fluoro aromatic substituted carboxylic acid (0.01mole), thiosemicarbazide (0.01mole), and 4 ml of phosphorus oxychloride were added and heat at 105°C for 5-6 Hrs. Progress the reaction was monitored on TLC. After completion of reaction the reaction mixture was cool to room temperature and poured in ice-cold water, neutralized by saturated KOH. Then filter, dried and recrystallized from methanol.

#### Synthesis of 5-phenyl substituted 1, 3,4-thiadiazol-2-amine 3(a-d) under microwave .

The mixture of substituted aromatic carboxylic acid (0.01mole), thiosemicarbazide (0.01mole), and 4 ml of phosphorus oxychloride were added. The mixture was irradiated under microwave irradiation at 120°C for 15 min. The completion of the reaction was checked by TLC. After completion of the reaction the RBF was removed from the oven. The reaction mixture was poured on to crushed ice drop wise with continuous stirring, neutralized by saturated KOH. Then filter, dried and recrystallised from methanol.

Entry	Compound	Ar	Microwave Irradiation		Conventional method		M.P (°C)
			Reaction Time (min)	Yield (%)	Reaction Time (h)	Yield (%)	
1	3b	2-F, 3-Cl	15	87	5	68	111
2	3a	3-F, 4-F	15	82	8	76	216
3	3c	2-F	15	88	4	74	165
4	3d	4-F	15	86	4	79	225

### III. RESULT AND DISCUSSION

A simple and efficient procedure is described for the synthesis of the 1,3,4-thiadiazole derivative using the

one-pot reaction of aromatic carboxylic acid and thiosemicarbazide in the presence of phosphorus oxychloride as a catalyst by conventional and Microwave irradiation techniques. The structural elucidation of the synthesized compound 3a is based on its IR, <sup>1</sup>H NMR, and mass spectral studies. The IR absorption band around 703 cm<sup>-1</sup> could be attributed to the -C-S-C functional group. IR spectrum of 3a showed absorption bands at 3385, 1487, 1607, 1596, 1009 cm<sup>-1</sup> indicating the presence of NH<sub>2</sub>, C=C, C=N, C-F groups respectively. <sup>1</sup>H NMR spectrum peaks due to NH<sub>2</sub> protons appeared at δ:7.40. Peaks for three aromatic protons appeared between 7.52-8.16. Further, LC mass spectrum showed a molecular ion peak at m/z 236 which conform to the molecular structure of 3a.

### IV. SPECTRAL DATA OF COMPOUND

#### 5-(3-Chloro-2-fluoro-phenyl)-[1, 3, 4]thiadiazol-2-ylamine (3a)

Yield 84 %, m.p.151°C; IR spectrum cm<sup>-1</sup>: 703 (C-S-C stretching ), 3385 (NH<sub>2</sub> stretching.); 1487(C=C Ar stretching), 1607 (C=N stretching ), 1009 (C-F stretching ); <sup>1</sup>H NMR spectrum, δ, ppm : 7.40 ( dd, J=7.96, 8.4, 1H) , 7.52(1H, d, J=7.96, 1H), 8.00(s, 2H), 8.16(d, J=8.4, 1H). (MS: m/z 236 (M+H)<sup>+</sup>).

#### 5-(2, 4-Difluoro-phenyl)-[1, 3, 4] thiadiazol-2-ylamine (3b)

Yield 85 % m.p.216°C; IR spectrum, ν, cm<sup>-1</sup>: 682(C-S-C stretching ), 3369 (NH<sub>2</sub> stretching,); 1443(C=C Ar stretching), 1596 (C=N stretching ), 1054 (C-F stretching ); <sup>1</sup>H NMR spectrum, δ, ppm :: 7.20 (s, 1H), 7.41(d, J=8.96, 1H), 7.46(s, 2H), 8.12(d, J=8.96, 1H), (MS: m/z: 214 (M+H)<sup>+</sup>).

### V. CONCLUSION

In conclusion, the present method is very simple, mild, and efficient for the synthesis of 1,3,4-thiadiazole. This method offers several advantages,

including the short reaction time, simplicity of the workup procedure, low cost, and mild reaction condition for the synthesis of one-pot synthesis of 1,3,4-thiadiazole. These derivatives have been given a key to more modifications in pharmacophore replacements.

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## VII. REFERENCES

- [1]. Chandrakantha, B.; Isloor, A.M.; Shetty, P.; Fun, H.K.; Hegde, G. *European Journal of Medicinal Chemistry*, 2014, 71, 316–323.
- [2]. Bhardwaj, V.; Noolvi, M.N.; Jonathan, S.; Patel, H.M. *Journal of Saudi Chemical Society*, 2016, 20, S406–S410.
- [3]. aronikyan, E.G.; Akopyan, S.F.; Noravyan, A.S.; Dzhagatspanyan, I.A.; Paronikyan, R.G.; Nazaryan, I.M.; Akopyan, A.G. 2012, 46, 154–156.
- [4]. Sun, J.; Yang, Y.S.; Li, W.; Zhang, Y. Bin; Wang, X.L.; Tang, J.F.; Zhu, H.L. *Bioorganic and Medicinal Chemistry Letters*, 2011, 21, 6116–6121
- [5]. Sharma, R.; Sainy, J.; Chaturvedi, S.C. *Acta Pharmaceutica*, 2008, 58, 317–326.
- [6]. Rajak, H.; Deshmukh, R.; Aggarwal, N.; Kashaw, S.; Kharya, M. D.; Mishra, P. *Arch. Pharm*, 2009, 342, 453.
- [7]. Noolvi, M.N.; Patel, H.M.; Kamboj, S. *Arabian Journal of Chemistry*, 2016, 9, 1283–1289.
- [8]. Yousif, E.A.; Majeed, A.S.; Salihi, N.A. *Journal of Taibah University for Science*, 2013, 8, 26–3
- [9]. Kumar, D.; Maruthi Kumar, N.; Chang, K.H.; Shah, K. *European Journal of 25 Belen Tejada-Romero, Jean-Michel Carter, Yuliana*
- [10]. Maddila, S.; Gorle, S.; Sampath, C.; Lavanya, P. *Journal of Saudi Chemical Society*, 2016, 20, S306–S312.
- [11]. Altıntop, M.D.; Can, Ö.D.; Özkay, Ü.D.; Kaplancıkl, Z.A. *Molecules*, 2016, 21, 1–10.
- [12]. Ridha Ben Mansour<sup>\*</sup>, Mohamed Ouzzane, Z.A. *International Journal of Refrigeration*, 2014, 43, 36–49.
- [13]. Rzeski, W.; Matysiak, J.; Kandefer-Szerszeń, M. *Bioorganic and Medicinal Chemistry*, 2007, 15, 3201–3207.
- [14]. Matysiak, J.; Nasulewicz, A.; Pelczynska, M.; Switalska, M.; Jaroszewicz, I.; Opolski, A. *Eur. J. Med. Chem.* 2006, 41, 475

## Effect of Chemical Mutagens on Seedling Height in Cluster Beans {*Cyamopsis Tetragonoloba* (L) Taub.} by Mutation Breeding

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### ABSTRACT

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In the present study two varieties of cluster bean, namely, Golden Early – 36 (GE-36) and Harit Rani (HR) were used to induce genetic variability. For present study two chemical mutagens, namely, ethyl methanesulphonate (EMS) of different concentrations such as 0.05%, 0.10% and 0.15% and sodium azide (SA) of concentrations such as 0.01%, 0.02% and 0.03% were tried. Seeds from each treatment were sown in field following randomized block design (RBD) with three replications along with control as the M1 generation. Further two consequent generations were taken, M2 and M3 generations respectively. In M1 generation seedling height was studied. After 10 days of duration, height of seedlings was noted. The seedling height decreased as the concentration (%) of the two mutagens increased in majority of the treatments in both the varieties of cluster bean.

**Keyword:** ethyl methanesulphonate, Golden Early – 36, Harit Rani, cluster bean.

## I. INTRODUCTION

#### Rationale of study

Cluster bean is also called as guar. The word "GUAR" represents a derivation from the Sanskrit word "GAUAAHAR" which means cow fodder or fodder of live stock. Basically cluster bean is a drought hardy, deep rooted annual legume. The crop is mainly grown in the dry habitats of Rajasthan, Haryana, Gujarat and Punjab. In addition to its major cultivation in India, the crop is also grown as a cash crop, although to limited extent in other parts of the world like

Australia, Brazil and South Africa. The crop is known for its exceptionally high adaptation towards poor and erratic rains, multiuse in cropping system, in industrial use in many ways besides other social and dietary uses. These qualities have made it most the favoured crop of marginal farmers in arid areas.

Mutation breeding in crop plants is an effective tool in hands of plant breeders especially in crops having narrow genetic base. Many mutants have been identified as donors of desirable traits in breeding program. Mutation breeding is built on mutation induction and mutation detection. Mutation

induction coupled with selection remains the "cleanest" and most inexpensive way to create varieties by changing single characters without affecting the overall phenotype. Mutation induction involves the treatment of plant propagules with mutagens (chemical or physical). This is followed by selection for desirable changes in the resulting mutants. Breeders use mutation induction to broaden the genetic base of germplasm, and use the mutant lines directly as new varieties or as sources of new variation in breeding programs. Mutation breeding has many comparative advantages. It is cost effective, quick, proven and robust. In addition, mutation breeding is transferrable, ubiquitously applicable, non-hazardous and environmentally friendly. There are more than 3200 mutant varieties officially released for commercial use in more than 210 plant species from more than 70 countries, as referenced in the [Mutant Varieties Database](#). The vast majority of released mutant varieties consist of cereals, followed by flowers and legumes. Mutation breeding work in soybean crop has yielded in identification of many mutant lines with desirable traits. Variations in M1 generation, though less important in view of obtaining stable gene 2 mutations, are often considered as indicators in measuring efficiency of mutagen treatments (Plesnik, 1993).

Vegetables act as a good source of nutrients. To enhance variability in such crops the tool of mutation breeding is accepted by various plant breeders. To increase the productivity of vegetables various mutation breeding programs are carried out in brinjal (Datar and Ahstaputre 1984), chilli (Gupta and Yadav 1984), pea (Cemalettin et al., 2004), rye (Savaskan and Toker, 1991) and capsicum (Alcantara et al., 1996). Different vegetables contribute towards the fibre and protein production besides getting the induced genetic variability for disease /pest/insect resistance.

## II. OBJECTIVE OF STUDY

1. To study the effect of mutagens on Cluster bean varieties.
2. To study morphological changes in M1 generation.
3. To screen early stages changes for understanding the effect of mutagens.
4. To understand the effectiveness of mutagens.
5. To analyze efficiency of two chemical mutagens, ethyl methane sulphonate and Sodium azide.

## III. HYPOTHESIS

Mutation breeding as a tool makes genetic variations that can be used to develop and improve well adapted plant varieties by modifying one or two major traits to increase their productivity or quality. Treating with mutagens like ethyl methane sulphonate and sodium azide at different concentrations can show different morphological changes that can be responsible for progressive yield productions. In present study change in seedling height was screened with comparing with two control varieties of cluster bean.

## IV. METHODOLOGY

The seed material of two varieties of cluster bean (*Cyamopsistetragonoloba* (L.)Taub.)namely, Golden Early 36 and Harit Rani obtained from Golden Seeds Pvt. Ltd, Bangalore, Karnataka and Navalakha Seeds Pvt. Ltd, Pune have been used in the present study.

### Mutagens Used:

The chemical mutagens namely ethyl methane sulphonate (EMS) and sodium azide (SA).

### Details of Mutagenic Treatments:-

To begin with the pilot experiments were conducted for determining the suitable concentrations/doses for further studies.

**Preparation of mutagenic solution:-**

The chemical mutagenic treatments were prepared at room temperature of  $25\pm 2^\circ\text{C}$ . The fresh aqueous solutions of the mutagens were prepared prior to treatment.

**Treatment:**

Prior to chemical mutagenic treatments, seeds were immersed in distilled water for 6hrs. The pre-soaking enhances the rate of uptake of the mutagen through increase in cell permeability and also initiates metabolism in the seeds. Such presoaked seeds were later immersed in the mutagenic solution for 6hrs with regular shaking. Seeds soaked in distilled water for 6hrs served as control. For each treatment a batch of 300 presoaked seeds was used. 50 seeds from each treatment were dried between the folds of filter paper and germinated in petridishes to record germination percentage. The remaining 250 seeds from each treatment were sown in field following randomized block design (RBD) with three replications along with control as the M1 generation.

**V. CONCLUSION**

The results of present studies regarding mutagenic effects have been dealt in M1 generation. In M1 generation, studies were carried out on differential effects of different mutagens on biological parameters and morphological abnormalities. The present investigation comprised the study of mutagenic sensitivity of two varieties [Golden Early-36 (GE-36) and Harit Rani (HR)] of cluster bean in regard to some biological and morphological parameters. The effect of EMS and SA on cluster bean was studied by choosing three concentrations(%)for each mutagen, such as EMS0.05%, 0.10% and 0.15%, SA0.01%, 0.02% and 0.03%.

The seedling height decreased as the concentration(%) of the three mutagens increased in majority of the treatments in both the varieties of cluster bean. After 10 days of duration, height of seedlings was noted. In

control the seedling height was found to be 10cm and 07cm in GE-36 and HR. The seedling height ranged from 07cm to 14cm and 09cm to 11.5cm after EMS treatments, from 10cm to 15cm and 10cm to 11.5cm after SA treatments (table 1 and 2).

**Table 1: Effect of mutagens on seedling height in M1 generation of *Cyamopsistetragonoloba* (L.)Taub.variety GE-36.**

Treatment	Concentration (%) / Dose	Seedling height in cm	± SE
Control	--	10	0.73
EMS	0.05	14	1.02
	0.10	08	1.43
	0.15	07	1.69
SA	0.01	15	1.16
	0.02	11	1.46
	0.03	10	1.72

SE = Standard Error

**Table 2: Effect of mutagens on seedling height in M1 generation of *Cyamopsistetragonoloba* (L.)Taub.variety HR.**

Treatment	Concentration (%) / Dose	Seedling height in cm	± SE
Control	--	07	0.64
EMS	0.05	11.5	0.87
	0.10	10	2.02
	0.15	09	2.47
SA	0.01	11.5	1.39
	0.02	10	2.15
	0.03	10	2.58

SE = Standard Error

**Suggestions/recommendations**

Mutation breeding has been employed as a tool to induce mutations at loci controlling economically

important traits or for eliminating undesirable genes from the elite breeding lines (Lippert et al., 1964). In present investigation both physical and chemical mutagens were used to induce mutation. Observations recorded in present study revealed induction of broad genetic variability in case of cluster bean. Many crops with improved economic value have been obtained by using induced mutation (Broetzes 1988, BEAS 1995 and IAEA 1995). Besides the economic benefits, some mutants have also played important role in the study of genetics and plant development (Vanden et al., 1990 and Bretagne-Sgnard et al., 1996). The effect of mutagen can be examined through different biological parameters such as percentage of seedling height in M1 generation. In present study the data obtained on seedling height of cluster bean varieties indicated that the seedling height decreased with the increasing concentration/dose of mutagens. SA was found to be more sensitive in variety GE-36 and EMS and SA in variety HR, respectively. Studying seedling growth as a parameter to assess the effects of mutagens was proposed by Ahnstrom (1974). According to Sax (1935) mutagens might inactivate the meristems and cause hormonal disturbances leading to reduction in plant height. Gunckel and Sparrow (1966) indicated that although the genetic material of the cell is certainly sensitive to radiation damage, both primary and secondary physiological effects may be responsible for many changes. Conger and Stevenson (1969) reported that increased seedling injury at higher doses could be correlated with chromosomal damage.

## VI. REFERENCES

- [1]. Plesnik, S. 1993. The evaluation of some quantitative traits in M1 generation in soybean after laser emission and ethylenimine treatment. Acta Facultatis rerum naturalium universitatis comenianae. Genetica et biologiamolecularis. 25-25: 105-113.
- [2]. Datar V.V. and Ahstaputre J.U. (1984): Reaction in brinjal variety, F1 hybrid and Solanum species to little leaf disease. J. Maharashtra Agric. Uni. 9(3): 325-334.
- [3]. Gupta C. R. and Yadav R. D. S. (1984): Genetic variability and path analysis in chilli. Genetic Agraria, 38:425-432.
- [4]. Cemalettin Yasar Ciftci., Asli D.T., Khalid M.K. and Mehment A. and Sebahattin O. (2004): Use of gamma rays to induce mutations in four pea cultivars. Turk. J. Biol. 30 29-37.
- [5]. Savaskan C. and Tokar M. C. (1991): The effects of various doses of gamma irradiation on the seed germination and root tip chromosomes of rye (*Secale cereale* L). Tr. J. of Botany, 15: 349-359.
- [6]. Alcantara T.P., Bosland P.W. and Smith D.W. (1996): Ethyl methanesulphonate induced mutagenesis of *Capsicum annum*, J. Hered., 239-41.
- [7]. Lippert L.F., Bergh B.O. and Cook A.A. (1964): Three variegated seedling mutants in the pepper. J Hered., 55:78-93.
- [8]. Broertzes C. and Van Harten A. M. (1988): Applied mutation breeding for vegetatively propagated crops. Elsevier, New York: pp.1-345.
- [9]. BEAS (1995): Bureau of Economics and Agricultural Statistics, Bangkok, Thailand 1995.
- [10]. IAEA (1995): Symposium and proceeding of Induced mutation and molecular techniques for crop improvement IAEA and FAO, Vienna Austria, pp- 1-748.
- [11]. Vanden Bulk R. W., Loffer H. J. M. and Lindhout W. H. (1990): Somaclonal variation in tomato: Effect of explant source and a comparison with chemical mutagenesis. Theor. Appl. Genet. 80: 817-825.
- [12]. Bretagne Sgnard B., Fouillox G. and Chupeav Y. (1996): Induced albina mutations as a tool for genetic analysis and cell biology in flax (*Linum usitatissimum*). J. Exp Bot 47:189-194.

- [13]. Ahnstrom G. (1974): Repair processes in germinating seed. *Mutation Res.*, 26: pp 99-103.
- [14]. Sax K. (1938): Chromosome aberration induced by X-rays. *Genetics*, 23: 494-516.
- [15]. Gunckel J. E. and Sparrow A.K. (1962): Ionizing radiation, biochemical, physiological and morphological aspects of their effects on plants. *Encyclopaedia of Plant Physiology*. 16: pp. 555-611.
- [16]. Conger A.D. and Stevenson H.O. (1969): A comparison in seedling height and chromosomal damage in irradiated barley seeds. *Rad. Bot.* 9: pp 1-14.

## Synthesis of Reduced Graphene Oxide (RGO) by Using Hydrothermal Method

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### ABSTRACT

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Reduced graphene oxide, RGO (also called chemically modified graphene, CMG) was synthesized by a hydrothermal method, with graphite oxide (GO), prepared by using improved hummer method at different temperatures, served as the raw material. Structural and morphological studies indicate the degree of reduction is dependent on the temperature, which is also verified by Raman analysis. The variation in interlayer distance and the intensity ratio of the D to G Raman modes (ID/IG) indicates higher reaction temperature can accelerate more reduction of GO and also (I2D/IG) ratio indicate the reduction in number of graphene layers. The reduction material is characterization by Raman spectroscopy.

**Keywords:** Graphene oxide (GO), Reduced graphene oxide (RGO), Hydrothermal method, Improved Hummer Method, Raman Spectroscopy.

### I. INTRODUCTION

Carbon is the one of the most common atoms on Earth, occurs naturally in many forms and as a component in countless substances which are called allotropes of carbon. Graphene, a "wonder material" is the world's thinnest, strongest, and stiffest material, as well as being an excellent conductor of heat & electricity. [1] Graphene, a single layer of sp<sup>2</sup>- bonded carbon atoms packed in a hexagonal lattice, since the first fabrication via a "Scotch tape" method in 2004 [2], has triggered great research interests. Graphene & reduced graphene oxide (RGO) are promising candidates as components in applications, such as storage materials [3], catalyst supports [4] and electronic devices [5].

Graphite oxide has a similar layered structure to graphite, but the plane of carbon atoms in graphite oxide is heavily decorated by oxygen-containing groups, which not only expand the interlayer distance but also make the atomic-thick layers hydrophilic. As a result, these oxidized layers can be exfoliated in water under moderate ultrasonication. If the exfoliated sheets contain only one or few layers of carbon atoms like graphene, these sheets are named graphene oxide (GO). The most attractive property of GO is that it can be reduced to graphene-like sheets by removing the oxygen-containing groups with the recovery of a conjugated structure. The reduced graphene oxide (RGO) sheets are usually considered as one kind of chemically derived graphene. Some other names have also been given to RGO such as



functionalized graphene, chemically modified graphene, chemically converted graphene, or reduced graphene.[6]

In this study, we fabricated reduced graphene oxide (RGO) from the reduction of graphite oxide (GO) by hydrothermal method at different temperatures, by systematically analyzing the influence of reaction temperature on the interlayer distance and the intensity ratio ( $I_D/I_G$ ) of the D to G Raman modes of the as-produced RGO, we find that the degree of reduction is related with the reaction temperature, the conductivity in turn related with the degree of reaction [7].

## II. EXPERIMENTAL

### 2.1. Synthesis of GO & purification:

Graphite oxide was prepared from natural graphite by the well-known Improved Hummer method. Nature graphite (1g) was grinded with NaCl (1g) for 1hr. Afterward NaCl was washed away using distilled water with filtration & dried it below 45 °C [8]. For the Improved method, we take 9:1 proportion of conc.  $H_2SO_4/H_3PO_4$ . The dried graphite (660 mg) was then mixed with 75ml of concentrated sulfuric acid in round bottom flask & stirred up to 3 hrs. Then next 8.8 ml of  $H_3PO_4$  was added to the mixture & allow to dissolve for 1hr. The flask was then placed in an ice bath & (4g) of  $KMnO_4$  was slowly added while the temperature was kept below 20°C for 2hrs. The solution then heated at 35°C for 1hr. Then add 1ml  $H_2O_2$  to 100ml water & add above mixture to  $H_2O_2$  solution. Dilute this suspension to 400 ml water & stirred it for 1hr. After that, this suspension was shifted through a metal sieve & then filtered through polyester fiber. The filtrate was centrifuge at (10000 rpm, 1hr) with 180ml distilled water & the supernatant was decanted away [9]. The remaining solid material was again centrifuge for many times until its pH does not get maintained. Finally, the GO was kept for drying at below 45°C.

### 2.2. Synthesis of RGO & purification:

First 120mg as synthesized GO was suspended in 120ml distilled water to give brown colloidal solution by 30min of sonication. After the Sonification stirred solution for 1hr & add 5ml of hydrazine hydrate as reducing agent stirred this suspension for 10 min & then add 5ml of polyethylene Glycol ( $HO(CH_2CH_2)_nOH$ ) as capping agent. After that this solution was sealed in 180ml Teflon-lined autoclave & put this autoclave into the hydrothermal furnace at temperature 120°C for 5 hrs. Then the solid were filtered & washed with distilled water several times, finally the collected sample was dried in incandescent lamp at below 45°C. Same procedure was repeated for temperature at 140°C & 160°C. Finally, we got RGO for 120°C, 140°C & 160°C.

## III. EXPERIMENTAL ARRANGEMENT



Figure 1. The macroscopic physical samples

## IV. GRAPHICAL RESULTS

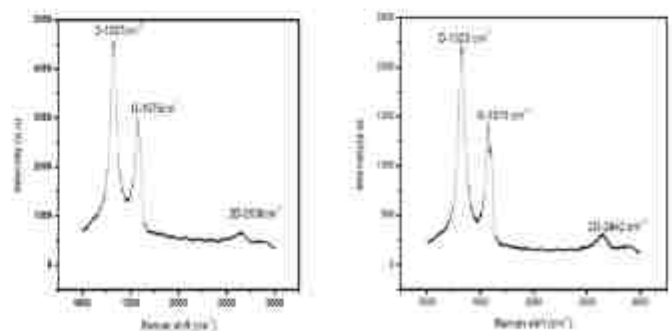


Fig a. Raman Spectra of GO Fig b. Raman spectra of RGO (NaOH)

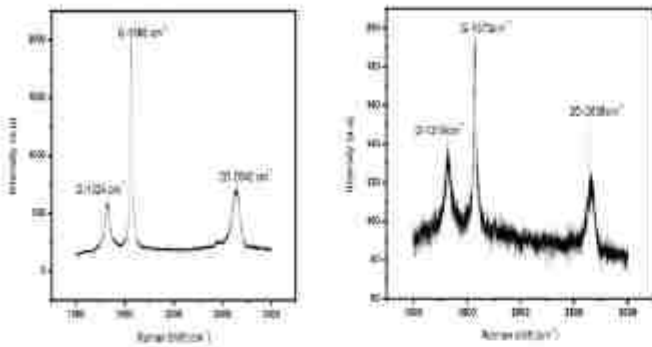


Fig c. Raman Spectra of RGO-1200C Fig d. Raman Spectra of RGO-1400 C

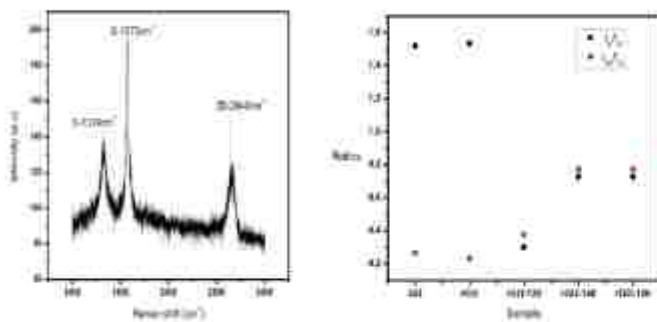


Fig e. Raman Spectra of RGO-1600C Fig. The Intensity Ratio of D,G,2D band

V. DISCUSSION

Raman spectroscopy is a very useful method to characterize the degree of reduction of GO. For all carbonaceous materials, both D and G bands are the predominant features in the Raman spectra. They are represented by peaks at around 1318-1346  $cm^{-1}$ , 1490-1691  $cm^{-1}$ , respectively. In the Raman spectrum of GO fig (a) Shows the G band is broadened at 1575 $cm^{-1}$ . In addition, the D band at 1327  $cm^{-1}$  becomes prominent, which indicates that after oxidation, some of the carbon atoms have changed from  $sp^2$  to  $sp^3$  hybridized carbon, the C=C double bonds in the graphite layers are destroyed. In fig (b) shows the Raman spectra of reduced graphene oxide by using NaOH as reducing agent but these spectrads does not show more reduction because if we compare D & G band of GO spectra its values are nearly equal. So that I choose Hydrazine Hydrate as best reducing agent we see in the nest result. The comparison shows in fig (c), fig d) & fig (e)

almost all D band of RGO get reduces means number of defects are reduced & G band shows more crystallinity as compared to GO. Fig (f) shows the intensity ratio of the D to G bands ( $I_D/I_G$ ) also represents quantity ratio of  $sp^3$  hybridized carbon and  $sp^2$  hybridized carbon, the decrease of  $I_D/I_G$  means the increase of  $sp^2$  hybridized and decrease of  $sp^3$  hybridized in RGO. That is, increased  $I_D/I_G$  shows better reduction of GO to RGO. Here the best reaction temperature is 160 $^{\circ}$  C, according to the  $I_D/I_G$ . In the case of  $I_D/I_G$  ratio varied with the reduction time & temperature. In the case of  $I_D/I_G$  increased means the number of graphene layers are decreased.

VI. CONCLUSION

We have successfully obtained RGO at different temperatures via a hydrothermal method. The degree of reduction of GO is affected by the reaction temperature, which can be confirmed by Raman characterization. In this project we studied reduction of graphene oxide at different temperature such as 120 $^{\circ}$ C, 140 $^{\circ}$ C, 160 $^{\circ}$ C & finally we conclude that the best reduction occurred at temperature 160 $^{\circ}$ C. So that higher temperature makes more reduction of graphene oxide to RGO. From the result we conclude that if the  $I_D/I_G$  ratio increases means number of defects get reduces and more reduction. From the  $I_D/I_G$  ratio if the ratio increases with increase in temperature, then number of graphene layers decreases. From this report we studied that the hydrazine hydrate was the best reducing agent for reduction of graphene oxide.

VII. REFERENCES

[1]. Paulchamy B, Arthi G & Lingeshi BD, ISSN: 2157-7439 JNMNT.  
 [2]. Sasha Stankovich, Dmitriy A. Dikin, Richard D. Piner, Kevin A. Kohlhaas, Alfred Kleinhammes, Yuanyuan Jia, Yue Wu, SonBinh T. Nguyen, Rodney S. Ruoff; Carbon 45 (2007) 1558-1565.

- [3]. M.D Stoller, S. Park, Y. Zhu, J. An, R.S. Ruoff, Nano Lett. 8 (2008) 3498-3502.
- [4]. B. Seger, P.V. Kamat, J. Phys. Chem. C 113 (2009) 7990-7995.
- [5]. Q. Yan, B. Hung, J. Yu, F. Zheng, J. Zang, J. Wu, B.L. Gu, F. Liu, W. Duan, Nano Lett. 7 (2007) 1469-1473.
- [6]. Songfeng Pei, Hui-Ming Cheng, Carbon 50 (2012) 3210-3228.
- [7]. Xiufeng Mei, Xiuqing Meng, Fengmin Wu, X. Mei et al. / Physica E 68 (2015) 81-86.
- [8]. Dachao Luo, Guoxin Zhang, Junfeng Liu, Xiaoming Sun, dx.doi.org/10.1021/jp110001y | J. Phys. Chem. C 2011, 115, 11327-11335.
- [9]. Daniela C. Marcano, Dmitry V. Kosynkin, Jacob M. Berlin, Alexander Sinitskii, Zhengzong Sun, Alexander Slesarev, Lawrence B. Alemany, Wei Lu, James M. Tour, VOL.4. NO. 8-4806-4814. 2010.
- [10]. Handbook of Hydrothermal Technology/ by K. Byrappa and Masahiro Yoshimura. <https://doi.org/10.1016/C2009-0-20354-0>.
- [11]. Jinpyo Hong, Min Kyu Park, Eun Jung Lee, DaeEung Lee, Dong Seok Hwang & Sunmin Ryu, 3:2700 | DOI: 10.1038/srep02700.
- [12]. Surajit Some, Youngmin Kim, Yeoheung Yoon, HeeJoun Yoo, Saemi Lee, Younghun Park & Hyoyoung Lee, 3: 1929 | DOI: 10.1038/srep019291
- [13]. Basic Principle, Working and Instrumentation of Experimental Techniques, [Nikita H. Patel / Ph.D Thesis / Sardar Patel University / July-2015].

## Study of RC Coupled Amplifier Using B2 Spice, TINA and Circuit Maker Software's

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### ABSTRACT

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This paper addresses the performance of RC coupled amplifier using B2 Spice, TINA and Circuit Maker electronic circuit simulation software's. Traditionally electronic circuit design was verified by building prototypes, subjecting the circuit to the various stimuli and then measuring its response using appropriate laboratory equipment's. Prototype building is somewhat time consuming. But produces practical experience from which we judge the manufacturability of the design. Computer programs that simulate the performance of an electronic circuit provide a simple cost-effective means of confirming the intended operation prior to circuit construction and verifying new ideas that could lead to improve the circuit performance.

**Keywords:** - RC Coupled amplifier, Amplification, Transient Analysis, Spice Analysis Simulation.

### I. INTRODUCTION

The evolution of electronics technology almost in to every facet because of low cost, reliability and ease of interface [1]. The electronic industry is getting progressively more and more efficiently more at new products in wide range and variety of circuits in service of human being. We also saw the more and more products coming in to the market in shorter time [2]. Hence low-cost circuit design, with an accurate, linear and faster testing techniques are addressed. A variety of electronic components PSpice commercially available which plays an important role

in design development of accurate circuit design performance and optimum reliability [3].

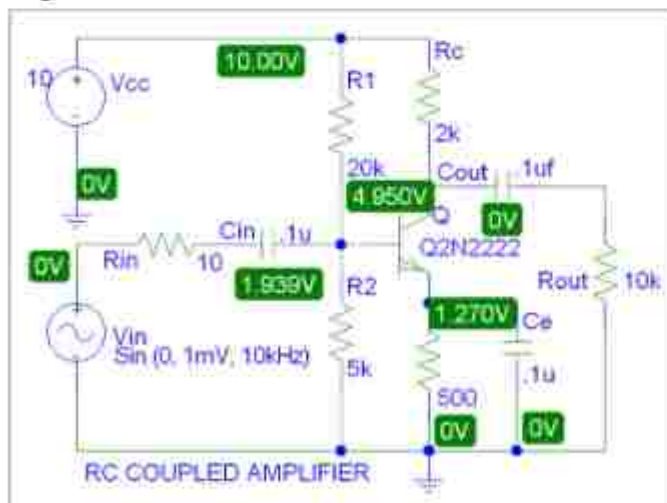
### II. SIMULATION

Electronic simulation of circuit function is now a common practice in the design of individual circuit and the complete systems. The most of the circuit designer can simulate, and design the circuit and develop it as early as they can and hence in market [4]. Spice software models for common circuit elements, active as well as passive, and it is capable of simulating most electronic circuits. It is versatile programmed and is widely used both in Industries

and Universities. [5]. The circuit performance and its reliability in any circuits for to minimize the failure can be tested. To meet the required standard of the circuits and hence quality instruments, the circuit analysis is performed. In case of any failure or problem on can easily redesign it by modifying the very same circuit in a few minutes using highly sophisticated simulation tools [6].

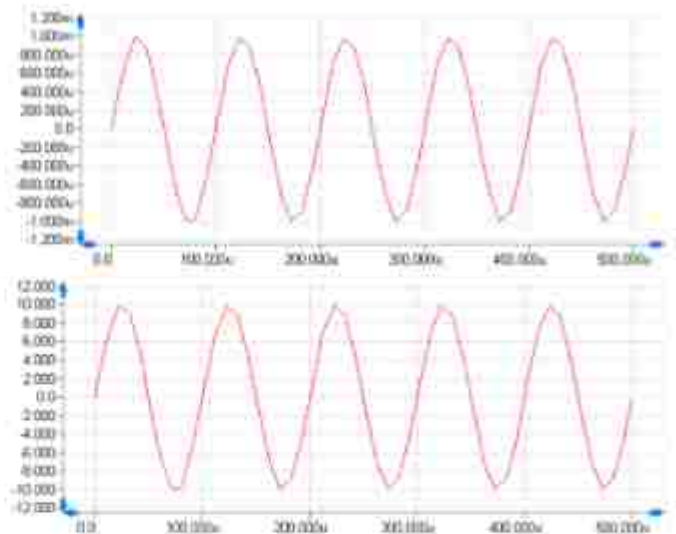
The role of spice software's is very vital in all fields of engineering and industries for the design and built the electronic circuits. Today many groups around the world are investigating advanced software capable of responding a wide verity of components. Recent years have witnessed the excellent progress in the field of spice software. These improve the ability of users to integrate different types of electronic circuits in to their systems or applications. The spice software would have more capability to design and built electronic circuits in wider range of applications.

In case of classroom / laboratories study teaching the spice, experiments will be tried for example in the design of RC coupled amplifier. Here various software's can be come to our reuse and the effect can be easily demonstrated by changing various capacitors so also can be done in case of other circuits of amplifiers and oscillators even for modulation studies.

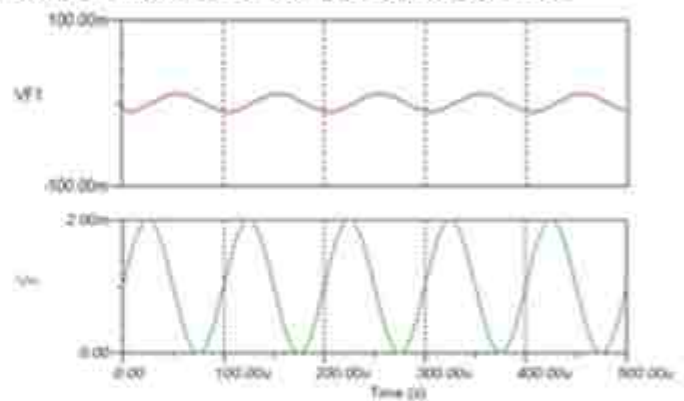


Circuit diagram of the RC coupled amplifier

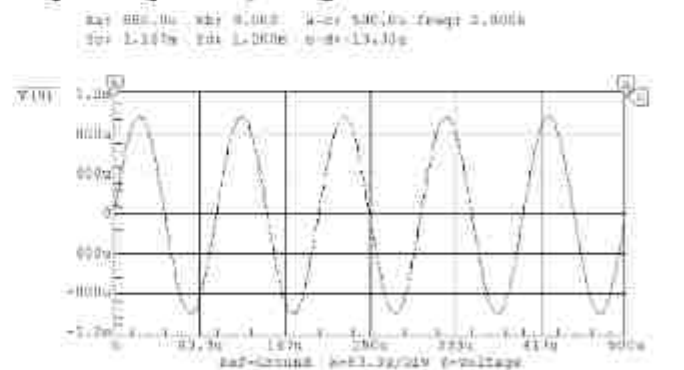
### III. GRAPHICAL OUTPUTS

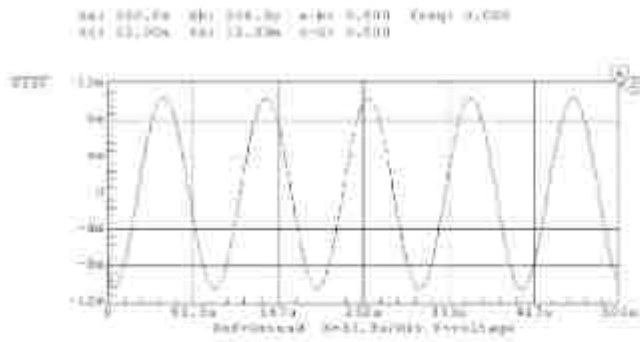


The fig shows input and output signals of the RC coupled amplifier by using B2 Spice Software.



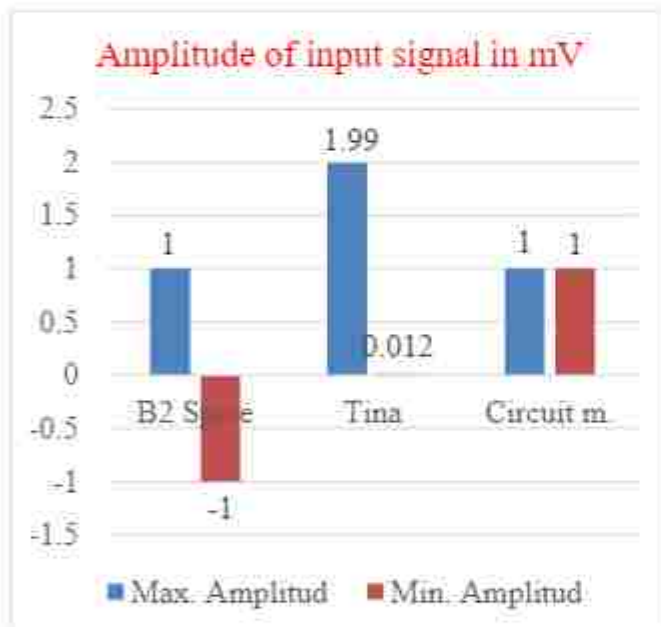
The fig shows input and output signals of the RC coupled amplifier by using TINA Software.



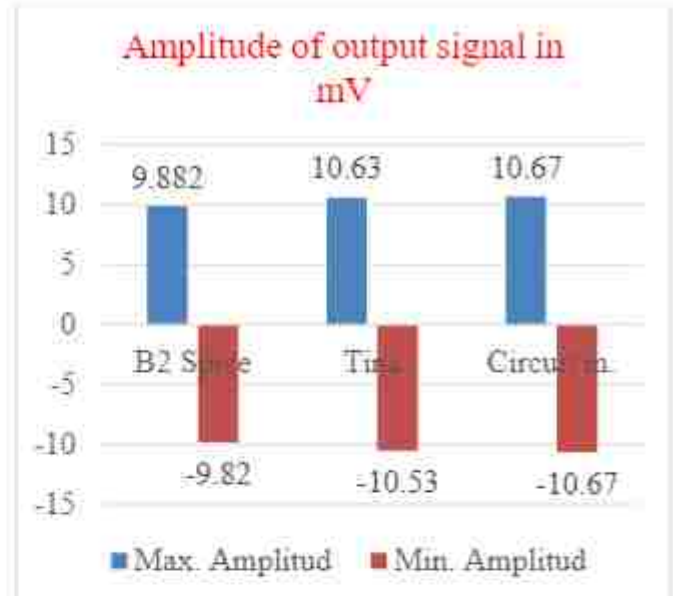


The fig shows input and output signals of the RC coupled amplifier by using Circuit Maker Software.

Software	Amplitude of input signal	
	Max. Amplitude	Min. Amplitude
B2 Spice	1 mV	-1 mV
Tina	1.99 mV	0.012 mV
Circuit m.	1 mV	1 mV



Software	Output Signal Amplitude	
	Max. Amplitude	Min. Amplitude
B2 Spice	9.882 mV	-9.82 mV
Tina	10.63 mV	-10.53 mV
Circuit m.	10.67 mV	-10.67 mV



Spice helps to determine which components are overstressed using Smoke analyses or observed yields using Monte Carlo analysis are help to prevent board failures. Advanced simulation performance technology save time, improves reliability, and speeds convergence on larger designs.

#### IV. CONCLUSION

When we built the RC coupled amplifier circuit of same configuration in B2 Spice, TINA and Circuit Maker software's we observed the above results. These are very close to the actual built of circuit results. But in TINA and Circuit Maker, We can't observe the proper input signal wave. Means these software's are useful for to build and design the number of electronic circuits for the human welfare, are the time sever as well useful for the virtual education in pandemics condition and fulfils the anytime anywhere lab requirements.

#### V. REFERENCES

- [1]. PSpice Schematics, Evaluation Version9.1 [www.cadence.com](http://www.cadence.com)
- [2]. TopSPICE/Win32 version 7.16c by panzer development. [www.penzar.com](http://www.penzar.com)

- [3]. B2 Spice A/D 5.2.3, Beige Bag Software  
[www.beigebag.com](http://www.beigebag.com) [info@beigebag.com](mailto:info@beigebag.com)
- [4]. TINATM for Windows, The Complete Electronics Lab version 6.00.008SFS.
- [5]. CircuitMaker V6.2C Protel Technology, Inc.  
5252N Edgewood Dr Ste175 Provo UT84604 USA.
- [6]. Muhammad H. Rashid, Introduction to PSpice Using OrCAD for circuits and electronics. Prentice hall of India private limited, New Delhi – 110 001, 2006.
- [7]. "Comparative study of different spice software's using astable multivibrator in different spice software's", Sanjay K. Tupe, Sayyad S.B. and S.H. Behare. International Journal of Recent Trends in Engineering, CEE NOV 2009.
- [8]. Maheshwari L. K. and Anand M.M.S., Laboratory Experiments and PSPICE Simulation's in Analog Electronics., Prentice Hall of India Pvt. Ltd., New Delhi, (2007).
- [9]. <http://www.ecircuitcenter.com/AboutSPICE.htm>.
- [10]. Operational Amplifier - G. B. Clayton
- [11]. Principles of Electronics - V. K. Mehta
- [12]. Electronic Principles - A. P. Malvino
- [13]. Comparative study of various circuit simulation software's", A.V.Mancharkar, S.K. Tupe, A.S. Jadhav, J.B. Patwardhan and S.H. Behare. 95th Indian Science Congress, Jan 2008, Andhra University, Visakhapatnam.
- [14]. "Comparative study of various circuit simulation software's by using triangular waveform generator circuit", S.K. Tupe, B. Deshmukh, and A.V. Mancharkar. Presented 97th Indian Science Congress, Jan 2010, to be held at Thiruanantpurum.
- [15]. RC Coupled Amplifier htm.

## Why Simulate?

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### ABSTRACT

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This paper addresses why simulation is necessary and various types of circuit analysis. Traditionally electronic circuit design was verified by building prototypes, subjecting the circuits to various stimuli and measuring its response using appropriate laboratory equipment's. It is time consuming, instead of this if we use various SPICE software's, we can perform the number of analysis of the same circuit virtually. Virtual results are very close to the actually build circuits. It gives new ideas that could lead to improve the circuit performance.

**Keywords:** - SPICE, Circuit Analysis, Virtual Components

## I. INTRODUCTION

SPICE is a great tool to learn a lot in a short time. Also, busy lives and limited budgets can make experimenting with real parts and expensive equipment nearly impossible. What may take you an hour to wire up in the lab to get a minor concept could be covered in a few minutes with SPICE. For example, how does an amplifier's gain vary with bandwidth? Before the circuit parts were even collected, you can get hands on experience with the gain-bandwidth tradeoff. While text and equations tell you the story, a simulation can clarify the concept and drive it home.

It's true getting a circuit to work as you envisioned can be fun and satisfying. Trying one more RC combination can be addicting as you optimize a circuit. Simulation gives you an open-ended sense of play, a set of circuit blocks ready to be combined in

some interesting or useful way. There's a challenge in creating a SPICE model for an electrical or non-electrical component in your system. It's easy to get lost in a circuit adventure. What better way to learn the art and develop a passion for circuit design?

Measuring some circuit voltages and currents can appear like a mission impossible. Here are some difficulties simulation can avoid. Some measuring equipment may load your circuit producing misleading results. Other measurements may require special test equipment you don't have or can't afford. Still others may be dangerous (high voltage or current measurements) or may inadvertently destroy the real circuit. [1,2,3,4,5]

## II. TYPES OF ANALYSIS

**DC Analysis:** -The dc analysis portion of SPICE determines the dc operating point of the circuit with



inductors shorted and capacitors opened. The dc analysis options are specified on the .DC, .TF, and .OP control lines. A dc analysis is automatically performed prior to a transient analysis to determine the transient initial conditions, and prior to an ac small-signal analysis to determine the linearized, small-signal models for nonlinear devices. If requested, the dc small-signal value of a transfer function, input resistance, and output resistance is also computed as a part of the dc solution. The dc analysis can also be used to generate dc transfer curves: a specified independent voltage or current source is stepped over a user-specified range and the dc output variables are stored for each sequential source value.

**AC Small-Signal Analysis:** -The ac small-signal portion of SPICE computes the ac output variables as a function of frequency. The program first computes the dc operating point of the circuit and determines linearized, small-signal models for all of the nonlinear devices in the circuit. The resultant linear circuit is then analyzed over a user-specified range of frequencies. The desired output of an ac small-signal analysis is usually a transfer function. If the circuit has only one ac input, it is convenient to set that input to unity and zero phase, so that output variables have the same value as the transfer function of the output variable with respect to the input.

**Transient Analysis:** -The transient analysis portion of SPICE computes the transient output variables as a function of time over a user-specified time interval. The initial conditions are automatically determined by a dc analysis. All sources which are not time dependent (for example, power supplies) are set to their dc value. The transient time interval is specified on a .TRAN control line.

**Pole-Zero Analysis:** -The pole-zero analysis portion of SPICE computes the poles and/or zeros in the small-signal ac transfer function. The program first computes the dc operating point and then determines

the linearized, small-signal models for all the nonlinear devices in the circuit. This circuit is then used to find the poles and zeros of the transfer function.

Two types of transfer functions are allowed: one of the form (output voltage)/(input voltage) and the other of the form (output voltage)/(input current). These two types of transfer functions cover all the cases and one can find the poles/zeros of functions like input/output impedance and voltage gain. The input and output ports are specified as two pairs of nodes. The pole-zero analysis works with resistors, capacitors, inductors, linear-controlled sources, independent sources, BJTs, MOSFETs, JFETs and diodes. Transmission lines are not supported. The method used in the analysis is a sub-optimal numerical search.

**Small-Signal Distortion Analysis:** -The distortion analysis portion of SPICE computes steady-state harmonic and intermodulation products for small input signal magnitudes. If signals of a single frequency are specified as the input to the circuit, the complex values of the second and third harmonics are determined at every point in the circuit. If there are signals of two frequencies input to the circuit, the analysis finds out the complex values of the circuit variables at the sum and difference of the input frequencies, and at the difference of the smaller frequency from the second harmonic of the larger frequency.

Distortion analysis is supported for the following nonlinear devices: diodes (DIO), BJT, JFET, MOSFETs (levels 1, 2, 3, 4/BSIM1, 5/BSIM2, and 6) and MESFETS. All linear devices are automatically supported by distortion analysis. If there are switches present in the circuit, the analysis continues to be accurate provided the switches do not change state under the small excitations used for distortion calculations.

**Sensitivity Analysis:** -Spice will calculate either the DC operating-point sensitivity or the AC small-signal sensitivity of an output variable with respect to all circuit variables, including model parameters. Spice calculates the difference in an output variable by perturbing each parameter of each device independently. Since the method is a numerical approximation, the results may demonstrate second order effects in highly sensitive parameters, or may fail to show very low but non-zero sensitivity. Further, since each variable is perturbed by a small fraction of its value, zero-valued parameters are not analyzed.

**Noise Analysis:** -The noise analysis portion of SPICE does analysis device-generated noise for the given circuit. When provided with an input source and an output port, the analysis calculates the noise contributions of each device (and each noise generator within the device) to the output port voltage. It also calculates the input noise to the circuit, equivalent to the output noise referred to the specified input source. This is done for every frequency point in a specified range. The calculated value of the noise corresponds to the spectral density of the circuit variable viewed as a stationary Gaussian stochastic process.

After calculating the spectral densities, noise analysis integrates these values over the specified frequency range to arrive at the total noise voltage/current (over this frequency range). This calculated value corresponds to the variance of the circuit variable viewed as a stationary Gaussian process. [6, 7, 8, 9, 10, 11]

### III. CONCLUSION

The sky is the limit with electronic devices and topologies. You can start with some high-level functional blocks. As the design takes shape, fill in the details with components until Presto. Your creative

synthesis has given birth to a circuit ready for actual prototype and further verification.

**Note:** -Now a day due to Covid -19 Pandemic condition education field is totally affected in comparison with other fields. So simulation is necessary for to give the realistic experience to the students. For this teachers should be techno friendly and sufficient technical infrastructure should be available.

### IV. REFERENCES

- [1]. Mancharkar A. V. Ph.D. Thesis, Development, comparison and simulation studies of universal sensor interface, December 2005.
- [2]. Attia, John Okyere, PSPICE and MATLAB for Electronics: An Integrated Approach, Boca Raton, FL: CRC Press, 2002.
- [3]. Roy W. Goody, OrCAD PSpice for windows Volume I: DC and AC Circuits, 3d ed. Upper Saddle River, New Jersey: Prentice Hall, 2000.
- [4]. Roy W. Goody, OrCAD PSpice for windows Volume II: Devices, Circuit and Operational Amplifiers, 3d ed. Upper Saddle River, New Jersey: Prentice Hall, 2000.
- [5]. Mark E. Herniter, Schematic Capture with Cadence PSpice, Upper Saddle River, New Jersey, Prentice Hall, 2001.
- [6]. Muhammad H. Rashid, Introduction to PSpice Using OrCAD for Circuits and Electronics, third edition, Prentice -Hall of India Private Limited, New Delhi-110 001, 2006.
- [7]. Lavagno, Martin, Scheffer, Electronic Design Automation For Integrated Circuits Handbook, ISBN 0-8493-3096-3, 2006.
- [8]. Dirk Jansen., Kluwer, The Electronic Design Automation Handbook, Academic Publishers, ISBN 1-4020-7502-2, 2003.
- [9]. M. H. Rashid, "SPICE For Circuit And Electronics Using PSPICE", Prentice Hall of India, second Edition, 2004.

- [10]. R. M. Kielokwski, "Inside SIPCE overcoming the obstacles of circuit simulation", McGraw Hill, Inc, 1994.
- [11]. A. K. Walung, A. V. Mancharkar and A. D. Shaligram, "PSPICE Simulation performance and Relability testing of sensor signal conditioning circuits", Journal of Instruments Society of India, vol. 30(2)65, 2000.

## Study of Voltage Regulator Using B2 Spice, Tina & Circuit Maker

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### ABSTRACT

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This paper addresses the study of voltage regulator using PSPICE and TOP SPICE. Spice stands for "The Simulation Programme for Integrated Circuit Emphasis". Traditionally electronic circuit design was verified by building prototypes, subjecting the circuits to various stimuli and measuring its response using appropriate laboratory equipment's. It is time consuming, instead of this if we use various SPICE software's, we can perform the number of analyses of the same circuit virtually. Virtual results are very close to the actually build circuits. It gives new ideas that could lead to improve the circuit performance. As well gives idea about the configuration of electronic components. It saves the time for to develop the proper circuit design for the special purpose.

**Keywords:** - Prototype, Spice, Virtual design

### I. INTRODUCTION

SPICE is a great tool to learn a lot in a short time. Also, busy lives and limited budgets can make experimenting with real parts and expensive equipment nearly impossible. What may take you an hour to wire up in the lab to get a minor concept could be covered in a few minutes with SPICE. For example, how does an amplifier's gain vary with bandwidth? Before the circuit parts were even collected, you can get hands on experience with the gain-bandwidth trade off. While text and equations tell you the story, a simulation can clarify the concept and drive it home.

Electronic circuit and systems need a stable dc voltage for their intended operation. The required dc voltage

is usually obtained by converting the mains ac voltage into a dc voltage. After a suitable step-up or step-down transformation, the ac voltage is rectified and filtered resulting in to a dc voltage. However, the dc voltage thus obtained does not remain constant with increasing load current, variations in mains voltage and changes in the ambient temperature. The filtered output is therefore applied a voltage regulator which provides a stable dc voltage at its output.

The lack of regulation of the dc output voltage may lead to distorted output, frequency shift in an oscillator or change of calibration in measuring instruments. Therefore voltage regulator forms an important component in an electronic power supply. The DC voltage regulator using op-amp is studied with following circuit diagram.

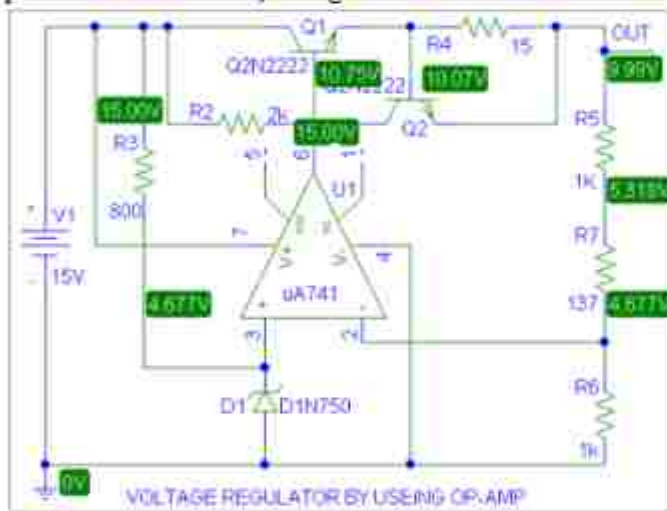
## II. EXPERIMENTAL WORK

In this study we have choose the one circuit of voltage regulator. Same circuit is built in the worksheet or windows of PSPICE and TOP SPICE with same configuration of electronic components as well the inputs and observed the outputs by simulating these. The regulated output voltage  $V_o$  is given by

$$V_o = (1 + \frac{R_f}{R_l}) V_z$$

Where  $R_f = R_5 + R_7$  and  $R_l = R_6$

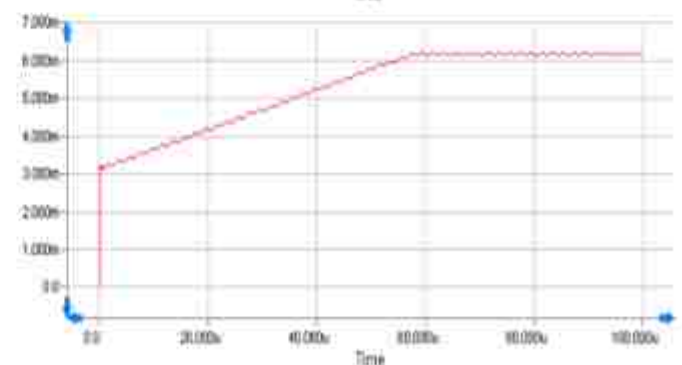
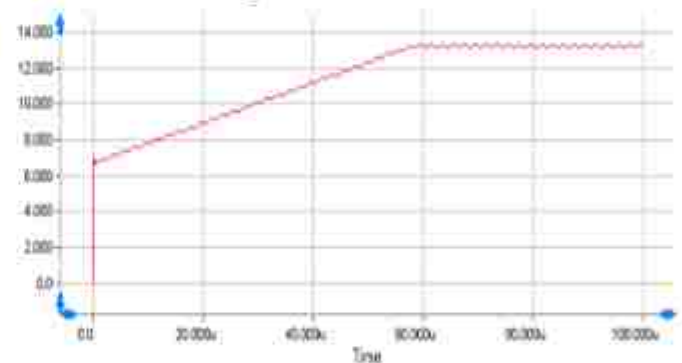
In the simple operational regulator by using a pass transistor Q1 as shown in following figure, the load current can be increased by a factor of 100 as the op-amp will required supply only the base current of Q1. The voltage can be adjusted by varying the potentiometer i.e. adjusting the values of  $R_x$



A). The Following Graphs Shows the Output of Voltage Regulator in B2 SPICETINA & CIRCUIT MAKERS Software:

- The output starts at 0 Sec.
- At 0 Sec the output potential is 7.02V.
- As the time increases the output potential increase.
- At 57.496 $\mu$ sec, we get the regular output 13.309V.
- After 57.496 $\mu$ sec, we get the regular output, which varies between 13.326V to 13.139V.
- We get the variation in output voltage is about 0.187V.

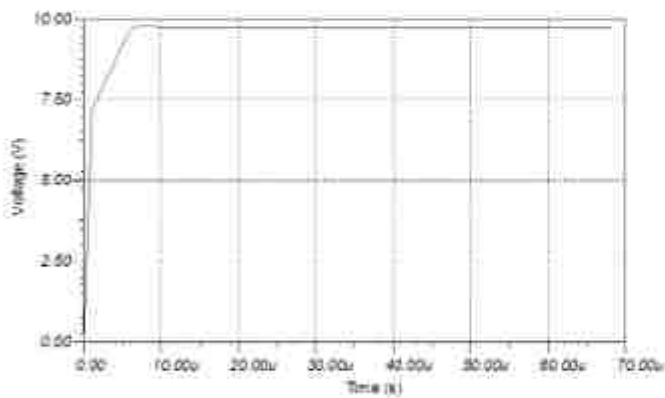
- The output current is 6.206mA.
- We get the variation in output current is about 0.006mA.
- For this, the values of R7 and R5 are 137 Ohm and 1000 Ohm respectively.
- This software does not respond for the change in the values of the R7 and R5.
- Under the same conditions in all circuits in this software, we get out put 13.326 V.
- For to get the regular output it takes the period 60  $\mu$ s.
- in this circuit there is no maximum impact of R7 and R5 on the output when we change the potential of the battery to 11 V, we get the regulated output varies between 10.03 V and 10.011V.
- In this software, we get the maximum fluctuations up to 669.139  $\mu$ Sec for the current.
- We get the variation in the output up to 1.121msec and after that we get the regulated output potential up to 13.235V. in regular output varies between 13.253V to 13.252V. That is the variation in output is 0.001V.



The above graph is the output of voltage regulator using B2 SPICE

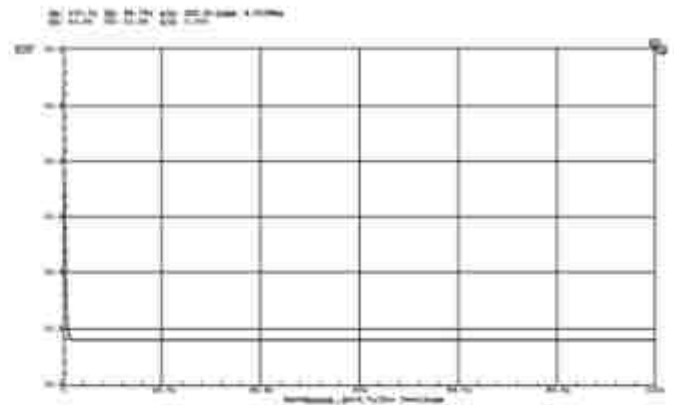
**B]. The Following Graphs Shows the Output of Voltage Regulator in TINA & CIRCUIT MAKER Software:**

- The output starts at 306.35nSec.
- At 306.35nSec the output potential is 2.2V.
- As the time increases the output potential increase.
- At 8.12 μsec, we get the regular output 9.78V.
- After 8.12 μsec, we get the regular output 9.76V.
- For this, the values of R7 and R5 are 137 Ohm and 1000 Ohm respectively.
- This software does not respond for the change in the values of the R7 and R5.
- For to get the 10V regular power supply it requires Rf 1190 Ohm and Ri 1000 Ohm.
- 15 V 1190 Ohm 10 V
- 15.5V 1190 Ohm 10.03V
- 16.5 V 1190 Ohm 10.09 V
- In this software, we cannot observe the variations in the output.



The above graph is the output of voltage regulator using TINA

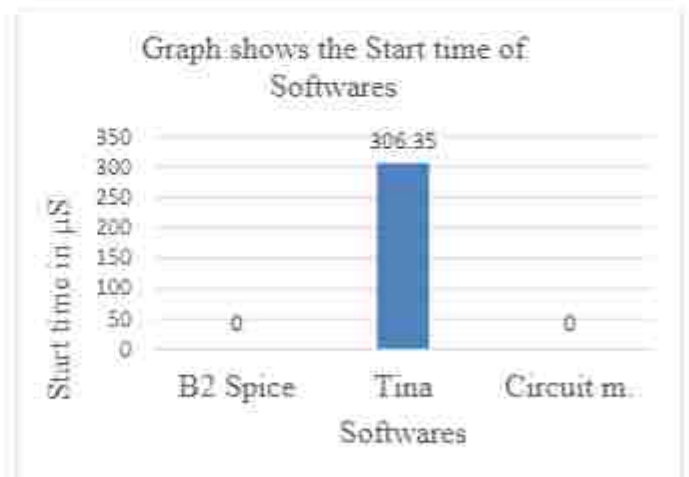
**C]. The Following Graphs Shows the Output of Voltage Regulator in CIRCUIT MAKER Software:**



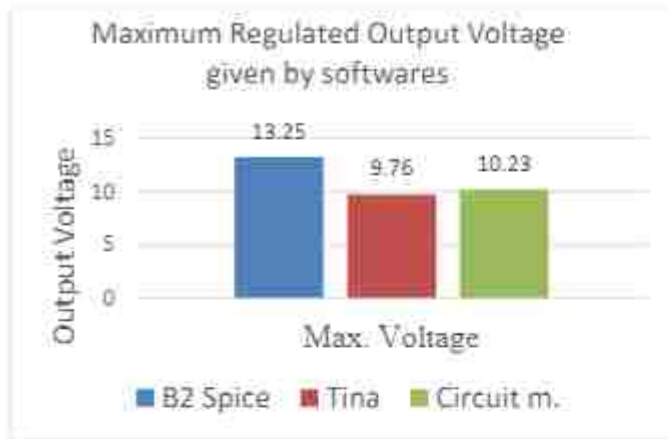
The above graph is the output of voltage regulator using CIRCUIT MAKER

- Under the same conditions in all circuits in this software, we get out put 10.23 V.
- For to get the regular output of 10 V takes the period 1.67μs.and requires a Rf 1089 ohm.
- this software is most sensitive for the change in the values of the resistances.
- In this software we get the maximum fluctuations up to .9 μS.

Software	Start Time in μS
B2 Spice	0
Tina	306.35
Circuit m.	0



Software	Max. Voltage
B2 Spice	13.25
Tina	9.76
Circuit m.	10.23



### III. CONCLUSION

The output regulated voltage given by B2 Software is maximum i.e. 13.25 volt. It is maximum voltage output but there are negligible variations. The Tina gives the 9.76 volt non fluctuated output. The Circuit Maker gives the 10.23 volt non fluctuated output.

### IV. REFERENCES

- [1]. PSpice Schematics, Evaluation Version 9.1 [www.cadence.com](http://www.cadence.com)
- [2]. TopSPICE/Win32 version 7.16c by penzar development. [www.penzar.com](http://www.penzar.com)
- [3]. B2 Spice A/D 5.2.3, Beige Bag Software [www.beigebage.com](http://www.beigebage.com) [info@beigebage.com](mailto:info@beigebage.com)
- [4]. TINATM for Windows, The Complete Electronics Lab version 6.00.008SFS.
- [5]. CircuitMaker V6.2C Protel Technology, Inc. 5252N Edgewood Dr Ste175 Provo UT84604 USA.
- [6]. Muhammad H. Rashid, Introduction to PSpice Using OrCAD for circuits and electronics. Prentice hall of India private limited, New Delhi – 110 001, 2006.
- [7]. "Comparative study of different spice software's using astable multivibrator in different spice software's", Sanjay .K. Tupe, Sayyad S.B. and S.H. Behere. International Journal of Recent Trends in Engineering, CEE NOV 2009.
- [8]. Maheshwari L. K. and Anand M.M.S., Laboratory Experiments and PSPICE Simulation's in Analog Electronics., Prentice Hall of India Pvt. Ltd., New Delhi, (2007).
- [9]. <http://www.ecircuitcenter.com/About/SPICE.htm>.
- [10]. Operational Amplifier - G. B. Clayton
- [11]. Operational Amplifier and Linear Integrated Circuits - R. A. Gaikwad
- [12]. Principles of Electronics - V. K. Mehta
- [13]. Electronic Principles - A. P. Malvino
- [14]. Comparative study of various circuit simulation software's", A.V. Mancharkar, S.K. Tupe, A.S. Jadhav, J.B. Patwardhan and S.H. Behere. 95th Indian Science Congress, Jan 2008, Andhra University, Visakhapatnam.
- [15]. "Comparative study of various circuit simulation software's by using triangular waveform generator circuit", S.K. Tupe, B. Deshmukh, and A.V. Mancharkar. Presented 97th Indian Science Congress, Jan 2010, to be held at Tiruanantpuram.



## STUDY OF RC COUPLED AMPLIFIER USING PSpice AND TOP Spice

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### ABSTRACT:

This paper addresses the performance of RC coupled amplifier using PSpice and Top Spice electronic circuit simulation software's. Traditionally electronic circuit design was verified by building prototypes, subjecting the circuit to the various stimuli and then measuring its response using appropriate laboratory equipment's. Prototype building is somewhat time consuming. But produces practical experience from which we judge the manufacturability of the design. Computer programs that simulate the performance of an electronic circuit provide a simple cost-effective means of confirming the intended operation prior to circuit construction and verifying new ideas that could led to improve the circuit performance.

**Keywords:** - RC Coupled amplifier, Amplification, Transient Analysis, Simulation.

### INTRODUCTION:

The evolution of electronics technology almost in to every facet because of low cost, reliability and ease of interface [1]. The electronic industry is getting progressively more and more efficiently more at new products in wide range and verity of circuits in service of human being. We also saw the more and more products coming in to the market in shorter time [2]. Hence low-cost circuit design, with an accurate, linear and faster testing techniques are addressed. A verity of electronic components PSpice commercially available which plays an important role in design development of accurate circuit design performance and optimum reliability [3].

### SIMULATION:

Electronic simulation of circuit function is now a common practice in the design of individual circuit and the complete systems. The most of the circuit designer can simulate, and design

the circuit and develop it as early as they can and hence in market [4]. Spice software models for common circuit elements, active as well as passive, and it is capable of simulating most electronic circuits. It is versatile programmed and is widely used both in Industries and Universities. [5]. The circuit performance and its reliability in any circuits for to minimize the failure can be tested. To meet the required standard of the circuits and hence quality instruments, the circuit analysis is performed. In case of any failure or problem on can easily redesign it by modifying the very same circuit in a few minutes using highly eophisticated simulation tools [6].

The role of spice software's is very vital in all fields of engineering and industries for the design and built the electronic circuits. Today many groups around the world are investigating advanced software capable of responding a wide verity of components. Recent years have witnessed the excellent



progress in the field of spice software. These improve the ability of users to integrate different types of electronic circuits in to their systems or applications. The spice software would have more capability to design and built electronic circuits in wider range of applications.

**Theory of RC coupled amplifier:** - A transistor amplifier is designed to work in the active region. A single stage amplifier is designed using voltage divider bias. In a voltage divider bias

$$V_B = V_{CC} \frac{R_2}{R_1 + R_2}$$

Applying Kirchhoff's Voltage Law for the output side of amplifier

$$V_{CC} = I_C R_C + V_{CE} + I_E R_E$$

$$I_E \cong I_C$$

$$R_C = \frac{V_{CC} - V_{CE} - V_E}{I_C}$$

$$V_E = I_E R_E \cong I_C R_E \quad \therefore R_E = \frac{V_E}{I_E}$$

**Design of R1, R2, f & CE**

For a fluctuation in  $I_{B1}$  and  $I_{B2}$  there will be small change in  $I_E$ . For example, if  $I_{B1} = 21 I_E$  and a 5% change in  $I_{B1}$  occurs there will be only  $\frac{5}{21}$  % change in  $I_E$ . Therefore, the circuit will be stable against small changes in  $R_1$  and  $R_2$  due to temperature or tolerance.  $R_2 \leq \frac{\beta R_E}{10}$

$$V_B = V_{BE} + V_E \quad \therefore$$

$$R_2 = \frac{\beta R_E}{10}$$

$$V_B (R_1 + R_2) = V_{CC} R_2$$

$$R_1 = V_{CC} \frac{R_2}{V_B} - R_2$$

The coupling capacitor  $C_m$  along with resistance combinations shown in fig forms a high pass filter whose cut-off frequency,  $f = \frac{1}{2\pi RC} \quad \therefore C_E = \frac{1}{2\pi R_E f_c}$

Some tolerances have been made in order to obtain standard values of components. All capacitors are designed to obtain a fair frequency response curve.

**Transient Analysis:**

In Transient Analysis, we perform the simulation of the circuit and analyze the output voltage with respect to time. For this maximum simulation time and the time limit are set in the corresponding parameters window. Then simulation is performed with 'Display Waveform' option enabled. The output of the amplifier is viewed in the Waveform viewer. The user also has the provision to simulate with print and plot outputs.[7]

**CONCLUSION:**

When we built the RC coupled amplifier circuit of same configuration in PSpice & Top Spice software's we observed the above results. These are very close to the actual built of circuit results. Means these software's are useful for to build and design the number of electronic circuits for the human welfare, are the time sever as well useful for the virtual education in pandemics condition and fulfils the anytime anywhere lab requirements.

**REFERENCES:**

P. Spice Schematics, Evaluation Version9.1  
[www.cadence.com](http://www.cadence.com)

Top SPICE/Win32 version 7.16c by panzer development. www.penzar.com

Muhammad H. Rashid, Introduction to PSpice Using OrCAD for circuits and electronics. Prentice hall of India private limited, New Delhi – 110 001, 2006.

"Comparative study of different spice software's using a stable multivibrator in different spice software's", Sanjay K. Tupe, Sayyad S.B. and S.H. Behare. International Journal of Recent Trends in Engineering, CEE NOV 2009.

Maheshwari L. K. and Anand M.M.S., Laboratory Experiments and PSPICE Simulation's in Analog Electronics, Prentice Hall of India Pvt. Ltd., New Delhi, (2007).

<http://www.ecircuitcenter.com/About/SPICE.htm>.

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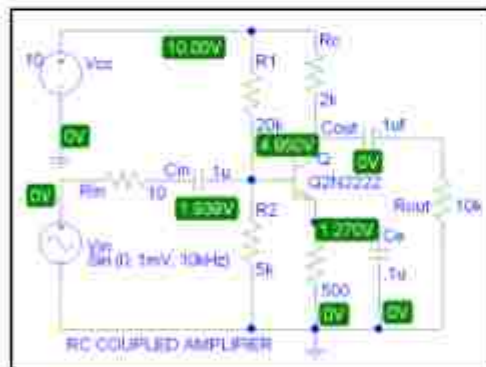
Principles of Electronics - V. K. Mehta

Electronic Principles - A. P. Malvino

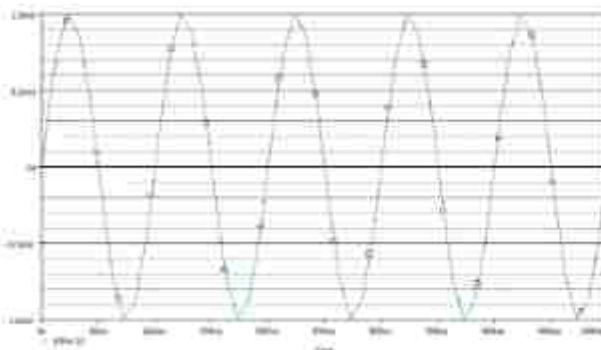
Comparative study of various circuit simulation software's", A.V. Mancharkar, S. K. Tupe, A.S. Jadhav, J.B. Patwardhan and S.H. Behare. 95<sup>th</sup> Indian Science Congress, Jan 2008, Andhra University, Visakhapatnam.

"Comparative study of various circuit simulation software's by using triangular waveform generator circuit", S. K. Tupe, B. Deshmukh, and A.V. Mancharkar. Presented 97<sup>th</sup> Indian Science Congress, Jan 2010, to be held at Thiruanantapuram.

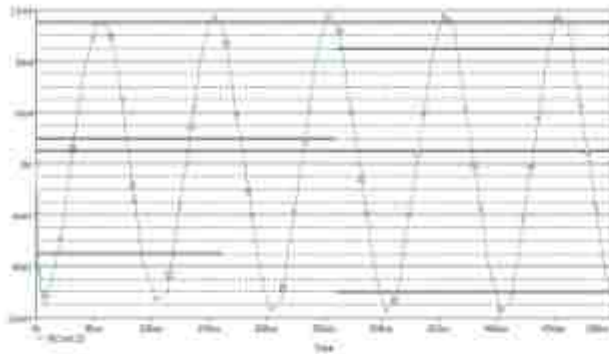
RC Coupled Amplifier htm.



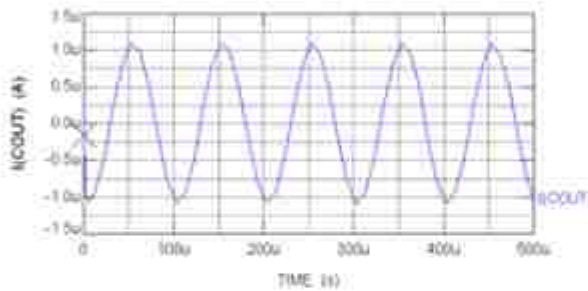
Circuit diagram of the RC coupled amplifier



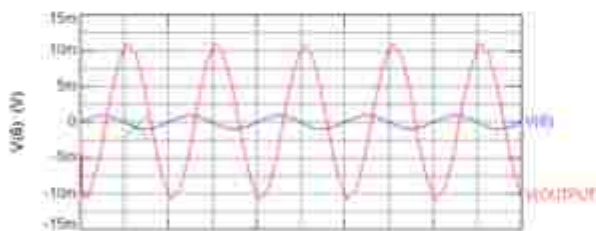
Input signal given to the RC coupled amplifier has amplitude 1 mV. [PSpice Software]



Output signal given to the RC coupled amplifier has amplitude 1 mV. [P Spice Software]



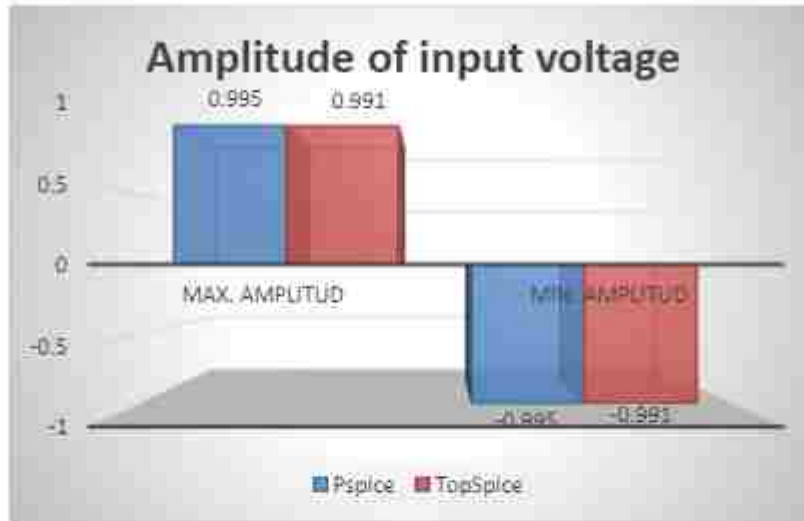
Output signal current given by the RC coupled amplifier has amplitude 12 µA. [Top Spice]



Input signal has the amplitude 0.991 mV, Output signal given to the RC coupled amplifier has amplitude 11.071mV. [Top Spice]

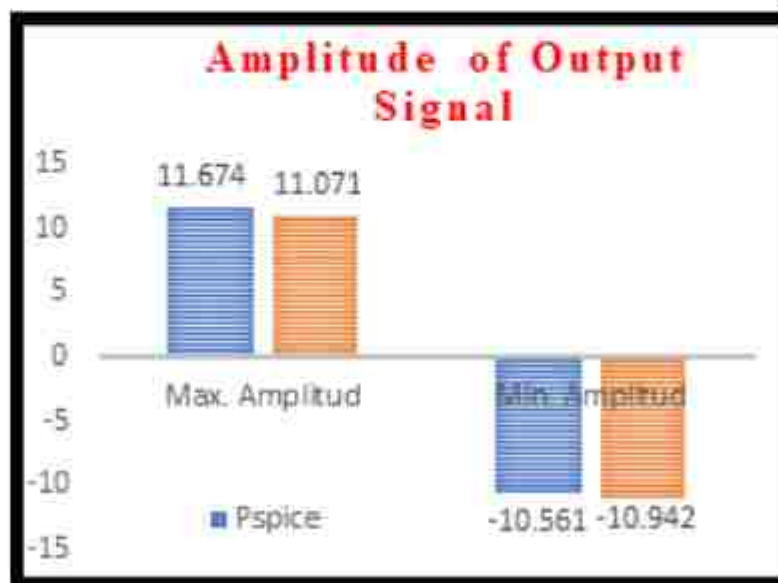
The following table shows the maximum and minimum input signal amplitudes in mV

Software	Amplitude of the input signal	
	Max. amplitude	Min. Amplitude
P Spice	0.995 mV	-0.995 mV
Top Spice	0.991 mV	-0.991 mV



The following table shows the maximum and minimum signal amplitudes in mV

Software	Amplitude of output signals	
	Max. Amplitude	Min. Amplitude
Pspice	11.674 mV	-10.561 mV
Top Spice	11.071 mV	-10.942 mV



## Accident Alert System

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**Abstract-** The rapid rise of technology and infrastructure has made our lives easy. In the high demand of automobiles has also increased the traffic hazards and road accidents. life of the people is under high risk. In India there is very high rate of accidental death rate due to lack of medical help. There is also we observed the deficiency of alertness of accidents to the respective accident care departments / relatives. Our project (Idea) give proper information to the Owner, Relatives, Police Station, Nearest Government Hospital, Ambulance to save the life of Injured Persons in accident.

**Keywords-** Accident Alert System.

**Introduction-** We have collected some data from various resources which gives us the fearfulness regarding with accidents. Numbers in the following tables are really horror. We observe day by day the number of accidents is increasing. In the same lot of peoples lost their souls. Some are gating permanent disability. But if we can alert the proper lifesaving systems, we can decrease the death as well as permanent disabilities. In India the number of peoples martyrized on border till date are comparatively to much less than the peoples died or disabled in the accidents of one year Following data gives us the terrible information about the Accidents.<sup>1</sup>

Parameter	2016	2017	% Change
No. of Road Accidents	480652	464910	-3.3
No. of Deaths	150785	147913	-1.9
No. of Persons Injured	494624	470975	-4.8

**No. of Deaths in Accidents across India<sup>2</sup>**

Year	No. of Deaths
2018	151420
2017	147910
2016	150790
2015	146130
2014	139670
2013	137570
2012	138260
2011	142490
2010	134510
2009	125660

1. In India there are number of peoples dies due to unavailability of Emergency Medical Help when they meet an accident.
2. 377 people dies every day
3. 20 Children under Age of 14 dies per day
4. 400 fatalities and 411 peoples die per day
5. Altogether 30,084 Accidents were reported in Maharashtra Between January and November 2019. In which 11,387 people were killed and 26,428 others Injured.
6. In 2016 reported Accidents 4,80,652 and in it 1,36,071 Fatal Accidents.
7. In Most of the Accidents peoples were killed due to they don't get Emergency Medical Help.
8. In some cases, injured people get help but it's too late
9. To Overcome such cases, we have made one of the Alert System. It alerts Ambulance, Police Station and also to the responsible person regarding with that Vehicle.
10. This system gives very instant Calling / Messaging to Ambulance, Police station or other family Member within 10 to 15 seconds.
11. When any Four-Wheeler or Two-Wheeler Vehicle meets with serious accident, then this Device or System gives instant messaging or calling to Ambulance, Nearest Police Station and any family member by which, those peoples injured during accident, gets instant Emergency Medical Help.
12. In some Cases, accidents happened in out of cities area or out from any kind of Facilities. So, such cases This system is Helpful to giving medical help.

**Work out: - The idea / system (We have actually run this system by using the mobile in vehicle, demo purpose)**

For to develop this system we can use the various types of sensors their output is given to the microcontroller system. As the Collision takes place with in fraction of second this system activates and message / calls to the above-mentioned agencies. There are two modes of operation 1. Running / stopping mode: - there are the various possibilities of accidents number of times two or more than two vehicles are in running or one vehicle is stopped and other comes and dash / stroked it or due to fault in machine or the mistake of the driver / operator the vehicle collides with the road side obstacles or at the turn vehicle leaves the road and thrown in the valley / pond / well etc. 2. Traffic mode: - when vehicle is in traffic and traffic is blocked for sufficient time it will alerts to the nearest traffic controller agency. It helps to save the time. Different programs are given to the microcontroller chief (IC)

In all above possibilities the programs are given to the microcontroller chief for to alert the various rescue agencies. In the same programming location and nearest route should be activate. The mobile numbers of the above-mentioned agencies are given at the time of programming. After accident automatically these ringing and alert the respective rescue teams and relatives. This system reduces the time delay and victims get the help as early as possible so possibilities of to prevent the deaths or permanent disabilities increases.



**Conclusion-** Our system is helpful to reduce the death rate and permanent disabilities in accident.

**Reference –**

1. *International Journal of Applied Engineering research*. Ashutosh Gupta, A. K. Mishra Department of civil engineering MMMUT Gorakhpur India.



## IMPACT OF CLIMATE CHANGE AND GLOBAL HUNGER ISSUES

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### ABSTRACT:

Climate change has the potential to make life vulnerable on the earth and its impact is a matter of great concern among all countries of the world because Human race, in deficiency of food couldn't be able for healthy development. Extreme events, such as droughts and floods, are forecast to increase as climate change and global warming. Ranging from overnight floods to gradually worsening droughts, have a range of effects on the agricultural sector as well as the species of crops that various communities are able to grow. Climate change and Food Security goes hand in hand. The annual UN report found that climate variability affecting rainfall patterns and agricultural seasons, and climate extremes such as droughts and floods are among the key drivers behind the rise in hunger and economic slowdowns. Climate change attack crops with various diseases, affecting the quality and quantity of food production. Food insecurity exists when all people, at all times, do not have physical and economic access to the sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. New evidence continues to signal that the number of hungry people in the world is growing, reaching 821 million in 2017 or one in every nine people, according to The State of Food Security and Nutrition in the World 2018 released report. The alarming signs of increasing food insecurity and high levels of different forms of malnutrition are a clear warning that there is considerable work to be done to make sure that 'Everyone is secure and satisfied' on the road towards achieving the Sustainable Development goals on food security and improved nutrition.

**Key words:** -Climate Change and Agriculture, Food Security Solutions, Solutions for sustainable agriculture

### INTRODUCTION:

Today the greatest challenges to the food security are the growing world population, environmental degradation, limited natural resources and climatic change. In last decade irregular Climate change and extreme weather events with higher intensity and frequency are seriously affecting the agricultural sector and are creating serious instability in food production and farmers' livelihood. Changes in climate are affecting the production of major crops such as wheat, jawar, rice and maize, without strengthening environmental and climate issues, this is expected to worsen as

temperature is increasing and becoming more extreme.(1)

From last few reports it is evident that the prevalence and number of undernourished people is higher in countries exposed to highly sensitive to rainfall and temperature variability. Undernourishment is where a high proportion of the population depends on agricultural systems.(2) Temperature abnormalities over agricultural cropping areas continued to be higher in last decade i.e. 2011-2019, leading to more frequent droughts.

In 2018, the United Nations warned that because of climate change hunger around the world was a matter of great concern.(3) The

United Nations. Specifically reported that extreme weather events, land degradation and desertification, water scarcity and rising sea levels sabotage global efforts to eradicate hunger.(4) Since 1991s, the number of extreme climate-related disasters including extreme heat, droughts, floods, and storms, all of which harm agricultural productivity and contribute to food shortages, has been doubled. These shortages result in increases in food prices and income losses that reduce access to food for the affected population. In particular, droughts cause more than 80% of the total damage and losses in agriculture and if they are widespread enough they can contribute to national food shortages and thus prevalence of undernourishment.(4)

#### Global Hunger Index 2019

The report of GHI on 2018 found that 785 million people were suffering while 822 million were found affected with hunger. GHI highlights that among the 117 countries ranked, 47 countries are in 'serious' and 'alarming' hunger levels. India ranked 102 out of 117 countries in the GHI 2019 that is placed at much below to its South Asian neighbors such as Nepal, Bangladesh, Pakistan. The GHI report pointed out that "India is suffering from a serious hunger problem" the report highlights that climate crisis is bringing alarming levels of hunger in the world(5) Hunger has been on the rise over the past three years, returning to levels from a decade ago. This reversal in progress sends a clear warning that more must be done and urgently if the Sustainable Development Goal of Zero Hunger is to be achieved by 2030.

#### Key facts and figures of Global Hunger

- Number of hungry people in the world in 2017: 821 million or 1 in every 9 people; in Asia: 515 million
- Children under 5 affected by stunting (low height-for-age): 150.8 million (22.2%)
- Children under 5 affected by wasting (low weight-for-height): 50.5 million (7.5%)
- Children under 5 who are overweight (high weight-for-height): 38.3 million (5.6%)
- Percentage of women of reproductive age affected by anemia: 32.8%
- Percentage of infants aged below 6 months who were exclusively breastfed: 40.7%
- Adults who are obese: 672 million (13% or 1 in 8 adults).(6)

#### Climate Change and Food Security Solutions

To solve a problem of Global Hunger or Food Security the problem should be understood first; its severity, time frame and obstacles to develop proper strategies. The main problem is atmospheric pollution with several greenhouse emissions which also have to be addressed. Such as industrial age food production which is a large source of emissions. We know that Green Revolution has increased food production but at the same time it has affected environment a lot. But at the same time solution to loss of food security under climate change is first, solving the global climate change problem is also prior but it is not accepted yet so this should also be equally treated. The issue of loss of food production devoted to global warming is a **Global Climate Change Food Security**



**Emergency** Which is unrecognized and it has to be put forth.

#### **Genetically Modified Foods:**

GM crops are thoroughly evaluated for environmental effects before entering the marketplace. They are assessed by many stakeholders in accordance with principles developed by environmental experts around the world (7,8,9) Among those who conduct risk assessment procedures are the developers of GM crops, regulatory bodies, and academic scientists. GM traits can also help farmers produce crops that are more resistant to extreme weather conditions. In recent years, several extreme weather disasters around the world have significantly damaged regional crop production (10) reduced pesticide spraying (11) reduced the release of greenhouse gas emissions (12) They are herbicide tolerant (13)no-till cultivation practices (14)

#### **Green Revolution versus Sustainable Agriculture**

In the mid- and late-20th century a revolution occurred that dramatically changed the field of agriculture, and this revolution was known as the Green Revolution. Because of Green Revolution the productivity of global agriculture increased drastically. New Chemical advances were utilized during this time period as a result, high-yield crops were developed and introduced along with multiple-cropping. These new farming techniques and advances in agricultural technology were utilized by farmers all over the world, which intensified the results of the Green

Revolution (15) and made it possible to feed the growing human population. India began its own Green Revolution program of plant breeding, irrigation development and financing of agrochemicals. Today India is exporting food and this story is repeated by other nations. (16, 17)

#### **Organic Agriculture:**

In last few years Organic Agriculture has been stepped forward as one of the best practice for addressing Food productivity and Climate Change. Organic farming attributes to the phenomena of improving taste and nutritive value of produced food. Organic farming also has bundles of Ecological benefits (19, 20, 21) which are:

- **Exposure To Harmful Chemicals is Reduced**
- **Organic Farming Consumes Less Energy**
- **It helps in Reducing Nitrogen Run-Off Induced Pollution**
- **Facilitates Healthy Soil Formation and helps in Combating Erosion**
- **It Fights the Effects of Global Warming**
- **It Supports Water Conservation and Water Health**
- **Organic Farming Discourages the Algal Blooms**
- **It Supports Animal Health and Welfare**
- **Organic Farming Supports Biodiversity**
- **Organic Farming is Sustainable over the long term**

#### **Basic Agronomy Practices:**

The old agronomic practices help in decreasing investment in production of farm products. This increases the quality and quantity of yield significantly. These agronomic practices help farmer in maintaining the environment by

reducing pollution. Appropriate practice decrease water usage and proper use of fertilizer can maintain the quality of land and incorporate many areas of conservation. Sustainable agronomy can lead us into a future where feeding the world is balanced with protecting, preserving and even regenerating our farmland. Through agronomy changes might be small, but the results are massive. These practices have yielded major significant dividends that farmers enjoy. Some of the best agronomic practices include [22, 23]:

- Land Preparation, Fertilizers and Method of Sowing
- Reducing water usage
- Soil tillage
- Manage plant populations
- Seed Rate and Seed Treatment
- Selection of Drought-Resistant Varieties
- Early Maturing Varieties
- Wider Spacing
- Cover crops
- The most important 4R which are used in agronomy are:
  - > Right nutrient application rates
  - > Right application methods
  - > Right application timing
  - > Right nutrient source

#### Plant Based Diet:

It's a fact that food systems are major drivers of poor health and environmental degradation, global efforts are needed urgently for collective transform of diets and food production. [24] Many studies have reviewed the effects of food production on human health and the environment, which concluded that a dietary shift toward plant foods and away from

animal products is essential for promotion of human health and planet. [25].

As per the report of *Livestock's Long Shadow*, Animal agriculture is responsible for emissions of greenhouse gases. Cattle's grazing contributes to climate change by producing a lot of gas such as methane and CO<sub>2</sub>. [26] The food used in raising animals could be used in alleviating human hunger. Eating plant food can also help in preventing premature deaths from heart disease, diabetes, and other chronic conditions every year. After many researchers it is evident that livestock farming consumes a significant amount of water for production of meat. For instance 13,500 litres of water are used to produce 1kg of beef meat. Animal farming also pollutes water sources as the waste produced by the livestock ends up in waterways. [26]

#### CONCLUSION:

Many studies have come forward regarding impacts of climate change on agriculture and its effect on food security. From these studies it is clear that impact of climate on food security is serious, and thus we have to go for more research that directly informs the actions needed to tackle food security challenges. At the same time food systems need transformative options in the coming decades, for which we have to go for some challenges such as Change the research culture, involvement of multiple stakeholder engagement, practices of communities, achieving social inclusion through a focus on people who are most vulnerable to climate change and to address adaptation and mitigation together in the context of food security, at farm, national and global levels. To meet these challenges, we must work with

science, hand in hand with practitioners and policy-makers, to devise sensible options that meet current needs and capacities, we have to try our best and learn from the experiences.

#### REFERENCES:

- <https://www.who.int/news-room/detail/11-09-2018-global-hunger-continues-to-rise-new-UN-report-says>
- Concern Worldwide. "The Top 9 Causes of Hunger Worldwide." (February 27, 2018) <https://www.concernusa.org/story/top-9-causes-world-hunger/>. Accessed on 10 October 2018.
- United Nations Climate Change. (September 12, 2018) "UN Warns Climate Change is Driving Global Hunger." <https://unfccc.int/news/un-warns-climate-change-is-driving-global-hunger>. Accessed on 10 October 2018.
- FAO. "2018: The State of Food Security and Nutrition in the World." <http://www.fao.org/state-of-food-security-nutrition/en/>. Accessed on 10 October 2018.
- <https://www.agronomish.com/current-affairs/global-hunger-index-2019-india-slips-to-102nd-place-pakistan-ranked-94-1571209500-1>
- <https://www.who.int/news-room/detail/11-09-2018-global-hunger-continues-to-rise-new-UN-report-says>
- Canola Council of Canada. 2001. An agronomic and economic assessment of transgenic canola. Canola Council of Canada: 1-95. <http://www.canolacouncil.org/production/gm01.html>
- US National Research Council. 1989. Field testing genetically modified organisms: framework for decisions. Committee on Scientific Evaluation of the Introduction of Genetically Modified Microorganisms and Plants into the Environment. National Academy Press, Washington, DC
- Organization for Economic Cooperation and Development. 1992. Safety considerations for biotechnology. OECD, Paris, 50 pp.
- Carpenter, J, A Felszt, T Goode, M Hammig, D Onstad and S Sankula. 2002. Comparative environmental impacts of biotechnology-derived and traditional soybean, corn and cotton crops. Council for Agricultural Science and Technology, Ames, Iowa, June.
- Kümper, W and M Quim. 2014. A Meta-analysis of the impacts of genetically modified crops. PLoS ONE 9(11): e111629. <https://doi.org/10.1371/journal.pone.0111629>
- Brookes, G and P Barfoot. 2018. GM crops: Global socio-economic and environmental impacts 1996-2016. PG Economics Ltd, UK. p 1-204
- Petry, ED, F Ciliberto, DA Hennessy, and GC Moschini. 2016. Genetically engineered crops and pesticide use in U.S. maize and soybeans. Science Advances 2(8): e1600850. <http://advances.sciencemag.org/content/2/8/e1600850.full>
- Fawcett, R and D Towery. 2002. Conservation tillage and plant biotechnology: how new technologies can improve the environment by reducing the need to

flow. Conservation Tillage Information Center, West Lafayette, Indiana.

<https://study.com/academy/lesson/What-is-the-green-revolution-definition-benefits-and-issues.html>

UN (16 October 2015). "Sustainable food systems vital to end hunger, malnutrition, UN says on World Food Day". Retrieved 2 November 2013.

<http://www.ipnews.net/1969/DG/miba.com-green-revolution-to-sustainable-agriculture/>

*Kilangykhudhubakid ng Pilipinas (2007)*. Victoria M. Lopez, et al. (eds.), The Great Rice Robbery: A Handbook on the Impact of HBB in Asia (PDP). Penang, Malaysia: Pesticide Action Network Asia and the Pacific. ISBN 978-985-9381-35-1. Archived from the original (PDP) on 23 July 2011. Retrieved 8 August 2011

<http://www.fao.org/organicag/on-fao/en/faq/en/>

<https://www.interindiaorganics.com/here-are-the-5-key-environmental-benefits-of-organic-farming/>

<https://www.thebalanceamb.com/environmental-benefits-of-organic-farming-2538317>

<https://www.lurben.com/sites/gmoanswers/2010/11/18/gmo-help-reduce-food-waste/#119ed4a3bee>

<https://www.bio.org/blogs/gmo-solve-benefits-environment>

<https://www.perm.org/news/ideas/how-eating-more-plants-can-save-lives-and-planet>

<https://www.arenomatters.com/p/environmental-benefits-plant-based-vegan-diet>

<https://reilleybottle.com/ideas/how-a-plant-based-diet-can-impact-our-environment>

<https://www.frankhuyvillas.com/?p=132>

<https://www.agonomy.org/about-agronomy>

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## Vision of Dr. Ambedkar about Women and Status of Modern Women in India

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### Abstract:

There have been innumerable debates about gender in India over the years. Much of it includes women's positing in society, their education, health, economic position, gender equality etc. What one can conclude from such discussions is that women have always held a certain paradoxical position in our developing country. While on one hand, India has seen an increased percentage of literacy among women, and women are now entering professional fields, the practices of female infanticide, poor health conditions and lack of education still persisting still continue. Even the patriarchal ideology of the home being a woman's 'real domain' and marriage being her ultimate destiny hasn't changed much. The matrimonial advertisements, demanding girls of the same caste, with fair skin and slim figure, or the much criticised fair and lovely ads, are indicators of the slow changing social mores. If one looks at the status of women then and now, one has to look at two sides of the coin; one side which is promising, and one side which is bleak. Today, the modern woman is so deft and self-sufficient that she can be easily called a superwoman, juggling many fronts single-handedly. Women are now fiercely ambitious and are proving their metal not only on the home front, but also in their respective professions.

**Key Words:** status of Women in India, Vision of Dr. Ambedkar about women,

### Introduction:

The vision of Dr. Ambedkar about women is explicitly depicted in Indian Constitution. Dr. Ambedkar tried an adequate inclusion of women's right in the political vocabulary and constitution of India, i.e., Article 14 Equal rights and opportunities in political, economic and social spheres, Article 15 prohibits discrimination on the ground of sex, Article 15(3) enables affirmative discrimination in favor of women, Article 39 Equal means of livelihood and equal pay for equal work, Article 42 Human conditions of work and maternity relief, Article 51 (A)(C) Fundamental duties to renounce practices, derogatory to the dignity of women, Article 46 The state to promote with special care, the educational and economic interests of weaker section of people and to protect them from social injustice and all

forms of exploitation, Article 47 The state to raise the level of nutrition and standard of living of its people and the improvement of public health and so on, Article 243D (3), 243T (3) & 243R (4) provides for allocation of seats in the Panchayati Raj System and many others. The principle of gender equality is enshrined in the Indian Constitution in its Preamble, Fundamental Rights, Fundamental Duties and Directive Principles. He laid down the foundation of social justice and there can be no social justice without gender equality. (1)

In tune with the global phenomenon, educated Indian women seem to have formed a vision of equality with men. They have acquired a tremendous zeal to secure what they call 'lost rights.' They no longer consider themselves silent spectators in this dynamic world situation, but feel an urgent obligation to action and role-contribution. They urge breaking away from hackneyed traditions, warped social thinking and double standards of morality, that have blocked the worthwhile contributions they could make to the country's welfare. They have the vote of course; they have legal rights, abortions has been legal for many years now; they can aspire or be elected to any office in the country that men have access to. And yet, in spite of all this, many find themselves trapped in stereotyped roles.

The status of women in India has been subject to many changes over the span of recorded Indian history. Their position in society deteriorated early in India's ancient period, especially in the Indo-Aryan speaking regions, (2,3,4) and their subordination continued to be reified well into India's early modern period. Practices such as female infanticide, dowry, child marriage and the taboo on widow remarriage, have had a long duration in India, and have proved difficult to root out, especially in caste Hindu society in northern India.(5,6) Women's rights under the Constitution of India mainly include equality, dignity, and freedom from discrimination; additionally, India has various statutes governing the rights of women. (7,8) So in this view while studying the status of modern women we have to mainly study the;

- Educational Status
- Health Status

- Political Status
- Economic Status
- Safety and Crime Status

**Educational status**

The 2011 census report indicates that literacy among women is only 65.46%. It is virtually very disheartening to observe that the literacy rate of women in India is very lower to the National Average i.e. 74.04%. The growth rate of women's education in rural area is very slow. This obviously means that still large womenfolk of our country are illiterate. Moreover in India education is available equally to women. Gender inequality is reinforced in education which is proved by the fact that literacy rate for the women is only 65.46% against 82.14 of men as per census 2011.

**Political Status**

Indian constitution has provided women two important political rights, female enfranchisement and eligibility for the legislature. India has one of the highest numbers of female politicians in the world. Women have held high offices in India including that of the President, Prime Minister, Speaker of the Lok Sabha and Leader of the Opposition. The Indian states Madhya Pradesh, Bihar, Uttarakhand, Himachal Pradesh(11) Andhra Pradesh, Chhattisgarh, Jharkhand, Kerala, Karnataka, Maharashtra, Orissa, Rajasthan and Tripura have implemented 50% reservation for Women in PRL. (12, 13). Majority of candidates in these Panchayats are women. Currently 100% of elected members in Koussery Panchayat in Kerala are women (14).

**Health Status**

The rates of malnutrition are exceptionally high among adolescent girls and pregnant and lactating women in India, with repercussions for children's health.(9,15) The SRS 2018 estimates showed a Crude Birth Rate (CBR) of 17.86 and General Fertility Rate (GFR) of 2.2 at all India level. Literacy leaves its mark as fertility rate declines in both rural and urban areas. The Maternal Mortality Ratio (MMR) has declined from 301 to 178 in 2011 - 13. In 2019, the Infant Mortality (IMR) of females was 32. The life expectancy for females was 70.2 for females and 67.4 years for males as per health profile released in 2019, depicting higher life expectancy of females as compared to males (16).

**Economic Status**

In both rural and urban regions of India today we see a remarkable increase in household women becoming workers. They are successfully giving competition to men and their number is steadily increasing, though small in number but today women are making remarkable impressions in IT Sector, Multi sector, Entrepreneurship,

Medical, Engineering, Architecture, Law, Government Jobs and even in Army, air force and Navy to even at ground level such as auto driver, Taxi driver, bus Conductors reporters and many more. Employment is giving women economic independence and feeling of importance and boosted their self-pride and confidence. In order to protect women interest in economic growth government is now undertaking various socio economic legislations, which cover areas such as rights to property or inheritance, equal wages, working conditions, maternity benefits and job security.

According to the 'Kotak Wealth Hurun - Leading Wealthy Women 2018' list, which compiled the 100 wealthiest Indian women based on their net worth as on 30 June 2018 Shaw was only one of two women, the other being Jayshree Ullal, who did not inherit their current wealth from family relatives in the top ten.(17)

**Safety and Crime Status:**

Crime against women such as rape, acid throwing, dowry killings, honour killings, and the forced prostitution of young girls has been reported in India. (18, 19, 20) Police records in India show a high incidence of crimes against women. The national data on crime was released by the National Crime Records Bureau (NCRB) and termed India as the world's most dangerous country for women due to high risk of sexual violence (10). The crimes rose from 3,793 per million in 2016 to 3,886 per million in 2017. This means, 100 more crimes took place per million people in 2017 compared to the previous year, though crimes such as murders and rapes have come down.

A few states, in particular, Karnataka, Kerala, Tamil Nadu, Punjab, Rajasthan and West Bengal showed a decrease in crime rates, but most others continue to see a rise in crimes. Incidents of theft have increased at the fastest rate. In Delhi, the crime rate rose by 8% in a year. This is the fastest rate of growth among all states in India and translates to 11,500 crimes reported per million.

These crimes act as barriers to their empowerment and establishing equality in terms of gender. This puts a constant constraint on individual and societal development and has heavy economic costs. According to the World Bank report of 2018, violence against women is estimated to cost countries up to 3.7% of their GDP. This amount is more than double of what most governments spend on education.(21)

**Conclusion:**

The path towards total gender empowerment is full of potholes. Over the years, women have made great strides in many areas with notable progress in reducing some gender gaps. Yet realities such as 11,332 women and girls getting trafficked every year, and increased

practice of dowry, rape and sexual harassment hit hard against all the development that has taken place. Thus, if on one hand women are climbing the ladder of success, on the other hand she is merely suffering the violence inflicted on her by her own family members. As compared to the past, women in modern times have achieved a lot but in reality they have to still travel a long way. Women may have left the secured domains of their home, but a hard, cruel, exploitative world awaits them, where women have to prove their talent against the world who see women as merely vassals of producing children. The Indian woman has to make her way through all the incultured prejudices against her, and the men yet have to allow and accept the women to be equal participants in the country's way forward.

**References**

1. <https://www.dailysocialson.com/unitedfor-women/>
2. "Rankings", United Nations Development Programme (UNDP) India.
3. "Gender Inequality Index" United Nations Development Programme. Retrieved 2 October 2018.
4. "The Global Gender Gap Report 2018" (PDF). World Economic Forum. pp. 10-11.
5. "Bhija Sabha passes Women's Reservation Bill". The Hindu. Chennai, India. 10 March 2010. Retrieved 23 August 2010.
6. Dyson, Tim (2018), *A Population History of India: From the First Modern People to the Present Day*, Oxford University Press, p. 20, ISBN 978-0-19-882905-8
7. *State. Barton (2010), A History of India*, John Wiley & Sons, pp. 90. ISBN 978-1-4413-2351-1
8. Ramasack, Barbara N. (1999), "Women in South Asia", in Barbara N. Ramasack, Sharon L. Sievers (ed.), *Women in Asia: Restoring Women to History*, Indiana University Press, pp. 27-29, ISBN 0-253-21207-7
9. Lodden, David (2013), *India and South Asia: A Short*

- History, OneWorld Publications, p. 101, ISBN 978-1-78074-108-6
10. Parihar, Lalita Dhar (2011). *Women and law: from impoverishment to empowerment*. Lucknow: Eastern Book Company. ISBN 9789350280301.
11. Rao, Manja (2008). *Law relating to women and children (3rd ed.)*. Lucknow: Eastern Book Co. ISBN 9788170121329. ...women and the protection provided under various criminal, personal and labour laws in India
12. "50% reservation for women in panchayats" *Oceindia News*. 27 August 2009. Retrieved 28 July 2013
13. "50% reservation for women in SP, Bihar Panchayats" *City News*. 25 November 2011. Retrieved 28 July 2013.
14. "Major Malayalam News", *Mathrubhumi (in Malayalam)*. 26 November 2013.
15. "Woman's Malayalam News", *Mathrubhumi (in Malayalam)*. 24 November 2013.
16. b Narayan, Jitendra, John, Denny; Ramadas, Niroopana (2018). "Malnutrition in India: status and government initiatives". *Journal of Public Health Policy*. 40 (1): 126-141. doi:10.1057/s41271-018-0149-3. ISSN 0197-5897. PMID 30353132.
17. [http://wikispedia.in/social-welfare/women-and-child-development/women-development-1/women-development7h\\_startint=5](http://wikispedia.in/social-welfare/women-and-child-development/women-development-1/women-development7h_startint=5)
18. Iccavade, Sakshi (18 August 2018). "India's Top 10 Richest Women 2018". *My India*. Retrieved 2 October 2018.
19. Thak, Sudha G. (11 March 2013). "Crimes against women increase in India - Features" *Al Jazeera English*. Retrieved 7 February 2014.
20. Upreti, Deepak K. (14 November 2011). "India is home of unspeakable crimes against women". *Deccan Herald*. Retrieved 7 February 2014.
21. Kumar, Madhuri (8 March 2013). "Atrocities against women on the rise". *The Times of India*.
22. <https://www.youthkiawaaz.com/2019/10/nerb-data-reveals-that-crimes-against-women-in-india-are-on-the-rise/>

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## Index

- 1 Impact of Fruits And Vegetables In Covid-19 5  
Deepak Karan, Vishwa Nath and Ravi Karan
- 2 Impact Of Covid 19 Pandemic On Education, Benefits, Opportunities 9  
And Challenges Before Online Education In Rural Areas  
Dr. Korde Rajabhau Chagganrao
- 3 'Effect of sugar mill effluent on water quality of Bore-well' 15  
Dr. A. V. Gaikwad
- 4 Administration of Green audit in Vasant Mahavidyalaya ,Kanj (M.S.) 17  
Hirve Babasaheb J.
- 5 Factors Responsible For School Dropout In Shirur (Kasar), Especially Girls 21  
Dr. Chetana Vishwanathrao Donglikar
- 6 Importance of Mahatma Gandhiji's Views on Sanitation 27  
Dr. Pandit Mahadeo Lawand
- 7 GST In India 30  
Dr. Pratap J. Phalphale Ananda Ramrao Sarange
- 8 सखेंतरी हिंदी महिला कहानीकार और स्त्री विमर्श 33  
प्र.डॉ. एकलव्य चंद्रकांत तरसप्या
- 9 मनरंजणा अमलकनावावाले ग्रामसभेची भूमिका 36  
प्र. सुनील कपोतराम खट्टे , डॉ. सी. डी. मायकवाड
- 10 जैन संज्ञाची व्याख्याची संकल्पना 41  
डॉ. राजव नारायण कोनाळे
- 11 गीरा कांत कृत 'अंत हाजीर हो' नाटक में स्त्री जीवन 45  
प्र. डॉ. गोविंद एल. जी.
- 12 'चोरंगा काव्यातील व्यासम' 47  
प्र. डॉ. भास्कर माने
- 13 'चोरंगा काव्यातील कविता' 50  
प्र. डॉ. गोविंद काळे
- 14 अतिमूर्ती जनजाति एक परिचय 56  
डॉ. जगिता पाण्डेय
- 15 चोरीभित्त, रूपबंध आणि सांस्कृतिकता 64  
डॉ. सी. डी. काबळे
- 16 अण्णाभाऊ साठे यांचे लोक संगीतातील योगदान 68  
प्र. वटशेखर हि. वेडोले
- 17 कश्मीर प्रश्न और डॉ. बाबासाहब अम्बेडकर 71  
डॉ. मा. ना. मायकवाड
- 18 राष्ट्रीय एकात्मतासाठी संगीताची भूमिका 77  
प्र. ज्ञानेश्वर बोपीलवार
- 19 "उच्च शिक्षा लेते समय अनुसूचित जाति के छात्रों को जानेवाली प्रवेशशुल्क की समस्या - 2020-21" 79  
डॉ. मदिप गोम्बू साठवे

## Factors Responsible For School Dropout In Shirur (Kasar); Especially Girls

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### Abstract:

*Dropout from education is a major issue of concern for Indian government now days. Government has launched various educational developmental programs to improve female enrollment in schools and colleges but still their position is getting worst day by day. In Backward rural areas like Shirur (Kasar), girls are facing various problems in regards of completing their education even up to higher secondary. Rarely girls complete higher education only to get some degree for finding a better half from a well settled background. Dropout of girls from education is related with aspects like individual, family, school and social problems. The main Factors related to these aspects are poor interest in studies or negligence by parents, taking on parenting jobs and responsibilities, being left to the care of relatives, orthodox and traditional mentality of people, Discrimination in family, expenses of dowry, incidents of sexual harassment in and on the way to school, low socio-economic and educational status of family, poor infrastructure of school, inadequate number of female teachers, Low job satisfaction of teachers, lack encouragement from the school towards parents and many other individual factors are related with girls dropout from education.*

**Key words:** *Girls dropout, low socio-economic status and dropout of girls, Discrimination in education of girls, Social factors of dropout.*

### Introduction:

It is said that approximately the present billion populations will hit to 1.57 billion by 2050. But unfortunately these youngsters are unable to receive adequate education facilities. Today India's education system is in gloomy state. (1) Dropout has become a universal phenomenon of education system in India, at all levels of education, near about in all parts of the country and across all the socio-economic groups of population.

Though Government has enacted various schemes to ensure compulsory and free education to students for economically and socially backward student, increasing student dropout rate in Maharashtra is a matter of great concern. The dropout rate at upper primary and higher secondary levels in Maharashtra is continuously increasing. The dropout rate of has risen from 1.06% (2016-17) to 1.56% (2017-18) at primary level, whereas at HSC level it has increased from 2.4% (2016-17) to 2.9% (2017-18). (2) There are multiple factors responsible for student dropout from education. Many times because of socio-economic problems of family and domestic problems a negative environment is created which negatively affects the value of education. Dropout effects on overall personality of students as failure to complete high school and higher education not only produces negative outcome for the individuals, but also widens the existing social and economic inequalities.

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Issue XIX (25) , Vol. 1  
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Children who are admitted in primary schools are unable to complete their secondary education. Factors like poor socio-economic status of parents, schooling patterns of siblings, physical problems related to school, social problems and many other contribute in school dropout especially in rural areas. To avoid the educational loss and keep the students in continuous education process, children are promoted to the next grades based on sheer attendance. But they are unable to grasp the studies, which leads to inferiority complex in them. Beside this students have to face basic problems of family & society if they wish to continue their education this leads to education dropout.

### About the study:

Present study is a small scale preliminary study conducted by undergraduate students in Taluka Shirur (Ka) as a part of Third year Project, in order to evaluate various factors responsible for student dropout.

### Objectives:

- The main objective of this study is to identify the prominent factors that lead to student drop out from schools in rural areas.
- To investigate individual, school and social issues and challenges faced by students especially girls while pursuing education.

### Data Collection and Sampling Method:

The study based on Random sampling method. 100 Students were randomly selected for study from secondary to undergraduate grades for collection of the data. Data was collected by using open ended questioner. After testing the questionnaire the results were assessed by using simple percentage frequency method. Recommendations at the end of study may help controlling dropout to some extent.

### Locale of study and its Social Demography:

Marathwada is economically backward region of Maharashtra its HDI is 0.676 (3). Beed district is a part of Marathwada region. Near about 75 percent of the people live in villages. 67 percent of population is below poverty line. This region is mostly prone to frequent droughts. To earn livelihood over 5-6 lakhs people migrate annually to work in the sugarcane cutting industry. As per a research based on IndianNgos.com based on 586 districts throughout India, the district ranks 143rd in literacy in India.(4) On Human Development Index (HDI), using UNDP method, Out of 30 districts of Maharashtra Beed ranks 18th, with 0.47 HDI. It is 7th poorest district in the state with Human Poverty Index (HPI) of 21.21.(5,6)

### Taluka Shirur (Ka):

Taluka Shirur (ka) is one of eleven talukas of Beed district. Agriculture or related work is the main occupation of people. Nearly 50% of people migrate to western Maharashtra for sugarcane cutting labor, leaving behind their children to work in their own fields along with their relatives. Percentage of literacy is low i.e 53.31 %, male literacy is 62.81 %, and female literacy 37.80 %. People who don't have their own lands labor in others fields with children left behind by their parents. Children from 7-14 years are engaged in agriculture child labor. Mostly cotton collection is the labor performed by these children, along with other agricultural and domestic work especially by girls.

Shirur (Ka) is a drought prone area. Frequent drought is a major problem, which affects people on all fronts of life in Shirur (Ka). Many children live in fodder camps to feed their cattle by dropping-out school. Lot of children drop out from their schools and help their parents

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in providing daily needs of family by working on others fields, being irresponsible for their health, childhood and studies.

**Table I. Reasons of student dropout in education from secondary to undergraduate level**

Sr. no	Reasons of student dropout	Secondary grade		Higher Secondary grade		Undergraduate	
		Girls	Boys	Girls	Boys	Girls	Boys
1	Poverty	20%	33%	44%	48%	36%	19%
2	Family Responsibility	28%	15%	33%	33%	30%	52%
3	School Distance	18%	25%	55%	41%	27%	34%
5	School environment and infrastructure	17%	48%	55%	20%	28%	32%
6	Social problems	15%	29%	61%	42%	24%	29%

### Results:

From the results of present study it is evident that most of the female student dropout from school at higher secondary stage because of the reasons indicated in the table among which social insecurity, school environment and infrastructure, school distance and poverty are prominent. Whereas dropout rate of male students was seen more in case of family responsibilities and school distance at undergraduate level and school environment at secondary level. So study of various factors responsible for student dropout becomes more important.

### Responsible factors of girls' drop out from education:

#### Family environment and its socio-economic status:

While studying parental reasons for school drop-out it was observed that poor interest or negligence by parents, taking on parenting jobs and responsibilities, being left to the care of relatives or grandparents,(7) discrimination against female child,(8) gambling- alcoholism and other vices in father, parent death, parent disputes, illiteracy of parents, anxiety to family dignity, parental force or compulsion of their interests etc. are prominent. As mentioned above, from Shirur (Ka) more than 50 % people migrate to nearby district and western Maharashtra for labor leaving their children with their relatives, who use these children for domestic and other farm works.

Girl's education is also affected because the expenses of dowry problem, the chances of girls being educated are reduced and incidents of Child Marriage increased. (9, 10) A Harvard School of Public Health survey (11) has conducted a study in Gujarat to study rates of child marriage, they found that of girls aged 14-17, 37% were engaged and 12% married. The orthodox and traditional patterns of society are also a condemning cause of girls drop out from education. The dropout rate of girls is higher than that of boys. In context of socio-economic conditions of family, illiteracy, poverty, inadequate earnings and poor living conditions of parents force them to withdraw their children from school but also put them in various types of jobs for contribution to the family income (12)

#### Social Problems related to school dropout

Travelling to school has become a matter of major concern in rural areas especially for alone girls. The recent events have highlighted this problem prominently in regards to school

dropout of girls. Events like eve teasing, taunting, sexual harassment on the way to school and in schools have generated several problems in economically and socially backward classes. (13, 14)

#### **School environment factors responsible for girl's dropout:**

Rural schools are substantially at a disadvantage in regards of school infrastructure. In the first instance improper building condition because of lack of sufficient funds for maintenance is the major problem. Schools in the rural areas have inadequate equipment required for an effective teaching / learning process. (15)

Access to the schools due to lack of proper link roads and travelling resources is a major problem in rural areas. These villages have very poor transportation facilities. This specifically creates difficulties for the children during the rainy season. (16)

Clean drinking water and proper sanitation is the basic need of any educational institution but unfortunately near about 40 percent of institution lack these facilities. (17, 18) Female students coming from distant villages have to spend the whole day in schools and colleges in absence of pure clean water for drinking and sanitation and separate girl's toilets.

Serious conditions are created for girls at the time of menstruation period. It is a stunning fact that near about 50 % schools in taluka Shirur (Ka) doesn't have sufficient toilet and sanitation facilities especially for girls and if they have, they are maintained so pathetically. Almost 25% of adolescent girls within the age-group of 12-18 drop out of school after they start menstruating. (19, 20, 21)

The ratio of female teachers to female students in schools is very low. This creates a insecurity in minds of girls. (22) The major problem in this case is again the same of distance of school from villages and improper travelling facility in case of female teachers. Parents lack encouragement from the school, this is a fact, particularly in the case of girls this results in lack of faith for the school as an instrument of social promotion. The one more major cause of school dropout is discrimination at school among students of different caste, community, gender and status also leads to dropout.

#### **Student Centric factors of dropout:**

Adolescence is a period of metamorphosis from childhood to adulthood; it's a crucial position in the life span of human beings. Physio- psychological changes is the important aspects of adolescence. Attraction towards opposite sex is often seen in this age. In Indian context especially in rural areas, this becomes a matter of family dignity and pride on the part of girl and ultimately leads to dropout. (23)

Besides this, transient or prolonged illness, accidents, disabilities or handicaps in the child, early menarche or marriage of the child, disinterest in studies, distraction in play or games, inferiority feelings, behavioral problem in child, deficient academic performance, earning money for family, punishment fear by teacher, love affairs, pessimistic attitude towards education because of unemployment, pride and ego in children, etc are the other factors responsible for student dropout especially in rural areas.

#### **Recommendations:**

School dropout is very intricate with multiple interwoven factors responsible to the complex situation. This paper highlights the issues of student dropout with reference to children living in Rural Shirur (Ka) of Beed district. Though there is variety of reasons for the dropout, following interventions could be made to combat and reduce dropouts.

Socio-economic status variables are unable to change but school variables such as access to schooling facilities, attendance, improvement in infrastructure, flexible curriculum,

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location of school and teacher motivation could be modified to improve the confinement rate of student dropout

- The transport facility must be organized for safe and convenient access to school and colleges by government and education institutions
- Financial constraints are the major causes of dropout so children may be given stipends, scholarships, free uniform, free text books, free stationery items up to secondary level of education
- Parents' opinion and expectations in regards to school for their child must be considered.
- To overcome academic deficiencies at the elementary levels of education it is necessary to built up bridge courses or special classes during the summer break
- More skill oriented courses should be introduced with the students being given the option to choose a course of their choice
- Organizing regular health check up camps, distribution of medicines, counseling, and referring the critical cases for further diagnosis will be helpful
- The cultural gap between parents and teachers should be bridged through more elaborated forms of participation in the school's management and control.
- Certain implications should be made for girls' safety and security, enrolment and retention.
- Formation of committees in schools, colleges and universities to deal with sexual harassment should be activated properly

## References:

- 1) Census of India 2001, *Report on the Census of India*. New Delhi: Registrar General of India
- 2) [https://timesofindia.indiatimes.com/city/mumbai/maharashtra-as-school-dropout-rates-rise-experts-ask-for-data-tracker/articleshow/69835992.cms#:~:text=The%20dropout%20rate%20of%20upper,%25%20\(2017%2D18\)](https://timesofindia.indiatimes.com/city/mumbai/maharashtra-as-school-dropout-rates-rise-experts-ask-for-data-tracker/articleshow/69835992.cms#:~:text=The%20dropout%20rate%20of%20upper,%25%20(2017%2D18))
- 3) <https://maharashtra.pscnotes.com/maharashtra-economy/maharashtra-human-development-index/>
- 4) Srinivasan, S. "Marathwada Profile". Rediff.com. <http://www.rediff.com/election/2004/oct/06mahal.htm>. Retrieved 2007-02-26.
- 5) "IndianNGOs.com". IndianNGOs.com. Archived from the original on 2007-03-09. <http://web.archive.org/web/20070309005616/http://www.indianngos.com/issue/education/districts/beed.htm>. Retrieved 2007-03-01.
- 6) Kandari, S. and Basak, A. "Beyond the Human Development Index, Preliminary Notes on Deprivation and Inequality" (PDF). Mumbai University. [http://www.mu.ac.in/economics/File60\\_Sangitawp1.pdf](http://www.mu.ac.in/economics/File60_Sangitawp1.pdf). Retrieved 2007-02-27. <sup>[dead link]</sup>
- 7) <https://www.dian.org/developmentmatters/2014/march/case1.php>  
V-School: A 'Free and Fair' Platform is Showing the Way!
- 8) <https://indianexpress.com/article/cities/pune/in-4-months-63-minor-girls-to-be-married-off-in-beed-3737825/>
- 9) <https://www.firstpost.com/india/marathwada-diary-how-mass-migration-illiteracy-and-low-farm-yield-feeds-into-rampant-child-marriage-in-rural-maharashtra-4446283.html>
- 10) <https://www.thehindu.com/news/cities/Thiruvananthapuram/13-child-marriages-stopped-in-district-in-a-year/article31806922.ece>

# CURRENT GLOBAL REVIEWER

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- 11) Bhabha, Jacqueline, and Orla Kelly. *Child Marriage and the Right to Education: Evidence from India*. working paper. François Xavier Bagnoud Center for Health and Human Rights. Harvard University, 2013. <http://fxb.harvard.edu/wp-content/uploads/sites/5/2013/12/Submission-for-OHCHR.pdf>.
- 12) Rao Mohan, M.J. 2000. "Migration of labor and school dropouts." *Social Welfare*, 47(6), 26-31
- 13) Violence Against Girls in School  
<http://www.actionaid.org/assets/pdf/VAGreportfinalthree.pdf>
- 14) Rachel Williams. "Why girls in India are still missing out on the education they need." *The Guardian*, March 11, 2013.
- 15) <https://www.livemint.com>
- 16) <https://timesofindia.indiatimes.com/blogs/voices/dropout-of-students-engage-huge-ramifications-in-social-progress-of-new-india/>
- 17) Bhagyalakshmi, J. 2001. "Presenting Educational Science: what next?" *Yojana*, 45: 48-49
- 18) Kiran Tare, June 18, 2011 Maharashtra. Girls drop out of school due to lack of toilets.
- 19) Action Aid - Better sanitation lures girls to school
- 20) Action Aid - Women's rights / Women and girls
- 21) [Action Aid believes that addressing gender violence in schools is essential for making progress towards global goals on education](#)
- 22) Ruchita Sharma, (et. al) 2007 Extent of Female School Drop outs in Kangra District of Himachal Pradesh *J. Soc. Sci.*, 15(3): 201-204 (2007)



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# Index

1. Digitization and Building a Digital Library Dr. Anant B. Sarkale	1
2. Developmental Challenges Of Adolescents Dr. Chetana V. Donglikar	4
3. The effect of achievement motivation and aggression on sports Dr. Deepak Pandey & Dr. Syed Khurshid Alam Geelani	7
4. Phonological Means Used in Print Advertisements Dhanaji Arya	9
5. Gender Discrimination in Mahesh Dattani's Tara Dr. Ahilya Bharatrao Barure	13
6. Role Of Women In Human Development Dr. Alka P. Tadkalkar	16
7. Financial Fraudulent Practices And Preventive Measures Dr. Durgadas D. Choudhari	18
8. A Comparative Study Of Depression between Softball And Cricket Inter Collegiate Male Players Dr. Mrs. Kalpana B. Zarikar	21
9. A Comparative Study Of Mental Health Between men And Women Inter Collegiate wrestling Players Dr. Shekhar N. Shirsath	23
10. A Study Of Personality Characteristics Of Sports Participant And Non-Sports Participant Of College Students. Dr. Vinod Nagnath Ganacharya	25
11. Study Of The Problems Of Girls About Participation In Sports Competition At College Level Dr. Chandrasen Udhavrao Saruk	27
12. Physical Education and yoga a Biggest necessity for Public health Dr. Prakarsh Ramkrishna Kakde	29
13. Women's safety - An analytical study of Nagpur City Dr. Seema A. Pande	32
14. Sports and social media research - A review ! Mansi Maheshrao Kulkarni, Prof. R. M. Chavan	34
15. The Brave and Extraordinary Sanskrit Scholar Pandita Ramabai Saraswati Deshpande Monica Madhukar	36
16. Hypocrisy and Deceptiveness of Brahminhood in U.R. Ananthamurthy's Samskara Mr. Vikram S. Dhanve	38
17. The Role of woman in developing scientific Attitude at secondary school level Dr. More V.P., Muley R. G.	41
18. The Role of Muslim Women's in freedom struggle Movement: With special reference to Abadi Bano Begum (Bi Amman) and Hazra, Matangini Dr. Mustak Ahmed	43

# Developmental Challenges Of Adolescents

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## Abstract:

The experience of adolescence is very complicated because of factors that have both positive and negative effects. Researchers have proved that economic problems are associated with disturbed families and difficulties for adolescents that promote risk-taking behavior for them. But positive parenting methods can also give positive outcomes for Adolescents. Peers are associated to their identity development. The effect may be positive or negative depending on their experiences. Also strong relations with teachers and peers at school could be associated positively as well as negatively. Communities also have Specific characteristics that are supportive of positive adolescent development. The most important of all is the rapidly expanding universe of social media has a profound influence on adolescence that affects evolving norms for many behaviors, particularly on attitude towards sex and sexual activities. Along with negative impact, it is also a powerful tool for influencing young people in a positive direction. There is an urgent need to nurture the immense potential of young people as partners in progress of Nations, and at the same time in processes that address their specific needs, desires and aspirations. If the adolescents flourish, communities also flourish so all of us have to work collectively and responsibly to ensure that adolescence could become an age of opportunity.

**Key Words:** Profound Development of Adolescents, Development issues of Adolescents, Adolescent challenges

## Introduction:

About 1.2 billion adolescents aged 10-19 are in the world i.e. near about 18 % of the global population, more than 243 million adolescents i.e. a quarter of the country's population is between 10-19 years, no country has this more young people.(1) The youth i.e. 15-24 years age population of India accounted for 17.8% of the world population by 2010. It is estimated that by 2030, India's Youth population would account for 17.97% of global population.(2)

The largest generation in history are preparing to make a transition from childhood to adulthood, a phase characterized by rapid growth and physical changes accompanied by risky behavior patterns.(3, 4, 5) Being a key to future development, young people are critical social changes agents for fostering economic development and technological innovation(6). Adolescence is a period of bisexual transition between childhood and adulthood.(7) In this period the body grows very rapidly with many physical changes(8) Also on the psychological side there is acute self consciousness, rebelliousness and idealism. Adolescence is a crucial period for developing and maintaining social (9)and emotional habits important for mental well-being(10) These include adopting healthy sleep patterns, taking regular exercise, developing coping, problem-solving, and interpersonal skills; and learning to manage emotions(11).

Adolescence is a distinctive and developing period. Various physical, emotional and social changes, exposure to poverty, any types of abuse, or violence, can make adolescents exposed to mental health problems. Promotion of psychological well-being and protecting adolescents from unfavorable experiences and risk factors which may impact their potential are crucial for their physical and mental well-being in adulthood. So before going further it's important to see some important key facts related to today's adolescents (12)

### Key facts related to adolescents in world

- One in six people are aged 10-19 years
- Mental health conditions account for 16% of the global burden of disease and injury in people aged 10-19 years
- Half of all mental health conditions start by 14 years of age but most cases are undetected and untreated
- Globally, depression is one of the leading causes of illness and disability among adolescents
- Suicide is the third leading cause of death in 15-19 year olds
- The consequences of not addressing adolescent mental health conditions extend to adulthood, impairing both physical and mental health and limiting opportunities to lead fulfilling lives as adults.
- Mental health promotion and prevention are key to helping adolescents thrive.

### Factors affecting Adolescent Development

Factors that affect adolescent development include physical, cognitive, emotional, social, and behavioral development. So it is important to discuss sexual development as well as concern of adolescents regarding physical appearance and body image while studying physical development. Cognitive development is associated with Moral development and learning disabilities. Emotional development of adolescents is comprised of the individual's self-identity, emotional intelligence and group differences, such as gender differences and ethnic diversity. Adolescent's Social development can be explained with the view of peer and family relationships, school, work, and community. Whereas adolescent's risk-taking behaviors i.e. alcohol and drug abuse, pregnancy and sexually transmitted diseases, school failure and dropping out, delinquency, crime, and violence must be cited under behavioral development and protective factors with flexibility (13, 14) Some of the prominent factors that affect adolescence development are listed below

1. Generation Gap
2. Family

3. Gender discrimination
4. Emotional Instability
5. Career Consciousness
6. Treating the adolescents
7. Nutrition disorders
8. Social media and technology
9. Good Literature
10. Socialization
11. Schools and other educational institutions
12. Aggression and antisocial behavior
13. Anxiety and depression
14. Peer Influence
15. Romantic relationships
16. Identity formation and crisis
17. Proper Teaching Methods

### What to do for sound adolescent development

For helping adolescents develop soundly we have to work in out-of-school, with community-based, faith-based, education based, interventions along with healthcare, public health, and social service programs, to reach up to large number of adolescents. By expanding social connections and engaging in relationships beyond the family adolescents seek greater independence and more autonomy. For which parents, professionals, and other adults who could interact with teens have a unique opportunity to support adolescents for their healthy development – socially, emotionally, and cognitively. Today it is a great priority for individuals and communities to make adolescents grow in a healthy manner. So there are some steps that need to be taken for their healthy development such as:

1. **Try to understand adolescents and know what to expect:** Adolescent period is very important in terms of developmental milestones as adolescents navigate on the path to adulthood. Learning the development of adolescents physical as well as brain development can help us understand their behavioral patterns. It also enables us to help teens for making better decisions.
2. **Encouraging adolescents for physical activity:** If we want adolescents to exercise then we have to do it with them because then they are more likely to keep exercising on their own. It also helps us to know about their friends and current events going on in their life.
3. **Help adolescents to be engaged in their educational activities:** Education plays a important role in the healthy development of adolescents. We have to take care that school environment is supportive and equal for every student, regardless of race, ethnicity, gender, disability, sexual ability or sexual orientation.
4. **Adolescents should be encouraged to pursue their interests:** Developing the hobbies is good for physical and mental health. So we have to help adolescents in identifying the opportunities for cultivating their talents and interests by joining clubs, playing outdoor games, singing, skill learning, volunteering in social activities, or working for a part-time job.
5. **Creating opportunities to learn and grow:** Adolescence is a risk taking and decision making period. Positive experiences will help adolescents in making decisions in a safe and supportive environment and promote learning and build resilience.
6. **Family meals play a very important role:** Sharing a meal with family should be a common activity, as eating takes place in a social context it is important to understand how, and why, who we dine with affects what we eat. The family environment plays an important role in arising various feelings like belongingness, security, expressiveness and positive adjustment.
7. **We should talk and listen to adolescents:** Share a quality time with adolescents and hear about their activities, show the genuine interest and listen carefully. We should speak with them without any comparison. We think our child is not listening but they do, if we talk with them in a manner they can get it.
8. **Work together and let them lead:** Working together and giving them chance to lead the situation is associated with increase in overall satisfaction, happiness, self-confidence and self esteem, and with improved health and well-being.
9. **Keep watch and take care:** Adolescence is associated with independent thinking and behavior they will continuously try for getting away from their parents. But at same time they lack the experiences regarding many situations so they still need a watch out for them. So we have to keep watch for changes in behavior that could harm their development.
10. **Try to enjoy their company:** Though there are many challenges in developing adolescents, there are lots of positive sides also. Adolescents are very energetic, fun-loving, high-spirited, and passionate. Appreciate their individual strengths and try to spend time together doing something they enjoy and that will make us surprised at the benefits for our relationship.
11. **Be an "open/approachable" parent:** Understand our children's feelings, even if we don't always approve of their behavior. We should try not to make judgments and keep the door open on any subject.

12. **Avoid humiliating your child:** Avoid humiliating our children and laughing at what may seem to us to be silly or foolish questions and statements.
13. **Appreciate the adolescent:** Make an effort to commend our children frequently and appropriately. Too often we take the good things for granted and focus on the bad, but every one needs to be appreciated.
14. **Respect the adulthood of our child:** Encourage the child to participate in family decision-making and to work out family concerns together with us. Understand that our child is going through transition and could challenge our opinions and our ways of doing things to achieve the separation from us that's essential for their own identity.

### Conclusion

Adolescence is specified with rapid transitions, no two adolescents are similar. Developing body need special concern of parties like parents, teachers, health professionals, religious counselors and media and community organizations. With the developing age adolescents continue to develop self-identity and go on adjusting to the experiences of changing biological and social conditions. These experiences could be stressful and full of stress provoking. So adolescents can have a low tolerance for these changes. This makes things more difficult for adolescents to adjust their behaviors which come out suddenly because of inappropriate mood swings. With the growing age adolescents develop their relationships with selves and others. They become more influential. Kind, patient, empathetic, sympathetic, sharing, respect to elders, they develop sense of responsibility and not going overwhelmed with the authority. But we need our guidance regarding few things in order to keep them on the track of life. With the developing age adolescents need to deal constructively with the stress situations in their everyday lives. Gaining positive attitude towards the future depends on understanding the actual stress situation faced by them. Through this paper we tried to examine the coping strategies of adolescents with different developmental issues, as this could provide a foundation for preventive intervention services for helping adolescents to change their attitude towards developmental issues.

### References

1. <http://unicef.in/PressReleases/87/Adolescence-Anti-Age-of-Opportunity>
2. Central Statistics Office Ministry of Statistics and Program Implementation Government of India (Social Statistics Division) [http://mospi.nic.in/sites/default/files/publication\\_reports/Youth\\_in\\_India-2017.pdf](http://mospi.nic.in/sites/default/files/publication_reports/Youth_in_India-2017.pdf)
3. *Macmillan Dictionary for Students* Macmillan, Pan Ltd. (1981), page 14, 456. Retrieved 2019-7-15.
4. "Adolescence". *Merrim-Webster*. Retrieved May 9, 2012.
5. "Puberty and adolescence". *MedlinePlus*. Archived from the original on April 3, 2013. Retrieved July 22, 2008.
6. Coleman, John; Roker, Debi. *Psychologist* 11, 12 (Dec 1998): 593. "Adolescence"
7. Larson, R., & Wilson, S. (2004). Adolescence across place and time: Globalization and the changing pathway to adulthood. In R. Lerner and L. Steinberg *Handbook of adolescent psychology*. New York: Wiley.
8. Arnett, J. J. (2007). "Emerging Adulthood: What Is It, and What Is It Good For?". *Child Development Perspectives* 1(2): 68-73. doi:10.1111/j.1750-8606.2007.00016.
9. Côté, J. E. (1996). Identity: A multidimensional analysis. In G. R. Adams, T. Gullotta & R. Montemayor (Eds.), *Issues in Adolescent Development* (Vol. 6, pp. 130-180). New York, NY: Sage Publications.
10. Simmons, R., & Blyth, D. (1987). *Moving into adolescence*. New York: Aldine De Gruyter.
11. Gam, SM. Physical growth and development. In Friedman SB, Fisher M, Schonberg SK, ed. *Comprehensive Adolescent Health Care*. St Louis: Quality Medical Publishing, 1992. Retrieved on 2009-05-20.
12. <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>
13. <https://www.mentalhelp.net/articles/adolescent-physical-development/>
14. <https://www.ncbi.nlm.nih.gov/books/NBK53409/>
15. <https://nobaproject.com/modules/adolescent-development>
16. <https://youth.gov/youth-topics/tag/about-tag/live-essentials>
17. <https://www.tandfonline.com/doi/full/10.1080/07673843.2013.868163>
18. <https://www.counsellingconnection.com/index.php/2010/02/11/biological-cognitive-and-psychological-challenges-of-adolescence/>
19. [https://www.enkashmir.ac.in/departmentsdocs\\_16/Issues%20and%20Challenges%20during%20Adolescence%20Dr.%20Ismail%20Thummarasseni.pdf](https://www.enkashmir.ac.in/departmentsdocs_16/Issues%20and%20Challenges%20during%20Adolescence%20Dr.%20Ismail%20Thummarasseni.pdf)



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## Study of Feminism and Media in India

Dr. Donglikar Chetana Vishwanathrao

### Abstract:

In India the percentage of women is near about half of the population i.e 48.03 % in 2019. Women's are the main asset of India; they have contributed in near about all sectors of Indian development and made the country proud. They have put up many milestones and have been always an inspiration for all generations. Besides this there is another reality of feminism in India as it is influenced by systematic biological, social, political and economical discrimination and is always neglected. These discriminations are prominent in terms of nutrition, health, education, property rights, labor and marriage and domestic violence. Lack of social security for women is a major issue of Indian society that restricts the women freedom. It is said that literature or media is the mirror of society it reflects the facts and incidents of society. Media is a powerful medium for influencing masses and communities and the new IT technology has increased its importance. But unfortunately today media is trembling in its role and getting biased and this affects the social development and makes it more rigorous for women. Previously Indian media was given lowest priority but now a day's media and especially social media has become the priority of Indians. So it is necessary that Indian media should be refined to gender issues and focus on role empowerment of women in media and Indian society. In this current scenario, through this paper effort will be made to discuss about the role of media in empowering women image and role in India's development.

### Introduction:

Media is the most important and effective tool of society in the modern era as it is empowered to reach out to a large audience by mass communication for creating an impact on all sectors of society making it far and wide. Social media is getting updated and social networking is becoming an inevitable source of influence on mass media. Social media has become a source of support for women liberation by focusing on their various problems and making them able to express their views openly against the problem. Through mass media women can communicate effectively thus it is playing an important role. Women are getting involved more in number than men in this business thus it has also helped in flourishing of media. (1)

Media can be a powerful tool of change as well as of persecution both at the same time. No doubt media is a prominent source of advocating gender equality but at the same time it also strengthens the conventional image of women in the society and media. Women contribution towards society has always been neglected besides their hard work and dedication. (2) Electronic and print media crucially present the picture of women's variant lives and their contributions to society. Media should act responsibly before reporting and publishing any news as it has huge influence on people. (3) Disrespectful portrayal of women in media shows the lack of gender sensitivity. Because of such instances the National Commission for Women has to recommend amendment in the Indecent Representation of Women (Prohibition Act), 1986.

Promoting a non-convictional image of women in the mass media is very important for avoiding the ill effects of Media. Women's should be made knowledgeable about media because women are still having limited knowledge regarding modern information technology in most societies. Through increasing participation and access of women for self-expression and decision-

making through the media a new era of communication is ready for empowering women. So the powerful role of the media in the empowerment of women and gender equality should be supported and explored. (4) This will also help government for implementing various programs related to women and bring awareness regarding it.

#### **What are the Different forms of Social Media?**

Social media is gaining the popularity and power for businesses and marketers because they can use it to target and convert the audiences. More people are only aware of Facebook, Twitter, Snapchat, and Instagram as social channels but besides this there are many other platforms which could be used for business as well as for social awareness. (5, 6) Social media is helpful in building up loyalty of current customers to the point that they will be willingly and freely, spread the content worldwide.

#### **Social Networks: Facebook, Twitter, LinkedIn:**

They are used for associating with individuals (and brands) on the web. They help individuals business via branding, social awareness, relationship building, customer service, lead generation, and conversion.

#### **Media Sharing Networks: Instagram, Snapchat, YouTube:**

These Social Media platforms are used to find and share photographs, live video, video and other kinds of media on the web.

#### **Discussion Forums: Reddit, Quora, Digg:**

These Social Media platforms are used for finding, sharing and discussing different kinds of information, opinions, and news. These discussion forums have an enormous user and make sure that it would extraordinarily heighten your business. Through this platform different queries of any domain are answered easily.

#### **Bookmarking & Content Creation Networks:**

Pinterest, Flipboard these Social Media platforms will be helpful in finding out, sharing, discussing and saving a variety of latest content and media that are trending.

#### **Blogging & Publishing Networks: Word Press, Tumblr, Medium**

These types of Social Media networks are choosed for publishing, discovering and commenting on articles, social media blogs and other content on the web. This type of content marketing is one of the most powerful ways to target, attract, engage and convert a target audience.

By one of the survey report in India it is evident that number of male users of internet is more than that of women. As per the report, 'Internet in India 2017' by the Internet And Mobile Association of India (IAMAI), "the total number of internet users in the country are increasing but still only 30 percent of the female are users." This shows the significant huge digital gender gap. Today India is getting digitalized and this huge digital gender gap is presenting a question mark regarding digital literacy of females. The digital gender ratio in urban area is more than rural for internet usage. (8) These reports are sufficient to show the sensible status of women literacy in India in this digital era.

#### **Impact of Social Media on Women Issues in India:**

Because of Social media, communication have transformed extensively at local and global level in the past few decades. In past few decades in India use of Social media has increased excessively. For women Social media is a new platform, tool or weapon to discuss, raise and communicate their voice or opinion and organize online campaign and activism. Social media is also a powerful medium for seeking a wider attention from a global community for attending



different issues related to women's right and motivate and encourage the government or policy for motivating gender equality. Using Social media tools and applications such as blog, vlog, facebook, twitter, instagram etc women are being empowered by education, entertainment, self decision making, technologically updated and financial empowerment.(9) Few are the examples of Social media campaign that has helped in seeking attention of society on national and international level;

#### **Me too Campaign and Social media**

In India women's role varies as per the region, class, caste and religion. Upper and middle class women have opportunities for education as well as profession. But the lower class women have very different roles. Hard work is the unenviable part of their life they have very little freedom for moving around. Violence is worst experience their life.(10) In India sexual harassment of women is a major matter of concern. In 2018 exposing India's sexual harassment problems were highlighted by #Me Too campaign and for the first time the power of social media in mobilizing people and generating social change was visualized by the society. The #Me Too campaign was primarily a social media campaign because Social media gave women the platform for the raising and coming together, in support of women and encouragement them to fight. (11) Because of this campaign women started talking about what has happened with them or who did it. (12) But very few women has accesses to social media, still women are now getting confident and realizing that it is not their fault and they should talk about it, rather hide it. This is a long-term and large impact of social media campaign.

#### **I Will Go Out campaign**

In Bengaluru in 2017 a group of young women initiated a campaign called #IWillGoOut campaign and showed how a hashtag can be unfolded into a national movement. The role of social media in translating online support to offline action is very important. The #IWillGoOut campaign was activated by two politicians because they commented on these young women by blaming for the sexual assaults. As a result the young women sent a Facebook message to her 10 friends and asked them to join her in a petition to demand public apology and draw attention to sexual assault in India. This campaign gained a strong surveillance within few days and reached up to many people. A page was created on Facebook and website, which gained the attention and support from people across India. This online activity reached to its climax in offline action when on 21 January 2017 over 30 events and marches were held across India in support of these young women. In this campaign Facebook was the main stimulant as it brought together a young community of suffered women and motivated others in different cities to coordinate and organize marches. (13,14)

#### **Pad Man Challenge and Social Media:**

Social entrepreneur Arunachalam Muruganatham initiated 'pad man challenge', he had invented a low-cost sanitary pad-making machine, which had created a rumor on social media. Muruganatham's work got recognised when the movie padman got nomination and recognition when the lead cast of the movie, Akshay Kumar, Sonam Kapoor and Radhika Apte posted their picture holding a sanitary pad, along with the message, "#PadmanChallenge".(15) Social media played a responsible role in this, as within few days stars like Aamir Khan, Deepika Padukone, Anil Kapoor and Katrina Kaif joined this campaign and posted their photos on media and conveyed the importance of menstrual hygiene of women. After that not just celebrities, but their fans had also joined the viral campaign and

posted their photos on social media. In India even today talking openly about sex education or any matter related to it is a great taboo. Even in medical stores if any woman goes to buy sanitary napkins they pack it in paper and give it in a black carry bag as it is thing which must not be exposed or seen by anyone. But this campaign has helped on a large extent to normalize this situation in society.(16)

#### **Selfie With Daughter Campaign**

In 2011 The countries census has reveled a shocking information regarding Gender gap in India. There were missing females in India. The percentage of girls per 1000 females was very low. In tstes like Maharashtra, Rajasthan, Madhya pradesh and Haryana, were at alarming positions. In India the ratio was only 834 girls for every 1000 boys. After this heart throbbing incidence, the problem of sex-selective abortion had been discussed intensely in India and beyond. During this period from a rural village of Haryana, the Mayor of Bibipur Mr. Sunil Juaglan initiated a campaign, "Selfie with Daughter" as a local centest. The picture was awarded and because of this initiative parents started praising their girl child and felt proud. This initiative motivated parents to welcome the birth of girls. Within ten days 800 selfies were collected through social media under 'Selfiwithdaughter hashtag. This campaign was very much appreciated by Prime Minister, Narendra Modi. In 2017 a new smart phone app was generated for uploading the selfies and the website has registered more than 100000 pictures. This campaign is almost related with the national policy of government. 'Beti Bachao Beti Padhao'.(17, 18)

#### **Beti Bachao Beti Padhao Campaign**

Even in 2014 India was fighting against decreasing female sex ratio in India. At this time our Prime Minister Narendra Modi put forward a great initiative over his twitter handle. This movement was taken on a multi sector in selected 100 districts with three joint ministries i.e Ministry of Women and Child Development, the Ministry of Health and Family Welfare and the Ministry of Human Resource Development, for creating awareness against female feticide and to reduce education drop out of girls. There was a major decline in sex ratio of girls. This movement created a change and has come up with positive change regarding female birth and education in society. (19) This campaign has its own official page on facebook.

#### **Conclusion:**

Women participation in decision-making processes and public life has a created a great impact on policy making. With their increasing political participation gender-responsive public policies are regenerated. So From the evidences it could be positively concluded that Social Media has put forth positive impact before Indian Society and women. Women are having new education and job opportunities they are breaking restrains of heartless traditions and speaking for their right and changes in society. Also it's a fact that digital literacy rate, of women is very low. Today alternative culture is being created by Social media. Portability and affirmation for women in public spaces has become necessary for healthy and modern democracy. For a democratic society a free flow of information is a vital element. Media or press freedom is meaningless unless women have the right to express themselves in the news-gathering and proclamation processes.

#### **References:**

- 1) <http://www.legalservicesindia.com/article/1637/The-responsibility-of-Women-empowerment-on-media.html>
- 2) [www.yourarticlelibrary.com/society/changing-status-of-women-after-the-independence-of-india4398](http://www.yourarticlelibrary.com/society/changing-status-of-women-after-the-independence-of-india4398).

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## INDEX

No.	Title of the Paper	Author's Name	Page No
1	Women Empowerment : A Need of Society	Dr. Mohini Kumari	05
2	Women Empowerment through Skill Development & Vocational Education in India	Dr. Ganesh Kathar	16
3	Working Women and Their Issues	Dr Rancee Jadhav	21
4	Working Women and Their Problems	Dr. Pallavi Irlapalle	25
5	Women Entrepreneurs in India	Sopan Nimbore	27
6	A Study of Women Empowerment through Self Help Group	Dr. Mrs. Kanchan Sananse	30
7	Indian Women Entrepreneurs Faced by Problems in Micro, Small and Medium Enterprises	Miss. Manisha Wanjari	35
8	Women Entrepreneurs in India: An Economic Force	Dr. Mahamadali Shaikh	40
9	Role of NGOs and Most Successful Womens Entrepreneurs in Osmanabad District	Smt. G. S. Jagtap	45
10	Socio- Economic Background of Women Empowerment	Ashok Deokar	48
11	A Study on Women Empowerment through Self Help Groups in Maharashtra	Dr. Rajaram Pimpalpal	51
12	Women Empowerment : Problems and Strategies	Dr. Syeda Najeem Asra Syed Hussain Shabeed	57
13	Government Schemes for Women Skill Development	Dr. Sandhya Beedkar	60
14	Women Empowerment and Indian Agricultural Sector	Dr. Suryakant Deshmukh	63
15	Decentralization of Power and Women Leadership: A Study of Marathwada Region in Maharashtra State	Dr. Sidharth Jadhav	67
16	Women Empowerment in Small Scale Industries : Challenges Ahead	Dr. J. A. Magar	72
17	Are Women Really Being Empowered?	Dr. Ajaz Shaikh	75
18	Dalit Women Facing Violence in India	Dr. Rajabhau Kordé	77
19	Women Empowerment & Ways	T.T.Kolhe	82
20	Challenges and Opportunities of Rural Women entrepreneurship in India	Dr. Chetana Donglikar	85
21	Women : Skill Development and Entrepreneurship in India	Dr. R. R. Mutkule	90
22	Women Empowerment Schemes in India	Pradheep Ingole	93
23	Women Entrepreneurs in India	Prof. Ambadas Waghmare	97
24	Women Entrepreneurship in Micro, Small and Medium Scale Enterprises	Dr. B. N. Mutkule	102
25	Historical Approach to Women Empowerment	Smt. Archana Chavare	106
26	Sexual Harassment of Women at Workplace : An Overview	Smt. Jyoti Rakte	108
27	Rural Women Entrepreneurship Development	Smt. S. S. Sayyad	113
28	Women Empowerment in India - A Sociological Perspective	Prof. Bansi Walke	116
29	Working Women and Their Issues	Dr. Abhay Shinde	122
30	Contemporary Schemes and Arrangements of Ministry of Skill Development and Entrepreneurship for Women in India	Dr. B. K. Shep	124
31	Women Entrepreneurship Development in India	Dr. D. B. Borade	128



## Challenges and Opportunities of Rural Women Entrepreneurship in India

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### Abstract:

*Nowadays Rural entrepreneurs are facing many problems due to non availability of primary amenities in rural areas especially in developing countries like India. Financial problems, Lack of education, Insufficient technical and conceptual ability at present it is too difficult for the rural entrepreneurs to establish industries in rural areas. The economic development of our country largely depends on the development of rural areas and also the standard of living in its rural mass. Today entrepreneurs are also driven to achieve success in their business along with the qualities inherited by them of a dreamer, leader, manager, innovator, continuous learner, and decision maker and most important is to implement all these qualities into the work. Undoubtedly it looks attractive, fascinating and motivating after listening the stories of the entrepreneurs, but for sure success is not as easy as it looks always. There are certainly some obstacles which we call challenges to overcome by looking forward the prospects to be a successful entrepreneur. In the light of this research paper focuses on the major challenges and problems available in the Indian market by en-cashing the possibilities and prospects of the same to be an able and successful entrepreneur*

**Keywords:** Rural entrepreneurs, Innovator, economic development, Empowerment, Problems, opportunities, Challenges, Self-Fulfillment

### Introduction:

Women owned businesses are highly increasing in the economies of almost all countries. The hidden entrepreneurial potentials of women have gradually been changing with the growing sensitivity to the role and economic status in the society. Skill, knowledge and adaptability in business are the main reasons for women to emerge into business ventures. Women Entrepreneur is a person who accepts challenging role to meet her personal needs and become economically independent.

Rural entrepreneurship is defined as "entrepreneurship emerging at village level which can take place in a variety of fields of Endeavour such as industry, business, agriculture and act as a potent factor for overall economic development." An entrepreneur is a person who either creates new combination of production factors such as new products, new methods of production, new markets, finds new sources of supply and new products and new organizational forms or as a person who is necessarily willing to take risks or a person who by exploiting market opportunities, eliminates disequilibrium between aggregate demand and aggregate supply or as one who owns and operates a business.

In simple terms "entrepreneurship" is the act of being an entrepreneur, which can be defined as "one who undertakes innovations, finance and business acumen in an effort to transform innovations into economic goods".

### Principles of Rural Entrepreneurship

Some of the basic principles of entrepreneur which can be applied to rural development are:

- Optimum and full utilization of local resources in an entrepreneurial venture by rural population  
-Better distributions of the farm produce results in rural prosperity
- Entrepreneurial occupation opportunities for rural population to reduce discrimination and also providing alternative occupations as against the rural migration
- To activate such system as to provide basic „6M“ - Manpower, money, materials, management,

machinery and market to rural population.<sup>(1)</sup>

**Some of the major opportunities in rural entrepreneurship are:**

Women entrepreneurs believe good enough to contribute for the society well being in order to tap the opportunities in entrepreneurship. They have many responsibilities towards society betterment. In recent days women entrepreneurs are performing extremely fantastic.

- Vermiculture
- Sericulture
- Handicraft Production
- Mineral water
- Sericulture
- Floriculture
- Herbal & health care
- Food, fruits & vegetable
- Textile and clothing
- Eco-friendly technology
- Bio-technology
- IT enabled enterprises
- Event Management
- Tourism industry
- Telecommunication
- Plastic material

**Factors Motivating Rural Women to involve in Business Activities:**

Women start businesses for fundamentally different reasons than their male counterparts. Many researchers drew inferences on factors influencing the women to become entrepreneurs. The gist of all the researchers accord that the following are the major reasons for women entrepreneurship.

- Need for Power
- Getting self actualization
- Seeking Independence
- Need for achievement
- Presence of knowledge and skills
- To become a leader
- Economic compulsion
- Inspiration from others success
- Frustration in the present job
- Motivation towards new enterprise
- To get control over the business
- Not finding a right/ suitable job
- Need for additional income
- Thrust to create new things

**Problems of Indian Women Entrepreneur:**

There are a number of problems faced by women entrepreneurs in India. The problems may be categorized into, Personal problems such as Dual commitment, lack of support from family members, lack of self confidence, education, psychological problems etc. Social problems such as Male dominated society, different social attitude, lack of Government support, etc. Business related problems such as scarcity of finance, paucity of raw materials, marketing problems exploitation by middlemen etc.<sup>(2)</sup>

The major problems faced by the women entrepreneurs are as follows,

1. **Being Women:**

The first and foremost problem for a Women Entrepreneur is being a woman. The male dominated society builds blocks for women's success in business

2. **Lack of Confident:**

Lack of self-confidence, will power, strong mental outlook and optimistic attitude amongst women creates a fear from committing mistakes while doing their piece of work

3. **Paucity of Funds/ Difficulty in Obtaining Finance:**

Unlike big public firms, tiny firms cannot have access to primary and secondary markets. Women in developing country have little access to funds, due to the fact that they are concentrated in poor rural communities with few opportunities to borrow money.

4. **High Production Cost:**

High production cost of some business operations adversely affects the development of Women entrepreneurs. The installation of new machineries during expansion of the productive capacity and like similar factors dissuades the women entrepreneurs from venturing into new areas

5. **Male Female Competition**

Though the women entrepreneurs considered good in keeping their service prompt and delivery in time, due to lack of organizational skills compared to male entrepreneurs" women have to face constraints from competition

6. **Legal Formalities:**

This kind of problem is faced by the entrepreneurs who enter into business without any preparation. So, they face some legal formalities such as the trademarks, copyrights and intellectual property problems.

7. **Women's Family Obligation:**

Having primary responsibility for children, home and older dependent family members, few women can devote all their time and energies to their business. The financial institutions discourage women entrepreneurs on the belief that they can at any time leave their business and become housewives again.

8. **Women's Emphasis to Family Ties and Relationship:**

The business success depends on the support, the family members extended to women in the business process and management. Absence of proper support, cooperation and backup for women by their own family members force them to drop the idea of excelling in the field of entrepreneurship

9. **Risk Bearing Capacity:**

Any kind of business is considered as continuous risk taking and strategic decision all the time. Investing money, maintaining the operations and ploughing back money for surplus generation requires high risk taking attitude, courage and confidence.

10. **Isolated from Business Networks:**

Today, the business is transforming in different aspect, and maintaining the networks is playing a vital role in the success of business. Apart from formal networks, the informal networks maintenance demonstrates the success of business. It is necessary to attend the informal meetings, but the women entrepreneurs are considered as isolated from these kinds of business networks, which dwindle the margin of women entrepreneurs

11. **Negative Self-Perception:**

Women entrepreneurs will take a pioneering step in business to face the situations. But because of not having proper support and positive attitude, majority of women are dropping their ideas before the actual result.

### 3. **Offering training facilities:**

Training is essential for the overall development of entrepreneurs. It also enables the rural entrepreneurs to undertake the venture successfully as it certainly imparts required skills to run the enterprise.

### 4. **Power supply of raw materials:**

Rural entrepreneurs should be surely ensured of proper supply of scarce raw materials on a priority basis. Subsidy may also be offered at times to make the products manufactured by rural entrepreneurs reasonable and cost competitive.

### 5. **Setting up marketing co-operatives:**

Proper assistance and encouragement should be provided to rural entrepreneurs for setting up marketing co-operatives. These co-operatives shall help in getting various inputs at reasonable rate and they are helpful in selling their products at remunerative prices.

### **Conclusion:**

Entrepreneurship among women, no doubt improves the wealth of the nation in general and of the family in particular. Women today are more willing to start their own business or to take over family owned business. The contribution of rural women to the economy is quite significant. Women entrepreneurs not only give employment to greater number of people, they also enhance the economy to grow faster than before, this results the women entrepreneurs to take challenging career and improve the nation as a whole.

But still, the problems and difficulties faced by rural women entrepreneurs are unnoticed. Lack of mobility and capital investment was the major problem of rural entrepreneurs. Besides this, women entrepreneurs face several obstacles. This is due to deeply rooted discriminatory socio-cultural values and traditions, embedded particularly in the policy and legal environment and in institutional support mechanisms. In many instances women are unable to benefit from services and struggle to overcome or circumvent discriminations in business circles. So, it is the responsibility of the country to make certain policies to help the rural women to develop entrepreneur skills and surface the problems to become flourishing entrepreneurs.

### **References:**

1. Dr.T.Vijayaragavan, (July, 2014). Problems and Opportunities of Women Entrepreneurs in India. International Journal of Business and Management Invention Volume 3 Issue 7, PP.59-6, [www.ijbmi.org](http://www.ijbmi.org)
2. J.Shyamala,(March 2016). Problems And Challenged Faced By Rural Women Entrepreneurs In India. Asia Pacific Journal of Research, Vol: 2. Issue XXXVII
3. Vasant Desai (2010), "Dynamics of Entrepreneurial Development and Management", Himalaya Publishing House.
4. Mishra .S.P.(1996) Report "Factors Affecting Women Entrepreneurship in Small and Cottage Industries in India" International labor Organization, Swedish International Development cooperation Agency, Pg. 193-201 [www.apjor.com/jose](http://www.apjor.com/jose)
5. P., Ajith Kumar and Paul T.M., "Entrepreneurship Development", Himalaya Publishing, 1994,
6. Khanka S.S. (2007): "Entrepreneurial Development", S. Chand & Co., New Delhi. pg. 23
7. Jayadatta S (September, 2017). Major Challenges and Problems of Rural Entrepreneurship in India. IOSR Journal of Business and Management (IOSR-JBM) Volume 19, Issue 9. Ver. II, PP 35-44 [www.iosrjournals.org](http://www.iosrjournals.org)
8. Lalita .N, (2005) "Micro Finance and Rural Development", Gandhi gram Rural Institute, Gandhi gram, Dindigal, Tamilnadu



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Agrarian Crisis in Maharashtra And Its Social Effect

Dr. Ghanu Prakashram Dhanrajkar  
K. J. Somaiya Institute of Management Studies & Research, Mumbai, India

Abstract

Agriculture is the backbone of the Indian economy...

Dr. Ghanu Prakashram Dhanrajkar

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Because of agrarian crisis many farmers have committed suicide, which are globally being addressed through health care and other services. The focus of their studies. The goal of their studies remains undetermined due to lack of data, shortage of special focus on the spiritual dimension of agrarian crisis, policy analysis and stability of government, business, their credit and other agricultural services, suffer on multiple levels due to the broader economic and social safety net. However, lack of access to social safety net and the general instability of workers in the state, community and family, the subject, most affected by the crisis and affecting rural, is "Agrarian Crisis: A Review of all these problems: empirical, theoretical, and policy implications: conceptual framework which is most salient to all."

Decker of lack of social safety net, economic of the welfare that's got their person because their present work is not sufficient to maintain their standard of living. There is no income program and no independent income card for workers. Farmer's own are also not as they had other been denied the compensation had received a general overview of farmers' identity, economic, even know about the future, get into other about the status of their business after already having the status and able to acquire those kind programs. Some a survey is in course that outcome, about the current, perspectives, gender discrimination, economic debt and stress stability and good and initial of life as a member of farmer's.

There is no health care, the workers farmers. Mental practices and healthcare's outcomes are not by the government either able to reach workers' and if they do, are not acceptable. Though government has started many welfare but there success there are huge gaps in their implementation, how days a very different way is coming forward as a

consequence of agrarian crisis. Many workers are playing his resignation and implicitly unemployment by government, so when the more productive or work, in the form of other of the industrial revolution, a growing number of workers are getting from work, because of majority of them workers work as wage laborers, employed by and subject to contractors, in order to pay back their debt and social debt, many workers are not for a long time, either they must work due to their family.

Fact experimenters have shown that men and women were both not independent in the field, when addressed the subject of their, agricultural or socio-economic, having gender equality and higher satisfaction in their family work. Finding of women and children is a deeply intertwined and growing phenomenon in the rural areas, as well as Maharashtra's "Agriculture: A Review of all these problems: empirical, theoretical, and policy implications: conceptual framework which is most salient to all." experiment in the region have revealed in agriculture, economic, and social, and great pressure for rural areas, to acquire a better of economic nature, in each of them, women of managerial, community, family, become, community, particularly women who are separated from their families, are under the

Challenges of small farmers. The rising frequency of farmers' aggression in Maharashtra and elsewhere are the high incidence of farmer's suicides are symptoms of a deep crisis in rural India. Agriculture is not the source of our food, health, income, strength, and heavy investment of food and only grain farmers' distress but also food shortage for farmers and whole society. Farmers who cultivate their lands have hardships are unable to increase their food area because of agrarian crisis and hence, the block of land can no longer sustain what farmers, especially in rural and agricultural, which accounts for two thirds of India's workforce are

**Keywords:** Interdisciplinary Multilingual Refereed Journal Impact Factor 7.8414

Because of agrarian crisis many farmers have committed suicide, which are globally being addressed through health care and other services. The focus of their studies. The goal of their studies remains undetermined due to lack of data, shortage of special focus on the spiritual dimension of agrarian crisis, policy analysis and stability of government, business, their credit and other agricultural services, suffer on multiple levels due to the broader economic and social safety net. However, lack of access to social safety net and the general instability of workers in the state, community and family, the subject, most affected by the crisis and affecting rural, is "Agrarian Crisis: A Review of all these problems: empirical, theoretical, and policy implications: conceptual framework which is most salient to all."

Decker of lack of social safety net, economic of the welfare that's got their person because their present work is not sufficient to maintain their standard of living. There is no income program and no independent income card for workers. Farmer's own are also not as they had other been denied the compensation had received a general overview of farmers' identity, economic, even know about the future, get into other about the status of their business after already having the status and able to acquire those kind programs. Some a survey is in course that outcome, about the current, perspectives, gender discrimination, economic debt and stress stability and good and initial of life as a member of farmer's.

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47.	राष्ट्रीय नेते यशवंतराव चव्हाण	डॉ. संजय मराठे	236
48.	यशवंतराव चव्हाण यांच्या आर्थिक विचारांचा अभ्यास	युवराज अभिमन्यू आठवले	241
49.	" राष्ट्रसंत तुकडोजी महाराज यांचा शैक्षणिक दृष्टीकोन "	डॉ. उद्धव न. कांबळे	245
50.	"मराठी लोकसाहित्यातील निवडक लोककला" (लावणी,तमाशा व गोंधळ)	प्रवीण शंकर सोलनकर	248
51.	महिलांचा राजकीय विकास	श्री. जितेंद्र प्रल्हादराव जाचमारे	254
52.	ग्रामीण महिला खरचं शक्तीहीन आहे का ?	प्रा. सुवर्णा लक्ष्मणराव बोडके	258
53.	नाशिकमधील प्राचीन मंदिरे	डॉ.शशिकांत गोकुळ सावळे	261
54.	भारतीय राजकारणात जयप्रकाश नारायण यांचे योगदान	श्री. ज्ञानेश्वर गोविंदराव हासनाळे	268
55.	कोर ट्रेनिंगचा व्हॉलीबॉल खेळाडूंच्या कारक क्षमतेच्या घटकांवर होणाऱ्या परीणामांचा अभ्यास	प्रा. तत्तापूरे जे. जी.	273
56.	शेतकरी चळवळ : एक दृष्टीक्षेप	प्रा. डॉ. संजय सु. आहिरे	281
57.	डॉ. बाबासाहेब आंबेडकरांचे कार्य व जलनीती विषयक दृष्टिकोन	संजय वंदूजी साठे	284
58.	उद्योग क्षेत्रातील महिलांचे योगदान: एक दृष्टीक्षेप	सुधाकर वाळू चव्हाण	287
59.	लठ्ठपणा आणि स्त्रीचे आरोग्य	प्रा. सय्यद अफरोज अहमद	290
60.	अर्थशास्त्रीय संशोधन आणि त्याचे प्रकार	श्री. विठ्ठल व्यंकटी कासले	293
61.	इंट्रानेटचे ग्रंथालय व माहिती केंद्राच्या दृष्टीने महत्त्व	श्री. प्रशांत प्रमोद गोंदकर	295
62.	स्वातंत्र्योत्तर काळातील मुंबईतील वाहतूक व्यवस्था : योजनात्मक आढावा	डॉ. मीनल आनंद मापुस्कर	299

# लठूपणा आणि स्त्रीचे आरोग्य

प्रा. सय्यद अफरोज अहमद

(गृहशास्त्र विभाग)

कालिकादेवी कला वाणिज्य व विज्ञान महाविद्यालय, शिरूर (का.) जिल्हा ब्रीड

प्रस्तावना:

आरोग्यम् धनसंपदा.' यावाचनेत आपलीच वेगळे काही सांगायची गरज नाही. आरोग्य चांगले असेल तर जीवनाच्या कोणत्याही क्षेत्रात प्रगती करता येणे सहज शक्य होते. चांगल्या आरोग्यासाठी आहार, व्यायाम आणि विश्रांती ही त्रिमूर्ती आवश्यक असते. आरोग्य आणि आहार यांचा दृढा संबंध आहे. की त्यामुळेच आपण 'जसे खातो तसेच दिसतो.' असे म्हणतात. अनीवडल्या काळात मात्र घावपळीने आपलेही व्यस्त जीवन शैली आहार विहाराच्या पाश्चात्य संकल्पना आणि तांत्रिक प्रगती साधण्याकडे असलेला गर्वाचा कल, यामुळे संतुलित आणि पोषक आहाराकडे दुर्लक्ष होताना दिसत आहे. दुसरीकडे बदललेल्या जीवनशैलीमुळे जेवण खाण्याच्या वेळाही बदलल्या आहेत. शिवाय भूक लागल्यावर मिळेल ते खाणे, या प्रवृत्ती मुळे संतुलित आहार मिळविण्याकडे कोणी लक्ष देत नाही.

फास्ट फूड, पिझ्झा, बर्गर आणि कोल्ड्रिक्स यानारच्या पदार्थांची सेवत करण्याची नवी संस्कृती निर्माण झाल्यामुळे लोक अनेक नव्या आजारांना बळी पडताना दिसत आहेत. डायबिटीज, किडनीचे विकार, हृदयविकार, पचनमार्गचे विकार, यानारच्या आजारांवर उपचार करण्यासाठी हजारो-लाखा रुपये खर्च करणारे लोक मुळात अशा प्रकारचे विकार टप्पळ होऊ नयेत, यासाठी आपल्या आहाराकडे मात्र काळजीने लक्ष पुरवित नाहीत. आजार उद्भवल्या वर औषधांचे सेवन करण्यापाठवी, आजार होऊ नये म्हणून आहाराच्या साध्यमातून आरोग्य आपणे हा प्रमुख उद्देश लक्षात घेणे गरजेचे आहे. न्यायिवाय कार्यक्षमता, बुद्धिमत्ता, स्मरणशक्ती यांच्या विकासासाठी कशा प्रकारचा आहार हवा, याचे ज्ञान असणे महत्त्वाचे आहे.

शरीर आणि मेंदूच्या विकामासाठी कोणते घटक आवश्यक असतात आणि ते आहारातून योग्य प्रमाणात कसे मिळवता येतील, याकडे प्रत्येकाचा कल असावा. जगात एकीकडे कित्येक लोकांना घावला पोटावर अन्न मिळत नाही, तर दुसरीकडे जाम्त खाऊन चरबी साठवलेने माणसे आढळतात. अजेंय सहिजेत असे म्हटले आहे ती जगात आढ प्रकारची माणसे असतात. अति केसाळ व मूळीच केस नसलेले, अति उंच अति वृद्धी, घुप काळी, घुप सोरी, अतिकूल आणि अतिस्थूल, यापैकी नेवटल्या दोन प्रकारच्या व्यक्तींचे आरोग्य कधीच चांगले राहत नाही आणि विशेषता: अति स्थूल व्यक्तींचे तर मूळीच नाही.

**स्थूलपणा (Obesity) व्याख्या**

"शरीरात घेतल्या जाणाऱ्या ऊर्जेपेक्षा वापरली जाणारी ऊर्जा कमी असल्यास जास्तीची ऊर्जा चरबीच्या रूपात साठते आणि लठूपणा येतो.

"स्थूलपणा म्हणजे शरीरात साठवीपेक्षा जास्त चरबी साठणे व त्यामुळे वजन अपेक्षित वजनपेक्षा जास्त होणे होय."

जागतिक आरोग्य संघटनेने केलेल्या संशुपणाच्या व्याख्येत 'आरोग्यावर दुष्परिणाम होईल एवढ्या प्रमाणात अॅडीपोज पेसीमध्ये मेद(लिपिड/Fat) साठणे म्हणजे स्थूलपणा होय.' over weight म्हणजे 'ज्यादा वजन' borse ओबेस म्हणजे फाजील लठू किंवा स्थूल अतिरिक्त मेदवृद्धीभाव इशजी भाषेत (abese) आणि ओबेसिटी (obesity)



असे म्हटले जाते. व्यक्तीच्या वय लिंग आणि उंचीनुसार प्रमाणित वजनाच्या दहा ते बीस टक्के वजन जाग्न अमल्याम ती व्यक्ती (ओव्हर वेट) संबोधली जाते.

आरोग्यावर विपरीत परिणाम करणाऱ्या अनेक चयापचय क्रिया संबंधित (मेटट्रॉलीक) आणि यांत्रिक (Mechanical) उपद्रव/त्रास स्थूलपणामुळे होऊ शकतात. म्हणूनच स्थूलपणा हा एक विकार आहे असे निश्चितपणे म्हणता येईल.

शरीरवस्तुमान निर्देशांक B.M.I (BODY MASS INDEX) चा वापर  
मोजलेले वजन (कि. ग्रॅम)

$$B.M.I = \frac{\text{वजन (कि. ग्रॅम)}}{\text{उंची}^2 / \text{मीटर}}$$

सामान्यपणे पुरुषांचा B.M.I. 20 ते 25 असणे योग्य मानले जाते. तर स्त्रियांचा B.M.I 19 ते 24 च्या दरम्यान असणे योग्य समजले जाते या पद्धतीत शरीरयष्टी या संकल्पनेचा समावेश होतो ही पद्धत जास्त संवेदनशील आहे.

लठ्ठपणा जाणून घेण्याची पद्धत:

"शरीरातील चरबीचे प्रमाण जाणून घेण्यासाठी एका विशिष्ट प्रकारच्या चीमट्या चा उपयोग केला जातो.

१) Harpenden calipers - बगलेच्या खालील भाग, छातीचा भाग, पोटा, जांघ, दंडाच्या मागचा भाग, पाठीच्या फऱ्याखालील भाग, कंबर, नितंब या शरीराच्या भागांपैकी कोणताही एक भाग चिमट्याने दाबून पाहिला असता ही जाडी एक इंचापेक्षा जास्त असेल तर तुमचे शरीर स्थूल आहे असे समजावे.

२) माणूस उघड्या अंगाने आरशासमोर उभा राहिला असता छाती पेक्षा पोटाजास्त मोठे दिसले तर तो लठ्ठ समजावा. साधारण: पुरुषाची हनुवटी, गळा, पोटा व कमरेवर चरबीचे घर असतात व स्त्रियांच्या बावतीत छाती, पोटा, कंबर, नितंब यावर चरबी साठते किंवा पोटाला घडी म्हणजेच वळकटी पडत असेल, चालताना मांड्या एकमेकींना घासल्या जात असतील तर त्या व्यक्ती लठ्ठ समजाव्यात.

❖ आपले वजन आपल्या उंचीला योग्य आहे की नाही ते ठरविण्याची सोपी पद्धत पुढीलप्रमाणे आहे

पुरुषांसाठी : उंची (इंचा मध्ये)  $\times 1 =$  वजन - म्हणजे तुमची उंची ५ फूट ६ इंच असेल (म्हणजे ६६ इंच) तर  $\times 1$  करून तुमचे वजन ६६ किलो असायला हवे. स्त्रियांसाठी : उंची (इंचामध्ये)  $\times .8 =$  वजन - म्हणजेच तुमची उंची ५ फूट २ इंच असेल, म्हणजे ६२ इंच असेल तर गुणिल .८ म्हणून तुमचे वजन ४९.६ लठ्ठपणाची/मिदोवृद्धीची कारणे:

- आनुवंशिकता, चयापचयाच्या क्रियेत अनियमितता, लिंग सामाजिक आणि आर्थिक घटक, भावनिक घटक, यंत्राधीन जीवन पद्धती जास्त कॅलरीज युक्त आहाराचे सेवन करणे.
- दिवसा झोप घेणे, व कफकारक पदार्थ सेवन करणे यामुळे शरीरातील मेद म्हणजेच चरबी वाढते.
- व्यायामाचा व शारीरिक श्रमाचा अभाव जंगफुड फास्टफुड तसेच मैद्याचे व जास्त गोड पदार्थ आहारात नेहमी सेवन करणे. विश्रांती
- तेलकट व तळलेल्या पदार्थांचा अतिप्रमाणात सेवन करणे अतिशय जलद गतीने जेवण करणे तसेच अति दारू पिणे धूम्रपान ताण तणाव अतिविश्रांती हॉटेल मधील खाणे इत्यादी शोडक्यात मनुष्य घेत असलेल्या आहार करत असलेली कामे व्यायाम यावर वजनातील वाढ किंवा कमी होणे अवलंबून असते.

• लठ्ठपणाचे/मिदोवृद्धीचे परिणाम

शुद्ध रक्तवाहिन्यांचा त्रास होतो. स्थूलपणामुळे उच्च रक्तदाबाची तक्रार निर्माण होते. हृदयावर ताण हृदय रोहिण्याचा त्रास, हृदयाची कार्यक्षमता विघडते, सामंजिक आजार झाल्यास लवकर बरा होत नाही. मेंदूच्या शुद्ध रक्तवाहिन्यांच्या त्रासामुळे मेंदूच्या रक्तपुरवठ्यात अडथळा निर्माण होऊन अर्धांगवायू सारखे परिणाम दिसून

येतात. श्वसनाच्या स्नायूंचे कार्य परिणामीत होते. धाप लागते. मधुमेहाच्या पार्श्वभूमी असणाऱ्यात मधुमेह उद्भवतो. रक्तातील एकूण कोलेस्ट्रॉल LDL कोलेस्ट्रॉल आणि ट्रायग्लिसेराईड्सची पातळी वाढते, तर HDL कोलेस्ट्रॉल ची पातळी कमी होऊन रोहिणी काठिण्याला पूरक अशा लायपोप्रोटीनच्या पातळीत वाढ होते.

रक्तातील यूरिक आम्लाच्या पातळीत वाढ होऊन सांध्यांचा गाऊट हा विकार होतो. स्थूल शरीराचा भाग सातत्याने पेलावा लागल्यामुळे संबंधित सांध्यांची उदा. कमरेचे हाड, मणके गुडघे क्षमता कमी होऊन त्यामुळे कंवर, गुडघ्यांची सांधेदुखी निर्माण होते. लठ्ठपणामुळे हालचाली मर्यादित होतात त्यामुळे बद्धकोष्ठते मारखे विकार उद्भवतात. पायाच्या अशुद्ध रक्तवाहिन्यांची अवनती होऊन पायाच्या मागच्या वाजूच्या शिरा दोरखंडा सारख्या टचटचीत व वेड्यावाकड्या स्वरूपात दिसतात. यालाच Varicose veins म्हणतात.

#### • स्थूलपणातील टाळण्यासाठी उपाय योजना:

आहारात विविधता आणण्याचा प्रयत्न करावा. एकाच वेळी पोटभर खाऊ नये दिवसभराचा आहार चार ते पाच टप्प्यात विभागावा, साखर अधिक मीठ तेलकट पदार्थ सॉफ्टड्रिंक, आईस्क्रीम, अल्कोहोल, बेकरीचे पदार्थ, शिळे अन्नपदार्थ टाळावेत. नॉनव्हेज खाणाऱ्यांसाठी आठवड्यातून एकदा चालेल पण शक्यतोवर फिश डिस्किन केलेले चिकन असेच पदार्थ खावेत. साय विरहीत दूध घ्यावे. भरपूर भाज्या फळे खावीत ,संतुलित आहार जीवनपद्धती व्हावी, पदार्थ उकडून किंवा भाजून खावे तळून नको पाणी भरपूर प्यावे शक्यतोवर कोमट पाणी प्यावे. सकाळी भरपूर न्याहारी, लाईट लंच लाईट डिनर असा दिनक्रम हवा. आणि स्थिरपणे वजनात घट होणे उत्तम,आहारात विविधता आणण्याचा प्रयत्न करावा,एकाच वेळी पोटभर खाऊ नये. दिवसभराचा आहार चार ते पाच टप्प्यात विभागावा. उपवासाचे पदार्थ खाऊन उपवास करणे टाळावे परंतु संपूर्ण रसाहार करून आठवड्यात एक उपवास करावा.खाण्यातील कॅलरी पेक्षा व्यायामाने जळणाऱ्या कॅलरीज कडे लक्ष द्यावे.

आग्रह करणे आणि करून घेणे टाळावे, उरलेसुरले अन्न पोटात टकलून नये, व्यायामासाठी वेळ राखून ठेवा व्यायामापूर्वी एक तास आणि व्यायामानंतर एक तास काहीही खाऊ नये आयुष्यात सुखी समाधानी व्हायचे असल्यास आहार व्यायाम विद्यांती या त्रिसूत्रीचा अवलंब करा उपचारात्मक रूप न देता जीवन धर्म समजावा त्याची उपासना व्हावी.

#### संदर्भ ग्रंथ

1. प्रा. रसिका विठ्ठल देशमुख (२००९): आहाराचे आरोग्य मंत्र ;माकेत प्रकाशन, पुणे.
2. प्रा. डॉ. खेहा महाजनी (1994): आहार शास्त्राची मूलतत्त्वे ; श्री. मंगेश प्रकाशन, नागपूर
3. सी. शोभा वाघमारे (नाईक) (2008): पोपण आणि आहार ; विद्या बुक पब्लिशर्स, औरंगाबाद .
4. डॉ. शोभा वाघमारे (नाईक) (2010): आहारोपचार आणि सामुदायिक पोपण ; विद्या बुक पब्लिशर्स, औरंगाबाद .
5. डॉ. वा. वा. भागवत (२००७) : लठ्ठपणा-व्यायाम आणि आहार ;उन्मेष प्रकाशन, पुणे.
6. सी. शकुंतला देसरदा (२००९) : आरोग्य जागृती ;अक्षरयोगी प्रकाशन , औरंगाबाद.

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# SOCIAL ISSUES AND PROBLEMS

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## VILLAGES STUDY REPORT REGARDING COVID-19 OF SHIRUR (KA) TALUKA OF BEED DISTRICT IN MAHARASHTRA

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**Abstract:** This study was conducted in a scientific manner following the objectives of the University Grants Commission's reference letter (No D.O.NOF.1-1/20209 (Secy) Dated 12 June 2020) to the villagers of five villages namely Rakhasabhuvan, Padli, Warni, Kolwadi and Dahiwadi in Shirur Kasar taluka of Beed district in Maharashtra. Google forms have relied on this technique to collect data in this regard. This study is based on preliminary data. The data is analyzed on the basis of questionnaires, observations, techniques for compiling basic facts. Although the study was conducted by the Department of Sociology our college, the sociological approach is evident in the study. The views of fifty villagers from the above five villages have been incorporated in this study. The study lacked time while doing this, so there were limitations to study from different perspectives.

**Key words:** Health, Community, Awareness, Prevention

**Introduction:** Corona is a name of a group of viruses. India is already known to this virus. SARS discovered in 2003, and MERS discovered in 2012, are also diseases caused by the corona virus. But the corona virus that was found in the outbreak of the disease in December 2019 in Wuhan, China, is different from the previous one, so it is called the novel Corona virus. The World Health Organization has named the disease Covid-19. Covid-19 is the name given by the World Health Organization (WHO) on February 11, 2020 for the disease caused by the novel Corona virus SARS-CoV-2. It started in Wuhan, China in late 2019 and has since spread worldwide. Covid-19 is an acronym that stands for Corona virus disease of 2019. The virus is also named after its shape which takes the form of a crown with protrusions around it and hence is known as corona virus.

The disease has been reported in many parts of the world. India could not stay away from this disease. The Covid-19 has infected millions and killed scores of people all around the world. There are currently five lakh forty eight thousand three hundred and eighteen patients in India and two lakh ten thousand one hundred and twenty patients are currently undergoing treatment in the hospitals. Three lakh twenty one thousand seven hundred and twenty three patients have recovered and gone home. The total number of deaths in India due to corona virus is sixteen thousand four hundred and seventy five. In Maharashtra, seventy three thousand two hundred and ninety eight patients are active patients and a total of eighty eight thousand nine hundred and sixty patients have recovered and returned home. Till date one hundred and fifty six patients have died in Maharashtra due to corona virus. In the Beed district of Maharashtra where we have studied five villages in Shirur Kasar Taluka, a total of one hundred and seventy seven patients have been affected with corona virus and eighty six patients have recovered from it. Currently thirty seven patients are undergoing treatment in Civil Hospital, Beed. Three patients have died of the disease. While the disease was rampant in Maharashtra, only two patients were found in Shirur Kasar Taluka till today. Now they are recovered and have been sent home after recovering

from the disease. The patient was from Mumbai. After this, however, no corona infected patient has been found or reported in Shirur Kasar Taluka till date and no death has been reported so far. We are studying the villages in such talukas. Covid-19 has been shown to have many effects at different levels in the society. We can see the vivid economic, social, environmental consequences in this context. The results have been seen in urban as well as rural areas. What effects did the lockdown caused by Covid-19 have on rural areas? A study has been conducted on the awareness of the rural population about corona virus disease and the problems that have arisen in the rural areas during the lockdown and the measures taken by the rural population.

**Study Method:** For this study, five villages of Rakhas Bhuvan, Padli, Dahiwadi, Kolwadi and Warni in Shirur Kasar Taluka of Beed district of Maharashtra were identified and selected. Our intention in selecting these villages was that a special camp of our Kalikadevi College's National Service Scheme was held in these villages. Since the study was conducted during the lockdown period, Google Forms were used for data collection. We reached out to the villagers on social media and the questionnaire was filled out by the people. A total of fifty people participated and filled out the questionnaire online. The purpose of the letter from the University Grants Commission has been kept in mind while preparing this questionnaire.

- 1) To study the awareness of the villagers about Covid-19.
- 2) To study what problems arose in rural areas during the Covid-19 period.
- 3) To study how the rural masses overcame the problems created during the Covid-19 period and what their strategy was while doing this.

About this objective, as well as the study conducted by the Department of Sociology, some of these questions were asked from the sociological point of view. This Study is totally dependent on primary data. For data collation we have used Questionnaire, Observation Method techniques.

**Silent Findings:** The highlights of this study are as follows:

Our college is located in a rural & hilly area. Most of the people in this area are sugar cane cutters. This area is also facing the water scarcity problem continuously.

For the study of Covid-19 as per our reference letter D.O.NO.F.1-1/20209 (Secy) dated 12 June 2020 we have conducted this study. For this study we have chosen the five villages which are located in Shirur Kasar and have the population of near about two thousand or so. We have conducted the N.S.S. camps in the same villages from time to time. They were always very co-operative with us and we have worked in close coordination with them.

As per the samples of survey we observed that there are 98.2% Hindu and 1.8% Muslim community people in this area. There are no clashes among them. Here the population has the average age of 20 to 30 years and is more aware and they gave very good response to this study and to the questions put to them. Among them 80.7% were males and 19.3% females. We got very good response from the under graduates students 70.2 % and 14% from P.G. It is one of the great achievements of our college and it has added a new feather in the history of our college.

We observed that 87.7% residents were already living in their villages but 12.3% residents were migrants who had migrated from various cities to their village in this period. Many people have migrated from cities to their village in the crisis of corona.

One thing is also noticeable here that the migrant people had followed the rules and regulations which are enforced by the Central Government and controlled by the State Government such as quarantine, isolation, medical checkup, hand wash, use of mask, social distancing etc. Villagers were alerted by the government agencies and also due to the effort taken by the Asha activists, Anganwadi Sevika, Sarpanch, Gramsevak the people were made aware of and educated about the spread of corona virus. The people were also identified if they were infected by the virus and sent to civil hospital for the treatment. Tahasildar and his team along with the educated people and students from the town have worked tirelessly and selflessly in the crisis of corona virus. They have worked hard in close co-ordination with each other as a team and collectively followed the instructions strictly to restrain the spread of the corona (covid-19) virus. During the survey we observed that near about 96.5% people are well-known about the symptoms of covid-19 and they also know which organs of the body will be highly affected by the virus. If a mob or crowd was observed anywhere on the streets immediately the people were instructed to disperse from there and avoid the spread of the virus.

The people in these villages who have android mobile phones among them 84.2% had downloaded the SETU APP which gives the alerts about the covid-19 in their area.

In some villages many people who had migrated to the villages were restricted or prevented from entering in to the villages, but finally they were

allowed entry and were kept in quarantine or isolation for fourteen days as per the norms of government. Around 72% of the people have arrived in the village with government permission. We also observed that during the lockdown period the people have received regular and sufficient supply of grains from the government as well as the NGOs etc. Also the primary teachers, social workers and the students from the villages have taken special efforts and worked tirelessly, hand-in-hand and in close co-ordination with the administrative authorities. So we observed that 96.5% people are satisfied with the efforts taken by the government agencies and others in the harsh times of corona virus.

The Grampanchayat of every village has cleaned up each and every area of the villages, however, due to some limitations they were able to clean up only 63.2% of the area of their villages so far. All the villages are kept neat, clean, and tidy. Specially, the entry to temples, mosques, market places is strictly banned.

Due to covid-19 everyone has become alert and conscious in order to improve their immunity and so many people have given up their bad habits of chewing tobacco, gutka and smoking or consuming liquor etc. The women's self help groups are also engaged in creative and preventive work such as mask making, sanitizers, making various food items and supplying them to the people in the same villages. The journalists in Shirur Kasar Tahsil have also played a very important and crucial role during this period. They have continuously worked to give information which is helpful for the peoples for preventing the spread of corona virus. The journalists have also helped the administration in teaching out to the needy people. Our college staff has also helped near about two hundred needy people by providing them grains and other needful items under the guidance of our Honorable Secretary Ex. Minister of Maharashtra state Shree Jaydutt Kshirsagarji. The entire college staff and colleagues have also helped the Shirur Tahasil in this hour of need. We were also on duty on the check posts at the borders of Shirur Kasar Taluka.

**Conclusion:** Overall, we observed that the rural people are cooperative, helpful, alert about their immunity, cleanliness, government policies, and facilities etc. Their economic condition is poor, so they are affected adversely. The routine of the people has been disturbed for a long time. But they have faced all the problems very bravely with the help of their strong, positive, and helpful nature.

One thing we have intensively observed is that they are very eager about the education. But nowadays number of people (87.7%) who have Android mobile phones and 66.6% people had ensured that there is proper internet range in their areas. Some parents are afraid of the misuse of the mobile, as well as there are lots of electricity problems in the rural area.

Still the basic infrastructure is not available for providing online education. The people has also limited the number of people and arranged the

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functions in the presence of limited people only. About 82.5 % peoples are satisfied due to such functions. This is also one output of this lock down. People are also strictly aware about the personal as well as village cleanness and have avoided creating crowd. Around 98.2 % people are in the favor of early lockdown for the environmental balance.

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**References:**

1. Covid 19 Pandemic General Awareness Booklet: Published by Public Health Department, Government of Maharashtra.
  2. Day to Day Report Prepared by government of Maharashtra also Civil Hospital, Beed.
  3. [https://www.who.int/health-topics/coronavirus#tab=tab\\_1](https://www.who.int/health-topics/coronavirus#tab=tab_1)
  4. UGC Ref. letter: D.O.NO.F.1-1/20209 (Secy) Dated 12 June 2020.
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## मानवी हक्क आणि महात्मा गांधी राष्ट्रीय ग्रामीण रोजगार हमी योजना

डॉ. सुधीर आशुबा येवले

सहा.पा. व विभाग प्रमुख, समाजशास्त्र विभाग, कव्लिकादेवी महाविद्यालय शिरूर (वा), जि. बीड (महाराष्ट्र)

प्रस्तावना:

दरवर्षी १० डिसेंबर रोजी जगभरात आंतरराष्ट्रीय मानवी हक्क दिवस राष्ट्र संघ मानवाधिकार कार्यालयांच्या नेतृत्वात जगभरा साजरा केला जातो. मानवाधिकाराचे वैश्विक घोषणापत्र संयुक्त राष्ट्रांच्या सर्वसाधारण सभेत १० डिसेंबर १९४८ रोजी स्वीकारले त्यानंतर संयुक्त राष्ट्रसंघाने १९५० मध्ये १० डिसेंबर हा दिवस मानवी हक्क दिवस म्हणून जाहीर केला. समाजातील प्रत्येक व्यक्तीचे स्वातंत्र्य अबाधित राहणे तसेच व्यक्तीला सन्मानपूर्वक जगता याचे वास्तवी १० डिसेंबर हा आंतरराष्ट्रीय मानवी हक्क दिवस म्हणून साजरा केला जातो. मानवाधिकाराच्या घोषणापत्रात ३० कलमे असून या घोषणा पत्रा वर आधारित मानवी हक्काचे आंतरराष्ट्रीय विधेयक १९६६ मध्ये संयुक्त राष्ट्रांच्या आमसभेत मांडण्यात आले. १९७६ मध्ये पूर्वीच्या सदस्य राष्ट्रांच्या पाठीमध्यानंतर त्याला आंतरराष्ट्रीय कायद्याचे स्वरूप प्राप्त झाले. भारतात २८ सप्टेंबर १९९३ ला मानवी हक्क कायदा लागू करण्यात आला. त्यानंतर २२ ऑक्टोबर १९९३ मध्ये राष्ट्रीय मानवी हक्क आयोगाची स्थापना करण्यात आली. हा आयोग राजकीय, आर्थिक, सामाजिक आणि सांस्कृतिक या कार्याक्षेत्रांना लागू करण्यात आला. १) अग्निदयस्त्री स्वातंत्र्य २) मतदान वगळता तसेच निवडणूक लढविण्याचा अधिकार ३) प्रत्येक व्यक्तीला स्वातंत्र्य आणि सुरक्षा अधिकार ४) शिक्षणाचा अधिकार ५) कायदासमोर समानतेचा अधिकार अशा प्रकारचे एकूण २५ अधिकार आपणाने मूलभूत मानवी हक्क द्वारे प्राप्त झाले आहेत.

मानवी हक्क म्हणजे सर्व मनुष्यांना प्राप्त झालेले असे मूलभूत अधिकार, जे त्यांच्या राष्ट्रीयत्व, निवास, लिंग, जात, वर्ण, धर्म, भाषा किंवा इतर कोणत्याही स्थितीवर अवलंबून नसते. यामध्ये कुठल्याही प्रकारचा भेदभाव नसतो, व्यक्ती मनुष्यप्राणी असल्यामुळे ज्या हक्कांचा दावेदार ठरते त्यांस मानवी हक्क संबोधले जाते.

मानवी हक्कांचे स्वरूप :

- १) वैश्विकता: मानवी हक्क वैश्विक स्वरूपाचे आहेत. प्रत्येक व्यक्तीला आपले जन्मस्थान, जात, पंथ, वंश, भाषा, धर्म, संस्कृती अथवा राष्ट्रीयता याशिवाय कोही मानवी हक्का असतात.
  - २) स्वभाविकता: मानवी हक्क मानवाच्या स्वभावातून उगम पावतात. प्रस्तुत हक्क कोणत्याही बाह्य संशोधकांचे बद्दल केलेले नसत व्यक्तीला कोणीही त्यापासून वंचित ठेवू शकत नाही.
  - ३) अदेयता: मानवी हक्क मानवाच्या स्वाभाविक दंडलेले असल्याने प्रत्येक व्यक्तीला जन्मापासून उपलब्ध होतात.
- अ. मानवी हक्कांचा वैश्विक जाहीरनामा : १९४८
- १) कलम १: सर्व मानवजात जन्मतः स्वतंत्र आणि व्यक्ती प्रतिष्ठा व हक्कांच्या बाबतीत समान आहे. सर्वांना वैचारिक शक्ति व सदसाधिकार बुद्धीची देणगी लाभली असून सर्वांना परस्परांशी बंधुत्वाच्या भावनेने व्यवहार केले पाहिजे.
  - २) कलम २: प्रस्तुत जाहीरनाम्यात नमूद सर्व हक्क व स्वातंत्र्य प्रत्येकाला उपलब्ध असतील. याबाबत वंश, वर्ण, लिंग, भाषा, धर्म राजकीय अथवा इतर मते, राष्ट्रीय व सामाजिक मूळ, दारिद्र्य, जन्म वा इतर स्थान या आधारे भेदभाव केला जाणार नाही. याशिवाय व्यक्तीला देश अथवा प्रादेशिक, राजकीय अधिकार क्षेत्राच्या अथवा अंतरराष्ट्रीय दर्जाच्या आधारे भेदभाव केला जाणार नाही, नग तो देश असो या स्वतंत्र घेत असो.
- ब) नागरी व राजकीय हक्क :
- ३) कलम ३: सर्व स्त्री-पुरुषांना सर्व नागरी व राजकीय हक्कांचा उपभोग घेता याचा वास्तवी नागरी व राजकीय हक्कांच्या संधीतील सर्व हक्कांची हमी देण्याचा सर्वसदस्य राष्ट्र प्रयत्न करतील. त्यासाठी कलम ३ व्दारा प्रत्येकाच्या जीवित, स्वतंत्री, व्यक्तीगत सुरक्षांच्या हक्कांची तरतूद केली जाते.
  - ४) कलम ४: कोणत्याही व्यक्तीला गुलामगिरीत ठेवता येणार नाही. सर्व प्रकारची गुलामगिरी आणि गुलामांचा व्यापार यास प्रतिबंध घातला जाईल.
  - ५) कलम ५: कोणत्याही व्यक्तीचा छळ केला जावू नये अथवा कोणत्याही व्यक्तीला क्रूर, अमानवी अथवा अपमानास्पद प्रत्यूक अथवा शिक्षा दिली जावू नये.



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- १) कलम ६ : प्रत्येकाला कायदासमोर व्यक्ती उद्भवून सर्वत्र मान्यता प्राप्त करण्याचा अधिकार आहे.
- ७) कलम ७ : सर्वत्र मान्यता प्राप्त असतील आणि कोणत्याही भेदभाव न करता कायदांच्या समान संरक्षणाचा सर्वोच्च अधिकार आहे. या जाहीरनाम्याचे उल्लंघन अथवा उल्लंघनाच्या घेतावतीपासून संरक्षण करण्याचा सर्वोच्च अधिकार असेल.
- ८) कलम ८ : संविधान अथवा कायदाने प्रचलित केलेल्या मूलभूत हक्कांचे उल्लंघन झाल्यास त्याविरुद्ध न्याय मिळावा यासाठी संक्षेप राष्ट्रीय न्यायादायके प्रभावी दाद मागण्याचा अधिकार आहे.
- ९) कलम ९ : कोणत्याही व्यक्तीस मनमानी अटक अथवा बेकायदेशीररीत्या स्वातंत्र्य वंचित करता येणार नाही किंवा हद्दपार करता येणार नाही.
- १०) कलम १० : प्रत्येक व्यक्तीला आपले हक्क व जबाबदाऱ्या निर्धारित करणे आणि स्वतः वरील गुन्हेगारी स्थितीच्या आरोपाबाबत सर्वोच्च स्वतंत्र व निःपक्षपाती न्यायाधिकार न्याय्य आणि धुन्या सुनावणीचा अधिकार आहे.
- ११) कलम ११ : गुन्हाचे आरोपी असणारी व्यक्ती जोपर्यंत सुनावणी होऊन न्यायालयाबाबत दोषी ठरवण्यात जात नाही. तोपर्यंत तिला निधीन मानले जाईल आणि न्यायालयी प्रक्रियेत आपली बाजू मांडण्याचा तिला अधिकार आहे. एखाद्या व्यक्तीने केलेले कृत्य प्रचलित राष्ट्रीय वा आंतरराष्ट्रीय कायदानुसार गुन्हेगारी मानले जावे. तसेच एखादे कृत्य केले तेव्हा प्रचलित कायदात जी शिक्षा लागू केलेली असते त्यापेक्षा अधिक शिक्षा देता कामा नये.
- १२) कलम १२ : कोणत्याही व्यक्तीची खाजगी, कौटुंबिक आयुष्य अथवा पराव्याहार यात मनमानी हस्तक्षेप करता येणार नाही अथवा त्यांच्या सन्मान आणि प्रतिष्ठा यावर अतिक्रमण करता येणार नाही. प्रत्येक व्यक्तीला अशा हस्तक्षेपापासून बेकायदेशीर संरक्षण मागण्याचा अधिकार असेल.
- १३) कलम १३ : प्रत्येक व्यक्तीला आपल्या राष्ट्रांतर्गत कोणत्याही भागात संचार करण्याचा अधिकार आहे. तसेच प्रत्येक व्यक्तीला स्वतःच्या राष्ट्रसह कोणतेही राष्ट्र सोडून जाण्याचा आणि राष्ट्रगत परत येण्याचा हक्क आहे.
- १४) कलम १४ : एखाद्यापासून संरक्षण मिळवण्यासाठी प्रत्येक व्यक्तीला देशात राजाश्रय घेण्याचा आणि तेथे वास्तव्य करण्याचा अधिकार आहे. तथापि, अराजकीय गुन्हासून उगम पावणारी आणि संयुक्त राष्ट्रसंघटनेची सन्ध व तत्त्वे यांच्याशी विरुद्ध असल्यामुळे निर्माण होणाऱ्या न्यायप्रक्रियेच्या विरोधात हा हक्क अवलंबता येणार नाही.
- १५) कलम १५ : प्रत्येकाला राष्ट्रीयत्वाचा अधिकार आहे आणि कोणत्याही व्यक्तीला राष्ट्रीयत्व बेकायदेशीररीत्या रद्द करता येणार नाही अथवा राष्ट्रीयत्व बदलण्याचा व्यक्तीला हक्क नाकारता जाणार नाही.
- १६) कलम १६ : मुलूखी व पुरुखास वंश, राष्ट्रीयत्व अथवा धर्म याआधारे कोणत्याही भेदभाव न करता विवाह करून स्वतःचे कुटुंब स्थापन करण्याचा अधिकार आहे. विवाह आणि घटस्फोट याबाबत सर्वोच्च समान हक्क असतील. विवाहाच्या मुक्त आणि पूर्ण संमतीने विवाह केला जाईल. कुटुंब स्थापने हे समाजातील स्वाभाविक आणि मूलभूत हक्क असून कुटुंबांना समाज व राज्यकडून संरक्षण प्राप्त करण्याचा अधिकार आहे.
- १७) कलम १७ : प्रत्येकाला व्यक्तीगत व सामूहिकरीत्या मान्यता बाळगण्याचा अधिकार आहे. कोणत्याही व्यक्तीची मान्यता बेकायदेशीररीत्या हिरापून घेता येणार नाही.
- १८) कलम १८ : प्रत्येक व्यक्तीला विचार, विश्वास आणि धार्मिक स्वातंत्र्य असेल; यात स्वतःचा धर्म वा संप्रदाय बदलण्याचा अधिकार तसेच व्यक्तीगत वा इतरांच्या साहाय्याने आणि सार्वजनिक वा खाजगीरीत्या विकसणूक, आचरण व उपासनेच्या धर्मांचा आविष्कार करण्याचा अधिकार आहे.
- १९) कलम १९ : प्रत्येकाला मत स्वातंत्र्य व अविष्काराचे स्वातंत्र्य आहे. या हक्कात कोणत्याही हस्तक्षेपाविना मत बाळगण्याचा तसेच तीमांचा विचार न करता कोणत्याही प्रसाराप्रकाराने साहित्य प्राप्त करणे तसेच साहित्यी व विचार प्रस्तुत करण्याचा हक्क समाविष्ट होतो.
- २०) कलम २० : प्रत्येकाला शांततासह मार्गाने सभा भरविण्याचा आणि संघटना बांधण्याचा अधिकार आहे. कोणत्याही व्यक्तीला एखाद्या संघटनेचा सदस्य होण्याची सक्ती वेगळी जाणार नाही.
- २१) कलम २१ : प्रत्येकाला अप्रत्यक्षपणे अथवा धुन्या पद्धतीने नियंत्रणेच्या प्रतिनिधीद्वारे शासन वरिष्कारत सहभागिता होता येईल. तसेच प्रत्येकाला आपल्या देशातील सार्वजनिक सेवांचा समान उपभोग घेण्याचा अधिकार आहे. लोकसंमती हाच शासनसत्तेचा आधार असेल. नियमितपणे घेतल्या जाणाऱ्या निवडणुकांमार्फत ही जनसंमती व्यक्त केली जाईल. या निवडणूक प्रक्रियेत सक्तीने समाज अधिकार असून या निवडणुका गुप्त अथवा धुन्या पद्धतीने आयोजित केल्या जातील.
- क) आर्थिक, सामाजिक आणि सांस्कृतिक हक्क  
२२) कलम २२ : समाजाचा सदस्य म्हणून प्रत्येकाला सामाजिक सुरक्षेचा हक्क आहे आणि आपली व्यक्तीगत प्रतिष्ठा तसेच व्यक्तिमत्त्वाचा मुक्त विकासासाठी राष्ट्रीय प्रयत्न व आंतरराष्ट्रीय सहकार्य आणि प्रत्येक देशाचे संघटन व संस्थापनांच्या प्रमाणात आपले आर्थिक, सामाजिक, आणि सांस्कृतिक हक्क प्राप्त करण्याचा अधिकार आहे.

- २३) कलम २३- प्रत्येक व्यक्तीला कामाचा, आपल्या इच्छेनुसार रोजगार निवडीचा, कामाच्या ठिकाणी न्याय व अनुकूल परिस्थिती असण्याचा आणि बेकारीपासून संरक्षणाचा हक्क आहे. कोणत्याही व्यक्तीला कोणत्याही भेदभावाविनासमान कामासाठी समान वेतन मिळण्याचा अधिकार आहे. काम करणार्या प्रत्येक व्यक्तीला आणि त्याच्या कुटुंबाला सन्मानाने जगता यावे यासाठी न्याय व योग्य वेतन मिळवण्याचा हक्क आहे आणि प्रसंगी सामाजिकसुरक्षेची इतर साधने प्राप्त करण्याचा अधिकार आहे.
- २४) कलम २४- प्रत्येकाला दिवाळी आणि विरगुब्याचा अधिकार आहे. यात कामाचे निश्चित व न्ययादित तारखे आणि नियमित पगारी सुट्टीचा समावेश होतो.
- २५) कलम २५ - प्रत्येकाला स्वतःचे आणि आपल्या कुटुंबाचे आरोग्य व कल्याण साधण्यासाठी आवश्यक जीवनमान राखण्याचा अधिकार आहे. यात अन्न, वस्त्र, निवारा, वैद्यकीय सेवा आणि आवश्यक सामाजिक सेवांचा समावेश होतो. याशिवाय प्रत्येकाला बेकारी, आजारपण, अपंगत्व, वैधर्म्य, वृद्धत्व किंवा आपल्या नियंत्रणापलीकडे असलेल्या परिस्थितीमुळे निव्वहे प्राप्त करणे असह्य झाल्यास सुरक्षा मिळवण्याचा हक्क आहे. माता व बाळके यांना विशेष प्रकारची काळजी आणि साहाय्य प्राप्त करण्याचा अधिकार आहे. औरस तसेच अनौरस बाळकांना समान सामाजिक संरक्षणाचा हक्क आहे.
- २६) कलम २६- प्रत्येकाला शिक्षणाचा अधिकार आहे. किमान प्राथमिक आणि मूलभूत स्तरावरील शिक्षण जोपासत असेल. प्राथमिक शिक्षण सक्तीचे असावे. तांत्रिक व व्यावसायिक शिक्षण सार्वत्रिक असावे आणि उच्चशिक्षण गुणवत्तेच्या आधारे सर्वोत्तम उपलब्ध असावे. मानवी व्यक्तिमत्त्वाचा सर्वांगीण विकास साधणे आणि मानवी हक्क व स्वातंत्र्यविषयी आदर बळकट करणे हा शिक्षणाचा उद्देश असेल. शिक्षणाद्वारे सधे राष्ट्रातील यांत्रिक किंवा धार्मिक गटांमध्ये सामंजस्य, सहिष्णुता आणि मैत्रीस प्रोत्साहन दिले जाईल आणि संयुक्त राष्ट्रांद्वारे शांतता राखण्याच्या कार्यास उत्तेजन दिले जाईल. घातकांना आपल्या पाल्यास वधोपत्त्या प्रसारणे शिक्षण दिले जावे याची निवड करण्याचा पूर्वधिकार असेल.
- २७) कलम २७- प्रत्येकाला आपल्या समुदायाच्या सांस्कृतिक जीवनात मुक्तपणे सहभाग घेणे, कलांचा आस्वाद घेणे आणि वैभक्तिक प्रगतीचा लाभ घेण्याचा हक्क आहे. प्रत्येक व्यक्तीला स्वतः निर्माण केलेल्या वैज्ञानिक, साहित्यिक किंवा कलात्मक निर्मितीतून उदभवणार्या नैतिक आणि भौतिक लाभांचे संरक्षण मिळवण्याचा हक्क आहे.
- २८) कलम २८- प्रस्तुत जाहीरनाम्यात नमूद केलेल्या सर्व हक्क व स्वातंत्र्याची पूर्तता होईल अशा सामाजिक आणि आंतरराष्ट्रीय स्थितीचा प्रत्येक व्यक्तीला हक्क आहे.

## ५) व्यक्तीचे कर्तव्य :

- २९) कलम २९- प्रत्येक व्यक्तीला आपल्या समाजाप्रीती काही कर्तव्य असतात. व्यक्तीच्या व्यक्तिमत्त्वाचा मुक्त व परिपूर्ण विकास केवळ समाजात होवू शकतो. व्यक्तीच्या हक्क व स्वातंत्र्याच्या उपभोगावर इतर व्यक्तींच्या हक्कांना योग्य मान्यता देवून त्यांचा योग्य आदर राखणे आणि लोकशाही समाजात नैतिकता, सार्वजनिक कल्याणासाठी आवश्यक गरजांची पूर्तता करण्यासाठी कायद्याने निर्धारित केलेले बंधनेच लादता येतील. व्यक्तीला आपले हक्क व स्वातंत्र्य संयुक्त राष्ट्रसंघटनेची उद्दिष्टे व तत्त्वे यास विभंगत ठरतील अशा प्रकारे उपभोगता येणार नाही.
- ३०) कलम ३०- प्रस्तुत जाहीरनाम्यातील कोणत्याही राष्ट्राने, गटास किंवा व्यक्तीस या जाहीरनाम्यात नमूद केलेल्या हक्क वा स्वातंत्र्यास बाधा आणणारी कृती करता येणार नाही.
- मानवी हक्कांच्या सनदेची एकंदर ३० कलमे आहेत. आर्थिक शोषणापासून व्यक्तीची सुटका झाल्याशिवाय त्याला प्रदान केलेल्या व्यक्तीस्वातंत्र्याचा तो खऱ्या अर्थाने उपभोग घेऊ शकत नाही याउलट व्यक्तीस्वातंत्र्याच्या अभावी आर्थिक शोषणाचा खरायुरा प्रतिबंध करता येत नाही ही भूमिका सनदमध्ये प्रतिबिंबित झालेली आढळते. या सनदचा २३ व अनुच्छेद रोजगारच्या हक्काची मांडणी करणारा आहे.
- १) रोजगार मिळणे, रोजगाराची निवड मुक्तपणे करता येणे हा प्रत्येकाचा हक्क आहे. कामाच्या बत्ती न्याय व पीडक असल्यात हा प्रत्येकाचा हक्क आहे. बेकारीपासून संरक्षण मिळणे हा देखील प्रत्येकाचा हक्क आहे.
- २) समान काम केल्यास मोबदल्यात कोणत्याही प्रकारचा भेदभाव न करता समान मोबदला मिळवा हा प्रत्येक व्यक्तीचा हक्क आहे.
- ३) काम करणार्या प्रत्येक व्यक्तीस न्याय्य व योग्य मोबदला मिळवण्याचा, मानवात्सा साजेस अशा प्रतिष्ठेचे जीवन तिला व तिच्या कुटुंबीयांना ह्याखास जगता येईल याची हमी मिळवण्याचा हक्क आहे.
- ४) आपले हितसंबंध जपण्यासाठी व्यावसायिक संघटना स्थापन करण्याचा व त्यात सहभागी होण्याचा प्रत्येकाला हक्क आहे. संयुक्त राष्ट्राने स्वीकृत केलेली ही सनद सदस्य राष्ट्रांनी संमत केली असती तरी ती त्या स्तरावर कायदेशीररीत्या बंधनकारक नाही.
- भारतीय संविधानात रोजगाराचा हक्क:**
- संविधानातील भाग चौथा 'राज्यघोरणाची निर्देशक तत्त्वे' असा आहे. या भागाची अमलबजावणी सरकारला बंधनकारक नाही. तरी बरीचशी राज्य सरकारांच्या मजीवर सोडून देण्यात आली आहेत. त्याकरिता न्यायला जाता येत नाही संविधानाच्या चौथ्या भागातील कोण ३९, ४१, ४३ या तीन अनुच्छेदांचा रोजगाराच्या हक्कासंबंधी येतो. अनुच्छेद ३९ प्रमाने स्त्री व पुरुष नागरिकांना पर्याप्त स्वरूपात उपजीविकेस हस्तगत करण्याचा सारखा हक्क आहे. याची पूर्तता करण्यासाठी शासन विशेष करून आपली घोरणेअंमल.

अनुच्छेद ४१ प्रमाणे स्वतःची अधिक कुवत व विकास यांच्या मर्यादेत रोजगाराचा, शिक्षणाचा व वैकरी, वृद्धत्व, आजारपण अपंगत्व व स्वतःचा अपराध नसताना ओढवली हलाकीची स्थिती अशा प्रकरणी शासकीय मग्याचा हक्क मिळवून देण्यासाठी शासन परिणामकारक उपाययोजना करील आणि ४३ नुसार सुयोग्य वेळीच करून आर्थिक संघटन करून, व अन्य कोणत्याही प्रकारे रोंती, उणेगधटे व अन्य क्षेत्रे यातील सर्व श्रमिकांना रोजगार, जीवनवैतन यांच्या प्रकारचे जीवन जगता येण्यासाठी आणि फुरसतीच्या वेळीचा व सामाजिक सांस्कृतिक संधीचा पुरेपूर लाभ देण्यासाठी, आवश्यक सोयीसुविधा या गोष्टी मिळवून देण्यासाठी शासन प्रयत्न करेल.

महात्मा गांधी राष्ट्रीय ग्रामीण रोजगार हमी योजना.

मूलभूत हक्क म्हणून नाही पण गरजू श्रमिकांना विमान मजुरीवर कामची हमी देणारा कायदा भारतात प्रथमच महाराष्ट्र शासनाने १९७७ ला केला. कायदा करून पथम मागणाराचा ग्रामीण श्रमिकांना काही अटीवर व निश्चित नियमानुसार काम पुरविण्याची हमी देणारे व विशिष्ट कालावधीत काम करून शकल्यास प्रतीक रूपाने का होईना येऊन भत्ता देण्याची बंधन स्वीकार करणारे महाराष्ट्र हे एवजेव राज्य आहे. संविधानातील 'शासनसम्येची धोरणाची निदेशक तत्त्वे' या भागातील एका महत्वाच्या तत्वाची अंमलबजावणी करणारे पहिले पाठल महाराष्ट्र राज्याने ठासले आहे.

ग्रामीण भागातील रोजगार निर्मिते या क्षेत्रात देशातील इतर राज्यांना आदर्शकृत ठरलेल्या महाराष्ट्राच्या रोजगार हमी योजनेचे जनक आणि महाराष्ट्र विधान परिषदेचे समापतिपट अठरा वर्षे संभाळणारे ज्येष्ठ गांधीवादी नेते, स्वातंत्र्यसैनिक, तत्त्वचिंतक विठ्ठल सखाराम फारगे हे होत. महाराष्ट्र रोजगार हमी अधिनियमाची १९७७ पासून महाराष्ट्रात अंमलबजावणी सुरु झाली. महाराष्ट्र शासनाने राज्य रोजगार हमी योजनेच्या नावात बदल करून महात्मा गांधी राष्ट्रीय ग्रामीण रोजगार हमी योजना महाराष्ट्र असे नामकरण केले असून सध्या केंद्र शासनाची ही योजना राज्यात सर्वत्र राबविण्यात येत आहे.

राज्यात महाराष्ट्र रोजगार हमी अधिनियम, १९७७ नुसार दोन योजना सुरु होत्या. त्या म्हणजे १) ग्रामीण भागात अकुशल व्याप्तीकरिता रोजगार हमी योजना. २) महाराष्ट्र रोजगार हमी अधिनियम, १९७७ कलम ७(२) (दहा) नुसार वैयक्तिक लाभाच्या योजना. सदर योजनांना राज्य शासनाच्या निधीतून अर्थसहाय्य केले जात होते.

सन २००५ मध्ये केंद्र शासनाने संपूर्ण भारतात राष्ट्रीय ग्रामीण रोजगार हमी अधिनियम (विद्यमान नाव महात्मा गांधी राष्ट्रीय ग्रामीण रोजगार हमी अधिनियम) लागू केला.

तदनुसार महाराष्ट्र शासनाने सन २००६ मध्ये पूर्वीचा कायदा ठेवण्याचा पर्याय स्विकारला आहे. मात्र विधिमंडळाने केंद्रीय कायद्यास अनुसरून राज्यास तिथी मिळण्याच्या अनुषंगाने १९७७ च्या कायद्यात आवश्यक त्थ सुधारणा केल्या, त्यामुळे योजने राबविण्याच्या कार्यपध्दतीत बदल झाला आहे.

सधःस्थितीत राज्यात महाराष्ट्र रोजगार हमी अधिनियम, १९७७ (सन २००६ मध्ये बदल केल्याप्रमाणे) अंमलात आहे, व या योजने अंतर्गत खालील दोन योजना सुरु आहेत.

अ) महात्मा गांधी राष्ट्रीय ग्रामीण रोजगार हमी योजना - महाराष्ट्रात या योजने अंतर्गत केंद्र शासन प्रती कुटुंब १०० दिवसांच्या रोजगाराची हमी देते व प्रती कुटुंब १०० दिवसांच्या मजुरीच्या खर्चासाठी तिथी पुरवते. १०० दिवसांपरिंत प्रती कुटुंब मजुराच्या मजुरीचा खर्चाचा आर्थिक भार राज्य शासन उचलते.

आ) महाराष्ट्र रोजगार हमी अधिनियम, १९७७ कलम ७(२) (दहा) नुसार वैयक्तिक लाभाच्या योजना यात जवाहर विहिर योजना आणि रोह्यो अंतर्गत फळवाग लागवड योजना.

संदर्भ:

- १) आपले हक्क व त्यांची परिपूर्ती : य.च.म.मू. विद्यापिठाल नाशिक.
- २) <https://maharashtratimes.com/astrophotohow/67020357.cms>
- ३) <https://www.mpscworld.com/types-of-human-rights-and-rules-part-1/>

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## Women's Rights : Status & Goal



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**बीड जिल्ह्यातील महिला सरपंचांच्या कुटुंबातील दर्जाचा समाजशास्त्रीय अभ्यास**

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**डॉ.रुपाली कुलकर्णी**

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स्वा.सावरकर महाविद्यालय, बीड- ४३१ १२२

❖ **प्रस्तावना (Introduction) :**

पारंपारिक पुरुषप्रधान भारतीय समाजात महिलांना अवकाश समजावता येई. त्यांना कौटुंबिक, सामाजिक तसेच राजकीय क्षेत्रातील सत्तेपासून वंचित ठेवले जात असे. राजकीय सत्ता होवून त्या ठिकाणच्या सरपंचा स्वतः असतो म्हणून ७३ व्या घटनादुरुस्तीने महिलांना सबल बनेविण्याकरिता पंचायतराज व्यवस्थेत जाणीपूर्वक ३३ टक्के आरक्षण देऊन त्यांना सत्तेत सामील करून घेण्याचा प्रयत्न केला आहे सध्या २०२१ पासून पंचायतराज व्यवस्थेत फक्त ३३ टक्के महिलांना आरक्षण देणे आहे. आरक्षण दिल्यामुळे खरेच महिला सरपंचांच्या दर्जा सुधारण्यास अर्थात त्यांचे सबलीकरण होण्यास मदत झाली आहे का? हे अभ्यासण्याचा प्रयत्न प्रस्तुत संशोधन निबंधामध्ये केलेला आहे. या शोधनिबंधामध्ये प्रामुख्याने महिला सरपंच झाल्यामुळे तिच्या कौटुंबिक दर्जात कोणता बदल घडून आला हे अभ्यासले आहे.

महिलांच्या सबलीकरणाचा विचार करताना त्यांच्या जवळची पुरुषांप्रमाणे उच्च प्रशासकीय कौशल्ये, इच्छासक्ती, अर्थव्यवस्था आणि निर्णयक्षमता अस्तित्, परंतु त्यांच्या बाबतीत सामाजिक, कौटुंबिक पाठिंब्याची उणीव व कमतरता दिसून येते. महिला समोलीकरण व कुटुंबातील त्यांच्या दर्जाचा कृषीमधील हा प्रमुख अडथळा आहे. महिला सबलीकरणाच्या संदर्भात स्वीडची अभ्यासक मर्तीथा गुप्ते यांच्या मते, आपल्या शरीराबद्दल, मनाबद्दल, शिक्षणबद्दल, नोकरी, लग्न, मुले इवत को नको, किती आणि वेळा या सर्वोबद्दल मन भोकळेपणाने कोणत्याही दबावाखाली न राहता स्वतःचा निर्णय स्वतःला घेता येणे म्हणजे महिला सबलीकरण होई. तसेच स्वतःचे निर्णय घेण्याबरोबरच इतर महिलांचे प्रश्न समजून घेणे वरकरणी भिन्न दिसणाऱ्या अनुभवांमध्ये साम्य शोधणे आणि सामाजिक पातळीवर सर्व महिलांचे प्रश्न समजून घेऊन मांडणे तसेच एकत्रितपणे आणि परस्पर सहकार्यातून या प्रश्नांची उत्तरे शोधणे हा महिला सबलीकरणाचा महत्त्वाचा टप्पा आहे. तर कौशल्य सुशिक्षा यांच्या मते राजकीय सत्तेतील निर्णय प्रक्रियेत प्रभावधारणे सहभागी होण्यासाठी महिलांची राजकीय सत्तेतील संख्या आणि त्यांचा स्तर हा योग्य प्रमाणात असणे आवश्यक असते. त्यामुळे महिलांना आपल्या निर्णय क्षमतेला वाच देता येतो असा ही संख्या ७३ व्या घटनादुरुस्तीने ३३% आणि २०२१ पासून पंचायतराज व्यवस्थेत ५० टक्के झालेली आहे या आरक्षणामुळे महिलांची स्थानिक राजकीय क्षेत्रातील संख्या वाढवण्यास मदत झालेली आहे, पण केवळ राजकीय सत्तेतील संख्या वाढणे सबलीकरणकारिता किंवा महिलांच्या दर्जाचा सुधारणाकारिता महत्त्वाचे असून त्यांना निर्णय प्रक्रियेत सहभागी होता आले पाहिजे. असे असले तरी अनेकदा महिलांना या राजकीय सहभागामुळे समाजातून मानादान मिळत नाही परंतु कुटुंबामध्ये हा मान मिळत नाही अशा परिस्थितीत संशोधकाने प्रस्तुत शोधनिबंधात महिला सरपंचांना राजकीय प्रशासकीय स्तरावर मान प्रतिष्ठा मिळत असली तरी त्यांच्या कुटुंबातून आलेले आहेत त्या कुटुंबातील त्यांच्या दर्जा नेमका कोणता आहे, त्यांच्या कौटुंबिक दर्जात सरपंच झाल्यामुळे काही बदल झाला आहे का? हे अभ्यासण्याचा प्रयत्न केलेला आहे प्रस्तुत संशोधन हे प्राथमिक माहितीच्या आधारे केलेले आहे.

❖ **अभ्यासाची उद्दिष्टे (Objectives of Study) :**

- १) सामाजिकातीचे नेतृत्व करणाऱ्या महिला सरपंचांच्या नावावर स्वाई मालमत्ता आहे का? याचा अभ्यास करणे;
- २) महिला सरपंचांना परकामात कुटुंबाकडून मिळणाऱ्या मदतीचा अभ्यास करणे;
- ३) महिला सरपंचांना त्यांच्या कुटुंबात मिळणाऱ्या जागणुषोचा अभ्यास करणे.

❖ **अभ्यासाची गृहितके (Hypothesis of Study) :**

- १) महिलांच्या नावे पारंपारिक रूपाची मालमत्ता केली जात नाही.
- २) महिला नावाची प्रमुख झाली तरी तिच्या पारंपारिक आणि कौटुंबिक दर्जात बदल होत नाही.

❖ **संशोधन पध्दती (Research Methodology) :**

प्रस्तुत संशोधन हाती घेतल्यानंतर समाजशास्त्रीय संशोधन पध्दतीचा वापर करून बीड जिल्ह्यातील ग्रामपंचायता स्तरावर नेतृत्व करणाऱ्या परंतु फक्त ३३ टक्के आरक्षण जाहीर होण्याअगोदर नेतृत्व करणाऱ्या महिला सरपंचांच्या कौटुंबिक स्तरावर दर्जाचा हे



पालेला बदल अभ्यासला आहे. हा अभ्यास हा अभ्यास करताना शासकीय पध्दतीचा वापर केला.बीड जिल्ह्यातील महिला आरक्षण पदावर नेतृत्व करणाऱ्या इसवी सन २००६ ते २०१२ दरम्यान निवडून आलेल्या ३२८ महिला सरपंचा पैकी सध्या नमुना निवड प्रक्रियेतील स्तरात यादृच्छिक नमुना निवडोच्या आधारे बीड जिल्ह्यातील ११ तालुक्यातून १/३ नमुना निवड करून म्हणजेच ११० महिला सरपंचाचा अभ्यास वरील उद्दिष्टांना अनुसरून करून प्रस्तुत शोध निबंध लिहिला आहे.प्रतिसादक महिला सरपंचाकडून प्राथमिक माहिती मिळविण्याकरिता मुलाखत अनुसुची निरीक्षण तंत्राचा वापर केला आहे.संकलित केलेल्या प्राथमिक माहितीचे सारोत्तरण आणि विश्लेषण सारणीच्या आधारे केले आहे.सारणीतील संख्यिकी माहितीचे विश्लेषण करण्याकरिता शेकडेवारी पध्दतीचा वापर केला आहे.

#### ❖ माहितीचे विश्लेषण(Data Analysis):

#### ❖ महिला सरपंचाचा स्थाई मालमत्तेवरील मालकी हक्क :

पारंपारीक भारतीय समाजात महिलांच्या नावे मालमत्ता केली जात नसे.पुरुष प्रधान संस्कृतीमुळे भारतीय समाजात कुटुंबाचा वारसा हा मुलाकडे जात असल्यामुळे कुटुंबाची जमीन आणि घराची मालकी परंपरेने महिलांकडे नव्हती तर पती,सासरा किंवा मुलाकडे जात असे.महिलांच्या नावे ती केली जात नसे,परंतु आधुनिक काळातील कायद्यामुळे महिलांनाही कुटुंबाच्या मालमत्तेत वाटा मिळू लागला आहे.महिलांचे नावे जमीन घरे सारखी स्थायी मालमत्ता असेल तर महिलांना त्यांच्या जिव्हात स्थिरता आल्यासारखे वाटते.अनेकदा चारित्र्याच्या संशयावरून व अन्य किरकोळ कारणावरून महिलांचा परित्याग केला जातो.सरपंच पदावरील महिलांचा कार्यालयीन कामकाजाच्या निमित्ताने परपुरुषाशी संबंध येतो, अशा वेळी चारित्र्य हान होण्याची भीती असते, त्यातून परित्याग,घटस्मोट होण्याची शक्यता असते.अशा वेळी स्वतःच्या नावे जमीन,घर असल्यास महिला अशा संकटात खंबीरपणे आणि धोराने सामोरे जाऊ शकतात.त्यासाठी महिला सरपंचांची सबलीकरण आणि त्यांचा कुटुंबातील दर्जा अभ्यासगतांना त्यांच्या स्वतःच्या नावे जमीन,घर सारखे स्थायी मालमत्ता आहे किंवा कसे हे पाहणे अगत्याचे वाटले.अभ्यासलेल्या प्रतिसादक महिला सरपंचांच्या वैयक्तिक नावे जमीन आहे किंवा कसे तसेच घरासारखी मालमत्ता त्यांची नावे केली जाते किंवा नाही ? याबद्दल माहिती मिळवण्याचा संशोधकांनी प्रयत्न केला असता मिळालेल्या माहितीचे विश्लेषण सारणी क्रमांक १ मध्ये दिले आहे.

सारणी क्रमांक १

प्रतिसादक महिला सरपंचाचे त्यांच्या वैयक्तिक नावावर असणाऱ्या स्थायी मालमत्तेनुसार वितरण

अ.क्र.	स्थायी मालमत्ता	स्थायी मालमत्तेचे स्वरूप			
		जमीन	प्रमाण %	घर	प्रमाण %
१	होय	३८	३४.५५	१०	०९.०९
२	नाही	७२	६५.४५	१००	९०.९१
	एकूण	११०	१००	११०	१००

महिला सरपंचांच्या स्वतःच्या नावावर असणारी जमीन ही एकूण ११० प्रतिसादक महिला सरपंच पैकी ३८ महिला सरपंचांच्या (३४.५५%) स्वतःच्या नावावर जमीन असल्याचे आढळून आले. तर ७२ (६५.४५%) महिला सरपंचांच्या स्वतःच्या नावावर जमीन म्हणजेच २/३ महिला सरपंच दुसऱ्याच्या नावे असणाऱ्या जमीनीच्या आधारे जगतांना आढळून आल्या.

ज्या महिला सरपंचांच्या नावे जमीन आहे ती निकृष्ट दर्जाची आणि खूप कमी म्हणजे चार एकर पेक्षा जास्त जमीन नाही असेही आढळून आले आहे.

#### ❖ महिला सरपंचांची राहत्या घराची मालकी :-

अभ्यास असलेल्या अनाम ११० ग्रामपंचायतीची नेतृत्व करणाऱ्या प्रतिसादक महिला सरपंचांपैकी १० महिला सरपंचांच्या स्वतःच्या नावावर घर आहेत. स्वमालकीची घरी असणाऱ्या प्रतिसादक महिला सरपंचांचे प्रमाण केवळ ०९.०९ टक्के आहे तर १०० प्रतिसादक महिला सरपंचांच्या स्वतःच्या नावावर घर नसून त्यांचे प्रमाण (९०.९१%) इतके मोठे आहे.

या माहितीवरून असे स्पष्ट होते की, घरासारखी स्थावर मालमत्ता महिला सरपंचांच्या नावे फारशी आढळून आलेली नाही. ज्या १० महिला सरपंचांच्या नावावर घर आहेत तीही शासकीय योजनेतून महिलांच्या नावावर मिळाली असून ते पारंपारीक वारसा हक्काने मिळालेली नाहीत.



❖ **कुटुंबात मिळणारी वागणूक :**

पारंपारिक भारतीय समाजव्यवस्थेत महिलांचा दर्जा पुरुषांपेक्षा कनिष्ठ मानला जातो.त्यांचे कर्तव्य फक्त घुल आणि मूल राखणेच समजले जाते.परंतु ७३ व्या घटनादुरुस्तीने महिलांना प्रथमच कुटुंबा बाहेर पडण्याची तसेच राजकारणात प्रत्यक्ष सहभागी होण्याची आणि गावच्या प्रमुख पदी विरावमान होण्याची संधी मिळाली.सरपंच झाल्यामुळे महिला सरपंचाच्या कोट्टीबक दर्जा सक्षमतात्मक बदल झाला आहे का ?त्यांना कोट्टीबक निर्णयात सहभागी करून घेतले जाते का? त्यांचे घर काम कमी होणे,संती काम कमी होणे,पतीसह कुटुंबातील अन्य सदस्यांनी त्यांच्याशी आदराने वागणे,दुखादो दर्जात्मक बदल घडून आला आहे का?बाबत महिला सरपंचांना विचारले असता मिळालेल्या माहितीचे विश्लेषण सारणी क्रमांक ४ मध्ये दिलेली आहे.

**सारणी क्रमांक ४**

**प्रतिसादक महिला सरपंचांचे त्यांना त्यांच्या कुटुंबात मिळणाऱ्या वागणूकीनुसार वितरण**

अ.क्र.	कुटुंबात मिळणारी वागणूक	एकूण (११० पैकी)	प्रमाण (%)
१	कोट्टीबक निर्णयात सहभागी करून न घेणे	६६	६०.००
२	सरपंच म्हणून कुचेष्टा करणे	२२	२०.००
३	कोट्टीबक छळ करणे	३०	२७.२७
४	वरील प्रकारे काही नाही	३७	३३.६३

(बहु प्रतिसाद सारणी)

अध्यासलेल्या ११० प्रतिसादक महिला सरपंचांपैकी बहुसंख्य ६६(६०.००%) महिला सरपंचांना कोट्टीबक निर्णयात कधीच सहभागी करून घेतले जात नाही.किंबहुना ३० महिला सरपंचांना (२७.२७%) कोट्टीबक छळास सामोरे जावे लागल्याचे तर २२ लणींची (२०.००%) सरपंच म्हणून कुचेष्टा केली जात असल्याचे आढळून आले.मात्र १/३ महिलांचा या बाबतीत अपवाद आढळून आला.यावरून महिला जरी सरपंच झाल्या तरी सर्वांनाच कुटुंबात चांगली वागणूक व मानभरातच मिळतोच असे नाही.

❖ **ठळक शोध (Salient Findings) :**

१)बहुसंख्य म्हणजेच (६५.४५%) महिला सरपंचांच्या नावे आजही जमीन नाही.मात्र काहीनी (३४.५५%) महिला सरपंचांनी आपल्या जवळ जमीन असल्याचे नमूद केले आहे.मात्र ही जमीन धारसा इक्काने का खरेदी करून मिळवली ते समजू शकले नाही. तसेच या जमीनींचे प्रमाण जास्तोत जास्त चार एकर हून अधिक नाही आणि ती कोरडवाहू स्वरूपाची आहे.

२)अगदी नागण्य म्हणजे ९% प्रतिसादक महिला सरपंचांनी राहते घर त्यांच्या नावावर असल्याचे नमूद केले आहे.हे घर त्यांना पारंपारिक मिळालेली नसून शासकीय योजनेतून त्यांच्या नावे मिळालेली आहेत.महिलांसाठी घराच्या बाटपात प्राधान्य देण्याच्या सरकारी धोरणामुळे हे शक्य झाले असावे.

३)महिलांची आजही आढळणारे सामान्यातील दुय्यम स्थान ती सरपंच झाली तरी तिला घरगुती आणि अन्य जबाबदारीतून मुक्त होऊ देत नाही त्यामुळे बहुसंख्य (७७.२७%) प्रतिसादक महिला सरपंच मुक्तिगी,संखी,गाता आणि ग्रामप्रमुख अशा विविधंगी भूमिका पार पाडण्यासाठी कसरत करताना आढळून आल्या.

४)बहुसंख्य म्हणजे ६३.६३% महिला सरपंचांना आजही क्षमानीमित बाहेर जाताना अपसली घुले सोबत घेऊन जाणे घाण पडते.

५)गावच्या प्रमुख असूनही आज ही ६० टक्के महिला सरपंचांना स्वतःच्या कुटुंबात निर्णय घेतांना सहभागी करून घेतले जात नाही.

६)२०% महिला सरपंचांची सरपंच म्हणून कुचेष्टा केली जाते, तर २७.२७% सरपंच महिलांचा कोट्टीबक छळ केला जातो.

❖ **निष्कर्ष(Conclusion) :**

महिला सवलतीकरण ही सभानामध्ये पुरुषांच्या बरोबरीने महिलांना उच्च अधिकार प्राप्त करून देणारी प्रक्रिया होय.यद्यपि महिला राजकीय संस्थांच्या माध्यमातून सत्ता आणि अधिकार प्राप्त करून सामाजिक विकारांच्या प्रक्रियेत सहभागी होऊन स्वतःचे आणि त्यांचे बरोबर अन्य महिलांचे संबलीकरण करून आणू शकतात. त्या अनुषंगाने झालेली ७३ वी घटना दुरुस्ती जात्याची असली तरी, अनुनही महिलांचा राजकीय क्षेत्रातील सहभाग संख्यात्मक दृष्ट्या वाढला असला तरी गुणात्मक दृष्टीने वाढलेला दिसून येत नाही. कारण महिलांचा सामाजिक दर्जा आणि कुटुंबातील दर्जात खूप मोठी तफावत दिसून येते.अनुनही महिलांना सरपंच म्हणून मान-भरातच मिळतोच असे नाही. त्यांना सामान्यामध्ये मान असला तरी कुटुंबात मात्र मान मिळतो असे घरील अध्यासावरून दिसत





जारी तहसे अधिकतम स्वार्थ मान्यतेस समान बादा असता तरी जाणवता आहे मान्यता केवळचें दिवून येत आहे जणूकी एका  
पुढीसो मगूनच कुटुंबात काम करावें साकारे,त्यांचे वा जारेपारीक कामातून सुटका झालेली नाही.

❖ संदर्भ :

1. अन्वयती एन.ए. (२०००) : महिला अर्थे मान्यते अधिकार, ज्योती प्रकाशन, जयपुर.
2. कोलकाता सेवा अर्थेस पुस्तकानी (२००२) : असा व सबसोकरण, आलोचना, स्वोविषयक संग्रह व संशोधन केंद्र, पुणे.
3. कर्तिका असा (२००४) : जरी सबसोकरता विमर्श बैठक प्रथम,संपादित, पीइंटर पब्लिकेशन जयपुर.
4. गीते-माकावने सुधुंगी (२००४) : महिला सबसोकरण स्वरुप व समस्या, वरद पब्लिकेशन, औरंगाबाद.
5. रत,विहावा (२००३) : मग शाक्या कोण करणार ? : संघाती प्रकाशन, मुंबई.

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## A SOCIOLOGICAL STUDY OF EFFECT OF COVID-19 ON MARRIAGE CEREMONY: WITH REFERENCE TO SHIRUR (KA), TALUKA OF BEED DISTRICT

✓  
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**Abstract** - Proposed work has been conducted in a scientific manner in line with objective 'to study the effect of covid-19 on marriage ceremony and to study the changing perspectives of the society towards traditional marriages with respect to five villages namely Rakshasabhuvan, Padli, Wami, Kolwadi and Dahiwandi in Shirur Kasar taluka of Beed district in Maharashtra region'. Google form is customized and has relied to collect data in this regard. Said investigation is based on preliminary data collected in Google spread sheet via Google form. The data is analyzed on the basis of questionnaires, observations, techniques for compiling basic facts. Although the study was conducted virtually, the sociological approach is evident. The views of 82 villagers from the above five villages have been incorporated in this study. Due to the time bounds applied by UGC for this study the limited perspectives were studied.

**Keywords:** Health, Community, Awareness, Marriage

**Introduction** - In the present manuscript, the authors focused on the changes occurred due to covid-19 situation in traditional marriage institution & in the traditional attitude of the society towards marriage institution. Marriage is an important institution in Indian society. The history of this marriage institution is four to five thousand years old and the appearance of marriages is changing in modern era. Although the institution of marriage is universal, the nature of the institution of marriage is different in every culture. Every country has a different culture and nature. Regarding the institution of marriage, Bogardus says, "The institution that allows men and women to enter into family life is the institution of marriage." According to Mukherjee, "the formal sexual intercourse between a man and a woman through religious rites for the purpose of sex, son and religious work is called marriage". Hindu marriages are mainly based upon the objectives viz. religious function, procreation and sexual pleasure.

Marriage is necessary for the continuity of race and society. Marriage creates marital relations and also creates a duty relationship.

Corona is a name of a group of viruses. India suffered a lot due to this virus. SARS discovered in 2003, and MERS discovered in 2012, are also diseases caused by the corona virus. But the corona virus that was found in the outbreak of the disease in December 2019 in Wuhan, China is different from the previous one, so it is called the novel Corona virus. The World Health Organization has named the disease Covid-19. COVID-19 is the name given by the World Health Organization (WHO) on February 11, 2020 for the disease caused by the novel Corona virus SARS-CoV-2. It started in Wuhan, China in late 2019 and has since spread worldwide. COVID-19 is an acronym that stands for Corona virus disease of 2019. The virus is also named after its shape which takes the form of a crown with protrusions around it and hence is known as corona virus.

The disease has been reported in many parts of the world. India could not stay away from this disease. The Covid-19 has infected millions and killed scores of people all around the world. Marriage is an integral part of society, so though the world stopped on the background of Corona, but marriages not. The marriages were organized during this Covid-19 period also, but somewhat differently. And if so, how did it happen? The present study has been undertaken to present the new approach regarding Indian marriages.

**Importance of Study:** The research presented is important to understand the impact of traditional Indian society on marriage ceremonies, the resulting costs, the current perception of simple & short marriages in society and the direction of future marriage institutions.

**Study Method:** For this study, five villages of Rakshas Bhuvan, Padli, Dahiwandi, Kolwadi and Wami in Shirur Kasar Taluka of Beed district of Maharashtra were

identified and selected. Authors intention in selecting these villages was that a special camp of our Kalikadevi College's National Service Scheme was held in these villages. Since the study was conducted during the lockdown period, Google Forms were used for data collection. We reached out to the villagers on social media and the questionnaire was filled out by the people. A total of 82 villagers participated and filled out the questionnaire online.

1. To study the effect of COVID situation on organized marriage ceremonies
2. To study the modified attitude of the society towards traditional marriages

The study is presented in accordance with these objectives. As the research study was conducted by the Department of Sociology, some of these questions were asked from the sociological point of view.

**Objectives of Study:**

Data Analysis: Table No: 01

**Wedding ceremonies during the lockdown Period**

Sr. No.	Wedding ceremonies	Total	(%)
1	Reduction in Number of attendees	70	85.04
2	Keeping social distance	41	50.00
3	Simplicity	37	45.01
4	Refused marriage organization	04	04.09

(Multi Respondent Table)

According to Table 1, out of 82 villages in Shurur Kasar taluka, 85% of the respondents said that they got married in the presence of less bridal party (Number of attendees) congregations. According to 50% of the

respondents, the marriages were solemnized on the basis of social distancing and 45% of the respondents were married with simplicity. Only 5% said they refused to marry during the lockdown period.

Table No: 02

**A changing perspective on marriage during the lockdown**

Sr. No.	Changing Perspectives on Marriage in Covid-19 Period	Total (Out of 82) (%)	
1	The imitation of a big wedding ceremony got a split	41	50.00
2	This avoids the cost of orphans at the wedding ceremony	63	76.08
3	To organize a small ceremony was approved by the society	36	43.09
4	More money should be demanded from bridal family as the marriage expenses were reduced	09	11.00
5	Rituals are important in a wedding ceremony	36	43.09
6	In future, the government should legislate to ensure that only fifty people attend a wedding ceremony	39	47.06
7	No one was upset during this period as not invited for wedding	34	41.05
8	Our daughter's wedding cost a lot and her expenses were saved, so many people were upset	07	08.05
9	If the marriage is simple and cheap, there will be a less burden on the bride parents	43	52.04

(Multi Respondent Table)

According to 82 respondents from five villages in Shirur Kasar taluka, covid-19 among the majority, i.e. 76% respondents, has reduced the orphanage expenses incurred on marriage ceremony. Also, 52% of the respondent's opinion is that if the marriage is organized with simplicity and in a low cost budget, burden of bridal family is reduced. According to 43% respondents, small weddings are socially accepted in the society, so the imitation of big weddings is rife because 41 per cent said that no one is upset because they did not invite them to the wedding. In the wedding ceremony, the appearance and the bridal party congregation are not important, the ritual is important. This fact is recognized by the society. According to only 11% of respondents, a short and simple marriages saves money of bridal family hence more money should be demanded.

**Conclusion** - In the studied Shirur taluka region, covid-19 has curbed the grandeur of marriage ceremonies by emphasizing the importance of marriage rituals, so it seems that people will prefer small wedding ceremonies in the future. It was also seen that there is a mindset that the government should legislate for small marriage

ceremonies. The less number of girls in Shirur taluka due to the orphanage expenses incurred in the marriage ceremony will tend to increase the proportion of girls. In short, in Shirur taluka, Covid-19 situation has reduced the cost of traditional or ceremonial expenses, and it has been seen in the mindset that it should remain the same in future.

#### References:

- 1) Covid-19 Pandemic: General Awareness Booklet: Published by Public Health Department, Government of Maharashtra.
- 2) Day to Day Report Prepared by government of Maharashtra also Civil Hospital, Beed.
- 3) [https://www.who.int/health-topics/coronavirus/tab-tab\\_1](https://www.who.int/health-topics/coronavirus/tab-tab_1)
- 4) UGC Ref. letter: D.O,NOF,1-1/20209 (Secy) Dated 12 June 2020.

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21	मराठवाड्यातील दुष्काळी स्थिती व महिलांच्या समस्या डॉ. जयदीप रामकृष्ण सोळुंके	89
22	भुवनेश्वर उपाध्याय के साहित्य में नारी के विविध स्वर प्रो.महेबुब मंगरुले	94
23	प्रतिमा इंगोर्लेची कथा : स्त्रियांच्या दुःखाची कहाणी श्री. एम. वाय. पोवार	97
24	हिंदी आदिवासी कविता में अभिव्यक्त आदिवासी स्त्री डॉ. संजीवकुमार नरवाडे	102
25	कन्नड तालुक्यातील आदिवासी ठाकर स्त्रियांचे सामाजिक जीवन डॉ.नम्रता दिलीप भोसले	110
26	गौरी देशपांडे यांच्या साहित्यातील स्त्री जाणीवा डॉ. नवनाथ ज्ञानोबा पवळे	113
27	भारतीय स्वातंत्र्य लढ्यातील क्रांतीकारी महिलांचे योगदान : डॉ. किशन केंद्रे	116
28	महानुभाव साहित्याचा स्त्री विषयक दृष्टीकोण प्रा. डॉ. किरण प्रभाकर वाघमारे	122
29	हिंदी कथा साहित्य में स्त्री विमर्श प्रा. डॉ. कुलकर्णी वनिता बाबुराव	126
30	समाज सुधारकांची भूमिका—महिला सशक्तिकरण के संदर्भ में डॉ. अदिती गोस्वामी	129
31	तुमरी सम्राज्ञी सिद्धेश्वरी देवी प्रा.संतोष किसनराव खंडारे	133
32	स्वातंत्र्य चळवळीतील स्त्रियांचे योगदान श्री. सन्मित बाबासाहेब पाटोळे	136
33	नारियों के बदलते आयाम डॉ. संजय कुमार सिंह	142
34	इतिहासातील कर्तृत्वान स्त्रिया प्रा.डॉ.संजय काळे / अक्षय काळे	146
35	हिराबाई बडोदेकर यांचे भारतीय शास्त्रीय संगीतात दिलेले योगदान प्रा.डॉ. सचिन सुरेशराव बंडगर	149
36	स्वातंत्र्य चळवळीतील स्त्रियांचे योगदान - एक अभ्यास प्रा. संतोष सोमनाथ कपाळे	154
37	स्वातंत्र्यपूर्व हिन्दी साहित्य में स्त्री—विमर्श (महादेवी वर्मा के गद्य—साहित्य के विशेष संदर्भ में) प्रा. सुरेन्द्रकुमार गिरधारीलाल साहु	156
38	मध्ययुगीन संत स्त्रियांचा साहित्य आविष्कार -एक शोध प्रा.डॉ.संपदा कुलकर्णी	162
39	रामकथाओ में नारी पंखी सेनापति	167
40	गोमंतकीय लोकगीतातून अकट होणारी स्त्री प्रतिमा प्रा. उगम उमेश परब	170



## गौरी देशपांडे यांच्या साहित्यातील स्त्री जाणीवा

डॉ. नवनाथ ज्ञानोबा पवळे

कालिकादेवी कला, वाणिज्य व विज्ञान महाविद्यालय, शिरूर (का) मो.  
९४२१४७७८५४.

### प्रस्तावना :

१९८० नंतरच्या कालखंडातील स्त्रियांनी आणि पुरुषांनी लिहिलेल्या एकंदर कथात्मक साहित्यातील महत्त्वपूर्ण आणि प्रभावी साहित्य म्हणून गौरी देशपांडे यांच्या साहित्याचा उल्लेख जर्मनचा उरतो. एकंदर कथात्मक साहित्याच्या तुलनेत स्त्री-निर्मित साहित्य कमी आहे. गौरी देशपांडे यांचा जन्म ११ फेब्रुवारी १९४२ व मृत्यू १ मार्च २००३ रोजी झाला. गौरी देशपांडे यांनी कथा, कादंबरी ललित लेख, स्फुटलेखन, ललितलेखन, भाषांतर, कविता, सशोधन यासारखे बहुतांशी साहित्य प्रकारांमध्ये लेखन केले आहे. गौरी देशपांडे यांच्या साहित्याविषयी संपादकीय मनोगततात वि.म. गीतारली म्हणतात. गौरींनी माणसाच्या देहाकडे स्त्रीदेह आणि पुरुषदेह या द्वैत भावनेत न वगळा निव्वळ मानवी देह म्हणून वचितलं जावं असं म्हणत स्त्रीच्याच देहाभोवती कोपलेले नैतिकतेचे निकष तोडायला सुरुवात केली. २० व्या शतकातील आधुनिक स्त्रीवादी साहित्यात लेखिका गौरी देशपांडे यांचे योगदान फार मोठं आहे. स्त्रीवादाच्या वाटेवरून जाणाऱ्या कोणत्याही आधुनिक मराठी साहित्याप्रती माणसाला गौर देशपांडे हे नाव टाळून पुढे जाता येत नाही. असंच त्यांचे लेखन कर्तव्य आहे.

एकोणिसाव्या शतकात लिहिणे, वाचणे म्हणजे स्त्रियांच्या दृष्टीने ज्ञानाच्या, सामर्थ्याच्या सत्तेच्या क्षेत्रात प्रवेश करणे होते आणि ती अडथळाची शर्यत होती. त्या शतकात स्त्रियांनी लिहिलेल्या एकूण ६ कादंबऱ्या आणि ३ कथासंग्रह आढळतात. इतकी ही कमी संख्या होती. पुरीक काळात शिक्षणाचा प्रसार, सुधारकार्ये व शासनकर्त्यांचे प्रोत्साहन यामुळे लिहिणाऱ्या स्त्रियांची संख्या वाढली. या बौद्धिक क्षेत्रात ज्या स्त्रियांनी अवकाश प्राप्त करून घेतला आणि अखिल दर्जाची निर्मिती केली त्यात गौरी देशपांडे यांचे नाव अग्रक्रमाने घ्यावं लागेल. गौरी देशपांडे यांच्या कथात्मक साहित्य अगदी बरबर जरी चालले तरी संस्कृत दर्शनांचे चटकन लक्षात येते. गौरी देशपांडे यांनी नवकथापूर्व कथेला छंद देऊन नविन संकेतनां आवाहन दिले. तसेच रूपाच्या रचनेच्या वेगळे पणाबरोबरच लक्ष वेधून घेणाऱ्या त्यांच्या कथेचा महत्त्वाचा घटक म्हणजे भाषेची मोडणी, मौखिक परंपरेशी नाते जोडणारी सहज अकृत्रिम भाषा हा त्यांचा कथेचा चैतन्य स्रोत आहे. गौरी देशपांडे यांच्या कथेची भाषा शतकभर माने जाऊन मौखिक परंपरेशी नाते जोडणारी आहे. ती स्त्री सुलभ आहे. स्त्री आपसात बोलतांना त्यात आपलेपणाचे, परगुती पणाचे, गोष्टी वेळाळ विरोध असलेले जे भाषेचे रूप यात होते. तीथे बोलणाऱ्या व ऐकणाऱ्या व्यक्ती समोरासमोर असल्यामुळे भाषेत जी सहजता व चैतन्यपूर्णता येते ती त्यांच्या कथात अवतरलेली दिसते.

मौखिक परंपरेशी नाते जोडणाऱ्या भाषेतून जो जिवनाशय त्यांच्या कथा अभिव्यक्त करतात तो मात्र पारंपारीक नितीमुल्यांशी जुळणारा जुन्या स्त्रियांनी उरीपोटी बाळगलेला असा नाही. त्यांच्या कथेत साकारणारे जीवन ही कोणत्याही अर्थाने जुने नाही. शहरां उच्च शिक्षिकांच्या जीवनाभूभावे दर्शन त्यांच्या कथेत घडते. गौरी देशपांडे यांनी स्त्रियांच्या कौटुंबिक जीवनात जे प्रश्न निर्माण





होतात आणि मानसिक आणि भावनात्मक पातळ्यांवर त्यांना जो संघर्ष करावा लागतो, मुल्यासंबंधी पुनर्विचार करावा लागतो. त्याचे चित्रण गौरी देशपांडे आपल्या कथात्मक साहित्यात करतात. "एकेक पान गळायच्या" मधील रधा जुने नितीमुल्यांचे संकेत कुटुंब संस्थेने मुकर केलेले आईच्या भुमीकेतील वर्तन आणि बंडखोर सुधारणावादांनी प्रस्थापित केलेली पुनर्विवाहाची वाट हे सारेच नाकारते आणि स्वतंत्रपणे एकटी राहण्याचा निर्णय घेते. अशी धीट स्त्री गौरी देशपांडे यांनी आपल्या साहित्यात रेखाटलेली आहे. तसेच 'मुक्काम' मधील कालिंदी, आपला नवरा, नंदन आपले आपले अस्तित्त्व लक्षात घेत नाही. दुय्यम वागणूक देतो. हे जाणवल्यावर आणि दिमोत्रीच्या प्रेमाचा अनुभव घेतल्यावर भारतात परत येते. आणि श्रीमंत नवऱ्याकडून कोणतीही अपेक्षा न करता तळेगावला अपंग पुनरवसन केंद्रात काम करू लागते. या नाईकावरून असे लक्षात येते की, आपल्या स्वयच्छावर जिवन जगण्याचा निर्णय घेणारी नायिका या ठिकाणी दर्शवली आहे. गौरी देशपांडेच्या कथांच्या नायिका त्या स्वतःच्या आयुष्याचे नियंत्रण स्वतः करू पाहतात. परंपरेने समाजाने दिलेल्या भुमीकांच्या साच्यात आपली आयुष्य बसविण्याचे नाकारून स्वतःच्या मर्जीप्रमाणे आयुष्य घालविण्याचा प्रयत्न करतात. कुटुंबाचे सामाजिक स्थान व प्रतिष्ठा वाढविण्यासाठी खोला कुटुंबांमध्ये समानतेची वागणूक मिळणे गरजेचे आहे. स्त्रिमुक्ती चळवळीचा लढा हा माणुसपणासाठी चाललेला आहे. यासंदर्भात लिला पाटील म्हणतात "जीवन सार्थकतेचे तिकाय बायकांनी बदलवला हवेत त्यासाठी त्यांनी जागे होण्याची गरज आहे. आपण आपले जीवन दुसऱ्यांसाठी जगणे, शरीर झोपावणे, मन मारून जगणे, परंपरागत आलेल्या मुल्यांची जपवणूक करणे योग्य की अयोग्य याचा विचार त्यांनी करायला हवा. आपले आयुष्य दुसऱ्या कृपाच्यातरी मर्जीवर अवलंबून ठेवणे चुकीचे आहे. आपल्या समोरील प्रश्न आपणच सोडवू शकतो त्यासाठी आपली निर्णय शक्ती वापरली पाहिजे." गौरी देशपांडेच्या कथांच्या नायिका या मध्यवर्ती भुमीका असलेल्या स्त्री व्यक्तींखातल्यांच्या अंगीकार करणाऱ्या असल्यामुळे समाजातील आणि वाड्भयातील स्त्री प्रतिमापेक्षा वेगळ्या आहेत. त्या सामाजिक चालिरीतीशी फटकून वागणाऱ्या आहेत अशा दिग्गज येतात.

स्त्रिने स्वतःवर काही बंधने लादून घेतली आहे. पुरुषांच्या तुलनेत स्त्री एवढी चांगली असली तरी सर्वात जास्त मानहाणी तींचा सहन करावी लागले. स्त्री सध्याच्या वातावरणांमध्ये असुरक्षित आहे. स्त्रिच्या प्रश्नासंदर्भात मिलम गोळे म्हणतात "स्त्रियांच्या प्रश्नावर स्त्रियांचाच संघर्षात करायला हवं त्यांच्या स्वतः जगण्याला आणि माझ्या जगण्याला एक माणुसपणासाठी आव्हानाची जाग निर्माण करायला हवी." एकूण स्त्री जागृतीच्या दृष्टिने पडणारे हे पाऊल अतिशय महत्त्वाचे आहे. स्त्रिमुक्तीची चळवळ ही समाजाच्या उद्धाराची चळवळ आहे. ही चळवळ पुरुषांनी समजून घेतली पाहिजे, स्त्रियांवरील बंधने दूर केले पाहिजे असे केले तर समाज व्यवस्थेमध्ये खऱ्या अर्थाने प्रगती होईल. या विचारप्रमाणे गौरी देशपांडे यांच्या साहित्याचे स्त्रिया स्वतंत्र म्हणून आपले आयुष्य आपल्याच हाती ठेवण्याच्या हेतुने जिवन जगतात. पुरुष सत्तात व्यवस्थेने खांब असलेले विवाह संस्था स्वभावीकपणे अडचणीची ठरते. तींचा विरंबदीपणा खिळखीला करून कालिंदी, नमु, रधा मोकळा स्वाश घेतात एक गोष्ट आपल्या लक्षात घेतात या स्त्रिया एकट्या राहतात, घटस्फोट घेतात आणि मोकळा श्वास घेतात अशा स्त्रिया समग्र साहित्यातून गौरी देशपांडे यांनी रेखाटल्या आहेत.

स्वतंत्रपणे जगणाऱ्या बुद्धीप्रमाण्यवादी, विवेकनिष्ठ, आधुनिक सुशिक्षित स्त्रिचे स्वप्न गौरी देशपांडे यांनी रेखाटले आहे. त्यांच्या नाईका संवेदनशील अभिरूची संपन्न आणि बुद्धिमान आहेत. हे गौरी देशपांडे यांच्या साहित्याविषयी डॉ. अरुणा दुभाषी म्हणतात "स्त्रिचा स्वयं अस्तित्वाचा शोध हे गौरी देशपांडे त्यांच्या सर्वच कादंबऱ्या मागील एक प्रमुख सूत्र आहे. यात शका नाही.



साहित्यिक तऱ्याच्या सर्व कादंबऱ्या स्त्री केंद्रीत आहेत. त्यांच्या आत्मनिवेदनार कादंबऱ्या मधील निवेदन या स्त्रिया आगत आणि तृतीय पुरुषी निवेदन हे स्त्री पात्रांना प्राधान्य देऊन केलेले दिसते. साहित्यिक स्त्री, स्त्रिये भावविषय, तीक्ष्ण आत्मशोध हा सर्व लेखनाचा गाभा आहे असे म्हणता येईल. स्त्री केंद्रीत साहित्य हे मराठी साहित्य परंपरेला नवे नाही परंतु गौरी देशपांडे यांच्या साहित्यातील स्त्री ही त्यापूर्वीच्या साहित्यातील स्त्रीपेक्षा वेगळी आहे. हे लक्षात घेतले पाहिजे. गौरी देशपांडे यांच्या कादंबऱ्यातील मध्यवर्ती व्यक्तिरेखा असणारी स्त्री ही प्रामुख्याने स्वकेंद्री, परनिरपेक्ष, अस्तित्वाचा शोध घेताना दिसते. या व्यक्तिरेखा आपल्या अस्तित्वाचा आपल्या पुरता अर्थ शोधण्याचा प्रयत्न करताना दिसतात. हा आत्मशोध व्यक्त करण्यासाठी गौरी देशपांडे यांनी आपल्या कादंबऱ्यातून विशिष्ट सिद्धप्रतीमा घडविलेली दिसते. अशा प्रकारच्या नायिका गौरी देशपांडे यानी आपल्या समग्र साहित्यातून रेखाटलेल्या दिसून येतात.

समाप्ते :

अशा प्रकारे आपणांस २० व्या शतकातील महत्वाच्या स्त्री लेखिका म्हणून ज्यांनी मान मिळविला आहे या पार्श्वभूमीवर गौरी देशपांडे यांच्या लेखनाकडे पाहिले की, लक्षात येते गौरी देशपांडे यांच्या साहित्याच्या मर्यादा या एकुलाने मराठी साहित्य परंपरेच्या मर्यादा आहेत. वेगळी स्त्री प्रतिमा निर्माण करण्याचा त्यांनी प्रयत्न केला. या नून त्यांचे लेखिका म्हणून असागारे मान व्यक्त होते. परंतु या स्त्री प्रतिमेला साकार करताना त्यांनी स्विकारलेल्या स्त्री तत्वांमध्ये या स्त्री प्रतिमेला मुख्ययुक्तता मात्र लाभलेली नाही.

संदर्भ :

- १) पाटील लीला - 'भारतीय स्त्रीजीवने' विद्या प्रकाशन, पुणे दि.आ. १९९८ पृ. १७६.
- २) मीचे निलम - 'संकल्प', (संपा) सजीव खंडेकर, मुंबई, १९८२, पृ. ५६.
- ३) राजापूरे पुष्पलता - '१९८० नंतरचे स्त्री - निर्मित कथनपर साहित्य, शाब्दालय प्रकाशन, झोयमपुर, पहिली आवृत्ती डिसें २०१०, पृ.क्र. २२.
- ४) विभूवन शैलेश - 'साहित्यास्वाद,' के.एस. पब्लिकेशन्स पुणे, एप्रिल - २००६.
- ५) तपे केशव - 'साहित्य : सर्जन आणि संदर्भ ; कैलाश पब्लिकेशन्स औरंगापुर, औरंगाबाद.



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Editor

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- 14) Recurrent Motifs in the Writings of J. M. Coetzee  
Dr. R. M. Patil, Amravati ||64
- 15) Constitutional and Legal Indicators of women Empowerment in India ...  
Dr. Man Mohan Singh, Amroha ||68
- 16) Renaissance Of Education And Literature In Modern Mysore  
Dr. Sreedhara H. Asst., Mysore ||74
- 17) Population Transition and Possibilities Demographic Dividend in India  
Ms. Archana Mishra, Prayagraj ||78
- 18) Job Satisfaction As Detaminant Of Leadership Style In Federal University ...  
Jaafaru Sani, Dr. Deepak Kumar Shrivastava,, Kota ||83
- 19) Poverty in Bihar Trend and challenges of Bihar  
Raj Kumar Gupta, Asha Gupta, Saran ||89
- 20) Protective Effect Of Withania Somnifera On Follicular Cells Against ...  
Poonam Kumari, Bodh Gaya ||94
- 21) Alterations in Mucins: Major Contributor of Asthma  
Priyam Singh, Khushtar A. Salman, Aligarh ||103
- 22) भारतीय सविधानातील राष्ट्रीय एकतासोबत संदर्भातील तरतुदी  
प्रा. भुषण प्रदिप अहिरराव, डॉ. पी. सु. नैरपगार, पुणे ||110
- 23) लक्ष्मण गावकऱ्यांचे गावचा साहित्यातील गावगाड्याचे चित्रण  
प्रा. नवनाथ ज्ञानेश पवळे, बीड ||114
- 24) गांधी धर्म दर्शन का मानवतावादी स्वरूप  
डॉ. रीतेश कुमार, पटना ||118
- 25) बौद्ध धर्म और तत्कालिन संस्कृति  
बेबी कुमारी, बोधगया ||122
- 26) मोन महानंद का प्रवाह: एक ऐतिहासिक, पुरातात्विक, व धार्मिक अवलोकन  
डॉ. संतोष कुमार ||125

## लक्ष्मण गायकवाड यांच्या साहित्यातील गावगाड्याचे चित्रण

प्रा. नवनाथ ज्ञानोबा पयडे

कॉलेजकादंबरी कला, खांगान्ध व विज्ञान महाविद्यालय,

शिरूर (का) जि. बीड

### प्रस्तावना :-

साहित्य लेखन करताना साहित्यिक हा एक समाजाचा घटक म्हणून समाजामध्ये वावरतो समाजाची रचना, समाजातील अडचणी, समस्या, दु:ख, वेदना, समाजाची हांगाची सर्वोत्तमपट लेखक आपल्या उपरुद्ध गडोळ्यानी पडतो व त्या समस्या वेदना दु:ख साहित्याच्या माध्यमातून सोडण्याचा प्रयत्न करतो. साहित्य लेखनासाठी गावगाडा हा खूप महत्त्वाचा असतो. गावगाडा संबंधी सांगतांना विवेक नारायण अडे म्हणतात की, "चलन दाराच्या गावसंबंधाच्या परस्पर व्यवहारांना आणि चलनदाराच्या जगत व्यापारी नाळ्यात गुरफटलेल्या गावच्या सामाईक जगत बाह्य व्यवहारांना गावकी किंवा गावगाडा असे म्हणतात" (गावगाडा विवेक अडे पृष्ठ क्र. २३) अशी गावगाडापाची व्याख्या आपणास सांगता येते. पुढे गावगाडा जड विचार मांडतांना विवेक नारायण अडे म्हणतात, "जाणाव्याही गावला गले तरी त्यामध्ये पांडरी व सभोवती बळाडी दुष्टीस घडेल. गावच्या बदोबस्तासाठी घाटावरील पुष्कळ गांधासभोवती गावकुस किंवा कोट दिले असून त्यातून गावात शिरण्याला एक अगर अधिक वेशी असतात. पुष्कळ ठिकाणी गावकुस व वेशीची मिठा न साहित्यामुळे पडडाड व मोडतोड झाली आहे त्यामुळे गावाची हया, उणेड ही खेळती झाली आहेत हे सांख्येनिक आरोग्याच्या दृष्टीने एकयती वर झाले म्हणावचें। मृग्य जातीचे घरे वेशीच्या आत असतात. आणि घेलेल्या जनावरांची घिरफाड करणाऱ्यां (शासकाने न घारलेल्या म्हणजे निसर्ग धर्माने घेलेल्या जनावरांना पडे म्हणतात. त्यांच्या मांसाला ते न खाणाऱ्या जाती, माती म्हणतात. व ते खाणाऱ्या जाती, भाती म्हणतात ती खाणाऱ्या जातीचे तसेच वेनारे वडर वेकडाडी फासे पारधी वगेरे शारख्या फिररव्या व नवीन वरतीला जालेल्या जंगली जातीची घरे पाले किंवा औपड्या प्राच गावबाहेर असतात. त्यातल्या त्यात फासे

घारच्याच्या डोवरड्या गावपासून जरा दुर असतात. घामूळ पांडरी मांगलेनी विसले इतकेच नव्हे तर लवड्याला जायज जकड घेव लीन गावे असण्याचा भास होतो. जशी जातीचे घरे सलग असतात व त्यांना जातीपरत्वे गाळा आडी, सुका आडी, कोळवाडा, रणोळाडा, भिला ही अशी नावे पडतात. दर एक गावाला एखादे तेवळा आणि बहुतेक गावांना चावडी असते. जेथे लोक जमतात शिरूर, कोळी, रामोशी वगैरे तुभाने जातीतले लोक जंगल पहावया दडन व पुढाक सोडून गावाच्या आश्रयाला आले. तेव्हा त्यांच्या जलोधरीस घोप अशा ठिकाणी त्यांना वरती मिळाली ह्या जाती मृग्य आज तरी त्यांना माजवरीत काटेजी जगा मिळाली नाही. असून जातीवेकी ते रोमांस खात नाहीत असा डोर घेवता भयो इत्यादीचे घरे गावात शेवटी किंवा गावकुसा बाहेर जगती गावाला घेवून असतात. महार, मांग, घेलेची डोरे (गाई म्हडी) फाडतात व खाल लहून महारवाडा व मांगवाडा हे गावपासून किर्ध्यात दुर असतात." (गावगाडा-विवेक नारायण अडे पृष्ठ क्र. १३,१४) एकदरीत विवेक नारायण अडे यांनी गावधी रचना कशी असते. घावेल्या घावेल्या गावगाडा कसा रेखाटला जातो याचे चित्रण करील उदाहरण्ये माध्यमातून सांगण्याचा प्रयत्न केला आहे. गावगाडाच्या घाटावरील साहित्यिक साहित्य कृतीतील गावगाडाचे चित्रण करत असतो. लक्ष्मण गायकवाड यांनी मुध्या साहित्यामध्ये गावगाडाचा अकरावे चित्रण केलेले आहे. "वोकल्या पारधी" ही सामाजिक कारणी आहे कादंबरीमधी लेखकाने जावयक तेव गावगाडाघाची भिन्न केले आहे. पुढी पारधी जमल ही रचनासामध्ये शिकार कर्न आपला उदरनिर्वाह करत होती. परंतु कालांतराने इंधन सजवती संगल तोड करणाऱ्यावर निबंध घातले. इंधन राने कर्नतो संगल तोडू लागले. यामाटी बिरडोस आपली बस्ती जंगलतून माळरानावर आणली. त्या ठिकाणी ही त्यांच्या सुरक्षिता जती नाही म्हणून बिरडोस आपली बस्ती गावाच्या माळरानावर आणले. येथे आन्यान्तर बिरडोसचा व त्यांच्या वस्तीतील सर्व लोकांचे संबंध गावगाडाघाची येऊ लागला. त्यामुळे त्यांचे गावगाडातील लोकाप्रमाण पोवाच व राहणीमान टोबावे लागत होते. गावगाडाघा आलेल्या संबंधाने त्यांच्यामध्ये परिवर्तनशीलता आली होती. पुढी खाण्यापुरतोच प्राण्याची शिकार करावची पण आपला उदरनिर्वाह भार्गवपासाठी त्यापेक्षा जास्त प्राण्याची शिकार करून ते लडवती कारणत जावून विकू लागली. त्यातून ते पैसे मिळताने त्यातून आपला उदरनिर्वाह भागवू लागले शिकारीला गेल्यावर गावी असल्या प्राण्याची शिकार करावयाची नाही. संपूर्ण झाड बुडापासून लडवणे नाही असे पारधी समाजातील पुर्वनाचे संकेत कादंबरीतून लवकर

मिठून काढून वाराही महिने मिठेल त्या प्राण्याचो शिकार करून जवळपास गावगाड्यातील लोकांना विडून आपली वस्ती चालवतो.

"पारवे घाल्या पासून वात होत नाही, पानककूच्याचे मटन जाल्यास महारोग होत नाही. रामडूकर खाण्याने शरीर मजबूत जायत घट्ट होते. जा कलपना गावगाड्यातील लोकांमध्ये विरडोसने रूढ वेत्या गावातील जमीनदाराला वाघाचो शिकार करून देणे त्याच वाघाच्या नव्या आणून देणे असे काम विरडोस करत होता. म्हणून त्यांचा येथील गावगाड्याशी संबंध येवू लागला. (विकित्या पारथी पृष्ठ क्र. ३५.)" वरील वाक्यातून लेखकांने कोणत्या प्राण्याचे मटन खाल्यानंतर कोणता रोग होत नाही याचो माहिती कादंबरीचा लेखकांनोवाचने लोकांना सांगतो. गावाच्या पाटलांना खूप करण्यासाठी त्याच वाघाचो शिकार करून देतो. पारथी समान हा लेखा रानावनात राहत होता. तेव्हा त्यांचा संबंध गावगाड्याशी येत नव्हता. गावातील पाटल लोक यांचा फायदा करून घेतात. पोलिस या पारध्याची चार मटन फुकट घेवून जातात. वरून हत्याही घेतला जातो. लेखकांने गावातील सकाळची वेळ कशी घाईची असते. गावामध्ये पाणी भरताच कस जातोवाच केला जातो यांचे चित्रण पुढील खंडातून केले आहे. त्याचामध्ये सकाळचो वेळ असल्यामुळे सकाळी एकच घाई असते. ते गावामध्ये येतात तेव्हा बाजोरवा देतानुच उठलेले नसतात. म्हणून चुळ भरून पाणी पिण्यासाठी ते लक्ष्या आडा नवेळ जातात. वराच वेळ याला पाणी मांग तर कधी त्याला पाणी मांग करीत होते. पण जो तो आपआपल्या घागी विदव्या, घरच्या भरून पाणी नेण्यात दंग होते. विरडोस व पानककूच्या जने पाणी मागत होते तसेच पारध्यांच्या आजुबाजुला चोभार, मांग आदी महारांचो माणस आमसाला थोड पाणी वाहा जी पानक लक्ष वापूळ पासून घागी घेवून बसलो म्हणत होते. पण लोक मार मांगच्या व चोभाराच्या घागीत आपल्या पोहय्यातील पांग भरून उरलेले पाणी त्यांच्या घागीमध्ये टाकून गडबडीने मिठून जायचे पण त्यांना पाणी देत नव्हते. त्यांनी स्वतःहा पाणी रोदण्यास वाट होतो. गावातील लोकांनी उरले सुरले पाणी दिल्यास तेवदय घावे विरडोस म्हणाला काय गावाचे नियम कडक आहेत. मुळात फिगारी कुळी, मांगरी इकडून तिकडे उडवामारून अडाला सिक्तात जांभेने पाणी पितत माणसा सारखा म्हणुस वसून आपल्याला घटकभयामुन साधे चुळ भरण्यासाठी आणि घ्यावला पाणी कृपी वरून वाहत नाही. या गावातील मांग, चोभार, यांच्यापेक्षा आपला पारथी बसतो बरो असे विरडोसला थोडते. " (विकित्या पारथी पृष्ठ क्र. ६९.)" वाचून लेखकाला सांगायचे आहे की. गावामध्ये असा जलंधर पाटला जाता मुके प्राणी मुळातून येवून पाणी पितात

पण माणमाला पाण्याला हात लायता येत नाही अस संवाद गावगाड्यातील लेखकांने आपल्या डोळ्यांसमोर उभा केला आहे तो गावगाडा हवेहवे आपल्या समोर उभा राहतो, पारथी समाजाचा गावगाड्याशी संबंध आल्यानंतर त्याच्यामध्ये परिवर्तन कसे होते लक्ष्मण गायकवाड यांनी गावगाड्याचे चित्रण करताना जो संवाद मांडला आहे तो प्रसंगानुरूपअसाच मांडला आहे गावगाड्याला साजेसो भाषाशैली ही लेखकांने वापरली आहे

वडार वेदना या कादंबरीमध्ये सुधा लक्ष्मण गायकवाड यांनी गावगाड्याचे चित्रण केले आहे. "सुधा चोगलाच मावळाचला चालत्यान उन्हाचा मोर केव्हाच कमी होऊन सावली आंगला गोड वाटत होती. चालता चालता माळरानावरून चार-दोन आकडवे नेऊळी गांव दिसत होत. गावचे सारे गुराखी आपआपली काम करणारी बायका पुरुष कोणाच्या डोक्यावर वेरणीचे भारे तर काईच्या डोक्यावर काटक्या कुटक्या बांधलेले गाडोडे डोक्यावर दिसत होते काहीच्या हातात शेळ्या, गाई पारडे होते. हे पाहून शंकरचा जीव धाड्यात पडला शंकरला वाटू लागले. झाकड पडेस्तावर आपण नेऊळी गाव गाटू एवढ्या लांब चलून चलून येहत्यावर आलेला शीण गवाजवळ पोहचल्यावर कधीच गेलेला दिसत होता. आता चोगलाच हाकावरच्या अंतरावर नेऊळी गाव आलेले दिसत होते. गावाच्या मध्यभागी असलेला मंदिराचा कळस टळ - टळ चमकताना दिसत होता. नेऊळीची मांजरा नदी वुई वुई वाहत असलेल्या तिथ्या पाण्याचा मंजुळ आवाज कानाला ऐकू येत होता. जाता जाता आपले हात पाय त्या वाहत्या नदीच्या पाण्यात धुवून पाणी पिऊन सर्वच आपला धक्या घालावत होती. नदीच्या पलिकडे समंद निऊळी गाव दिसत होते. शंकर विचार करत होता आपण गावाच्या बाहेरच नदीच्या काठावर उतराय आपल्या सोबत चार दोन जनांघर एकदोन कुत्री आहेत या गावात नवीन आल्याने या गावाची रीते सडेन, स्वभाव, धर्म काय आहेत हे आपल्याला माहित नाही. आपल्याला वधुन उगीच लोक काबरे बाबरे होतील. कुठले कोण हाकलून गावाच्या बाहेर काढतील. त्यापरिस आपण गावाच्या बाहेर थांबाय आपल्या पाये आपले जात भाई येतील म्हणून शंकरने गावाच्या बाहेर नदीच्या काठावर आपले विन्हाड गाडीतून उतरवून थांबवले (वडार वेदना पृष्ठ क्र. ५.)" वरील प्रसंगारून गावातील गावगाड्याची जी रचना आहे कशा स्वरूपाची असते. यांचे दर्शन घडवण्यासाठी लक्ष्मण गायकवाड यांनी हा प्रसंग शंकरच्या सोडून मांडिलेला दिसतो. गावगाड्यामध्ये सायंकळ आल्यानंतर बायका पुरुषांचो घरी जाण्यासाठी कशी धावपळ असते याचे चित्रण वाचकांने लक्ष्मण गायकवाड यांनी केले आहे.

दुभंग या कादंबरीमध्ये लक्ष्मण गावकऱाड यांनी किल्लारी गावातील गावगाड्याचे चित्रण खालील उताऱ्यात केलेले दिसून येते. "सर्वे गावांनी भिडकटेभराची जत्रा वाटासाटत कराचें टाळतें. भिडकटेभराचें मोंदर जणू किल्लारीच्या मध्यभागी समघा गावचें रक्षण करणयासाठीच आहे असं काटाचें अशी त्या गावाची रचना देवळाच्या अस्तपाम लिंगापताची कामणाची आंगि बाजूलाच मराठ्याची वस्ती त्याचे शेकडो वर्षांपासूनत गडीचे डोले गज खाडे जाडवडिलांचा देवा म्हणून भिडकटेभराच्या आजूबाजूला विमानात तसे टाकलेले होते तर या सर्वे वाड्याच्या पाठोमागे आजूबाजूला माळी गल्ली, मुसलमान गल्ली, धनगर गल्ली तर त्याच्या पलीकडे घिसाडी, कैकाडी, माडी लोहार, घडार, मूतार, नाथी, पांभार यांची टूटक टूटक घरे होती. गवाघ्याएकदम पाठोमागे महारवाडा, मांगवाडा त्यांच्यागे मागे महार बाजारा अशा अठरापगड जातीच्या लोकांनी भरलेल्या किल्लारी गावाचें श्रद्धास्थान मणजे भिडकटेभर होतें या भिडकटेभराच्या जत्रेला पराधरांतून गोडघोड वेगण कराचेंचें आंगावचें मुसलमान मुधा या दिवशी मागे राहत नसतें ते सुधा भिडकटेभराच्या जत्रेसाठी गाववाल्यांसोबत काम करत मुसलमानांच्या हातनेच्या तर भिडकटेभराच्या बाजूने अंगात चापचें तर डोलेच्या आंगि घिराच्या नावाने कोड्याच्या भेमाच्या अंगल याचें किल्लारी गावातले लोक एवढे गुणधर्मांविषाने नांदत होतें. (दुभंग पुढे क्र. १६)" किल्लारी गावाच्या मध्यभागी भिडकटेभराचे मोंदर गावाचें रक्षण करणयासाठी बांधलेले आहे मोंदराच्या आसपाम लिंगापत, कामणाची आंगि बाजूलाच मराठ्याची वस्ती कशी वस्ती आहे शेकडो वर्षांचे गडीचे डोलेअंग खाडे करे उभारलेले आहेत. वाड्याच्या बाजूला माळी गल्ली, मुसलमान गल्ली, धनगर गल्ली, वारवतुनेपरांत्या गत्वा जत्रा या गडीच्या वाड्याचें रक्षण करणयासाठी रचून झालेल्या आहेत असे वाटते. याचें धारकाईने चित्रण लक्ष्मण गावकऱाड यांनी केले आहे. गावगाड्यामध्ये अठरापगड जाती असून मुधा ते एकमेकाशी गुणधर्मांविषाने नांदतात. सर्वे सण एकत्रियाने साजरे करतात.

लक्ष्मण गावकऱाड यांनी उठाव या कादंबरीमध्ये महापूर गावातील गावगाड्याचे चित्रण करताना त्या गावातील गावगाड्याची रचना खालील उताऱ्याच्या माध्यमातून सोंगण्याच्या प्रयत्न केला आहे. "नदीतून गावात प्रवेश केल्यानंतर वेगवेगळ्या जाती जमातीची घरे लागतात. त्यात मुरूवातीलाच झोपडपट्टीचे दर्शन होते. थोड्याच अंतरावर मांगवाडा, महारवाडा आडळतो. त्यापुढे गेल्यानंतर खुप मोठा दरवाजा लागतो. आजूबाजूने चिरेबंदी भित्तीने बांदिलेले झालेले गाव दिसते या दारातून जाताता असे वाटते की आत इती. घोडे

जाणवारीची हा दरवाजा आहे की काम बांदिसे आत प्रवेश करता येव असा गडीमारवा वाडा नजरेस पडतो. आजूबाजूने विविध जाती जमातीची पुष्कळ घरे आहेत. त्यात तेली, तांबेळी, सोसा, शिपो, न्हावी, कोळी, माळी, माळी या गावकऱाड्यामध्ये राहणारे या जाती जमातीचे लोक आडळतात. या लोकांचा घरांचा माध्यमातून जणू एकाद मोंदर आहे असे वाटते पण ते मोंदर असून देवघुड्याचे मध्य अशी गडी आहे. या गडीचे रक्षण करणयासाठी म्हणूनच को काम हे आजूबाजूचे विविध जातीचे लोक घरे बातून राहिले असे वाटते. (उठाव पुढे क्र. ७)" लेखकाने महापूर गावाची रचना सांगताना नदी ओलांडल्यानंतर वेगवेगळ्या जातीभरांची घरे लागतात. मुरूवातीलाच झोपडपट्टीचे दर्शन करे होते. थोड्याच अंतरावर मांगवाडा महारवाडा आडळतो. त्यापुढे गेल्यानंतर खुप मोठा दरवाजा लागतो. आजूबाजूने चिरेबंदी भित्तीने बांदिलेले गाव दिसते या दारातून जाताता असे वाटते की आत इती. घोडे

**समारोप :-**

अशा प्रकारे आपणाम वरील मूळाच्या अध्यां लक्षात गावकऱाड यांच्या सोंगा साहित्यातील कथानकाचा विचार करत वसे. प्रथम आपण कादंबरी म्हणजे काय हे समजून घेतले आहे साहित्यात अशाप्रसूधला किती महत्त्व असते. हे समजून घेतले आहे. साहित्यामध्ये लक्ष्मण गावकऱाड यांनी पारशी समाज, घडार समाजांच्या मटक्या विमुक्तांच्या विविध बाबींवर प्रकार टाकला आहे. त्या प्रत्येक बाबीचा विचार आपण प्रस्तुत प्रकारामध्ये संविस्तर असा केला आहे. लक्ष्मण गावकऱाड यांच्या साहित्यात गावांचे विविध आशयसूत्र त्यात सामाजिक आंगि गावगाड्याचे चित्रण, राजकीय चित्रण, गुन्हेगार जमातीचे चित्रण तसेच सांस्कृतिक व धार्मिक चित्रण अंधश्रद्धेचे चित्रण अशा विविध आशयसूत्राचे लक्ष्मण गावकऱाड यांनी अतिशय धारकाईने व प्रीजळणगे रेखातले आहे या साहित्य लेखनामागे लक्ष्मण गावकऱाड यांचा मुळ उद्देश असा आहे की या देशातील सर्वे माणसे समान आहेत की " आहेत तर मग एका बाजूला पोटाची खडगी भरण्यासाठी जगण्याची सर्वे माध्यम समाजाने बंद केल्यानं धारीचा तुकडा घोरगात्या भरल्या विमुक्त समाजाला चोर डाकु म्हणून पोलिस राजचसर्वे बायकातून सहित गुराहारांना डांबून कोडल्या सारखे धरून भारतात कुटूंब ह्या चोरी गुन्हेगाराच्या नावाखाली उध्वचस्य झालेली पाहणजे

लेखकात असा उद्देश लक्ष्मण गायकवाड यांचा साहित्य लेखनामार्गे  
लाय भटक्या विमुक्त जमातीला जगत असताना कोण-कोणत्या  
घामांमना लंड घावे लागते किती हालअपड्टा सोसाव्या लगतात  
याच समग्र विचार त्यांच्या साहित्यामध्ये आलेला आहे म्हणून  
मसे झगता येईल की त्यांचा उद्देश साहित्य लेखनाने पूर्ण झाला  
हेतूच साहित्यात गावगाड्याचे चित्रण करताना गावगाड्यातील  
बातावत्याचे चित्र हुबहुच आपल्या डोळ्यासमोर उभे केले आहे  
सामाजिक चित्रण करताना भटक्या विमुक्त जमातीच्या जिवन  
गतीचा त्यांच्या पोसाख त्यांची भाषा राहणीमान रितीरिवाज त्यांची  
वेवढ पाहती कशी असते याचा समग्र विचार लक्ष्मण गायकवाड  
जाने केला आहे. क्रांतिचिंतन साकारताना कुटूंबातील निव्हाळा  
चा संवेधानेन संवाद प्रेम, वास्तव्य कसे जोपासले जाते याचे ही  
चित्रण साहित्यातून दिसून आले आहे. पारधी लोकांना गुन्हेगार  
पत्न्यामध्ये समाजव्यवस्था व पोलिस यंत्रणा कशी जबाबदार  
आहे याचे चित्रण गुन्हेगार जमातीचे चित्रण मध्ये केले आहे.  
सांस्कृतिक आणि धार्मिक चित्रण करताना रूढी परंपरा अंधश्रद्धा  
क्या पाहिल्या जातत शिक्षणाचा अभाव असल्यामुळे ही जमात  
अंधश्रद्धा बळी कशी पडते याचे ही चित्रण या प्रस्तुत प्रकरणात  
सांगत आले आहे तसेच लक्ष्मण गायकवाड यांच्या साहित्य  
लेखना मागचा उद्देश काय आहे ? त्याचा शोध घेऊन त्यांची  
लेखनामार्गेची भूमिका स्पष्ट केलेली आहे. त्यांच्या लेखनातील  
साहित्यामुळे त्यांचे साहित्य कसे वेगळे ठरते याचाही विचार  
प्रस्तुत प्रकरणात सखोल असा करण्यात आलेला आहे.

**संदर्भ ग्रंथ :-**

1. अरे त्रिविक्र नारायण :- गाव-गाडा समन्वय प्रकाशन, राहपुरी,  
कोल्हापूर, पृ. क्र. -२३
2. अरे त्रिविक्र नारायण :- उर्जि पृ. क्र. -१३,१४
3. गायकवाड लक्ष्मण :- बकिच्या पारधी स्वरंग निर्मितो चरई  
टाणें प्रथम आवृत्ती आवटी. २००२ पृ. क्र. -३५
4. गायकवाड लक्ष्मण :- उर्जि पृ. क्र. -९९
5. गायकवाड लक्ष्मण :- खडार वेदना, परचुरे प्रकाशन, मुंबईपृ.  
क्र. ७
6. गायकवाड लक्ष्मण :- दुमंग, दुसरी आवृत्ती-२००५ मधुरान  
पब्लिकेशन्स, शनिवार पेठ, पुणे पृ. क्र. १६
7. गायकवाड लक्ष्मण :- उदक दिलिपराज प्रकाशन, पुणे,  
पृ. क्र. ७





दलित नाटकाचे स्वरूप आणि वाटचाल

डॉ. नवनाथ जानोबा पवळे

कालिका देवी कला, वाणिज्य व विज्ञान

महाविद्यालय, शिरूर (का)

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प्रस्तावना :

दलित वांगमयाचा उदय 1960 नंतर झालाची ड आणि बंडही दलित चळवळीची दोन प्रमुख वैशिष्ट्ये होती. नंतर वेदना, विद्रोह आणि नकार ही या साहित्यातील महत्त्वाची तत्त्वे होती. स्वातंत्र्य, समता, बंधुता, विज्ञान निष्ठा न्याय आणि लोकशाही ही मुख्य दलित साहित्याची मूलाधार आहेत. दलित साहित्यामध्ये विविध साहित्य प्रवाहामध्ये लेखन झाले. दलित साहित्यामध्ये कविता, आणि आत्मकथन हा वाङ्मय प्रकार जास्त प्रमाणात हाताळला गेला. तितकासा कादंबरी आणि नाटक हा वाङ्मय प्रकार हाताळलेला आपणास दिसून येत नाही. हिंदू समाज व्यवस्थेमध्ये जातीची उतरंड आहे त्यामुळे उच्च जात व कनिष्ठ जात अशी विषमता असून दलितत्व हे या विषमतेचे आपत्ती आहे.

दलितांवर या विषमतावादी समाजव्यवस्थेने पिढ्यान् पिढ्या अन्याय केला त्याला विरोध करण्यासाठी साहित्य हे दलितांनी त्यांच्या विरुद्ध लढण्याचे एक हत्यार बनविले आहे. त्यामुळे दलित लेखकांची जबाबदारी या विषमतेच्या विरुद्ध लेखन करून लढा देणे ही आहे असे हा साहित्य प्रवाह मानतो. ही जबाबदारी स्पष्ट करताना अण्णा भाऊ साठे म्हणतात आम्ही दलित साहित्यिक आणि दलितांना वास्तव जगण्याच्या सर्व जुलमातून मुक्त करणारे साहित्य निर्माण केले पाहिजे. असे यांनी सांगितले आहे. शत्रुघ्न मात करण्यासाठी हत्यारा पेक्षा विचार हे फार मोठे शस्त्र आहे. ही इतिहासाची साक्ष म्हणून डॉ. बाबासाहेब आंबेडकर यांनी देखील रक्तपात विरहित समाज परिवर्तनासाठी शब्दशस्त्राचाच वापर करून आपल्या तत्त्वज्ञानाच्या सामर्थ्याव रभारतीय समाजात परिवर्तन घडवून आणली. अण्णा भाऊ साठे यांनी त्याच शब्दसामर्थ्याची जाणीव ठेवून समाज प्रबोधनासाठी लेखन माध्यम उपयुक्त असल्याचे दलित साहित्यिकांनी सांगितले. त्याच प्रमाणे स्वतःही लेखन केले दलित कथा लिहून त्यांनी मोलाचे योगदान दलित साहित्याला दिलेले आहे.

**दलित साहित्यातील नाटके :**

वाटा-पळवाटा दत्ता भगत, अमली ऋषिकेश सुलभ, अश्मक दत्ता भगत, आगट अशोक बुरबुरे, आग्या वेताळ जांती मंश्राम, उचक्का लक्ष्मण गायकवाड, कथा खैरलांजी प्रा. अनिल कुमार साळवे, कॅम्पस वामन तावडे, कालचक्र हेम चंद्रना, काळोखा च्या गर्भांत भि.शि. शिंदे, कैफियत रुस्तुम अचलखांब, कोर्ट मार्शल स्वदेश दीपक, खोळ्या गांडू बगीच्या नामदेव ढसाळ यांच्या कवितावर आधारित एकाकिका, गावकी आत्मचरित्र रुस्तुम अचलखांब चक्रांत, जयजय रघुवीर समर्थ, जाता नाही जात सिद्धार्थ तांबे, झाडा झडती शिल्पा मुर्विसकर, झुंबर विदूषक प्रभाकर दुपारे, बाबा भांड लिखित या कादंबरीवर आधारित तंट्या तनमाजोरी, तृष्णा पारफ. मु शिंदे, थांबारामराज्यंतआहेप्रकाशत्रिभुवन, देवनगरीकिरवंतप्रेमानंदगज्वी, धादांतखैरलांजीप्रज्ञापवार, पांढराबुधवार, पुन्हा एकदा नव्यानं भगवान हिरे, पैदागीर, पोतरा जवळी अडगुळ गुणशंखरण, भाई तुम्ही कुठे आहात, डॉ. ऋषिकेश कांबळे, महाभोज मनु भंडारी, युगवात्राम, भींचटणीस, रापी संजय जीवने, शिवाजी अंडरग्राऊंड भीमनगर मोहल्ला राज कुमार तांगडे, सुनो शेफाली कुसूम कुमार, सुबरान रामदास कांबळे, कमल अधिक नेस्मारक कुमार देशमुख, आदी नाटकांचा दलित साहित्यामध्ये उल्लेख असलेला आपणास दिसून येतो. सन 1982 मध्ये पहिला दलित नाट्य महोत्सव भरवण्यात आला होता.

**दलित रंगभूमीचा उदय :**

सन 1955 मध्ये मिलिंद महाविद्यालयात ऋह संमेलनात डॉ. बाबासाहेब आंबेडकर पाहुणे म्हणून आले होते. त्यांनी तेथे विद्यार्थी व प्राध्यापकांनी सादर केलेली नाटके पाहिली सर्व साधारण विषयावर नाटके लिहिण्यापेक्षा दलित जीवनावर नाटके लिहा असे त्यांनी सांगितले आणि तिथून दलित रंगभूमीची मुहूर्त मेढ रोवली गेली. मिलिंद महाविद्यालयाचे प्राचार्य म. भि. चिटणीस यांनी युग वात्रा 1956 मध्ये लिहून आंबेडकरांच्या समाज प्रबोधनाला हाक किंवा प्रतिसाद दिला. 1956 मध्ये नागपूरच्या दीक्षा भूमीवर डॉ. आंबेडकर यांच्या या नाटकाचा प्रयोग झाला. त्यानंतर काही वर्षांत दलित व अन्य लेखकांनी अनेक दलित नाटके एकाकिका लिहिल्या. दलित याशब्दाचा अर्थ मुळी पिडलेले, नाडलेले, तुडवलेले, शोषित, वर्चित, उपेक्षित असा आहे. अशा समूहाचा दडपलेला आवाज या नाटकांमध्ये त्यांनी प्रकट केला आहे. ज्या जाणीवने प्रगट होतो. ते दलित नाटक होय.

**दलित नाटकाची वंशिष्टे :**

- 1) मराठी नाट्य परंपरेच्या इतिहासात दलित नाटकाचे वेगळे अस्तित्व आहे. हे मान्य करावला हवे. आजपर्यंत लिहिण्यात आलेली दलित नाटके ही समाज परिवर्तनाची आणि समाजबाधिलकीचे केंद्रबिंदू आहेत. म्हणजेच सामाजिकतेला व परिवर्तनाला सामोरे जाणारे विचार प्रवाह दलित नाटकाला मंजूर आहेत.
- 2) यादेशातील समाज व्यवस्थेला एक जबरदस्त हादरा देणारे धारदार हत्यार म्हणून दलित नाटकाचे एक वेगळे अस्तित्व आहे. दुसरी गोष्ट म्हणजे नाट्य परंपरेतील नाटकांपेक्षा दलित नाटकाला मान्य नाही.

- 3) प्रस्थापित वर्गाकडून दलितांवर होणाऱ्या अन्याय अत्याचाराला वाचा फोडण्याचे कार्य दलित नाटकांनी केले आहे.
- 4) आपल्या वेदना दलित नाटकांनी नाटक व एकाकि कातून मांडल्या. दलित इतर दलित साहित्य प्रमाणे वेदना विद्रोह नकार ही दलित नाटकाची वैशिष्ट्ये आहेत.
- 5) दलित नाटक सामाजिक दुःखातून जन्माला येते. दलित नाटकातून येणारा इतिहास हा केवळ एक इतिहास म्हणून येत नाही तर मानवी संस्कृती म्हणून येतो.
- 6) दलित नाटक हे इतिहासाचे गोडवे गात नाही तर इतिहासाचे विश्लेषण करून भविष्याचा वेध घेते. मानवते विषयी माणुसकी विषयी दलित नाटक आग्रही आहे.
- 7) दलित नाटक हे वैचारिक बाधिलकी मानणारे अखिल मानव कल्याणासाठी सिद्ध झालेले व हया जगात जे सर्वोत्तम असे मूल्य माणुस त्याच्या रक्षणासाठी सिद्ध झालेले आहे.

#### **दलित नाटकाचे स्वरूप आणि वाटचाल :**

मानवी मन निर्भय करणारे रोख ठोक पणाची भाषा बोलणारे, प्रस्थापितां विरुद्ध उघडपणे संघर्ष करणारे हे दलित नाटक मनोरंजन पेक्षा प्रबोधनाची कास पत्करते. विद्रोही जाणवांचा पेटता अविष्कार म्हणजे दलित नाटक. वेदनांचा हुंकार म्हणजे दलित नाटक काही नव्या विरोधी आणि विद्रोही जाणवा पेटात घेऊन दलित रंगभूमीने आपल्या प्रवासाला सुरुवात केली. या अनुभवांना जीवनाला दलित नाटकांनी आकार दिला. ते अनुभव विदारक रीतीने आपल्या उघड्यानागड्या स्वरूपात समोर आले. त्यामुळेच दलित विषयावरील ही नाटके लक्ष वेधी ठरतात. महत्त्वाची ठरतात तर कर्धाकधी प्रस्थापितांच्या जाणवेला चमत्कारिक आंगळ, प्रक्षोभक व अस्वस्थ अशा स्वरूपाची वाटतात. उदा. तनमा जोरी व देवनवरी या नाटकाचा शेवट इत्यादी तंदा ह्या दलित नाटकात नाटककारांनी आपले विशिष्ट अनुभव मांडले आहेत. त्याचे वेगळेपण लक्षात घेण्यासारखे आहे, गेल्या दोन दशका पूर्वी (केव्हा पासून मोजायची?) मराठीत दलित विषयावरील व दलित जाणवा विषयांच्या नाटकांना बहर आला.

दलित लेखकांनी दलित नाटक व रंगभूमी दलित चळवळीचे एक साधन बनविले आहे. यावर्गाच्या वाट्याला आलेले दैन्य व अप्रतिष्ठाही माणसाला किती खालच्या पातळीवर नेते याचे भोषणकरणारे दर्शन यानाटकात घडते. उदा. तनमाजोरीतील घेठबिगारी, खेळी यातील नारायणचा खून इत्यादी तरी देखील दलित समाजाला हळूहळू प्रबोधनाची चाहूल लागल्याने या दलित रंगभूमीच्या माध्यमातून दलितांच्या जीवनातच नव्हेतर संबंध समाजात होत असलेल्या परिवर्तनाची कल्पना येऊ शकते. (उदा. युग यात्रा व कैफियत नाटक) दलित नाटक हे केवळ आवेडकरी विचारांच्या प्रचारासाठी जन्मले नसून त्याविचारांच्या साक्षात्कारासाठी जन्मले आहे. दलित रंगभूमी आणि चळवळीतील हा जिवंतपणा आवेडकरी विचारांच्या चळवळीमुळे आणि चळवळीतून जन्माला

आला आहे. यालाह्याने सांस्कृतिक क्रांतीला जन्म दिला तेव्हा यादलित नाटकाचा निर्मितीचीमुळ प्रेरणा म्हणजे आत्मशोध होय. स्वतःचा शोधा विषयांचे प्रश्न दलितांच्या जीवनात निर्माण झाले. जगण्याच्या दणकट जिद्दीमुळे सोसाव्या लागणाऱ्या यातनां मधून जन्मलेले हे प्रश्न आहेत म्हणून दलित रंगभूमीवरील चळवळीच्या नाटकांमध्ये अनुभवाचा निवृत्तपणा असलेला आपल्याला दिसतो. या दलित नाटकाचे दुसरे वैशिष्ट्य म्हणजे त्यात आढळून येणारा सामाजिक संदर्भ होय. आंबेडकरी विचार आत्मसात केल्यामुळे प्राप्त होणाऱ्या जीवन विषयक दृष्टीकोनाच्या आधारे स्वतःला आणि स्वतःभोवतीच वा वास्तवाला जाणून घेण्याच्या उकट इच्छाशक्तीचा शब्दरूप अविष्कार म्हणजे दलित नाटक असे प्राध्यापक दत्ता भगत यांनी एके ठिकाणी म्हटले आहे.

आंबेडकरी तत्त्वज्ञानाची शक्ती घेऊन कोणत्याही संघर्षात सिद्ध झालेले आंबेडकरी चळवळीही दलित नाट्यचळवळीची प्रेरक शक्ती आहे. दलित शोषितांच्या अस्मिता जागृत केली म्हणून आंबेडकरी चळवळीशी दलित रंगभूमीचे नाते आहे ते विसरता येत नाही असे डॉ. भालचंद्र फडके यांचे मत आहे. ते योग्यच म्हटले पाहिजे मराठी नाटकांच्या इतिहासातील हा दलित नाटकाचा प्रवाह अविभाज्य भाग आहे हा दलित नाट्य चळवळीचा नवोन्मेष प्रवाह म्हणजे नाविण्याचा, नव समाज जाणिवांचा एक नवा आकृति बंध आहे असे म्हटल्यास ते वावगे होणार नाही. मानवी जीवन विषयक मूल्यपरिवर्तनशील समतेचा प्रवाह बलदंड करणारी अशीही नाटके आहेत. उदा. न्याय, मन्वंतर इत्यादी तसेच मध्यम वर्गीय जाणिवांवर आघात उदा. आम्ही देशाचे मारेकरी याचबरोबर अंधश्रद्धा विरोधी जागृती थांबा रामराज्य येतंय ,पोतराज, देवनवरी इत्यादी. परिवर्तनाचा विचार देणाऱ्या नाट्य कृती भिक्षुणी वासव दत्ता, न्यायमुख्य म्हणजे बुद्धधर्मातील सिद्धम्माचा विचारही काही दलित नाट्य कृतीत आढळतो. विषम समाजरचनेचा व अर्थव्यवस्थेचा धिकार आदर्श मानवी जीवनाचा स्वीकार ही दलित नाटकाची प्रयोजने आहेत. तेव्हा दलित नाटक ही सामाजिक व सांस्कृतिक चळवळ आहे. निव्वळ मनोरंजन हा उद्देश तिच्या पाठी मागे नाही. येथील रुढी परंपरेने जाती धर्माने एका विशिष्ट समाजाने माणूसकीचे अधिकार नाकारण त्याविरुद्ध विद्रोह करण्याची दलित रंग भूमीची भूमिका आहे. शिवाय दलित रंगभूमीने ही प्रस्थापित परंपरा ही नाकारली आहे .

दलित नाटकाचा संबंध वर्तमानाशी आहे. कारण दलित नाटक हे दलितांच्या वर्तमान चळवळीतून जन्माला येत आहे. चळवळ जन्म दात्री असल्यामुळे येथे हाडाचा निवृत्त आहेत साहा निवृत्तपणा येथील मातीतून उगवला आहे. त्यामुळे या नाटकात तंत्राची ही मोडतोड केलेली आढळते. (उदा.थांबा राम राज्य येतंय ) दलित नाटकात मूळ संकेताचे भंजन केलेले आढळते. दुःख टोकदार करण्यातून कधी वक्तृत्वाचा तर कधी आवेशाचा आधार घेतलेला आढळतो. (उदा. काळोखाच्या गर्भातील सूत्रधाराच्या सुरुवातीचा व शेवटचा भाग) दुःखाची उकटता व्यक्त करण्यासाठी दलित नाटक कधी कवितेकडे सरकते उदा. साक्षी पुरम, न्याय, युगयात्रा ,कैफियत मधील काव्यपंक्ती इत्या. अशा तऱ्हेने दलित रंगभूमीवर सादर होणाऱ्या नाट्यकृतीना एक दिशा आहे. स्वतःची गती आहे एक इतिहास आहे स्वतःचे असे एक तत्वज्ञान आहे भारतीय समाज हा विषमतेवर आधारित असल्यामुळे

माणूस माणसापासून अलग झाला वेगळा झाला. आता तसे न होता समान मानवी मूल्यांची समाज मदिरात प्रतिष्ठापना करण्याचे ध्येय बाळगणारे दलित नाटक आज आपल्या समोर उभे आहे.

दलित नाटकांचे विषय दलितांवरील अत्याचार त्याची उपेक्षा त्याची त्याच्या जीवनातील दुःख आणि सर्वप्रकारच्या अन्याया विरुद्ध बंड असे असावेत हे स्पष्टच आहे. परंतु दलित नाटके म्हणजे केवळ एवढेच नव्हे त्या सर्व दलित नाटकातून धर्मशास्त्रातून निर्माण झालेली अंधश्रद्धा, दैववाद, जातिवाद यावर कठोर आणि मर्मग्राही आघात आहे. शिवाय या दलित नाटकात विद्रोह व बंडखोरांचे लक्षण असून दुःख आणि आक्रोशही त्याच्या जोडीला जाणवतो. परंतु ही नाटके निराशा आणि कवैकल्यग्रस्त नाहीत हे लक्षात घेणे आवश्यक आहे. यादलित रंगभूमीवरील नाटकाचे आणखी वैशिष्ट्य सांगताना ते केवळ दलितांच्या दुःखा पुरते मर्यादित नाही तर मजुरांची होणारी पिळवणूक तनमानोरी, आणि सान्या जगात जगभराच्या मानवी अन्यायविरुद्ध दंड धोषदून उभे राहण्याची क्षमता व निर्धार या नाटकाच्या शब्दाशब्दांतून व्यक्त होतो. या दलित रंगभूमीवरील नाटकात अस्पृश्यांच्या वाट्याला आलेले हिणकस जीवन, दारिद्र्य, उपासमार पोट्यासाठी चाललेली धडपड अस्पृश्यतेमुळे समाज जीवनात होणारी उपेक्षा दलितावर सुवर्णाकडून होणारे अत्याचार, अंधश्रद्धा, गैरसमजुती यांचे प्रामुख्याने चित्रण आलेले आहे. तसेच दलितेतर समाजाबद्दल आणि त्यांच्या सर्वकष परंपरेबद्दल दलितांना आलेली चीड ही समजून घेता येते.

दलित रंगभूमी आणि चळवळीचे नाटककार सामाजिक बाधिलकी मानणारे आहेत या बाधिलकीमुळेच समाज व्यवस्थेने निर्माण केलेल्या विषमतेची व अन्यायाची चित्रे चळवळीच्या नाटकातून रेखाटण्यात आलेली दिसतात. या जाणवेने निर्माण होणारे ताण-तणाव त्यांनी वारकाईने चित्रित केलेले आहेत. आजच्या दलित रंगभूमीवरील नाटकाचे स्वरूप प्राधान्याने प्रतिक्रियात्मक, निषेधानात्मक आणि नकार प्रचुर असे आहे. त्यात बंडखोरी, संतप्तता, आक्रमकता, त्वंष पूर्णता, झालेल्या अन्यायाचा दंश, सरळ सरळ आणि उघड स्वरूपात बहुतांशी प्रकट झाल्याचे दिसून येते. जळजळीत वेदना भोगणारा दलित माणूस या दलित नाटकात प्रथम भेटतो देव, दैववाद, अंधश्रद्धा, कर्मकांड, पुराणमतवाद, किंवा पारंपारिक संकल्पना नाकारणे तसेच बद्धविचारातून आलेला अनिश्चिंवरवाद, तर्कवाद, बुद्धिप्रामाण्यवाद, नितीवाद स्विकारणे हेच दलित जाणवेचे नाटक होय.

#### समारोप :

सामाजिक क्रांतीचे एक साधन म्हणून दलित नाट्य चळवळीचा विचार होत असला तरी या विषयाच्या अनुषंगाने कलात्मकतेचाही विचार होणे आवश्यक आहे. दलित रंगभूमीवरील नाटके ही प्रचारी असल्यास हरकत नाही. पण प्रचारालाही कलात्मकतेचे भान असणे आवश्यक आहे. आक्रस्ताळी लेखनातून काहीच साध्य होत नाही हे लक्षात घेऊन दलितांना सोसाव्या लागणाऱ्या दुःखाचे, व्यथांचे दर्शन या नाटक काराने जरूर दाखवावे पण त्याचे प्रदर्शन करण्याची वृत्ती असू नये हे महत्वाचे आहे. या सगळ्या दलित नाटकात आता एक प्रकारचा एक सुरीपणा जाणवू लागला आहे. त्याच एक आवर्त निर्माण झाले आहे. त्या दलित नाटकाच्या मुळाशी जी बंडखोर

वृत्ती आहे त्याचा परिपोष करण्याऐवजी आपले नाटक हे एका मोठ्या व्यापक चळवळीचे शक्तिस्थान आहे याचे या दलित नाटककारांनी अजिबात धान विसरता कामा नये. या सर्व दलित नाटकामध्ये नाट्य प्रयोगाचे सर्व गुण ओतपोत भरलेले आहेत. त्यातील आशय व्यापक आणि सखोल आहे. अभिव्यक्ती चैतन्यपूर्ण आणि नाविन्यपूर्ण आहे. आणि तांत्रिक दृष्ट्या ही ते अधिक योग्य आहेत. मात्र या सर्व नाटकामध्ये अनुभवाची खोली वाढवणे आणि मानवी समाजातील गुंतागुंतीचे योग्य दर्शन घडविणे आवश्यक आहे. दलितांना येणारे विदारक अनुभव एका नाट्यात खच्चून भरण्यापेक्षा एका-एका अन्यायाच्या उपेक्षेच्या घटना-घडामोडी या भोवती कथा सूत्र गुंफून त्यातून मानवी मनाच्या स्वभावाच्या क्रिया-प्रतिक्रिया आघात प्रत्याघात याचे कौशल्यपूर्ण कलापूर्ण चित्रण प्रस्थापित करण्याचा प्रयत्न होणे या गोष्टीकडे दुर्लक्ष करून चालणार नाही.

**संदर्भग्रंथ :**

- 1) दलित रंगभूमी आणि नाट्य चळवळ, डॉ. मधुकर मोकाशी
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27]	बालविश्व का बदलाव पत्रिका मौजू प्रसाद, संगमरमल, सहरसा	124
28]	भारत में आर्थिक दृष्टिकोण और राष्ट्रवाद का विकास डा. विजिलेश कुमार, मधेपुरा	129
29]	औद्योगिकरण का सामाजिक जीवन-शैली पर प्रभाव डॉ० संजय कुमारी सुमन, मुर्शीदाबाद	134
30]	दलित के विकास में अनेक समस्याएँ दयानंद कुमार, मधेपुरा	137
31]	छत्तीसगढ़ी लिपि लिखक के उपनाम 'टूठी दादी' में सुपरीकता नन्दनी कुमारी, दरभंगा, बिहार	140
32]	पुस्तक का सांख्यिकीय विश्लेषण सुनील कुमार, जिला- बेगूसराय	143
33]	बालविश्व: एक अन्तर्जातीय-सांख्यिकीय विश्लेषण-अध्ययन डॉ० सुखे पी.एच. सिन्हा (प्रा.) वि. बीड.	146
34]	बालविश्व : जिला, साहित्य सेवा व कृषक बालविश्वों पर और विद्यार्थी प्रभाव डा. डॉ. पी.जी. सिन्हा, बीड-नागनाथ, वि. डिग्री	149
35]	अखिलभारत संस्था : केंद्र व बालविश्वों डा. डॉ. एच. बी. कट्टा, स्वयंसेवक दल दमरु	153
36]	उत्कर्ष मातृशिक्षा विद्यालय के विद्यार्थियों के शैक्षणिक प्रदर्शन पर सांख्यिकीय ममता सिंह, डॉ० ओम पाल सिंह	157
37]	A BRIEF STUDY ON CHILD HUMAN RIGHTS AND CHILD LABOUR IN ASSAM - ABOUT SOBIR HAZORIKA, DIST. DHUBRI (ASSAM)	161
38]	संस्कृत शैली के बालविश्वों में बाली भाषा का विकास ओमप्रकाश खैलिया & डॉ० प्रविण सिंह, बीड (म.प्र.) भारत	164
39]	बाल विज्ञान में एक अन्तर्जातीय-सांख्यिकीय विश्लेषण डॉ० दिनेश कुमार शर्मा, पटना	167

अर्थशास्त्र विभागद्वारा मासिकार्षिक के इन लेखों को मासिक पुस्तक में प्रकाशित करने के अलावा इसे मासिकार्षिक पत्रिका में भी प्रकाशित किया जाएगा।

### छत्रपती शाहू महाराजांच्या आर्थिक विचारांचा अभ्यास

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२. आचार्य शब्दी - कात्यायन - भाष्यकार - लेखकालास मुद्रा - महाराष्ट्र शासकीय विद्यापीठ, सांगली - १९७२, प्रथम प्रकाशन - १४ - २४
३. शब्द - कात्यायन - भाष्यकार - डॉ. सांगली शासकीय विद्यापीठ, सांगली - १९६५, १४/२ - १९
४. आचार्य विद्यासागर - साहित्यदर्पण - विद्यासागर हिन्दी भाषा, सांगली शासकीय विद्यापीठ, सांगली - १९७०, ६/३१ पृष्ठ ३०५
५. मासिक पुस्तक - पूर्ण - १/१
६. साहित्यदर्पण - अर्थशास्त्र - ६/३२५
७. मासिक पुस्तक - पूर्ण - ८०/७२
८. साहित्यदर्पण - अर्थशास्त्र - ६/३२७
९. मासिक पुस्तक - पूर्ण - ६/६५
१०. अर्थशास्त्र विभागद्वारा प्रकाशित - अर्थशास्त्र विभाग, सांगली शासकीय विद्यापीठ, सांगली - १, जि. ६७, १ - २४
११. अर्थशास्त्र - १/६८
१२. मासिक पुस्तक - अर्थशास्त्र - १४ - ८२

#### प्रस्तावना :

भारताने आर्थिक विद्येच्या क्षेत्रात अत्यंत महत्त्वाचे योगदान दिले आहे. अर्थशास्त्राच्या क्षेत्रात अनेक महत्त्वाचे लेख लिहिले आहेत. त्यामध्ये शाहू महाराजांचे एक लेखनही समाविष्ट आहे. शाहू महाराजांचे अर्थशास्त्रातील योगदान अत्यंत महत्त्वाचे आहे. शाहू महाराजांचे अर्थशास्त्रातील योगदान अत्यंत महत्त्वाचे आहे. शाहू महाराजांचे अर्थशास्त्रातील योगदान अत्यंत महत्त्वाचे आहे. शाहू महाराजांचे अर्थशास्त्रातील योगदान अत्यंत महत्त्वाचे आहे.

शाहू महाराजांचे अर्थशास्त्रातील योगदान अत्यंत महत्त्वाचे आहे. शाहू महाराजांचे अर्थशास्त्रातील योगदान अत्यंत महत्त्वाचे आहे. शाहू महाराजांचे अर्थशास्त्रातील योगदान अत्यंत महत्त्वाचे आहे. शाहू महाराजांचे अर्थशास्त्रातील योगदान अत्यंत महत्त्वाचे आहे. शाहू महाराजांचे अर्थशास्त्रातील योगदान अत्यंत महत्त्वाचे आहे.

शाहू महाराजांचे अर्थशास्त्रातील योगदान अत्यंत महत्त्वाचे आहे. शाहू महाराजांचे अर्थशास्त्रातील योगदान अत्यंत महत्त्वाचे आहे. शाहू महाराजांचे अर्थशास्त्रातील योगदान अत्यंत महत्त्वाचे आहे.

  
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221







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1	राष्ट्रसंगीत सुकजीवी महाराष्ट्र प्रांतीय साहित्यव्यापीत मानवतावाद	डॉ. मनीषर जंकिटकर डॉ. मिलिंद कांबळे	1-5
2	अभिव्यक्त धटनयानिया घडवळीला दिशा देणारे आत्मकथन: 'कसी'	डॉ. मारोती कसाब	6-9
3	कुसुमाग्रजांची राष्ट्रीय कविता: एक आस्वाद	प्रा. डॉ. विनोद उत्तमराव भालेराव	10-15
4	संगीत साहित्यव्यापीत संतकविविधी	प्रा. डॉ. सुनंदा तपडे	16-21
5	राष्ट्रसंगीतची 'वागगीता' विविधी भागील भूमिका	डॉ. अशिताबा श. सोबे	22-25
6	एकांगिसाव्य शतक : स्त्री व समाज	मराठी अरुण भयान	26-29
7	'होजी' बेजारा समाजाचा सांस्कृतिक उत्सव	प्रा. डॉ. विनोद डे. राठोड	30-33
8	दलित आत्मकथनातील प्र. ई. सोनकांबळे यांचे समानात्म्यव्यवस्थेतील स्थान	प्रा. नामदेव शिंदे	34-37
9	महाराष्ट्र प्रांतीय दलित संप्रदायकालीन सामाजिक स्थिती मती : एक दृष्टिक्षेप	प्रा. डॉ. राजेंद्र सुखदेव चौधरी	38-41
10	आदिवासी नायकांचे स्वतंत्रतासंगीतचे योगदान	डॉ. विठ्ठल केदारी	42-48
11	भाषा आणि साहित्य : आंतरसंदितात्मक अभ्यास	डॉ. बालाजी पाठक	49-52
12	गुलामगिरी उपन्यास मं. विविध पात्रांची समीक्षा	डॉ. बालकवि लक्ष्मण सुरज	53-55
13	इकवीसवी सदी का साहित्य	प्रा. डॉ. भायला काठुळे	56-60
14	निराला के काव्य मं. राष्ट्रीय खेळा	डॉ. संतोष रामचंद्र आडे	61-64
15	'अल्पा कवुतरी' उपन्यास मं. अभिव्यक्त भाषावैविध्य एवं उद्देश्य	प्रीती जहिर डॉ. बालकवि लक्ष्मण सुरज	65-67
16	कारंम-संस्कृत मं. अभिव्यक्त अर्थव्यवस्था और खेल उद्योग पर अस्तर	डॉ. हेमंत धर्मा	68-74
17	आधुनिक हिंदी कथाविविध मं. विविध वैसाहिक परिदृश्य	डॉ. ज्ञानेश्वर महाजन	75-77
18	सिनेमा और साहित्य	प्रा. डॉ. उत्तम जाधव	78-80
19	आंगणकारा यत्नवैविध्य की कविताओं मं. अभिव्यक्त आंबेडकरवादी चिंतन	प्रा. डॉ. रविंद्र आर. शर्मा	81-86
20	समकालीन दौर मं. साहित्य और सिनेमा की भूमिका	प्रोफेसर डॉ. आबासाहेब राठोड	87-91
21	महाराष्ट्रातील जलसिंधुनातील असमोल : एक दृष्टिक्षेप	प्रा. रासकर भीष्मा रंगनाथ	92-98
22	महाराष्ट्राच्या विविध जलसिंधुनातील शेतकरी विकास	डॉ. मुळ पी. एम.	99-107
23	भूजल जलसिंधुनातील धरणप्रभावित क्षेत्रांचा सामाजिक व आर्थिक अभ्यास	संशोधन मान्यदेवराव तोंडवणे प्रा. प्रा. डॉ. डी. एस. पाटील	108-109

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## • भारताच्या नियोजन कालखंडातील शेतीचा विकास

डॉ. मुळे वी.एम.

अर्थशास्त्र विभाग

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### प्रस्तावना :

भारत हा कृषी प्रधान देश म्हणून ओळखला जातो. शेती हा भारतीय अर्थव्यवस्थेचा कणा समजला जातो. देशाच्या एकूण लोकसंख्येपैकी जवळपास ५८ टक्के रेशा जास्त लोकसंख्या शेतीवर अवलंबून असल्याचे दिसून येते. भारताने एकूण भौगोलीक क्षेत्रफळ ३२,८७२६३ चौ. कि.मी. आहे. वनाखालील क्षेत्रफळ ७१८००० चौ.कि.मी. आहे. जवळपास २२ टक्के क्षेत्र वनाखाली असल्याचे दिसून येते. भारताच्या आर्थिक नियोजनाच्या सुरुवातीस एकूण अन्नधान्य उत्पादन ५०८ लाख टन होते त्यात वाढ घेऊन २०१५-१६ मध्ये २५१५ लाख टन इतके आले यातील वाढ ५ पटीने झालेली दिसून येते परंतु लोकसंख्येमध्ये मात्र जवळपास ९० कोटींची वाढ झालेली आहे.

भारतीय अर्थव्यवस्थेत शेतीचे योगदान हे महत्त्वपूर्ण आहे. देशाच्या राष्ट्रीय उत्पन्नात शेतीचा वाटा महत्त्वाचा आहे. तसेच या देशातील वाढीव लोकसंख्येला रोजगार देण्यात शेती महत्त्वाची भूमिका बजावत असल्याचे स्पष्ट होते. तसेच शेतीच्या माध्यमातून अन्नधान्य उपलब्ध उद्योगाना कच्चा माल परकीय चलन प्राप्ती इत्यादी बाबतीत शेतीचे योगदान महत्त्वाचे आहे. आर्थिक नियोजन काळापासून आजपर्यंतचा मागोवा घेतल्यास शेती क्षेत्रात मोठ्या प्रमाणात बदल झालेले दिसून येतात. लागवडीखालील क्षेत्रफळात अन्नधान्ये आणि विंगर अन्नधान्य उत्पादनात आणि उत्पादकांत हरितक्रांतीनंतर आमूलाग्र असे बदल झालेले दिसून येतात. एकंदरीत नियोजन काळापासून शेतीच्या विकासाचा आलेख वाढत असल्याचे दिसून येते.

### संशोधनाची उद्दिष्टे :

- १) भारताच्या नियोजन कालखंडातील शेती क्षेत्रावरील खर्चाचा आढावा घेणे.
- २) भारतातील प्रमुख पिकांच्या उत्पादन प्रवृत्तीचा अभ्यास करणे.
- ३) भारतातील विमालांच्या निर्यातीचा अभ्यास करणे.

### संशोधन पद्धती :

वरील शोध निबंधाचा अभ्यास करत असताना दुय्यम साधन सामुग्रीचा वापर केला असून त्यामध्ये प्रामुख्याने भारताची आर्थिक पाहणी, इंटरनेट, वर्तमान पत्रे सुंदर्भ ग्रंथ, योजना मासिक इत्यादींचा वापर केला आहे.

नियोजनांच्या कालखंडातील शेती क्षेत्रावर केलेला खर्च :

१९५०-५१ पासून आर्थिक नियोजनाला सुरुवात झाली पंचवार्षिक योजनांच्या

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226

माध्यमातून देशाचा आर्थिक विकास घडवून आणण्याचा विशेष आराखडा तयार केला जातो होता. प्रत्येक पंचवार्षिक योजनेमध्ये शेती आणि शेती संबंधित क्षेत्राचा विकास घडवून आणण्यासाठी विशेष तरतूद केली जात होती पहिल्या पंचवार्षिक योजनेत शेती क्षेत्राला अग्रक्रम देण्यात आला. या योजनेतील एकूण खर्चापैकी ३१ टक्के खर्च शेती क्षेत्रावर खर्च करण्यात आला. प्रत्येक पंचवार्षिक योजनेमध्ये शेती क्षेत्रावर केलेला खर्च खालील तक्त्यामध्ये आहे.

भारताच्या नियोजन काळातील शेती क्षेत्रातील खर्च (कोटी रुपयात)

पंचवार्षिक योजना	पंचवार्षिक योजनेचा कालावधी	एकूण योजना खर्च	शेती क्षेत्रावरील खर्च	एकूण खर्च हा शेती क्षेत्रासाठी प्रमाण
१ पहिली	१९५१-५६	१९६०	६००	३१
२ दुसरी	१९५६-६१	४६००	१५०	२१
३ तिसरी	१९६१-६६	८७७७७	१७५०	२०
४ चौथी	१९६९-७४	१५७९९	३६७०	२४
५ पाचवी	१९७४-७९	३७४२६	८७४०	२२
६ सहावी	१९८० - ८५	१०९२९२	२६२००	२४
७ सातवी	१९८५-९०	२१८७२९	४७२००	२२
८ आठवी	१९९२-९७	४७४२२१	१०१५९९	२१
९ नववी	१९९७-२००२	९४१०४०	१६८८००	१८
१० दहावी	२००२-२००७	१६१८४६०	३०५०५५	१९
११ आकरावी	२००७-२०१२	३६४४७१८	१०६३१८०	२९
१२ बारावी	२०१२-२०१७	९९६०८८८		

संदर्भ : भारताची आर्थिक पाहणी २०१६-१७.

नियोजन काळात शेती क्षेत्रावर जो खर्च करण्यात आलेला आहे. तो सुरुवातीच्या कालखंडात जास्त असलेला दिसून येतो. परंतु नंतरच्या काळात शेतीवरील खर्चात घट आलेली आहे.

भारतातील प्रमुख पिकांचे उत्पादन :

भारतामध्ये प्रामुख्याने नियोजनाच्या काळापासून ते आजतागायत अनेक पिकांचे उत्पादन घेतले गेले. परंतु त्यामध्ये प्रामुख्याने गहू, तांदूळ, ज्वारी, हरभरा, मक्का, बाजरी, तूर, कडधान्य, तेलबिया यांचे उत्पादन करत असतांना काही पिकांच्या उत्पादनात वाढ झाली परंतु काही पिकांच्या बाबतीत म्हणावी तेवढी वाढ झालेली नाही ते आपणाला खालील तक्त्यावरून लक्षात येते.

227



भारतातील प्रमुख पिकांचे उत्पादन : (लाख टनामध्ये)

प्रमुख पिक	१९५०-५१	२०१५-१६
एकूण अन्नधान्य	५०८	२५१५
गहू	६४	१२३
तांदूळ	२०५	१०४४
ज्वारी	६३	४२
मक्का	२४	२२६
बाजरी	२७	८१
कडधान्य (सर्व)	८४	१६४
बटाटा	१७	४३४
उस	५७०	३४८४
तुर	..	२६
तेलविया	५१	२५३

भारतातील प्रमुख पिकांच्या उत्पादनांचा अभ्यास करत असताना वरील तक्त्यावरून असे लक्षात येते की, नियोजनांच्या सुरुवातीच्या काळात उत्पादन कमी प्रमाणात असलेले दिसून येते परंतु नियोजनांचा वापर करून देखील सर्व पिकांच्या बाबतीत उत्पादकतेत वाढ न होता काही ठराविक पिकांच्या उत्पादनात वाढ झालेली दिसून येते प्रामुख्याने गहू, तांदूळ, बटाटा, उस, मक्का या पिकांच्या उत्पादकतेत वाढ झाली. परंतु तेलविया, कडधान्य (सर्व) या पिकांच्या उत्पादकतेत हरित क्रांतीचा देखील म्हणावा तेवढा परिणाम झालेला नाही म्हणजेच यांची उत्पादकता कमी असलेली दिसून येते.

भारतातील काही कृषी पिकांचा जागतिक निर्यातीमधील वाटा : (टक्केवारी मध्ये)

वस्तू	१९९०	२०१०	२०१५
तांदूळ	६.४	११.३	२८.००
अन्नधान्य निर्मित खाद्य वस्तू	०.६	३.३	६.२
भाजीपाला व फळे	०.८	१.३	१.४
चहा	२२.१	१०.००	८.४
मसाले	७.७	१५.४	१७.३

संदर्भ : India Economic Survey 2016-17.

भारताने सन १९९१-९२ मध्ये जागतिकरणाचा अंगिकार करून खुल्या अर्थव्यवस्थेकडे वाटचाल सुरू केली. मात्र जागतिक बाजारपेठेत भारतीय कृषीमालाचा निर्यातीतील वाटा हा कमी असलेला दिसून येतो. १९९० मध्ये तांदळाच्या निर्यातीतील वाटा ११.३ टक्के इतका होता. त्यात वाढ होऊन २८.०० टक्के इतका झाला. मसाले आणि चहा यांची निर्यात १९९० मध्ये अनुक्रमे ७.७ टक्के, २२.१ टक्के होती परंतु २०१५ मध्ये अनुक्रमे १७.३ टक्के, ८.४ टक्के असलेली दिसून येते. म्हणजेच चहाच्या निर्यातीमध्ये घट व मसालेच्या निर्यातीमध्ये वाढ झालेली वरील तक्त्यावरून स्पष्ट होते.

भारत हा देश कृषिप्रधान देश म्हणून ओळखला जातो. कृषि मालाच्या उत्पादन आणि उत्पादकतेत मोठ्या प्रमाणात वाढ झाली मात्र जागतिक पातळीवर कृषि मालाची निर्यात ही अत्यंत कमी असलेली दिसून येते.

संदर्भ सुची :

- १) भारतीय अर्थव्यवस्था (समस्या आणि भवितत्व) — डॉ. एस.के.ढगे २०१३.
- २) कृषी अर्थशास्त्र — प्रा.डॉ. दत्तात्रय भुतेकर २०१५.
- ३) भारतीय अर्थव्यवस्था — रुद्र दत्त आणि सुंदरम.
- ४) India Economic Survey 2016-17.
- ५) कृषी अर्थशास्त्र — विजय कविमंडल.
- ६) भारतीय अर्थव्यवस्था — एस.के. मिश्रा.



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21	शोध - शीतल देवीका	प्रा. डॉ. अरविंद सोनठकळे	85
22	प्रभाषित तत्वज्ञानाच्या महिलांवरील अल्फागार : एका चिकित्सा (विशेष संदर्भ मुरळी देवदासी ओपवीण)	डॉ. अमिता व्यक्तारण शिंदे	89
23	प्राचीन भारतीय कलेवर शिक्का आणि शिक्कांचा दर्जा- एक दृष्टिकोन	प्रा.डॉ.संतोष संदिदान पटारे	92
24	'हैदराबाद मुक्ती संग्रामात शिक्कांचे योगदान	डॉ.राजासम स विपटपल्ले	95
25	भारताच्या अज्ञात इतिहासातील कर्तव्यार रणी दुर्गावतीचा इतिहास	प्रा.डॉ. राजविरेंद्रसिंग रुक्मी गावित	100
26	महिला समाधिकारणाचे संकल्पना आणि सामाजिक-सांस्कृतिक व आर्थिक आव्हाने	प्रा. शरद बाबुराव सोनवणे	105
27	भारतवर्षाची ऐतिहासिक महिलांची का देशाचे प्रति योगदान : सती विमर्श	डॉ. रजिया अहमद जेथ अब्दुल्ला	108
28	पंचायती- राज में महिलां नेतृत्व और अशिक्षा	सरदार हुसैन	111
29	औरंगाबाद शहरातील एच.आय.वि सह जीवन जागृताच्या रूपगाना सेवा पुरविणाऱ्या व्यावसायिकांचे एच.आय.वि चे प्रमाण व परिणामाबाबत मत.	सुषमा शंकर तिनगोटे	115
30	पंचायत राज व्यवस्थेतील विमुक्त जाती आणि भटक्या जमातीच्या महिलांचा राजकीय सहभाग विशेष संदर्भ मंडळ साजुबा	डॉ. नामानंद गौतम साठे	120
31	प्रमुख २३ वेगवेगळे राष्ट्रीयकरणे. श्रीमती इंदिरा गांधी यांची भूमिका एक चिकित्सक अभ्यास.	प्रा. डॉ. एस एल मेळे	122
32	भारतवर्षातील स्त्री नाळवळीचा चिकित्सक अभ्यास	डॉ. सुळे पी.एम.	126
33	कौटुंबिक हिंसाचार : भारतीय महिला	प्रा.डॉ.तोटे दादासाहेब सजेंराव	129
34	बीभूष भर्मातील स्त्रीयांचे स्थान व भूमिका	प्रा.डॉ.सुवर्णा उमाकांत टेंकाळे (ताले)	131
35	सांख्यिकीय दुर्लक्षी कामगिरी	प्रा.कांबळे जिजाजी ईरबा	135
36	भारतीय शेती व शेती व्यवसायात काम करणाऱ्या महिला	डॉ.एम.डी काळगे.	
37	मराठी साहित्यातील स्त्रीचित्रण - एक अभ्यास	प्रा. डॉ. रामहारी पाचका	143
38	स्त्रीवादी साहित्य मुळाटे	श्रीधर सुधाकर	147
39	मराठी स्त्रीवादी साहित्य	प्रा.डॉ. हरिचंद नांगमू नरेंटी	150
40	भारतीय स्त्री आणि मानवअधिकार	Pathan Asad Ahemad	153

मराठवाड्यातील स्त्री चळवळीचा चिकित्सक अभ्यास

डॉ. मुळे पी.एम.

अर्थशास्त्र विभाग, प्रमुख, कालिकादेवी काल, वाणिज्य व विज्ञान महाविद्यालय,  
शिरूर (का.) जि. बीड.

प्रस्तावना :

भारतीय समाजव्यवस्था ही शिष्टाचारपिंडित समाजव्यवस्था आहे. यातही महत्त्वपूर्ण विषयाने महामते स्त्री व पुरुष यांच्यामध्ये असलेली दिसते. इतकीच नाही भारतामध्ये मानसताक व शिष्टाचाराक असा धोखा पडला आहे. भारतीय समाज विभक्त असल्याचे दिसते. कालांतराने विविध प्रक्रियेतील पुरुषांचे स्थान स्पष्ट झाल्यानंतर स्त्रियांे महत्त्व कमी होऊन पुरुष प्रधान संस्कृती अस्तित्वात आली व शिष्टाचार दुर्लभ वजा झाला. समाज व्यवस्थेची विभागणी जाली. व्यवस्थेत झाल्या पत्त समकालीन जातीच्या विविध विषयांचा आलोचनी स्त्रीपरंपरांचा परिणाम स्त्री समाजर हीतो स्वभाविक आहे.

उद्देश :

- 1) भारतातील स्त्री चळवळीचा अभ्यास करणे.
- 2) मराठवाड्यातील स्त्री चळवळी बद्द प्रकाश टाकणे.
- 3) मराठवाड्यातील स्त्रींचा होणाऱ्या अल्पसंख्येचा अभ्यास करणे.

संशोधन पद्धती :

प्रस्तुत शोधनिव्वारासाठी प्राथमिक व द्वितीय मातम साधुप्रिया वापर केला असून त्यामध्ये प्रमुखांचे व्यक्ति, साहित्यिक माहिती, इन्टरनेट, शोधनिव्वर वर्तमानपत्रे इत्यादींचा वापर केला आहे.

भारतातील स्त्री चळवळीची पारदर्शनी :

भारतामध्ये जाही काळ यादुसत्यांक पद्धत रूढ होती तिथु पासून नाईल पर्यंतच हा प्रदेश ऐवढी मानसताक समाजव्यवस्थेजाली होता हा मारुल्लेख संशोधनाचा निष्कर्ष जवळजवळ सर्वमान्य झाले आहे. मानवांच्या संस्कृतीचा एक टप्पा असा होता की विविध प्रक्रियेतील पुरुषांचे स्थान स्पष्ट झाले व पुरुषप्रधान संस्कृती तयार झाली. मध्ययुगीन स्त्रियांची स्थिती ही काहीशी स्त्रियांच्या अवनितीच्याच स्वरूपात राहिली. आधुनिक काळातील नवविचारसरणीच्या नावाची संकल्पना पुढे आली. भारतीय समाजव्यवस्थेमध्ये स्त्रियांना अनेक समस्यांनी झडले होते. बालविवाह, जडकुमारी विवाह, सतीची चाल, केशोपन, शिष्टाचाराची स्थिती संस्कृतीच्या नावाजाली अनेक आलोचनी, स्त्री परंपरा स्त्रियांचेर लादल्या होत्या. एवढेच काय तर मुख्य प्रवाही इतिहासातून स्त्रियांचा वगळण्यात आले होते. तो सर्व इतिहास पुरुषांकडे होता म्हणून या इतिहासाचे वर्णन करताना पुरुषांचा इतिहास असे केल्यास ते अपौरुष्य उरगार नाही असे स्त्री अभ्यासांच्या प्रणेते गर्दी लॅरर गांनी म्हटले आहे. १९५० च्या दशकात भारतातील स्त्री चळवळी पुढे आल्या व त्यानिमित्ताने स्त्री अभ्यास सुरु झाले. स्त्रियांच्या शोभावाजवत वाणिज्य निर्माण करण्यात मदत पाण्याने घटक म्हणून शिष्टाचाराकडे पाहू लागले. एते चळवळीतील स्त्रियांचा विकास शिष्टाचाराचा हिंसाचार त्यांचे आचरण, स्त्रीकता भ्रम, समान नागरी कायदा या चळवळीं रूढ देण्यात आले. राजकीय नेतृत्व व शासकीय यंत्रणा प्रशासकीय संस्थापर्यंत आज्ञाची स्त्रीकाही चळवळ पोहोचली आहे. यादुष्टीने स्त्री चळवळीची भूमिका व्यापक होत गेली आहे.



### भारतातील स्त्री चळवळीची वाटचाल :

जिजाण्डा हक्कासाठी झगडणाऱ्या सर्व चळवळींच्या स्त्रीवादी चळवळी महत्त्वे पाहिले. या चळवळीची वाटचाल पाहिल्यास त्यामार्गाच्या वेगवेगळ्या टप्प्यावर उदयाला आल्या होत्या बहरल्या आणि त्याही काळातच संघर्षाच्या असे दिवस म्हणून स्त्रीवादी इतिहासकारांनी या टप्प्यांचे वर्णन स्त्रीवादी चळवळीतील काय असे केले आहे. पहिली लाट १९ व्या शतकात व विसाव्या शतकाच्या प्रारंभीच्या दशकामध्ये विकसित झाली. समाजशास्त्र रोबीटो हीमाल्टन यांनी महत्त्वाप्रमाणे संशोधनासाठी ते बाँडविल्ल्याही या शिब्यांतल्या काळ हा शिब्यांच्या दर्जातील टक्क बंदल्या आरंभ किंवा मानला जातो. यानंतर उदारमतवादी स्त्रीवाद मानसशास्त्री स्त्रीवाद पुढे आले आणि शिब्यांच्या संबंधित सर्व घटकांना पुन्हाइतिहासीय संशोधन अधिवासकत अन्वयारी स्वयम् चळवळी असे घटनात मुळात झाली.

स्त्रीवादी चळवळीची दुसरी लाट १९६० ते १९८० च्या काळात जागतिक पातळीवर उदयाला आली दिसते. पहिल्या लाटेने शिब्यांसाठी शिब्यांच्या व मतदानाचा अधिकार यावर लक्ष केंद्रित केले तर दुसऱ्या टप्प्यात जगाला स्त्रीवाद मनोविश्लेषणात्मक स्त्रीवाद, समाजवादी स्त्रीवाद यासारख्या संकल्पनेतून शिब्यांच्या प्रश्नांची मांडणी होत असल्याने दिसते.

स्त्रीवादी चळवळीतील तिसरी लाट १९९० च्या दशकामध्ये उदयाला दुसऱ्या टप्प्यांच्या पश्चात्पश्चाती चर्चा करण्यासाठी म्हणून तिसरी लाट आली. स्त्रीवादी विचारमंचन हे प्रामुख्याने पहिल्या जगातील मुख्यमवर्गीय सौऱ्या शिब्यांच्या अनुभवावर आधारले होते. अशी जोरदार टीका होऊ लागली म्हणूनही स्त्रीवादी नेत्या या चळवळीच्या अपरिष्ठांनी होत्या. स्थानिक पातळीवर स्त्री प्रश्न समजवून घेण्यात स्त्रीवादी विचारपेक्षा स्थानिक पातळीवरील प्रश्नांची बहुआयामी चर्चा केली पाहिले अशी घटना चळवळी झाली.

### भारतवाङ्मयातील स्त्रीवादी अभ्यास :

शिब्यांवर अत्याचार संपूर्ण राष्ट्रातून होत आहे. याला महाराष्ट्र किंवा महाराष्ट्रा विभाग देखील अपवाद नाही. त्यामुळे शिब्यांच्या अत्याचाराविषयी समाजशास्त्रीयदृष्ट्या सूक्ष्म अध्ययन होणे अत्यावश्यक आहे. कारण शिब्यांवर अत्याचार झाल्यात त्या अत्याचारासाठी कोणती कार्यकर्त्या मानल्या आहे. तसेच शिब्यांचे अधिकार कोणते स्वा सुरक्षितेचे त्यांचे कोणते आणि स्त्री अत्याचार कमी करण्यासाठी उपाय यांचा अभ्यास करणे आवश्यक आहे.

### शिब्यांचे कायदेशीर अधिकार :

भारतीय राज्यघटनेतील धारा तीसमध्ये कलम १४ ते ३२ मध्ये सहा मूलभूत अधिकारांची तरतूद आहे. समतेचा हक्क, स्वातंत्र्याचा हक्क, शोषणाविरुद्धचा हक्क धार्मिक स्वातंत्र्याचा हक्क, सांस्कृतिक व शैक्षणिक हक्क घटनात्मक उपाययोजनांचा हक्क भारतीय राज्यघटनेने दिलेले आहे. शिब्यांवरील अत्याचारांच्या मुद्द्याचे प्रमाण सन २०१४ मध्ये ३४.६ टक्के आहे आहे हे प्रमाण प्राथमिकरित्या अतिशय गंभीर असल्याचे स्पष्ट होते. देशातील शिब्यांवरील अत्याचारांच्या आकृतीत माराष्ट्राच्या १८ वा क्रमांक आहे. परंतु महाराष्ट्रातील जिल्हाधीन राज्यपाली अन्वयारी अभ्यासणे आवश्यक आहे. कारण याचकून स्त्री अत्याचाराची जिल्हानिहाय तीव्रता स्पष्ट होते.

महाराष्ट्रातील शिब्यांवरील अत्याचार प्रमाण जिल्हा निहाय.

क्र.सं.	जिल्हा	प्रमाण
१)	औरंगाबाद	१३
२)	नांदेड	१२
३)	बीड	१५
४)	उस्मानाबाद	१७
५)	नांदेड	१४
६)	जानूर	११
७)	परभणी	१८
८)	हिंगाळी	१७

**स्रोत - Crime in Maharashtra 2014.**

मराठवाड्यातील शिवधामिनाथ विद्यापीठातील अत्याचारांचा विचार केला असला तर सर्वत्र आपले अत्याचार दिगोली जिल्ह्यामध्ये असून यथावत जमी प्रमाण जाल्या मिळविलेले असेलतयाने विस्तृत पेत.

**सौ अत्याचार निर्मुलतासाठी उपाय**

शिवधामिनाथ विद्यापीठात ही एक गंभीर सामाजिक समस्या आहे आणि या समस्यावर उपाय शोधण्यासाठी समाजमन पुरेसे जागृत आहे. या प्रश्न निर्माण झाल्या आहे या समस्यांची लढताना पोलीस व्यवस्था, कठोर कायदे शिवाय जम आंदोलनाची मदत घेणे यांनी तर या प्रश्नाची मुळावला कारणेसाठी समाजाची मूल तर्काने सामाजिक कार्यकारी शाली पाहिले शिवधामिनाथ संस्थात केवळ पोलीसाचे काम, सरकारची जबाबदारी किंवा त्या स्त्रीची वैयक्तिक जबाबदारी आहे असा संकुचित व मर्यादित दृष्टीकोन ज्योतीयांनी यांनी तर समाज म्हणून असे पुढे करणाऱ्या प्रयत्नांवर सामाजिक नैतिक दबाव असणे महत्त्वाचे आहे. महिला बाबतचा सुरक्षिततेला मध्यस्थीन दृष्टीकोना बदलणे हे अत्याचार समाजापुढे खरे आव्हान आहे देशातील प्रत्येक व्यक्तीचा आर्थिक आणि सामाजिक विकास साधून विरहित मानवी विकासची पातळी प्राप्त करावी. वेळाने सध्या अर्थाने अशा घटनांची संख्या घटेल व महिला सहकारीकरणांच्या दृष्टीने आपण एक पाऊल पुढे टाकू.

वहिले सर्व उपाय हे फक्त मराठवाड्यापुरतोच मर्यादित नसून राष्ट्रीय पातळीवर देखील संतुष्टत लागू होताने. प्रश्न आहे फक्त जनसामान्य ते राजकीय प्रबळ कडी शक्तीच्या अमलबजावणीचा

**संदर्भ सूची :**

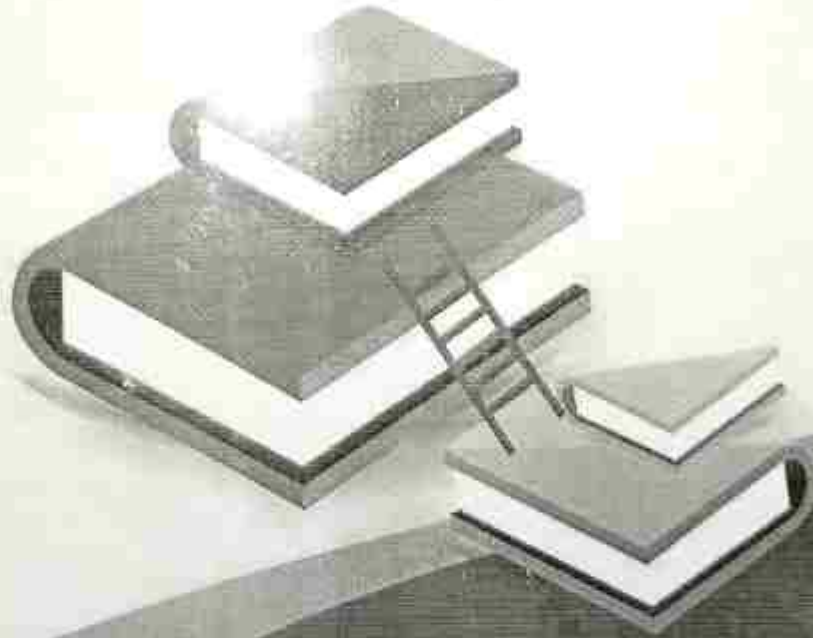
- १) स्त्री अभ्यास विचार संघात, ताराबाई शिंदे स्त्री अभ्यासकेंद्र निर्मला जाधव.
- २) डॉ. स.र. गाडगीळ लोकसंश्लेष्य दिवाळी अंक २०१३.
- ३) Government of India (2014) NCRB Report, Published by oxford university Press New Delhi.
- ४) Government of Maharashtra (2013) Crime in Maharashtra - 2012 criminal investigation department Maharashtra state pane P. No. 131.
- ५) www.cidmaharashtra.gov.in
- ६) लोकसंश्लेष्य सप्टेंबर २०१९.
- ७) भारतातील राष्ट्रीय नळवळीचा वृत्तिसत - प्राथम्ये हो एसा एसा फादल.
- ८) भारतातील सामाजिक नळवळी - श्रीकांत रायवज्याह, प्रा. राधकिसन भागडे

235



शंकरराव पाटील महाविद्यालय, भूम व  
डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद  
यांच्या संयुक्त विद्यमाने

“राजर्षी शाहू, महात्मा फुले, डॉ. बाबासाहेब आंबेडकर  
यांचे योगदान ” या विषयावर  
एक दिवसीय राष्ट्रीय आंतरविद्याशाखीय परिषद



प्राचार्य  
डॉ. श्रीकृष्ण चंदनशिव



- 37) महात्मा फुले यांचे सामाजिक न्याय आणि समता  
प्रा. विठ्ठल बाबुराव मुंडे, बीड || 126
- 38) राजर्षी शाहू महाराज यांचे ऐतिहासिक योगदान  
प्रा. डॉ. नानासाहेब पंडितराव मनाळे, उस्मानाबाद || 119
- 39) राजर्षी शाहू महाराज व डॉ. आंबेडकर यांच्यातील पत्रव्यवहार  
रुपाली राजू सावे, औरंगाबाद || 121
- 40) महात्मा ज्योतिबाचे शैक्षणिक विचार  
प्रा. जगताप शालुन धर्मराज, उस्मानाबाद || 123
- 41) बहुजन शिक्षणाचे जनक महात्मा ज्योतिबा फुले  
प्रा. डॉ. संजय दरवडे, अहमदनगर || 127
- 42) लोकसंख्या शिक्षण आणि डॉ. बाबासाहेब आंबेडकरांचे विचार व कार्य  
प्रा. सुधाकर कांबळे, डॉ. वसंत डोंगरे, प्रा. मनोज भगत, रायगड || 130
- 43) महात्मा ज्योतिबा फुले यांचे सामाजिक योगदान  
प्रा. कांबळे रोशनी बाबुराव, उस्मानाबाद || 133
- 44) शाहू महाराज यांचे जलव्यवस्थापन विषयक विचार  
वळीराम शेषराव चव्हाण, स्नेहा राजेंद्र माने, उस्मानाबाद || 136
- 45) कलाप्रेमी राजर्षी शाहू महाराज  
प्रा. डॉ. विकास कदम, डॉ. बाळकृष्ण माळी, सोलापूर || 140
- 46) डॉ. बाबासाहेब आंबेडकर यांचे अधिका विचार  
डॉ. बाळासाहेब गौरीशंकर पाटील, उस्मानाबाद || 143
- 47) महात्मा ज्योतिबा फुले यांचे सामाजिक कार्य  
प्रा. जाधव जे. डॉ., उस्मानाबाद || 146



जातीच्या निराकरणे उपभोग घेता आल्या  
मात्र हा हक्क समाजाना दुरुन्या कृपापेक्षा  
तरहोत नाही नाकिवा त्याच्या हक्काची  
व्यवस्था होत नाही याची विचार केल्या पाहिजे  
मात्र फुले यांनी मानवाच्या हक्काच्या आड येणाऱ्या  
हिंदू समाजातील वर्णाव्यवस्था, जातीभेद, स्त्रीविषयक  
दुराचारां यासारख्या गोष्टींवर टीकेची झाड उडवली.  
वर्णाधिष्ठित समाज व्यवस्था :

भारतीय समाज हा चातुर्वर्ण्य व्यवस्थेत  
विभागला गेलेला होता. ब्राह्मण, क्षत्रिय, वैश्य, शुद्र ही  
या व्यवस्था ईश्वरनिर्मित आहे असे प्राचिन हिंदू धर्म  
ग्रंथां सांगतात परंतु या व्यवस्थेने समाजव्यवस्थेत दुर्ही  
निर्माण करण्याचे कार्य केले असे फुले मानतात. या  
यादी वर्णांची निर्माती विराट पुरुषांच्या मुख, हात,  
मांड्या व पाय यांच्या पासून झाली आहे सर्वश्रुत आहे.  
हे जरी वर्णनात्मक असले तरी त्यामध्ये उच्चनिचतेची  
बीजे आहेत तसेच अधिकार भेदाची सामाजिक विघ्नतेची  
कल्पना यामध्ये समाविष्ट आहे. ज्योतीराव यांनी या  
व्यवस्थेवर घणाघाती प्रहार केले. ते म्हणत मानव  
समाजात कल्पकतेने असे विभाग घडणारी व्यवस्था  
अन्यायकारक व लक्षणी आहे. ब्राह्मण समाजाचे  
श्रेष्ठत्व केवळ धर्मशास्त्रकारांच्या कल्पनेचा खेळ आहे.  
कारण बुद्धीमत्ता, गुणकर्म ही समाजाधिष्ठित नसून  
व्यक्तागत असतात ते फुले म्हणतात.

‘मानव सारखे निर्मीके निर्मीले।  
कमी नाही केले। कोणी एक॥  
कमी जास्ती बुद्धी मानवा तोपीली।  
कोणा नाही दिली। पिढीजादा  
‘निर्मीके निर्मीले मानव पवित्र।  
कमी जास्त सुत्र। बुद्धीमध्ये॥  
पिढीजादा बुद्धि नाही सर्वांमधी।  
शोध करा आधी। पुर्तीपणी”  
यानुसार आपण पाहिले जर इतिहासात जेवढे

राजेरजवाडे, बादशाह झाले त्यापैकी कोणाचे मुळ  
पुरुष शिकारी, कोणाचे मेढके, कोणाचे शेतकरी, कोणाचे  
कारकून, कोणाचे बंडखोर असे आढळतात. त्यामुळे  
जी वर्णाव्यवस्था हिंदू समाजावर लादलेली आहे, ती  
त्यांना आपल्या हक्काची

जाणीवने केले. नसे म्हणून कायमता विचारणी करायला  
आली असा सर्व उच्चनीचतेच्या मर्यादेच्या मर्यादा  
फुले यांनी विचार केला आहे.

फुले यांचा जाती विषयक विचार : हिंदू  
समाजाच्या सामाजिक व धार्मिक अशा पाननास  
जाणोव्यवस्था पूर्णतः जनावदारश्रुते. असे फुले मानतात,  
प्रत्येक मनुष्याचा हात, हाक, कर्तव्य, अन्धर धर्म  
इत्यादी सर्वकाही त्याच्या जाणोव्यवस्था टाकले जात  
असे. सर्व माणसे समान आहेत हे जाती संस्थेच्या  
मान्य नाही. जातीची श्रेणीबद्ध रचना मानवाच्या  
असापनतेच्या तत्वावर आधारलेली आहे. जणुनच  
फुले जाती संस्थेच्या आणि तिचे समर्थन करणाऱ्या  
धर्माचा भिक्कार करताना, ऐतिहासिकदृष्ट्या जाती संस्थेचा  
उगम प्राचीन काळी आर्य – द्रविड संघर्षातून झाला  
अशी उपपत्ती फुले मांडतात. आर्यांनी ब्रह्मेतून येऊन  
येथील कुरावी, माळी, आगरी, कोळी, भोक्ल, रामोशो,  
मांग, महार इत्यादी मुळच्या क्षेत्रातून आपले दस  
बसविले. त्यावेळेस त्यांच्या जीवनात वर्ण विभाग असला  
तरी, जातीभेद अस्तित्वात नव्हता, पण फुले त्यांच्या  
अंकीत असणाऱ्या शुद्धतेशुद्धता समाज जसजसा वाढत  
चालला, त्यानुसार आर्यांनी त्यांच्यामध्ये परस्पर विभागणी  
करण्याचा घाट घातला येवढे करून ते थांबले नाही  
तर, त्यांनी आपण नाही श्रम न करता त्यांच्या श्रमावर,  
उत्पन्नावर विनम्रत मोज करता घेईल यासाठी  
जातीभेदाचे धोताड निर्माण करून त्यावर स्वहित साधक  
ग्रंथ निर्माण केले.

या जाती व्यवस्थेमुळे यांच्यामध्ये आचार-विचार,  
खाणेपिणे, चालीरीती, आचमन यांच्यात फरक पडत  
गेल्या. काही जातीत रोटी व्यवहार चालू राहिल्या परंतु  
बेटी व्यवहार निशिद्ध मानला गेला. बऱ्याचशा जाती  
रोटीव्यवहार आणि बेटीव्यवहार यांचे श्रेष्ठ त्या – त  
जातीपुरतेच मर्यादित ठेवले. जातीजातीत घुटका  
येऊ लागला त्यामुळे हे सर्व लोक एकत्र येऊ  
गुलामगिरीविरुद्ध बंड करतील अशी शक्यता उर  
नाही. जाती संस्थेच्या उपत्ती विषयी अनेकांनी आप  
मत मांडली आहेत, परंतु यामध्ये एक गोष्ट स्पष्ट  
की जातीव्यवस्था हा केवळ श्रमविभागणाऱ्या  
नसून त्यात उच्चवर्णायांना स्वार्थ दडलेला आहे.

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69.	Savitri Bai Phule The Pioneer Of Womens Empowerment Vithal Baburao Gunde	279
70.	"Impact of Demonetization on Indian Economy" Dr. Wanne Mohan B.	282
71.	Demonetization And Way Towards Cashless Economy Dr. Yogesh A. Borade, Ashwini A. Kele	284
72.	Citizen Centric Administration: Need of Democracy Dr. P.R. Tharkar	288
73.	Fundamentalism in Indian Politics. Shaikh Gafoor Ahmed	291
74.	Terrorism: The Current Issue before Human Rights Dr. R. K. Kale	294
75.	Trade Analysis of India: Direction and Composition Dr. Pramod Pandurangrao Lonarkar	298
76.	Citizenship Amendment Act 2019: Issues and Challenges Dr. Arun Pentawar	304
77.	Unemployment In India: Causes And Remedies Dr. B.R. Dahe	307
78.	A study on the composition and direction of India's Foreign Trade Mudiraj Narendra	311
79.	E-Governance and Modi Government's Ambitious "Digital India" Dr. Dattatraya Vitthal Kharatmol	316
80.	New Farmers' Movement Dr. Balu Atmaram Kamble	320
81.	Impact of Globalization and Administration Reforms Dr. Chavan Gorakshanath Baburao, Mr. Morey Milind Uttamrao	326
82.	An Overview Study of Banking Sector Reform phases in India Dr. P.B. Kharat	329

## Savitri Bai Phule The Pioneer Of Womens Empowerment

Vithal Baburao Gunde

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### Abstract:

*Without Women we don't think about family and society because they play an important role in their life. Their role is very important for the development human society and also every stage of life. But women empowerment is the boiling issue all over the world. Though women are not completely empowered in India because Indian traditions, customs and culture, but the process of women empowerment is started in 19<sup>th</sup> century and that credit goes to Savitribai Phule in Maharashtra. If she would have not taken the initiative to educate women then the condition of women would have been poor. This paper is highlight Savitribai Phule's role of Pioneer to women empowerment. She played a vital role as a teacher, poet, liberator, social reformer, for women's. Also she was mother of modern education and orationalist.*

**Keywords:** Savitribai Phule, 19<sup>th</sup> century, Social-reforms, Pioneer, Women Empowerment.

### Introduction: -

Savitribai Jyotirao Phule was born on January 3, 1831 at Naigaon, near about 50 kms from Pune. She was the eldest daughter of mother Lakshmi and father Khandoji Neveshe Patil. In 1840, at the age of 10, she was married to Jyotirao, who was 13 at the time. After marriage Savitribai and Jotiba lived in a Dalit-working class locality in Pune. Jyotirao educated his wife at home and trained her to become a first lady teacher. The responsibility of Savitribai's further education was taken up by Jyotirao's friends Sakharam Yeshwant Paranjpe and Keshav Shivram Bhavalkar (Joshi). Savitribai also had taken teacher's training at Ms. Farar's institute in Ahmednagar and in the Normal School of Ms. Mitchell in Pune. Savitribai went on to become India's first woman teacher and headmistress. It is her struggle and story that marks the beginning of modern Indian women's public life in India.

The surprising couple was engaged in a passionate struggle to build a movement for equality between men and women and a fight against the caste system. They devoted their lives to increasing education and knowledge. They started the first school in the country for girls and the 'Native Library'. In 1863, they started a 'home for the prevention of infanticide' in their own house, to ensure the safety of pregnant and exploited widows. They also established the *Satyashodhak Samaj*, introducing the practice of marriage without dowry or overt expenses. They were against child marriage and supported widow remarriages.

**First School for girls:** - Savitribai Phule completed her studies she started first women school exclusively for girls in India at that time when no one could think about educating a girl. School started in Bhide Wada at Pune on 1 January 1848 and was the youngest female school teacher of modern India, at the age of 17 years. Jyotirao says if we think developed society we needed developed child and development of child is not possible without her mother that's why mother is very important. So those who are worried with the happiness and welfare of this country should definitely pay attention to the condition of women and make every effort to impart knowledge to them if they want the country to progress. With this alleged, I started the school for girls first. But my caste members did not like that I was educating girls and my own father threw us out of the house. Nobody was ready to give space for the school nor did we have money to build it. People were not ready to send their children to school but Lahuji Ragh Raut Mang and Ramba Mahar committed their caste members about the benefits of getting educated. Savitribai, initiated handling the school administration as a headmistress.

Initially only 9 girls took admission but all of them were from different castes. She had taken innovative step to educate women which was not liked by traditional society. People used to throw mud, cow dung on her but she faced it courageously. Then she opened two more schools and one of them exclusively for Dalit children. The British government honored the *Jyotiba Phule & Savitribai Phule* for their efforts in the field of education. Savitribai was declared as the best teacher in 1852.

### Work for Social Reformation:

*Savitribai Phule* was a first women social reformer in India. *Mahtaphule* and *Savitribai Phule* started shelter home for widows because a young Brahman widow named *Kashibai* used to work as a cook at the home of *Jotirao's* Brahman friend, *Govande*. *Kashibai* was a poor, young, beautiful, honorable Brahman widow from a good family. A scheming *Shastri* from the neighborhood took advantage of this illiterate widow and as a result, she became pregnant. When all efforts at abortion failed, she gave birth to a beautiful baby. Since the *shastri* refused to take up any responsibility, *Kashibai* was in a quandary. Fearing that society will not let her live, she killed the innocent baby by slitting its throat. She threw the body in the well in *Govande's* compound, where it was later discovered. The Police filed a case against *Kashibai* and she was sentenced for life imprisonment in the Andamans. The incident took place in 1863. It was the first time a woman had been sentenced to such severe punishment. *Savitribai* and *Jotirao* were very upset and distressed by this trial and the turn of events. They immediately started a shelter home for such Brahman widows in their own house at 395, *GanjPeth*, Pune.

Those days' dalits were not allowed to take water from public tanks & wells. Many times they used to remain thirsty. In 1868 *Savitribai Phule & Jyotibaphule* dug a well in their house and made open for people from every caste. It was a big challenge for upper caste society. But they took a daring step. After releasing the problem of caste discrimination prevailing among women she started organizing meetings of women. She was calling women for *Tilgul* festival. So women from different caste used to come together and share their problems. Because of all these things she came to know the reasons of women's worse condition. The reasons were authority was in the hands of males of family and mindset of people. In 1852 she formed *Mahila Mandal* in Pune. This *Mahila Mandal* was working for the women empowerment and liberty of women. *Jotirao* and *Savitribai* were running a hostel in their own house, where students from far off places would stay for the purposes of education. A student from Mumbai, *Laxman Karadi Jaaya* had lived in this hostel and experienced *Savitribai's* motherly care and concern.

**Savitribai Contribution as a Poet:** *Savitribai Phule* was a well-known poet of Marathi and English. She was the first Indian woman whose poems got noticed in the British Empire. The name of her first poetry composition was '**Kavya Phule**' which was published in 1854. She consciously chose the traditional form of writing like *abhang*, which called a folk form. Her language is simple and effective. While some of her poems are mostly nature poems, in others she engages with the themes of education and caste system, exploring people to throw away slavery. '**Bavan Kashi Subodh Ratnakar**' was published in 1982. Theme of her poetry was centred at educational and social reforms. She is known as the pioneer of Marathi poetry. She was stressing the necessity of English and education through her poems.

*Savitribai's* writings expressed the pain, ambition and feeling of the modern, liberated Indian woman. While her contemporaries were busy re-constructing the images of the mythological *pativrata* women such as *Sita-Savitri* module, in contrast, she expressed the passion of modern Indian literature. She was able to develop her own voice and agency at a time when women of all classes were brutally suppressed and lived a secondary-human being existence.

**Conclusion:** *Savitribai* was having firm courage to face traditional people. Her goal of life was freedom from Indian tradition, freedom from religious autocracy and rituals. *Savitribai Phule* wanted to introduce practical philosophy of human being, individual growth from education; other unethical things she was rejecting like so

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called Indian tradition. In her philosophy she was talking about individual growth, love, care and humanism as virtue, her emphasis on self-reliance and wants to interpret Indian tradition in her own way. They fought against the tradition and fought for human rights, rights of education and rights of human development. She took enormously innovative stand in her whole life. She was first woman to enter into male bastion society. She was not a straight Indian devoted wife but she was a inspiring teacher, courageous leader, brave social reformer, great thinker and critic writer after all she was real pioneer of women's empowerment. I would like to conclude with that, her thoughts and works she could bring about a complete change in all domains of women's lives.

### References:

1. Dewey J.(2004),Democracy and Education: An introduction to the philosophy of Education, Aakar publishing, New Delhi
2. Pattanaik Anjali & Swain SnigdhaRani(2015): Women Education, APH publishing, New Delhi.
3. B.R Mani & P Sardar, (Ed.) (2008), A Forgotten Liberator", the life and struggle of Savitribai Phule, Mountain Peak, New Delhi.
4. Dhara: Lalitha. (Ed.), (2011), Phule's and Woman's Question, Dr. Ambedkar college of Commerce and Economics, Mumbai.
5. Keer, Dhananjay, (1997), Mahatma JotiraoPhooley, Father of the Indian social revolution, Popular Prakashan, Mumbai.



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डॉ.बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद

यांच्या संयुक्त विद्यमाने

“राजर्षी शाहू, महात्मा फुले, डॉ.बाबासाहेब आंबेडकर  
यांचे योगदान ” या विषयावर

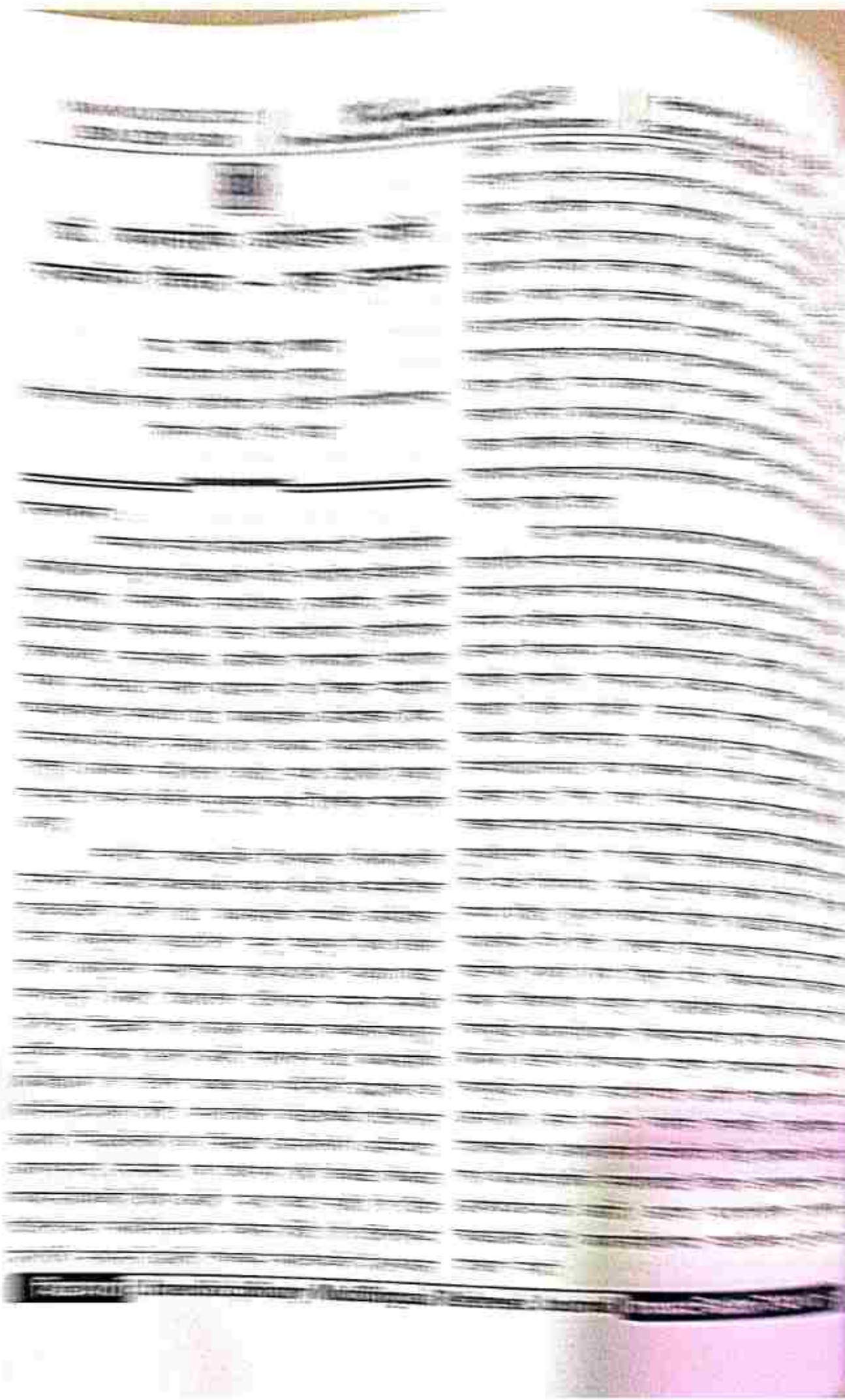
एक दिवसीय राष्ट्रीय आंतरविद्याशाखीय परिषद



प्राचार्य

डॉ.श्रीकृष्ण चंदनशिव

- 25) स्वामी दयानंद सरस्वती पुरोचित आर्यधर्म आणि आर्यसाम्राज्य संबंधित सत्यी शत्रु महासत्त्व विचार  
प्रा.डॉ. कुलकर्णी जयश्री रमेश, उस्मानाबाद ||79
- 26) महात्मा फुले यांचे शिक्षणविषयक विचार आणि कार्य  
डॉ. उमेश भुंजें, जालना ||81
- 27) स्वामी शंकर महादेवराजे भक्तना निवृत्त अमातीमाजीच्या चतुर्थांश आत्मज्ञान  
आकाश शेषराम बांगर, तिर्गोली ||85
- 28) डॉ. बाबासाहेब आंबेडकर यांचे सामाजिक विचार  
प्रा.डॉ. लख्मणे पंडित शिवराम, परभणी ||87
- 29) डॉ. बाबासाहेब आंबेडकर यांचे शेतीविषयक विचार  
डॉ. अरुण खर्डे, कु. शांडेकर राधिका, परंदा ||90
- 30) डॉ. बाबासाहेब आंबेडकर यांचे राजकीय विचार - एक अंगारा  
प्रा. पनार बंडू धानश, बीड ||92
- 31) शाहू आंबेडकर यांचे आस्थापन विषयक विचार  
डॉ. भम्मानंद गायकवाड, डॉ. शिष्टार्थ चाधगारे, कांबळे प्रतिप ||96
- 32) डॉ. बाबासाहेब आंबेडकर यांचे आर्थिक विचार  
डॉ. अरुण चांगदेन खर्डे, कु. हनुरे अल्लुबी शिवकर, परंदा ||99
- 33) महात्मा जोतिराव फुले यांचे आर्थिक विचार  
डॉ. मुळे पी. एम., बीड ||101
- 34) सामाजिक समस्यांच्या निर्मुलनातील डॉ. बाबासाहेब आंबेडकरांचे विचार  
प्रा.डॉ. शेकोबा परशुराम जोळे, नांदेड ||103
- 35) महात्मा फुले यांचे सार्वजनिक सत्यधर्म विषयक विचार  
प्रा.नवनाथ ज्ञानोबा पवळे, शिरूर (का) ||109
- 36) महात्मा फुले यांचे साहित्यातील योगदान  
श्री. गोविंद गरड, प्रा. डॉ. सोपान सुरवसे, बीड ||112



- प्रश्न :  
१. डॉ. बा. आ. राष्ट्रवादी विचारांचे होते काय?  
२. डॉ. बा. आ. करानी राष्ट्रीय एकात्मता निर्माण केली.  
३. डॉ. बा. आ. करानी स्वयं निर्णयांच्या हक्कांचे समर्थन केले काय?  
४. डॉ. बा. आ. करानी सामाजिक लोकशाही अभिप्रेय होती.  
५. डॉ. बा. आ. करानी समाजवाद प्रस्थापित करण्यासाठी प्रयत्न केले.

- प्रश्न :  
१. डॉ. बाबासाहेब आंबेडकर लोकशाहीचे खडे उरुक्ते होते का?  
२. डॉ. बाबासाहेब आंबेडकर समता प्रस्थापित करण्यासाठी प्रयत्न केले काय?  
३. स्वातंत्र्य, समता, न्याय हे तत्व त्यांनी अंगिकारले काय.  
४. राज्य हे व्यक्ती विकासाचे साधन आहे काय?  
५. कुशल कायदे पंडीत व घटनेचे शिल्पकार

संशोधन पद्धती  
सामाजिकशास्त्र संशोधन करत असतांना संशोधन यंत्रणेला खूप महत्त्व असते डॉ. बाबासाहेब आंबेडकर यांचे राजकीय विचार : एक अभ्यास हेसंशोधन करत त्यांना विश्लेषणात्मक संशोधन पद्धतीचा अवलंब घेता आहे.

डॉ. बाबासाहेब आंबेडकरांचे राजकीय विचार :  
१. राष्ट्रवादी विचार : राष्ट्रवाद ही मानवी अभिव्यक्ती आहे ते म्हणतात "राष्ट्रवाद हे असे सत्य आहे ज्यापासून निसटता येणार नाही अगर त्यास नकारता येणार नाही. जरी त्यास कोणी अबौद्धिक धरना किंवा भ्रम म्हटले तरी राष्ट्रवाद ही परिणामकारक शक्ती असून तिच्यात साम्राज्यउखडून काढण्याची हुदा क्षमता आहे."

२. स्वातंत्र्य : स्वातंत्र्याचा खरा अर्थ समाजातील कमकुवत घटकांची अंतर्गत गुलामगिरीतून मुक्तता होणे एवढाच अर्थ त्यांना अभिप्रेत नव्हता केवळ पश्चिमात्यांच्या वर्चस्वापासून मुक्त होणे एवढाच म्हणजेच याचा दुसरा अर्थ त्यांच्या मते खरा राष्ट्रवाद म्हणजेच लोकांमध्ये असलेली एकतेची चैतन्यमुक्त निर्माण होय. आपल्या देशाबद्दल देशबांधवा बद्दल व

त्यांच्या प्रतिष्ठेबाबत आंबेडकरांच्या मनात निश्चित अभिमान होता. स्वातंत्र्य म्हणजे समाजातील पायदळी तुडविल्या जाणाऱ्या लोकांना मनाचे व प्रतिष्ठेचे जीवन प्राप्त होणे होय. डॉ. आंबेडकरांच्या दृष्टिकोनातून, तात्त्विकदृष्ट्या राष्ट्राला एक घटक म्हणून समजाणे शक्य असले तरी समाजशास्त्राच्या दृष्टीकोनातून ते अनेक सामाजिक वर्गांचे बनले असते. राष्ट्रीय स्वातंत्र्य जर वास्तव स्वरूपात अभिप्रेत असेल तर आपण त्यातील सर्व वर्गांना व त्यातही विशेषतः ज्यांना गुलामगिरीची वर्तणूक दिली जाते त्यांना हे स्वातंत्र्य मिळवून दिले पाहिजे.

### ३. चिरकालीन ऐक्याची भावना :

चिरकालीन ऐक्याच्या संदर्भात ते म्हणाले होते 'हे ऐक्य बंधुत्व भावनेवर उभे हवे. थोडक्यात, ते आध्यात्मिक बैठकीवर उभे हवे' त्यांच्या मते, हवे असले तर केवळ राजकीय ऐक्य नाही तर हे हृदयाचे आणि आत्म्याचे ऐक्य हे केवळ भौतिक हित संघाच्या समाधान पूर्तीवर अवलंबून असून चालणार नाही.

### ४. राष्ट्रवादी भावनेचे स्पष्टीकरण:

आंबेडकरांच्या मते, राष्ट्रवादी भावनेतील महत्त्वाच्या महत्त्वाचा घटक म्हणजे आपण सर्व एक आहोत ही जाणीव होय राष्ट्रवादाचे भाव संबंध इतके घट्ट आहे. त्यामुळे आर्थिक संघर्ष किंवा सामाजिक वर्गाभेद हे बांध ओलांडले जाऊ शकतात यांचाच अर्थ राष्ट्रवाद हा आंतर राष्ट्रीय बंधुभाव निर्माण होण्यासाठी अडथडा नसावा असे त्यांना वाटते.

### ५. राष्ट्रीयत्व राष्ट्रवाद :

राष्ट्रीयत्व राष्ट्रवाद या मानवी मनाच्या दोन मिल कल्पना आहेत. परंतु त्यांचे एकमेकांशी जवळचे नाते आहे. आंबेडकर म्हणतात, राष्ट्रीयत्वाची भावना अस्तित्वात असेल आणि तरीही राष्ट्रवादाची भावना नसेल. म्हणजेच राष्ट्रीयत्वाचे प्रत्येक उदाहरण राष्ट्रवादीची निर्मिती करीलच असे नाही डॉ. आंबेडकरांच्या मते राष्ट्रीयत्वाचे प्रत्येक उदाहरण राष्ट्रवादीची निर्मिती करीलच असे नाही डॉ. आंबेडकरांच्या मते राष्ट्रीयत्वाकडूनच राष्ट्रवादाकडे जाण्यासाठी दोन अटीची पूर्तता होणे आवश्यक आहे. १. राष्ट्र म्हणून जगण्याची इच्छा निर्माण झाली पाहिजे.

राष्ट्रवादास भौगोलिक अधिष्ठान असले पाहिजे भुमीविना राष्ट्रवाद म्हणजे शरीराच्या शोधात असलेला आत्मा असाच प्रकार होईल. राष्ट्रवाद निर्माण होण्यासाठी

राजकीय एकतेच्या पाठीमागे सामाजिक बंधुत्वाचा भक्कम पाया आधार म्हणून हवा ते म्हणत "भारत हे राज्य असेल पण राष्ट्र असेलच असे नक्के. राज्य जर राष्ट्र नसेल तर ते जीवन संपर्पात टिकण्याचा संभव नाही."

#### ६. स्वयं निर्णयाचा हक्क :

डॉ. बाबासाहेब आंबेडकरांच्या मते, आशिया व आफ्रिका खंडामधील राष्ट्रवादावर लादल्या गेलेल्या साम्राज्यशाही विरुद्ध त्या राष्ट्रांचा स्वातंत्र्यासाठी लढा सुरू झाल्यानंतर या स्वयंनिर्णयाच्या हक्कास एक आशय निर्माण झाला. स्वयंनिर्णयाचा हक्क म्हणजे परकीय वंशाच्या राजवटीपासून राष्ट्रीय स्वातंत्र्य प्राप्तीचा हक्क होय.

#### ७. भाषा व राष्ट्रवाद :

डॉ. आंबेडकरांच्या मते, भारताती विविध भाषा या राष्ट्रवादी चैतन्यांच्या वाढीला मारक ठरत नाहीत. कॅनडा, स्वित्झर्लंड, दक्षिण आफ्रिका येथील भाषा ह्या राष्ट्रवादाला बाधक ठरतात.

#### ८. लोकशाही :-

#### ३. सामाजिक परिस्थिती :

• भारतात प्रदीर्घ काळापासून सामाजिक विषमता आहे. जाती व्यवस्थेने मोठ्या प्रमाणावर विषमता निर्माण केली आहे.

• समाजात श्रेष्ठ आणि कनिष्ठ स्तर निर्माण झाले आहेत. त्यामुळे समाजातील एकात्मतेचा गुंता निर्माण झाला.

• अनिष्ट रूढी, परंपरा यांचे वर्चस्व समाजावर आहे.

• समाजातील श्रेष्ठ व्यक्ती या पुरातन असा विचारांच्या आहेत त्यामुळे नवीन बदल स्वीकारला जाऊ शकत नाही. जाती - जातीतच रोटी - बेटी व्यवहार होतात.

• निवडणुकीच्या काळात धर्म, जात आदींचा आधार घेतला जातो.

• यामुळे भारतात मोठ्या प्रमाणावर सामाजिक समस्या निर्माण झाल्या आहेत.

#### २. आर्थिक परिस्थिती :

• समाजात मोठ्या प्रमाणात आर्थिक विषमता आहे. काही लोकांच्या हाती संपत्तीचे केंद्रीकरण झालेले आहे.

आहे.

येते.

वागणुक दिली जाते.

अशी शोपनावर आधारित आर्थिक व्यवस्था भारतांची आहे तसेच अस्पृश्य हे अल्पसंख्यांक असल्याने त्यांचा आवाज दाबून त्याचेसतत शोषण केले जात आहे.

#### ३. शैक्षणिक परिस्थिती :

• समाजातील अनेक लोक अज्ञानो अज्ञान विराजदारी आहे.

• शिक्षण घेणे व देणे ही उच्च वर्गाच्या निवडणुकीच्या काळात अज्ञानी लोकांवर फायदा करून घेतला जातो.

• जनता स्वतःच्या अधिकारप्रती जागरूक नसते.

• लिहिता - वाचता न येणाऱ्या लोकांवर राजकीय सहभाग फारसा प्रभावी नसतो.

• राजकीय पक्ष किंवा सरकारला शैक्षणिक समस्या व त्या सोडविण्यासाठी मार्ग पुरेसे माहित नसल्याने त्यांना हलाखीचे जीवन जगावे लागते.

#### राजकीय परिस्थिती :

• भारतात लोकशाहीला अनूकूल (मुक्त) वातावरण नाही.

• राजकीय पक्षांवर उच्चवर्गीयांचे वर्चस्व आहे.

• स्वतंत्र व निःपक्षपातीपणे निवडणुका होत नाहीत.

• बहुमताऐवजी विशिष्ट जातीकडे संवे केंद्रीकरण होते.

• भारतात लोकशाहीची परंपरा नाही. म्हणजे ती नवीन व परकीय आहे.

• दुसऱ्यांना गुलामगिरी ठेवण्यात उच्चवर्गीयांचा समाधान वाटते.

• बहुसंख्यांक जाती अल्पसंख्यांक जातींवर अन्याय, अत्याचार करतात.

• लोकशाहीच्या बुरख्याखाली उच्चवर्गीयांचा सत्ता प्रस्थापित होऊन विशिष्ट जातींना सत्तेपासून वंचित ठेवले जाते.

संसदीय लोकशाहीचे वैशिष्ट्ये

डॉ. आंबेडकरांच्या मते, भारतात जोपर्यंत राजकीय व आर्थिक लोकशाही प्रस्थापित होणार नाही तो पर्यंत राजकीय लोकशाही यशस्वी होणे शक्य नाही.

डॉ. आंबेडकरांच्या मते लोकशाही हा केवळ शासनाचा प्रकार नसून तो जीवन जगण्याचा प्रकार आहे. लोकशाहीचा मार्ग आहेच यासाठी

डॉ. आंबेडकरांच्या मते लोकशाही हा केवळ शासनाचा प्रकार नसून तो जीवन जगण्याचा प्रकार आहेच यासाठी

डॉ. आंबेडकरांच्या मते लोकशाही हा केवळ शासनाचा प्रकार नसून तो जीवन जगण्याचा प्रकार आहेच यासाठी

डॉ. आंबेडकरांच्या मते लोकशाही हा केवळ शासनाचा प्रकार नसून तो जीवन जगण्याचा प्रकार आहेच यासाठी

डॉ. आंबेडकरांच्या मते लोकशाही हा केवळ शासनाचा प्रकार नसून तो जीवन जगण्याचा प्रकार आहेच यासाठी

डॉ. आंबेडकरांच्या मते लोकशाही हा केवळ शासनाचा प्रकार नसून तो जीवन जगण्याचा प्रकार आहेच यासाठी

डॉ. आंबेडकरांच्या मते लोकशाही हा केवळ शासनाचा प्रकार नसून तो जीवन जगण्याचा प्रकार आहेच यासाठी

जबाबदार राहणे. या सर्व बाबी विचाराने घेऊन आंबेडकरांनी संसदीय लोकशाहीच्या संदर्भात विचार केला जातो.

संसदीय लोकशाहीचे वैशिष्ट्ये

१) समता २) शक्तीशाली विरोधी पक्ष ३) कायदा व प्रशासन क्षेत्रात समानता ४) घटनात्मक नीतिमत्ता ५) अल्पसंख्याकांची सुरक्षितता ६) नीतिमान समाज व्यवस्थेची गरज ७) विवेकी लोकमत दोष १) संघ प्रगती २) संघटनेतील दोष ३) विभूतीपूजा ४) विवेकाऐवजी भावनेला ५) सहिष्णुतेचा अभाव व जाती ६) आर्थिक व सामाजिक विषमता.

लोकशाहीच्या यशस्वितेसाठी आवश्यक बाबी:

१) आर्थिक, सामाजिक न्याय २) समाजवाद ३) सनदोशीर मार्ग ४) सभांडवलशाहीवर मर्यादा ५) व्यक्ती स्वातंत्र्य व समाजवादाचा समन्वय ६) समानता ७) मनाची मुक्तता ८) विषमता विहरीत समाज ९) विरोधी पक्ष १०) घटनेला महत्त्व ११) अल्पसंख्याकांचा विचार १२) नैतिक मुल्यांना महत्त्व.

निष्कर्ष :

१. आंबेडकरांना लोकशाही शासन प्रकार प्रिय होता.  
२. लोकशाहीचे उद्दिष्टे समाजवादाशिवाय साध्य होऊ शकत नाहीत असेत्यांचे मत.  
३. डॉ. बाबासाहेब आंबेडकरांनी वास्तवादी दृष्टीकोन स्विकारला.  
४. डॉ. आंबेडकरांची आयुष्यभरची भूमिका दलित समाजोद्धाराची होती.  
५. डॉ. आंबेडकरांनी मुलभूत हक्काचे समर्थन केले.

संदर्भ सूची :

१. डॉ. वि.जी. कुलकर्णी प्रा. कांत सोमवंशी भारतीय राजकीय विचारवंत कैलाश पब्लिकेशन्स औरंगपूर, औरंगाबाद.  
२. प्रा. बी.वाय.कुलकर्णी प्रा. अशोक भा. नाईकवाडे भारतीय राजकीयविचारवंत श्रीविद्या प्रकाशन २५०, शनिवार पेठ पूणे -४११०३० १, ऑगस्ट २००६.  
३. प्रा.डॉ. शुभांगी रठी भारतीय राजकीय विचारवंत कैलाश पब्लिकेशन्स, औरंगपूर, औरंगाबाद

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14.	भारतीय संसदीय व्यवस्था सकल विचारधारा	41
15.	अमेरिका-चीन व्यापार युद्ध व इसके भारतीय होम्स परिणाम निरुद्ध राजाराम विहवार , डॉ. अनुमोद एन. भुगकर	46
16.	"अर्थिक संवेदन संरक्षणका राष्ट्रीय विकासार्थी पूर्णता" राहुल शूरा निरुद्ध	49
17.	संविदा संरक्षण (संरक्षण संविदा संविदा संरक्षण) संविदा संरक्षण	51
18.	संरक्षण संरक्षण संरक्षण संरक्षण डॉ. निरुद्ध	54
19.	भारतीय संरक्षण संरक्षण संरक्षण डॉ. निरुद्ध संरक्षण	57
20.	भारतीय संरक्षण संरक्षण संरक्षण : एक संरक्षण संरक्षण डॉ. निरुद्ध संरक्षण	61
21.	संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण : एक संरक्षण संरक्षण डॉ. निरुद्ध संरक्षण	64
22.	"भारतीय संरक्षण संरक्षण" डॉ. निरुद्ध संरक्षण	67
23.	संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण	70
24.	"भारतीय संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण" डॉ. निरुद्ध संरक्षण	73
25.	संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण	76
26.	संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण	79
27.	संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण : एक संरक्षण संरक्षण डॉ. निरुद्ध संरक्षण	83
28.	संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण संरक्षण डॉ. निरुद्ध संरक्षण	86





# CURRENT GLOBAL REVIEWER

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## मानव विकास (Human Development)

प्रा.डॉ.विठ्ठल स. जाधव

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### प्रस्तावना

मानव विकास, आरोग्य भौतिक पर्यावरण यातून आर्थिक, सामाजिक, ज्ञान रानकीय स्वातंत्र्यापर्यंत सर्व प्रकारच्या मानव पंचांगीना समतोलाने करत स्वरूपाच्या पर्यायानामध्ये विस्तार आणि त्यांच्या शिक्षण, आरोग्य सेवा-यंत्रणे बरोबर राहणे करणाऱ्या संधी मध्ये वाढ करणारे प्रक्रिया आहे. डॉ. अमृतलालने मानव विकास ही एक व्यापक संकल्पना असून यामध्ये मानवाच्या सवोगीय कामाचा विस्तार महत्त्वाचा आहे. ही संकल्पना लक्षात घेतांना आपणास डॉ. महेंद्रुधर उल हाक व नोबेल विजेते डॉ. अमर्त्य सेन यांच्या विचारांचा आदराने घेणे क्रम प्राप्त करते. डॉ. महेंद्रुधर उल हाक म्हणतात, "मानवास नास्तोत नास्त संपी उपलब्ध करून देणे. या संधी अमर्त्य सेन चेंडेरूप बदलता येणाऱ्या असल्यात मानवाची संकल्पना ही उत्तम वाढीच्या आकड्यात दिसण्या ऐवजी ज्ञानवृद्धी, उत्तम आहार व आरोग्य सुविधा, सुरक्षित जीवनमान, आर्थिक वेदना व मुद्देगिरी पासून सुरक्षितता, फावला वेळ घालण्याचे समतोल, रानकीय व सांस्कृतिक स्वातंत्र्य यात दिसते. त्याच बरोबर विकासाचा मुख्य उद्देश मानवासाठी असा सामाजिक वातावरणाची निर्मिती करणे ज्यात आरोग्य संपन्न व नोविषणपूर्ण जीवन नगता येईल असा असावा. डॉ. अमर्त्यसेन मानव विकास संकल्पना मांडतांना म्हणतात की, 'मानव विकास' हा एक असा दृष्टिकोन आहे, ज्यात मानवी जीवनाचा एक भाग असलेल्या अर्थव्यवस्थेच्या विकासापेक्षा तेथील मानवी जीवन वृद्धीगत, विकसित होणे गरजेचे आहे. संयुक्त राष्ट्रसंघ विकास कार्यक्रमाच्या पहिल्या अहवालानुसार मानव विकास म्हणजे लोकांना मिळणाऱ्या संधीचा परीच मोठा करण्याची एक प्रक्रिया होय. मानवाचा वेगळ आर्थिक विकासच नव्हे, तर त्या सोबतच सामाजिक, शैक्षणिक, रानकीय, मानसिक, सांस्कृतिक इत्यादी असा सर्व अंगांनी विकास होणे म्हणजे 'मानव विकास' होय. मानव विकास

रोनगार निर्मितीचे लक्ष निर्धारित करणे, रोनगार निर्मितीकर जाणवित विकास करणे, सर्व समावेशक विचार करणे, नवनवीन कौशल्य व शिक्षण पुरविले, सामूहिक कार्ये करणे व कामगार संघटनांचा प्रोत्साहन देणे इत्यादी बाबी विचारात घेवून धोरणे निश्चित करावयास हवीत उत्तम कार्याच्या निर्धारणासाठी अहवालाने रोनगार निर्मिती व उद्योग विकास कामांत गुणवत्ता व अधिकार, सामाजिक सुरक्षा, शासन व समाज यांच्यातील संबध हे चार आधार स्तंभ सुचित करण्यात आले आहेत. या आधार स्तंभान्या अनुषंगाने देश खऱ्या अर्थाने 'मानव विकास कायदे' ही बाब साध्य करू शकेल. मानव विकाससाध्य जाळ्यांचे विचार करता असे महत्ता येईल की बऱ्याच अनुषंगाने केंद्र व राज्य शासनाच्या समक्ष धोरणाची रचना करून त्यांची प्रभावी अंमलबन्दीची आवश्यकता असेल. ज्यामध्ये लोकाना आनंदी, उत्तम आहार व आरोग्य, सुरक्षित जीवनमान, शारीरिक वेष्टा व गुंतवणूकसुत सुरक्षितता, पावला वेळ घालविण्याचे समाधान, शांतता व सांस्कृतिक स्वातंत्र्य समाजात-मिसण्याच जाणवू इत्यादी संपी काल होऊ शकतील व मानवासाठी असे सामाजिक वसायण निर्माण होण्यास मदत होऊन न्याय मानव आरोग्य संरक्ष नोक्य व भाविकपुन कर्ष करून नोक्य व्यतीत करेल.

#### मानव विकास निर्देशांक

सर्व देशात मानव विकास करता झाला आहे. त्याचे नियंत्रण करण्यासाठी राष्ट्र संघाने (U.N.) मानव विकास निर्देशांक तयार करण्यासाठी मेहबूब उल इकब यांच्याकडे जबाबदारी सोपवली त्यानुसार प्रथम मानवविकास अहवाल १९९० साली प्रकाशित करण्यात आला. मानव विकास निर्देशांक तयार करण्यासाठी राष्ट्रसंघाने पुढील तीन निकष तयार केले.

- १) जन्मतः अपेक्षित आयुर्माया
- २) प्रौढ साक्षरता
- ३) दरडोई स्थूल देशांतर्गत वास्तव उत्पादन (लोगरिथम).

#### जन्मतः अपेक्षित आयुर्माया :

प्रत्येक देशातील नागरिकांची अपेक्षित आयुर्माया भिन्न आहे. दीर्घायुष्य नागरिक वैयक्तिक जीवनातील विविध उद्दिष्टे ज्येष्ठप्राणे पूर्ण करतात त्याचप्रमाणे राष्ट्राच्या विकासात मानवी संसाधने या भूमिकेतून महत्त्वाचे योगदान देत असतात. व्यक्तीचे दीर्घायुष्य हे त्याचे पालन पोषण, सकस आहार सरोच आरोग्य यावर अवलंबून असते देशाची कर्ती लोकसंख्या देशाच्या आर्थिक विकासात योगदान देते व्यक्तिला उच्च दर्जाची गुणवत्ता प्राप्त करून त्यात वाढ करायपाची तर त्याची अपेक्षित आयुर्माया वाढणे आवश्यक आहे. असे संकुत राष्ट्राचे मन आहे. त्यावरून हा विकास वा संघटनेने महत्त्वपूर्ण मानला.

#### २) प्रौढ साक्षरता :

साक्षर नागरिक राष्ट्रचा दृष्टीने भूषण मानले जाते. जे साक्षरतेच्या संदर्भात जाणवित आहे. त्यांचा विकास नंतरातले ज्ञान, शिक्षण ही मानवाची मुलभूत गरज मानली जाते. त्यामुळे मानव विकासचा विकास मानला पाहिजे. शिक्षणातून बहिष्कृत स्तर उंचवर्ती, विचार करण्याची क्षमता वाढते व विवेकी नागरिकांचे संख्या वाढते असे नागरिक राष्ट्र उपायगीत साधणारे देतात. यासाठी साक्षरता वाढणे मानव विकासासाठी राष्ट्र संघाला आवश्यक वाटते.

#### ३) दरडोई देशांतर्गत स्थूल वास्तव उत्पादन :

दरडोई वास्तव उत्पन्न वाढणे ही बाब व्यक्तिच्या राहणी मानवा स्तर उंचवर्तीची प्रकृती दर्शविते. देशांतर्गत स्थूल वास्तव उत्पादन वाढण्याची प्रक्रिया (त्या तुलनेत लोकसंख्या वाढीची दर कमी असेल तर) ही नागरिकांना दरडोई वास्तव उत्पन्न वाढ घडवून आणते. त्यामुळे जवळी पूर्वोक्ता अधिक संख्येने घडवू व सेवांचा उपयोग घेऊ शकतात. मानव विकासाचा विकास वा दृष्टिकोनातून राष्ट्रसंघाने हा घटक महत्त्वपूर्ण मानला अर्थात राष्ट्रीय उत्पादना अंदाज व्यक्त करतांना अनेक महत्त्वाची घटक या अडथळी वर माने वाढवून तुलना करणे सुलभ जावे या दृष्टिने दरडोई स्थूल वास्तव उत्पादनाचा घातांक (Logarithm) विचारात घेण्यात राष्ट्रसंघाने घनवर्तिकांच्या निदेशांकवरी घातांक करणाऱ्या तीन निकषांना पूर्वील प्रमाणे वर दिलेला आहे.

१. जन्मतः अपेक्षित आयुष्य - ७८ वर्षे

२. प्रौढ साक्षरता

३. विकसित देशांच्या तय. अमेरिका, ब्रिटन, ऑस्ट्रेलिया, जपान, नॉर्वे, नेदरलँड, फिनलंड, स्वित्झरलँड यांच्यात ४८९२ इतक्या ही वास्तवता मानली. संघीय देशातील खरेदीक्षमता पाच राष्ट्रांतील करून त्यांचा घातांक (Log) घेण्यात आला. हे उत्पादन अंम देशांसाठी उद्दिष्ट गृहीत घरण्यात जावे.

मानव विकासाचा निर्देशांक वाढतांना हे तीन निकष एकत्र करून आदर्श निर्देशांक १००० गृहीत घरण्यात आला. या तुलनेत प्रत्येक देशाचे निर्देशांक काढण्यात आले. आदर्श गुण निर्देशांक व प्रत्यक्ष गुण निर्देशांक यातील फरक हा वंचनेचा निर्देशांक मानला जातो. या निर्देशांकांच्या आधारे १९९७ मधील अहवालात राष्ट्रांसंघाने नी माहिती प्रकाशित केली आहे. त्यात फिनलंड हा देश सर्व प्रथम असून या देशांच्या HDI चे मूल्य ०.९३२ आहे. दुसऱ्या क्रमांकावर नॉर्वे असून HDI मूल्य ०.९२७ आहे. १७४ देशांच्या बाबत भारताचे स्थान १३२ क्रमांकावर असून भारतासाठीच्या HDI मूल्य ०.५४५ इतके आहे. यावरून भारतासाठी वंचनेचा निर्देशांक ०.४५५ येतो. भारतात मानव विकासाची कशी स्थिती आहे व तुलनात्मकदृष्ट्या जागतिक परिस्थितीत आपण भिती मागे आहोत हे यावरून स्पष्ट वंते.

सारांश :

मानवविकास होण्यासाठी प्रत्येक व्यक्तीला आवुष्मात दीर्घायुष्य मिळणे, ज्ञान मिळणे, सुखदायी दर्जेदार जीवन प्राप्त होणे, उत्तम रोजगाराची प्राप्ती होणे, शुध्द हवा, शुध्द पाणी मिळणे, चांगल्या आरोग्याची प्राप्ती इ. गोष्टी आवश्यक असतात. ह्या बाबींचे संख्यात्मक मोजमाप करणे ही अवघड असले तरी यतील काही घटकांचे संख्यात्मक मोजमाप मानव विकास निर्देशांक बाहारे केले जात स्थूल राष्ट्रीय उत्पादनाचे (GNP) मापन पेशामध्ये केले जाते, परंतु देशाची सामाजिक, आर्थिक प्रगती मोजण्यासाठी असा काही साधन उलब्ध नाही. आवुर्गमोदा ही वर्षांमध्ये मोजली जाते. प्रौढ साक्षरता ही प्रौढांच्या एकूण संख्येच्या टक्केवारीत मोजली जाते. ह्या निर्देशकांना एवढे समान मापात करतकाच मोजायेच ? मानव विकास निर्देशकांच्या साहय्याने हे मापन केले जाते. मानव विकास निर्देशकांमुळे आर्थिक प्रगती (GNP) आणि सामाजिक प्रगती (PQLI) एकत्रित मोजणे शक्य होते. ह्या दोन्ही बाबी परस्परेक आहेत व हातात घेऊन घालून पुढे जाताना न्यून विकासात देशांनी त्यांच्या सद्यस्थितीतील विकासाच्या अस्त्येत मानवी विकाससंख्येचे दरदोई उत्पादनाच्या वाढीला प्राधान्य दिलेच पाहिजे. पण त्याच बरोबर सामाजिक सेवांमध्ये सुधारण करणासाठी सार्वजनिक खर्चाच्या पध्दतीमध्ये बदल घडवून आणला पाहिजे, त्यामुळे मानवी जीवनाच्या गुणवत्तेत वाढ होते. सैवतो असे म्हणावे लागेल की मानव विकास, मानव विकासा निर्देशांक पाहतांना आवुष्मान, प्रौढ साक्षरता, दरदोई उत्पन्न, व बरोबरच उत्तम रोजगार, आरोग्य, हवा, पाणी इ. गोष्टी महत्त्वाच्या आहेत. यतील सारे विरलेल्यावरून खासिले शिक्षारशी दिलेल्या आहेत.

शिक्षारशी

- १) शिक्षण हे संविधान मुल्यांवर आधारित मोडत व सारशीचे करणे गरजेचे आहे. त्यामुळे निश्चितच मानव विकास दिसून येईल.
- २) मानव विकाससाठी सरकारने रोजगार निर्मितीचे लक्ष निर्धारित करणे ही पूर्ण करणे गरजेचे आहे.
- ३) शासनाची घोरणे देशांतर्गत उपपन्वाडीच्या दृष्टीने गुलाम असणे आवश्यक आहे.
- ४) सर्व समावेशक विकासाचे ध्येय आखणे व अंमलात आणणे.
- ५) देशाने मानव विकास निर्देशांकत उच्चतर अशी वाढ करणे महत्त्वाचे आहे.

संदर्भ सूची :-

- १) आर्थिक विकास व नियोजन - डॉ. विश्वास कदम
- २) विकास व पर्यावरणाचे अर्थशास्त्र - डॉ. विश्वास कदम
- ३) लोकसंख्या आणि विकास - डॉ. विश्वास कदम
- ४) [https:// www.zigya.com](https://www.zigya.com)
- ५) [maharashtra.times.in](http://maharashtra.times.in) [diatimes.com](http://diatimes.com)

**अल्पसंख्याक व मानव अधिकार**

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**प्रस्तावना :-**

भारतीय संविधानाचे शिल्पकार डॉ.बाबासाहेब आंबेडकर आहेत, हे युगसत्त्व आहे. संविधान निर्मितीच्या आधी विविध समित्या स्थापन झाल्या होत्या. त्यापैकी 'मायनॉरिटी राईटस कमिटी' ही एक महत्त्वपूर्ण समिती होती. घटना समितीत मायनॉरिटी राईटस कमिटीचा अहवाल सादर झाला, त्यामध्ये अल्पसंख्याकांच्या नेत्यांची इच्छा भांडाळा व्यक्त केल्या होत्या. डॉ.आंबेडकरांनी आपल्या निवेदनात अनुसूचित जातींना विभक्त मतदार संघाची मागणी केली होती. अल्पसंख्याकांना विभक्त मतदार संघ देण्याबद्दल अतिशय कडवट प्रतिक्रिया व्यक्त झाली. मुलभूत हक्कांच्या द्वारे अल्पसंख्याकांना पुरेसे संरक्षण दिले गेले आहे, असा सूर घटना समितीने लावला होता. घटना समितीने मुलभूत हक्कांच्या संबंध नसा अल्पसंख्याकांशी ठेवला तसा सर्व सामान्य नागरिकांशी ठेवला. अल्पसंख्याकांच्या नेत्यांशी तडजोड करीत चॅट प्रसंगी सामोपचाराने, कधी रागावून आणि कधी दबाव टाकून अल्पसंख्याकांच्या मागण्यांची विल्हेवाट लावली. याला डॉ.बाबासाहेब आंबेडकर काही अंशी अपवाद होते, असे म्हणता येईल. घटना समितीमध्ये घटना बनविण्याचे कार्य सुरू असताना अनेक सदस्यांनी 'अल्पसंख्याक' या शब्दाबद्दल प्रुण व्यक्त केली होती. डॉ.पी.एस.देशमुख यांनी तर असे म्हटले होते की, 'अल्पसंख्याक' या शब्दासारखा भयंकर शब्द नाही आणि अल्पसंख्याकांनीच बहुसंख्याकांवरच अन्याय केलेला आहे. श्री अनंत रामनम अय्यंगार यांनी अशाच भावना व्यक्त केल्या. आपले वेगळेपण व्यक्त केल्याने, विकसित केल्याने या निर्मितीसाठी भयंकर घटना घटली, त्यामुळे भारतीय मूस्लीम आणि मूस्लीमेतर अल्पसंख्याक मितीग्रस्त झाले होते. सरदार पटेलानी विभक्त मतदार संघ मागण्यावर जो प्रखर हल्ला चढविला, त्याला प्रत्युत्तर देण्यासाठी कोणत्याच अल्पसंख्य जमातीचा नेता पुढे आला नव्हता. अल्पसंख्याकांवर झालेल्या ध्वंड मानसिक दबावाचा फायदा बहुसंख्याकांना झाला. अनुसूचित जाती-जमाती व्यतिरिक्त इतर अल्पसंख्याकांना त्यांनी पूर्वी कबूल केलेल्या सवलतीही मिळाल्या नाहीत. अनुसूचित- जाती, जमातीसाठी ज्या सवलती मिळाल्या त्यांचे श्रेय निःसंदेह डॉ.बाबासाहेब आंबेडकरांनाच द्यावे लागेल.

**उद्दिष्ट :-** बुध्दिष्ट अल्पसंख्याक म्हणून भारतीय संविधानात तरतूद असूनही योग्य लाभ संबंधीत बुध्दिष्ट अल्पसंख्याक समाजास भेटले नाहीत त्याचा विश्लेषणात्मक आढावा घेणे

**संशोधन पध्दती :-** या शोध निबंधाचा तिसरा पुनरावलोकन व पुनर्विचारात्मक असल्याने या शोध निबंधासाठी लेखनासाठी ऐतिहासिक संशोधनातील संदर्भ पध्दतीचा वापर करून शोध निबंधाचे लिखन करण्यात आले आहे.

**भारतीय संविधान आणि बुध्दिष्ट अल्पसंख्याक :-**

डॉ.बाबासाहेब आंबेडकरांनी ४ नोव्हेंबर १९४८ रोजी संविधानाचा मसुदा संविधान सभेला सादर करतांना ते भाषण केले, त्यामध्ये अल्पसंख्याकांच्या प्रश्नावर चर्चा केली. डॉ. आंबेडकर म्हणाले "अल्पसंख्याकांसाठी केलेल्या सवलतीच्या तरतुदीमुळे मसुदा संविधानावर टीका करण्यात येत आहे, यासाठी मसुदा समिती जबाबदार नाही. संविधान सभेने घेतलेल्या निर्णयाची ती अंमलबजावणी करते. माझ्या दृष्टीने अल्पसंख्याकांना सवलती देण्याचा संविधान सभेने घेतलेला निर्णय जो इथे कृतोत आणला आहे. तो शब्द समुहाचा आहे. याबद्दल माझ्या मनात संदेह नाही.

या देशात अल्पसंख्य आणि बहुसंख्य या दोघांनीही चुकोचा मार्ग अनुसरता आहे. अल्पसंख्याकांचे अस्तित्व नाकारणे ही बहुसंख्याकाची चूक आहे. अल्पसंख्याकांनी स्वतःहाथे अल्पसंख्यत्व गौणरणे व त्याला चिरस्थायी स्वरुप देण्याचा प्रयत्न करणे हे सुध्दा तेवढेच चुकीचे आहे. दुहेरी हेतू साध्य होईल असा उपाय शोधणे मज्जरयक आहे. सुध्दात म्हणून त्यात अल्पसंख्याकांचे अस्तित्व मान्य करावला हवे असाही प्रवेल व्हावा की, ज्यामुळे बहुसंख्याक आणि अल्पसंख्याक एकाच एक दिवस एकजीव होणे शक्य होईल. संविधान सभेने सुचविलेल्या उपायांचे स्वागत झाले पणने कारण या उपायांमुळे दुहेरी हेतू साध्य होतो.

बहुसंख्याकांचे घोरण राष्ट्रीयवादी दृष्टीनेच विचार झाला पाहिजे. ज्या दिवशी बहुसंख्याक लोक अल्पसंख्याकांच्या भावना आत्मियतेने समजून घेतील त्या दिवशी या देशात- काय परिवर्तन होईल, हे व्यक्त करण्यासाठी डॉ. बाबासाहेब आंबेडकर म्हणतात, ही बहुसंख्याक भुलतः राजकीय नसून जातीयवादी आहे, अशा जातीयवादी बहुसंख्याकांचे राज्य अल्पसंख्याकांनी निघ्टेने रिकारले आहे. म्हणून अल्पसंख्याकांच्या प्रति भेदभाव न करणे हे आपले कर्तव्य आहे, त्याची जाणीव बहुसंख्याकांनी ठेवावी. अल्पसंख्याकांच्या विरोधात भेदभाव करण्याची सवय बहुसंख्याक ज्या क्षणी सोडतील त्या क्षणी अल्पसंख्याक अस्तित्वात राहण्याचे कारण उरणार नाही व ते एकजीव होतील.

**बुध्दिष्ट अल्पसंख्याक :-**

डॉ.आंबेडकरांच्या मते या देशातील अल्पसंख्याकांच्या प्रति बहुसंख्याक कशी वागणूक करतात यावरच अल्पसंख्याकांचे अस्तित्त्व विसंबून आहे. त्यासाठी बहुसंख्याक आणि अल्पसंख्याक या दोघांनी ही राष्ट्रीय दृष्टिकोणातून विचार करावा. अल्पसंख्याकांच्या विरोधातील भेदभाव ज्या क्षणी बहुसंख्याक सोडतील त्याक्षणी अल्पसंख्याक या देशातून नष्ट होईल. हा हितोपदेश घेऊन अल्पसंख्याकांच्या हिताचा आहे. अशा प्रकारचे डॉ. बाबासाहेब आंबेडकरांचे राष्ट्रीय विचार ऐकून संविधान सभेचे सदस्य आणि मसुदा समितीचे सहकारी या सर्वांनी

डॉ.बाबासाहेब आंबेडकरावर अभिनंदनाचा वर्षाव केला होता. सर्वोच्च न्यायालयाने मुक्तकंठाने प्रशंसा केली होती. तब्बल सव्वोप्रांत फुलझता व्यक्त करण्यासाठी डॉ.आंबेडकर संविधान सभेच्या सभारोपीय भाषणात म्हणतात.

“संविधान सभेत येताना अनुसूचित जातीच्या हित संबंधी संरक्षण करण्यापलीकडे माझी दुसरी गावांसाठी नव्हती. यापेक्षा अधिक जबाबदारीचे कार्य करण्यासाठी मला आमंत्रित करण्यात येईल याची पुसटशी सुध्दा कल्पना मला नव्हती. सभेने मसुदा समितीने तिच्या अध्यक्षपदी माझे निवड केले. तबबल तर माझ्या अशक्याला पारावार उरला नाही. मसुदा समितीत माझे मित्र सर अल्लादी कृष्णास्वामी अय्यर यांच्या सारखी माझ्यापेक्षा अधिक भोळी, धांसवी आणि अधिक योग्य माणसे होती. माझ्यावर इतका विश्वास व्यक्त करून आणि जबाबदारी सोपवून त्यांनी माझे निवड केले आणि देशाची सेवा करण्याची मला संधी दिली यासाठी मी संविधान सभा आणि मसुदा समितीच्या प्रति फुलझता व्यक्त करतो.”

“घटना तयार करताना काँग्रेसने अल्पसंख्याकांच्या राजकीय भविष्याचा विचार करण्यासाठी नेमलेल्या समितीची सभा ज्या दिवशी होती त्याचा आदल्या दिवशी मी मौलाना आझाद यांना भेटलो व त्यांना अल्पसंख्याकांच्या सर्व प्रश्नांची व भविष्याची इच्छित कल्पना कळवून दिली. पण मौलाना दुस-या दिवशी सभेत हजर न राहता निघून गेले. मुसलमान बंधू तद्वत् इतर अल्पसंख्याकांचा प्रश्न माझ्या शिवाय तिथे कुणी मांडू शकला नाही आणि मी आपल्या वतीने एकदाच असल्यामुळे पंडित नेहरुंनी मुसलमानांना राखील जागा देण्याच्या सूचनेला काँग्रेसच्या वतीने विरोध केला व त्यामुळे आपण राजकीय हक्कांना मुक्तता.

**सार्वजनिक धोरण व बुध्दित अल्पसंख्याक :-**

डॉ. बाबासाहेब आंबेडकरांनी संविधान परिषदेत अल्पसंख्याकांच्या विचार आणण्यापूर्वीच मांडला लोकशाहीच्या कामकाजासाठी फार महत्त्वाची बाब म्हणजे लोकशाहीच्या नावावर बहुमतवाल्यांनी अल्पमत वाल्यांवर जूलूम करता कामा नये. बहुमतवाले जरी सत्तेवर आले तरी अल्प मतवाल्यांना सुरक्षितता खाटली पाहिजे. हे जर घडले नाही तर लोकशाहीचा फार मोठा धोका निर्माण होईल, ही भावना व्यक्त करताना डॉ. आंबेडकर म्हणतात अपण साक्षर आधिक्येतील अन्याया संघी बोलत आहेत. मी स्वतःचीच काही वेळेला या गोष्टीचे आश्चर्य करतो की, विलीनीकरण व अन्य गोष्टींच्या विरोधात बोलणा-या आपणामाखेच्या लोकांकडे प्रत्येक खेड्यात साक्षर आधिक्य नाही काय ? आपल्या प्रत्येक खेड्यात साक्षर आधिक्य आहे आणि असे देखील एखाद्या स्वर्ण जातीतील माणूस वर्गीकृत वार्ताची संरक्षण घेऊन लढतात मला कदाचितच दिसते. येथे असे का घडते? कारण येथे लोकांमिठा नाही. “ मी आणि बहुमत वाल्यांचा माझा देश याच एका विश्वात्मचे गुरफटलेला आहे”, जर असा पध्दतीच्या गोष्टी घडल्या तर अन्यायाखाली घिरडल्या जाणा-या अल्पसंख्याकांना अन्यायाचे निवारण करण्याच्या हेतूसाठी इतरांच्या पासून मदत मिळवता नाही. याच गोष्टीमुळे लोकशाही घोष्यात आणणारी बंडाची भवोक्तूती काढायेल.

सारांश :- डॉ.बाबासाहेब आंबेडकर यांच्या प्रेरणेने जो भारतीय बौध्द समान आहे, त्यांनी त्यांच्या विकासासाठी अनुसूचित जाती बौध्द जो धार्मिक अल्पसंख्याक बौध्द यापेकी कोणता पर्याय निवडणार, यासंबंधी संशोधन करून योग्य तो निर्णय घेणे, हा उद्देश आहे. अनुसूचित जाती : बौध्द आणि धार्मिक अल्पसंख्याक बौध्द या दोन्ही मार्गाद्वारे विकास साधता येतो, दोन्ही गोष्टी संविधानांतर्गत आहेत. तरीपण बौध्दांच्या अस्मितेसाठी आणि स्वातंत्र्यासाठी कोणत्या भागाचे अनुसरण करावे, ह्या प्रश्नाचे योग्य उत्तर शोधण्यापर्यंत ही संशोधन प्रक्रिया आरंभली आहे.

डॉ. आंबेडकरांनी बौध्द धर्माची दिशा दिली ती जातिपत्तेचा फलंदा केवळ दलोतांबरील मिटविण्यासाठी नाही. तर संपूर्ण मानव जातीवरील जातिपत्तेचा कलंक मिटविण्यासाठी त्यासाठी त्यांनी ‘अनिहितेशन ऑफ कास्ट’ हा ग्रंथ लिहिला. जातीच्या नावावर सवलती घेणे, हा काही काळासाठी तडजोडीचा भाग असू शकतो, परंतु तो नेहमीसाठी नाही. डॉ. बाबासाहेब आंबेडकरांनी १९५६ तडजोडी त्यांना मान्य नव्हती. कारण जात आणि बौध्द धम्म हे समोकरणच होऊ शकत नाही. भारत सरकारने १९९० पर्यंत बौध्दांना सवलती दिल्या नाही. त्यांनी फक्त अनुसूचित जातीच्या लोकांना सवलती दिल्या त्यामुळे १९९० पर्यंत अनुसूचित जातीच्या लोकांना बौध्दच होऊ दिले नाही. आणि जे बौध्द झाले त्यांना सवलती पासून वंचित ठेवण्यात आले. १९९० साली अनुसूचित जातीसोबत बौध्द नाव जाडले गेले. त्याचेही कारण अगदी स्पष्ट आहे. भारतीय संविधानाच्या अनुच्छेद २५ नुसार अनुसूचित जाती आणि बौध्द म्हणजेच हिंदू होत कारण हिंदू या शब्दांतर्गत बौध्द शब्द आला आहे. ‘बौध्द’ हा हिंदू धर्माचा एक पंथ आहे, असे स्पष्टीकरण केले जाते.

डॉ. बाबासाहेब आंबेडकरांनी प्रतिज्ञा केली होती, मी हिंदू म्हणून जन्माला आलो तरी हिंदू म्हणून मरणार नाही. बाबासाहेबांनी ती प्रतिज्ञा पूर्ण केली. बौध्द झाल्यानंतर त्यांनी शेडपुल कास्ट फेडरेशनचे सप्टर पद सुध्दा त्यागले. परंतु त्यांची जन्मत बौध्द होऊनही जवळपास अर्ध शतक अनुसूचित जाती बौध्द म्हणून जगत आहे. बाबासाहेबांचे अनुयायी बौध्द धर्माची दिशा घेऊनही अनुसूचित जातीच्या कोणातून बाहेर पडले नाहीत, तबबल यासंबंधी पुनर्विचार करण्याची गरज आहे. अल्पसंख्याक आयोगाने बौध्दांच्या विकासाच्या काही योजना आखलेल्या आहेत. त्याचा परिचय आपण गेल्या काही प्रकरणांत करून घेतला आहे. तसेच त्या योजनांचे कार्यान्वयन योग्यप्रकारे होते की नाही यांचेही सत्यनिहाय सर्वेक्षण झालेले आहे. अनेक राज्यात बौध्दांची संख्या नसल्यामुळे त्या सर्वेक्षणाचा आणि समितीच्या शिफारशीक काहीही उपयोग होत नाही. अल्पसंख्याकांच्या नवाखाती मुस्लिमांनी सवलती आपल्या पदरी पाडून घेतल्या जाते. तर सवलती बौध्दांना अल्पसंख्याकांच्या नावाखाली आपल्या पदरी पाडून घेत येतील. त्यासाठी बौध्दांची संख्या वाढविणे आवश्यक आहे. बौध्दांच्या वाढत्या संख्येवर त्यांचा विकास व यश निर्भर आहे.

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## निष्कर्ष :-

- 1) अल्पसंख्यांक धोरणात चौथांचा प्रकरणांचे विचार करून त्यांना बौद्ध अल्प संख्याकांच्या सवलती मिळायलाय ह्यात.
- 2) भारतीय संविधानात अल्पसंख्यांक बुध्दीष्ट यांना सर्व सवलती दिल्या आहेत पण गेल्या पन्नास वर्षांत त्या वर्गापर्यंत या सोयी सुविधांचा प्रचार- प्रसार होवू शकला नाही.
- 3) सार्वजनिक धोरण आख्यांना संविधानाने बुध्दीष्ट अल्पसंख्याक घटकास प्रथम प्राधान्य द्यावे. असे कालमात नमुद केले आहे. तरी त्याची अंमलबजावणी होताना दिसत नाही.

## संदर्भ सुची :-

- 1) डॉ. धनराज डाहाड बौद्ध धार्मिक अल्पसंख्याक, संकेत प्रकाशन नागपुर प्रथमावृत्ती १ जानेवारी २०११, पृष्ठ क्र. २६, २७, २८, २९, ३०, ३१.
- 2) अनुवाद : प्रा.घोडेश्वर देविराम, संविधान सभा डिबेटर्स (मराठी संस्करण), राईट थिंकर्स, पब्लिकेशन आणि डाक्युमेन्टेशन, प्रा.लि.नागपुर प्रथ.संस्करण २०१३, पृष्ठ क्र.४९८,५७७.
- 3) संपादक :- डॉ. धनराज डाहाड, डॉ.बामरासहन आंबेडकर भावणे आणि विचार, खंड-५ (संविधान), संकेत प्रकाशन, नागपुर, दि. ६ डिसेंबर २०११, पृष्ठ क्र.४४
- 4) जयदेव गायकवाड, संविधान सभेत डॉ.आंबेडकर, मधुमंथा प्रकाशन पुणे, तृ.आ. १५ जानेवारी २००८, पृष्ठ क्र.६०,६१.
- 5) डॉ.डी.आर. जाधव, भारतीय समाज एवं संविधान, समता साहोत्य संदन नवपूर, दि.सं. १९९२, पृष्ठ क्र.७,११.



## लोकसंख्या शिक्षण एक प्रशासकीय अध्ययन

प्रा.डॉ.विठ्ठल स. जाधव,

सहा.प्रा.तथा विभाग प्रमुख, लोकप्रशासन शास्त्र

कालिका देवी महाविद्यालय, शिरूर (का.), बीड. ४१३२४९

### प्रस्तावना:

भारतात प्राचीन काळी लोकसंख्ये संबंधी आकडेवारी मिळविण्याचे अनेक प्रयत्न केले गेलेत. समाजातील लोकसंख्या विषयक, आर्थिक व शैक्षणिक विषयक बाबींची गिनती कशी करावी यांचे विवेचन ख्रिस्त पूर्व ३९९ ते २६९ या कालावधीत कौटिल्याने लिहिलेल्या अर्थशास्त्र या ग्रंथात केले आहे. सम्राट अकबराने 'एने अकबरी' या प्रशासकीय अहवालात लोकसंख्या, लोकांचे व्यवहार, लोक, संपत्ती, यांची आकडेवारी गोळा करण्याचा प्रयत्न केला आहे. आधुनिक भारताच्या कालखंडात डॉ. आंबेडकर यांनी लोकसंख्या विषयक ठराव मांडून लोकसंख्या नियंत्रणा विषयी विवेचन केल्याचे आढळते.

जगाच्या लोकसंख्येत सातत्याने वाढ होत आहे. तथापि अविकसित देशाच्या लोकसंख्येत विशेष मोठ्या प्रमाणावर जलद वाढ होत आहे. भारतासारख्या वाढीचा गंभीर प्रश्न निर्माण झाला आहे. ११ मे २००० रोजी भारताची लोकसंख्या शंभर कोटी झाल्याची नोंद आहे. लोकसंख्या मर्यादीत ठेवली तरच लोकसंख्येचा गुणात्मक दर्जा वाढतो. राहणीमान सुधारते एकूणच आर्थिक विकासाला चालना मिळते हा विचार आर्थिकशास्त्रात प्रबल झालेला आहे. त्यामुळे जननदर करणे हा लोकसंख्या शिक्षणाचा महत्त्वाचा भाग आहे. लोकसंख्याशास्त्रात लोकसंख्येच्या आकारमानात घडवून आणणाऱ्या घटकांशिवाय सामाजिक, राजकीय, जैविक व भौगोलिक इ. घटकांचाही अभ्यास केला जातो.

आपल्या देशाला भेडसावत असलेल्या लोकसंख्या वाढीच्या संकटाशी यशस्वीरित्या मुकाबला करण्यासाठी लोकसंख्या शिक्षणाचा पाठपुरावा करणे गरजेचे आहे. चर्चलोकसंख्येतून निर्माण झालेल्या तसेच होऊ घातलेल्या सध्याच्या भीषण परिस्थितीशी सामना देण्यासाठी आपण काय केले पाहिजे याची जाणीव करून देणारे शिक्षण म्हणजे लोकसंख्या शिक्षण होय. लोकसंख्या शिक्षणाची उद्दिष्टे ही पुढीलप्रमाणे सांगात येतील उदा. लोकसंख्येचे परिणाम व रचना या संबंधी विद्यार्थ्यांना माहिती करून देणे लोकसंख्या व साधन संपत्ती यांचा मेळ घेतला गेला नाही तर जीवनमान खालावते याची विद्यार्थ्यांना जाणीव करून देणे, खनिज संपत्तीच्या साठ्यांवरील मर्यादा स्पष्ट करून त्यांचा काटकसरीने वापर करण्याची आवश्यकता स्पष्ट करणे, लोकसंख्या वाढीवरोबरच सामाजिक गरजा वाढतात आणि वाढत्या गरजा भागविण्यासाठी आर्थिक व औद्योगिक प्रगती आवश्यक असते. याचे ज्ञान विद्यार्थ्यांना करून देणे, लोकसंख्या आणि विकासाची प्रक्रिया यांच्यातील परस्पर संबंध स्पष्ट करणे, सुखी व निरोगी जीवनासाठी योग्य निवारा, स्वच्छ परिसर, स्वच्छ कपडे व समतोल यांची आवश्यकता स्पष्ट करणे. आजच्या विद्यार्थ्यांमधून कर्तव्य, तत्पर प्रामाणिक व

निःस्वार्थी नागरिक निर्माण व्हावेत या दृष्टीकोनातुन विद्यार्थ्यांमधील प्रमाणिकपणा सेवाभाव, कर्तव्य, तत्परता, निस्वार्थीपणा इत्यादी गुणांचा विकास साधने, मानवाचा पर्यावरणाशी असलेला संबंध स्पष्ट करणे, पर्यावरण असमतोल राखण्यासाठी वनस्पती, वन्य पशु, पक्षी यांची असलेली आवश्यकता स्पष्ट करणे, विद्यार्थ्यांना प्रदुषणाच्या धोक्याची माहिती करून देणे, त्यांच्यामध्ये वृक्षारोपण, वृक्षसंगोपन व वृक्ष संरक्षण या गोटींची आवड निर्माण करणे.

### संशोधनाची गरज :

लोकसंख्या शिक्षणाच्या संशोधनाची गरज लक्षात घेता असे दिसून येते की, मानवाच्या एकंदर विकासात लोकसंख्या व लोकसंख्या शिक्षणाची भूमिका अत्यंत महत्वाची असल्याचे दिसून येते.

संशोधनाद्वारे लोकसंख्या, जननदर, लोकसंख्या नियोजन, साधनसमग्री, मुलभुत गरजा, राहणीमान दर्जा, सामाजिक, आर्थिक, सांस्कृतिक, राजकीय, प्रशासकीय, शैक्षणिक इत्यादी विकास करावयाचा असेल तर लोकसंख्या नियंत्रण व लोकसंख्या शिक्षण ही काळाची गरज असल्याचे दिसून येते. त्याद्वारे आपणास सर्व क्षेत्रात संशोधन करून लोकसंख्या शिक्षणाद्वारे साध्य केलेली उद्दिष्ट्ये कितपत साध्य झाले याचे विवेचन करणे सोपे जाईल. म्हणून या लोकसंख्या शिक्षणाद्वारे साध्य झालेली उद्दिष्ट्ये किती प्रमाणात साध्य झाली यासाठी आपणास संशोधनाची गरज असल्याचे दिसून येते.

लोकसंख्या वाढ आणि जीवनमान यांचा घनिष्ठ संबंध असल्यामुळे आपल्या देशातील जीवनमान उंचावण्यासाठी लोकसंख्या वाढीला आळा घालणे आवश्यक या भावनेतुन लोकसंख्या शिक्षणाची गरज निर्माण होते.

- \* लोकसंख्या वाढीमुळे निर्माण झालेल्या समस्यांची जाणीव करून देण्याची गरज.
- \* अज्ञान, अंधश्रद्धा आणि अयोग्य रुढी यांचे समाजातुन उच्चटन करण्यासाठी.
- \* आपल्या देशाची प्रगती योग्य वेळेत साधण्यासाठी.
- \* कुटुंबनियोजनाचे महत्त्व लोकांना पटवून देण्यासाठी.
- \* नैसर्गिक संपत्तीचा, वस्तुंचा अयोग्य आणि घेगाने होणारा नाश थांबविण्यासाठी
- \* लोकांचे जीवनमान उंचावण्यासाठी
- \* लोकसंख्या वाढीपेक्षा गुणात्मक वाढीला महत्त्व आहे, की जाणीव होण्यासाठी,
- \* पर्यावरणात योग्य समतोल राखण्यासंबंधी जाणीव.

लोकसंख्या शिक्षणाचे ज्ञान देणे आवश्यक आहे. कारण स्वतःसाठी सोयिस्कर व राष्ट्राच्या हिताचे निर्णय घेणे त्यांना शक्य व्हावे त्याचप्रमाणे १४ वर्ष वयापर्यंत आपल्या देशात एकंदर ४०% लोकसंख्या असून ही मुले १०-१२ वर्षांनी विवाह करून लोकसंख्यातील भर घालतील म्हणून लोकसंख्या शिक्षणाची मुल्य मूलांच्या मनावर विंबविण्याचा प्रयत्न होणे आवश्यक आहे. लोकसंख्या शिक्षणांमुळे अशा स्वरूपाच्या समस्या हाताळण्यास मदत होवू शकेल आबाल हाताळण्यास मदत होवू शकेल आबाल वृध्दांना लोकसंख्या शिक्षणाची जाण व्हावी म्हणून लोकसंख्या शिक्षणाची गरज आहे.

नसुन लोकांचे जीवनमान उंचावणे व उपलब्ध मनुष्यबळाची कार्यक्षमता वाढविणे या गोष्टी लोकसंख्या शिक्षणात समाविष्ट होत असल्यामुळे हे शिक्षण सर्वस्पर्शी आहे.

अर्थ :- लोकसंख्या शिक्षण या शब्दाचा अर्थ सर्वप्रथम स्पष्ट करण्याचे श्रेय कोलंबिया विद्यापीठाच्या अध्यापक महाविद्यालयातील प्रोफेसर स्लोन आर.व्हेलांड यांच्याकडे जाते त्यांच्या मते, लोकसंख्या शिक्षण हे लैंगिक शिक्षण किंवा कौटुंबिक शिक्षणापेक्षा निराळे आहे.

व्याख्या :-

१. बेरेलसन यांच्या मते, लोकसंख्या शिक्षणाद्वारे शिक्षक आणि विद्यार्थ्यांमध्ये लोकसंख्या विषयी जागृकता, विवेक, अर्थज्ञान विकसित करता येते. त्याचबरोबर कौटुंबिक जीवन प्रजनन आणि मूलभूत मुल्यांचे सुध्दा ज्ञान करून देता येते.

समाजापरिवर्तन आणि शिक्षण :-

शिक्षण हे समाज परिवर्तनाचे एक प्रभावी साधन आहे. समाजातील अनेक रुढी व परंपरा, अज्ञात व अंधश्रद्धा काढून टाकण्यासाठी शिक्षणाचीच आवश्यकता असते. शिक्षणाद्वारे समाजातील वाईट सवयी, अनिष्ट प्रथा काढून टाकावयाच्या असतात चांगल्या सवयी जोपासण्याच्या असतात. नवसमाज निर्मितीला आवश्यक अशी मुल्ये, विचार व सवयी यांचे आरोपण करून नवी पिढी घडविण्याचे कार्य शिक्षणच प्रभावीपणे करू शकते देशाच्या विकासाला हातभार लावतील अशा तऱ्हेच्या जाणिवे, अभिवृत्ती, चिकित्सक दृष्टीकोण व कौशल्ये तरुण पिढीला शिक्षणातूनच प्राप्त करून दिली पाहिजेत.

लोकसंख्या शिक्षणातून साधावयाच्या गोष्टी :-

आजचा नागरिक हा उद्याच्या जीवनाचा शिल्पकार असतो. देशाच्या प्रगतीची भावी दिशा आणि समाजजीवनाची गुणवत्ता ही त्यांच्या कार्यावर आधारलेली असते. परिवर्तनाला आवश्यक व पुरक अशी वैचारिक पार्श्वभूमी निर्माण करण्याचे कार्य त्यास करावयाचे असते. लोकसंख्येची समस्या सोडविण्या बाबत प्रत्येक नागरिकास स्वरूपाचे कार्य करावयाचे आहे. प्रत्येकाने समाजिक जबाबदारीची जाणीव करून घेऊन एक जबाबदार नागरिक वनायचे आहे. प्रत्येक नागरिकामध्ये स्वतःच्या कुटुंबाच्या आधाराविषयी, स्वतःसाठी योग्य आणि समाजासाठी हितकारक निर्णय घेण्याची क्षमता निर्णय घ्यावयास पाहिजे.

लोकसंख्या शिक्षणविषयक नागरिकांचा दृष्टीकोण :-

लोकसंख्या समस्येची जाणीव निर्माण करण्यात आणि लोकसंख्या धोरणाच्या संदर्भात दृष्टीवृत्ती विकसित करण्यात भारतीय नागरिकांना महत्त्वाची भूमिका वजावयाची आहे. त्यासाठी प्रथम त्याला या बाबतीत जाणीव झाली पाहिजे व त्याच्यामध्ये योग्य त्या वृत्ती निर्माण झाल्या पाहिजेत. त्यांच्या मनात लोकसंख्या शिक्षणाची संकल्पना स्पष्ट असली पाहिजे. लोकसंख्या शिक्षणाची उद्दिष्ट्ये त्याच्या डोळ्यासमोर ठेवली पाहिजेत. ती अधिक समृद्ध करण्यात प्रयत्न केला पाहिजे व्यक्ती, कुटुंब व समाज दबाव कसा परिणाम करतो हे त्याला स्पष्ट माहित असले पाहिजे. लोकसंख्येची गतिमानता लोकसंख्येची रचना, लोकसंख्या

वाढीची कारणे, सामाजिक, सांस्कृतिक व आर्थिक समस्या यांचे सम्यक ज्ञान प्रत्येक नागरिकाने आत्मसात केले पाहिजे. माहित असले पाहिजे. लोकसंख्येची गतिमानता लोकसंख्येची रचना, लोकसंख्या वाढीची कारणे, सामाजिक, सांस्कृतिक व आर्थिक समस्या यांचे सम्यक ज्ञान प्रत्येक नागरिकाने आत्मसात केले पाहिजे.

नागरिक हा परंपरावादी व स्थितीशील वृत्तीचा असता कामा नये. इष्ट परिवर्तनाला तो सदैव उत्सुक असला पाहिजे. नवे ज्ञान, नवे विचार, नवी मुल्य यांचा स्विकार करण्याच्या बाबतीत त्याने उत्सुकता दाखवली पाहिजे शिक्षणात समाज बदलण्याचे घडविण्याचे समर्थ आहे. यावर त्याचा दाट विश्वास असला पाहिजे. प्रत्येक नागरीकचा लोकसंख्या विषयक दृष्टीकोन तयार होण्यासाठी महाराष्ट्र राज्य आरोग्य शिक्षण विभाग महाराष्ट्र राज्य शैक्षणिक संशोधन व प्रशिक्षण परिषद पुणे यांच्या संयुक्त उपक्रमातून तयार झालेल्या जाणीव पत्रिकेतील खाली नमुद केलेल्या गोष्टी प्रत्येकाने करावयास पाहिजेत.

१. देशाची साधनसंपत्ती वाढवु आणि असलेल्या साधनसंपत्तीचा काटकसरीने उपयोग करत.
२. शासनाला त्यांच्या कामात मदत करत.
३. प्रदुषणाला आळाघालण्यासाठी आणि पर्यावरणाचा समतोल राखण्यासाठी रोपटी लावु ती जगवु वनराई वाढवु, घरात, शाळेत परस बाग तयार करु वाढलेली झाड तोडणे हे चुकीचे आहे असे समजु.
४. शैक्षणिक साहित्य आणि सार्वजनिक मालमत्ता यांची नास धूस होणार नाही याकडे लक्ष देवु सार्वजनिक ठिकाणी शिस्त पाळु.
५. अन्न व पाण्याची नासाडी टाळण्यासाठीची दक्षता घेवु.

सारांश :-

लोकसंख्या शिक्षण केवळ लोकसंख्येच्या आकडेवारीचे शिक्षण नसुन उत्तम जीवन जगण्यासाठी आवश्यक असलेल्या सर्व गोष्टींचा चांगल्या प्रकारे संस्कार करणारे शिक्षण म्हणजे लोकसंख्या शिक्षण व्यक्तीचे उत्तम जीवनमान ठरविण्यास जबाबदार घटक, त्यांचा परस्पर संबंध व त्यांच्यातील बदिलवर्तनाची प्रक्रिया या गोष्टींचे ज्ञान मिळवुन देण्यास मदत करणारे शिक्षण म्हणजे लोकसंख्या शिक्षण.

लोकसंख्या शिक्षणाचा आशय पुढील तीन मुद्द्यांवर आधारित आहे.

१. जाणीव जागृतीसाठी शिक्षण.
२. उत्तम जीवनमान वाटचाल करण्यासाठी शिक्षण.
३. जबाबदार पालकत्वाचे शिक्षण.

लोकसंख्येच्या संदर्भातून जे शिक्षण दिले जाते त्याला लोकसंख्या शिक्षण असे म्हणतात. लोक संख्येची प्रक्रिया व वैशिष्ट्ये यांच्याच संदर्भात अध्यापन अध्ययन लोकसंख्या शिक्षणात होत असते. आज जग भर सर्वत्रच लोकसंख्येचा विस्फोट होत आहे. अशा परिस्थितीत लोकसंख्या शिक्षणाला विशेष महत्व

मालेले आहे. लोकसंख्या शिक्षण हा नवी संकल्पना असल्याने त्यात नेमके काय शिकवायचे कसे शिकवायचे या बद्दल चित्र स्पष्ट नाही. याबाबतीत काही विचार मांडण्यात आलेले आहेत. मानवी साधन संपत्तीच्या विकासाशी लोकसंख्या शिक्षण निगडित आहे. त्यामुळे लोकसंख्ये विषयी जाणीव एवढाच लोकसंख्या शिक्षणाचा प्रेत नसुन मुल्यांच्या विकासाचा व अभिवृत्तीचाही संबंध लोकसंख्या शिक्षणाशी येतो असे मानले जाते. लोकसंख्येतील वाढ व संबंधाबाबत जाणीव निर्माण करणे जाणीवेचा विकास करणे, ज्ञान करून घेणे हे लोकसंख्या शिक्षणाचे उद्दिष्ट असते. लोकसंख्या शिक्षणातून कौटुंबिक जीवन, मानवी जनशक्ती यांचे ज्ञान तर दिलेच पाहिजे, त्याचबरोबर त्याची नैतिक बाजूही सांगितली पाहिजे ही नैतिक बाजू म्हणजे समाजात प्रत्येक व्यक्तीची कृती इतर व्यक्तीवर परिणाम करणारी असते हे समजून सांगणे. तसेच लोकसंख्येच्या वाढीतून ज्या समस्या निर्माण होतात त्याबाबत दिलेली निर्णय घेण्यास सक्षम करणे हाही लोकसंख्या शिक्षणाचा मागिल हेतु असतो.

लोकसंख्या वाढीचे अनेक दुष्परिणाम आढळतात. उदा. दारिद्र्य वाढत जाते, अन्न धान्याची कमतरता भासू लागते व जीवनावश्यक वस्तुंच्या किंमती वाढतात, घरांची कमतरता भासू लागते, दळणवळणाची साधने उदा. बस, रेल्वे, इ. कमी पडुन उपलब्ध वाहनांत गर्दी वाढून त्यांचे विपरीत परिणाम दिसू लागतात. बेकारीची समस्या गंभीर होऊन समाजविघातक कृत्ये जोर धरू लागतात. निरक्षरतेची समस्या गंभीर बनते, समाजविषयक कृत्ये होऊ लागली का त्यातून सामाजिक सुरक्षितता राष्ट्रीय स्वातंत्र्य याबाबतीत समस्या निर्माण होतात अशा प्रकारचे दुष्परिणाम दळण्यासाठी लोकसंख्येवर नियंत्रण आवश्यक ठरते व ते लोकसंख्या शिक्षणाने शक्य होते.

लोकसंख्या शिक्षणाच्या उद्दिष्टांचा अभ्यास करणे व ते कितपत साध्य झाले याचे संशोधन महत्वाचे असल्याचे दिसून येते.

### निष्कर्ष :-

लोकसंख्या शिक्षणाने साध्य केलेल्या उद्दिष्टांचा अभ्यास करतांना खालील निष्कर्ष आढळून आलेले जाणवतात.

१. लोकसंख्या शिक्षणामुळे समाज जागृती होण्यास मदत होते.
२. अंधश्रद्धा, अज्ञान आणि अयोग्य रुढी यांचे समाजातून उच्चाटन करण्यासाठी लोकसंख्या शिक्षणाची गरज आहे.
३. देशाची प्रगती योग्य वेळेत साधण्यासाठी लोकसंख्या शिक्षणाची आवश्यकता आहे.
४. कुटुंब नियोजनाचे महत्त्व लोकांना पटवून देण्यासाठी लोकसंख्या शिक्षण महत्वाचे आहे.
५. वस्तुंचा व नैसर्गिक संपत्तीचा अयोग्य आणि वेगाने होणारा नाश थांबविण्यासाठी लोकसंख्या शिक्षण जरूरीचे आहे.
६. लोकांचे जीवनमान उंचावण्यासाठी या लोकसंख्या शिक्षणाची गरज आहे.

### शिफारशी :-

लोकसंख्या शिक्षणाने साध्य केलेल्या उद्दिष्टांचा अभ्यास करत असतांना काही शिफारशी खालीलप्रमाणे आहेत.

१. लोकसंख्येतील रचनेत घडून येणारा बदल आणि संख्यात्मक बदल परिवर्तन व प्रगती यामधील परस्पर संबंध याची आवश्यकता आहे.
२. साधन संपत्तीचा काटकसरीने उपयोग व साधनसंपत्ती वरील मर्यादा, लोकसंख्येचा साधन संपत्तीवर होणारा परिणाम याचा अभ्यास करणे, जरूरीचे आहे.
३. सामाजिक सांस्कृतिक दर्जाचा आणि लोकसंख्येचा संबंध साधने गरजेचे आहे.
४. मनुष्यबळ संपत्तीचा विकास आणि लोकसंख्या शिक्षणात करणे गरजेचे आहे.
५. पर्यावरणातील समतोल मानवी अस्तित्वासाठी आवश्यक आहे.
६. राष्ट्रीय वैयक्तिक व सामाजिक जीवनस्तर उंचावणे गरजेचे आहे.
७. नैतिक मूल्य व लोकसंख्या वाढ इत्यादी बाबींचा अभ्यास लोकसंख्याशिक्षणात गरजेचे आहे.

### संदर्भ सुची :-

१. भारतातील मानव संसाधन विकास (भाग-१), अमोल लक्ष्मण घोडके, युनिक अकॅडमी पुणे - एप्रील, २०१३.
२. भारतीय अर्थव्यवस्था, भोसले, काटे, फडके प्रकाशन, कोल्हापूर - मे, २०१२,
३. मानव संसाधन विकास, के. सागर व प्रा. व्ही. बी. पाटील, के. सागर प्रकाशन, पुणे
४. लोकसंख्या शिक्षण : Soc २१५ ; पुस्तक १ ते ३, डॉ. प्रकाश अतकरे, कुलसचिव यशवंतराव चव्हाण महाराष्ट्र मुक्त विद्यापीठ, नाशिक,
५. डायमंड सामाजिक ज्ञानकोश, संपादक-प्रा. डॉ. नरेंद्र जाधव, डायमंड प्रकाशन-पुणे, प्र. अ. २००७
६. समाजकालीन भारतातील सामाजिक समस्या, प्रा. जयंत घाटगे, प्रकाशक चंद्रकांत घाटगे-कोल्हापूर, १९९९



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#### प्रस्ताविका

भारताची राज्यपट्टना विविध स्वरूपांच्या तत्त्व वैचारिक सोतातून निर्माण झाल्याचे दिसून येते. त्यात एका बाजूला स्वातंत्र्य तज्ञा ब्रिटिश कालिन कायदे, विशेषतः 1935 चा भारत सरकार कायदा आणि इतर देशातील राज्यपट्टनांचा प्रभाव दाखवत येतो. राज्यपट्टनेच्या निर्मितीसाठी विविध खोलांचा आधार घेतल्यामुळे विचारात अशा टीका येतात की भारतीय राज्यपट्टना ही उदभवारी असलेली संविधा आहे. तथापि भारतीय पटनाकारांनी विविध देशांच्या राज्यपट्टनेतून अनेक तरतुदींचा स्वीकार केलेला आहे. ते खरे असते तरी ती केवळ उदभवारी उरत नाही. पट्टनेतील आभाव, त्याची संरक्षिती उपयुक्त आणि येती सहा दशके सुद्धे असलेला विद्या व्यवहार मानून उपरोक्तित होणारी बाब म्हणजे, भारतीय पटनाकारांनी पटनात्मक मूल्ये, आदर्श आणि भारतीय समाज वास्तव मंणी साधनांद करूनच या पट्टनेची निर्मिती केली होती. ही बाबामाहंभ आविडकारांनी म्हटल्या प्रमाणे पटनाकारांनी अन्व देशांच्या राज्यपट्टनेतील सर्वोत्तम भाग एकत्र केले. भारतीय समाजात राष्ट्रवादाली उभासली करताना ज्या मानवतावादी, धर्मनिरपेक्ष लोकशाही व पुरोगामी मूल्यांचा स्वीकार केला त्या मूल्य व आदर्शांचा संविधानाद्वारे सम्बद्ध करण्यात आले आहे. भारतीय संविधान एका बाजूला पाश्चात्य तत्त्व व्यवहाराने प्रभावीत झाले आहे तर दुसऱ्या बाजूला स्वातंत्र्य लढ्यातून आकारात आलेल्या भारतीय संविधान आत्मिक वेगळ्या स्वरूपाचे जन्मले आहे. भारतीय राज्यपट्टनेतून लोककल्याणकारी तत्त्वांचे तत्त्वज्ञान प्रतिबिंबित होते. सरनाम्यात आभूत केलेले सामाजिक, आर्थिक न्याय तथा दर्जा व संपीची हमी इशाते समतेचे तत्त्व लोक कल्याणाचे उद्दिष्ट अधोखिड करताय. भा.ल. भोळे म्हणतात, "परंपरा आणि आधुनिकता या दोघांचा गेळ कसा घालावा या सामत्तचे अनेक दृष्टिकोन घटनासामिमीमात प्रत्येक मुद्यावरच्या घडवून आणलेले दिसून येतात. पण बळवंती आधुनिकतावादी विचार प्रवाहांचे पाळे दखेळी नद झालेले दिसते. मातही पाश्चिमात्यांच्या संस्थांचे अधानुकरन न करता त्यांचा भारतीय परिस्थितीनुसार योग्य ते वळण देऊन स्विकारावे अशा मडाचा प्रभाव जास्त होता. त्यानुसार पाश्चात्यपतीची पण भारतीय परिस्थितीची नुळवणीही संसदीय पद्धती आपण स्विकारली विकासाची प्रक्रिया मान्यी स्वरूपाची बनवायची असेल, विविध टप्प्यांवर लोक सहभाग वाढवायचा असेल तर देशातील लोकशाही यंत्रणा अधिक लोकाभिमुख होणे तसेच सर्व पातळ्यांवर ती अधिक जबाबदार प्रतिष्ठादात्मक बनणे आवश्यक आहे. त्यासाठी जागूक लोकमत जागृत प्रसारमाध्यमे, जागृत विरोधीपक्ष इत्यादींच्या सहाय्याने सत्तापती पहावर या तत्त्वांच्या आंमलबजावणीसाठी दबाव वाडविणे गरजेचे उरते. म्हणजेच न्यायप्रमाणे लोकजागृती माहेल त्या प्रमाणात शासनाकडून असणाऱ्या जन कल्याणाच्या अपेक्षा वाडतील आणि त्या प्रमाणात आपल्यासाठी दबाव वाडेल, या तत्त्वांच्या आंमलबजावणीला गती प्राप्त होईल म्हणून भारतीय संविधानातील प्रशासकीय मुल्यांची भारतीय प्रशासनाच्या संदर्भाने उपयुक्तता दिसून येते. तसेच अनुसुचित जाती आणि जमाती यांच्या करिता नेमण्यात येणाऱ्या राष्ट्रीय आयोगाने आंग्ल भारतीय समुदाया बाबत ही अनुसुचित जाती जमाती प्रमाणेच कार्य पाह

पाहणे अपेक्षित आहे. दुसऱ्या शब्दात, अल्प भारतीय समुदायाला असलेल्या पटनात्मक आणि इतर कायदेशिर संरक्षणात्मक तरतुदींचे परीक्षण आपणाला कायदे लागूत आणि त्यांच्या कार्यवाही बाबत राष्ट्रपतीला अहवाल सादर करावा लागेल, अशा प्रकारे संविधानाने अनुसुचित जाती जमाती, मागासवर्गीय, धार्मिक व धार्मिक अल्पसंख्यांक आणि आंग्ल भारतीय समुदायाकरीता संरक्षण देवून त्यांचे आत्मप्रतिष्ठा समान वागणूक आणि विकासाची हमी देण्याचा प्रयत्न केला आहे. भारतातील सर्व जाती धर्म समुदायांना सभता, स्वातंत्र्य, बंधुत्व व न्याय या तत्वानुसार समानसंपी धर्मनिरपेक्षताचे वागणूक देणे म्हणजे संविधानिक राष्ट्रवाद म्हणता येतो. संविधानिक राष्ट्रवाद हा संविधानाने दिलेला मूल्य, अधिकार, हक्क व जलंदरीक तत्त्वांची आपलकताजणी करणे, देशाची शासन व प्रशासन व्यवस्था एककीय लोकशाही पंर सामाजिक व आर्थिक लोकशाहीकडे देशाला मार्पक्रमण करणास काय देणे होय. जातीय व्यवस्था मोडून काढणे, जेष्ठवर्ग, कर्मकांड, धोडाड बांसा भाग न देणे व वैज्ञानिक दृष्टिकोन जोपासणे म्हणजे संविधानिक राष्ट्रवाद होय असे म्हणजे सगुनीक टरेल.

संशोधन शिर्षक - "संविधानिक राष्ट्रवादाला प्रशासनावरील प्रभाव" संशोधनाची गरज

संविधानिक राष्ट्रवादाला संशोधनाची गरज लक्षात घेता असे दिसून येते की, 26 जानेवारी 1950 रोजी या देशाने संविधानिक राष्ट्रवाद स्विकारला परंतु त्याची हमी संविधान राष्ट्रवादाला मूल्य भारतीय जनते मध्ये थोडक्या प्रमाणात रुजल्याचे दिसून येते. परंतु थोडक्या प्रमाणात ही सभता, स्वातंत्र्य, बंधुत्व व न्याय ही राष्ट्रवादाची मूल्य योतवर रुजल्यासाठी या संशोधनाची गरज असल्याचे निर्दर्शित येते. पण भारतीय मानकास प्रधान्याने सन्मानपूर्वक संपीची समानता व एककीय लोकशाही बरोबरच सामाजिक व आर्थिक लोकशाही या संविधानिक राष्ट्रवादाला अपेक्षित आहे. म्हणून सर्व पातळ्यांवर भारतीय नागरिकात संविधानिक राष्ट्रवादाला संशोधनाची गरज निर्माण झाली आहे.

- संशोधनाची उद्दिष्टे
- संविधानिक राष्ट्रवादाला प्रशासनावरील प्रभाव अभ्यासणे,
- संविधान मूल्यनुसार प्रत्येक क्षेत्रात आंमलबजावणी चा शोध घेणे,
- संविधानिक राष्ट्रवाद सर्व भारतीयानी आचरणात आणावा हा महत्त्वाचा उद्देश आहे.
- संशोधनाची गृहितके
- संविधानिक राष्ट्रवादाला प्रचार-प्रसार व प्रशिक्षण होणे गरजेचे,
- भारतीय समाजाचे प्रबोधन होणे अपेक्षित आहे,
- प्रत्येक भारतीयानी संविधानिक राष्ट्रवादाला विविध उपक्रम राबविले जातात,
- संशोधन पध्दती

या संशोधनासाठी वर्णनात्मक, विश्पेयनात्मक संशोधन पध्दतीचा उपयोग करण्यात आला आहे. ही पध्दती उपलब्ध साहित्याच्या उपरमणेत आणली जाणार

असून विविध संदर्भ ग्रंथ यानून वर्णनात्मक पध्दतीने संशोधनाची मांडणी करण्यात येणार आहे.

**संशोधन पर्वाने**

- 1) प्रस्तुत अभ्यास हा फक्त संविधानिक राष्ट्रवादाची उद्दिष्टे किताबत साध्य झाली इत्यादी पुस्तक मर्यादित आहे.
  - 2) संविधानिक राष्ट्रवादाची मांडणी, साधने, शिक्षण, संविधान साक्षरता, अज्ञातीपण, समुपदेशन या मार्गदर्शना यामून वंचित असल्यामुळे मांडणीत भिन्नपणा अडचणी निर्माण होवू शकतात.
  - 3) प्रस्तुत संविधानिक राष्ट्रवादाच्या संदर्भाने साधनग्रंथाचा आभाव व मांडणीचे अल्प खोत यामुळे हा अभ्यास परिपूर्ण करण्यात अडथळे येतात.
- भारतीय संविधान हे प्रजासत्ताकाच्या 70व्या वर्धापनंतर ही आजच्या परिस्थितीची कसे जुळवून घेते हे आपणास अनेक क्षेत्राच्या विकारातून दिसून येते. उदा. भारतीय राजकारण व प्रशासन या क्षेत्रात झालेला बदल म्हणजे सर्व जाती समुहाचे प्रतिनिधीनी या राज्य विविधतेत व संघर्षात कार्य करताना दिसतात. आपल्या देशातील लोकांनी निवडून दिलेले प्रतिनिधीना जनतेच्या हिताची कामे व त्यांच्या मूलभूत गरजा पूर्णविषयी संदर्भात उपाययोजना राबविणे काम प्राप्त आहे. पण सत्तेची उच्च मिळालेले धुर्ग्यांचा मोह त्यांना सुटता सुटत नाही. आपण जनतेचे मातृक समूह प्रतिनिधी आहोत. हे ते सोपीतच पण विसरून जातात. त्यामुळे स्वातंत्र्याच्या अनेक वर्षांनंतर देखील देशातील दारिद्र्य, भ्रष्टाचार, भूकच्ची, कुपोषण, शिक्षण, नोकरी, पानी, जन्म, जख, निवारण, आरोग्य हे मूलभूत सुविधा व संपन्नता आजही हद्दपार होवू शकल्या पाते. संविधानाने सर्व कामे कायदाद्वारे निर्धारित करी केलेल्या असल्या तरी त्याची अंमलबजावणी याच समाजातूनच केली जावी असे देशातील प्रत्येक जाती धर्माच्या मान्यता हा एक भारतीय नागरिक म्हणून ज्यावेळी बारागळा लागेल आणि त्यासाठी तो आग्रही भूमिका घेऊन राजकीय पारतु प्रतिष्ठाची शक्ती विकसित करणे करण्यासाठी तैयार उठेल त्या दिवसापासून सभतेचे राज्य स्थापन जाणता छन्ना अधिनि सुरुवात होईल. अन्यथा अति परीश्रम घेवून तयार करणारा आलेल्या संविधान निर्माणाकर्त्या डॉ. बाबासाहेब आंबेडकरांना अपेक्षित असलेले राष्ट्र कर्षीय निर्माण होऊ शकत नाही. कारण संविधानात माणूस हा केन्द्रबिंदू आहे. आणि त्याच माणसाच्या हिताला जर संविधान अस्तित्वात असून देखील बाधा पोहचवत असेल तर भारतीय नागरिक म्हणून त्याच बाबताने अन्यायमुलक व्यवस्थेवर प्रहार करण्यासाठी सज्ज झाले पाहिजे. जो वर्ग जात आर्थिक धर्म बापेक्षा देशहिताला प्राधान्य देतो. तो कधीच जातीच्या बंधनात अडकून पडत नाही. पण जो वर्ग जाती आणि धर्माचा गर्व बाळगून आपल्या बरोबर आपल्या पिढ्यांच्याही अवनतीला कारणीभूत ठरतो तो कधीही संविधानिक राष्ट्रवादी होऊ शकत नाही.<sup>2</sup>

**संविधानिक राष्ट्रवाद**

भारतीय संविधान प्रणीत भारतीय संविधानिक राष्ट्रवादाचे स्वरूप बहु आयामी आणि उद्वेगळाला भारतीय लोकांसह सर्वांना सामावून घेणारे होते. "बहुजन हिताय-बहुजन सुखाय" या विचार प्रणालीवर आधिष्ठान होते. राष्ट्रच्या राजकीय व आर्थिक सत्तेत सर्वांना समान हक्क, संधी व नैसर्गिक उत्सानुसार न्याय देणारा संविधानिक राष्ट्रवाद डॉ. बाबासाहेबांना अभिप्रेत होता. भारतीय संविधानिक राष्ट्रवाद संकल्पनेत राजकीय, सामाजिक व आर्थिक मतेदारीस जोगत्याही प्रकारचे स्थान नव्हते राष्ट्रच्या राजकीय व आर्थिक सत्तेत सर्वांना समान संधी मिळालीच पाहिजे असा त्यांनी आपल्या राष्ट्रवाद व संविधानिक राष्ट्रवाद संकल्पनेनुसार आग्रह घरलेला पहावयास मिळतो. स्वातंत्र्यपूर्व

काळातील भारताच्या राजकीय, आर्थिक व सामाजिक परिस्थितीचा डॉ. आंबेडकरांनी सखोल अभ्यास केला होता. त्यानुसार संविधानिक राष्ट्रवाद विकासीत आता असे म्हणता येईल. ती परिस्थिती सक्षम घेऊन त्यांनी असे म्हटले आहे की, "स्वराज्यात स्वर्ण हिंदू आर्थिक बलराणी होतील, आणि अस्पृश्य हे आर्थिक असहाय्य व लाचारा होतील. तसेच अस्पृश्योपुळे हिंदूना जे फायदे मिळाले होते ते सक्षम घेऊन स्वराज्यात अस्पृश्यता निवारण व होता वित्त नवीनदान मिळेल" यावरून आज दिसून येते की, स्वातंत्र्य पूर्व काळ किंवा स्वातंत्र्यानंतरचा संविधानिक राष्ट्रवादाचा काळ असेल हा 21व्या शतकातही अस्पृश्य माणत्या गेल्ल्या समूहाची परिस्थिती म्हणावी तरी सुधारलेली असे म्हणता येत नाही. त्यांना आजही जाती व्यवस्थेमुळे सन्मानजनक वागणूक मिळत नाही असे दिसून येते. म्हणून विकसनशिल भारतात मान्यता विकसित होण्यासाठी संविधानिक राष्ट्रवादाचा प्रभाव भारतीय समाजावर होणे गरजेचे वाटते. भारताला जरी स्वराज्य मिळाले तरी प्राप्त परिस्थितीत स्वराज्यात हिंदू अधिक सामर्थवान बनतील हे स्वराज्याच्या रूपाने मिळालेल्या राजकीय सत्तेचा केवळ आपली राजकीय व आर्थिक सत्तेची मतेदारी निर्माण करण्यासाठी उपयोग करतील. कारण हिंदूना स्वराज्यत्वाच्या रूपाने मिळालेल्या सत्तेचा उपयोग ते अस्पृशांसारख्या गरीब लोकांच्या उद्वेगासाठी करणार नाहीत, त्या राजकीय सत्तेचा माध्यमाद्वारे ते अस्पृशांना पुढे आणण्यासाठी प्रयत्न करतील नाहीतच उलट त्यांना मिळालेल्या राजकीय सत्तेचा उपयोग करून ते अस्पृशांना त्यांच्या मतेदारीच्या निर्मितीसाठी वापरून घेण्याचा प्रयत्न करतील. इतकेच नाही तर जातिव्यवस्थेवर आधिष्ठित समाजसंरचना अधिक प्रबल करणाऱ्या ते आपल्या राजकीय सत्तेचा माध्यमाद्वारे प्रयत्न करतील. कारण त्यातून स्वर्ण हिंदूंचा फायदा होतो. त्यामुळे स्वराज्यात असा प्रकारचा तयारी केल्या पाहिजेत की, ज्यामुळे अस्पृशांसारख्या गरीब लोकांना आपल्या विकाससाठी संधी मिळेल. त्याचबरोबर, राष्ट्राचे भविष्य उद्वेगळाल्या प्रतिक्रियेमध्ये स्वर्ण हिंदू व इतर समाजांच्या दोषग्रंथानेच अस्पृशांसाठी आपल्या प्रतिनिधीच्या माध्यमाद्वारे भाग घेता आता पाहिजे. त्यासाठी समाज संधीसाठी जेव्हा डॉ. बाबासाहेब आंबेडकर प्रयत्न करीत असत तेव्हा त्यांना राष्ट्रविरोधक अथवा राष्ट्रद्रोही ठरवून त्यांच्यावर अन्वयतय ठीका केला जात असे. या टीकेचे स्वरूप नेमाक कसे होते हे आपल्याला बाबासाहेबांच्या पुढे उल्लेख केलेल्या विचारांवरून सक्षम येईल. त्यावेळच्या परिस्थितीचा विचार करून भारतीय संविधानिक राष्ट्रवादाचे स्वरूप विशद करताना जे घट त्यांच्या खालील ग्रंथात दिसून येते ते असे "राज्य आणि अल्पसंख्यांक या आपल्या ग्रंथात असे म्हटले आहे की, "बहुसंख्यांकांचा अल्पसंख्यांकांवर बहुसंख्यांकांच्या इच्छेप्रमाणे राज्य करण्याचा नैसर्गिक अधिकार हे भारतीय राष्ट्रवादाचे तात्वीक अधिष्ठान होते. अल्पसंख्यांकांनी राज्य कारभारात भागीदारी मागणे म्हणजे जातीवाद आणि बहुसंख्यांकांनी सर्व राजकीय सत्तेची मतेदारी हातात ठेवणे म्हणजे राष्ट्रवाद" यालाच पुढे स्वातंत्र्यानंतर आपण संविधानिक राष्ट्रवाद म्हणाने वाचणे ठरू नये.

बरील विचारावरून आपल्याला असे निदर्शनास येते की, अस्पृशांसारख्या अल्पसंख्यांक लोकांनी जेव्हा जेव्हा राजकीय हक्कांची मागणी केली, तेव्हा तेव्हा त्यांच्यावर जातीवादाचे आरोप करण्यात आले. या उलट बहुसंख्यांकांनी राष्ट्रवादाच्या नावाने आपल्या राजकीय सत्तेची मतेदारी निर्माण केली. डॉ. बाबासाहेबांना असे वाटे की, प्रस्थापित स्वर्ण हिंदूंच्या राष्ट्रवादा विषयक या कल्पनात बदल झाला पाहिजे. याने अभिप्रेत असलेल्या भारतीय राष्ट्रवादात स्वर्ण प्रस्थापीत हिंदू बरोबरच अस्पृशांसारख्या गरीब लोकांनाही



राजकीय संसदेत व राज्य कार्यालयात त्यांचा एक म्हणून सामावून घेतले पाहिजे. डॉ. बाबासाहेब आंबेडकरांचे राष्ट्रवाद विषयक विचार मूल्यांचे संविधानिक राष्ट्रवाद समजावून घेताना आपण हे लक्षात घेतले पाहिजे, एका बाजूने ते ब्रिटीश सरकारने भारतीयोपनिवेशातील जास्त राजकीय घटा व अधिकार दिले पाहिजेत, अर्थात त्यांच्याने भारताला स्वतंत्र मिळाले असे पाहणे आपले विचार व्यक्त करतात तर दुसऱ्या बाजूने, ब्रिटीश सरकारने जे राजकीय अधिकार भारतीयोपनिवेशात दिले आहेत त्या राजकीय अधिकाराला व संसदेत असुरत्यासारखा गरीब लोकांनाही वाटा मिळाला पाहिजे, त्या राजकीय संसदेचा स्वरूप केवळ गरीब जातींना व प्रस्थापित लोकांना व मिळता, इतरांना त्या संसदेतून मिळाला पाहिजे असे डॉ. बाबासाहेब आंबेडकरांच्या वाटात आते. संविधानिक राष्ट्रवादाचा प्रकाशनांतरित प्रभाव राजकीय सुधारणेपेक्षा सामाजिक सुधारणा कसा अधिक महत्त्वाच्या आहेत अथवा सामाजिक सुधारणांचा राजकीय सुधारणांवर कसा प्रभाव होत असतो हे स्पष्ट करण्याच्या उद्देशाने डॉ. बाबासाहेब आंबेडकरांनी पत्रित लेखांतले (Articles) यांनी 1862 मध्ये एक केल्याचा विचाराला आधार घेतला आहे. त्यासाठी हा कार्टू यासोचा एक महत्त्वाची होता, त्याने असे म्हटले आहे की, "घटनात्मक पत्र प्रथमतः सत्तासिध्दिकते पत्र म्हणून ते सत्ता विषयक पत्र प्रथमतः, देशाच्या प्रायश्चातीत राजघटनेने अस्तित्त्व त्या देशातील प्रत्यक्षातील शक्तिघटनेवर अवलंबून असते. त्यामुळे राजकीय घटनांना महत्त्व आणि निश्चिंतता केवळ त्या घटनाघटनेमध्ये त्या त्या देशातील समाजाच्या सत्ता विषयक घटनेने प्रतिबिंब घडते असेच अर्थ प्राप्त होत असते." त्यासाठी यांनी असे निर्दोष असल्याचा प्रभाव केला आहे की, सत्ताघटना सामाजिक परिस्थितीची कल्पितशी आसता समाजामध्ये जे विचारप्रवाह असतात त्या विचारप्रवाहातून प्रभाव पडत असतो. याचा अर्थ असा होतो की सामाजिक परिस्थितीचा राजकीय व प्रशासकीय विचार प्रवाहाला प्रभाव पडत असतो. डॉ. प्रभाव संविधानसभेच्या रूपाने आपल्याला पहिल्याच मिळते. डॉ. बाबासाहेब आंबेडकरांनी या लेखातल्या मताचा आधार घेऊन सामाजिक परिस्थितीचा राजकीय परिस्थितीवर अजसा विचार प्रवाहावर कसा प्रभाव पडत असतो हे स्पष्ट केले आहे. त्यामुळेच सामाजिक सुधारणांचा प्राधान्य देण्याची गरज त्यांनी स्पष्ट केली आहे प्रथम विविध प्रकारची सामाजिक परिस्थिती निर्माण होत असते, समाजातील लोकांच्या आकांक्षा निर्माण होत असतात, त्यांच्या अधिकारांना प्रत्यक्षातील रूप देण्यासाठी राजघटना मंजूर केल्या जातात, याचाच अर्थ असा होतो की, प्रथम सामाजिक सुधारणांना गती प्राप्त होत असते, त्या सामाजिक सुधारणांचे हेतू साध्य करण्यासाठी राजघटनेच्या रूपाने राजकीय सुधारणा प्रत्यक्षात आकार घेत असतात असे डॉ. बाबासाहेब आंबेडकरांना वाटते.

डॉ. बाबासाहेब आंबेडकरांच्या तत्त्वज्ञानाचा भारतीय संविधानावर आणि संविधानाचा भारतीय प्रशासनावर पडलेल्या प्रभावाचा अभ्यास या प्रस्तुत शोध निबंधात करणारा आता आहे. म्हणून त्याची सद्यस्थितीत उपयुक्तता वाढत आसलेली दिसून येते. संसदीय लोकशाही शासन पध्दती, संविधानाच्या पहिल्या कलमात नमूद करण्यात आलेला 'सुनिश्चन' हा शब्द भारतातील जागतिक विविध स्वरूपाने संविधानातील संशोधन पध्दती, संघराज्य, राष्ट्रपतीचे स्थान इ. संबंधी संविधान सभेत घेण्यात आलेल्या आक्षेपांना उत्तरे देताना राजकीय, प्रशासकीय, सामाजिक, आर्थिक, धार्मिक कलाचार इ. तत्त्वज्ञान घाटले आहे. डॉ. बाबासाहेब आंबेडकरांनी मांडलेल्या वा तत्त्वज्ञानाचा भारतीय संविधानावर आणि संविधानाचा भारतीय प्रशासनावर प्रभाव पडला यालाच आपण संविधानिक राष्ट्रवाद म्हणणे बरेच ठरू नये, भारतीय संविधान म्हणजे एक भारतीय प्रशासन

वास्तविकताचा एकूण प्रशासकीय कायदा आपणास म्हणता येता. जे निर्मितीसाठी डॉ. बाबासाहेब आंबेडकर यांनी 2 वर्षे 11 महिने 18 दिवस सतत काम करून संविधानाची निर्मिती केली एवढ्या मोठ्या खंडप्राय देशाच्या सुख व सज्जोप अभ्यास करून सर्वत्र विषयावर मांडणी केली आहे. म्हणून आपणास भारतीय प्रशासनावर संविधानिक राष्ट्रवादाचा मोठ्या प्रमाणात प्रभाव असल्याचे दिसून येते.

डॉ. बाबासाहेब आंबेडकरांनी संविधान निर्माण करताना संपूर्ण विवेकापुंजाला लक्षात घेऊन अनेक देशांच्या संविधानाचा अभ्यास करून महत्त्वाच्या असा महत्त्वाचा समावेश आपल्या संविधानामध्ये केला आहे. या संविधानामुळे भारतीय समाजातील अस्तीत्वात अस्तीत्वात स्थान देऊन त्यांना जीवन जगण्याचा अधिकार या घटनेमुळे मिळाले विशेषतः मूलभूत हक्कांमधील कलम 32 घटनात्मक उपाय योजनेचा हक्क यामुळे व्यक्तीला समाजात मुक्त धार घेण्याचा अधिकार मिळाला. त्याच बरोबर समाजातील गरीब व शोषित वर्गातील ही कमी वर्गासाठी या संविधानाच्या माध्यमातून प्रथम केले गेले, परंतु आजच जागतिकीकरणाला सामोरा येताना सगळे अधिकार धोरण आपले गेले, त्यांच्यामध्येच गरीब गरीब होत आहे आणि शोषित शोषित होत आहेत. त्यामुळे संविधानातील तत्त्व बाजूत पाडल्या दिसून येतात. म्हणून आज आपण डॉ. बाबासाहेब आंबेडकरांच्या या सर्व विचाराला निर्माण झालेल्या संविधानाची प्रथम, प्राथमिक व नंतराचे सर्व आपल्याकडे करून भारत देशाला महत्त्वाचा बनविले. त्यामुळे आहे संविधानातील कलाचार व राजकीय मुल्यांनुसार या देशातील लोकशाही, राजकीय व्यवस्था व जवळचे आपली संविधानिक सभ्यता व राष्ट्रवाद वेगवेगळे का या देशाचा महत्त्वाचा होण्याचा मार्ग निश्चित सुकर होईल असा आशावादी बाळासाहेब निघतो. म्हणून संविधानातील सामाजिक न्यायाने मूल्य अर्थसमाजिक व अनुसूचित जाती त्याच बरोबर एकंदर मानव समाजाच्या दृष्टीने संविधान व प्राथमिक प्रशासन अन्वयानुसार सत्ता प्रस्थापना करताना दिसून येत असताने आढळते. यामुळे वेगवेगळे काळात संविधानिक राष्ट्रवादामुळे देशात असंतोष व हलकासात नावेत असे दिसून येते. या प्रसंगी संविधानसभेत डॉ. बाबासाहेब आंबेडकर म्हणतात ते म्हणजे अगदी योग्य वाटते, "आपला देश विचारांनी पुढात आहे. देशाची सामाजिक संरचना पारंपारिक आहे. असा राष्ट्रवादी वा तत्त्वांचा वाकारवादी व्यक्ती सोपूनही सापडणार नाही. म्हणून या राज्याचा पुनरुच्चार म्हणजे राष्ट्र पदवीत पाडित्याचा प्रकार होय; कारण ही सत्ते आमच्या विचारांचे पवित्र अधिपत म्हणून स्थापित झाली आहेत, म्हणूनच त्यांना असा पुन्हा आमच्या तत्त्वज्ञानासाठीचा भाग म्हणून घोषित करणे अनावश्यक आणि अप्रस्तुत आहे. या प्रस्तावात मला काही वरिधा बाणावतात मला असे वाटते की, या प्रस्तावात जरी काही अधिकारांची घोषणा करण्यात आली असली तरी, त्यांच्या सुरक्षिततेच्या उपाययोजनांविषय अधिकारांना काहीही मोल नसते कारण लोकांच्या अधिकारांचे इन होत हेव्हा या प्रायश्चातीच्या जाणावरच लोक त्यामिळून राह माणू शकतात, मला या प्रस्तावात असा तत्त्वज्ञानाचा अभाव जाणवतो, एवढेच नव्हे तर मानवाचे बीबीत वित्त आणि स्वतंत्र्याचे आपहरण कायद्याच्या प्रक्रियेविषयक कसा वेगार नाही, यास्तव सर्व सामान्य उपाय योजनेसाठी या प्रस्तावात उल्लेख नाही. या मूलभूत अधिकारांना कायदा आणि नीतिज्ञानांच्या स्वाधीन करण्यात आले आहे आणि कायदा म्हणजे काय? नीतिज्ञान म्हणजे काय? तर त्या संपूर्ण प्रशासन ठरविले तो कायदा, प्रशासन ठरविले ती नीतिज्ञान आणि ही मात्र हाकालीन प्रशासनाच्या हाकालीन करण्यात आली तर एक प्रशासन एक समर्थी या संदर्भात एक घाबरणारे मान्य करून तर दुसरे

प्रशासन दुसऱ्या समयी दुसरी धारणा मान्य करणार असेल तर या मुलभूत २) अधिकारासंबंधी निश्चित काय स्थिती होईल हे आपणस सांगता येणार नाही काही प्रावधाने आर्थिक, सामाजिक, प्रशासकीय, व राजकीय न्याया विषयी ३) आहेत. राष्ट्रचे भवितव्य निर्धारित करताना लोकांची प्रतिष्ठा, नेत्यांची प्रतिष्ठा, पक्षाची प्रतिष्ठा या बाबींना कोणतेही मुल्य नसते. देशाच्या भवितव्याचा विचार हा सर्वोपरी असतो. म्हणून संविधानिक राष्ट्रवादाचा प्रशासनावरील प्रभाव पोंडतांना संविधान सभेत हे मत मला महत्वपूर्ण वाटते ४)

**सारांश**

संविधानिक राष्ट्रवादाचा प्रशासनावरील प्रभाव पोंडतांना स्वातंत्र्यपूर्व काळातील डॉ. बाबासाहेब आंबेडकर यांचे राष्ट्रवाद विषयक विचार पाहणे १) गरजेचे होते. त्या राष्ट्रवादात समता, स्वातंत्र्य, बंधुत्व व न्याय, एकतामत्ता व आत्मश्रद्धा या बाबी बरोबरच माणूस हा केंद्रीभूत मानला जातो. स्वातंत्र्यानंतर २) जानेवारी १९५० रोजी संविधान ओपल सुरू झाला संविधान मुल्य जी मानव केंद्रीत कल्याणकारी आहेत. त्यालाच आपण संविधानिक राष्ट्रवाद म्हणजे मान्य ३) उरणार नाही म्हणून या भारतातील सर्व कल्याणकारी भारतीयानी संविधानिक राष्ट्रवाद जागृत करणे गरजेचे आहे. नामधरस दिवलेने मुलभूत अधिकारा, मुलभूत कर्तव्य, मार्गदर्शक तत्वे इ. मानवतेच्या दृष्टिने पाहतांनी वेगळी पाहिलेले संविधानिक राष्ट्रवाद देशाच्या सर्व नातकात जोपासला तर भारत देश सत्तासत्ते कडे निश्चित नाटयान करेल.

**शिफारशी**

संविधानिक राष्ट्रवादाचा प्रचार-प्रसार करणे गरजेचे आहे.मानवतेच्या दृष्टीने संविधान मुल्य शिवाय व्यवस्थेतील सर्व स्तरात अभ्यास-ऊर्मात असणे गरजेचे आहे.

भारत साक्षरता मिशनच्या धर्तीवर संविधान साक्षरता मिशन निर्माण करून संविधानिक राष्ट्रवाद जोपासला जाणे गरजेचे आहे.

सर्व भारतीयान मध्ये संविधानिक राष्ट्रवादाचा प्रसार होण्यासाठी विविध उपक्रम हाती घेणे गरजेचे आहे.

देशाच्या संसदेने व राज्याच्या कायदेमंडळाने, शासनाच्या विविध पदाधिकार्यांना आपल्या कार्यात संविधानिक राष्ट्रवाद शिकवला जावे व जोपासण्याचे सक्तीने गरजेचे वेळे घ्यावे.

**संदर्भसुची**

मुकादम जाधव, भारतीय व्यवस्थेचा आनुवंशिक, सुनिक प्रकाशन, पुणे, प्र.आ. जानेवारी २०११, प्र.क्र. १६, १८, २५, ६५, ७९, ९७.  
आत. डी. सांगळे, लेख- संविधान आत्मश्रद्धावर्णातच राष्ट्राने दित, टै. सभार २१, ऑगस्ट २०१५, प्र.क्र.३.  
प्र.एस. पी. कदम, स्वातंत्र्यपूर्व काळातील डॉ. बाबासाहेब आंबेडकरांचे राष्ट्रवादी विचार, बहुजन साहित्यघार, पुणे, प्र.आ. ३१ जानेवारी २०१२, प्र.क्र. २५, २६, २७, ४१०, ४११.  
डॉ. रवि एस. सरोदे, डॉ. तंगलबाळ, सुनपुस्तक डॉ. नाथसाहेब आंबेडकर, शिवानी प्रकाशन, नरिंद, १४ एप्रिल २०१४, प्र.क्र. २०९-२६४  
५) प्र. देविशम पोडेकर, संविधान सभा दिवेदस, तिकाय -१, राईट पब्लिकस पब्लोकेशन ऑफ इन्सुमेशन, प्रा. लि. रायपुर, २०१३, प्र.क्र. १३५, १३६, १४०

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प्रस्तावना

कोणत्याही देशाचे संविधान हे त्या देशाचा मुलभूत कायदा असतो, असे मानले जाते. ज्या कालखंडात ज्या देशात, ज्या समाजासाठी हे कायदे तयार करण्यात येतात. त्या संघर्ष कामगतीत त्या देशाचा इतिहास, समाजव्यवस्था, अर्थव्यवस्था व संस्कृती इत्यादींचे संदर्भ असतात. मुलभूत कायदाही त्याच अर्थाने असतो. जर आपण जनता सार्वभौम मान्यता असू तर त्या मुलभूत कायद्याला जनतेची मान्यता मिळविण्याच्या दृष्टीने असे संदर्भ असणे अपेक्षित असते. धामुळेच तर देशोदेशींच्या राज्यघटनेत आपल्याला विविधत्व आढळते. याही मुलभूत स्वरूपाचे फरक आढळतात. या दृष्टीने भारतीय संविधान या देशाच्या ऐतिहासिक पार्श्वभूमीवर तपासल्याशिवाय या राज्य घटनेला भारतीय इतिहासाचे संस्कृतिचे असे कोणते संदर्भ आहेत. याची कल्पना येणार नाही. १५ ऑगस्ट १९४७ ला जरी स्वातंत्र्य मिळाले असले. तरी देशाचा राज्यकारभार १९३५ च्या सर्व्हेन्ट ऑफ इंडिया या कायदानुसार २६ जानेवारी, १९५० पर्यंत चालत होता. कोणत्याही देशाच्या संविधानकाराला आपल्या देशाची मुद्रा, (मानचिन्ह व राष्ट्रीय प्रतिक) राष्ट्रध्वजा घटनेत अंतर्भाव करताना त्या त्या देशाला लाभलेल्या महान समृद्धी व संस्कृतीपूर्ण विचारांचा आधार घ्यावा लागतो. भारतीय संविधानाच्या प्रस्ताविकातून ते त्याच्यातील सर्व अनुच्छेदांवर पुढे धम्मचा प्रभाव जाणवतो.

स्वातंत्र्य प्राप्तीनंतर देशातील नागरिकांचा सामाजिक विकास घडवून आणणे प्रशासनाला शक्य व्हावे यासाठी कल्याणकारांनी राज्य संकल्पनेचा स्वीकार करण्यात आला. कल्याणकारांनी राज्यात व्यक्तींच्या जन्मापासून त्यांच्या मृत्युपर्यंत त्यांच्या सामाजिक विकासाची जबाबदारी राज्यावर पुरविले. प्रशासनालाही जबाबदारी पार पाडता याची म्हणून भारतीय संविधानाने आपल्या राज्य घटनेवरून राज्यनीतीच्या मार्गदर्शक तत्वांचा स्वीकार केला. भारतीय संविधानातील चौथ्या भागात कलम-३६ ते ५१ अंतर्गत या तत्वांचा समावेश केला आहे. फेडरेशन आणि घटक राज्य शासनांनी आपले कायदे करताना, कोणते ठरविताना राज्य नीतीच्या मार्गदर्शक तत्वांचा अवलंब करावा या त्यानुसार आपला राज्यकारभार चालवावा म्हणून नागरिकांचा आर्थिक, सामाजिक, शैक्षणिक, सांस्कृतिक व राजकीय विकास घडवून येईल. श्वसन व्यवस्थेने मार्गदर्शक तत्वांचा अनुसृष्टन तयार केलेल्या ध्येय धोरणांची व विकास कार्यक्रमांची अंमलबन्धवर्णी करण्याची जबाबदारी भारतीय प्रशासनवरच आहे.

२६ जानेवारी १९५० रोजी भारत लोकशाही सत्तारूढक देदा होणार याच अर्थ असा की लोकांचे, लोकांनी आणि लोकांसाठी चालविलेले राज्य, भारताला त्या दिवसा पासून मिळाले. संशोधकांच्या मनात पुर्वीचाच विचार येतो. भारताच्या लोकशाही प्रणैत घटनेचे काय होणार? भारत ही घटना शाबूत ठेविल की पुन्हा नष्ट करील? हा दुसरा विचार संशोधकांच्या मनात उभा राहतो. व पहिल्या विचारा अमाणेच हा ही विचार संशोधकांच्या मनाला चिंतनांत करित आहे.

लोकशाही हे व्यवस्था काय आहे हे भारताला माहित नव्हते असे नाही. असा एक काळ होता की त्यावेळी भारतात पुन्हा लोकसत्ताक राज्ये होती. ज्या प्रदेशात राजेशाही होती तेथे ही राजे लोक लोकमताने नेमले जात असत, किंवा त्यांच्या अधिकारावर नियंत्रण घातलेले असे. बुद्धिभ्रंशसंघाचा ज्यांनी अभ्यास केलेला आहे. त्यांना हेच विद्वान येईल की हे संघ म्हणजे मुर्तिमंत लोकसभा होत्या. कारण आजकालच्या लोकशाहीच्या ज्या नियमवध्दाची

... त्या सत्य बाबो मुद्द मिश्रसंपाच्या घेतणीत पाळण्यात येत असत. मिश्रने कोठे बसले, ताव फसे ...

या निविधानामुळे स्वातंत्र्यानंतरच्या भारताचे भविष्य ठरणार होते. त्या दृष्टिने डॉ.बाबासाहेब आंबेडकरांची ...

अर्थात बापाळीनागे त्यांचा उद्देश अमुक एका विशिष्ट धर्माच्या वा जातीच्या समाजाच्या संजोविसपयी नव्हता, ...

या विचारांचा प्रभाव अल्पवयाला भारताच्या प्रशासनावर दिसून येतो. आजचे प्रशासन हे घटनेतील सर्व ...

संशोधन पध्दती

प्रस्तुत संशोधनासाठी विविध संशोधन पध्दतींचा वापर करण्यात आला आहे. प्रामुख्याने ऐतिहासिक ...

गृहीतके

संविधानद्वारे भारतीय प्रशासनाकडून होणाऱ्या प्रशासकीय कार्येभर्तेत याद व प्रभावी अर्पलवनावणी आहे. ...

संशोधनाची अदिष्टने :-

- १) भारतीय संविधानाचे आधुनिक स्रळ्यातील प्रौगदान अभ्यासणे.
- २) भारतीय प्रशासनाचे लोकशाही रान्य निर्माण झाले काचे याचा अभ्यास करणे.
- ३) भारतीय संविधानाच्या अंमलापासून प्रशासनात रुनलेली मूख्य बांधणे.

संशोधन लोकशाही

रानसलेला साम घालून तिला घडविण्यासाठी लोकशाहीचा उद्देश झाला. सेलाम रामेताहीला येतण ...

शासनाच्या राज्यघटनेला लोकशाही म्हणतात. ती पुढे म्हणतात की, सामाजिक व आर्थिक परिवर्तनांविषयक सर्वोच्च लोकशाही असून नसल्यासारखीच असते.

ही बाबतही अविडकर लोकशाहीचे चार आधार मानतात. १) व्यक्ती स्वतःच एक राज्य आहे. २) व्यक्तीचे काही अधिकार अधिकार आहेत. त्वचे संरक्षण सरकारने केले पाहिजे. ३) फौजदारी व्यक्तीला संघी प्रत्येक करणाऱ्या अविडकर पवित्र ठेवू नये. ४) राज्य अधिकृत व्यक्तीला इतर व्यक्तीला शासन करणाऱ्या फौजदारी अधिकार देणार नाही. असे दिसून येते की, अनेकांना शासनाच्या तपशीलवेसाठी संवैधानिक अधिकारत्यापणी खोडवावे लागले. जो लोकसेवक आहेत. त्यांचे विचारही, अर्थाने भौतिक अधिकार म्हणतात, त्यांचे त्वचेचा काय फायदा आहे? एखाद्या अर्थाने सामाजिक निचे फौजदारी भाग्य आहे. मंगुलीची खेळ निरवित नाही, युनिव्हर्समध्ये सामील व्हायचे सुट नाही अशी एखादी नोकरी एखादे आणि दुसरीकडे आपल्या भौतिक अधिकारांचा वापर, पार्येची एकाची निवड करायची असल्यास ती फक्त निवडिले? अशा प्रकारे वेळार लोकशाही शासनाच्या संघीयता आणि निवडिले राहण्यासाठी भौतिक अधिकारांना आर्थिकदृष्टीने तिला नंतरे घ्यावे लागते.

भारतीय संविधान हे फेब्रुवारी २६ १९५० मध्ये पारित झाले. त्याचे अर्थाने, सामाजिक, राजकीय आणि सांस्कृतिक आणि प्रशासकीय विचारांचे मूलस्रोत आहे. जगातल्या सगळ्यातच आणि लोकशाहीच्या दिसाने मेणारे होकार्य आहे. एकूणच भारताला परिवर्तनाच्या दिसाने नेण्यासाठी भारतीय संविधान हे संपूर्ण विचारांचे न्यायलय आहे. १९५० च्या फौजदारी देशा सोबत असण्यांच्या हक्कासाठी आपली विद्वता पत्तास लावली लागली. त्यानंतर त्यांचे भारताच्या संविधानासाठी संविधान समेत प्रवेश मिळविण्या पासून तर संविधान राष्ट्रता आणि करणार पक्ष संवैधानिक संघर्ष करायला लागला. ही बाबताही अविडकरांच्या मनातील संवैधानिक म्हणजे शेंडफुड फरस्ट फेडरेशनचे मेमोरेडम होते.

भारतीय संविधान समजून घ्यायचे असेल तर ही बाबताही अविडकरांचे वेळोवेळी मांडलेले विचार लक्षात घ्यावे लागतील.

भारतीय संविधानातील राजकीय, प्रशासकीय तत्वांचा :

भारतीय संविधानाचे सारगर्भित आधारे त्वचे तत्वज्ञान आत्मारा समजून घेता येते. त्या संदर्भाचे मुद्दे पुढील प्रमाणे सांगता येतील.

१. जनतेच्या सामर्थ्याचे पूर्ण विचार
२. लोकशाही प्रजासत्ताकाचा स्वीकार.
३. धर्मनिरपेक्ष राज्य
४. समाजवादी तत्त्व प्रणालीचा स्वीकार
५. स्वतंत्र, समता, संपुष्टाव व न्याय.
६. स्वतंत्र घटकव्यवस्था प्रणाली
७. सर्वोच्च न्यायालयाच्या विचारांचा प्रभाव
८. मुले, शाहू, अविडकर खेळ विचारांचा प्रभाव.
९. विविध राज्य घटनांचा प्रभाव

भारताच्या संविधानाचे सारगर्भित निरनिराळ्या देशांच्या संविधानांचा प्रभाव पडला आहे. आपल्या संविधानकारांनी इतर देशांच्या राज्यघटनेतील फारसे शोभनीय तत्वांचे अनुकरण केले आहे. विहित राज्यघटनेच्या उदाहरणावरून आपण भारतीय पद्धतीचा स्वीकार केला आहे. सर्वोच्च न्यायालयाला न्यायालयीन पुनर्विलोकनाचा अधिकार देण्याची तरतूद ही अमेरिकेच्या घटनेची प्रेरणा आहे. राज्य घटनेतील मार्गदर्शक तत्वांचे कल्पना आपण

अंगलक्षणात्मक ठपकाली आहे. अर्थात भारतीय घटनाकारांनी भारताकडून फेब्रुवारी २०२० मधील घटना देशाची परिस्थिती व भारता या विषय फेब्रुवारी २०२० मध्ये आयतन हे घडनेत अंतर्गत केला. प्रत्येक राज्यघटनेला तात्त्विक पायाभूत करी सामाजिक, राजकीय, आर्थिक, वैयक्तिक व प्रशासकीय सार्यांचे संदर्भ घेऊन आता. शिवाय एकत्रीतपणे संविधानाचे तात्त्विक सिद्धांत प्रणाली प्रणाली घेतले.

**सारांश :-**

आज भारतात संविधान लागू होऊन ७१ वर्षे पूर्ण झालेली आहेत. तेव्हा भारतीय अंगलक्षणात्मक ही सही प्रमाणात घेतल्यामुळे सामाजिक कल्याणाच्या योजना मध्ये योजनेकर प्रगती झालेली दिसून येते. संविधानातील सर्व मूल्यवर्ती, सार्यांची खरोखर जर अंगलक्षणात्मक झाली तर हा देशातील सर्व मान्य समाज हा प्रगतीपाथवर असेल. यासाठी संविधानातील विचार मूल्य आणि मारदर्शकतेचे सत्य आपल्याला जनजागृती करून जनतेपैकी पोहचवावे लागेल.

त्याच बरोबर या सर्व गोष्टी करण्यासाठी नव्य तरतुदी घेतल्या आहेत. त्यातील एक तरतूद म्हणजे घटना दुरुस्ती या तात्त्विकानुसार कालापरतचे बदलत्या परिस्थितीनुसार आपणास मूळ संरचनेला धक्का न लावता दुरुस्ती करून प्रत्येक क्षेत्रातील विकासासाठी हतभार लागेल. त्यासाठी संविधानाच्या मार्गदर्शक तत्त्वे, मूलभूत अधिकार व कर्तव्य या चौकटीनुसार प्रत्येक घटकसंघिका शक्यतासक अर्थ वाढून प्रशासनाचे प्रामाणिक अंगलक्षणात्मक करणे गरजेचे आहे. त्याच बरोबर मुख्य मूल्य समाज, स्वातंत्र्य, वैयक्तिक व न्याय यांची जनजागृती करून शोषट्या माणसापैकी ही तात्त्विक प्रचार प्रसार करून पोहचवावी लागतील तेव्हाच संविधान सफल झाल्याचे म्हणावे लागेल. भारतीय प्रशासनाची कार्यक्षमता सुधारण्यासाठी संविधानाची फाटकोरपणे अंगलक्षणात्मक होणे गरजेचे आहे. संविधानातील सर्व तरतुदीनुसार सर्व मोज्यांचे स्वरूप सर्व भारतातील जनजागृती प्रामाणिक प्रशासकांचे फर्क व त्यांच्याकडे नेतृत्व देणे आवश्यक आहे. भारतीय प्रशासनातील सुधारणेसाठी संविधानातील कर्तव्य, ठपकाली व योग्य तरतुदीची अंगलक्षणात्मक करण्याचे आवश्यकता आहे. सर्व विभागातील अधिकारी व कर्मचारी यांनी योग्य अंगलक्षणात्मक घेतल्यास प्रशासनात निरिच्छता सुधारणा झाल्यासक्याय राहणार नाही.

**शिकारणी :**

१. भारतीय संविधानातील मार्गदर्शक तत्त्वांच्या चौकटीनुसार प्रशासनाचे प्रामाणिक अंगलक्षणात्मक करणे ससेध संविधानिक राष्ट्रवाद सृजनाधियाया प्रयत्न सर्व नागरिकांनी करणे गरजेचे आहे.
२. राज्यकर्ते व प्रशासकीय अधिकारी यांनी पारदर्शक, प्रामाणिक नियोजन यथ्य, प्रष्टाचार मुक्त प्रशासन शोषट्या व्यक्तीपैकी प्रत्येक घटकसंघिका स्वतंत्र पोहचेल यासाठी संविधानानुसार गतिमान पारदर्शक व कार्यक्षम प्रशासनाची गरज आहे.
३. भारतीय प्रशासनाच्या सर्व विभागातील अधिकारी कार्यकारी यांची प्रामाणिकता आणि कार्यक्षमता सुधारण्यासाठी संविधानाची सत्ये जनजागृतीत हजवतूक करी होईल याला गती देणे.

**संदर्भ ग्रंथ सुची**

१. पाटील निजम, बुध्दकोलिन व आधुनिक लोकशाही गणराज्य, सम्यक टिजिन, मुंबई प्रथम आवृत्ती २०१९, पृ.क्र.४२.
२. ठपकाली, पृ.क्र.४३.
३. डॉ.वरे सतिश, भारतीय शासन, वैशाख प्रसिध्देशन, औरंगाबाद प्रथम आवृत्ती- २००७, पृ. क्र. २४,२५

3. धोसादे एकनाथजी, (बी.नाथ) अखिलेडकर समाजदर्शन, पुरुषभूमि प्रकाशन, नागपुर : प्रथम आवृत्ती, १४ ऑक्टोबर २०१२, पृ. क्र. १२१, १२२.
4. डारोस्त, पृ. क्र. १२८, २२९
5. कुवरे या.ना., डॉ.बाळासाहेब अखिलेडकर विचार मंचन, सुराया प्रकाशन, पुणे, दुतीम आवृत्ती, फेब्रुवारी-१९९८, पृ. क्र. १३२, १३३, १३८.
6. ब्रह्मचर धनराज (संपादक), डॉ.बाळासाहेब अखिलेडकर भाषणे व विचार; खंड-५ (संविधान) संक्षिप्त प्रकाशन, नागपुर, द्वितीम आवृत्ती, ६ डिसेंबर २०१९ पृ.५,
7. के.सागर, व ए.पी.पाटील, द्वितीम आवृत्ती-२००९, समग्र राज्यशास्त्र, के.सागर पब्लिकेशन, पुणे, पृ.क्र.६२६, ६२७



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## Index

1. Impact of Fruits And Vegetables In Covid-19 5  
Deepak Karan, Vishwa Nath and Ravi Karan
2. Impact Of Covid 19 Pandemic On Education: Benefits, Opportunities 9  
And Challenges Before Online Education In Rural Areas  
Dr.Korde Rajabhau Chagganrao
3. 'Effect of sugar mill effluent on water quality of Bore-well' 15  
Dr. A. V. Gaikwad
4. Administration of Green audit in Vasant Mahavidyalaya ,Kajj [M.S.] 17  
Hirve Babasaheb J.
5. Factors Responsible For School Dropout In Shirur (Kasar); Especially Girls 21  
Dr. Chetana Vishwanathrao Donglikar
6. Importance of Mahatma Gandhiji's Views on Sanitation 27  
Dr. Pandit Mahadeo Lawand
7. GST In India 30  
Dr. Pratap J. Phalphale Ananda Ramrao Sarange
8. साठोत्तरी हिंदी महिला कहानीकार और स्त्री विमर्श 33  
प्रा.डॉ. एकलारे चंद्रकांत नरसप्पा
9. मनरेगाच्या अंमलबजावणीत ग्रामसभेची भूमिका 36  
प्रा.सुनिल काशिराम राठोड , डॉ.व्ही.डी. गायकवाड
10. जॉन रॉल्सची न्यायाची संकल्पना 41  
डॉ. संजय मारोतीसव कोनाळे
11. मीरा कांत कृत 'श्रंत हाजीर हो' नाटक में स्त्री जीवन 45  
प्रा. डॉ. एमेकर एन.जी.
12. 'कोरोना काळातील व्यायाम' 47  
प्रा. डॉ. भास्कर माने
13. 'कोरोना काळातील कविता' 50  
प्रा. डॉ. गोविंद काले
14. आदिवासी जनजाति एक परिदृश्य 56  
डॉ. अमिता पाण्डेय
15. चौथीभित - रूपबंध आणि सांस्कृतिकता 64  
डॉ.सी.डी. कांबळे
16. अण्णामाळ साठे यांचे लोक संगीतातील योगदान 68  
प्रा. चंद्ररोखर हि. मेडोले
17. कश्मीर प्रश्न और डॉ.बाबासाहब अम्बेडकर 71  
डॉ.मा.ना.गायकवाड
18. राष्ट्रीय एकात्मतेसाठी संगीताची भूमिका 77  
प्रा. ज्ञानेश्वर बोपीलवार
19. "उच्च शिक्षा लेते समय अनुसूचितजाति के छात्रों को आनेवाली प्रवेशशुल्क की समस्या- 2020-21" 79  
डॉ. संदिप गौरख साळवे

# CURRENT GLOBAL REVIEWER

Issue XIX (25) , Vol. I  
Dec. 2020

Peer Reviewed  
SJIF Impact factor

ISSN : 2319 - 8648  
Impact Factor : 7.139

## Impact Of Covid 19 Pandemic On Education; Benefits, Opportunities And Challenges Before Online Education In Rural Areas

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### ABSTRACT:

*The global pandemic of corona virus has enormously smashed all the sectors of economy. At the same time for some professionals it has been easy to adopt work from home and continue business and office work as usual. But for education system the times have been challenging around the world which has changed the classroom learning patterns. However because of Covid-19 experts are induced to rethink about the standard mode of education. Digital education could be a operable solution to fill in the gap of classroom-education for a period of few months as it could minimize the threat of infection among the students until the schools and colleges resume. Mainly digital education has also brought forward its previous outlying issue in India to focus. In future, digital education will be an integrated part of mainstream education. Because of this there will be enabled inclusive education for students learning across diverse geographic conditions in India. E-learning will provide various opportunities for educators to come forward with personalized learning solutions for each student. But this situation has immerged with many pros and cons for students, teachers and parents which have to be addressed for overall development of students.*

**Key words:** Benefits of on online education, Forth coming opportunities in education, Covid 19 and education, Challenges of online education

### INTRODUCTION:

The world wide pandemic has forced the overall countries to temporarily close the educational institutions. In India this closer has impacted over 91% of the worlds' student population. In this disastrous time UNESCO has come forward to support countries in their efforts to alleviate sudden impact of school closures, especially in more endangered and underprivileged countries, to provide education to all through e-learning. As per the UNESCO report, over 290 million students across 22 countries will be resentfully affected by corona virus. Also the UNESCO reports regarding India states that approximately 32 crores students will be affected because of covid 19 from schools as well as colleges. (1, 2)As there are many obstacles in the sudden change in learning styles it has also opened the door to new opportunities.(3) In fact it is remarkable that the urgent demand for e- learning has been a contributing factor for providing more new educational resources to students in both urban and rural areas.

Because of pandemic the government has endorsed operating education in an online mode to stop the educational loss of students and avoid the disturbance in academic calendars. Fortunately technology and smart classrooms is transforming education in not only private schools also cautiously encroaching in government schools. Therefore it could be said that e-learning is now gradually transforming the education sector.(4) This positive transformation is seen in schools and colleges of urban as well as rural areas who are trying to adapt the technology eventually and are ready to transform the traditional education into a digitally-enhanced process.

# CURRENT GLOBAL REVIEWER

Issue XIX (25) , Vol. I  
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Though the online learning have numerous benefits still it has to cross many obstacles in its way of making whole education a digital phenomenon. Even today when we are talking about **Digital India**, Internet connectivity and electricity supply in rural areas is a big issue.(5)

E-learning has immersed with many trump cards, as physical boundaries are no barriers in digital learning for students, there are many learning experiences in digital learning than the traditional learning. Students learn in their enclosed comfort zone in a very low cost effective manner. (6) As Covid 19 pandemic has brought many new opportunities of digital transformation in education;

## ➤ FORTH COMING OPPORTUNITIES IN EDUCATION SECTOR:

Indian Education Ministry has introduced New Education Policy 2020 that highlights the growing need of online education in India.(7) In this Pandemic period education system has been challenged and at the same time gave birth to new opportunities in the world of online education. It has become necessary that we should be ready to accept alternate mode to our traditional education system;

### • Massive Open Online Course (MOOC):

MOOC courses are the online courses that is meant for immense engagement in education through open access via internet. (8) MOOCs provide interactive courses along with traditional course materials used, such as video lectures, readings, and problem sets. To motivate group discussions among students and teachers, forums or social media discussions along with immediate feedback to quick quizzes and assignments are used in MOOC courses. MOOCs are designed after along research in distance education.(9) They were first introduced in 2008.(10) and has now become a popular mode of learning (11,12,13)

### • Use of Remote Teaching/Learning:

Teaching / Learning through communication platforms like zoom meet, Google meet and Microsoft Teams has immersed as a use full platform for gaining education for students worldwide. Remote learning is beyond traditional classroom, there is no compulsion of physical presence of both the teacher and the student. Instructions to students are provided to students through technical tools like discussion boards, virtual classrooms, virtual assignments and video conferencing.(14) The best example is Google classroom which is becoming very useful mode of teaching and learning for both student and teacher in any tricky situation.

### • Developing Virtual Labs

Indian government has taken initiative in developing digital platforms like SWAYAM, SWAYAMPBHA and DIKSHA because of it virtual labs will be now developed in educational institutions for students to practice the theoretical knowledge and experiential learning experiences.

### • Accessibility of Courses in Different Regional languages

India is a miscellaneous language that varies with each state so it becomes necessary to provide education to students in their native language. Televisions, community radio and radio are best option for the task that will be used for telecasting and broadcasting educational programs for the students who could be able to access the digital media in their native regional language.

### • Creation of Digital Depository, Content Designing and Communication

For providing digital education to students it is necessary to create digital depository including Learning through Games & Simulations, Practical and elevated Reality. Construction of some playful learning tools like motivation games of Indian traditions, culture and art will be helpful for giving moral education. Developing a secure backup system to provide the dissemination of e-content to students is necessary.

# CURRENT GLOBAL REVIEWER

Issue XIX (25) , Vol. I  
Dec. 2020

Peer Reviewed  
SJIF Impact factor

ISSN : 2319 - 8648  
Impact Factor : 7.139

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- **Formation of Blended Learning Models**

In traditional learning the importance of direct face-to-face learning is inevitable and uncompromised. So while promoting digital education it is necessary to develop the curriculum in blended model while replacing the traditional modes of learning.

- **Constitution of Devoted Unit for Digital Education**

MHRD is basically working for development of human resources and improvement in education from primary to higher education in India. So it is requisite that it should form a unit that will look after the needs of digital education with the team of experts from the field of primary and higher education, education technology, e-governance, digital pedagogy, administration and Information Technology. (15)

- **Use of social media for online education:**

Social media is playing a vital role in digital education. Various education institutions are adapting these changes to develop teaching learning mechanism. They are anticipating on group resources such as Facebook, Instagram and Twitter for getting academic information and connecting to other learning groups by social media plugins. LMS is a best option for getting online tutorials through social network. (16)

➤ **KEY CHALLENGES FOR ONLINE EDUCATION IN INDIA**

There are some common challenges that were considered while preparing the new education policy. Some of them are provided below. Various challenges are also the inevitable part of it which has to be discussed to improve digital education system for future of students especially in rural areas.

- Computer literacy is the major problem. More than 30 % population is computer illiterate.
- In rural areas every one cannot afford computers, Laptops or Android Mobiles specially farmers and labors.
- In rural areas Internet Connectivity and continues power supply is a vast spread problem.
- There is deficiency of proper training of teachers for providing digital education to students one of the sudden. The most important of all is than it is not necessary that a good traditional teacher will be a good digital teacher.
- There are various limitations for conducting online examination in India so student online assessment is a big issue.
- Some subjects and courses like arts, drama, math and science could not be completely digitally taught because it restricts the practical knowledge.
- Many colleges and universities conduct certification courses with conventional learning; this concept is seen to be lost to some extent in E-learning.
- Students IQ level, Physical environment, mental state and physical status and activeness differ with each students for students under 17. Under such circumstances developing self concentration for e- learning is a matter of concern.
- Complete makeover of schools in rural areas as per the needs of Digital education still need more time.
- Unforeseen introduction of e-learning has confused all parents, teachers and students. Time and awareness regarding benefits of e-learning is needed.
- Because of sudden exposure there is lack of E-learning study material in regional language. Standardized E-Content and pedagogy has to be developed.

## CURRENT GLOBAL REVIEWER

Issue XIX (25) , Vol. I  
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- Because of E-Learning exposure of children to screen timing has been increased this is a major issue of concern for parents.
- In higher education experimental research has been negatively affected. Social face to face interview based researches is also affected because it could not be substituted.
- In rural areas because of lack of digital infrastructure in schools and homes dropout rate of students especially girls has been raised.
- Adolescent students are getting distracted by gaming apps, other social media stuff, are getting involved in mal practices and developing a non community sense in them.
- Mental health of children is severely affected. Anxiety, Frustration and Panic is being developed regarding acceptance of e-learning.

### ➤ BENEFITS OF ON ONLINE EDUCATION:

The term online education puts forth the idea of electronic learning. For e-learning computer and other similar devices are necessary. Online learning demands technology innovation and Internet access for providing educational material or sources, to students. This new form of education has immersed with various challenges but on the other side of coin there are benefits too:

- **Online education is time efficient and cost effective**

Online education is classroom free, education could be provided to students anywhere and anytime with ample study material and diverse knowledge. This saves money and time spent on travelling by students.

- **Confinement of Knowledge is the main outcome of E-learning.**

Blended learning approach and Gamification has made online education more effective and interactive for students and convenient for the teachers using both traditional and digital education. Because of it the education has become more productive, interesting and time efficient.

- **Perusing the Progress of course and student becomes much Easier**

Various educational institutions are implementing Learning Management System (LMS) for providing education in an effective manner in any situation. LMS is very useful in taking the follow up of student course progress in a more effective and easy way. Through LMS assessment of students' capabilities is effortless.

- **E-learning helps students for avoiding embarrassing situations**

Not all the students have the capacity of communicating their doubts or expressing their views or asking questions in classrooms. So these students feel shy and either stay quit or become a center of attraction in class. But because of online education this situation can be avoided and student gets enough space for self improvement.

- **Knowledge sharing is encouraged by online education**

There are number of online communities that share their acquired knowledge through online discussion forums that add value to learning by integrating scope for abundant collaboration and conversation. This can flourish the E-learning.

- **The target amount of student is unlimited**

In traditional learning there were two main obstacles i.e. time and place. That use to limit participation of students in education. But with e-learning educators have a wide access for students because distance is no more an obstacle in providing education.

## CURRENT GLOBAL REVIEWER

Issue XIX (25) , Vol. I  
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ISSN : 2319 - 8648  
Impact Factor : 7.139

- **Motivation to Personalized learning**

Each individual student have different needs for education, personalized learning fulfills these needs of students by providing vast range of courses. These courses are designed to meet the definite learning interests, expectations and preference.

- **CONCLUSION**

Covid-19 has put a stop on classroom learning sessions, and online learning has occupied its place to avoid the loss of students and academic calendar. Schools in both urban and rural areas are adapting online education system with or without infrastructure development. This has brought in front many affordable and low-bandwidth e-learning solutions with multi-lingual platform providing online learning conveniently in rural areas.

Government has come forward and adapted innovations in digital technology, this will make online education affordable and accessible. It's a fact that the pandemic has not only adversely affected the economy, but also affected the education sector in India. A year has passed and still no one is sure about when the situation will come to normal. The situation of education system is vulnerable as mass gathering could be dangerous for sake of health of students. Online classes are the substitute but with lots of opportunities and limitations

This situation may give birth to digital divide that will lead to discrimination. Student teacher interaction is a determining component of teaching and cannot be replaced by online classes. Research has been adversely affected because of the lockdown, and hence we all pray that the situation should return to normal for the betterment of education system.

- **REFERENCES:**

1. <https://en.unesco.org/covid19/educationresponse>
2. [https://www.indiatoday.in/cdn.ampproject.org/v/s/www.indiatoday.in/amp/education-today/featurephilia/story/covid-19-impact-digital-education-conventional-education-divd-1661185-2020-0330?usqp=mq331AQFKAGwASA%3D&js\\_v=0.1#aoh=15864254935324&referrer=https%3A%2F%2Fwww.google.com&tf=From%20%251%24s&share=https%3A%2F%2Fwww.indiatoday.in%2Feducation-today%2Ffeaturephilia%2Fstory%2F-covid-19-impact-digital-education-conventional-education-divd-1661185-2020-03-30](https://www.indiatoday.in/cdn.ampproject.org/v/s/www.indiatoday.in/amp/education-today/featurephilia/story/covid-19-impact-digital-education-conventional-education-divd-1661185-2020-0330?usqp=mq331AQFKAGwASA%3D&js_v=0.1#aoh=15864254935324&referrer=https%3A%2F%2Fwww.google.com&tf=From%20%251%24s&share=https%3A%2F%2Fwww.indiatoday.in%2Feducation-today%2Ffeaturephilia%2Fstory%2F-covid-19-impact-digital-education-conventional-education-divd-1661185-2020-03-30)
3. <https://www.socialbakers.com/blog/impact-of-coronavirus-on-education>
4. <https://www.indiatoday.in/education-today/featurephilia/story/covid-19-impact-4-major-challenges-faced-by-students-of-rural-india-1709294-2020-08-10>
5. <https://theexcelligent.com/2020/07/30/covid-19-pandemic-impact-and-strategies-for-the-education-sector/>
6. <https://government.economictimes.indiatimes.com/news/education/covid-19-pandemic-impact-and-strategies-for-education-sector-in-india/75173099>
7. <https://www.collegedekho.com/articles/benefits-and-challenges-online-education-in-india/>
8. Kaplan, Andreas M.; Haenlein, Michael (2016). "Higher education and the digital revolution: About MOOCs, SPOCs, social media, and the Cookie Monster". *Business Horizons*. **59** (4): 441–50. doi:10.1016/j.bushor.2016.03.008.
9. Masson, M (December 2014). "Benefits of TED Talks". *Canadian Family Physician*. **60** (12): 1080. PMC 4264800. PMID 25500595.
10. Siemens, G. (2013). Massive open online courses: Innovation in education. In McGreal, R., Kinuthia W., & Marshall S. (Eds), *Open educational resources:*

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---

- Innovation, research and practice (pp. 5–16). Vancouver: Commonwealth of Learning and Athabasca University.
11. Pappano, Laura (2 November 2012). "The Year of the MOOC". *The New York Times*. Retrieved 18 April 2014.
  12. Lewin, Tamar (20 February 2013). "Universities Abroad Join Partnerships on the Web". *The New York Times*. Retrieved 6 March 2013.
  13. Leontyev, Alexey; Baranov, Dmitry (12 November 2013). "Massive Open Online Courses in Chemistry: A Comparative Overview of Platforms and Features". *Journal of Chemical Education*. **90** (11): 1533–
  14. <https://www.albert.io/blog/what-is-remote-learning/>
  15. <https://www.collegedekho.com/articles/benefits-and-challenges-online-education-in-india/>
  16. <https://www.lcibs.co.uk/the-role-of-social-media-in-education/>
  17. <https://www.learnpick.in/blog/e-learning-in-india>
  18. <https://www.firstpost.com/india/online-education-has-a-mountain-of-problems-in-india-but-it-can-become>

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## Buddhist Cultural Studies and Literature in Modern India

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### Abstract

Buddhism is a great philosophy and it is the third-largest religion in the world. Approximately 600 million followers and 8% of the global population are known as Buddhists. Buddhist ideology and teaching are based on originality it is traditions, beliefs, and spirituality totally based on Buddha's teaching. It originated in ancient India as a Sarmana tradition sometime between the 6th and 4th centuries BCE, spreading through much of Asia. Buddhism has two main branches that are generally recognized. Buddhism is a non-theistic religion that is not believed in God. It is just believing in reality and originality and also consider moral disciple. It is originated in India in the 5th and 6 centuries BCE. It was founded by the sage Siddhartha Gautama who, according to legend, had been a Hindu prince before abandoning his position and wealth to become a spiritual ascetic and, finally, an enlightened being who taught others the means by which they could escape samara, the cycle of suffering, rebirth, and death. Gautama Buddha has developed Buddhism and he taught Buddhism to all over the world. It was very much flourished in the period of king Ashoka. Buddhism was thought in many schools during the period of Budhha. It was only one religion that could become the world's no one religion. It is a very great religion in the world it is not a killer but a savior. It remained a relatively minor school until the reign of Ashoka the Great (268-232 BCE) of the Mauryan Empire (322-185 BCE) who embraced and spread the belief, not only throughout India, but through Southern, Eastern, and Central Asia.



Keywords: Buddhism, Culture, Literature, Spiritual, beliefs.

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## **Buddhism**

Buddhism was founded by Siddhartha Gautama 2500 years ago in India. There are 470 million followers are considered approximately. Buddhism is one of the major and chief religions in the world. Its practices have historically been most prominent in east and south East Asia. But its influence is growing in the west. A lot of Buddhist Philosophies and concepts are lapsed due to the other faiths. As we know the Buddhism was founded by Siddhartha Gautama who was known as Buddha. He was surviving in the 5<sup>th</sup> century B.C. He was born into a wealthy and healthy family in present-day it is in Nepal. He had left his lavish life to search for the sorrow in the world. Although he had an easy life, Gautama was moved by suffering in the world. He had decided to give up his generous way of life and continue scarcity. When this did not fulfill him, he encouraged the thought of the life "Middle Way," which means accessible between two boundaries. Thus he required a life lacking communal extravagance but also without deficiency. After many years of searching he has got enlightenment while meditating under the Bodhi tree he spent his life under the Bodhi tree to teach his pupils the way of spiritual life.

## **Buddhism Beliefs**

As Buddhists, we have experience and some key Buddhism beliefs include:

- Followers of Buddhism don't acknowledge a supreme god or deity. They instead focus on achieving enlighten a state of inner peace and wisdom.
- The religion's founder, Buddha is considered an extraordinary man, but not a God the word Buddha means "enlightened".
- The way of enlightenment is to attain by using morality, meditation, and perception
- There are many philosophies and interpretations within Buddhism, making it a liberal and developing religion.
- Some scholars don't recognize Buddhism as an organized religion, but rather, a "way of life" a "spiritual tradition".
- Buddhism encourages its people to avoid self-indulgence but also self-denial.
- Buddha's most important teachings, known as the four noble truths, are essential to understanding religion.
- Buddhists embrace the concepts of karma (the law of cause and effect) and reincarnation (the continuous rebirth).
- Followers of Buddhism can worship in temples or in their own homes.

- Buddhist monks, or Bhikkus, follow a strict code of conduct, which includes celibacy.
- There is no single Buddhist symbol, but a number of images have evolved that represent Buddhists beliefs, including the lotus flower, the eight-spoked dharma wheel, and the Bodhi tree. The swastika was an ancient symbol whose known as well being or good, fortunate in the Sanskrit language.

### Types of Buddhism

Theravada Buddhism: is found in Thailand, Sri Lanka, Cambodia, Laos, and Burma

Mahayana Buddhism: found in China, Japan, Taiwan, Korea, Singapore, and Vietnam

Tibetan Buddhism: widespread in Tibet, Nepal, Mongolia, Bhutan, and parts of Russia and northern India. Buddhist literature is referred to or composed in either classical Sanskrit it is registered and it is called Buddhist Hybrid Sanskrit or it has been mixed of the two terms. More than a few non-*Mahāyāna Nikāyas* come into view to have set aside their canons in Sanskrit, the majority well-known between which was the Sarvāstivāda. There are sutras of Buddhist canon the words and teaching of the Buddha there are many numbers of noncanonical Buddhist texts that have been provided supplementary teachings rules of conduct and explanation on intermediary states after death. Buddhist culture is exemplified from first to last Buddhist art, Buddhist architecture, Buddhist music, and Buddhist gastronomy. Buddhism was expanded from the Indian sub-continent it is adopted artistic and civilized culture which was flourished in other parts of Asian countries. Buddha was passed away in the early 5<sup>th</sup> century B.C. he taught about dharma which was spread over Asia and other developed countries

### The Foundations of Buddhism

The cultural context: Buddhism was flourished in northeastern India between the 6<sup>th</sup> century and the early 4th century BCE. It was a great social change and intense religious activity. But many modern and intellectual scholars believed that the historical Buddha lived in about 563 to 483 BCE. Many scholars believed that he was lived about 100 years later (from 448 to 368 BCE)

At the time of India, there was much disgruntlement with Brahmanic (Hindu high-caste) sacrifice and ritual. There were ascetics who were tried to create personal and spiritual religious experiences Vedas were found in northwestern India. In the *Upanishads* a new accent and renunciation and transcended knowledge were found in the literature was grew out of this movement. In northeastern India, it was not as much prejudiced by Vedic customs which became the propagation

ground of many sects. In this area, the society was troubled due to the breakdown of tribal unity and the extension of many petty kingdoms. It is a time of turmoil, doubt, and experimentation.

### **Culture of Buddhist**

Over and over twenty-five years centuries Buddhist ideas and philosophy have been guided and influenced in many parts of the world to the lives and thoughts of countless human beings. Discoveries in existence are not sufficient to give an accurate perception of life. To transport ourselves earlier to the best of an in proportion man or woman, we need to obtain, at slightest in the sketch, what is called an artistic foundation in the Buddha-Dhamma. Traditions reveal to ourselves and others what we are. It gives expression to our nature in our method of existing and of accepted wisdom, in art, religion, moral aspirations, and acquaintance. Generally verbal communication, it represents our split ends in dissimilarity to means. A sophisticated man has full-grown, for civilization comes from a word meaning "to grow." In Buddhism, the arahant is the perfect quintessence of culture. He has grown to the peak, to the uppermost promising limit, of human growth. He has emptied himself of all self-interest all voracity, abhorrence, and hallucination and embodies faultless purity and selfless sympathetic service. Things of the world do not entice him, for he is free from the repression of selfishness and passions. He makes no compromises for the sake of power, human being, or community.

Such a mistaken strategy implies incredulity in karma and its belongings. Eliminate kamma and one is peripatetic. Rejection is the result of blinding voracity for speedy substance growth and physical pleasures, conjoined with hallucination about the accurate nature and providence of man and life. It also signifies approval of the philosophy of usefulness — that one should get the most that one can out of this single fleeting life on earth guided largely by one's instinct, subject to the laws of culture, which the wealthy and powerful often get around with impunity. Such a short-sighted and incorrect view, in the end, leads to character and social tension, to impatience and disagreement, and to the augment of disruptive behavior, lawlessness, and crime. Buddhism distinguishes between emotions that are productive, such as *metta* and *karuna*, and those that are unhelpful: anger and jealousy, for example. It encourages the development of the former to eradicate the final. Human beings can both think and feel. When the Buddha taught the *Dhamma*, sometimes he appealed to reason, sometimes to emotions, and sometimes to the belief, using such means of teaching as fables, stories, and poetry.

Buddhist civilization, too, manifests in other forms than that of good nature, such as in the ground of literature the *Jatakas*, the *Theragatha*, and *Therigatha*, for instance, philosophy, art, architecture, and sculpture execute it. Nor does its content change with context. The collision of Buddhism on world traditions was truthfully noteworthy. In it, there is no cerebral error, based as it is

on reason and on the basis of personal understanding. It is free from right sightlessness, for its moral principles are actually superior, guided by a normal origin for such an ethic, namely, personal progress in provisions of one's own karma. It engendered no social perversity — hate and bigotry were for none, boundless loving-kindness and sympathy were for all. The doors to liberation were unlocked to anybody who wished to go in them.

Its thrilling message of reason, universal benevolence, flaming righteousness, social justice, hope, and deliverance in this very existence by one's own exertion — all had a fertilizing and liberating influence on thought and action wherever Buddhism spread.

To the thinking individual, Buddhism offered a normal, sensible, and impartial way of release from all life's sorrows, and the confidence of the perfectibility of man, here and now exclusively by one's own attempt. To the humanist, it gave a comprehensive sympathetic hallucination, inspirational ameliorative achievement as a pre-condition for the understanding of the highest religious attainments. Even to have a universal thought of its achievements, in the various ways it has expressed itself in civilization, is a teaching in the art of living wage. Buddhism gives the perception to the total of life. Nothing in life is seen as more significant than it actually is. A sophisticated Buddhist can tell the good from the bad, the right from the incorrect, and the true from the false. He can consider the proof competently, and his Buddhist educational environment makes his decision a wise one.

## **Introduction**

Buddhism intersects with contemporary literature at a large number of junctions. In all its assortment of forms, schools, and relocations, the teachings of the Buddha carry on to come into view in the literary educational harvest of the 20th and 21st centuries. The harvest of this meeting bears the marks of modernity such as globalization and secularization. For modern literature, this translates into the dissolution of Meta narratives, the blurring of boundaries, including genre boundaries, and a self-reflexivity that highlights issues of identity. Where current literature intersects with Buddhism there is a face up to and conciliation with conventional cosmologies in arrangement with the valorization of the boring. Due to the worldwide temperament of contemporary literature, there is also an ever-present possibility of unpacking ideological belongings in the form of colonialism, socialism, imperialism, Marxism, and Orientalism.

Buddhist finances form an important part of Buddhist society. Buddhist Economics does not work to maximum consumption but human well-being, which dishonesty in a simple, resolute, and compliant life, in which legal livelihood is earned. Human beings must stay behind correct to their convention and pass up money-oriented tracking down. Perfunctory and superfluous work that

deprives the soul of meaningful recognition is looked down upon, while also much free time also is not accepted. Women's flattering part of the vigorous workforce is a measured breakdown of the financial system, as women have to go away looking after the children to spoil in financial way-fare, while the children are intended for. The culture focuses on bodily and coherence, but religions do on holy and illogical. Religious diversity threatens the unity of the different nations in Southeast Asia because religion defines people's beliefs, values, and behaviors. They ran away from the huge population to the slightest population. Religion a particular system of faith and worship. Both culture and religion are social constructs. Religions influence cultures, cultures influence religions. Southwest Asia is the crib of three great monotheistic systems. Judaism and its offshoots Christianity and Islam. Judaism, found in the eastern Mediterranean region some 4,000 years ago, posits an agreement linked between God—the source of celestial law—and humanity.

The most important religions in the subcontinent are Hinduism, Islam, Sikhism, Buddhism, and Christianity. The percent of the more than 1.29 billion people who put into practice each of them. Most of the people of South Asia practicing Hinduism in language religion custom, tradition, and they are divided into many sects.

### **Buddhism and healthcare**

In Buddhism, most people are giving priority to their mental health which is of supreme importance for them. They must strive to improve this by practicing non-violence and nonparticipation from sexual misconduct and dishonesty.

However, Buddhist traditions do acknowledge physical ill-being. Hurting and anguish are predictable like death, for which taking any form of medicine is not forbidden. The medicine taken should not be invigorating or concern the clearness of mind anyway. Any bodily ill-being must be endured with endurance and resoluteness, as any form of bodily anguish allows time for self-reflection and sacred progress. The best way to heal an illness is to get better one's diet by committed vegetarianism, thoughtful of the non-violent way of living. Buddhism also lays great pressure on fasting on particular days which helps invigorate the bodily and religious being. Any form of organ move has been viewed as the highest form of kindness as well.

### **Buddhist literature**

Throughout his life span the Buddha taught not in Vedic Sanskrit, which had become incomprehensible to the people, but in his own NE Indian vernacular; he also confident his monks to spread his teachings in the dialect. After his death, the Buddhist standard was formulated and transmitted by spoken custom, and it was written down in quite a lot of versions in the 2d and 1st cent. BC Its main divisions, called *pitakas* [baskets], are the Vinaya or Spartan rules, the Sutra

(Pali *Sutta*) or discourses of the Buddha, and the *Abhidharma* (Pali *Abhidhamma*) or educational metaphysics. Also built-in is the *Jataka*, stories about the preceding births of the Buddha, many of which are non-Buddhist in derivation. The only inclusive Indian description of the standard now existing is that of the Sri Lankan *Theravada* school, in the Pali language, written 29–17 BC (see Pali). North Indian Buddhist texts were written in a type of Sanskrit predisposed by the vernaculars. *Mahayana* Buddhism formed its own class of sutras, and all schools of Buddhism generated a substantial body of explanation and attitude. The whole quantity of Buddhist writings were translated into Chinese over a period of a thousand years, commencement in the 1st cent. AD This was a mutual effort of foreign and Chinese monks. Its most recent version, the *Taisho Daizokyo* (1922–33), is in 45 volumes of some 1,000 pages of Chinese characters each. It was started the translation of Buddhist texts into Tibetan in the 7<sup>th</sup> century. It was finalized in standard form in (1290-1364) by the Buddhist historian Bu-ston) and is in two sections, the *Kanjur* and the *Tanjur* consisting altogether of about 320 volumes of Tibetan script. The Tibetan translation is particularly literal, subsequent to the Sanskrit approximately word for word and based on consistent Sanskrit-Tibetan equivalences for Buddhist conditions; thus it is chiefly useful for scholars.

Sanskrit Buddhist literature refers to Buddhist texts collected either in classical Sanskrit, in a register that has been called Buddhist Hybrid Sanskrit (BHS), or a mixture of the two. Quite a lot of non-*Mahāyāna Nikāyas* come into view to have kept their canons in Sanskrit, most famous among which was the *Sarvāstivāda*. The Buddhist standard consists of the Sutras: the words and teachings of the Buddha. There are also a number of noncanonical Buddhist texts that offer additional teachings, rules of carrying out, and commentary on in-between states after death.

## Conclusion

It is a concern with the Buddhist culture and literature in modern India. This research paper is related to the ancient and modern literature of Buddhist culture which is alive today and flourishing day by day in the modern world. There are many scholars are doing research on Buddhist culture and its literature.

## References

- Kitagawa Joseph M & Cummings mark d. (eds.), (1989) Buddhism and Asian History (<https://www.history.com/topics/religion/buddhism>)
- Kitagawa Joseph M & Cummings mark d. (eds.), (1989) Buddhism and Asian History (<https://www.britannica.com/topic/Buddhism>)

- Bogoda Robert (2005) Buddhist Culture, The Cultured Buddhist  
(<https://www.accesstoinsight.org/lib/authors/bogoda/bl139.html>)
- HJ Sugunasiri Suwanda Buddha Launches Literary Realism  
(<https://www.oxfordbibliographies.com/view/document/obo-9780195393521/obo-9780195393521-0230.xml>)
- Haviland Charles The darker side of Buddhism 30 May 2015  
(<https://www.bbc.com/culture/article/20200115-how-buddhism-spread-written-language-around-the-world>)
- Culture of Buddhism – news · newspapers · books · scholar · JSTOR (March 2017)  
([https://en.wikipedia.org/wiki/Culture\\_of\\_Buddhism](https://en.wikipedia.org/wiki/Culture_of_Buddhism))
- Cummings M. Lives of the Buddha in the Art and Literature of Asia (1982)  
(<https://www.infoplease.com/encyclopedia/religion/eastern/buddhism/buddhist-literature>)

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## Index

1. A Green Perspective Towards The Fascinating Molecule: Quinoline. 5  
Vikas V. Borge\* and Pratima Yadav
2. College with Potential for Excellence Scheme: An overview 25  
Dr. Shivraj B. Deshmukh
3. Environment Change In India & Threats To Human Life 30  
Dr. Chetana Vishwanathrao Donglikar
4. "Freedom of Speech and Expression and Social Media: A 36  
Socio-Legal Study"  
Dr. Jadhav N.D.
5. Effect of lockdown on Environment 43  
Dr. A. V. Gaikwad
6. Challenges of Virtual Teaching For Students From Tribal Areas of India 45  
Dr. Banjara Dilip Lalu
7. Detection Of Causes Of Immigrant Sugarcane Cutters In Solapur 48  
District, Maharashtra, India  
Dr. Vikas B. Nagare
8. Status of Higher Education in India 53  
Shilpa Yashawanta Jawale
9. Study of Some Zooplankton Of Balsoor Tank Tq. Omerega 59  
Dist. Osmanabad ( M.S.) India.  
Dr. Suryakant D. Kamble
10. A Comparative Study Of Flexibility And Agility Of Different 61  
Age Group Of School Going Boys  
Dr. Sunil Kumar
11. Implementation Of Right To Education Act: Challenges And Remedies 68  
Dr. Rajesh Chandanpant
12. "A Comparative Study Of Self-Concept Among College 72  
Student In Buldhana District"  
Pradeep Khedkar
13. Dr B.R. Ambedkar's Thoughts on Buddhism 76  
Dr. Korde Rajabhau Chhaganrao
14. Impact of Internet on Library Use: Study of Srtm University's Private and 82  
Government Education Colleges In Marathwada Region  
Kalyan D. Yadav , Dr. Mrs. Vaishali Bhakt.

## CURRENT GLOBAL REVIEWER

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### Dr B.R Ambedkar's Thoughts on Buddhism

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#### Abstract:

*Dr. B.R. Ambedkar was a National Leader who made a terrific contribution to making of the Indian Constitution. Dr. Ambedkar was a spiritual man but he did not want insincerity in the name of religion. According to him religion was morality and it should affect the life of each and everything characters, actions, reactions likes and dislikes. He experienced the bitterness of caste system in his life. He fought for caste freedom in his entire life. He left the Hinduism and accepted Buddhism as a religious solution to the problems of untouchables. Dr. Ambedkar did not accept Islam, Sikhism and Christianity and preferred to Buddhism because of two reasons. Firstly, Buddhism is a root of Indian religion and secondly, it includes ethics, morality and no place for Casteism. Dr. Ambedkar took 22 vows with his follower to accept Buddhism more than five lakh in member at Nagpur Dikshabhumi on 14th Oct., 1956. He brought great upheavals in the life of the depressed, suppressed and oppressed castes in India.*

**Keywords:** Buddhism, Dr. B.R. Ambedkar, caste, democracy, constitution

#### Introduction:

Dr Ambedkar, generally known as Babasaheb, helped to reconstruct Indian society through its legal and political systems. Earning four doctorates in economics, he conducted research in law, economics and politics into the lowest class of India's caste system called the untouchables, Dalits or the depressed classes, and down trodden people. British rule in India (1858-1947) and social disparity and ruling out straddle in sub-continent Indian society. Initiating the down trodden people, Dr Ambedkar frequently opposed Mahata Gandhi because he was a leader of the shudras. He was born in the Mahar caste, which was the lowest caste in Hindu class from the military town of Mhow, he got much experienced social and economic bigotry Dr. he Hindu classics, insisting that Bhimrao and his brother read the Mahabharata and Ramayana to their sisters and others at bedtime every night. <sup>(1)</sup> When Dr. B.R. Ambedkar was 14 years old, he was attracted towards Buddha. His teacher Dada Keluskar gave him a book of related Buddha's biography and he was instantly enthralled.

Dr. Ambedkar's father Ramji Ambedkar was a good debater and strictly follows self-governing and he were optimistic about Dr. Ambedkar spiritual text, including Kabir and Mahatma Phule. When Babasaheb was studying in America he was studied Buddhism thoughts and really impressed. Babasaheb tremendously Studied Buddhism since last many years. Dr. B.R. Ambedkar has got many references from Buddhism in his life he explained through his speeches, writings and other areas. This is very simple and deeply understandable thoughts to common people. Dr. Babasaheb Ambedkar gave the knowledge to his people; through his speeches and writings it is medium of public education. Thousands of people were attending his speeches he was explaining skillfully in simple and easy way to get to language. As well he used the education people's skills with well-planned and handled carefully.

On the event of Buddha Jayanti there are many lecture were arranged on Dr. Ambedkar's Dhamma that is called as Dharmopadesh communication of Dhamma. Dr. Ambedkar had written much more on Buddhism that is called discourse on Dhamma.

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It was focused on discourses Buddha on the event of Buddha Jayanti. It was presented before Janata in May 1941 in Marathi language. Lot of discourses is in Marathi language. There is one in Hindi and another in English language. The purpose of this speech is aimed to propagate the readers make aware of the existence and assignment of the Buddhism. It was started for the public organization on the occasion of Buddha Jayanti by Dr. Ambedkar.

**Many times Buddha Jayanti was celebrated by Dr. Babasaheb Ambedkar**

Dr. Ambedkar was celebrated Buddha Jayanti in 2<sup>nd</sup> Mont of May 1950 at Delhi

In month May 19<sup>th</sup>, 20<sup>th</sup> and 21<sup>st</sup> in 1951 again at Delhi.

In Mumbai and Pune it was celebrated on 27<sup>th</sup> May 1953

In 17<sup>th</sup> May 1954

In 6<sup>th</sup> May 1955 again in Mumbai

Last one Dr. Ambedkar was attended 24<sup>th</sup> May 1956 at Mumbai.

Since those programs Dr. Ambedkar was announced on the occasion of Buddha Jayanti as public holiday when he was member of Viceroy's Executive Council.

Dr. Babasaheb Ambedkar certainly spine accurately wrote on Buddhism and he communicates to his followers. As explaining about Buddhism term Dr. Ambedkar clarify to the people what is Buddhism? And what is the purpose Buddhism to end the suffering and poverty.

Dr. Ambedkar explained the cases of suffering of people.

1. **Adhyatmik Dukkha** (spiritual suffering)

Its personal Dukkha arise due to own misbehavior and wrong talking. It is end with five precepts.

2. **Adibhautik Dukkha** (Social suffering)

Its common misery suffers due to wrong behavior, it is communal and financial suffering. This suffer can be remove ethical practice of the eightfold path.

3. **Adidaivik Dukkha** (suffering due to natural calamities)

In point of view of Dr. Ambedkar, Nirvana is most important in thing in man's life.

Nirvana is last and highest glory in man's life nobody can avoid it. If we have so much wealth or so much Knowledge still we cannot avoid the Nirvana.

The nirvana fire passion and hatred in. Function of society oriented service and could be gave intellectual leadership and bring new cultural changes in society<sup>(2)</sup> It seems that Dr. Ambedkar seen to democracy like western creation and he learnt many more things from them and imported it. Certainly he studied most of the European and American political philosophers' to create new democracy. He mostly inspired from the outsiders to make the Indian constitution. Probably he got the intellectual affinities from western developed countries like united states of America and England. He got the support from the westerners. In 1931 he was applied for 40,000 Pounds sterling to Europeans and Americans to help deprived people to make the Depressed Classes Institute. Dr. Ambedkar often resorted in his Marathi writings to the word *manushi* in English translated as humanness. There are many variant in his writings for Buddhist culture. Dr. Ambedkar was very spiritual person he thought that religion is an essential for the progress of human life. He was strong minded with his ideas for social consideration. He left Hindu religion accepted Buddhism because impartiality was innate in Buddhism. He thought that Hindu religion cannot flourish in any way. He told about Hindu religion when Brahmin woman give birth a child, her eyes are concentrated on the high court and Supreme Court judge where it is vacant post. Instead of when poor woman give birth a child, her eyes are focused on a post of on fourth class post.

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It is only because of Varna system; Varna system is responsible for such type of things: Prosperity, richness, sacredness can be found in only Buddhism.

When Buddha said, to his pupils you came from different countries and castes. Rivers are flowing from their countries and provinces when rivers meet to the sea they forget their names and identity. The Buddhist Sangh is like an ocean all are equal. Dr. B.R. Ambedkar urges that the rise of Buddhism in India was a very symbolic and significant like French Revolution this is not only social implication it is also political implication. Buddhism gives us freedom of thoughts and freedom of self-development. He declares one of his speech about his philosophy which is depends on these three words Liberty, Equality and Fraternity. Dr. Ambedkar has borrowed his philosophy from the French Revolution. It is religious philosophy not political and it has been derived from teaching of Buddhism. In Buddhist philosophy includes liberty, equality and fraternity is the highest place in Buddhism. It is only real safeguards to against the denial of liberty, equality and fraternity this is sign of brotherhood also called humanity it is included in religion.

Buddhism is based on the democracy in this religion Dr. Ambedkar has found the communal principles he tried to inculcate in democracy. Since 1919-1950 he tried to improve the Indian society to make more fraternal sense of human relations to assemble them by arguing the favor of new unity in nation. Dr. Ambedkar got inspiration from the European and American scholars. Buddhist teaching is not invention of the West it is created by Indian history. In 25 November 1949 Dr. Ambedkar was presented the final draft of Indian Constitution to the Assembly which was passed in 26 January 1950. He pointed out that being parliamentary constituency India comes back in Buddhist root, India did not known parliaments or parliamentary procedure. A learning of the Buddhist Bhikshu Sanghas opened at that time parliamentary procedure for Sanghas to take education with rules and regulations it is observed that in present time. The rules of parliaments like seating provision, rules concerning Motions, Resolutions, Quorum, Whip, Counting of Votes, Voting by Ballot, Censure Motion, Regularization, Res Judicature, etc. <sup>(3)</sup>

### **Dr Ambedkar's Later Belief in Buddhism:**

Dr Ambedkar was a open-minded human being he expressed religion as having numerous meanings bereft of true morality. God is a name stemming from supernatural magic, evolving into prayers for the soul. Dhrama is moral thing it is basic reality of the social nature. Dhrama made the society which is personal religion undercuts hence Dhrama is offered to society to make government instruments make liberal and it is led the society i.e Dharama government which is safe when the Buddha appreciated in equating dhrama wit integrity and asset both as holy. Ambedkar's approach to dhrama as a social explanation is very practical and outer looking in being rule based rather than based on stuff and laws of the outer space. He disliked Hinduism and protected the liberation of the obedient people. Simply rules of dharmas which are simply lives in true Buddhism. Therefore he think as a Buddha but also as a Maitreya. As today, although he rejected the term when alive, people's hero Baba Saheb was called a bodhisattva<sup>(4)</sup>

### **Dr Ambedkar's relevance today and in the wider world:**

Why should be important of Dr. Ambedkar's philosophy for the living and understanding of oppressed class today it is not only India it is important in worldwide. He firstly mentions social reality how it is applying for each and every person; secondly his point of view those people who are oppressed; thirdly Dr. Ambedkar said the condition of the poor people who are working in the social system under which they lived. Obviously the question

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is asks to the downtrodden people 'Who are we?', 'What is our identity?' but 'how are we treated?' and 'why?'

Further he told in the world his people are called various names Dalit, downtrodden the broken we have to follow Dr. Ambedkar's two things which are very important.

He said firstly do not separate two things from social inequality from economic inequality or caste from the class. Really Dr. Ambedkar was only one person in the world who was very bond to his rights authorities for oppressed class people. Second thing is the oppressed people were separate from the society and economy they were not treated as human being. Dr. Ambedkar was very orthodox about Hindu religion and varna system. He gave up the thoughts of untouchability he said it is just cultural or religious matter. He fought for the rights of downtrodden people.

It is need to address marginalized is commitment of the international Sustainable Development Goals to finish the poverty in all categories and decrease the inequality of chances to supply polite work for all the forms people. Dr Ambedkar challenged to the global by three ways: Firstly

Policy makers should be exactly faces the realities of the social difference discriminations and marginalization of certain people of society particularly on the caste basis. Secondly they have to listen and take the experience of that marginalized group and make their concerns as part of national priorities. Third they have to understand their condition and take the decision on their problem which they facing in free India. Dr Ambedkar points to caste as one such system, not only in India but internationally.<sup>(5)</sup>

On December 6, 1956, Dr. Babasaheb Ambedkar attained immortality. Jawaharlal Nehru said that, B R Ambedkar always fought for the social justice and inequality for the backward people. He did well he had framed the Indian constitution he died in 6<sup>th</sup> December 1956 at his home Delhi it is called Mahaparinirvan Diwas and cremated him at Bombay Dadar Chowpathy beach it is called Chatya Bhoomi lakhs people were attended that cremation with grieves. It is holy place where all the categories people can go there it is all for open this place is also called ideals, cherish Equality Liberty and Fraternity it is symbol of calm and peace. Every more than 4 to 5 lakhs people visits to this place for expressing the gratitude's and pay their respect to Dr. B.R. Ambedkar. Dr. Ambedkar was born on 14<sup>th</sup> April 1891 at Mhow town which in now at Indore in Madhya Pradesh state. He was born in Mahar caste which is in Maharashtra state it is untouchable caste. His father was Ramji Sakpal who was very strict by his nature and he was follower of Saint Kabir hence he never believed in caste system. He was first untouchable Indian who went to abroad to take the higher education. He got the Ph.D. in 1917 from Columbia University. During his Ph.D. he went to London to take the admission of Law, economics and political science.

He got the degree Master of Science in 1921 and also he completed Ph.D degree with entitled of 'The Problem of the Rupee' from London University he completed simultaneously Bar at Law in 1923. Dr. Ambedkar was started the practice of law and devoted himself for the depressed class. In 1930 he became the president of All India Depressed Class Association and later he formed Independent Labour Party. In 1936 it was converted into All India Scheduled Castes Federation. In 1942 he became the member of the Council for Governor General. 3<sup>rd</sup> August 1949, he had taken charge of Law Minister in India, further in 1955 he formed Buddhist society of India frequently he was talking and feeling to him depressed class has no pride and prestige in Hindu religion it is reflected in his speech and writings. Dr. Ambedkar struggled very much and did hard work he was thinking as him in second generation do not want to do

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the struggle not facing the same problems which he had faced. Accepted humiliation, severe discriminations, insults caste discriminations. He did study outside sitting the class room he never studied in class room due to untouchable. His entire schooling life was sitting the outside of class still he became winner.

Dr. Ambedkar was not habitual to any single habit he never touched any habit there was only one habit that is to read books and write books. He very much loved the books. He studied eighteen hours a day as student and statesman. He was only one great person on this planet who constructed home for only books the name of 'Rajgruha' it is located at Dadar at Mumbai. Dr. Ambedkar had got many opportunities in abroad and also India but he left because he want to do the work for the poor and downtrodden people he wanted to bring out them from the darkness to the light make them educated give them Knowledge. Dr. Ambedkar was a great personality in the world who made new in India. His message is to young generation Educate, Agitate and Organize. He taught us what is possible, individually and collectively he was great, Philosopher in the world who contributed his entire life for society and country. He was great social reformer, politician, lawyer, teacher, mass pioneer and as human being. He must be spirit of Indian constitution must be ideal for all the Indian people.

Now Dr. Ambedkar is not alive but his way is very pioneer and sacred he devoted to himself for us. He situated all over the world who is follower of Buddhism and Ambedkarism. We are very fortunate Dr. Ambedkar was born in India here many caste discriminations, slavery capitalism all those are removed by Dr. Ambedkar through drafting the Indian constitution; he gave fundamental right every common man by giving the right of vote. We need Dr. Ambedkar's thoughts not Gandhi it is common thinking nowadays. He wanted to spread the Buddhism in entire India and the every corner of the world but before that he left us. He rejected violent Karl Marx philosophy and accepted Buddhism which is symbol of calm and peace. He is situated in our heart blood, blood cell and the last drop of the blood will call Dr. B.R. Ambedkar we never forget to him.<sup>(6)</sup>

### Conclusion:

Dr. Babasaheb Ambedkar was very great personality in the world. He was huge personality who created new Indian constitution and gave the justice to all class groups who were slave, poor, beggar, backward social-economical he done the job well in his entire life he became the 'Messiha' of Dalit and poor people. He never concentrated on his family in his entire life his many children's were died but he did not lost his goal because once he said all Dalits are my family and they are children. He was born in Hindu religion but not died as Hindu his oath he has completed. Dr. Ambedkar was very much impressed by the thoughts of Gautama Buddha, Mahatma Jyotirao Phule & Sant Kabir and he followed them. Dr. Ambedkar finally accepted the Buddhism and his Buddhism was rational Buddhism. He was struggled and handworker I am repeats this sentence again because who will read this article from the young generation they have taken the inspiration from Dr. B.R. Ambedkar.

### References:

- [https://www.researchgate.net/publication/329354776\\_Dr\\_Ambedkar\\_My\\_Conclusion\\_is\\_Buddhism](https://www.researchgate.net/publication/329354776_Dr_Ambedkar_My_Conclusion_is_Buddhism)
- <https://velivada.com/2020/05/07/reflections-on-babasaheb-ambedkars-dhamma-talks-on-buddha/>
- <https://thewire.in/books/ambedkar-democracy-buddhism>

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<https://blogs.soas.ac.uk/ssai-notes/2016/05/23/the-relevance-of-dr-babasaheb-ambedkar-today-and-tomorrow/>  
<http://www.sikkimexpress.com/news-details/my-babasaheb-ambedkar-remembrance-reflections-and-thoughts>

## Impact of Buddhist culture and literature in India

Dr. Korde Rajabhau Chhaganrao

### Abstract:

Buddhism is a great philosophy in the world. Buddhism is the world's fourth-largest religion with over 520 million followers, or over 7% of the global population, known as Buddhists. Buddhism encompasses a variety of traditions, beliefs, and spiritual practices largely based on original teachings attributed to the Buddha and resulting interpreted philosophies. It originated in ancient India as a Sarmana tradition sometime between the 6th and 4th centuries BCE, spreading through much of Asia. Two major extant branches of Buddhism are generally recognized by scholars. Buddhism is a non-theistic religion (no belief in a creator god), also considered a philosophy and a moral discipline, originating in India in the 6th and 5th centuries BCE. It was founded by the sage Siddhartha Gautama (the Buddha), c. 563 - c. 483 BCE) who, according to legend, had been a Hindu prince before abandoning his position and wealth to become a spiritual ascetic and, finally, an enlightened being who taught others the means by which they could escape samara, the cycle of suffering, rebirth, and death. The Buddha developed the belief system at a time when India was in the midst of significant religious and philosophical reform. Buddhism was, initially, only one of many schools of thought which developed in response to what was perceived as the failure of orthodox Hinduism to address the needs of the people. It remained a relatively minor school until the reign of Ashoka the Great (268-232 BCE) of the Mauryan Empire (322-185 BCE) who embraced and spread the belief, not only throughout India, but through Southern, Eastern, and Central Asia.

### Buddhism:

Buddhism is a faith that was founded by Siddhartha Gautama ("the Buddha") more than 2500 years ago in India. With about 470 million followers, scholars consider Buddhism one of the major world religions. Its practices have historically been most prominent in east and south East Asia. But its influence is growing in the west. Many Buddhist ideas and philosophies overlap with those of other faiths.

**Founder of Buddhism:** Siddhartha Gautama, the founder of Buddhism who later became known as "the Buddha," lived during the 5<sup>th</sup> century B.C. Gautama was born into a wealthy family as a prince in present day Nepal. Although he had a easy life, Gautama was moved by suffering in the world. He decided to give up his lavish lifestyle and endure poverty. When this did not fulfill him, he prompted the idea of the life "Middle Way," which means existing between two extremes. Thus he sought a life without social indulgence but also without deprivation. After six years of searching, Buddhists believe Gautama found enlightenment while meditating under Bodhi tree. He spent the rest of his life teaching others about how to achieve this spiritual state.

### Buddhism Beliefs:

Some key Buddhism beliefs include:

- 1) Followers of Buddhism don't acknowledge a supreme god or deity. They instead focus on achieving enlighten a state of inner peace and wisdom. When followers reach this spiritual echelon, they are said to have experienced nirvana.



- 2) The religion's founder, Buddha, considered an extraordinary man, but not a god; the word Buddha means "enlightened".
- 3) The path enlightened is attained by utilizing morality, meditation and wisdom.
  - a. There are many philosophies and interpretations within Buddhism, making it a tolerant and evolving religion.
- 4) Some of scholars don't recognize Buddhism as an organized religion, but rather, a "way of life" or "spiritual tradition".
- 5) Buddhism encourages its people to avoid self-indulgence but also self-denial.
- 6) Buddha's most important teachings, known as the four noble truths, are essential to understanding the religion.
- 7) Buddhists embrace the concepts of karma (the law of cause and effect) and reincarnation (the continuous of rebirth).
- 8) Followers of Buddhism can worship in temples or in their own homes.
- 9) Buddhist monks, or Bhikkus, follow a strict code of conduct, which includes celibacy.
- 10) There are no single Buddhist symbol, but a number of images have evolved that represent Buddhist beliefs, including the lotus flower, the eight-spoken dharma wheel, the Bodhi tree and the swastika (an ancient symbol whose name means "well-being" or "good fortune" in Sanskrit).

#### Types of Buddhism:

##### Theravada Buddhism:

Prevalent in Thailand, Sri Lanka, Cambodia, Laos and Burma

##### Mahayana Buddhism:

Prevalent in China, Japan, Taiwan, Korea, Singapore and Vietnam

##### Tibetan Buddhism:

Prevalent in Tibet, Nepal, Mongolia, Bhutan, and parts of Russia and northern India.

Sanskrit Buddhist literature refers to Buddhist texts composed either in classical Sanskrit, in a register that has been called "Buddhist Hybrid Sanskrit" (BHS), or a mixture of the two. Several non-Mahāyāna Nikāyas appear to have kept their canons in Sanskrit, most prominent among which was the Sarvāstivāda. The Buddhist canon consists of the Sūtras: the words and teachings of the Buddha. There are also a number of non-canonical Buddhist texts that provide supplementary teachings, rules of conduct and commentary on transitional states after death. Buddhist culture is exemplified through Buddhist art, Buddhist architecture, Buddhist music and Buddhist cuisine. As Buddhism expanded from the Indian subcontinent it adopted artistic and cultural elements of host countries in other parts of Asia. The Buddha died in the early 5th century B.C. His teachings, called the dharma, spread over Asia and developed into three basic traditions:

#### The Foundations of Buddhism

##### The cultural context:

Buddhism arose in northeastern India sometime between the late 6th century and the early 4th century BCE, a period of great social change and intense religious activity. There is disagreement among scholars about the dates of the Buddha's birth and death. Many modern scholars believe that the historical Buddha lived from about 563 to about 483 BCE. Many others believe that he lived about 100 years later (from about 448 to 368 BCE). At this time in India, there was much discontent with Brahmanic (Hindu high-caste) sacrifice and ritual. In northwestern India there were ascetics who tried to create

a more personal and spiritual religious experience than that found in the Vedas (Hindu sacred scriptures). In the literature that grew out of this movement, the Upanishads, a new emphasis on renunciation and transcendental knowledge can be found. Northeastern India, which was less influenced by Vedic tradition, became the breeding ground of many new sects. Society in this area was troubled by the breakdown of tribal unity and the expansion of several petty kingdoms. Religiously, this was a time of doubt, turmoil, and experimentation.

#### Buddhist Culture:

For over twenty-five centuries, Buddhist ideas and ideals have guided and influenced the lives and thoughts of countless human beings in many parts of the world. As lay Buddhists, our own experiences and discoveries in life are not enough to give a true perspective on life. To bring ourselves closer to the ideal of a well-balanced man or woman, we need to acquire, at least in outline, what is called a cultural grounding in the Buddha-Dhamma. Culture reveals to ourselves and others what we are. It gives expression to our nature in our manner of living and of thinking, in art, religion, ethical aspirations, and knowledge. Broadly speaking, it represents our ends in contrast to means. A cultured man has grown, for culture comes from a word meaning "to grow." In Buddhism the arahant is the perfect embodiment of culture. He has grown to the apex, to the highest possible limit, of human evolution. He has emptied himself of all selfishness, all greed, hatred, and delusion and embodies flawless purity and selfless compassionate service. Things of the world do not tempt him, for he is free from the bondage of selfishness and passions. He makes no compromises for the sake of power, individual or collective.

Such a misguided policy implies disbelief in kamma and its effects. Reject kamma and one is rootless. Rejection is the result of blinding greed for quick material gain and sensual pleasures, conjoined with delusion about the true nature and destiny of man and life. It also signifies acceptance of the philosophy of expediency -that one should "get the most that one can" out of this single fleeting life on earth guided largely by one's instincts, subject to the laws of society, which the affluent and powerful often circumvent with impunity. Such a short-sighted and mistaken view ultimately leads to individual and social tensions, to restlessness and conflict, and to the spread of indiscipline, lawlessness, and crime. Buddhism distinguishes between emotions that are constructive, such as *metta* and *karuna*, and those that are destructive: anger and jealousy, for instance. It encourages the cultivation of the former to eliminate the latter. Human beings can both think and feel. When the Buddha taught the Dhamma, sometimes he appealed to reason, sometimes to the emotions, and sometimes to the imagination, using such means of instruction as fables, stories, and poetry.

Buddhist culture, too, manifests in other forms than that of a fine character, such as in the field of literature the Jatakas, the Theragatha and Therigatha, for examples philosophy, art, architecture, and sculpture. Kill it. Nor does its content change with context. The impact of Buddhism on world culture was truly significant. In it, there is no intellectual error, based as it is on reason and on the bedrock of personal experience. It is free from moral blindness, for its ethics is truly lofty, guided by a rational basis for such an ethic, namely, personal evolution in terms of one's own kamma. It engendered no social perversity hate and intolerance were for none, limitless loving-kindness and compassion were for all. The doors to deliverance were open to anyone who wished to enter them. It's thrilling message of reason, universal benevolence,

flaming righteousness, social justice, hope, and deliverance in this very existence by one's own exertion all had a fertilizing and liberating influence on thought and action wherever Buddhism spread.

To the thinking person, Buddhism offered a rational, practical, and balanced way of deliverance from all life's sorrows, and the certainty of the perfectibility of man, here and now solely by one's own effort. To the humanist it gave an all-embracing compassionate vision, inspiring ameliorative action as a pre-condition for the realization of the highest spiritual attainments. Even to have a general idea of its achievements, in the manifold ways it has expressed itself in society, is an education in the art of living. Buddhism gives perspective to the whole of life. Nothing in life is seen as more important than it really is. A cultured Buddhist can tell the good from the bad, the right from the wrong, and the true from the false. He can weigh the evidence skillfully, and his Buddhist cultural background makes his judgment a wise one.

#### Introduction:

Buddhism intersects with modern literature at a multitude of junctions. In all its various forms, schools, and geolocations, the teachings of the Buddha continue to appear in literary cultural products of the 20th and 21st centuries. The products of this convergence bear the marks of modernity such as globalization and secularization. For modern literature this translates into the dissolution of meta narratives, the blurring of boundaries, including genre boundaries, and a self-reflexivity that highlights issues of identity. Where modern literature intersects with Buddhism there is a challenge to and negotiation with traditional cosmologies in juxtaposition with the valorization of the mundane. Due to the international character of modern literature, there is also an ever-present chance of unpacking ideological baggage in the form of colonialism, communism, imperialism, Marxism, and Orientalism.

Economics or the way in which work life is organized and the demands of production are met form an integral part of any culture. Buddhist economics forms an integral part of the Buddhist culture. Buddhist Economics does not work to maximum consumption but human well-being, which lies in a simple, purposeful and dutiful life, in which rightful livelihood is earned. Human beings must remain true to their heritage and avoid materialistic pursuit. Mechanical and redundant work that deprives the soul of meaningful pursuit is looked down upon, while too much leisure also is not approved of. Women becoming part of the active workforce is considered failure of the economic system, as women have to leave looking after the children to indulge in economic way-fare, while the children are untended for. The cultures focus on physical and rational, but religions do on spiritual and irrational. Religious diversity threatens the unity of the different nations in Southeast Asia because religion defines people's beliefs, values, and behaviors. They ran away from the large population to the least population. Religion: a particular system of faith and worship. Both culture and religion are social constructs. Religions influence cultures, cultures influence religions. Southwest Asia (the Middle East) is the cradle of three great monotheistic systems: Judaism and its offshoots Christianity and Islam. Judaism, founded in the eastern Mediterranean region some 4,000 years ago, posits a covenant relationship between God- the source of divine law- and humankind. The major religions in the subcontinent are Hinduism, Islam, Sikhism, Buddhism, and Christianity. The chart below shows the different religions in South Asia and the percent of the more than 1.29 billion people who practice each of them. The majority of the people in South Asia practice Hinduism. Like language, religion has also divided the people of South Asia.

**Buddhism and healthcare:**

For Buddhism, mental health is of supreme importance and individuals must strive towards improving this by practicing non-violence and refraining from sexual misconduct and lying. However, Buddhist traditions do acknowledge physical ill-being. Pain and suffering are inevitable like death, for which taking any form of medication are not prohibited. The medicines taken should not be intoxicating or affect the clarity of mind any way. Any physical ill-being must be endured with patience and steadfastness, as any form of physical suffering allows time for self-reflection and spiritual progress. The best way to cure a disease is to improve one's diet by practicing vegetarianism, reflective of the non-violent way of living. Buddhism also lays great stress on fasting on special days which helps revitalize the physical and spiritual being. Any form of organ transplant has been viewed as a supreme form of generosity as well.

**Buddhist literature:**

During his lifetime the Buddha taught not in Vedic Sanskrit, which had become unintelligible to the people, but in his own NE Indian dialect; he also encouraged his monks to propagate his teachings in the vernacular. After his death, the Buddhist canon was formulated and transmitted by oral tradition, and it was written down in several versions in the 2d and 1st cent. BC Its main divisions, called *pitakas* [baskets], are the Vinaya or monastic rules, the Sutra (Pali *Sutta*) or discourses of the Buddha, and the Abhidharma (Pali *Abhidhamma*) or scholastic metaphysics. Also included are the Jataka, stories about the previous births of the Buddha, many of which are non-Buddhist in origin. The only complete Indian version of the canon now extant is that of the Sri Lankan Theravada school, in the Pali language, written 29-17 BC (see Pali). North Indian Buddhist texts were written in a type of Sanskrit influenced by the vernaculars. Mahayana Buddhism produced its own class of sutras, and all schools of Buddhism generated a considerable body of commentary and philosophy. The entire corpus of Buddhist writings was translated into Chinese over a period of a thousand years, beginning in the 1st cent. AD This was a collaborative effort of foreign and Chinese monks. Its most recent edition, the *Taisho Daizokyo* (1922-33), is in 45 volumes of some 1,000 pages of Chinese characters each. Translation of Buddhist texts into Tibetan was begun in the 7th cent. The final redaction of the canon was by the Buddhist historian Bu-ston (1290-1364) and is in two sections, the *Kanjur* (translation of the Buddha's word) and the *Tanjur* (translation of treatises), consisting altogether of about 320 volumes of Tibetan script. The Tibetan translation is extremely literal, following the Sanskrit almost word for word and based on standardized Sanskrit-Tibetan equivalences for Buddhist terms; thus it is particularly useful for scholars.

Sanskrit Buddhist literature refers to Buddhist texts composed either in classical Sanskrit, in a register that has been called "Buddhist Hybrid Sanskrit" (BHS), or a mixture of the two. Several non-Mahāyāna Nikāyas appear to have kept their canons in Sanskrit, most prominent among which was the Sarvāstivāda.

The Buddhist canon consists of the Sutras: the words and teachings of the Buddha. There are also a number of noncanonical Buddhist texts that provide supplementary teachings, rules of conduct and commentary on transitional states after death.

**Cited works:**

- 1) <https://www.history.com/topics/religion/buddhism>

- 2) <https://www.google.com/search?xsrf=ALeKk00j6a9->
- 3) <https://www.britannica.com/topic/Buddhism>
- 4) <https://www.accesstoinsight.org/lib/authors/bogoda/h1139.html>
- 5) <https://www.oxfordbibliographies.com/view/document/obo-9780195393521/obo-9780195393521-0230.xml>
- 6) <https://www.bbc.com/culture/article/20200115-how-buddhism-spread-written-language-around-the-world>
- 7) [https://en.wikipedia.org/wiki/Culture\\_of\\_Buddhism](https://en.wikipedia.org/wiki/Culture_of_Buddhism)
- 8) <https://www.infoplease.com/encyclopedia/religion/eastern/buddhism/buddhist-literature>

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# INDEX

- |     |  |    |
|-----|--|----|
| 01) | Female Labour Force Participation Rate in India: A Review<br>Dr. Binod Kumar Bihar                             | 14 |
| 02) | Usage of ICT in Public Spheres-An Overview<br>Dr-Lalan Kumar Chaudhari Patna                                   | 18 |
| 03) | A STUDY ON E-COMMERCE IN YEMEN:PROBLEMS ANDPROSPECTS UPDATE<br>Dr.Dhammpal N. Ghumbre, Shirur(Ka.) Dist.Beed   | 24 |
| 04) | COVID-19 IMPACT ON INDIAN AGRICULTURE SECTOR.<br>Mrs.Panchshila Ghumbre, Aurangabad                            | 29 |
| 05) | INTER RELATION BETWEEN MUSIC AND YOGA<br>Dr. Amrita ,Patna.  | 34 |
| 06) | Primary And Secondary Sources In Data Collection Process<br>Mr.Gautam L. Sable, Beed                           | 37 |
| 07) | A Study on Clinico- Social Problems of Seasonal Migration<br>Mr .P. Desingh, Dharmapuri                        | 40 |
| 08) | The Role of Libraries in Dissemination of Information<br>DR.HD GOPAL .RAMANAGARA )                             | 46 |
| 09) | THierarchy of Urban Centres and Distribution of Urban Population in....<br>* Dr. Lalit Pratap Sandanshiv,Dhule | 55 |
| 10) | Luminescence of Ce3+ ions in sodium based halosulphate phosphors<br>Mrs.Priyanka S. Waghmare                   | 59 |
| 11) | DRUG AND SUBSTANCE ABUSES , THEIR INFLUENCING FACTORS,<br>Mr.Sharad Rode, Parli(Vai.)                          | 64 |
| 12) | नागरीकत्व सुधारणा कायदा<br>डॉ. अंकुश ना. बारमाटे, नागपूर   | 66 |
| 13) | जागतिकीकरणविरोधी नवे प्रवाह एक चिकित्सक अभ्यास<br>सौ संगीता अवसरे, नांदेड                                      | 69 |

03

## A STUDY ON E-COMMERCE IN YEMEN: PROBLEMS AND PROSPECTS UPDATE

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Tq. Shirur (Ka.) Dist. Beed

### INTRODUCTION:

The internet is becoming inevitable. Technology has shaped every aspect of life-social, economic, political, and lifestyle. There are new uses of the internet every day. This paper addresses the internet use in Yemen. It discusses the untapped potential of e-commerce. Currently, Yemen is considered behind the rest of the world regarding its internet use, connectivity, and awareness (Al-wazir & Zheng, 2014). There are many opportunities online that can open doors for the people of Yemen.

### INTERNET TECHNOLOGY INFRASTRUCTURE

The internet technology infrastructure in Yemen started in 1996. Tele Yemen started dial-up services. Today, there are ADSL, 3G mobile data connections, satellite internet, leased lines, and dial ups. Average speed is 1MB per second; the minimum is the 56K and the maximum home use is 4MB and for business around 10MB on leased lines. The average monthly subscription fee is around \$20 per month for 16GB of bandwidth on a 1MB

speed. The Information and Communication Technology (ICT) Table 1 shows statistics to compare Yemen with other countries regarding the information and communication technologies.

	Internet users out of internet population	Internet or e- commerce spending per consumer in US\$	Internet or market share in %	Fixed (wire) line subscriptions in thousands	Fixed (wire) line subscriptions in thousands	Fixed- line subscriptions in thousands	Fixed- line subscriptions in thousands
USA	71%	1.11	20.0	91,002	29.35	135,127	42
China	28%	29	112.0	146,849	10.08	262,982	39
Brazil	17%	0.7	11.0	20,120	11.0	45,038	22
Indonesia	0%	0.5	0.5	1,251	1.30	31,722	12
Yemen	0%	0	0.1	250	1.0%	1,143	5

**Sources:** Federal Communications Commission, USA; Ministry of Industry and Information Technology, China; Ministry of Industry and Information Technology, Brazil; MCIT, Indonesia; ITU estimate, Yemen. Data as of 2013.

Table 1: Information & Communication Technologies in different countries in comparison with Yemen

### GOVERNMENT

An e-government for Yemen can make a significant development in a short time. E-government can fight corruption, increase productivity and efficiency, involve stakeholders, improve policy development, and ensure transparency (Bhat, 2014). The government of Yemen faces several challenges in implementing e-government. Yemen is among the lowest ranking countries all factors set by the United Nations (Al-Aghbari et al., 2015; Al-mamary, Shamsuddin, & Aziati, 2015) to be ready for such mechanism. These challenges range from leadership and management (Al-wazir & Zheng, 2014) to cost of development and infrastructure. Online services in Yemen is the most needed index to be enhanced (an A. Ali & Zhao, 2012). The government has a telecommunication cabinet that supervises the development of telecommunications and information technology. The government is currently the only monopoly over internet service providing via its two entities Tele Yemen and Yemen Net. While



Tele Yemen has a majority ownership by the government, Yemen Net is entirely owned by the government. Because of the monopoly, Internet users complain of the lack of speed, services, affordability, and even availability of internet access.

#### **E-COMMERCE ADOPTION:**

Adoption challenges in Yemen are due to several factors. First, issues of poverty and illiteracy are preventing youth from accessing the internet. Issues of trust and awareness are also other reasons preventing individuals and groups from participating in the internet (Al Rawabdeh, Zeglat, & Alzawahreh, 2012). The limited access to the payment systems did not present the internet as an opportunity rather a source of transaction fees to pay.

#### **RESEARCH QUESTION**

What are the challenges and problems preventing Yemenis from utilizing e-commerce and other online payment systems, and what recommendations can be suggested to address those challenges?

The answers to this research question provided a description of the current status of the internet use in Yemen. It also provided the current consumer behavior online, the main reasons behind transacting online, and the current overall status.

#### **METHODOLOGY**

This section presents what methods were used and why they were chosen, a preview of the sampling process, ethical considerations, generalizability, reliability and validity indicators, plus the weaknesses and obstacles faced during the research

The research process included two parts. The first part was qualitative and exploratory in nature to identify the current challenges and prospects that e-commerce in Yemen is facing. Qualitative study was conducted via a focus group of 5 participants. Each of the participants is a current entrepreneur and a heavy internet user who have bought and sold products or

services online for at least the past five years. The results of the qualitative focus group were then developed into a quantitative survey to measure and examine the current state of e-commerce in Yemen.

The first phase included a focus group that discussed the current challenges for buyers and sellers to work from Yemen. The driving question to the focus group was the main challenges and opportunities individuals in Yemen can gain from e-commerce. The discussion generated the questions necessary to be answered in the second phase.

#### **FINDINGS**

The research included two components. The qualitative part generated the main challenges and prospects for e-commerce in Yemen. On the other hand, the quantitative part generated an examination of the survey responses to the survey.

#### **QUALITATIVE RESULTS**

The qualitative research included a focus group that looked into several concerns. These issues had to do what the challenges and prospects of e-commerce in Yemen. The questions contained in the panel discussion looked at the current status of e-commerce in Yemen. It asked the following questions:

1. What do people use the internet for?
2. Who are the users of the internet?
3. Do they buy from the internet?
4. If Yes,
  - a. What do they buy and what for?
  - b. Where do they buy from?
  - c. How do they buy?
  - d. Why do they buy?
  - e. What factors makes them buy online?
  - f. How they pay online?
  - g. How they receive their products?
5. If not,
  - a. Why not?
  - b. What to buy if you want?
6. Why don't people participate in e-commerce?

7. What risks are associated with e-commerce?

8. What difficulties and challenges can prevent individuals from participating in e-commerce?

9. What should the government, financial institutions, and retailers do to smooth online purchases?

The focus group participants agreed that there were eight uses for the internet in Yemen. These included news, social media, chat, education, work, games, and music. Further analysis of these uses of the internet, users can be segmented into three categories. First are the entrepreneurs who work and shop online. Second are the socializers who chat and share on social media. The third group is those who find entertainment on the internet via music and games.

In further analysis to predict customer behavior to shop online, entrepreneurs tend to buy online, while gamers don't. There were no relationship between internet socializers and purchasing online.

The focus group discussed five primary resources needed for individuals to buy online. These resources included English language skills, having a bank account, having a credit card, having a post office box, and having internet access at home.

The focus group focused on the ability to purchase online as an indication of the individual's capacity to conduct e-commerce activity and engage in economic activities on the internet. Therefore, it was also important to look at those who purchase online and identify their perceptions of the internet purchasing experience.

The focus group suggested investigating those who currently buy online. The results of the discussion highlighted these questions: what they buy, where from, how they buy, why they buy, how they paid, and how they received their goods. All of the developed themes in the focus

groups were categorized in the developed survey to measure the extent of generalizability of these perceptions.

#### QUANTITATIVE RESULTS

The quantitative result is a summary of all the questions in the survey. The following paragraphs list the research questions and a description of the answers. Additional analysis is provided.

#### WHAT DO YOU USE THE INTERNET FOR?

The survey asked respondents about their current use of the internet. Figure 1 shows a very high use of the internet in social media, and news. Online education seems to be an opportunity.

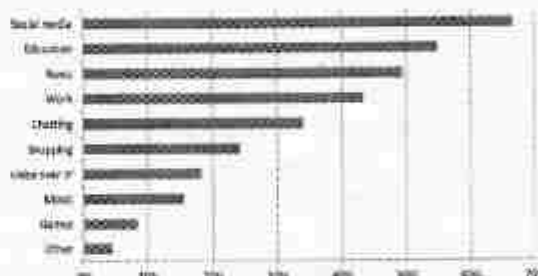


Figure 1: Internet Usage

#### HAVE YOU BOUGHT ANYTHING ONLINE?

To understand the challenges and prospects of e-commerce, it was important to check how many people have conducted any transaction online. A purchase online is an indicator of trusting the internet to take part of one's physical world. The survey responses show around 45% of the respondents have bought something online.

While only 60% of these purchases were direct purchases where the individual user bought from a website using their payment method, around 20% have purchases via a friend. Another 20% have purchased online via a third party.

Currently, many entrepreneurs have established the buy from America business model. The business is signing up for a freight forwarder in the USA. They take local shoppers'

orders and cash, process these purchases, deliver and collect a transaction fee. The growth of this business model seems to be a good indicator of the increasing demands for the value provided by the internet.

#### WHY DO YOU BUY ONLINE?

The survey investigated the current perceptions about purchases online. The focus group agreed on six primary reasons individuals buy online. The survey results shown in Figure 2 shows that price and availability are the main drivers for online purchases. This goes along with the ubiquity nature of the internet.

Why did you buy online?

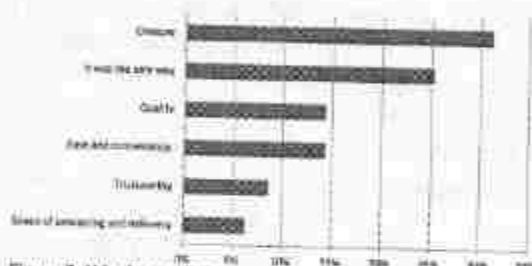


Figure 2: Why buy online?

The opportunities the Internet offers enormous benefits in savings, new products, and services. 15% started to see the Internet more trustworthy as they buy direct. Less than 5% began to shop online for standard consumer products. A case shows that buying electronics from the internet is cheaper than buying it locally, given the expensive shipping and handling fees.

#### BUY FROM WHERE?

The focus group suggested checking where survey respondents purchase from. The objective is to get a feel of the local, regional, and international distribution channels. The study results indicate that the foreign retailers are dominating the internet. Local and regional retailers had a slight percentage. The online auction ebay.com ranked number one in the list as shown in Figure 3.

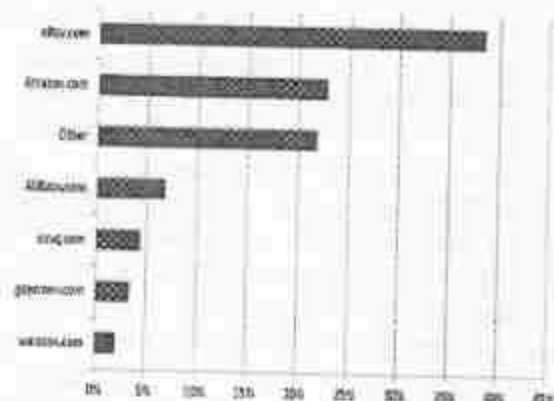


Figure 3: Buy from where?

#### CONCLUSION

E-commerce can provide opportunities for employment, consumer savings, and productivity. Reliable e-commerce infrastructure is needed such as internet speed, post services, logistics services, payment means, and protection. Awareness programs are required to overcome ecommerce concerns. Local e-commerce businesses got around 5% of purchases, which is an excellent opportunity for entrepreneurs to tap this market.

This paper provided a brief presentation of what challenges and prospects the internet and ecommerce ecosystem is facing in Yemen. The number of individuals who purchase online is relatively increasing. A high number of individuals still use their friends and third party companies to take the responsibility to buy, pay, and deliver goods and services from the internet. Individuals can gain much from the internet. The internet offers information, access to technology, the verity of products and services, news and communication, and entertainment. People in Yemen are interested in shopping online, learning from the internet, and get their work done.

Those who have not purchased online are facing infrastructure challenges such access to reliable payment systems. Global payment system providers not only provide comfortable

and convenient payment services, but also offer protection against cyber crimes, protection against fraud, and help consumers be aware of the internet associated risks.

Yemen transportation and logistics services lack value to smooth internet business. The transportation cost seems to be a major challenge to online shoppers. Many still use third party entities to get their products delivered. International carriers appear to be gaining from the Yemen market for delivery. Yemen's postal services seem to be losing a market opportunity.

Yemen legal framework needs to provide regulations to smooth online business transactions. Also, it needs to offer protection against known cybercrimes. The government of Yemen has to enable the development of e-commerce needed infrastructures such as internet access, electric power, transportations, and financial services.

#### REFERENCES

1. Al Rawabdeh, W., Zeglat, D., & Alzawahreh, A. (2012). The importance of trust and security issues in e-commerce adoption in the Arab World. *European Journal of Economics, Finance and Administrative Sciences*, (52), 172-178. Retrieved from
2. <http://www.scopus.com/inward/record.url?eid=2-s2.0-84873515910&partnerID=tZ0tx3y1>
3. Al-Aghbari, A., Abu-Ulbeh, W., Ibrahim, O., & Saeed, F. (2015). The readiness and limitations of e-government in Yemen. *Jurnal Teknologi*, 73(2), 107-115.
4. Ali, aA., & Zhao, Z. (2012). E-government Development in Yemen: Assessment and Solutions. *Journal of Emerging Trends in Computing and Information Sciences*, 3(4), 512-518.
5. Ali, S., & Al-Jabri, A. (2011). Oman's National Payment Systems and their Compliance with International Standards and Practices. *Journal of Internet Banking and Commerce*,

16(3), 1-25. Alkibsi, S. M., & Lind, M. (2011). Customer perceptions of technology-based banking service quality provided by bank operating in Yemen. *International Journal of Strategic Information*

6. *Technology and Applications*, 2(3), 35-82. <http://doi.org/10.4018/jsita.2011070104>

7. Al-mamary, Y. H., Shamsuddin, A. & Aziati, N. (2015). Investigating the Key Factors Influencing on Management Information Systems Adoption among Telecommunication Companies in Yemen : The Conceptual Framework Development, 6(1), 59-68.





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**REASONS AND EFFECT OF LABOUR MIGRATION: A CASE  
STUDY OF MARATHWADA REGION**

**Introduction:**

Migration is shift from a place of residence to another place for some length of time or permanently including different types of voluntary movements. It has great impact on economic, social, cultural and psychological life of people, both at place of emigration as well as of migration (Kaur, 2003). In India the labour migration is mostly influenced by social structures and pattern of development. Uneven development is the main reason of migration along with factors like poverty, landholding system, fragmentations of land, lack of employment opportunities, large family-size and natural calamities. The high-land man ratio, caste system, lawlessness and exploitation at native place speed up the breakdown of traditional socio-economic relations in the rural areas and people decide to migrate to relatively prosperous areas in search of better employment and income. Diversification of economy and increased land productivity in certain areas, rapid improvement in transport and communication means, improvement in education, increase in population pressure and zeal for improving living added momentum to the mobility of population in India (Roy, 2011). Those who migrate to new areas experience certain socio-psychological problems of adjustments with the residents of place of migration.

The relationship between migration and work has been transformed in recent decades. Between 1990 and 2017, international migration flows increased from 153 million to 258 million. Immigration to high-income countries, particularly for work-related purposes, has accounted for the majority of this growth (United Nations, 2017). While there are many drivers of these trends, they have been facilitated in part by labour migration policy changes including the growth of temporary and employer-sponsored visa schemes and the introduction and expansion of cross-border labour mobility zones (Castles et al., 2014).

Nevertheless, compared to goods, services and capital, where cross-border trade and movement have been liberalised substantially, there remain considerably greater constraints upon the free movement of labour (McGovern, 2007). Changes to immigration policies, including changes enabling the expansion of migrant labour supply, have produced major political challenges. Policymakers in many countries have recently struggled to balance the perceived disruptive impacts on jobs and communities with the potential economic benefits. The pivotal role that negative public attitudes towards immigration played in Donald Trump's presidential election in the USA, the Brexit referendum in the UK and the ascent of far-right parties across Europe exemplifies this (Gumbrell-McCormick and Hyman, 2017).

Nonetheless, the institutionalist focus of an employment relations analytical lens brings key advantages for analysing migration and work issues. While these issues have been relatively neglected within employment relations research compared to other disciplines, several employment relations scholars have made important contributions to migration research in particular areas. These include understanding why migrant workers are channelled into particular workforce segments (e.g. Piore, 1979; Waldinger and Lichter, 2003); identifying the reasons for discrimination against migrants in workplaces and the labour market (e.g. Taksa and Groutsis, 2010; Yu, 2019); analysing particular types of management practices in workplaces and industries where

migrant workers are concentrated (e.g. MacKenzie and Forde, 2009; Thompson et al., 2013); examining the strategies and policy positions of unions and employer associations towards migrant workers (e.g. Marino et al., 2017; Wright, 2017); and analysing state and community strategies to ensure that migrants' employment rights are enforced (e.g. Chibborn, 2019; Fine and Bartley, 2019).

### **What explains the association between migrant labour and low-quality work?**

The workplace and labour market experiences of migrants are highly diverse. In virtually all countries, migrants are represented across all professional and occupational fields, all industries and all levels of seniority (Bauder, 2006). Human resource management and international business scholarship focuses particularly on highly skilled migrants who are either 'self-initiated expatriates' who move countries of their own volition or else are employed by multinationals and posted to international offices as 'assigned expatriates' (e.g. Andresen et al., 2014; Guo and Al Ariss, 2015; Zikic, 2015).

Since these groups of migrants tend to have a high degree of agency and individual bargaining power, the concerns of this scholarship relate mainly to core human resource management processes among highly skilled migrants, such as remuneration, training, recruitment and selection; outcomes relating to their job performance, employee satisfaction and organisational learning; and issues relating to workplace and social

integration amongst workers moving across borders (e.g. Collings et al., 2009). While there are notable exceptions (e.g. Almeida et al., 2012; Turchick Hakak and Al Ariss, 2013), marginalisation and mistreatment of these workers are generally treated as secondary concerns within these fields.

### **Three approaches to rethinking migrant labour and low-quality work**

To account for why migrant labour tends to be associated with low-quality jobs, we need to examine supply-side (or worker-centred), demand-side (or employer-centred) and policy- and institution-related (or state-centred) factors.

#### **Worker-centred accounts**

As noted earlier, economic scholarship, particularly that informed by orthodox theories, has dominated research on the intersection of migration and work (McGovern, 2007). Such theories have also had a considerable influence on labour migration policy outcomes, as discussed in the following. This body of research, however, is yet to provide a convincing account for the persistent vulnerability of migrant workers to mistreatment and marginalisation. In recent years, reports of migrant workers being underpaid and poorly treated have increased in countries such as Australia, the USA and the UK (e.g. Berg and Farbenblum, 2017; Ram et al., 2017; Weil, 2018). Economic theories, and the policies they inform, tend to suggest that such outcomes are generally the result of an 'information asymmetry between temporary migrant workers and their employers' (Productivity Commission, 2016: 30). This

assumes that migrants have less access to information about labour market conditions and their rights under employment law than their employers. From this perspective, addressing this information imbalance is the key to resolving problems of migrant work exploitation.

Theories from employment relations and related fields, such as political economy and socio-legal studies, suggest that there are several factors aside from access to information that affect migrants' working conditions and their position in the labour market. The particular professions and occupations that migrants are qualified for, and whether these qualifications are recognised in the host country, can affect their opportunities within the labour market (Groutsis, 2003). Migrants who possess specialised and recognised qualifications in demand tend to be more able to find high-quality and high-income employment, and thereby avoid precarious work scenarios unless constrained by other factors including immigration rules, skill recognition procedures, language barriers and discriminatory practices. By contrast, migrant workers without recognised sought-after qualifications tend to have fewer options in the labour market, which is likely to push them towards low-wage, poor-quality jobs (Bauder, 2006; Dauvergne, 2016; Walsh, 2014).

In this context, as Fine and Bartley (2019) discuss in this special issue, new forms of non-traditional collective representation, such as worker centres and community organisations, have emerged to connect with migrant workers in ways that traditional representative structures may

inhibit (see also Alberti et al., 2013; Lopes and Hall, 2015). The success of these new organisational forms may be partly due to their resonance with a more diverse workforce who see their identities as constructed primarily through their communities outside of work, rather than at the workplace (Yilmaz and Ledwith, 2017). The article by Yu (2019) in this special issue examines how identity and the related concept of cultural conformity can impact on migrant workers' careers and their inclusion or exclusion at the workplace. There is scope for future research to examine how identity can be mobilised individually and collectively to improve migrant workers' position within the workplace and the labour market.

Piore's theory has influenced subsequent research on the working conditions of migrant workers (e.g. Krings et al., 2011; McCollum and Findlay, 2015; Waldinger and Lichter, 2003). However, Clibborn's (2018) study of international students in Australia identifies a 'third frame of reference' of the peer group of other migrant workers. In this third frame, the prevailing norms regarding acceptable wages and working conditions are not informed directly by those of either the home or the host country, but by what is deemed acceptable within the peer group. Further research is needed to examine whether additional frames of reference exist among other categories of workers, and how these can be potentially identified and harnessed as part of efforts to improve migrant workers' position within the labour market.

### **Employer-centred accounts**

While the characteristics of labour supply are important for understanding the susceptibility of migrant workers to mistreatment and marginalisation, so too are characteristics of demand. The following discussion focuses on three demand-related characteristics: control, perception and skills.

While useful for assessing supply-side issues, Piore's (1979) application of segmented labour market theory also provides an important perspective on why employers may develop a preference for hiring migrant workers. Piore finds employers who disproportionately recruit migrant workers develop preferences for workers whom they can control in order to reduce or contain unit labour costs. This control may be associated with numerical and temporal flexibility in terms of the ability to hire and fire migrant workers more easily and to adjust working hours in response to changes in production schedules. Migrant workers are more willing to tolerate these conditions, according to Piore, because of their relative lack of alternative options for employment, and because their frames of reference lead to lower expectations compared to other groups of workers, as discussed earlier (Piore, 1979; see also Clibborn, 2018). Subsequent studies have broadly supported Piore's arguments (e.g. Bauder, 2006; McDowell et al., 2008).

Addressing skills shortages is another common theme of research on why employers recruit migrant workers. This is particularly the case among studies of higher skilled migrant



labour (e.g. Hawthorne, 2013; Khoo et al., 2007). These skills shortages are typically understood within scholarship and defined in visa regulations in terms of 'hard skills' or the qualifications required for particular professions. Research has also pointed to migrant workers' possession of superior 'soft skills' or interpersonal competencies, such as the ability to communicate or to work constructively with colleagues, to explain employer preferences (e.g. Moriarty et al., 2012).

Other studies indicate that the 'soft skills' employers use to account for their recruitment of migrant workers can be a smokescreen for a desire to recruit workers over whom they can exert control (Ruhs and Anderson, 2010). For instance, a recent study of the hospitality industry found that employer claims of the superior soft skills of migrant workers related to attributes created by the conditions of sponsored temporary visas. These conditions made it difficult for these workers to exercise voice or exit the employment relationship and led employers to perceive them as more loyal (Wright et al., 2019).

#### **State-centred accounts**

The state plays a critical role in mediating the intersection between migration and work. There is considerable cross-national variation in immigration selection rules and procedures established by governments that determine which migrant workers are permitted entry into a labour market (Boucher and Gest, 2018). The relative strength or weakness of national employment laws, labour market institutions and enforcement

regimes can be critically important for determining whether migrant workers enjoy the same rights and opportunities as citizens and permanent residents, or whether they are likely to be underpaid at work and marginalised in the labour market (e.g. Fudge, 2014; Lever-Tracy and Quinlan, 1988). The following discussion reviews research on the state's role in mediating the migration-work relationship in terms of the association between migrant labour and low-quality work. In particular, it examines the following themes: the trend towards demand-driven policy; visa rules and residency status; the enforcement of employment laws; the influence of labour market institutions; the gaps between policy objectives and outcomes; and the gendered dimensions of labour immigration policy.

#### **Conclusions**

The study has revealed that most of the migrants were in the age of thirties and forties, belonged to general castes with faith in Hindu religion, were mostly illiterates and migrated in the first decade of 21st century. Nearly 62 per cent of the migrants were earning a monthly income of ₹ 3000-5000. Low wages and rain-fed agriculture in the native place have been found the economic factors leading to migration, while poverty, poor civic amenities, leading a poor life, high aspirations and demonstration effect were social and psychological factors resulting to migration. Before migration, about 23 per cent persons were unemployed and 60 per cent were getting less than 250 days employment per year; but after migration, 41 per cent got more than 300 days of

employment and 31 per cent got employment for 250-300 days. As far as income is concerned, before migration 49 per cent migrants were earning less than ₹ 10000 per annum, while after migration 34 per cent could earn more than ₹ 50000 and 28 per cent could get between ₹ 40000 and ₹ 50000 per annum. Nearly 58 per cent long-term migrants sent 50-70 per cent of their income as remittances back home. A general perception of the farmers regarding migration of labour was that it has resulted in increased supply of labour, decreased wage rates and increased social tension, crime, drug menace and cultural invasion. Despite this, Marathwada farmers preferred migrant labour due to their timely availability, quality of work and low wages. Some farmers preferred local labourers due to their trust worthiness and adjustment for advance payments. Among various farm operations, migrant labourers were preferred for transplanting of paddy, while for harvesting, threshing, cattle tending, sowing, spraying, hoeing and tractor driving local labourers were preferred by most of the farmers. Also, with migration of labour there was a significant decline in the harvesting charges of wheat, transplantation charges of paddy and annual rates of contract of a permanent labourer.

### References

- Deprivation', *The Economic Journal*, 101(408): 1163-78. District', *South Asia Research*, 39(1): 43-60.
- Gupta, A.K. (1991) Migration of agricultural labour from Eastern to North Western region, *Social Change*, 21 (6): 85-90. Impact of labour migration on wage rate for different agricultural operations in Punjab: 2011 Operation Without migration With migration Change t-value Amount (₹) Per cent
- Gupta, A.K. and Bhakoo, A.K (1980) Rural to rural migration and characteristics of migration in Punjab, *Social Change*, 10 (3-4):18-22.
- JAI Press. (1987) 'Undocumented Mexico-U.S. Migration and the Returns to Households in Rural Mexico', *American Journal of Agricultural Economics*, 69(3): 626-38.
- Kaur, Amandeep (2003) Pattern of Utilization of Remittances of NRIs in Doaba Village of Punjab. M. Phil thesis, Department of Economics, Punjabi University, Patiala.
- Roy, S., (2011) Consequences of migration in India: Need and pragmatic solution, *Economic Affairs*, 56 (1): 41-48.
- Stark, O. & Taylor, J.E. (1991) 'Migration Incentives, Migration Types: The Role of Relative
- Taylor, J.E. (1986) 'Differential Migration, Networks, Information and Risk'. In O. Stark (Ed.) *Migration Theory, Human Capital and Development* (pp. 71-147). Greenwich, CO:
- Willis, K.G. (1974) *Problems in Migration Analysis*. Farnborough: Saxon House.
- Zachariah, K.C., Mathew, E.T. & Rajan, S.I. (2001) 'Impact of Migration on Kerala's Economy and Society', *International Migration*, 39(1): 63-88.
- Zachariah, K.C, Rajan, S.I, Sharma, P.S., Navaneetham, K., Gopinathan Nair, P.S. &

Mishra, U.S. (1994) Demographic Transition in Kerala in the 1980s. Monograph Series. Thiruvananthapuram: Centre for Development Studies.

- Zachariah, K.C. & Rajan, S.I. (2012) 'Inflexion in Kerala's Gulf Connection: Report on Kerala Migration Survey 2011'. Working Paper 450. Thiruvananthapuram: Centre for Development Studies.
- Zachariah, K.C. & Rajan, S.I. (Eds) (1997) Kerala's Demographic Transition: Determinants and Consequences. New Delhi: SAGE Publications.



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

-महात्मा ज्योतीराव फुले

❖ विद्यावार्ता या आंतरविद्याशाखीय बहुभाषिक त्रैमासिकात व्यक्त झालेल्या मतांशी मालक, प्रकाशक, मुद्रक, संपादक सहमत असतीलच असे नाही. न्यायक्षेत्र:बीड



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# INDEX

- 01) Effect of COVID-19 on Economy in India  
Dr.Dhammpal N. Ghumbre, Shirur (Ka.) Dist. Beed ||14
- 02) AGRICULTURAL PRODUCTIVITY OF RABI MAIZE IN KOLHAPUR DISTRICT: ...  
Mrs. Panchshila N. Ghumbre, Aurangabad ||20
- 03) A Geographical study of Population growth and trends in Akola city  
Dr. Patil B. T., Mukhed ||23
- 04) INDIAN JUDICIAL SYSTEM AND CORRUPTION  
Mr.Gautam L. Sabl, Beed ||26
- 05) A STUDY ON THE ONLINE SECURITY AND ITS IMPORTANCE FOR E-COMMERCE ...  
Dr.Sidharth S. Jadhav & Mr. SAIF AL KHADER SALEH AL ALI, Aurangabad ||30
- 06) Skill development, employment opportunities And Indian Economy  
Mrs. Sangeeta Awasare, Nanded ||36
- 07) EFFECT ON INTAKE OF ALCOHOL NIOTINE COCAINE AND MARIJUANAON HEALTH  
Mrs. Priyanka S. Waghmare, Beed ||39
- 08) आधुनिक व्यवस्थित बंगारा समानाचे स्थान  
डॉ. साहेब गुलाबराव राठोड, जि. परभणी ||43
- 09) मराठा आरक्षण : एक न्याय्य मागणी  
डॉ. राजेंद्र शंजुळ, औरंगाबाद ||45
- 10) संत साहित्यातील जीवनमूल्ये  
प्रा.डॉ. श्याम नेरकर, परळी वै. ||50
- 11) स्त्रीवाद का सैद्धान्तिक परिदृश्य  
डॉ. शिल्पी गुप्ता, नोएडा, उत्तर प्रदेश ||53
- 12) जैन प्रतिमाओं का ऐतिहासिक अध्ययन  
डॉ० दिलीप कुमार मिश्रा, गोंडा (उ०प्र०) ||57

01

## Effect of COVID-19 on Economy in India

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### Abstracts:

The outbreak of COVID-19 brought social and economic life to a standstill. In this study the focus is on assessing the impact on affected sectors, such as aviation, tourism, retail, capital markets, MSMEs, and oil. International and internal mobility is restricted, and the revenues generated by travel and tourism, which contributes 9.2% of the GDP, will take a major toll on the GDP growth rate. Aviation revenues will come down by USD 1.56 billion. Oil has plummeted to 18-year low of \$ 22 per barrel in March, and Foreign Portfolio Investors (FPIs) have withdrawn huge amounts from India, about USD 571.4 million. While lower oil prices will shrink the current account deficit, reverse capital flows will expand it. Rupee is continuously depreciating. MSMEs will undergo a severe cash crunch. The crisis witnessed a horrifying mass exodus of such floating population of migrants on foot, amidst countrywide lockdown. Their worries primarily were loss of job, daily ration, and absence of a social security net. India must rethink on her development paradigm and make it more inclusive. COVID 19 has also provided some unique opportunities to India. There is an opportunity to participate in global supply chains, multinationals are losing trust in China. To 'Make in India', some reforms are needed, labour reforms being one of them.

**Keywords:** Paradigm, pandemic, portfolio,

migrants, shrink.

### Introduction

The Indian economy was expected to roll over Rs. 32,000 crore (us\$ 4.5 billion) every day during the first 21 days of complete lockdown which was declared following the coronavirus outbreak. Under complete lockdown Less have quarter of Indies \$2.8 trillion economic movement was functional.

The outbreak of COVID-19 has impacted nations in an enormous way, especially the nationwide lockdowns which have brought social and economic life to a standstill. A world which forever buzzed with activities has fallen silent and all the resources have been diverted to meeting the never-experienced-before crisis. There is a multi-sectorial impact of the virus as the economic activities of nations have slowed down. What is astonishing and worth noting is an alarm bell which was rung in 2019 by the World Health Organization (WHO) about the world's inability to fight a global pandemic. A 2019 joint report from the WHO and the World Bank estimated the impact of such a pandemic at 2.2 per cent to 4.8 per cent of global GDP. That prediction seems to have come true, as we see the world getting engulfed by this crisis.

In another report entitled 'COVID-19 and the world of work: Impact and policy responses' by International Labour Organization, it was explained that the crisis has already transformed into an economic and labour market shock, impacting not only supply (production of goods and services) but also demand (consumption and investment). International Monetary Fund's (IMF) chief said that, 'World is faced with extraordinary uncertainty about the depth and duration of this crisis, and it was the worst economic fallout since the Great Depression'. The IMF estimated the external financing needs for emerging markets and developing economies in trillions of dollars. India too is groaning under the yoke of the pandemic and as per news reports in Economic Times published on 23 March 2020,

the economists are pegging the cost of the COVID-19 lockdown at US\$120 billion or 4 per cent of the GDP (The Economist, 2020).

This COVID-19 pandemic affected the manufacturing and the services sector—hospitality, tours and travels, healthcare, retail, banks, hotels, real estate, education, health, IT, recreation, media and others. The economic stress has started and will grow rapidly. While lockdown and social distancing result in productivity loss on the one hand, they cause a sharp decline in demand for goods and services by the consumers in the market on the other, thus leading to a collapse in economic activity. However, lockdown and social distancing are the only cost-effective tools available to prevent the spread of COVID-19. Governments are learning by doing, as it was in the case of success of containment strategy in Bhadwari district, Rajasthan, India, the economic risks of closing the economy remain nonetheless. Similarly, flattening the caseload curve is critical for economy at large, but it comes with an economic cost.

**Objective of study:**

- To study economic situations in lockdown period
- To study the various sectors problems

**Research methodology:**

The study is based on secondary information. The data is collected from various sources such as planning commission report, economic survey, Annual reports of agriculture and other reports published by the government of India. Compound annual Growth Rate (CAGR) has been calculated to analyze the trends in agriculture production and industrial and service sector role in development in India. The study has used theoretical analysis and explanation of tables, comparison between initial period

**Significance of the study covid-19 pandemic:**

With an increasing number of coronavirus cares the government has locked down transport services, closed all public and private offices

factories and restricted mobilization based on recent studies. Some economist has said that there is a job loss 40 million people (MRD reports) in the country, mostly in the unorganized sectors.

The covid-19 epidemic is the first and foremost human disaster in 2020 more than 200 countries and territories have contra med effective medical cases caused by corona virus declared pandemic by the WHO recent growth rate care globule has accelerated to more than 1200000 covid -19 confirmed care and more than 66.000 death till April 2020 as we have already acknowledge that depression land high unemployment with 21 – day lockdown announced by prime minister of India on march 23. 2020 it would slowdown the supply side accelerating the slowdown further and jeopardizing the economic wellbeing of millions

**Impact on Tourism, Aviation and Retail:**

The tourism industry is the worst affected due to the COVID crisis, internationally. The World Tourism Organization (UNWTO) (2020) estimations depict a fall of 20–30 per cent in international tourist arrivals. These figures too are based on present circumstances and are likely to increase or decrease in future. Millions of people associated with industry are likely to lose their jobs. In India, the travel and tourism industry is flourishing and is contributing sizably to the economy.

The FICCI-Yes Bank report titled 'India Inbound Tourism: Unlocking the Opportunities' described India as a tourism powerhouse and the largest market in South Asia. Tourism in India accounted for 9.2 per cent of GDP and had generated US\$247.3 billion in 2018, with the creation of 26.7 million jobs. Currently, it is the 8th largest country in terms of contribution to GDP (Jagan Mohan, 2020). According to the report, by 2029, the sector is expected to provide employment to nearly 53 million people. Foreign Tourist Arrivals (FTAs) crossed 10 million in 2017. However, the coronavirus pandemic has

restricted international mobility and the revenues generated by this sector will take a major toll on the GDP growth rate. It may bring a downfall of 0.45 per cent in the growth rate of GDP.

The aviation sector in India currently contributes US\$72 billion to India's GDP. Foreign tourist arrival has been down in the first quarter. The lockdown will have a significant impact on arrivals in the second quarter. If we estimate a conservative 25 per cent decline in the contribution of the aviation sector, it will amount to 18 billion. Railways contributed US\$27.13 billion in 2019 to GDP. A 21-day lockdown period will bring down the revenue by US\$1.56 billion. The Indian retail industry was worth US\$790 billion in FY 2019. It accounts for over 10 per cent of the country's GDP and around 8 per cent of employment. In the past few years, online retail has seen a very rapid growth and the market projections had indicated a 30 per cent growth in online retail in 2020 (National Investment Promotion and Facilitation Agency, 2020). A month-long shutdown for retail will affect the Quarter 2 revenues. In the retail sector, the suppressed demand has a tendency to revive very fast and this will enable the sector to recover the losses once the lockdown is lifted. Online retail was operational in some parts of the country during the lockdown period and this will help in offsetting some of the losses for the industry.

#### **Impact on GDP Growth Rate:**

While the COVID-19 pandemic is constantly growing and showing little signs of containment as of 15 April 2020, its adverse impact on economic growth of the country will probably be very serious. The UN warned that the coronavirus pandemic is expected to have a significant adverse impact on global economy, and most significantly, GDP growth of India for the present economy is projected to decline to 4.8 per cent (United Nation 2020). Similarly, the UN 'Economic and Social Survey of Asia and the

Pacific (ESCAP) 2020 reported that COVID-19 would have extensive socio-economic consequences in the region with inundate activities across borders in the areas of tourism, trade and financial linkages (United Nations, 2020).

Economic Survey 2019–2020 had provided advance estimates for growth in real GDP during 2019–2020 at 5.0 per cent, as depicted in Table 1, as compared to the growth rate of 6.8 per cent in 2018–2019. The nominal GDP is estimated at <sup>1</sup> 204,400 billion in 2019–2020 with a growth of 7.5 per cent over the provisional estimates of GDP (<sup>1</sup> 190,100 billion) for 2018–2019. (Economic Survey, 2020, p. 100) On 28 February 2020, the National Statistical Office announced revised estimates of GDP growth, from 8 per cent to 7.1 per cent in the first quarter, from 7 per cent to 6.2 per cent in the second quarter and from 6.6 per cent to 5.6 per cent in the third quarter. Goldman Sachs estimated the growth rate of GDP at 1.6 per cent, declining by 400 basis points because of 21-day lockdown (Goldman Sachs, 2020). In case of a quick retraction of COVID-19 pandemic across the globe by mid-May, KPMG India estimated India's GDP growth in the range of 5.3 per cent to 5.7 per cent. In second scenario where India controls the virus spread but there is a significant global recession, the growth may be between 4 per cent and 4.5 per cent. KPMG India in its report estimated India's GDP growth rate falling below 3 per cent if the virus spreads further in India and lockdown sees an extension (KPMG, 2020). Motilal Oswal research suggests that a single day of complete lockdown could shave off 14–19 basis points from annual growth (Oswal, 2020). Barclays reported the cumulative shutdown cost to be around US\$120 billion, or 4 per cent of GDP (Barclays, 2020). Mr Yashwant Sinha, former Finance Minister of India, estimated the cost of 21-day countrywide lockdown at 1 percentage point of GDP. The global recession and uncertainties of future



might make a 2 percentage point decline in growth rate (for 2020–2021) possible.

**Table No: 1 Growth of GVA and GDP at Constant Prices (2011–2012) Percentage**

	2017-18 (PE)	2018-19 (AE)	2019-20 (RE)	Percentage point change in growth rate (2018-19 over 2017-18) (Difference in %)
GDP (constant prices)	5.8	6.6	6.7	+0.1
Agriculture and allied sectors	5	5.8	5.9	+0.1
Industry	5.9	6.8	7.1	+0.4
Manufacturing	5.1	6.5	6.8	+0.2
Construction	6.8	7.1	7.4	+0.3
Services	6.2	7	7.2	+0.2
Trade, transport, information and communication	7.4	8.1	8.3	+0.1
Financial and real estate	4.2	7.8	8.4	+0.6
Public administration, defence and other services	7.9	8.4	8.1	-0.3
GDP (market prices)	7.2	8.8	9	+1.8

Source: National Statistic Office, Year 2020

Notes: RE—Revised estimates. PE—provisional estimates and AE—advanced estimates.

**Impact of COVID-19 Pandemic on Migratory Labour:**

The International Labour Organization in its report describes the coronavirus pandemic as 'the worst global crisis since World War II'. About 400 million people (76.2% of the total workforce) working in the informal economy in India are at a risk of falling deeper into poverty due to catastrophic consequences of the virus. As half of the world is in lockdown, it is going to be a loss of 195 million full-time jobs or 6.7 per cent of working hours globally. Many are in low-paid, low-skilled jobs where sudden loss of income is catastrophic (International Labour Organisation, 2020).

Seasonal migration of labour for work is a pervasive reality in rural India. A migration of millions of people happens from rural areas to industries, urban markets and farms. Major migration corridors in India are from UP and Bihar, to Punjab, Haryana, Maharashtra and Gujarat. Newer corridors from Odisha, West Bengal and North East to Karnataka and Andhra Pradesh, from Rajasthan to Gujarat, from MP to Gujarat and Maharashtra and from Tamil Nadu

to Kerala are also being created. These migrant workers are employed in the construction sector (40 million), domestic work (20 million), textile (11 million), brick kiln work (10 million), transportation, mining and agriculture (IIPS, 2001). During lockdown, 92.5 per cent of labourers have lost 1 to 4 weeks of work. A survey done by Jan Sahas, of 3196 migrant workers across northern and central India, between 27 March and 29 March, reveals that 80 per cent of migrant workers feared that they will run out of food before lockdown ends on 14 April and will not get their job back thereafter (Figure 1). The survey revealed that 55 per cent of migrant workers get a daily wage between ₹ 200 and ₹ 400, and 39 per cent of the workers get it between ₹ 400 and ₹ 600, which is below minimum wage rate. Only 4 per cent of the workers get ₹ 600 and above, which is close to minimum wage rate. They work in exploitative conditions, are often under debt and have little savings of their own. About 49.2 per cent of these workers in the survey said that they did not have ration and 39.4 per cent said that they had ration which would last about 2 weeks.

**Table No: 2. The impact of corona virus lockdown on India's migrant population**

Not finding work	99.2
Not out of ration	88.8
Not able to return village	99.2
Shoes	99.2
Issues with ongoing wedding	99.2
Don't have	99.2
Won't have any problem	88.8
Not able to pay for education	99.2

The survey further explains that about 99.2 per cent of these workers have Aadhaar card, 86.7 per cent have a bank account or Jan Dhan documents, 61.7 per cent have ration cards and 23.7 per cent have Below Poverty Line (BPL) cards. Although government has announced a relief package of ₹ 1,700 billion, many of them might find it difficult to avail the benefits. These workers expected the government to provide for

monthly ration and monthly financial support (Jan Saahas Survey, 2020). The crisis witnessed a horrifying mass exodus of such floating population of migrants on foot amidst the countrywide lockdown. Their worries primarily emanating from loss of job and absence of a social safety net. Despite assurance from the government, they continued to walk back to their homes. It is a saga of inequality, poverty and social exclusion of vulnerable populations struggling to overcome this sudden crisis.

The Supreme Court sought a status report from the Centre on the measures taken to prevent the mass exodus of migratory labourers to their villages. A sudden displacement of workers due to coronavirus will have far-reaching effects on the Indian economy. Some of these workers may not return to work in the industrial towns of Gurugram, Surat and Mumbai. They may seek employment in their marginal farms or in the nearby areas. The consequences of behaviour changes forced by lockdown will put pressure on MSMEs and farm sector, as labour will not be available soon after lockdown. If not properly addressed through policy, the social crisis created by the COVID-19 pandemic may also increase inequality, exclusion, discrimination and global unemployment in the medium and long term.

#### **Implications on Capital Markets, Global Oil Market and its Impact on India:**

Coronavirus fears have sent shock waves across global financial markets. Indian capital markets are envisaging a funds flow to Western capital markets, owing to rate cuts and fall in the stock markets the world over. As per the NSDL data, Foreign Portfolio Investors (FPIs) have withdrawn huge amounts from India—<sup>1</sup> 247.76 billion from equity markets and <sup>1</sup> 140.50 billion from debt markets in a short span of 13 days, that is, from 1 to 13 of March 2020. There will be a lot of volatility in the capital markets in the next 6 months, owing to rapid flow of capital from one market to another in the world.

A historic drop in demand for oil has dropped the crude oil prices to an 18 year low of US\$22 per barrel, in March from US\$65 per barrel in January. Some estimates have pegged a saving of US\$7–8 billion for India for every US\$5 a barrel fall in crude oil prices. A fall in crude oil prices may cut India's current account deficit, which was 1.55 of GDP in 2019–2020 (Economic Survey, 2020). But the capital outflows from India may exceed the potential saving in the current account deficit. INR to USD average exchange rate has been <sup>1</sup> 70.4 per US dollar, but it is already quoting near the psychological barrier of <sup>1</sup> 75 per US dollar. If capital outflows from India continue, rupee (INR) may depreciate further in the coming days.

#### **Policy and programme implications:**

##### **Fiscal and Monetary Measures:**

Coronavirus pandemic demands coordinated fiscal and monetary policy measures to deal with it. The fiscal measures include paying the healthcare bill raised by the pandemic. Providing for masks, gloves, testing kits, personal protection equipment, ventilators, ICU beds, quarantine wards, medicines and other equipment would mean a huge increase in healthcare spending. Public spending on healthcare in India is 1.1 per cent of GDP. It is likely to increase in the current fiscal year. The government has declared a relief package of <sup>1</sup> 1,700 billion, it will be used to make cash transfers to the poor and vulnerable sections of the society. The sectors that are affected the most, that is, MSMEs and the farms, will be supported by another relief package which will be announced soon. Tourism and those sectors which are integrated with global supply chains will require support. Tax revenues will also drop due to recession. Fiscal receipts could drop by at least 2 per cent of GDP. All these fiscal measures will increase fiscal deficit by 1–1.5 per cent, which is currently at 3.2 per cent, as predicted by economists.

The crisis emerging from the coronavirus

spread will pull down investment and consumption demand. Conventionally, the demand side components of GDP account for 72.1 per cent consumption, out of which government consumption is barely 11.9 per cent as depicted in Table 2. An anxiety-induced reluctance to spend is the main threat to economic growth rate. The government will have to increase the spending in order to boost demand. Support to different sectors will have to be given as a measure to boost investment demand. Repo Rate has been reduced by 75 basis points, as part of a loose monetary policy. The federal reserve had cut its interest rate by 1 percentage point and decided to keep it in the range of 0–0.25 per cent in the USA. Monetary policy is less effective in dealing with a pandemic because the problem is not liquidity alone. The disruption of economic activity and the uncertainty of future bring down the investment sentiment. An anxiety-induced frugality among firms and investors wipes out the investment demand.

Which government consumption is barely 11.9 percent and as depicted table. No. 2 anxiety included.

#### **Conclusion:**

The spiraling and pervasive COVID-19 pandemic has distorted the world's thriving economy in unpredictable and ambiguous terms. But it significantly indicated that the current downturn seems primarily different from recessions of the past which had jolted the country's economic order. Whereas the nations, conglomerates, corporations and multinationals continue to understand the magnitude of the pandemic, it is undoubtedly the need of the hour to prepare for a future that is sustainable, structurally more viable for living and working.

While the unprecedented situation has caused a great damage to the economy, especially during periods of lockdown, the nation will have to work its way through it, by introduction of fiscal measures. As the national

government envisions, protection of both lives and livelihood is required. The economic activity must begin gradually after screening of the labour force. Strict preventive measures should be implemented by the industry in order to safeguard the health of the workers. While policy and reforms should be doled out by the government adequately to salvage the economy, the industry, civil societies and communities have an equal role in maintaining the equilibrium. The norms of social distancing, avoiding or cancelling gatherings, and use of masks and sanitizers should be the way of life till we are able to eradicate the virus. During this time, the economy is juxtaposed with social behaviour of humankind, so the responsibility of bringing back economic action is not of government alone.

The risk of a global recession due to COVID-19 in 2020 and 2021 would be extremely high, as it has been observed globally that the shutdown of all economic activities—production, consumption and trade—to control the spread of COVID-19 is imminent. The nature of shutdown is unique in case of COVID-19 due to a supply shock, a demand shock and a market shock. The recovery in economy depends on the timings and magnitude of government support as well as the level of corporate debt and how the companies and markets cope with lower demand. Government assistance to those most in need (largely constituted of unorganized sector, migrants and marginalized communities) is a critical measure to save many lives.

However, every crisis brings about a unique opportunity to rethink on the path undertaken for the development of a human being, community and society. The COVID-19 pandemic has a clear message for the Indian economy to adopt sustainable developmental models, which are based on self-reliance, inclusive frameworks and are environment friendly.

References:

1. Monika Chaudhary, P. R. Sodani, Shankar Das - August 11, 2020 Effect of COVID-19 on Economy In India – *Journal of Health Management*

2. Bloom, E., Wit, V. d., Jose, M. J.-S. (2005). Potential economic impact of an Avian Flu Pandemic on Asia. Asian Development Bank

3. **Economic Survey. (2020)**. Key indicators. Government of India. Chapter 5. Government of India.

4. **Godman Sachs. (2020)**. Goldman Sachs estimates India's GDP growth rate at 1.6%, predicts RBI will reduce interest rates by another 50 basis points

5. **Jagan Mohan, M. (2020)**. Travel and tourism industry in India, statistics and facts

6. **Jan Saahas Survey. (2020)**. Lockdown is only the beginning of misery for India's migrant labourers.

7. **KPMG. (2020)**. Coronavirus: India's GDP growth may fall below 3% if lockdown extends, says KPMG report. Business Today

8. **Lee, J.-W., Mc Kibbin, J. W. (2004)**. Estimating the global economic costs of SARS. In Knobler, S., Mahmoud, A., Lemon, S., Mack, A., Sivitz, L., Oberholtzer, K. (Eds.), *Learning from SARS: Preparing for the next disease outbreak*. Institute of Medicine (US) Forum on Microbial Threats.

9. **Martin Karlsson, T. N. (2014, July)**. The impact of the 1918 Spanish flu epidemic on economic performance in Sweden: An investigation into the consequences of an extraordinary mortality shock. *Journal of Health Economics*.

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02

## AGRICULTURAL PRODUCTIVITY OF RABI MAIZE IN KOLHAPUR DISTRICT: MAHARASHTRA

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Aurangabad

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### Introduction:

Now a day's explosively increasing population is one of the foremost challenge facing the world in general and underdeveloped and developed countries in particular. This resulted in food shortage worldwide. Inadequate production of food grain is one of the most important reasons behind food scarcity. Thus there is need to increase the agricultural production especially food grains. There are several ways to enhance the production such as advanced technologies, high yielding varieties of crops, multi crop farming etc. But these techniques further have constraint of physical and climatic conditions, socio-economic constraint, traditional methods of farming etc. due to these constraints regional imbalance in food crop production is seen all over the world. Therefore better planning developmental activities in agricultural practices are required which will help to increase crop productivity in real sense.

The agricultural productivity is considered as very complex and multidimensional concept. However, number of scholars has invented several techniques to compute efficiency in the level of agricultural productivity. Kendall (1939) has suggested a method of determining agricultural efficiency which is based on output per unit area and put forth a

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## INDEX

Sr. No.	Title of the Papers	Name of Authors	Page No.
01	Analysis of National Food Security Act	Mrs. Panchshila N. Ghumbre	01
02	The effect of mobile retailing on consumers' purchasing experiences: A dynamic perspective	Dr.A.M. Chandre Mr. A.N. Dhiver	04
03	Geographical Study of Farmer Suicide in Maharashtra: Special Reference to Marathwada	Dr.A.I.Khan	09
04	Art and Science of Voice Culture	Mr. Gautam L. Sable	14
05	Kirchen gardens-Their Social, Economic and Environmental Contributions to Community	Mrs. Priyanka S. Waghmare	18
06	Causes and Impact of Labour Migration: A Case Study of Marathwada Region	Dr.Sidharth S. Jadhav Mr.Sandeep G. Vale	20
07	Indian Modern Agricultural Systems	Dr.Baban M Mohite Kendre Rameshwar Dhondiba	24
08	A Study of Human Resources Management Practices and its Impact on Employees job Satisfaction in Private Sector Banks: A Case Study of Yes Bank	Dr. Dhammpal N. Ghumbre	26
09	Human Rights and Issue of Global Health	Mr. Sharad B. Rode	32
10	Mobile Marketing in the Retailing Environment	Dr.A.M. Chandre Mr. A.N. Dhiver	35
11	Emerging Issues in E-Commerce in India	Dr. Anurath M. Chandre	39
12	Cyanobacterial Diversity of Dokewada Reservoir in Beed District of Maharashtra	M. L. Thumram S. M. Talekar	43
13	Kiran Desai's Hullabaloo in the Guava orchard:The Study of Multicultural Identity	Dr. Sudhir P. Mathpati Subhash Virthalrao Pandir	45
14	संवैधानिक राष्ट्रवादाचा प्रशासनावरिल प्रभाव	प्रा. डॉ. जाधव विठ्ठल सखाराम	52
15	भारतीय संस्कृती के सोपानों का अध्ययन	प्रा.डॉ. विलास तुकाराम राठोड	56
16	महिला सबलिकरण वास्तव आणि व्यथा	डॉ. अशांक डोळस	59
17	दशशतवाद, नक्षलवाद, राजकीय हिंसा	बड्डे भागवत रामप्रसाद	61
18	स्त्री स्वातंत्र्याच्या भारतीय संकल्पना आणि कला	प्रा. डॉ. बालासाहेब कांडेबा जाधव केलास मच्छिंद्रनाथ होके	63
19	आदिवासी स्त्री : शिक्षण, आरोग्य आणि आर्थिक स्थिती	डॉ. बनायत जी .एच. अभिनिता लक्ष्मण बनकर	65
20	बौद्ध धम्मामध्ये दान पारमिता	प्रा. डॉ. मनोहर सिरसाट पांडमुख भाग्यशाली रामदास	67
21	आदिवासी आत्मकथन व चरित्र वाङ्मयातील धर्मांतरविषयी कार्ये	डॉ. विठ्ठल केदारी	69
22	औद्योगिक क्षेत्रात काम करणाऱ्या कामगार स्त्रियांच्या समस्या	प्रा.डॉ.एस.एस.मानकर प्रिती किशोर देवे	73
23	बुद्ध तत्त्वज्ञानातील नैतिक शिक्षण आणि पंचशीलाचे महत्त्व	डॉ. बाळासाहेब बा. लिहिणगर, वनामाला देविदास श्रीसुंदर	75

**A Study of Human Resources Management Practices and its Impact on Employees Job Satisfaction in Private Sector Banks: A Case Study of Yes Bank.**

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**ABSTRACT:** In recent days of exceedingly business atmosphere organizations, they have and facing strong tasks in form of achievement and optimization of human resource. Being valuable and scarce abilities, human resources as a source of sustainable competitive advantage. The success of any organization depends on several factors and standards, but the most serious factor that affects the organization achievement and activities is its employee. Human resources play a significant role in performing an advanced and high-quality of facilities and products. This study is an attempt to determine and analyse the influence of human resource management practices on job satisfaction of banking employees in private sector. In this study, the assessment regression model identified that the HRM practices like Performance, Training, Team Work, Appraisal, and compensation has significant impact on job satisfaction. By another way, Employee Participation has no significant impact on job satisfaction of the employees of Yes bank.

**Keywords:** Human Resource, Training, Job Satisfaction, Achievement, Employee Participation.

**INTRODUCTION**

In recent days in an exceedingly unstable business atmosphere organization are facing strong tasks in form of achievement and optimization of human resources. Being valuable and scarce abilities, human resources are considered as a source of sustainable competitive advantage. The success of an organization depends upon several factors but the most critical factor that affects the organization's performance is its employee. Human resources play a significant role in the Performance of an innovative and high-quality product/ facility. If the employees of an organization are satisfied with their works, the organization can complete its goals very directly. In any organization, HRM practices concentrations on optimum consumption and management of their human resource effectively in order to accomplish maximum output. Managing people is concerned with determining approaches and strategies to find alternatives for how to achieve organizational goals. Khan (2010) revealed that in an energetic business

atmosphere, there's a requirement of an approach to realize better performance, to originate and implement HRM practices. To a considerable and insubstantial extent, the organizations got to advance in such practices to urge a competitive benefit.

The management of human resources plays an important role in achieving the goals of the company and retaining the competitive edge. HRM procedures apply to institutional activities to control the personnel pool and ensure that resources are used to accomplish administrative aims (Schuler & Jackson 1987). Human resource management practices are that the management of individuals within the interior environment of organizations, comprises the activities, policies, and practices involved in planning, obtaining, developing, utilizing, evaluating, maintaining, and retaining the appropriate numbers and skill mix of employees to achieve the institution's objectives (Appelbaum 2001). Presently organizations are competing through implementing the unique HRM practices and thanks to the globalization organizations adopt the foremost up-to-date HRM practices so as to accomplish the organizational goals. Best HRM practices are advantageous for both employee and employer; it plays a crucial role in constructive growth of the organization.

Job satisfaction is an attitude which is an outcome of harmonizing and summation of various precise likes and dislikes experiences with the work. Job satisfaction for an employee is that the level of satisfaction consistent with job. Job satisfaction may be a crucial indicator of how employees feel about their job and describes what proportion they're contented together with his or her job. The satisfaction level of employees also related to increase output of the organization. Job satisfaction of an employee is important to the success of a corporation. In a corporation a high rate of employee contentedness is directly associated with a lower employee turnover. Thus, keeping employees' satisfaction in their jobs with their careers should be a foremost priority for each organization. Bogdanova et al (2008) stated that HRM practices attempt to develop and



allocate human capital within the absolute best ways so as to realize long-term goals; they supply them with many benefits and good environments that might boost employee's motivation, job satisfaction, and increase their performance. **Gürbüz (2009)** remarked that so as to sustain within the market human resource management (HRM) practices and job satisfaction of employees have many significant benefits for organization.

#### OBJECTIVES OF STUDY

The objectives of the study is:

To determine and analyze the impact of human resource management practices on job satisfaction of banking employees in private sector.

#### REVIEW OF LITERATURE

Researchers, scholars and politicians investigated many studies over various times in order to analyze the relationship between HRM activities and work satisfaction. Many researches have shown that the main drivers of employee success are HRM behaviors and work satisfaction. The paper aims to examine the relationship between HRM activities and the satisfaction of bank employees in the private sector. Different researchers and scholars have addressed many HRM activities. In **Katou (2008)** conducted a study on the effect of HRM practices on Greek manufacturing organizational efficiency. The findings showed the correlation between HRM practice (resourcing and growth, rewards and benefits, participation and work design) and organization's results (skills, attitudes, behaviour) and business strategies (cost, quality, innovation). The study concluded that HRM activities are connected with corporate strategies that influence corporate performance with HRM results. **Iqbal et al (2011)** The study was conducted to compare public and private university HRM activities in Pakistan to managers. The research showed that in public and private colleges there was a major gap in HRM activities. HRM practiced better in public universities than in private universities, including career description, training & growth, pay, teamwork and employee engagement. Study also found that performance evaluation activities in private universities are higher than universities in the public sector. **Zulfqar et al (2011)** examined the relationship and essence of the relationship between HRM (compensation, appraisal of the results and promotion) and workers perceived performance in Pakistan's banking sector. Results from the study showed a positive and important link between employee expectations of success and HRM practice. Further empirical findings show that performance management and promotion

practices are relevant, but compensation practices are not substantial. A similar research was carried out on bank employees **Majumder (2012)** advantage an insight into present HRM practices and their effect on the satisfactory work of the employees in the private banking sector in Bangladesh. These include recruitment and selector structures, compensation packages, safety at work, job growth, training and development, management style, job design, and accountability, and incentives and motivation, and the work environment. The study found that the majority of the workers were not happy with the incentives and incentive package, Career growth, education and advancement, management style, work creation and tasks. **Rehman and Hussain (2013)**

Examined the partnership between the organization's HRM activities on the purpose of the corporation to remain and operate effectively.

The study showed that HRM is an individual fit, employee protection, communication and training and growth activity that contributes significantly to keeping with the organization's intentions. In addition, strong, positive connections between HRM and employee retention have been identified and these activities strengthen the retention capabilities of employees in companies. **Lamba and Choudhary (2013)** found that HRM activities offer an advantage to the engagement of employees towards a global strategic organizational objective. The study concluded that HRM activities such as training & growth, reimbursement, and well-being have a major impact on corporate engagement and are related to high-level organizational success that help to retain skilled workers. The effect of university lecturers' work satisfaction on their contribution to academic activities was examined at **Awang et al (2010)**.

It also specifically analyzed factors that lead to satisfaction in the workplace, namely promotion, remuneration, job climate, workloads, colleague relationships, and management approach. The study showed that promotions, workload, and relationships with colleagues have a profound impact on lecturers' job satisfaction. Above all, this study confirms the essential connection between job fulfillment and employee engagement.

Universities of Pakistan's public sector **Malik et al (2010)** The effect on perceived organizational involvement of teacher satisfaction with job dimensions have been investigated. The results of the study showed that work-to-work satisfaction, supervisory efficiency, and salary satisfaction had a big positive impact on faculty members' organizational engagement. The study revealed that teachers

are highly organized and happy about their tasks, supervision, pay, colleagues, and promotional opportunities. **Padala (2010)** conducted a study to define different employee satisfaction and corporate engagement criteria. The study shows that the intensity of employee involvement in their company is positive. The employee happiness and the organization's dedication are negated both by their age, schooling, nature, a period of service, and profits. Employees with very active engagement in the union have more jobs and are more organizationally happy. **Olusegun (2013)** researched the impact of work satisfaction on turnover intentions among university employees in Southwest Nigeria. The study concluded that there was a significant linear combined impact of work satisfaction and sales intentions. Between work satisfaction and the desire to sell there were important ties. The research also found that the turnover of library employees by their employer was not considerably different.

**Shikha (2010)** analyzed HRM practices by Indian business bank employees in order to explore HRM practices which are a source of competitive and sustainable advantages. In the report, the company should prioritize long-term dedication to human capital instead of investing resources in training and development. **Hock (2011)** conducted a study to study the influence of human resources practices on the satisfaction of foreign employees in the PCSB group of businesses in Malaysia and gain a better understanding of this situation. The results of the study showed that only compensation for the independent variable influenced the satisfaction of foreign employees. The findings also showed that employees who only have primary education are happier with their employment. In order to find out how HRM practice influences work satisfaction, organizational engagement, and impact on the motivation to leave the project, **Martin (2011)** conducted an investigation. Recruitment & recruitment, incentive & rewards, training & development, and monitoring & appraisal included HRM activities. Research has found an important connection between the perception and purpose of abandonment of human capital, which can be mediated by organizational engagement and satisfaction at work.

**Khan et al (2012)** have examined the relationship between work satisfaction and HR practices in university lecturers in three different sectors of Pakistan's universities (public, private, and semi govt). The study found that teachers from male universities are more satisfied with their work, but teachers from female universities are more satisfied with the HR practices. The university teachers in the public sector

are more satisfied and have formed a direct correlation between experience and job satisfaction. The total relationship between HR activities and work satisfaction is positive. The relationship between HR practices (supervisor's effect, decision-making participation, and compensation policy) and employee satisfaction among Pakistan's manufacturing and service employees were evaluated by **Iqbal et al. (2013)**. Results from the study showed a strong positive impact on job satisfaction on the supervisor's position. Participation in decision making has a less positive impact on employee satisfaction than an optimistic factor in business success.

### RESEARCH METHODOLOGY

This research aims to investigate and evaluate the impact on the employment satisfaction of private sector banking employees of human resources management practices. In this study Yes Banks is taken as a case study by a leader of the private sector. Executives, middle managers, and yes-bank managers are included in the sample units. 45 participants were interested in the research to collect knowledge on HRM activities. However, because bank employees' busy schedules and their participation in various operations have limited the number of respondents to 40. The appropriate interview method is used and the researcher shall fill out a structured schedule.

#### Methodology:

Two approaches have been used for the recent analysis. The first is the HRM practice scale **Qureshi and Ramay (2006)**, consisting of 25 statements on preparation, teamwork, performance evaluation, compensation and staff involvement. The second form consists of 20 statements on the **Singh (2001)** work satisfaction scale. These instruments are found to be accurate and valid within appropriate criteria.

#### Model Specification:

for analyzing the impact of human resource management practices on job satisfaction the multiple linear regression models have applied by using SPSS. The regression model is depicted as:

$$JS_{it} = \beta_0 + \beta_1 (T) + \beta_2 (P) + \beta_3 (TW) + \beta_4 (EP) + \beta_5 (C) + e_{it}$$

In the above equation  $\beta_0$  is constant and  $\beta_i$  are the regression coefficient of the explanatory variables, while  $e_{it}$  is the residual error of regression.

#### Dependent and Independent Variables:

The dependent variable is the Job Satisfaction (JS) of bank employees in the regression model. The independent variables used in model are Training (T), Performance

Appraisal (P), Team work (TW), Employee Participation (EP) and Compensation (C).

**Hypotheses:**

For examining the impact of HRM practices on Job Satisfaction the following null hypotheses have framed.

H<sub>01</sub>: Training has no significant impact on job satisfaction.

H<sub>02</sub>: Performance Appraisal has no significant impact on job satisfaction.

H<sub>03</sub>: Team work has no significant impact on job satisfaction.

H<sub>04</sub>: Employees' Participation has no significant impact on job satisfaction.

H<sub>05</sub>: Compensation has no significant impact on job satisfaction.

**Findings of Regression Model**

In order to determine the existence of multicollinearity problem, the simple correlation matrix among independent variables is analyzed and presented in the table (1). Cooper and Schindler (2003) argued that a multicollinearity problem exists when correlation scores are 0.8 or greater. Table (2) Showing the Correlation between HRM and Job Satisfaction

	JS	T	P	TW	EP	C
	Job Satisfaction	Training	Performance Appraisal	Team Work	Employee Participation	Compensation
JS	1.00					
P	0.271*	1.000				
T	0.087	0.045	1.000			
W	0.754*	0.086	0.411*	1.000		
EP	-0.177	0.177	-0.203	0.217	1.000	
C	0.066	0.023	0.037	0.135	0.355*	1.000

From the table 1 it can be concluded that none of the HRM practices variables have no high correlation or presence of multicollinearity, which is above the standard rule of thumb 80%. The results from correlation analysis indicate that job satisfaction of employees is negatively correlated with employee participation and other HRM practices like training, performance appraisal, team work and compensation are positively correlated with job satisfaction.

**Regression Analysis Results**

Table III Showing the Multiple Regressions.

Explanatory Variables	Constant	T	P	TW	EP	C	
Variables		Training	Performance Appraisal	Team Work	Employee Participation	Compensation	
B <sub>1</sub>	0* (0.351)	5* (0.011)	-0.162 (0.074)	0.90* (0.000)	0.0* (0.048)	0.33* (0.008)	
t-values	0.964	2.631	-1.982	8.242	-2.047	2.826	
R <sup>2</sup>	0.713					Adj. R <sup>2</sup>	0.674
F-Test	6.21					Durbin Watson 2.214	

Coefficient effect (B<sub>i</sub>) is a predictor of each variable related to HRM practices. The regression analysis results reveal the following observations.

- The adjusted value of R<sup>2</sup> highlights that 67.7% variability in

**II. DATA ANALYSIS AND INTERPRETATION**

Table (1) Showing the Mean Value and Standard Deviation of HRM practices and Job Satisfaction.

	fs. No.	min	Max	Mean	St. Deviation
Performance	40	00	4.00	4.01	0.79
Training	40	00	5.00	5.00	0.45
Employee participation	40	00	3.00	2.45	0.45
Teamwork	40	00	5.00	3.80	1.18
Compensation	40	00	.00	4.47	0.35
Total HRM				4.55	
Job Satisfaction	40	00	.00	5.34	0.40

The training practices provide satisfaction to all the respondents between "small extents" to "very great extent". On an average the respondents are satisfied to a large extent from the training practices provided by the organization. The performance appraisal system provides satisfaction to all the respondents between "moderate extents" to "very great extent". On an average the respondents are satisfied to a large extent from the performance appraisal system provided by the organization. Respondents are satisfied to a small extent with the training practices and Employee participation practices offered by the Bank. The most important factor compensation showed that respondents are satisfied "to a large extent" with the salary packages and other remunerations benefits. The average value (3.55) showed that the employees are satisfied to large extent with the HRM practices offered by the Bank. The mean value of Job satisfaction showed that the employees are satisfied to a large extent.

the job satisfaction of employees can be explained by HRM practices (independent variables).

2. The Durbin Watson test value 2.244 indicates the absence of no serial correlation among the variables.
3. An F-Test value is 18.22 and p-values less than 5% for the data variables indicates the very well fit of regression model. In other words, the null hypothesis ( $H_0$ : There is no effect of given explanatory variables on dependent variables) is rejected.
4. The regression results highlight that performance appraisal has no significant effect on job satisfaction at 5% level of significance.
5. The regression coefficients of the other independent variables of HRM practices are statistically significant at 5% significance level and they have significant influence on job satisfaction of the employees of YES Bank.

As shown in the above table the results of regression analysis can also be depicted in the regression equation form based on regression coefficients.

$$P_{jt} = 0.720 + 0.153T - 0.182P + 0.890TW - 0.090EP + 0.403C$$

Based on the above equation it can be inferred that Performance Appraisal (P) has negative and insignificant influence on Job Satisfaction (JS), whereas Employee Participation (EP) has negative but significant influence on Job Satisfaction (JS). The  $\beta_1$  is 15.3%, t-value is 2.641 which is less than p-value at 5% level of significance. Thus,  $H_{01}$  is rejected. It means Training has significant influence on Job Satisfaction in YES Bank.

The  $\beta_2$  coefficient shows -18.2% influence of Performance Appraisal (P) on Job satisfaction. But these results are not statistically significant at 5% significance level. The t-value is -1.994, which is more than p-value at 5% level of significance. Thus,  $H_{02}$  is accepted and it is inferred that the Performance Appraisal has no significant influence on Job satisfaction.

In the HRM practices Team Work (TW) shows positive correlation with Job Satisfaction. The  $\beta_3$  shows 89% influence on the Job Satisfaction, t-value is 82.59 and p-value is less at 5% significance level hence  $H_{03}$  is rejected.

The regression results reveal that Employee Participation (EP) has negative and significant influence on Job Satisfaction. The  $\beta_4$  coefficient shows 9% influence on the Job Satisfaction, t-value is -2.047 and p-value is less at 5% significance level. Hence  $H_{04}$  is rejected. Thus, it is observed that in case of YES Bank Employee Participation

has significant impact on the Job Satisfaction. The regression coefficient  $\beta_5$  which measures compensation has 40% influences on Job Satisfaction of sample employees. The t-value is 2.826 and p-value is less at 5% significance level. Hence  $H_{05}$  is rejected

#### CONCLUSION AND SUGGESTION:

The current research is an attempt to evaluate and examine the effect on job satisfaction of private sector banking workers in Yes Bank on human resource management practices. In the recent research, the estimates of the regression model showed that the HRM practice has a substantial effect on job satisfaction, such as efficiency, training, evaluation, compensation, team work. In other words, the presence of workers has no important effect on the job satisfaction of Yes banks employees. The study suggests that Yes Bank should implement new policies to boost employee engagement at senior and middle management levels. Other activities such as preparation, evaluation of results, teamwork and compensation must be sustained and adjusted so that a high degree of employee satisfaction can be reached.

#### REFERENCES:

- Appelbaum, S. H., (2001): "Human Resource Management", John Molson School of Business, Concordia University, Montreal.
- Awang, Z., Ahmad, J. H., and Zin, N. M., (2010): "Modelling Job Satisfaction and Work Commitment among Lecturers: A Case of UiTM Kelantan", Proceedings of the Regional Conference on Statistical Sciences 2010 (RCSS'10), pp241-255.
- Bogdanova, A., (2008): "Work Environment Stressors: The link between employees well-being and job performance" Ph.D. thesis.
- Gurbuz, S., (2009): "The effect of high-performance HR practices on employees job satisfaction", Istanbul University Journal of the School of Business Administration Cilt/Vol:38, Sayı/No:2, 2009, 110-123 ISSN: 1303-1732.
- Hock, Y. K., (2011): "Impact of Human Resource Practices on Foreign Workers' Job Satisfaction: Evidence from a manufacturing firm in Malaysia", Research paper, College of Business Universiti Utara Malaysia.
- Hussain, T., and Rehman, S. S., (2013): "Do Human Resource Management Practices Inspire Employees' Retention?", Research Journal of Applied Sciences, Engineering and Technology 6(19), pp 3625-3633.
- Iqbal, H. K., Malik, M. A., and Ghafoor, M.M., (2013): "Impact of HR Practices on Job Satisfaction: An Empirical Evidence from corporate sector of Punjab- Pakistan",

- Interdisciplinary Journal of Contemporary Research in Business, June 2013 Vol 5, No 2, pp442-454.
8. Iqbal, M. Z., Arif, M. I., and Abbas, F., (2011): "HRM Practices in Public and Private Universities of Pakistan: A Comparative Study", *International Education Studies* Vol. 4, No. 4, pp 215-222.
  9. Katou, A. A., (2008): "Measuring the impact of HRM on organizational performance", *Journal of industrial engineering and management*, v1n2, pp 119-142.
  10. Khan, M. A., (2010): "Effects of Human Resource Management Practices on Organizational Performance – An Empirical Study of Oil and Gas Industry in Pakistan", *European Journal of Economics, Finance and Administrative Sciences*.
  11. Khan, I., Ghauri, T. A., and Akram, K., (2012): "Relationship between Job Satisfaction and HR Practices, an Empirical Research of Different Sectors of University Teachers in Pakistan", *International Journal of Learning & Development*, Vol. 2, No. 3
  12. Lamba, S., and Choudhary, N., (2013): "Impact of HRM Practices on Organizational Commitment of Employees", *International Journal of Advancements in Research & Technology*, Volume 2, Issue4, pp 407-423.
  13. Majumder, T. H., (2012): "Human Resource Management Practices and Employees' Satisfaction Towards Private Banking Sector in Bangladesh", *International Review of Management and Marketing* Vol. 2, No. 1, 2012, pp.52-58
  14. Malik, M. E., Nawab, S., and Naeem, B., (2010): "Job Satisfaction and Organizational Commitment of University Teachers in Public Sector of Pakistan", *International Journal of Business and Management* Vol. 5, No. 6, pp 17-26.
  15. Martin, M. J., (2011): "Influence of Human Resource Practices on Employee Intention to Quit", Dissertation submitted to the faculty of Virginia Polytechnic Institute and State University.
  16. Olusegun, S.O., (2013): "Influence of Job Satisfaction on Turnover Intentions of Library Personnel in Selected Universities in South West Nigeria", *Library Philosophy and Practice (e-journal)*. Paper 914.
  17. Padala, S.R., (2011): "Employees' Job Satisfactions and Organisational Commitment in Nagarjuna Fertilizers and Chemicals Limited, India", *Journal of Research in International Business and Management* Vol. 1(1) pp. 17-27.
  18. Qureshi, M. T., and Ramay, I. M., (2006): "Impact of Human Resource Management Practices on Organizational Performance in Pakistan". *Muhammad Ali Jinnah University Islamabad*.
  19. Schuler, R., and Jackson, S., (1987): "Linking competitive strategies with human resource management practices", *Academy of Management Executive*, Vol.1, No.3, pp. 207-19.
  20. Shikha, N., (2010): "Human Resource Practices and their Impact on Employee Productivity: A Perceptual Analysis of Private, Public and Foreign Bank Employees in India", *DSM Business Review* Vol. 2, No. 1.
  21. Zulfqar, A. B., Sharif, B., Saeed, A., and Niazi, M.K., (2011): "Impact of human resource practices on employee perceived performance in banking sector of Pakistan", *African Journal of Business Management* Vol. 6(1), pp. 323-332.