

Impact Factor – 6.625

E-ISSN – 2348-7143

INTERNATIONAL RESEARCH FELLOWS ASSOCIATION'S

RESEARCH JOURNEY

International E-Research Journal

Peer Reviewed & Indexed Journal

Special Issue 249 (A) - July 2020

IMPACT OF GLOBALIZATION LITERATURE, ENVIRONMENT & SOCIETY



Guest Editor -

Dr. D. K. Shinde,
Principal,
M.H.M. Arts & Commerce College,
Modnimb, Tal. Mhada Dist - Solapur

Executive Editors of the issue -

Dr. S. M. Gaikwad
Dr. P. B. Bhange

Chief Editor - **Dr. Dhanraj T. Dhangar** (Nashik)



This Journal is indexed in :

- **University Grants Commission (UGC)**
- **Scientific Journal Impact Factor (SJIF)**
- **Cosmoc Impact Factor (CIF)**
- **Global Impact Factor (GIF)**
- **International Impact Factor Services (IIFS)**

For Details Visit To : www.researchjourney.net

SWATIDHAN PUBLICATIONS

I
N
T
E
R
N
A
T
I
O
N
A
L

R
E
S
E
A
R
C
H

F
E
L
L
O
W
S

A
S
S
O
C
I
A
T
I
O
N



'RESEARCH JOURNEY' International E- Research Journal

Impact Factor - (SJIF) - **6.625 (2019)**,

Special Issue 249 (A) – Impact of Globalization

Peer Reviewed & Indexed Journal

E-ISSN :

2348-7143

July -2020

Impact Factor – 6.625

E-ISSN – 2348-7143

INTERNATIONAL RESEARCH FELLOWS ASSOCIATION'S

RESEARCH JOURNEY

International E-Research Journal

Peer Reviewed & Indexed Journal

July 2020

Special Issue 249 (A)

IMPACT OF GLOBALIZATION LITERATURE, ENVIRONMENT & SOCIETY

Guest Editor -

Dr. D. K. Shinde,
Principal,
M.H.M. Arts & Commerce College,
Modnimb, Tal. Mhada Dist - Solapur

Executive Editors of the issue :

Dr. S. M. Gaikwad
Dr. P. B. Bhange

Chief Editor - Dr. Dhanraj T. Dhangar (Nashik)

Our Editors have reviewed papers with experts' committee, and they have checked the papers on their level best to stop furtive literature. Except it, the respective authors of the papers are responsible for originality of the papers and intensive thoughts in the papers. Nobody can republish these papers without pre-permission of the publisher.

- Chief & Executive Editor

SWATIDHAN INTERNATIONAL PUBLICATIONS

For Details Visit To : www.researchjourney.net

© All rights reserved with the authors & publisher

Price : Rs. 1000/-

Cover Page Photo Source : Internet



Editorial Board

Chief Editor -

Dr. Dhanraj T. Dhangar,

Assist. Prof. (Marathi)

MGV'S Arts & Commerce College,

Yeola, Dist – Nashik [M.S.] INDIA

Executive Editors :

Prof. Tejesh Beldar, Nashikroad (English)

Dr. Gajanan Wankhede, Kinwat (Hindi)

Mrs. Bharati Sonawane-Nile, Bhusawal (Marathi)

Dr. Rajay Pawar, Goa (Konkani)

Co-Editors -

- ❖ Prof. Mohan S. - Dean faculty of Arts, Delhi University, **Delhi, India**
- ❖ Prof. Milena Brotaeva - Head, Classical East Department, Sofia University, **Sofia, Balgeria**
- ❖ Dr. R. S. Sarraju – Center for Translation Studies, University of Hyderabad, **Hydrabad, India**
- ❖ Mr. Tufail Ahmed Shaikh- King Abdul Aziz City for Science & Technology, Riyadh, **Saudi Arabia.**
- ❖ Dr. Anil Dongre - Head, Deptt. of Management, North Maharashtra University, Jalgaon [M.S.] **India**
- ❖ Dr. Shailendra Lende - R.T.M. Nagpur University, Nagpur [M.S.] **India**
- ❖ Dr. Dilip Pawar - BoS Member (SPPU), Dept. of Marathi, KTHM College, Nashik. [M.S.] **India**
- ❖ Dr. R. R. Kazi - North Maharashtra University, Jalgaon [M.S.] **India**
- ❖ Prof. Vinay Madgaonkar - Dept. of Marathi, Goa University, **Goa, India**
- ❖ Prof. Sushant Naik - Dept. of Konkani, Govt. College, Kepe, **Goa, India**
- ❖ Dr. G. Hareesh - Associate Professor, CSIBER, Kolhapur [M.S.] **India**
- ❖ Dr. Munaf Shaikh - N. M. University, Jalgaon & Visiting Faculty M. J. C. Jalgaon [M.S.] **India**
- ❖ Dr. Sanjay Kamble -BoS Member Hindi (Ch.SU, Kolhapur), T.K. Kolekar College, Nesari [M.S.] **India**
- ❖ Prof. Vijay Shirsath- Nanasahab Y. N. Chavhan College, Chalisgaon [M.S.] **India**
- ❖ Dr. P. K. Shewale - Vice Principal, Arts, Science, Commerce College, Harsul [M.S.] **India**
- ❖ Dr. Ganesh Patil - M.V.P.'s, SSSM, ASC College, Saikheda, Dist. Nashik [M.S.] **India**
- ❖ Dr. Hitesh Brijwasi - Librarian, K.A.K.P. Com. & Sci. College, Jalgaon [M.S.] **India**
- ❖ Dr. Sandip Mali - Sant Muktabai Arts & Commerce College, Muktainagar [M.S.] **India**
- ❖ Prof. Dipak Patil - S.S.V.P.S.'s Arts, Sci. and Com. College, Shindhkheda [M.S.] **India**

Advisory Board -

- ❖ Dr. Marianna Kosic - Scientific-Cultural Institute, Mandala, **Trieste, Italy.**
- ❖ Dr. M.S. Pagare - Director, School of Languages Studies, North Maharashtra University, Jalgaon
- ❖ Dr. R. P. Singh -HoD, English & European Languages, University of Lucknow [U.P.] **India**
- ❖ Dr. S. M. Tadkodkar - Rtd. Professor & Head, Dept. of Marathi, Goa University, **Goa, India.**
- ❖ Dr. Pruthwiraj Taur - Chairman, BoS., Marathi, S.R.T. University, Nanded.
- ❖ Dr. N. V. Jayaraman - Director at SNS group of Technical Institutions, **Coimbatore**
- ❖ Dr. Bajarang Korde - Savitribai Phule Pune University **Pune, [M.S.] India**
- ❖ Dr. Leena Pandhare - Principal, NSPM's LBRD Arts & Commerce Mahila Mahavidyalaya, Nashik Road
- ❖ Dr. B. V. Game - Act. Principal, MGV's Arts and Commerce College, Yeola, Dist. Nashik.

Review Committee -

- ❖ Dr. J. S. More – BoS Member (SPPU), Dept. of Hindi, K.J.Somaiyya College, Kopergaon
- ❖ Dr. S. B. Bhambar, BoS Member Ch.SU, Kolhapur, T.K. Kolekar College, Nesari
- ❖ Dr. Uttam V. Nile - BoS Member (NMU, Jalgaon) P.S.G.V.P. Mandals ACS College, Shahada
- ❖ Dr. K.T. Khairnar– BoS Member (SPPU), Dept. of Commerce, L.V.H. College, Panchavati
- ❖ Dr. Vandana Chaudhari KCE's College of Education, Jalgaon
- ❖ Dr. Sayyed Zakir Ali , HOD, Urdu & Arabic Languages, H. J. Thim College, Jalgaon
- ❖ Dr. Sanjay Dhondare – Dept. of Hindi, Abhay Womens College, Dhule
- ❖ Dr. Amol Kategaonkar – M.V.P.S.'s G.M.D. Arts, B.W. Commerce & Science College, Sinnar.

Published by –

© **Mrs. Swati Dhanraj Sonawane, Director, Swatidhan International Publication, Yeola, Nashik**

Email : swatidhanrajs@gmail.com Website : www.researchjourney.net Mobile : 9665398258

**INDEX**

No.	Title of the Paper	Author's Name	Page No.
1	Settlements in Chandgad Tahsil of Kolhapur District: Case Study of Village Jambre	Dr. A.V. Pore	05
2	The Impact of Globalization on Indian Culture and Literature : Manju Kapur's <i>Difficult Daughters</i>	Dr. Dattatraya Shahane	14
3	The Study of Poverty and Poverty Alleviation Programmes in India	Mr. Prakash Kamble, Dr. J. S. Bhoyar	18
4	A Geographical Review of Agricultural Holding in Solapur District	Dr. Subhash Manikrao Gaikwad	26
5	Role of ICT in Open and Distance Mode in Teaching Learning Process	Dr.L Malleswara Rao, J. Rama Mohan, Dr. APV Appa Rao, P. Ramakrishna Rao, Ch. Sundar Singh, K. Ramnarayana	30
6	A Geographical Analysis of Zero Waste Management and its Impact in Satara City	P. R. Vhatkar, Dr. A. S. Patil, Dr. R. S. Mane-Deshmukh	34
7	Indian Writing in English and Globalization	Prof. U. A. Sawant	42
8	Yoga Traditional Sports and Games	Dr. Toravi Shivanand Sharanappa	44
9	Impact of ICT on Academic Libraries	Mahadev Chavan, Dr. Vikram Giri	47
10	The Study of Soil Profile and Soil Distribution in Solapur District	Dr. D. S. Harwalkar	52
11	An Application of Environmental Psychology to Assess Flexible Approach in Teaching Learning Process: A Comprehensive Study	Dr. Upendra Pathade	57
12	A Special Class of Harmonic Univalent Functions Defined by Using A New Differential Operator	A. N. Metkari1, N. D. Sangle, S. P. Hande	64
13	Globalization and Diaspora in Indian Literature : A Study of 'Ila' in Amitav Ghosh's <i>The Shadow Lines</i>	Anusha Hegde	76
14	A Comprehensive Study on The Economic Growth of India Due to Covid-19	Gourab Das	80
15	The Impact of Globalization on Indian Culture and English Literature	Ms. Surekha Mangrulkar	86
16	Social Media Attack Against Transgender Community in the Era of Globalisation	Anagh	90
17	Impact of Globalisation on Sustainable Development in Indian Prospects	Dr. Aneeta Sen	93
18	Reflection of Globalization in Chimamanda Ngozi Adichie's <i>Purple Hibiscus</i>	Dr. Manoj Somwanshi	98
19	Land use Land Cover Change impact on Water Resources : A Review	Dr. Deepak Dede	101
20	Awareness Regarding Learning Disabilities Among Elementary School Teachers	Prof. Ramkumar Garg, Dr. Bhartendra Sharma, Dr. Prabha Garg	108
21	A Study on the Different Types of Digital Marketing Category Working Strategies in India	Mr. J. Kumaravadivelan	113
22	Knowledge, Attitudes and Practices of Indians towards COVID-19	Dr. Bhartendra Sharma, Prof. Ramkumar Garg, Dr. Prabha Garg,	121
23	Assessment of Water Quality Status of Krishna River Basin of Karnataka	Dr. (Mrs). Sunanda. Kittali	127
24	Globalisation and Sustainable Development in the Present Scenario with Special Reference to Education and Agriculture	Dr. Carolline David	136



25	Distinctive Characteristics of the Tribes in India Dr. P. B. Achole , Mr. B. M .Swami	142
26	Spatial Distribution of Crimes Against Women in India : A Study in Crimes Geography Dr. Sarjerao Tathe	147
27	Need & Use of Environmental Studies Dr. R. D. Khakre	151
28	The Effect of Climate Change on Agriculture and Food Security Prof. Sandip Patil	156
29	Covid-19 Pandemic Dislocates Real Estate Development Sector in India Hitesh Shingadia, Mahesh Korna, Vaibhav Prakash, Krunal Damania	163
30	Impact of COVID- 19 on Agriculture in India Dr. Rahul Surve, Prof. K. K. Kore	173
31	Urban Outgrowth in Thanjavur City in Tamilnadu, India - A Geomatics Study Rajakokila K., Neelakantan R.	180
32	The Impact of Globalization on Contemporary Literature, Environment and Society Shri. Dipak Bhasme	187
33	Fan Performativity in Global Fandoms Praveena Thompson	193
34	The Impact of Globalization in Common Man's Life with Reference to Aravind Adiga's <i>Last Man in Tower</i> Imran Ahmed., Dr. A. Shafee Ahmed Khan	197
35	Spi Induced Drought Condition on Nambiyar River Basin, Southern Agro Climatic Zone of Tamil Nadu, India R. Rajee, V. Emayavaramban, S. Vinothkanna, R. Jagannathan	201
36	Status of Dalit Women in Rural India: A Case Study of Akkalkot Taluka, Dist. Solapur Mr. Appasaheb Deshmukh	210
37	Analysis of Edward Cullen's Masculinity in Stephenie Meyer's <i>Twilight</i> Ms. Leena Chudasama, Dr. Nilam H. Gajjar	215
38	Intertextuality in Graham Swift's Last Orders Dr. P. B .Bhange	221
39	Re-Defining Edward-Bella's Relationship in <i>Twilight</i> Ms. Leena Chudasama, Dr. Nilam H. Gajjar	228
40	Impact of COVID 19 on Agriculture Sector Dr. Caroline David	233
41	Assessing the Domestic Groundwater Quality of Dharmapuri District, Tamil Nadu Vinothkanna S., R. Rajee, K. Senthilraja	238
42	Impact of Shifting Cultivation on Environment With Special Reference to Disabra Village of Dima Hasao District Dr. Dipalee Haflongber	246
43	Global Dimensions in the Novel from 'The White Tiger' by Indian Author Aravind Adiga Prof. Bhagyashri Shelake	250
44	Globalization: A Critical Analysis With Special Reference to the Transgender Community Shormita Bose, Dr. Prateek Pandey	254
45	Judicial Contribution in the Development of Environmental Jurisprudence In India Dr. Bharat G. Kaurani	258
46	Law, Globalization and Higher Educational Environment in India in Current Crisis Situation Dr. Sunny Hasani	267
47	Right to Wholesome Environment Bhawana Valvi	270
48	Study of Agricultural Land Use Efficiency of Sangli District : A Geographical Review Dayanand Kamble & Omprakash Shahapurkar	273
49	Impact of ICT in Academic Libraries Prof. Mohan Mahadik	276



Settlements in Chandgad Tahsil of Kolhapur District : Case Study of Village Jambre

Dr. A.V. Pore

Assistant Professor, Department of Geography,
Chhatrapati Shivaji College, Satara.

Abstract

The study of settlement pattern of settlements hilly topography is useful to identify the man and nature relationship. Present paper intends to study the settlement characteristics of village Jambre in Chandgad tahsil of Kolhapur district. The paper is based on primary data compiled by field work which is supported by secondary data. Geographically this village is located in very beautiful surrounding area cover by under forest and hilly. Most of the people engaged in hotel occupation as a cook and other works in hotel. The settlement pattern of the village is compact and some part of houses is cluster form.

Introduction

Settlements are a prerequisite for social and economic development, as no social progress for sustainable economic growth can occur without efficient settlement systems and settlement networks (Sarkar, 2010). The study of settlement pattern of settlements hilly topography is useful to identify the man and nature relationship. In the case study of this village, focus has been given on various aspects of rural settlements.

Objective

Present paper intends to study the settlement characteristics of village Jambre in Chandgad tahsil of Kolhapur district.

Database and Methodology

The paper is based on primary data compiled by field work which is supported by secondary data compiled from Census of India and other sources. The data has been processed by appropriate quantitative techniques.

1. Location

The village Jambre is located in Chandgad tahsil of Kolhapur district of Maharashtra state. It lies between 15° 53' North latitude and 74° 07' East longitudes. The average height of this village is 707 meters from the mean sea level. The village located in near Tambraparni river. Geographically this village is located in very beautiful surrounding area cover by under forest and hilly. The near by village Taramparni river Jambre project is going on. The village has an area of 15.6 sq. km. The village comes under western cool and average (3000-5000 mm) rainfall category.

2. Population characteristics

The population of Jambre village is 1209 in 2001. The growth rate of village was 80.99 per cent in 1991-2001. The population density was 80.28 per sq. km. It is observed that, the sex ratio of village is very low (715) as compare to tahsil (1033) and study area (962), but 0-6 population sex ratio was high (986) as compare tahsil (921) and the Kolhapur district (842).

Table 1
Rural Population Characteristics, 2001

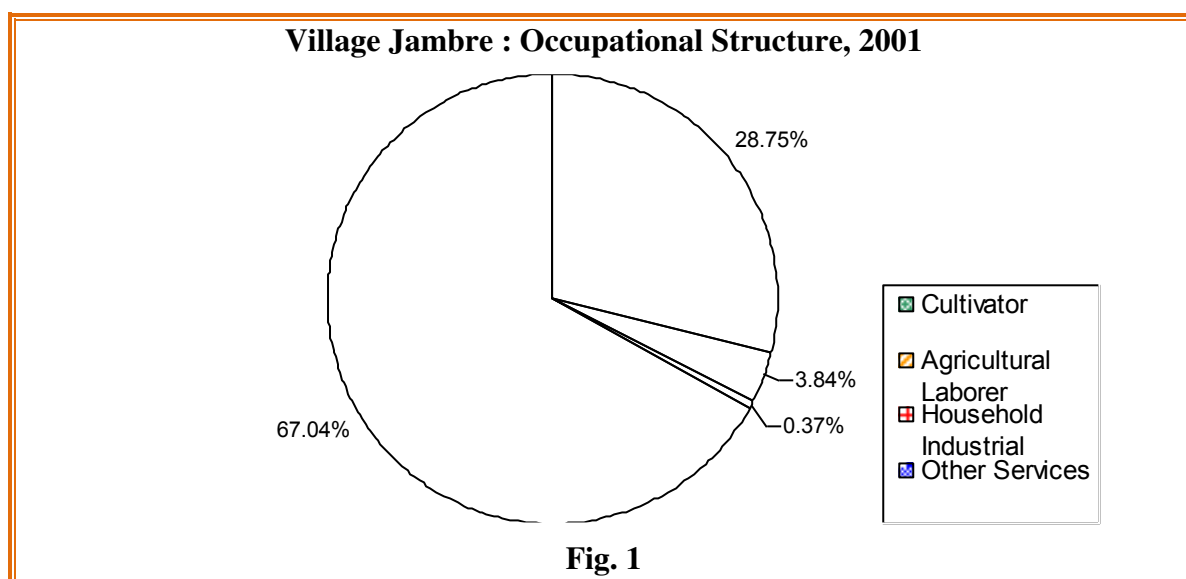
Population Characteristics		Unit	Village Jambre	Tahsil Chandgad	Study Area
Total Population		No	1209	180781	2472809
Growth rate 1991-2001		%	1078	10.38	12.27
Density		Per Sq. Km	80.28	190	330
Sex Ratio	Total	Females /1000 males	715	1033	962
	0 to 6		986	921	842
SC population		%	8.02	9.42	13.38
ST Population		%	1.32	1.07	0.66
Literacy	Total	%	53.77	66.67	73.07
	Male	%	64.50	80.74	85.22
	Female	%	38.05	53.29	60.7

Source: Based on District Census Handbook, Kolhapur District, 2001.

3. Occupational structure

It is found that, 66.75 per cent population is working in Jambre village in 2001 census report. It is further found, that the male work participation rate was 73.76 per cent. The female work participation rate was 56.94 per cent. It is surprisingly noted that, in other activity the proportion population in Jambre village is 67.04 per cent and in Chandgad tahsil 20.84%. During fieldwork, discussed some peoples and observed that most of the people engaged in hotel occupation as a cook and other works in hotel.

It is observed that, 28.75 per cent population is engaged in cultivation. It is also noticed that, as compared to male (19.62%) female (45.30%) is high. The proportion of agricultural labourers was only 3.84 per cent. It is observed that, the proportion of female agricultural labourers higher than that male in Jambre village. It is found that 0.37 per cent people engaged in household industrial activity (Fig. 1).



4. General land use

It is noticed that, 14.32 per cent area under cultivation in Jambre village. The proportion of cultivable waste was 2.99 per cent. It is also noticed that, 0.11 per cent area not available for cultivation. About 82.57 per cent area cover by forest. The proportion of Gaothan is 0.02 per cent (Table 2).

Table 2 : Village Jambre: General Land use, 2009-10

Sr. No.	Land Use Categories	Area	% to Total Area
1	Land Under Cultivation	215.69	14.32
2	Cultivable Waste	45	2.99
3	Area Not Available for Cultivation	1.68	0.11
4	Forest	1244	82.57
5	Gaothan	0.24	0.02
Total		1506.61	100.00

Source: Based on Talathi Office, Records, 2010-11.

5. Agriculture

The village Jambre located in Tambraparni River. So agriculturally the village is developed. The major crops of river is rice, sugar cane, etc. But due to Jambre irrigation project most of farmers losing their land in this project.

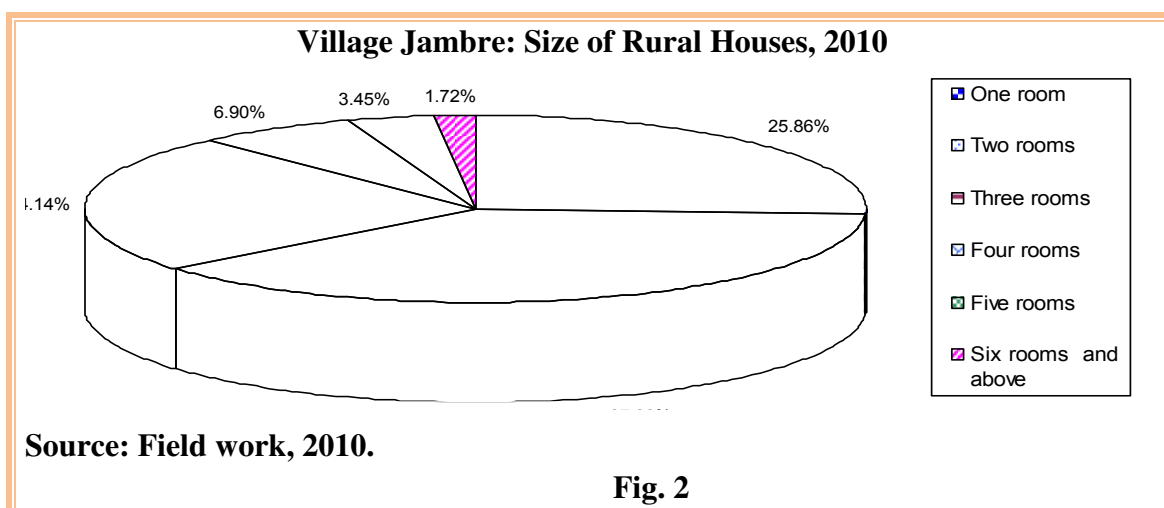
6. Village pattern and Morphology

Singh (1974) consider pattern analysis in the study of rural settlements. The Jambre village is sited along the river Tambraparni. The settlement pattern of the village is compact and some part of houses is cluster form. The house-road relationship is more common in all part of the village. The houses are little away from the road because the front side of houses (*angan*) are charactrised with banana trees, *mandav* and religious important *tulas* tree (Photo Plate 2 and 3). The bus stand is located at central part and the Grampachayat at southern part of village (Photo Plate 1).

7. Housing

A. Size

It is found that, 25.86 per cent houses are of one room in Jambre village. The proportion of two rooms houses is 37.93 per cent it means, most of people live in two rooms. It is observed that, 26.14 per cent people occupied three rooms, about 6.90 per cent in four rooms, 3.45 per cent in five rooms and 1.22 per cent in above 6 rooms in Jambre village.



B. Building material

1. Wall material

It is observed that, 3.45 per cent having, grass, thatch, bamboo used in wall material purpose in Jambre village. This proportion was high than the Chandgad tahsil (2.80%) as well as than the study area (3.43%). It is found that, most of the houses 68.97 per cent wall material is mud, unburnt brick. It is further found that, 1.72 per cent have wall of wood. About 15.52 per cent wall are used material burnt brick. Near about 5 per cent (5.17%) used stone, 3.45 per cent concrete and 1.72 per cent in any other (Table 3 and Fig. 3.A). In the rainy season there is wall protection by grass locally known as 'Jaap' (Photo Plate 4).

Table 3
Village Jambre: Wall Material in Houses, 2010

Sr. No.	Wall Material	Village Jambre	Chandgad Tahsil	Study Area	Maharashtra State
1.	Grass, Thatch, Bamboo etc.	3.45	2.80	3.43	11.48
2.	Mud, Unburnt brick	68.97	63.22	35.94	38.74
3.	Wood	1.72	0.50	0.95	1.54
4.	Burnt brick	15.52	25.24	27.52	26.56
5.	Stone	5.17	3.21	26.34	15.6
6.	Concrete	3.45	4.28	4.80	4.26
7.	Any other	1.72	0.76	1.02	1.83

Source: Field Work, 2010.

2. Roof material

It is found that, the most of houses of this village are having tiles roof (Photo Plate 9.3.5 and 6). The proportion of tiles is 86.21 per cent. This proportion was little higher than the tahsil (83.41%) but as compare to study area (86.77%) this proportion was low. The grass, thatch, bamboo, wood, mud, etc. used in 5.17 per cent, concrete 5.17 per cent, plastic polythene and asbestos sheets 3.45 per cent in Jambre village (Table 4 and Fig. 3.C).

Table 4
Village Jambre: Roof Material in Houses, 2010

Sr. No.	Roof Material	Village Jambre	Chandgad Tahsil	Study Area	Maharashtra State
1.	Grass, Thatch, Bamboo, Wood, Mud etc.	5.17	1.92	2.15	16.02
2.	Tiles	86.21	83.49	86.77	40.01
3.	Concrete	5.17	9.9	6.72	7.83
4.	Plastic Polythene & Asbestos Sheets	3.45	4.38	3.94	1.92
5.	Slate, Brick & Stone	0	0.3	0.42	1.04

Source: Field Work, 2010.

3. Floor material

It is noticed that, 91.38 per cent houses use mud as floor material is mud. The proportion of stone was 1.22, cement 3.45, mosaic and floor tiles 3.45 percent.

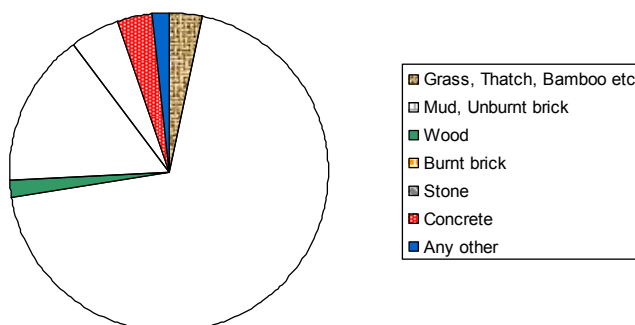
Table 5 :Village Jambre: Floor Material in Houses, 2010

Sr. No.	Floor Material	Village Jambre	Study Area	Maharashtra State
1.	Mud	91.38	74.79	72.13
2.	Wood, Bamboo	0.00	0.45	0.27
3.	Brick	0.00	0.73	0.31
4.	Stone	1.72	3.70	5.52
5.	Cement	3.45	7.82	3.00
6.	Mosaic, Floor tiles	3.45	11.51	16.02
7.	Any other	0.00	0.99	2.74

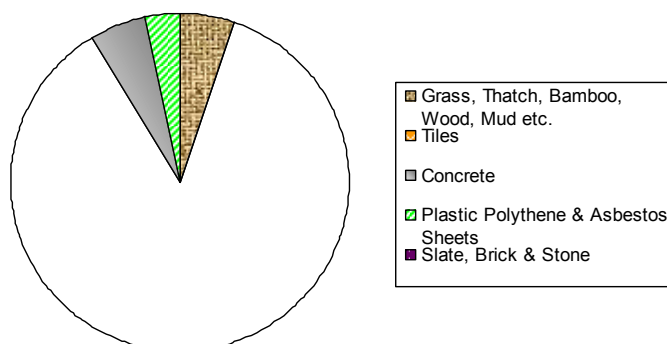
Source: Field Work, 2010.

Village Jambre: Building Material in Houses, 2010

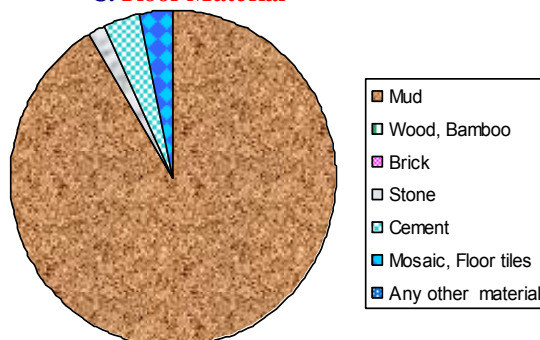
A. Wall Material



B. Roof Material



C. Floor Material



Source: Field Work, 2010.

Fig.3

VILLAGE JAMBRE



1. Grampaachyat Office



2. Settlement Pattern at Outer Side



3. Settlement Pattern at Central Part



4. Grass Protection (Jaap) to House



5. Tile Roofed Mud House



6. Tile Roofed Grass Protected House With Mandav



7. Open Drainage Facility



8. Public Handpump for Drinking Water

8. Available facilities and assets

1. Facilities

It is found, that 13.79 per cent household have drinking water facility near the house. About 86.21 per cent houses used public hand pump for drinking water purpose (Photo Plate 8). It is further found that, 77.59 per cent houses do not have drainage facility only 22.44 per cent houses available open drainage facility in this village (Photo Plate 7). About 72.41 per cent houses have latrine facility available. It is found that, 74.14 per cent bathroom available in houses and 94.83 per cent people having electricity facility.

Table 6

Village Jambre: Facilities in Houses, 2010

Sr. No.	Assets		Village Jambre	Chandgad Tahsil	Study Area	Maharashtra State
1.	Drinking Water	Away	86.21	15.06	70.36	81.79
		Near	13.79	84.94	10.07	17.23
2.	Type of connectivity for waste water outlet	Not available	77.59	40.06	47.53	58.86
		Available	Close	0.00	3.71	4.57
			Open	22.41	56.23	47.9
3.	Latrine	Not available	27.59	65.72	89.93	82.77
		Available	72.41	34.28	29.64	18.21
4.	Bathroom Within the House	Not available	25.86	34.4	28.73	53.91
		Available	74.14	65.6	71.27	46.09
5.	Electricity	Not available	5.17	8.79	12.66	34.83
		Available	94.83	91.21	87.34	65.17

Source: Field Work, 2010.

2. Assets

It is found that, 10.34 per cent having radio, transistor facility in their houses in Jambre village. The proportion of television is 24.14 per cent, telephone is 12.07 per cent, bicycle is 8.62 per cent and scooter, motor cycle and moped is 6.90 per cent facility available in this village. In the Jambre village, 44.83 per cent houses are do not available such facility.

Table 7 : Village Jambre: Assets in Houses, 2010

Sr. No.	Facilities	Village Jambre	Chandgad Tahsil	Study Area	Maharashtra State
1.	Radio, Transistor	10.34	42.96	44.37	26.8
2.	Television	24.14	26.35	33.27	24.72
3.	Telephone	12.07	4.54	7.68	4.38
4.	Bicycle	8.62	30.73	36.39	28.31
5.	Scooter, Motor Cycle, Moped	6.90	10.8	13.81	7.99
6.	Car, Jeep, Van	0.00	2.25	2.6	1.61
7.	None of the specified assets	44.83	37.71	34.32	50.2

Source: Field Work, 2010.

9. Facilities in Jambre Village

The village Jambre located in near by 16 km from the Jambre tahsil headquarter i.e. Chandgad. In this village, basic facilities are not available. Only floor mill and one Talring shop found in this village. All peoples are depends on Chandgad for market, education and health facility purpose. The studies mainly suggests providing basic facility to this village.

Table 8
Village Jambre: Number of Establishment, 2010

Sr. No.	Type of establishment	Number of Establishment
1.	Grocery	4
2.	Cloth and readymade garment	0
3.	Stationary	0
4.	Lodge	0
5.	Hotels	0
6.	Medical shop	0
7.	Flour mill	1
8.	Tailors	0
9.	Printing press	0
10.	Photo studio	0
11.	Jeweler	0
12.	Bakery	0
13.	Laundry	0
14.	Pan-bidi shop	0
15.	Cycle shop	0
16.	Electric Goods	0
17.	Talring	1

Source: Talathi Office and Field Work, 2010.

Conclusion

The case study of selected village has become useful to understand the settlement characteristics and their affecting factors. This villags represent more or less the settlement characteristics of the part where they are located. The case study reveals that, the building material, amenities and assets in houses are highly determined by the occupation of peoples. Geographically this village is located in very beautiful surrounding area cover by under forest and hilly. Most of the people engaged in hotel occupation as a cook and other works in hotel. The settlement pattern of the village is compact and some part of houses is cluster form.

References :

1. Brunches Jean (1952): "Human Geography", (Translated by, Row, E. F), George G. Horrp and Co. Ltd, London.



2. Sarkar, Ashis (2010): "Analysis of Human Settlement Patterns Using RS and GIS in the Plains of West Bengal", eTraverse, *The On-Line Indian Journal of Spatial Science*, Article 1 Vol. I No. 1, pp. 1-16.
3. Singh, R.P.B. (1974): "Pattern Analysis of rural settlement Distribution and their types in sores plain", National Geographical Found of India, 20, pp.109-127.





The Impact of Globalization on Indian Culture and Literature : Manju Kapur's *Difficult Daughters*

Dr. Dattatraya G. Shahane

Department of English

SMSMP Mahavidyalaya, Natepute

Cell No.: 9423536996

Abstract:

The present research paper will focus on the impact of Globalization on Indian culture and literature with reference to Manju Kapur's novel Difficult Daughters. Globalization has occupied each and every field in the world of economy but it has very closely related to the literature and culture also. So we can see the effects of globalization in the Indian Literature and Culture also. Globalization has widened the scope of thinking and learning with the help of innovative ideas from the different countries and their culture. We can find various themes of globalization in Indian Literature. Indian literature has its own identity in the world literature which is created through Indian traditions, customs and culture. But with an emergence of this globalization the whole world is transforming by accepting new ideas and ideals. In this world wide process the Indian literature and Culture has also accepted this process of transformation. The emergence of Globalization in Indian literature has created a new identity. This present paper focuses on the positive effects of globalization with special reference to the novel Difficult Daughters' protagonist, Virmati. Manju Kapur tried to focus upon the social and cultural effects of globalization through the character of Virmati. The emergence of globalization in India has provided an opportunity of higher education, their rights, freedom and so on especially to the Indian women. Because of this globalization Virmati has become successful in completing her dream of higher education and employment by opposing the age old traditions and customs concerned to the women in India. Thus Globalization has created a new world of light and hope in the life of women especially in Indian Culture and Society.

Keywords: Globalization, Indian Literature, Culture, Society, Education, Manju Kapur's *Difficult Daughters*.

Introduction:

The term 'Globalization' has different meanings and types. It is derived from the word 'globalize' which means an emergence of the international network of economic systems. Its popular definition is as, "Globalization means the speed up of movements and exchanges (of human beings, goods and services, capital, technologies or cultural practices) all over the planet. One of the effects of globalization is that it promotes and increases interactions between different regions and populations around the world."¹ (Web Page) The advances in transportation and communication technology have been responsible for the growth of globalization all over the world. Thus the international trade, ideas and culture has been grown through this world wide interaction. At the outset globalization has closely related to the economic process of interaction which is associated with social and cultural aspects.

According to Manfred B. Steger's point of view the term globalization has been used in academic literature to describe a process, a condition, a system, a force and an age. It clearly shows that the term globalization is not related only to the trade and economy but it has been



stated to use in connection with literature and culture since 1960. In this way we can have a definition of the term globalization as “an extensive network of economic, cultural, social and political interconnections and process which goes beyond national boundaries.”² (Web Page) Thus globalization has removed the barriers in front of the world trade markets, socio-cultural issues and political ideologies also. Thus the global markets have liberated the economic activities of exchanging goods, funds, socio-cultural ideas, philosophy, political issues and so on.

The argument of Sheila L. Croucher about globalization is that “globalization can be described as a process by which the people of the world are unified into a single society and function together. This process is a combination of economic, technological, socio-cultural and political forces.”³(Web Page) We can realize that the term globalization is not only restricted to the trade and economy but it has come into the form of cultural globalization through which the transmission of ideas, philosophy, meaning and values of life around the world are referred and focused emphatically. The interaction of various cultures of the world has created new fields to think on for the intellectual authors. Indian literature is not exception for this process. Because of this globalization it has become easy to the authors to enrich the new ideas and philosophy in Indian literature particularly. Through globalization the writers of India has spread the Indian culture, traditions, customs, philosophy and the Indian life throughout the world. It has created this great opportunity to spread our culture as well as to accept the foreign culture which is of our use.

In the novel *Difficult Daughters*, Manju Kapur has applied the global policy of education to women, their rights, freedom for survival, and women’s desire for an employment. By this globalization the place of women in India has become more secure and mainly they have been attracted towards education and employment which was not permitted to them by their age-old traditions. The nature of women has been changed and they have started to participate in the social issues very actively. It has also strengthened the women of India to revolt against the tradition and to fulfill their desire of independence in every sphere of the society. The Cultural and Social globalization have created an awareness and interest among the people of India to study the cultural aspects of the other countries. Indian literature and culture have not remained away from this process of transformation. But the entry of globalization has loosened the shackles of age old traditions and customs in the Indian context.

The Impact of Globalization on *Difficult Daughters*:

The emergence of globalization in India is one kind of revolution against the age old traditions and customs in Indian context. Because many women writers have broken the past literary traditions and customs. They started to transform their own experiences as a ‘woman’ through literature. Especially the women of middle class accepted the philosophy and idea of globalization positively for their own existence. These middle class women and women writers were more concerned with their individual progress and existence by opposing the age old traditions and customs. The submissive nature of women has been changed into aggressive nature against injustice.

Manju Kapur belongs to the class of Indian women novelists, who live in India and write in english like Shashi Deshpande, Arundhati Roy, Githa Hariharan, Anita Desai and Shobha De. These novelists present in their writings the realistic, social, economic and political conditions which are the major part of the Indian life and culture. Manju Kapur is the winner of (1999)



Commonwealth Writers Prize for the Best First Book “*Difficult Daughters*” (1998). The novel *Difficult Daughters* is a story of a woman named Virmati, who is torn between different forces of life. She is the chief protagonist of the novel who shows her courage and determination by fighting against the age old traditions. Globalization has created this new way of thinking among the class of women. No doubt, Virmati is always ready to shoulder the responsibility of the family but her inner mind is not ready to lead life in a fixed Indian structure especially for women class. Because her mother Kasturi is a traditional symbol leading her life in a fixed Indian structure of culture. It means for Kasturi marriage is the ultimate aim for the girls in the Indian context and education has secondary place. But Virmati has remained here loyal with her inner passion of taking education and knowledge in this era of globalization. The globalization has focused on particularly the education of women, their employment, their rights and their freedom. It has created an enthusiasm in the mind of Virmati to become educationally strong and enter into the field of employment. She has also an illicit love affair with a married man, Prof. Harishchandra. It has broken all the traditional boundaries of Indian culture. According to Virmati’s point of view, education is a weapon to fulfill her dreams. The present research paper attempts to focus on the positive impact of globalization on the character of Virmati particularly in the postmodern period.

Virmati is a young girl from a very conservative family of Punjab. She is trying to rebel against the established contemporary traditions and customs. Virmati, the protagonist of this novel *Difficult Daughters* has attempted very successfully to go against the established conservative society. This kind of insight is given to Virmati through the concept of globalization. When Virmati visited her cousin, Shakuntala, it created a surprise for her. Because Shakuntal’s outward appearance has been changed totally. Her blouses and saris were of some thin material and of foreign:

“She wore her hair with a side parting, smoothed over her ears into a bun at the back. Her shoes were black, shiny, patent leather with high heels. Her jewellery consisted of a stand of pearls, a single gold bangle on one arm, and a large man’s watch on the others.”⁴ (DD-16)

Thus globalization has created an impact on the life of Shakuntala. Virmati has impressed by observing all these changes in Shakuntala and decided to complete education for to be an independent in this world-wide changing atmosphere.

Virmati’s mother has a traditional approach that she must get married as she is eligible for marriage. So many times she tried to persuade the mind of Virmati for marriage. But this globalization has created a new approach in the mind of Virmati to fulfill her thirst of education. Because in Indian society and culture the girls who are skilled in stitching, cooking, reading and other household duties are eligible for marriage. Virmati’s mother Kasturi remarks “Your grandfather and father both have confidence in you; otherwise would they have given you so much freedom? They thought school and college would strengthen you; not change you.”⁵ (DD - 59)

It very clearly focuses on the traditional approach of the so called society towards women. Women must not take more education and always remain under the authority of male dominated society.

There were talks of her marriage going in the family but she remained very calm, passive and silent. She was also exploited by the family members. At last she became successful in



getting permission though unwillingly for her further studies at Lahore. But her mother Kasturi has made a last attempt to persuade Virmati for marriage as:

“If you cannot consider your duty to us at least consider yourself. There is a time in the cycle of life for everything. If you’re willfully ignore it like this what will happen to you? A woman without her own home and family is a woman without moorings.”⁶ (DD -111)

We can realize that this is a traditional way of living for the women. The entry of globalization has tried to keep away all such approaches and ways. The entry of globalization is a dawn in the life of women particularly.

The first meet between Virmati and Prof. Harishchandra is very important in her life. Because the first body touch of Prof. Harishchandra has changed her approach to look towards the life. And very pleasantly she felt that the whole of her life and soul only belonged to Prof. Harishchandra.

“Wasn’t her future partner decided by the first touch of a man on her body?”⁷ (DD-57)

She is very much influenced by Prof. Harishchandra. Because he talked about higher education especially of women class. She has very enthusiastically and sincerely started to attend the classes of Prof. Harishchandra:

“Virmati always sat in the front row with the four other girls who were in the professor’s class and that was the only place he saw her in college, flowerlike, against a backdrop of male students.”⁸ (DD -46)

Thus, Virmati tried to fulfill her quest for higher education by struggling very strongly with the contemporary conservative society.

Conclusion:

The globalization has provided such a great platform to the Indian women. Manju Kapur very successfully applied the features of globalization as well as postmodernism through this novel. Throughout the novel *Difficult Daughters*, Manju Kapur represents the impact of globalization on the Indian Literature. It has made radical changes in the cultural and social life of India. It has depicted through the novel very realistically.

References :

- Kapur, Manju. *Difficult Daughters* (1998). London: Faber and Faber, 2010.
- Jagannath, C. *Major Literary Movements in English*, (2010). Swastik Publications Delhi.
- Ram, Kishore. *Post-Modernism in English Literature* (2011). Sonali Publications, New Delhi.

Web Pages :-

- <https://en.wikipedia.org/wiki/Globalization>
- <https://youmatter.world/en/definition/definitions-globalization-definition-benefits-effects-examples/>
- <https://www.investopedia.com/terms/g/globalization.asp>
- <https://www.google.com/search?q=globalization+and+feministic+indian+literature&oq=globalization+and+&aqs=chrome.1.69i57j69i59j46j0l2j69i60l3.18398j0j7&sourceid=chrome&ie=UTF-8>



The Study of Poverty and Poverty Alleviation Programmes in India

Mr. Prakash Bhimarav Kamble

Research Student

Department of Economics,

SRTMU, Nanded

Dr. J. S. Bhojar

Principal

Late Baburao Patil Arts & Science

Collage, Hingoli.

Abstract:

Poverty is a global problem. India's poverty is very serious problem compared to other countries. Poverty can be defined as a socio-economic phenomenon in which a section of the society is unable to fulfill even its basic necessities of life. Poverty is conventionally measured by the income or expenditure level that can sustain a bare minimum standard of living. Dadabhai Navroji first introduced the concept of poverty in India since 1876. Since then many economists have studied poverty in India. In India, the proportion of Bellow Poverty Line people in India was 54.88 % in the year 1973-74. It decreased from 2011-12 to 29.05 %. In this research paper different study groups and year-wise rural and urban BPL population are given. It has also studied the poverty alleviation programs initiated by the Government of India to reduce poverty.

Keywords: Poverty, BPL, India, Programme, alleviation, Yojana, Rural and Urban, etc.

Introduction:

Poverty is one of the most critical issues being faced by any economy. One- third of the world's poor people live in India. India is facing so many problems. Today we have celebrating 60 years of independence but we cannot fulfill the common man's basic needs like food, clothing, shelter health and education. After independence our economic growth has been increased. But our problems are not finished they are arising in different way that is inequality, rapid growth of population, unemployment etc. Inequality is increasing, rich are becoming more rich and poor are poorer. Poverty has become serious problem it is affecting on personal as well as national development. Even today about 26 % people are below poverty line. War against poverty has to be fought in different sector from different angles. The policy of direct attack on poverty was not adopted. The government was under the impression that the benefits of economic growth will trickle down and create employment opportunities. As a result were not as accepted, so, now direct attack is made on poverty through poverty alleviation programs. In order to alleviate poverty, different policies and poverty alleviation programs are required.

Concept of poverty:

Generally, poverty is not the ability to meet basic needs of food, clothing, shelter. Being a relative concept, the concept of poverty differs from country to country. Absolute poverty and relative poverty is the two basic approaches of the poverty. The main criterion for definition of poverty is daily calorie intake. Everyday consumption of 2400 in rural areas and 2100 calories in urban areas is a criterion for poverty in India.

Definition of poverty

Former governor of RBI, C. Rangrajan headed the committee for poverty measurement. This committee stated that poverty line of Rs.32 per day per capita expenditure in rural area and Rs. 47 per day per capita expenditure in urban area. The person who is spending this much per



day should not be considered as poor. According to estimates of this committee, number of poor people declined from 454.6 mn to 363.00 mn in between 2009-2010 to 2011-2012.

Research Problem

There are many questions in the Indian economy. Of these, poverty is the basic question. After Independence, various government study groups, experts and experts were asked to solve the problems of poverty, but the government of India launched many employment generation programs and poverty alleviation programmes, but still poverty does not seem to be declining. Therefore, the issue of poverty is still basic and important to the country today.

Objective of Study

1. To study the nature of poverty in India.
2. To know the poverty situation in Rural and Urban India.
3. To study the Urban and Rural poverty alleviation in India.

Significance of study

Present study has focused on poverty alleviation programme in India. It will be helpful to know the Urban and Rural poverty level, focused on poverty alleviation programme, Particularly various aspect of poverty. It will be useful to discussion on emerging issues on Indian Economy.

Research Methodology

This research is based on secondary content and analyzed by compiling the necessary statistical instruments, financial magazines, reports, websites and analyzing it.

Poverty status in India

Poverty problems are the basic issue in India. Almost 70 % of the population lives in rural area. Therefore, the concept of poverty and especially rural poverty are important in the study of the Indian economy. According to the Tendulkar Committee report, 2011-2012 will be 21.92 percent of the population lives in poverty, According to Rangarajan Committee 29.5percent of the population is in poverty. Although, the Indian poverty is high, it shows that the ratio is varied according to the year and the state.

Based on the following tables, the presence of poverty in India can be seen.

Table No. 1

Year-wise Rural and Urban BPL population in India

Sr.No.	Year	Poverty Ratio (%)		
		Rural	Urban	Total
1	Lakadwala Methodology			
2	1973-74	56.44	49.01	54.88
3	1977-78	53.07	45.24	51.32
4	1983	45.65	40.79	44.48
5	1987-88	39.09	38.20	38.86
6	1993-94	37.27	32.36	35.97
7	1999-2000	27.09	23.62	26.10
8	Tendulkar Methodology			
9	2004-05	41.08	25.07	37.02
10	2009-10	33.08	20.09	29.08
11	2011-12	25.07	13.07	21.09
12	Rangrajan Methodology			



13	2009-10	39.06	35.01	38.02
14	2011-12	30.09	26.04	29.05

Reference: Report of the expert group to revive the Methodology for Measurement of Poverty, Government of India Planning Commission, 2014.

In this table no.1 indicate that the year-wise rural and urban BPL population in India. There, are mention only three study groups Lakadwala, Tendulkar and C. Rangarajan. In India, according to the study of the Lakadwala study, in India, 1973-1974, the percentage of people living below poverty line was 54. 88 percent were there. In the year 1999-2000, poverty decreased to 26.10 percent. According to the Tendulkar study group, in 2009-2010, the proportion of people living below poverty line was 29. 8 percent were there. In the year 1999-2000, poverty decreased to 21.9 percent is there. According to the Rangarajan Committee report, the poverty ratio of 2009-10 was 38.2 percent. It reduced to 29.5 percent in 2011-12. From 1973-74 to 2011-12, the number of people living below poverty line is different from those of the study groups.

Poverty Alleviation Programs

Alleviation of poverty remains a major challenge before the nation. While, there has been a steady decline in poverty over the last decades the total number of poor people has perhaps remained constant because of growth in population. Thus, acceleration of economic growth leads to increase employment and thereby to reduce poverty in the long run.

However, this strategy needs to be complement with a focus on provision of basic services for improving the quality of life of the people through state intervention in the form of targeted anti-poverty programs. The specifically designed anti-poverty programs for generation of both self employment and wage employment have been redesigned and restructured in 1999-2000 in order to make these programs more effective. The major poverty alleviation programs in rural and urban area have been discussed as below.

1. Jawahar Gram Samrudhi Yojana (JGSY)

It was started on 1st April 1999 as a successor to Jawahar Rojgar Yojana (JRY) is implemented as centrally sponsored scheme on the cost sharing rate of 75:25 percent between the central and states. All work that can result in the creation of durable productive community assets are to be taken under the programme.

2. Integrated Rural Development Programme (IRDP)

This Programme was started in 1980 on 50:50 percent cost sharing basis between centre and states. The objectives of this program were to create self employment for rural poor by providing financial assistance to target groups such as small farmers, marginal farmers, landless an agricultural labors and artisan belonging to BPL categories. The criterion was that 50 percent beneficiaries should be Scheduled Caste/Scheduled Tribe and 40 percent beneficiaries should be women and 3 percent belonging to physical handicapped.

3. Swarn Jayanti Gram Swarozgar Yojana (SJGSY)

SJGSY is an integrated rural development scheme. It was started in 2002. Some earlier schemes such as I) Integrated Rural Development Program II) Training of Rural Youth for Self Employment (TRYSEM) III) Development of Women and Children in Rural Areas (DWCRA) and IV) Million Wells Scheme (MWS) V) SITRA were migrated into Swarn Jayanti Gram Swarozgar Yojana (SJGSY). Objectives were i) To reduce poverty by providing earning assets



occupation through bank credit and government subsidies ii) To encourage Self Help Groups and criteria was that 35percent self employment to be provided to Scheduled Caste/Scheduled Tribe households and 50 percent to be women. In 2009, the scheme has been named as National Livelihood Mission.

4. The Swarna Jayanti Shahari Rozgar Yojana (SJSRY)

The Swarna Jayanti Shahari Rozgar Yojana (SJSRY) was started in 1st December, 1997. The SJSRY is to be a centrally sponsored scheme applicable to all the urban areas with expenditure to be shared in ratio 75:25 percent between the Centre and States government. This program would have two sub-schemes, namely, (i) Urban Self-Employment Program and (ii) Urban Wage Employment Program.

5. Prime Minister's Integrated Urban Poverty Eradication Program (PM IUPEP)

The Prime Minister's Integrated Urban Poverty Eradication Program (PM IUPEP) was launched in November, 1995. Recognizing the seriousness and complexity of urban poverty problems, especially in the small towns where the situation is more gave due to lack of resources for planning their environment and development. The PMIUPEP was a Rs.800 crore scheme approved for the period up to the year 2000. The program was being implemented on a whole town project basis extending the coverage to all the targeted groups for recurring a visible impact. The physical achievements as reported by the States are as follows.

6. National Rural Employment Program (NREP)

National Rural Employment Program was started in 1980. In view to i) Generate wage employment opportunities during off-season to BPL families ii) To develop rural infrastructures like road construction, social forestry, pasture development, soil and water conservation, irrigation, flood control and village ponds. It was a 50:50 percent cost sharing basis between central and state government. Centre provides its share partly in the term of foodgrains and partly in cash.

7. Rural Landless Employment Guarantee Program

Rural Landless Employment Guarantee Program was introduced from 15th August 1983 and 100 percent financed by central government. The objective of this scheme was to generate long term employment in rural areas particularly for the landless labours. The job opportunities to be generated in the same areas to at least one member of every rural landless labour household for 100 days in a year and to build infrastructure for rapid growth of rural economy.

8. Jawahar Rozgar Yojana started

In 1989-1990, earlier programs such as National Rural Employment Program and Rural Landless Employment Guarantee Program were merged into single program called Jawahar Rozgar Yojana (JRY). The basic objective was to create employment opportunities in rural area through the construction of rural infrastructures.

9. Million Wells Scheme

The Million Wells Scheme which was formerly part of Jawahar Rozgar Yojana. Since, 1996 it was being run as an independent scheme. The objective of this scheme was to provide financial assistance to small and marginal farmers for the construction of wells and land development. It was jointly financed by centre and state government. At present this scheme, is one of the constituents of Swarn Jayanti Gram Swa-rozgar Yojana which started in 1999.



10. Employment Assurance Scheme

Employment Assurance Scheme launched on Mahatma Gandhi birthday in 2nd October, 1993, started in 5448 blocks of the country during 1993-94. The objective was to provide unskilled manual work to rural poor who seek employment for 100 days. The cost of sharing was 80:20 percent between centre and states. In this scheme 2002, it was merged into Jawahar Gram Samrudhi Yojana.

11. Sampoorna Grameen Rozgar Yojana

Sampoorna Grameen Rozgar Yojana is a wage employment scheme. The Employment Assurance Scheme (EAS) and Jawahar Gram Samrudhi Yojana (JGSY) were merged into Sampoorna Grameen Rozgar Yojana on 25th September, 2002. The objectives were to provide wage employment in rural areas along with food security, To create durable social and economic assets and 100 crores man-days of wage employment every year. Cost sharing was 75:25 percent between centre and states. This programme guarantees 100 days of wage employment to every rural household in the country. The payment arrangement was made partly in foodgrains and partly in cash. The program is being undertaken by Gram Panchayat.

12. National Rural Employment Guarantee Scheme

National Rural Employment Guarantee Scheme started in April, 2008; Sampoorna Gram Rozgar Yojana was merged into National Rural Employment Guarantee Scheme. The objectives were to provide unskilled manual jobs to one member of each rural household at daily wage of Rs. 60 and to provide unemployment allowance for 100 days.

13. National Food for Work Program

National Food for Work Program which was centre sponsored scheme. It was introduced in 2004, in 150 most backward districts of the country for wage employment. This program was open for all villagers who were willing to take up unskilled manual work. It was central sponsored scheme; however, it being implemented by state governments. Those who were willing to work in this program were to be paid totally in terms of foodgrains.

14. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

MGNREGA aims to provide a steady source of income and livelihood security for the poor, vulnerable and marginalized. MGNREGA was passed to introduce and implement this program. 100 percent finance by central government for unskilled job. A peculiar characteristic of this program is that it is legal binding on the part of government to provide employment in rural area. Right to employment was introduced under this program. At the beginning it was introduced in 200 districts, later in 130 districts from 2008 all remaining districts were covered. Sampoorna Gramin Rozgar Yojana (SGRY) was merged into MGNREGA. The objectives of the MGNREGA are i) To enhance livelihood security of the poor's in rural areas by guaranteeing 100 days of wage employment to rural households who are willing to do unskilled manual work ii) To create durable assets in rural areas. It is demand driven programme. Work cover under this programme is i) Watershed development ii) Agricultural related works iii) Livestock iv) Sanitation and v) Irrigation etc.

16. Pradhan Mantri Gramodaya Yojana (PMGY)

Pradhan Mantri Gramodaya Yojana which was introduced in 2000-01 with focus of PMGY is on village level development in five critical areas such as health, primary education, drinking water, housing and rural roads with the objective of improving the quality of life of people in the rural areas.



17. Indira Aawas Yojana

It's aims are to provide dwelling units, free of cost to the Scheduled Castes, Scheduled Tribes and free bonded labours and also the non Scheduled Castes/Scheduled tribes BPL families in rural areas. IAY was started in 1985-86 as a sub-scheme of Rural Landless Employment Guarantee Programme (RLEGP). Since, 1st January, 1996, It has been working as an independent scheme. It is funded on a cost sharing basis in the ratio of 75:25 percent between the centre and states. Now, this scheme has been recently renamed as Pradhanmantri Aawas Yojana.

18. Prime Minister's Employment Generation Programme (PMEGP)

Government of India has approved the introduction of new credit linked subsidy programme called Prime Minister's Employment Generation Programme (PMEGP) by merging the two schemes that were in operation till 31st march, 2008 namely Prime Minister's Rojgar Yojana (PMRY) and Rural Employment Generation Programme (REGP) for generation of employment opportunities in rural as well as urban areas.

19. Annapurna

Annapurna is introduced in 1999–2000 with focus of providing food to senior citizens who cannot take care of themselves and are not under the National Old Age Pension Scheme (NOAPS), and who have no one to take care of them in their village. This scheme provide 10 kg of free food grains a month for the senior citizens they mostly target groups of 'poorest of the poor' and 'indigent senior citizens.

20. Sanjay Gandhi Niradhar Anudhan Yojana (SGNAY)

This plan was started on 1st August, 2008. Benefits of this scheme can be availed those are 65 year old men and women, tuberculosis, AIDS, leprosy and other such men and women, widows, third-party, devadasi, prisoner's wife, etc. who cannot run their own lives. To take advantage of, the family name must be below poverty line and annual income is upto Rs. 21,000.

21. Deendayal Upadhyay Antyodaya yojana

Deendayal Upadhyaya Antyodaya Yojana was implemented by the Central Government on 25th September, 2014 for the urban and rural poor. The main objective of this scheme is to reduce urban and rural poverty by increasing the standard of living with the help of skill development and other measures.

22. Pradhanmantri Shahari Awas Yojana (PMAY)

This scheme started on 25th June 2015. The Prime Minister's Urban Housing Scheme has been implemented primarily for the urban poor. The main focus of this scheme is to create 2 crore new homes within 7 years.

23. Pradhanmantri Gramin Awas Yojana (PMGAY)

Pradhanmantri Gramin Awas Yojana, This scheme started on 23rd March, 2016. Under this scheme, financial assistance will be given to the homeless people as well as those who are living in a disruptive home for constructing permanent homes. This scheme has been implemented all places except Delhi and Chandigarh.

24. Shabari Adivasi Gharkul Yojana

This scheme was started on 28th March, 2013. This scheme is implemented for people living in homeless or rugged households in the rural and urban areas of the Scheduled Tribes. In rural areas, a grant of Rs. 1.30 lakh per house and the beneficiaries of the city area is given Rs.2.50 Lakh.



25. Start up India

This scheme was started in 16th August, 2015. The main objective of this scheme is to promote innovation and to create jobs. The promotion of employment generation by reducing regulations and restrictions. Promoting sustainable economic development by encouraging of women entrepreneurs in the country.

26. Ramai Awas Yojana

This scheme started in 9th March 2010. This scheme is state-sponsored, which is implemented for people belonging to homeless or rugged households in the scheduled castes and communities of rural and urban areas. Under this scheme, in rural area grant of amount is 1.32 lakh and the beneficiaries of the city area Rs. 2.50 is given.

27. Make in India

This scheme started in 25th September, 2014. The main purpose of this scheme is to promote investment. Encouraging young entrepreneurs, improving skills development, protecting intellectual property etc. Make more emphasis on industrial development and increase in employment through Make in India.

Measures for eradicating poverty:

1. To promote and disseminate education and to provide vocational education.
2. Food security is very important for defining poverty.
3. Only Calorie intake criteria is also not sufficient.
4. Providing urban facilities in rural area.
5. To control the growing population.
6. Employment opportunities have to be provided by farming based industries and small scale industries.
7. Agriculture development should be the base of poverty eradication programs.
8. Providing loans to farmers for low interest rates, providing technical training, irrigation, and providing good seed.
9. Distribute the farmland to poor farmers and landless.
10. Employment opportunities should be increased at large scale.
11. It is necessary for all the people to get involved in the scheme.
12. Women empowerment activities which could reduce poverty.
13. Important plans should be implemented for economic development.

Conclusion

In this paper an attempt has been made to analyze the year-wise position of poverty ratio and poverty alleviation programme in India. Poverty is a stigma in a dream of the world power. It is important to implement and implement different measures for poverty alleviation. If the country wants to build a super power, then it is important to develop the exploited, afflicted and peasantry. According to Amartya Sen, "if there is no comprehensive growth, faster economic growth is meaningless".

Reference:

1. Datt & Sundaram,(2013)," Indian Economy", Chand & Company Ltd., New Delhi.
2. Misra and Puri,(2008)," Indian Economy", Himalaya Publishing House, p.203-217.



3. Suryagandh B.S. (june 2006), "Impact of Special Component Plan on Socio-Economic Conditions of Scheduled Caste Community in Kolhapur District".
4. Press note on poverty Estimates, 2011-12.
5. Government of India planning commission July,2013.
6. Report of the expert group to revive the Methodology for Measurement of Poverty, Government of India Planning Commission, 2014.





A Geographical Review of Agricultural Holding in Solapur District

Dr. Subhash Manikrao Gaikwad

Assistant Professor,

M.H.M Arts& Comm.College,

Modnimb Tal-Madha Dist Solapur

subhash25gaikwad@gmail.com

Mob :- 9595303318

Abstract:-

The Size of form is a matter of great importance to success in agriculture and accelerating Production by applying modern Form technology. An attempt has been made to take aerographical review of agricultural holding in Solapur district. There are More than 31.15 Thousand, 7.43 Thousand and 32.73 Thousand operational holding in un-irrigated and partials irrigated area. respectively. (Dr D C Kamble, 2018). It is found that 48.13% of holding are ranges between 1 to 2 hectares in un-irrigated agree and comprise 16.77% of un-irrigated area. About 83.12% of Total holding are below 5 hectares in Size Comprising More than 50% of un-irrigated area. Whereas, more than 95% of total holling are below 5 hectares in size. Comprising 85% of irrigated area.

Large size of class (10 Hectare and above) Constitute 4.23% of total holding and comprising 20.41% of un-irrigated agree, while same size of class holding are marked 0.44%, which comprises 2.06% of irrigated area in the district.

While nearly 27.95% holding found in the district have a size below 2 hectares, which constituted about 9.59% has a large size (10 hectare and above) holding, which comprising about 22.92% of Partially irrigated area in 2011-12.

Keywords:- Land holding, Population, Fragmentation of land, Land holders.

Objective :-

The present paper has attempted to investigate the various size of agricultural landholding in Solapur district.

Introduction :-

Land is private asset, though after the father dies, his land is distributed amongst the sons, this distribution of land does not entail collection, but its nature is fragmented and land holdings become more acute, Fragment have made cultivation more costly. This practice is very wasteful in the sense that the farmer cannot concentration all his attention and energies at one particular Place. The near field are apt to be over worked and the remote ones neglected. (Mane, 2018)

Size of operational holding determine the use of inputs and efficiency of farms. Several vied raising technologies have been made available, but they are not neutral to size and hence they are not within reach of every farmer. The amount of land one necessary Qualification to most of opportunities.

Data Base and Methodology:-

The work is based on secondary data, collected for the period 2011-12. The secondary data related to number of landholders and size of operational holding were obtained from social -

Economic Review of Solapur district and land record department. The collected statistic of land holding has been processed and tabulated, percentage method is used to show the statistical data.

Study area:-

The district Solapur is Situated entirely in the Bhima, Nira, Sina and Man river basins in Southern Maharashtra. It lies between $17^{\circ} 10'$ to $18^{\circ} 32'$ North Latitudes and $74^{\circ} 42'$ to $76^{\circ} 15'$ East longitude. The total geographical area of the district is about 14895 sq. km with a Population of 43,15,527 according to 2011 census. The district comprises eleven tahsin namely

karmale, Barshi, Madha, Malshiras, Pandharpur, Mohol, North Solapur, South Solapur, Sangola, Mandlweda, and Akkalkot. The district is divided into three major physical regions i.e. the hills region, the plateau region, and the plain region. Climate of the district is on the whole agreeable and is characterized by general dryness except during the monsoon season. The average annual rainfall of the district is 584 mm. The soils of the district are essentially derived from the Deccan trap. Which is the predominant rock formation of the district.



Result And Discussion:-

Table -1 Size Total Number of Landholding Area operated in solapur District (2011-2012)

Size of class	Un-Irrigated		Irrigated		Partially Irrigated	
	Holding	Area Hectare	Holding	Area Hectare	Holding	Area Hectare
0.0-0.5	33250 (8.49)	93570 (0.77)	13528 (18.34)	3815 (3.83)	838 (0.91)	301 (0.09)
0.5-1.0	49298 (12.58)	37462 (3.08)	16622 (22.36)	11002 (11.05)	5007 (5.47)	3616 (1.10)
1.0 -2.0	105975 (27.06)	156264 (12.86)	22825 (30.71)	27695 (27.82)	19730 (21.57)	2702 (8.40)
2.0-5.0	137055 (34.99)	4,25,252 (35.01)	17853 (24.01)	42391 (42.59)	39179 (42.84)	110749 (33.82)
5.0-10.0	49569 (12.65)	338523 (27.87)	3161 (4.14)	12597 (12.65)	19534 (21.39)	110150 (33.67)



10-20	14631 (3.73)	191267 (15.74)	326 (0.43)	1994 (2.00)	6352 (6.94)	62175 (18.99)
20	1813 (0.50)	56440 (4.67)	11 (0.01)	35 (0.86)	808 (0.88)	12885 (3.93)
District	3,915,91	1214545	74326	99529	91448	327378
Average	(100)	(100)	(100)	(100)	(100)	(100)

Source:-

Social-Economic Review of Solapur District 2011-2012 A direct consequence of progressive increase in population in fragmentation of land holding. Table-1 reveals that there were more than 39.15 Thousand, 7.43 Thousand and 32.73 thousand operational holding un-irrigated, irrigated and partial irrigated areas respectively. The nature and intensity of land use differ appreciably with the size of holding. From table 1 it is noticed that 48.13% of holdings are ranges between (1 to 2 hectares in un-irrigated area. About 83.12% of Total holdings are below 5 hectares in size, comprising more than 50% of un-irrigated area. Even without making allowances for tenancy and un-agricultural uses of land, these holdings cannot support the peasant family and a pair of bullocks. These Farmers use such inputs, which are within their reach. (Gaikwad, 2019) Due to financial constraints, he cannot go to capital intensive inputs and technologies.

Whereas, more than 95% of total holding are below 5 hectares in size, comprising about 85.29% of irrigated area. This is to note that irrigation is practiced by comparatively much proportion of marginal (Less than 1 hectare), Small and semi-medium (2-4 hectare) land holders in comparison to big farmers (About 10 hectare). Small and marginal farmers depend on public means of irrigation since they hardly can afford for their own. The farmers with small holding are getting subsidy for digging wells and purchasing pump sets.

Large size of class (10 hectare and above) constitute 4.23% of total holding and comprising 20.41% of un-irrigated area. whereas, in same size of class total holding are 0.44%, which comprises 2.06% irrigated area in the district tube wells and other sources are significant means of irrigation in large size farms- In 2011-12 about 3.27 thousand hectare of land is partially irrigated, table-1 shows that nearly 27.95% holding found in the district have a size below 2 hectare. Which constituted about 9.59% of partially irrigated area? Whereas, about 42.54% holding fall in the size category of 2 hectare to 5 hectares, which covered about 32.82% area and 7.8 % has a large size (about 10 hectares) holding while it constitutes about 22.92% of partially irrigated area in the year 2011-12. (Mane D. D., 2018)

Conclusion:-

It may be concluded that the change in land distribution across size classes shown in table -1 is due to sub division of land among family members either due to inheritance. The numbers of tenant farmers and landless laborers are increasing. In case of farmers having < 1 hectare to 2 hectares lands holding. Overall production falls short of meeting overhead costs, even if irrigation is made available to them, majority of the farmers have neither the economic capacity nor the technical ability to utilize irrigation facilities in their subsistence agricultural system.



References:-

- Abha Lakshmi Singh (1992): Farm size and Agricultural Beofragncrd.) N. Mohammad d. Microtech Advance Printing system (Pvt.) Ltd., New Delhi.
- Subhash Chavare and Sambhaji. D. Shinde , (2013), “Surface Water Harvesting Action Plan using Remote Sensing and GIS for Siddhewadi Village, Sangli District” Proceedings of State Level Seminar on “Sustainable Development of Rainwater Harvesting in Drought Prone Region of Maharashtra, India”.
- Bhattacharya, Nand (1972): Farm size and productivities: A Fresh look, Economic and political week, vol.VII. No.26
- Rao, A.P.(1967): size of Holding and productivities, Economic and political weekly, vol.II, No.44
- S. G. Chavare and Sambhaji. D. Shinde (2012) “Integrated Approach of Remote Sensing and GIS for Analysis of Agricultural Land Suitability in WR-6 Watershed” , in “Agriculture and Rural Development”
- Mane Santosh P. (2018) “Impact of Irrigation on Agriculture in Malshiras Tahsil of Solapur District (Ms): A Geographical Analysis” unpublished M.Phil. Dissertation submitted to Shivaji University, Kolhapur
- Saini, G.R. (1971):Holding size , productivity and some related Aspects of Indian Agricultural, Economic and political weekly vol.VI No-26
- Socio-Economic Review of Solapur District-2011-12





Role of ICT in Open And Distance Mode in Teaching Learning Process

**Dr. L Malleswara Rao¹, J. Rama Mohan^{*1}, Dr. APV Appa Rao¹, P. Ramakrishna Rao¹,
Ch. Sundar Singh² & K. Ramnarayana³**

¹Lecturers in Physics, Sri.Y.N.College, Narsapur, ²Lecturer in Physics, DNR Degree College for Women, Palakol. & ³Lecturer in Physics, ASNM Govt. Degree College, Palakol,

^{*}Corresponding Author: rammohanjaddu@gmail.com.

Abstract:

Nowadays the use of ICT in teaching and learning process becomes very important. ICT in education and teaching learning process has changed the traditional system of learning to modern ICT based learning. Teaching- learning process is not now limited within the boundaries of classroom. ICT can enhance teaching and learning through its dynamic and interactive content and can provide real opportunities for individualized instruction. ICT used for making assignments, communicating, collecting data & documentation, and conducting research. Typically, ICT is used independently from the subject matter in Open and Distance mode of Education. ICT as a medium for teaching and learning in both Open and Distance education. Distance Education indicates informal education system; basically it is teaching learning methodology. The technological advancement also influenced the formal and informal education system through its various technical tools. The tools used by faculty during lockdown for teaching and learning through online modes are Zoom, Google Hangouts, Skype meet up, Google classrooms, LMS, ICT, YouTube, etc. Many institutions conducted Faculty development programs online to gear up the positivity among faculty during the crisis of COVID-19. The use of ICT tools in software and hardware for teaching learning process in both Open and Distance mode of education. ICT is plays an important role in student evaluation, both Open and Distance mode. ICTs have the capable to expand access for higher education ICTs enables distance education institutions to provide knowledge within reach of all. Usage of ICTs encourages interaction and collaboration between teachers and students, and among students in distance and Open mode of education.

Keywords: COVID 19, Education, ICT Tools, Open and Distance mode, Teaching Learning Process.

I. Introduction:

India's fight against the COVID- 19 outbreak has been unique. India has locked down and loaded in its fight against the corona virus. Prime Minister Narendra Modi announced a 21 days nationwide shutdown, as the nation of 1.3 billion people shut down, the world health organization (WHO) said India s COVID fight could make or break the global war. According to COVID 19, When it comes to the education sector, many countries have closed down schools and universities. It is the creativeness and mastermind of policymakers how they can bridge a gap for this in a positive way or negative way. Hence teaching is moving online on an untested and unprecedented scale. Students' assessments are also moving online. Educators, faculty, students are doing their part to support each other. Technology has a key role in educating for the future generations.



Information and communication technology is group of technologies by which various support services shall be provided at different phases of student learning life cycle in distance learning. Open and Distance Education is a part of informal education system; basically it is teaching learning methodology. The technological advancement also influenced the open and distance education system through its various technical tools like: Learning Management Systems (LMS) provides the virtual platform for the e-learning by enabling the virtual classroom management, monitoring student, delivery of lectures and study material, tracking of learning, testing, communication, registration process and scheduling.

II. Teaching Learning Process during Lockdown period:

With the crisis of COVID 19, there is a wide adaption of technology in teaching; learning process through online modes are Zoom, Google Hangouts, Skype meet up, Google classrooms, LMS, ICT, YouTube, etc. Many higher Educational institutions (HEIs) conducted Faculty development programs through like online (called as Webinars) to gear up the positivity among faculty during the crisis of Lockdown. Faculty feel there is no much difference between online and offline sessions as they can share PPT, Videos Lectures and use board and marker as regular classrooms. Faculty have also done through online role-play, group presentations, guest sessions by experts in the respective fields . This has created a revolution in the higher education institutions and proved the hybrid system of teaching through offline and online mode.

III. Role of ICT in Teaching Learning Process:

1. ICT helps teachers to interact with students.
2. It helps them in preparation their teaching, evaluation and provide feedback.
3. ICT also helps teachers to access with institutions and Universities, NCERT, NAAC NCTE and UGC etc.
4. It also helps in effective use of ICT software and hardware for teaching learning process.
5. It helps in improve Teaching skill, helps by using innovative Teaching pedagogical methods.
6. It helps in effectiveness of classroom Teaching.
7. It also helps in improving professional Development, faculty development and Educational management systems.
8. It is replacing the ancient technology. Students are always have competitive mind set. So teacher must have the knowledge of the subject. This can be done through ICT.
9. ICT helps teachers in preparation for teaching. Different tools are used such as word processing, Database, Spreadsheet etc. Various technology based plans are used to help the teachers for their practice teaching.
10. ICT prepares teacher for the use of their skills in the real classroom situation and also make students for their future occupation and social life.
11. ICT used for making assignments, communicating, collecting data & documentation, and conducting research. Typically, ICT is used independently from the subject matter.
12. ICT as a medium for teaching and learning. It is a tool for teaching and learning itself, the medium through which teachers can teach and learners can learn. It appears in many different forms, such as drill and practice exercises, in simulations and educational networks.
13. ICT as a popular tool for Organisation and Management in Institutions.
14. ICT is plays an important role in student evaluation.
15. ICT helps Teacher to communicate properly with their students. So ICT is a bridge between



teacher and students.

IV. Advantages of ICT in Open/Online Education:

1. Finding the new things: Students can use ICT to find the information and to gain new knowledge in several ways. They may find information on the Internet or by using an ICT-based encyclopedia such as Microsoft Encarta. They may find information by extracting it from a document prepared by the teacher and made available to them via ICT, such as document created using Microsoft Word or a Microsoft PowerPoint slideshow. They may find out information by communicating with people elsewhere using email, such as students in a different school/college or even in a different country.

2. Knowledge of Processing: Students can use ICT as part of a creative process where they have to consider more carefully the information which they have about a given subject. They may need to carry out calculations or to check grammar and spelling in a piece of writing, or they may need to re-sequence a series of events.

3. Knowledge of Sharing: Students can use ICT to present their work in a highly professional format. They can create documents and slideshows to demonstrate what they have learned, and then share this with other students, with their teacher, and even via email with people all around the world.

V. Advantages of ICT in Distance Education:

The advantages of using ICT in distance education system are:

1. Delivery of fast and flexible course content: ICT technologies have made it possible to deliver lessons/courses in a faster and easier manner in distance education by using computer-based or internet-based technologies.

2. Improvement of access: ICTs have the capable to expand access for higher education as well as secondary education among people. ICTs enables distance education institutions to provide knowledge within reach of all. ICTs provide the opportunity of conducting thousands of classes on hundreds of subjects and courses available anytime, at any place, as per the need and convenience of learners.

3. Enhancement of pedagogical and course designs: Pedagogy is the art and science of teaching. Pedagogical knowledge is essential while using ICTs in course delivery at any stage of education. ICTs offer flexibility in an organization and design of courses in a suitable and effective manner that facilitates development of knowledge, skills and competences among learners.

4. Educational administration and management: Various areas of educational administration and management require ICT help at different levels. At school, colleges and at universities, there are different programmes available for registration, digital record keeping of staff and students. Academic Management Information System (MIS), Financial Management Information System (FMIS), Student or staff database and Examination data base are some examples.

5. Enhancement of collaboration and interaction: Usage of ICTs encourages interaction and collaboration between teachers and learners, and among learners in distance education. Communication tools like telephones, cell phone, SMS, online forums, chat, blogs, social media platforms like apps and e-mail etc. can made communication and discussion for meaningful teaching learning experience.



6. Preparation of teaching learning materials: With the use of word processing programmes, ICTs are helpful for teachers in preparing their own instructional and audio visual materials. Programmes like Power Point, Paint and Photoshop help teachers to prepare various instructional materials. Internet provides a lot of material and information in searching required subject matter or helping teaching aid.

7. Evaluation: Sending online assignment, quizzes, feedback forms, questionnaires and submitting responses online, participating in group discussion, blogs are modern approaches of evaluations which are being applied successfully with the help of ICTs. MOOCs is the best example of online teaching learning and evaluation.

VI. Conclusions:

e-learning or online learning has grown at a rapid pace and has enhanced the overall teaching learning experience in developed countries with less use demonstrated in developed countries, like India, due to high cost of power generation and access to ICT facilities. Application of ICT in higher educational Institutions (HEIs), education and teaching learning process has changed the traditional system of learning to modern ICT based e-learning. Teaching learning process is not now limited within the boundaries of classroom. ICT introducing innovative pedagogies in to the classroom, creating network among higher educational institution, improving overall standard of education by reducing the gap between the quality of education in urban area and rural area, initiation of smart school with objectives to foster self-paced, self assessed and self-directed through the application of ICTs, and developing ICT policy for education and training. So we should use information communication Technology in Teaching Learning Process in 21st Century, teachers only can create a bright future for students.

VII. References:

- 1- Ms. Veena Shenoy, COVID 19 – Lockdown: Technology Adaption, Teaching, Learning, Students Engagement and Faculty Experience, Mukd Shabd Journal, Volume IX, Issue IV, APRIL/2020,pp 698-702.
- 2- <https://elearningindustry.com/make-online-learning-engaging-during-coronavirus-lockdown>.
- 3- Bhowmick, Debashis. (2014). ICT in Education in India. Edutracks; A monthly Scanner of Trends in Education, 8(6), 5-6.
- 4- Sudipta Deb Roy, Application of ICTs in Teaching-Learning Process, International Research Journal of Interdisciplinary & Multidisciplinary Studies (IRJIMS),A Peer-Reviewed Monthly Research Journal ISSN: 2394-7969 (Online), ISSN: 2394-7950 (Print),Volume-I, Issue-VII, August 2015, Page No. 72-84.
- 5- Chauhan, S. S. (1992). Innovations in Teaching and Learning process. New Delhi: Vikas Publication House Pvt. Ltd.
- 6- Dash, K. M. (2009) ICT in Teacher Development, Neelkamal Publication Pvt. Ltd. Educational Publishers, New Delhi. Dr. G. Vasudevaiah, Promoting usage of ICT in Open and Distance Education Programs, The International Journal of Indian Psychology ISSN 2348-5396 (e) | ISSN: 2349-3429 (p) Volume 3, Issue 3, No. 11, DIP: 18.01.197/20160303 ISBN: 978-1-365-21307-6.



A Geographical Analysis of Zero Waste Management And its Impact in Satara City

P. R. Vhatkar¹, Dr. A. S. Patil², Dr. R. S. Mane-Deshmukh³

1. Assistant Professor, Department of Geography, S. G. M. College, Karad.

pandurangvhatkar@gmail.com

2. Associate Professor, Department of Geography, Chh. Shivaji College, Satara.

Patilanandraol23@gmail.com

3. Assistant Professor, Department of Geography, Chh. Shivaji College, Satara.

ramrajemsd@gmail.com

Abstract:

Zero waste management is a modern system approach mainly used to reduce the source of waste generation and waste treatment. Zero waste management is a prevention process of waste production, and conserve natural resources. Its process includes reduce, reuse, recycling and eliminate waste material. Zero waste management is a process helps avoids waste volume and its effects. Municipal solid waste has the highest proportion of domestic solid waste. It is necessary to adopt zero waste management to reduce the generation of this solid waste. According to the zero waste management approach, the amount of waste should be completely reduced at each stage of solid waste generation. The amount of urban solid waste is significant in modern times. To reduce the amount of solid waste in every civic sector, zero waste management approach should be implemented by the municipality. Through reuse, reduce, recycling, composting, solid waste can be reused and more durable and quality products can be obtained from it. This will stop the depletion of resources, save money, and help maintain environmental quality forever. Zero waste management process helps to reducing waste, municipal profit, stop pollution, secure living life, save the environment and resource.

Keywords: Zero waste management, reuse, recycling, municipal solid waste, composting, environmental quality.

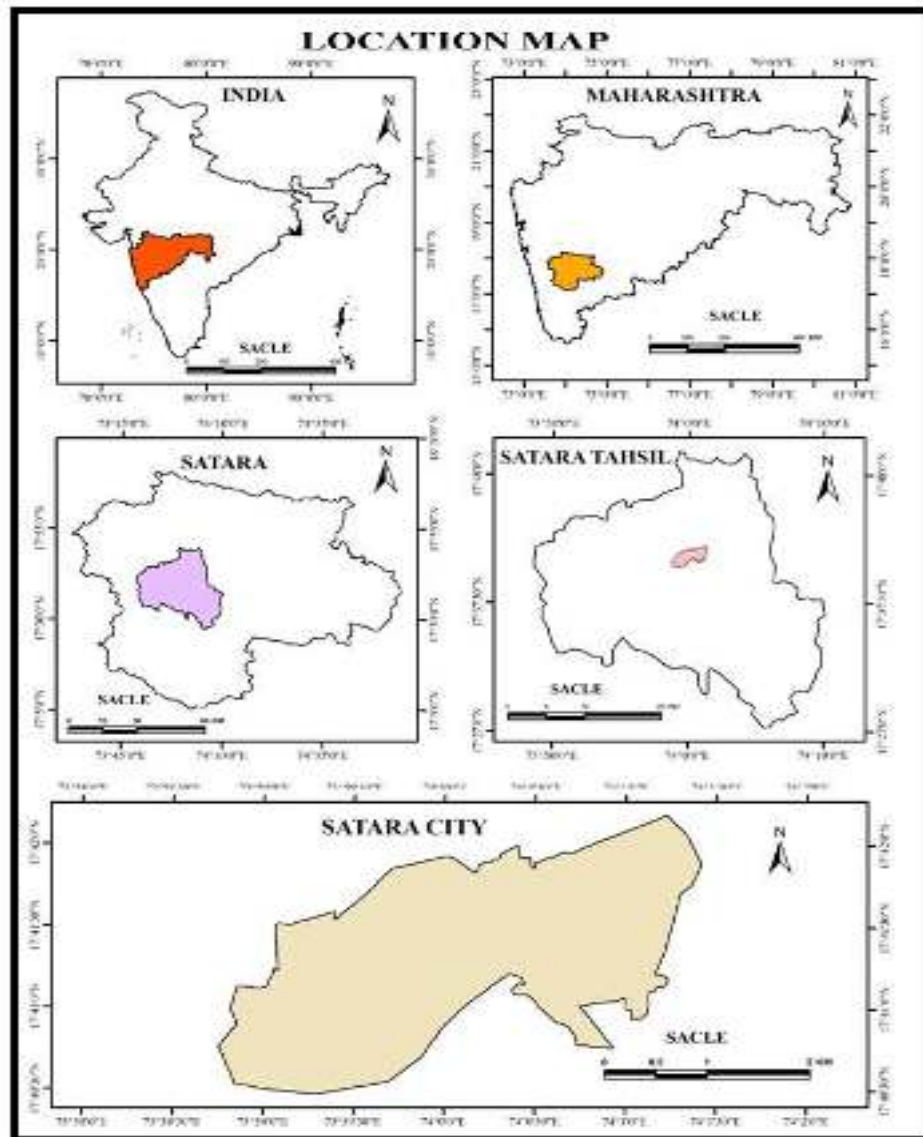
Introduction:

Zero waste management is an advanced approach used in solid waste management. This approach focuses on reducing waste amount and its toxicity. Municipal Council of Satara city and health department those are focus on waste reduction, recycling, waste treatment and waste dispose through zero waste management approach. Recyclable solid waste is sold to recyclers. Selected bio-degradable wet waste is used for composting. Prepared compost manure sold in market. Zero waste management process helps to reducing waste, municipal profit, stop pollution, secure living life, save the environment and resource. Efforts should be made to completely eliminate municipal solid waste generated from urban areas. It is possible to reduce solid waste completely by using various treatment methods such as urban solid waste reuse, reduce, recycling, composting. Satara Municipal Council is successfully managing the zero waste management approach. Such a modern ideal approach should be put before the society in the municipal field.

Study Area:

Satara is an important district in the state of Maharashtra. Located in Satara district, Satara is a historically important city. The city of Satara was founded by King Chhatrapati Shahu in the 16th century.

The city of Satara derives its name from the existence of seven hills (seven-stars). The geographical background of Satara city is characteristic. The city of Satara is situated at an average altitude of 600 m above sea level. The city of Satara is mainly located in the hills and plateaus. The geographical background of Satara city, some hills near Satara city. These hills are the tributaries of the Shambhu-Mahadev mountain range. Mountains are found on the west and south sides of Satara city.



Location Map: Figure 1.1: Location map of Satara city.

Ajinkyatara fort is located in a hilly area south of Satara city. On the south side, the fort has vertical ridges. The perfect location of Satara city is between $17^{\circ} 39'$ to $17^{\circ} 42' 30''$ north latitude and $73^{\circ} 57'$ to $74^{\circ} 02'$ east longitude. Figure No. 1.1 shows the location map of municipal Satara city area. As this part of Maharashtra Plateau is formed from lava flows, hilly black soil is found here. The rivers Venna and Krishna flow along the north-eastern side of Satara city. As the eastern part of Satara city is flat, the road transport is better developed in the eastern part. According to the 2011 census, Satara has a total population of 1,20,195. The population of Satara is increasing day by day due to favorable climate.

Objectives:

The view “A geographical analysis of zero waste management and its impact in Satara city” expected that the outcome result in improvement for zero waste management. The present



research work has focuses on the approaches of zero waste management system, in the Satara city (Songaon). The primary aim of research work is identify the zero waste management and its impact in satara city. In view of the above proposed research work, following main objectives are as follows.

- 1) To investigate the present situation of zero waste management in the Satara City.
- 2) To identify importance of reuse, recycling and composting in zero waste management.
- 3) To identify the better impact of zero waste management in Satara city.

Database:

The proposed geographical research work is based on both primary and secondary data related to zero waste management in the Satara city.

Primary Data:

The present research work is based on the mostly primary data. Field survey, interview, observation, and questionnaires these are the sources of primary data. Basic information has been collected through interviews, questionnaires, and observations etc. Primary information was collect with questionnaire survey carried out from zero waste management plant at Songaon, Satara city area.

Secondary Data:

The source of secondary data have includes research related published reviews, statistical abstracts, waste related data, base map, demographic data, socio economic data and some municipal departmental unpublished records. The secondary data have been collected from Municipal Council of Satara city, Satara jilha parishad, other governmental departments and Internet also. Official records of Satara District Census Hand Book, Gazetteer of Satara district, Districts statistical abstracts and relevant literature, Zero waste management related reports are getting from Municipal Council of Satara city. Census records of India, research journals, socio-economic review of Satara district are gets from online source.

Methodology:

The present research methodology includes the process of data collection and presentation. The database for the study area is prepared on the basic primary and secondary information. The output of the research study is depending on basic information of the city level background. Information and data elaborate of the solid waste management related municipal service delivery in the Satara city. Present research work has been carried out with the help of the following principal primary and secondary data sources, viz.

- 1) Maps, Statistics and available written literature.
- 2) Observations, questionnaire and interviews.
- 3) Internet based data.
- 4) Administrative data getting from the department in the region under study.

Zero Waste Management in Satara city:

Zero waste management is a modern system approach mainly used to reduce the source of waste generation and waste treatment. Zero waste management system provides quality waste-based products and completely prevents waste generation. Household solid waste collected from all over the city is brought to zero waste management plant for processing. This waste is

segregated in a home designed to process the waste. Wet waste and dry waste are separated. Reusable dry waste is used for recycling process or such waste is sold to recyclers. Wet waste compost is used for composting. This compost manure is sold in the market. Thus zero waste management plants help in minimizing waste at landfill sites. A plant based on the philosophy of zero waste has been set up at the waste management plant, Songaon. Figure No. 1.2 is shows the workflow of zero waste management.



Figure 1.2: Workflow of zero waste management:

House hold solid waste (wet and dry) from municipal solid waste is mainly used in Zero waste management plant. House hold solid waste from municipal solid waste collected at Songaon dumping ground is mainly used in Zero waste management plant. Table No. 1.1 is shows the house hold waste contribution in zero waste management plant.

Table No. 1.1: Contribution of house hold solid waste in zero waste management.

Sr. No.	House hold waste	% of wastes Composition
1	Organic	37%
2	Paper and Cardboard	14%
3	Plastic	20%
4	Glass	10%
5	Others	19%

Source: Municipal Council of Satara City, 2020.

Figure 1.3: Contribution of house hold waste composition in zero waste management



Source: The municipal council of Satara city (2020)

Reuse, Recover and Recycling:

Reuse or recovery of solid waste is the reuse of items considered waste after repair. Not only that, but creating a new more sustainable product from solid waste is better than reusing it. Reuse of solid waste avoids waste generation. Reuse of waste is beneficial in terms of environmental quality. Recycling of solid waste means processing the solid waste used, so that a new product can be made from it. The use of such recovered product will save resources, maintain environmental quality, save financially. Recycling of solid waste is low cost and profitable so the social acceptance of such items is increasing. Recycling of solid waste is making a significant contribution to improving human health and environmental quality.

Some solid waste is appropriate reusable and recyclable. Discarded waste items are usable resources. Recycling treatment includes dry house hold solid waste (plastic, metal, leather etc) and some commercial solid waste (recyclable). Solid waste can be reused. Solid waste reuse to generate energy, sustainable products, land filling, financial savings, etc. can be achieved. E.g. Empty glass bottles can be recycled. Plastics, junk paper, Rexene, rubber, wood, metal scrap are recyclable. This type of reusable solid waste material becomes available after the segregation process. Such waste is segregated at dumping ground. This waste is also cleaned and packed. The finished product is eventually sold to an authorized dealer.

Total of 1 MT / day of reusable and recyclable solid waste is sold from the treatment plant at Songaon dumping ground. Besides, at the Satara city area reusable and recyclable waste materials collected from rag pickers. Apart from this, there are many businesses in Satara city that buy recyclable material. Photo plate 1.1, and 1.2. shows the reusable and recyclable waste treatment process.



Photo Plate 1.1: Recyclable waste segregation, Songaon.



Photo Plate 1.2: Reusable solid waste material.

Composting:

Composting is a natural treatment of only biological solid waste with self heating and microbial process. Making compost manure from solid waste is a modern technology. Biodegradable waste material is allowed for composting purpose. There is converts organic waste, oxygen as well as other gases, water, natural heat into compost. Organic waste is disposed of here. Composting is an environmentally and eco-friendly manure getting from processed biodegradable decompose waste material. Composting is good manure and usable for agricultural food production. Modern thinking farmers are now using compost manure in agriculture to make the concept of organic farming a reality. The supply of organic manure to the agricultural sector helps in increasing the natural productivity of the agricultural sector. Therefore, the demand for compost is increasing. Now the tendency of municipal officials to increase the production of compost manure is increasing. Composting facilities should now be decentralized so that waste is reduced and resources are protected for future generations. Composting treatment can be done from open system and closed system. This is a solid phase biological waste treatment. Composting manure is getting low cost compared with chemical fertilizers. Advanced concept of organic agriculture some modern farmers are used compost manure in agricultural field. Composting from waste organic matter has been observed to significantly reduce the amount of waste generated.

The solid waste dumping ground area at Songaon is 7.6 hectares. This is various solid waste treatment plant is processing. The entire task of composting has been entrusted to a private company. This compost plant receives a total of 18 MT / day of biodegradable solid waste and composting is done on it. This compost plant produces 28 to 30 MT / day of compost. This is a good source of income for Satara Municipal Council through composting. This compost manure is packed in bags as per the order. The packing bags are fixed weighted scale. A variety of ingredients are found in this compost manure. The ratio of these various components is given in table no. 1.2. Total 50 kg of compost manure is in a bag. This all compost manure is sold by wholesale rate.

Table 1.2: Included particulars components in a 50 kg bag of compost manure.

Sr No.	Components / Particulars	Range
1	Arsenic (AS_2O_3)	10.00 mg/Kg
2	Cadmium (Cd)	05.00 mg/Kg

3	Chromium (Cr)	50.00 mg/Kg
4	Copper (Cu)	300.00 mg/Kg
5	Lead (Pb)	100.00 mg/Kg
6	Mercury (Hg)	0.15 mg/Kg
7	Nickel (Ni)	50.00 mg/Kg
8	Zinc (Zn)	1000.00 mg/Kg
9	C:N ratio	< 20
10	pH value	6.5 to 7.5
11	Moisture % by weight	15.0 to 25.0 %
12	Bulk density	<1.0 g/cm ³
13	Total Organic Carbon % by weight, minimum	12.00 %
14	Total Nitrogen (N) % by weight, minimum	0.8%
15	Total Phosphate (P ₂ O ₅) % by weight, min.	0.4 %
16	Total Potassium (K ₂ O) % by weight, min.	0.4%
17	Colour	Dark brown to black
18	Odour	Absence of foul Odour
19	Particle size	4.0 mm IS sieve
20	Conductivity (dsm -1) not more than	4.0

Source: Composting plant, Songaon 2020.



Photo Plate 1.3: Compost manure production, Songaon.

Impact of zero waste management:

The Solid Waste Management Rule, 2016 was passed with minor changes in the Municipal Solid Waste Management Rule, 2000. As per the recent new Solid Waste Management Rules, 2016, Satara Municipal Council has implemented zero waste management to reduce solid waste in Satara city. The implementation of zero waste management approach to reduce solid waste in Satara city has shown immediate results.

- Satara Municipal Council has successfully implemented zero waste management. Therefore, the entire domestic waste in Satara city has been eliminated.
- Recycling waste and compost manure generated through zero waste management is sold in the market. Therefore, Satara Municipal Council has benefited financially.



- The success of zero waste management in Satara city has helped in reducing the pollution caused by solid waste. The level of pollution in the city has decreased.
- Due to zero waste management in Satara city, municipal solid waste has been fully utilized. This has helped in reducing the pollution in the area. Resources are being conserved through reuse and recycling. The city is being kept clean, so the standard of living of the people is improving.
- Due to zero waste management in Satara city, compost manure is being produced on a large scale. This is definitely benefiting agricultural development near the city.
- Sanitation is maintained in Satara city due to zero waste management approach. The entire solid waste is recycled. The result has been to help improve environmental quality. Helping to conserve resources due to zero waste management.

Conclusion:

Zero waste management approach is being implemented in Satara city especially to reduce the amount of municipal domestic solid waste. A total of 52 MT / day municipal solid waste is generated from Satara city. All this waste is collected daily through the Municipal Council. This waste is 100% minimized. Reuse, recycling, reduce, composting have helped in reducing solid waste. Therefore, various benefits like municipal profit, stop pollution, secure living life, save the environment are happening. Citizens are also thinking positively about cleanliness in Satara city. In the approach of zero waste management, the Municipal Council should cooperate to further expand this approach by accommodating the citizens. Civil solid waste should be socialized through zero waste management. Everyone in the community should register their participation. Zero waste management is the ideal approach to reduce urban solid waste in modern times.

References:

1. Solid Waste Management Manual.
2. Cointreau, S. J. (1982), Environmental Management of Urban Solid Wastes in Developing Countries, Urban Development Technical Paper No. 5, World Bank, Washington DC.
3. Shinde A. S., (2014) "A Study Changing Pattern of Rain Water Harvesting Management An Ancient To Modern Age In India- Geographical Analysis" Review of Research Vol. 3/Issue. 10, ISSN: 2249-894X.
4. Gowda, K & Hemalatha B. N. (2007), Solid Waste Management: The Role of Formal and Informal Sectors in Waste Recovery, Reuse and Recycling in Hassan City, Shelter, A hudco-shmi Publication, Vol. 10, No. 2 August, New Delhi, India, Pp. 98-111.
5. Shekdar, A. V. (2002), Solid Waste Management in India – Future Needs, Shelter-A hudco-hsmi Publication, New Delhi, Vol. V, No. 1, January, pp.76-82.
6. Manual by Attarwal F. A. (1993), Solid Waste Management, All India Institute of Local Government, Bombay.
7. Kumar, D. C. Ravi. (2000), "Solid Waste Management and Protection of Urban Environment in Bangalore Metropolitan Area", Unpublished Ph. D. Thesis, University of Mysore.
8. <http://mpcb.mah.nic.in>
9. <http://www.sanicon.net>



Indian Writing in English and Globalization

Prof. U. A. Sawant

Head Dept. of English

Sahakar Maharshi Shankarrao Mohite-Patil

Mahavidyalaya, Natepute

Introduction:

Globalization is a very important factor in this competitive world. In the present age of rapid technical progression various countries, transformed due to the process of globalization. Globalization is great importance because it effects on cultural, social, political economical life of countries. In another sense of globalization means combination of economic and social exchange of information, ideas, technologies, goods services, capitals, finance and also people. But sometimes globalization also leads to unemployment and weakening labour movements. Literature of every nation denotes that Globalization has made countries to realize that they can share their cultural values and economic exchange. The globalization means that the world is getting smaller as well as bigger. India is main mover of globalization. Indian government made a policy in 1991 by which it allowed direct foreign investments in the country. Its result is that, globalization of the Indian industry occurred at large scale. The benefits of the effects of globalization in the Indian Industry are that foreign companies set up various industries in India especially in the pharmaceutical, BPO, petroleum, manufacturing and chemical sectors. Literature has always been subject to socio-political and economical pressure. Literature of Post – Colonial times reflected the increased flow of people from our country, to the other. It is true that the major forces of globalization in India has been in the development of IT field in terms of export and import activities. Many Indian companies have expanded their business and became famous at global level. In the urban and rural areas of India there is access of television grew on large scale. Even in the villages satellite television has grown up market. Indian movies are released at international level.

There is large effect in educational sector because of globalization in India such as literacy rate become high. The foreign Universities are collaborating with different Indian Universities. Globalization promotes new tools and techniques such as E-learning, Google Classroom, On-line learning, Distance Education Programs and trainings. The growth of computer and other technologies enabled women with better salaries and get them status in home and at corporate level. Globalization has given rise to inequalities among writers within the metropolis projecting non-resident Indian writers, over those writing from home. Quality in no longer the criterion by which literature is judged but importance is given to money. Arundhati Roy's *God of Small Things*, worldwide acclaim because of money they received.

In the modern education system of India has created a barrier between children and their parents. Parents always wish that their children should fulfill their incomplete dreams. The important point of modern Indian literature is that they present the Indian Society. Kamala Markandays has been living in England for long time, and yet she has given recently 'lolitha' that fictionalizes the triangular tension emerging from an interaction of tradition, modernity and the adolescent mind of Indian girl. K.N. Daruwalla transmitting the topography of India in his poetry. Aurobindo, on the other hand discovered his roots in the Indian culture. Aurobindo progressed from "revolution to revelation" with the life Divine and Savitri. Tagore's



transcreation which forms his contribution to Indian poetry in English like his other works in Bengali stems from and has now become a part of Indian culture. Nissim Ezekiel's background makes him a national outsider but made himself a part of Indian landscapes and states his unambiguous commitment: "India is simply my environment. A man can do something for and in his environment by being fully what he is by not withdrawing from it. I have not withdrawn from India". Arun Kolatkar sinks his roots in the Marathi past in the tradition of the Bhakti Poetry his tension between skepticism and faith built through his experiences in visiting the temple of Khandoba, the popular folk deity of hills and shepherds.

Conclusion:

Following with globalization, the modern Indian English Literature considers the trends that have emerged in Indian society by thematically focusing on the challenges faced by the Internationalized Indian lives. The impact of Globalization can be seen in Indian culture is very much. The contemporary Indian novel in English has now moved to capture the new tremors caused by overwhelming influx of the global capital and policies of free trade after 1991. They are restricting every aspect of the Indian life with increasing intensity. The drastic economic changes and national policies brought about by the globalization in India. It has created two parts of nation that is, the India of lights and the India of Darkness. Aravind Adiga's novel *The White Tiger* is a study of the distinction between India's ascent as a modern economic giant and the protagonist. Adiga dreams two different sides of Indian society, the upper class namely the oppressor and the lower class namely the oppressed. *The white Tiger* discusses the various evil systems like riots in election corruption, poverty, unemployment, educational system and misuse of welfare schemes. In *Three Mistakes of Life* Chetan Bhagat has highlighted the riot infested Gujarat. Another important aspect of modern novel is increased usage of prose especially in conversation. In the poem of Nissim Ezekiel, we get an authentic picture of one aspect of modern urban Indian life. Shashi Deshpande's novel *'The Dark Holds no Terror'* announced the arrival of a new feminist voice in Indian fiction in her works. She explores contemporary India and illustrates the complete adjustments and social changes of the Indian Culture. Thus Globalization has impacted every aspect of Indian Society, its culture and economy.

References:-

- 1- Arvind Adiga, *The White Tiger*, Harper Collins publication, India New Delhi, 2008.
- 2- Hari Mohan Prasad, *Indian Poetry in English*, Parimal Prakashan, Aurangabad.
- 3- Singh, S.S. (2012) Globalization and its impact on Indian Economy. Arth Prabhand : *A Journal of Economics and Management*, Vol-1, Issue 1, April, 2012.



Yoga Traditional Sports and Games

Dr. Toravi Shivanand Sharanappa

Director of Physical Education

Santosh Bhimrao Patil Arts Commerce & Science College, Mandrup.

Abstract:

*Yoga is mind body disciplines developed in India. In fact yoga is going to popular through the world for the overall development of human society. Many athletes are taking to yoga to improve their on-field performance. Yoga has become a proven match-winner in improving athletic performance. Whatever sport you may be practicing, you can be assured that yoga will help you become better at it. **Yoga for sports.** The most important benefit of yoga is physical and mental therapy. The aging process. Which is largely an artificial condition, caused mainly by autointoxication or self-poisoning, can significantly reduce the catabolic process of cell deterioration. To get the maximum benefits of yoga one has to combine the practices of yogasanas, pranayana and mediation.*

Keywords: Benefits Yoga for Sports, Psychological Benefits & Mental skills training.

Introduction:

Yoga is mind and body discipline developed in India some 2000 years ago. Almost two decades ago, the fitness industry rediscovered this ancient form of physical activity and a new category called mind-body exercise was created. In a more recent article, Larkey, Jahnke Etnier and Gonzalez proposed the term “meditative movement” to classify exercise activities which focus on physical movement’s conscious breathing a calm state of mind, and deep states of relaxation. Contrary to endurance decreases perceived stress and improves overall health perception. Ultimately the goal of yoga is purely psychological. As defined in the Yoga Sutras of Patanjali one of the authoritative texts in yoga yoga is the control of the mental fluctuations and energies. In Ashtanga the purpose of working the body out is to burn the six poisons of the heart-desire anger delusion greed envy and sloth simply put the goal is to live peaceful life free from hatred and negativities.

Yoga as physical activity intervention

In India the practice of yoga can be as sedentary as sitting for hours in deep meditation or as active as the jumping transitions in Ashtanga. When we talk about yoga as physical activity, we are actually focusing on the practice of hatha yoga. The practice of hatha yoga consists of several practical techniques aimed to make the body clean, healthy and strong. These modalities includes cleansing techniques, physical exercises breath work, attention focus and attitude training. All of which, I believe are important to physical and psychological health and well-being. A recent review article comparing the health benefits of yoga versus conventional exercise suggests that yoga appears to be as effective as or even superior than exercise in reducing perceived fatigue and stress in addition to improving health-related outcomes like blood glucose blood lipids and salivary cortisol. This review implies that yoga in general can be an effective alternative physical activity intervention program which not only addresses the health-fitness trait of aerobic exercise muscular fitness and flexibility but also provides a number of psychological benefits such as reduced stress and anxiety.



Yoga for mental skills training

Yoga also teaches positive thinking, generally, attitude training in yoga involves the practice of ethical rules and observances called yamas and niyamas but in the Context of sport psychology attitude training in yoga means thinking positively or applying positive self-talk.

Yoga for Sports

Many athletes are taking to yoga to improve their own field performance. Yoga has become a proven match winner in improving athletic performance. Whatever sport you may be practicing you can be assured that yoga will help you become better at it. Read on learn more about the efficacy of yoga for sports.

Benefits of Yoga for Sports

Yoga poses improve body balance and increase the flexibility of the joints and spine.

Yoga can prevent injuries by strengthening the muscles and increasing flexibility.

Yoga can improve your endurance strength footwork and concentration.

Pranayama and yoga meditation can improve your concentration and keep you focused.

Yoga relieves physical and mental stress enabling you to perform at your peak.

Yoga is a great for cross training which is essential for sports persons who perform the same exercise routine every day.

More Benefits of practicing Yoga for improving Sports

Flexibility, Balance, Strength, Mental Focus, Stress, Warrior Pose for Soccer.

Yoga for Sports & Games: The most important benefit of yoga is physical and mental therapy. The aging process, which is largely an artificial condition, caused mainly by autointoxication or self-poisoning, can be slowed down by practicing yoga. By keeping the body clean, flexible and well lubricated, we can significantly reduce the catabolic process of cell deterioration. To get the maximum benefits of yoga one has to combine the practices of yogasanas, pranayama and meditation. Regular practice of asana, pranayama and meditation can help such diverse ailments such as diabetes, blood pressure, digestive disorders arthritis, arteriosclerosis, chronic fatigue, asthma varicose veins and heart conditions. Laboratory tests have proved the yogis increased abilities of consciously controlling autonomic or involuntary functions such as temperature heartbeat and blood pressure. According to medical scientists, yoga therapy is successful because of the balance created in the nervous and endocrine systems which directly influence all the other systems and organs of the body. Yoga acts both as a curative and preventive therapy. The very essence of yoga lies in attaining mental peace improved concentration powers, a relaxed state of living and harmony in relationships. Through the practice of yoga we become aware of the interconnectedness between our emotional, mental and physical levels. Gradually this awareness leads to an understanding of the more subtle areas of existence.

Physiological Benefits

Physicians and scientists are discovering brand new health benefits of yoga every day. Studies show it can relieve the symptoms of several common and potentially life threatening illnesses such as arthritis arteriosclerosis fitness.

Psychological Benefits

Regular yoga practice creates mental clarity and calmness, increases body awareness, relieves chronic stress patterns, relaxes the mind, centers attention and sharpens concentration.



Self-Awareness, Mental Performance, Mood Change and Vitality, Spiritual Benefits, Pride Knowledge.

Conclusion:

Yoga for Sports is thus a boon for athletes as it can help them to cross-train, reduce injuries, alleviate boredom and add variety to their daily training routine Yoga Benefits for Sports & Games.

Reference:

- 1- Yoga. Ygoy.com/2011/02/27yoga-for-sports-2
- 2- www.articlesbase.com/.../the-benefits-of-yoga-iin-sports-985431.html
- 3- V.S. & Adams T.B. (2007) Heart rate in yoga asana practice : A comparison of styles. Journal of Bodywork and Movement Therapies, 11, 91-95.
- 4- K. Pattabhi Jois (2009), Retrieved January 4, 2012, from K. Pattabhi Jois Ashtanga Yoga Institute.





Impact of ICT on Academic Libraries

Mahadev N.Chavan¹ Dr.Vikram V.Giri²

Librarian (Research Scholar)

1. Librarian , Baburao Patil College of Arts & Science , Angar Tal- Mohol Dist- Solapur

2. Librarian, Shahid Bhagatsingh Mahavidyalaya, Killari, Tal-Ausa Dist-Latur.

Corresponding author-**E- mail- bharari04@gmail.com**

Abstract:

This paper investigated the impact of ICTs on knowledge of Importance of ICT in libraries. In this paper researcher focus on impact of ICT on Academic College Libraries. This paper presents an Importance of ICT in libraries. In this paper researcher collect information of impact of ICT on Academic libraries, history of ICT, Types of ICT based Resources in Libraries, ICT based Services in Libraries and consequences of ICT based resources and services in Libraries.

Keyword:

ICT, Digital libraries, UNIVAC, Electronic Books, Texts and Journal, Blogs or Weblog ,Databases,Bar-coding technology, Open source software (OSS) , RFID Technology, Web technology.

1. Introduction:

Information has come as the prime in the 21st century. ICT has exerted a profound influence on Past academic libraries. There is no option but adapt themselves to new developments, especially due to cuts in budget allocation. Hence, networking of information centers is inevitable. The main objectives of the library is pushing information resources and information related infrastructure and sharing them. In this process, many library have reexamined their Past methods and services to overcome lacquna through automation and `12 computerization. The use of computers for library operation avoids jobs and saves some amount of time, resources and labour. It is also speed of technical processing and information services. ICT bring quality services now. Systematic planning of its introduction and application will assure that the technology based information services are sustainable, and enhances the ability of library.

2. Objectives :

- To study about the Importance of ICT in Libraries.
- To study about the ICT and Academic Libraries.
- To study about the History of ICT.
- To know about the types of ICT based Resources in Libraries.
- To study about the ICT based Services in Libraries .

3. Importance of ICT in libraries:

The use of ICT has transformed the way of collection, storage, and retrieval of information in libraries. Specifically, the internet has completely Changed the Regular libraries into digital libraries. "Using the internet information may be accessed from anywhere of the universe. The arrival and proliferation of electronic resources and digital libraries have already influenced the way users use print resources and traditional libraries. It has also sparked a new



wave of literature on the perception and preference of print and electronic resources” (Ziming Liu, 2006). The digital age has a many changes in the way of information is stored and accessed. “Many new terms viz., „digital libraries”, „libraries without walls”, „virtual libraries” will be come to describe the libraries of today age. A digital library is famous as an electronic version of library where storage is in digital form, allowing direct convey to obtain material and copyright it from a master version” (Burns, 1984).

As the world is developing technologically, library operations in various locations in the world are no longer how they use to be. Libraries in India since the beginning of the 21st century have taking efforts to metamorphose from being institutions driven by manual processes into modern ones where operations are in part or totally dependent on ICT applications. The various use of ICT driven library work that would ample and efficiently meet the information needs of patrons has been broadly acknowledged in extant literature to the extent that most academic libraries in India are positively turning towards computerizing their work. Although none of the academic libraries in the country has fully automated or computerized, many are at varied and deferring stages of converting in having their operations ICT driven or ICT dependent. Academic libraries are libraries that are attached to post secondary institutions and they are as varied and particular as the institutions they are established to serve providing information services to faculty members, students, researchers and other scholarly toward persons. Academic libraries can be classified into university libraries and non-university libraries (Aina, 2004). Universities libraries are the best prograssive type of academic libraries in India; they are greater funded as compared with other types of libraries, they provide the type of information services that could be found anyware in the world.

4.ICT and Academic libraries:

Academic libraries in India uses of ICT as tools to get the information need of users who in this context are students and faculty staff. Academic libraries are developed to support the objectives of their institutions. which are enhance teaching, learning and research. Therefore, academic libraries have hope to serve the all students, lecturers and other members of the academic community. To get the information need of users, academic libraries provides many services such as user education (orientation/instruction services), inter-library loan (ILL) connection, abstracting, indexing , referral & circulation services. Other services provided include library book loan, reference services, reprography, online services, reading list and bibliographies, e-mail, internet connectivity, CD-Researching and publishing (Ifidon, 2006). ICT in libraries has alter the type of information storage , retrieval, acquisition, cataloguing , classification, circulation of materials, serials control, management statistics and administrative activities such as allocating. This achieved for purpose to more efficient information services to the users and the overall improvement in the performance of the libraries and other related information institution (Chisenga,1999). Librarians, therefore, are encouraged to soil themselves with the challenges of grasp this chance of learning the new skills to use the multimedia in information packaging, repackaging and delivery for optimum service delivery in the 21st century.

Information and Communication Technology (ICT) has brought unequalled changes and transformation to academic library and information services, regular LIS such as OPAC, users services, reference services, bibliographic services, current awareness services (CAS) ,



Document delivery, interlibrary loan, Audio visual services and customer relations can be provided more expence and effectively using ICT, as they offer conventional time, place, cost effectiveness, faster and most-up-to-date spreading and end users involvement in the library and information services process. The impact of ICT characterized on information services by alter in format, contents and method of creation and contents and method of production and delivery of information products. Rise of internet as the largest repository of information and knowledge, changed role of library and information science professionals from mediator to facilitator, new tools for distribution of information and shift from physical to virtual services environment and extinction of some regular information services and rise of new and innovational web based.

5. History of ICT:

The concept of “information technology” evolved in the 1970s. Its basic concept, however, can be seen in the World War II union of the military and industry in the development of electronics, computers, and information theory. After the 1940s, the military remained the major source of research and development funding for the expansion of facility to replace manpower with machine power. Since the 1950s, four generations of computers have developed. Each generation shows a change to hardware of decreased size but increased capabilities to control computer work. The first generation used vacuum tubes, the second used transistors, the third used integrated circuits, and the fourth used integrated circuits on a single computer chip. Featue in artificial intelligence that will minimize the need for complex programming characterize the fifth generation of computers.

The first commercial computer was the UNIVAC I, produced by John Eckert and John W. Mauchly in 1951. It was used by the Census Bureau to forecast the outcome of the 1952 presidential election. For the next 25 years, mainframe computers were used in large corporations to do calculations and manipulate large amounts of information stored in databases. Supercomputers were used in science and engineering, for making aircraft , nuclear reactors & for forecasting worldwide weather patterns.

Minicomputers came in the early 1980s in small businesses, manufacturing plants, and factories.

In 1975, the Massachusetts Institute of Technology produced microcomputers. In 1976, Tandy Corporation’s first Radio Shack microcomputer followed; the Apple microcomputer was come in 1977. The market for microcomputers enhanced dramatically when IBM introduced the first personal computer in the fall of 1981. Because of dramatic improvements in computer components and manufacturing, personal computers today do more than the largest computers of the mid-1960s at near about a thousandth of the cost.

Computers today are classified into 4 categories by size, cost, and processing ability. They are supercomputer, mainframe, minicomputer, and microcomputer, more commonly known as a personal computer. Personal computer classified into desktop, network, laptop, and handheld.

6. Types of ICT based Resources in Libraries:

- i. Electronic Books
- ii. Electronic Journals
- iii. Library Catalogues
- iv. Reference Sources
- v. Statistical Sources



- vi. Sound Recordings
- vii. Image Databases (Art, Maps, Medical, etc.)
- viii. ETDs
- ix. Blogs or Weblog
- x. On-line Conference Proceedings
- xi. Databases

7. ICT based Services in Libraries:

Mishra and Mishra defined various ICT based services. Here below that are...

1. Bar - Coding technology
2. Bulletin board service
3. CAS & SDI Services
4. Chat services
5. Computer technology
6. Database services
7. Document scanning services
8. Electronic books
9. Electronic document delivery services
10. Electronic journals
11. Electronic mail (E-mail)
12. Electronic resources
13. Fax (facsimile transmission/ Tele fax)
14. Indexing and abstracting services
15. Institutional repositories
16. Internet
17. Library management software package
18. Library website
19. Micrographic & reprographic technology
20. Networked electronic information resources
21. Networking technology
22. Online readers' advisory services
23. Open source software (OSS)
24. Printing technology
25. RFID Technology
26. Smart card for member identification
27. Storage technology
28. Tele Text services
29. Teleconferencing
30. Video conferencing
31. Videotext services
32. Voice mail
33. Web technology



This paper base on secondary data base review



8. Conclusion:

Academic libraries in India use of ICT as tools to get the information need of users who in this content are students and faculty staff. Many libraries gives book loan services, reference services, photocopying online, online services, compilation of reading list and bibliographic, e-mail, internet connectivity, CD-Researching facilities. The impact of ICT characterized on information services by changes in format, content, a method of production and contents and method of creation and supply of information products. Many library used library software and N-List. Recent ICT is impacting on various angle of libraries and the information profession. Development in ICT and the widespread use of ICT are resulting in digital information sources and digital media replacing and becoming the major form of information storage and retrieval. Information and communication technology also survives and makes true rules of Library Science “Every reader his/her book/information”, “Save the time of the reader”, “Library is a growing organism”.

References:

A) Books & Articles

- Patel,K.M.(2018).Impact of ICT in library and society.Library and Information science Academic Blog.
- Peltu, M. Information Technology: An Overview. In Information Management and Organizational Change, edited by Taylor. London: Aslib, 1982.
- Ramana, Venkata. Information Technology Applications in Libraries. New Delhi: Ess Ess,2004.
- Stephen, G (2017) Utilization of ICT based resources and services in engineering college libraries case study of Sivagangai and Ramanathapuram Districts.

B) Webliography

- www.nlist.inflibnet.ac.in
- www.shodhganga.inflibnet.ac.in
- www.ijlit.in
- <http://hdl.handle.net/10603/184724>



The Study of Soil Profile and Soil Distribution in Solapur District

Dr. D. S. Harwalkar

Dept. of Geography

Mauli Mahavidyalaya Wadala

Tal. N.Solapur, Dist. Solapur.413222.

Abstract

Soils forms an important part of physical landscape of any geographical region and it is inseparably associated with other components, such as landforms, natural vegetation and climate. The important characteristics and qualities of soils are texture, structure, thickness, color and the depth. In the present research paper we should observe various types of soils distribution in Solapur District. Soils of the district are essentially derived from the Deccan trap, which is of the predominant rock formation. In the district, calcareous Kankar and nodules are commonly associated with these soils. The spatial pattern of the soils in district is very complex due to the uneven relief structure and number of streams and rivers flowing through the district. In the hilly regions soils are shallow and not very much agriculturally fertile. Medium deep black soils cover most of the areas of the district since; it belongs to plateau and plain regions of the district. In order of importance the deep black soil cover more than 25 percent areas of the district along the river valleys. The soils of the Solapur district are generally found in the zone of scarcity of water with slight difference that the deep soils are rather restricted in drainage. In the Solapur District different soils are found in different parts of district. Such as, Kali or Black is found in the river valley of Bhima, Sina and its tributaries. Barad or Coarse gray is found in between hilly and river valleys and Tamboli or Radish is found in hilly track and its slopes. Thus, crop variations also found in different parts of the district. In the region under study various crop production are found such as Pulses, Groundnut, Jawar, Wheat, Sugarcane, Bajara, Oil Seeds, Cotton and other crops.

Key Words: Soil, Profile, Distribution.

Introduction:

Soil is made of substances, existing in three states of matter is necessary. The solid portion of soil is both inorganic and organic. The process of weathering of rock produces the inorganic soil particles which give a soil the main part of its weight and volume. Soil supports vegetation which in turn supports animal life. If the soil layer on the surface of the earth disappears; then all the life consisting of plant, animal and human cannot possibly grow. Soil is made of weathered materials of rocks and of decaying of plants and animals. As a result, of physical and chemical changes, through the ages, the upper part of the mental rock has been turned into consolidated materials which are known as a soil, which is the home of bacteria and organisms.

Soils forms an important part of physical landscape of any geographical region and it is inseparably associated with other components, such as landforms, natural vegetation and climate. Soils of the district are essentially derived from the Deccan trap, which is of the predominant rock formation. In the district, calcareous Kankar and nodules are commonly associated with these soils. Soils of the district can be broadly grouped in to three types such as:

1. Shallow Soils
2. Medium Deep Black Soil

3. Deep Black Soils

Overall, the spatial pattern of the soils in district is very complex due to the uneven relief structure and number of streams and rivers flowing through the district. In the hilly regions soils are shallow and not very much agriculturally fertile. Medium deep black soils cover most of the areas of the district since; it belongs to plateau and plain regions of the district. In order of importance the deep black soil cover more than 25 percent areas of the district along the river valleys.

Study Region:-

Solapur is located between 17.10 to 18.32 degrees north latitude and 74.42 to 76.15 degrees east longitude. The district is situated on the south east fringe of Maharashtra State and lies entirely in the Bhima and Seena basins. Whole of the district is drain either by Bhima river or its tributaries. The district covers geographical area of 14844.6 sq.kms, which is 4.82 percent of the total area of Maharashtra state. Out of the total area of the district 338.8 sq.kms. is urban area whereas remaining 14505.8 sq.kms. is rural area. Area wise Karmala taluka is biggest covering an area of 1609.7 sq.kms. and North Solapur is smallest covering an area of 736.3 sq.kms.

Objective:-

1. To analyze the distribution of soil of various tahsils in Solapur District.
2. To study the various types of soils in the study region.
3. To study the formation of soils and their profiles in Solapur District.

Database and Methodology:-

The data has been collected from socio-economic sources, agricultural department, various reference books, internet etc. The collected data has been analyzed and proceed. The descriptive method has been used for this research paper.

Soil Profiles in Solapur District:

So far, we have discussed about the spatial pattern of the soil distribution in Solapur district. At the same time, the important characteristics and most appealing qualities of the soils such as texture, structure, thickness, and color, depth and time factors have been considered in the preceding discussion. The spatial pattern of soil profiles and horizons is closely associated with the soil types according to their thickness. Broadly speaking in the Solapur district the soils are categorized in four major types according to thickness.

1) Shallow course gray soils: - This occurs in the western parts of the district consisting of Malshiras, Sangola southern parts of Mangalweda and northern parts of Barshi tahsils have a soil profile which is less than 25 cm in depth.

2) Medium black Soil: - The profile of medium black soils are relatively well developed, since, they have an average thickness up to 50 centimeter from the surface of the earth. These soils are found in most of the tahsils of the Solapur district except, river valleys.

3) Black cotton soil: - Black cotton soil is associated with the major river valleys in the study region. Due to relatively plain region, it is suitable for cultivation, the soil is perfectly developed and having thickness up to 75 cm. All the layers of horizons are available in this soil. The soil profile is fully developed and having layers upon layers.

4) Deep black cotton soil: - Deep black cotton soil is highly matured and fully developed soil having depth more than 100 cm.

In short it may be concluded that some soils, however are found under contrasting conditions of climate where conditions are dryer and warmer and evaporation exceeds precipitation either throughout the year or during a considerable part of it. In this situation the down ward movement of the soil water is more than balanced by an upward movement due to capillary action. Hence, there is a distinct dependency for the soil to become enriched by classification i.e. drawing up mineral salt especially calcium. Thus, the soil profiles of various types and their different horizons have great bearing upon the distribution and production pattern of a particular crop. Since, shallow course gray soil profiles are not fully developed and the thickness is not more than the 25 cm. hence, such soils are suitable for the cultivation of Jawar, Bajra, Sunflower and Pulses.

On the other hand; medium black soil profiles are better developed and depth is up to 50cm. This soil is also suitable for the cultivation of millets, good grains and Pulses. Black cotton soils have the matured soil profiles and well developed in all horizons and hence, have capacity to produce all kinds of food grains and cash crops, provided irrigation facilities are made available. Similarly deeps black cotton soils are highly developed in its profiles and all horizons, hence, are most suitable for the cultivation of food and cash crops in most parts of the Solapur district.

Spatial Pattern of Soils Distribution in the Solapur District:

On the basis of climate, vegetation, relief and parent materials, the soils of Solapur district are formed basically from the multiple processes and erosional work of running water and winds. The Solapur district belongs to Deccan plateau which is mainly formed by the fissure eruption of lava and after cooling made the basalt rock. The soils of the Solapur district are generally found in the zone of scarcity of water with slight difference that the deep soils are rather restricted in drainage. Broadly specking two types of soils are observed in the district. Firstly deep brown black clays with yellowish brown molted color subsoil layer and secondly deep brown black clays with directly white lime sub soil. In order to understand the distributional pattern of the soils very clearly, it is most suitable to take into consideration each tahsil of the Solapur district. Hence, the regional pattern of soils is given as under:

1) South Solapur Tahsil: The soils in the South Solapur are of three kinds; such as a) Kali or Black: it found in the river valley of Bhima, Sina and its tributaries. b) Barad or Coarse gray: Is found in between hilly and river valleys and c) Tamboli or Radish: is found in hilly track and its slopes. The soil varies from gray brown to black in the tahsil. Almost all the crops are grown in these soils of South Solapur tahsil.

2) North Solapur Tahsil: In the North Solapur tahsil the soil is generally, light and of moderate depth. The deep black soil of richer quality, however are predominant between the two rivers- Bhima and Sina. In this tahsil pulses, Groundnut, Jawar, Sugarcane and Bajara crops are grown in this soil.

3) Pandharpur Tahsil: In this tahsil, the soil is generally poor and capable of producing mostly kardai, Bajara and Jowar. Since, it is located in the central part of the district it is well accessible both by rain and real ways. The sugarcane cultivation predominates over many crops in this tahsil. The gray course soil is generally found in large term away from the Bhima River. Within



the tahsil the soil is gray brown to deep black soil. The deep black soil is found in the banks of the river Bhima.

4) Sangola Tahsil: The soils of the Sangola tahsil is for the most part of the region poor and shallow along the banks of the river and in low line position, however, some small tracts of fairly black clay soil of fair depth are found. Groundnut and pulses along with Jawar and Bajari crops are grown in this tahsil.

5) Barshi Tahsil: Barshi tahsil has the best soil in the district. In this tahsil richest land is found at the bottom of the steps of the hilly area. The black fertile soil is found in the banks of the Bhogawati and the banks of its streams. Rice, Jawar, Bajri Wheat Tur, Cotton, Pulses, Groundnut and Til are grown in this soil.

6) Malshiras Tahsil: The soil of Malshiras tahsil is in general shallow and light in color and not retentive of moisture. In some part, it is stony and it is found near the foot of the hills. Fertile black soil of sufficient depth is found in Bhima and Nira valleys and its streams. Jawar, Bajra, Wheat, Kardai, Crops are grown in this soil.

7) Madha Tahsil: Larger portion of Madha tahsil has generally shallow soils with varying depth and quality. Soils along the banks of river Sina are mostly black and of great depth and of good quality. Along the slopes of ridges, the soil is shallow and it covers with loose stones. In the low lying tracts of the tahsil, the soil is of brown to dark black color of richer quality. The richest deep black soil of great depth is found along the river Bhima and Sina and its tributaries. Jawar, Bajara, Pulses, Cotton and Oil seeds Wheat and Sugarcane are grown in this tahsil.

8) Akkalkot Tahsil: In this tahsil, the soil is rich in the vicinity of the rivers Bhima, Sina and Bori. In other parts of the tahsil in some places soil is covered with loose stones. It is mostly black and of fairly good depth. There is a distinct difference between the quality of the soil on the high land and that of the shallows. Most part of the tahsil the soil is good for Jowar production. Bajra, Tur, Kardai, Sugarcane, Cotton and Oil seeds are also grown in this soil.

9) Karmala tahsil: In this tahsil, one half of the soil is black and one quarter each red and brown. The black soil in certain depth is found along the banks of Sina and its tributaries along with the banks of Nalas. There is a small quality of rich alluvial soil is found along the banks of the river Bhima. Except the river valleys of Bhima and Sina, other parts of the tahsil have shallow gray soil. Jowar, Bajra, Wheat, Cotton, Sugarcane Oil seeds and Pulses crops are grown in this tahsil.

10) Mangalweda tahsil: Large portion of Mangalweda tahsil has generally deep black soil. The depth of soil exceeds more than 45 centimeter. The soil of Mangalweda tahsil is good in quality and rich in fertility. It is best for Jowar production. Other crops such as Kardai, Gram, Tur, Sugarcane, Cotton and Oil seeds are growth in this soil.

11) Mohol tahsil: The soils of the Mohol tahsil, by and large, are similar to the Pandharpur tahsil. Since the river Sina is passing along eastern border of the Mohol tahsil containing deep black soils. However, along the river Bhima and river Bhogawati the soil is fairly deep black and highly fertile. Most of the crops grown are now replaced by the sugar cane, due to availability of irrigation facilities. Besides, the Jowar, Bajra, Oil Seeds, Pulses, and Cotton crops are grown in the tahsil. In short, the region under the study as whole may be summarized as under: The soils of the Solapur district are three types namely; i) Black Soil, ii) Coarse gray Soil and iii) Radish Soil



Except in Barshi tahsil where the black soil is the rule and coarse gray is rare, most of the district is either gray or red. As there are few table lands, the black soil is almost confined to the banks of rivers and large streams. Near the confluence of Bhima and Sina, soil is fine. The black soil has three varieties such as, pure black, morvandi and chopan or chikan that is loamy; the barad or gray has three varieties, pandhara or white, barad or coarse gray and chunkhadi or lime; and the tambadi or red has two varieties, jada and pure tamadi or radish. Of the three varieties of black soil the pure black is generally found in flat plain. It is perfectly black and free from sand and stones. When it mixed with water it swells and is very soft to the touch. However, abundant the rainfall, it soaks in the whole of the rain and does not allow it to flow off or to stagnate. When the rains are over, it does not crack. For a depth of about 2.5 meter below the surface the soil is found of the same quality. Below this, it is either water or a rocky block stratum. This soil does not need an abundant supply of fresh water. When; one heavy shower occurs, good crops grow even though the later rain fails.

Conclusion:

In a few parts of the district this pure black soil occurs in whole numbers. In most places, the black soil occurs as small patches in gray and red fields. A mixture of this black is required before red or gray soils can be fertile. Pure black soil is not difficult to plough and seed grow surely and rapidly. The morvandi soil is found away from river banks and streams. The soils of the Solapur district are three types namely, black Soil, coarse gray soil and radish soil. In the Solapur District different soils are found in different parts of district. Such as, Kali or Black is found in the river valley of Bhima, Sina and its tributaries. Barad or Coarse gray is found in between hilly and river valleys and Tamboli or Radish is found in hilly track and its slopes. The soil varies from gray brown to black in the tahsil. Thus, crop variations also found in different parts of the district. In the region under study various crop production are found such as Pulses, Groundnut, Jawar, Wheat, Sugarcane, Bajara, Oil Seeds, Cotton and other crops.

References:

1. Deshpande, C.D. (1971): Maharashtra State Gazetteers Solapur, Revised Edition.
2. Foth, H.D. (1978): Fundamental of Soil Science, John Willey, New York.
3. Glinka, K.D. (1927): The Great Soil Groups of the World and their development Ann. Arbar, Michigan.
4. Maharashtra State Gazetteers (Govt. of Maharashtra) (1977): Solapur District- Gazetteer Dept. Government of Maharashtra.
5. Russel, E.J. (1961): Soil Conditions and Plant Growth, Longmans 9th edition, New York.
6. Sharma J.P. (2004): Environmental Studies, Laxmi Publication, New Delhi.
7. Socio economic review and District abstract of Solapur District, 2011.
8. Foth, H.D. (1978): Fundamental of Soil Science, John Willey, New York.
9. Rananaware D.D. (2001) : "History of Solapur" Abhay Publication, Sangramnagar, Akulj.



An Application of Environmental Psychology to Assess Flexible Approach in Teaching Learning Process : A Comprehensive Study

Dr. Upendra Abhimanyu Pathade

Assistant Professor

G.M.D. Arts, B.W. Commerce and Science College Sinnar

Tal. Sinnar Dist. Nashik – 422103 (Maharashtra)

Abstract :

Environmental Psychology is a system oriented discipline that examines human beings in relation to their surroundings. It is considered the environmentally behavior and attitudes to promote sustainable development and improve surroundings to how person interact and evaluate the situation. It studies that, examines the interrelationship between environments and human affect, cognition and behavior. Humans as information-processing creatures and the implications this has for encouraging reasonable behavior tries environmental circumstances for better lives in the nature. The encompassing of natural environments and social setting, learning environments and informational environments are broadly consisting to creating new knowledge. Similarly, helping society to form an affirmative response to emerging environmental and natural resource constraints. In the context of teaching and learning process the Environment Psychology refer as a to gain advanced knowledge and ability to undertake environmental psychology research in a professional setting. The present study concentrates on importance of environmental psychology study and its perspectives to assess the teaching and learning process for better effective work at the educational and research purpose. Flexible approach of learning designing of teaching content and mode of explanation as per the need of diverse learner's variety in the use of resources. It considers planning of lessons, delivery mode of instruction, and different style of learners and their learning style. Present study carried out the strategies of designing flexible approach of learning, online resources for teaching learning process and flexibility in the aspects of teaching learning.

Keywords: Environment Psychology, Cognition behavior, Social setting, Flexible approach, Diverse learners

I. Introduction

The field of Environmental Psychology firstly mention by Willy Hellpach in his book, "Geopsych". It is a direct study of the relationship between an environment and how that environment affects its inhabitants. The environment psychology teaches us how to change environment in joyful maner. In the context of research, the identifying problem and its solution the Environmental psychology is to be problem oriented. It deals with the behavior in relation to the environment for provide norms for better management of the environment, environment for better life and personality development. In modern think environment concern with the condition of surroundings and environment psychology concern with the 'space'. So, surroundings of within area of person considered to be specific area which has stipulated effects to relation with environment. Weather on human behavior valid to environmental psychology area. Cognitive sciences, cognitive mapping as a major research area into field of surroundings. The author Gifford quoted that, it differs from the main branch of psychology in that it is concerned with the everyday physical environment. The environmental psychologists studying



more micro aspects of the human-technology interface of stress in the workplace. The meaningful purpose of environmental psychology is to help various design professionals (such as architects, interior designers, and urban planners) work together to improve the overall human environment, both at the personal living space level (micro level) and at the larger, all-encompassing level (macro level) etc. Environment Psychology generally used in the variance of approaches. In the context of Education purposes classroom and school environment, using that views schools from the perspectives as a places for learning, places for socialization and places for psychological development for create new knowledge in subject field areas.

II. Hypothesis

Hypotheses in fact, are the basis of any research. These are facts and realities which exist in the regional view. Hypothesis is the pre-supposition on which entire research is based; hence it carried out of a particular problem. No study can be carried out without forming certain hypothesis. The following are certain hypotheses, which have been formulated for present study.

1. Natural environment near the class room for better peace environment.
2. Interaction with the students and their learning reflection to concentrate for their effectiveness with the nature.
3. Due to the use of poor infrastructural equipments adversely affected to punctual learning.
4. Teaching in clear concept and deep knowledge is to be creating better reply by the student.

III. Objectives

The main objectives of this paper is to find out importance of environmental psychology and its perspective for education purpose to creating new knowledge and effective strengths to establish quality of life in school. Also this research paper avails to concentrate on following objectives –

- i. To know the implementation flexible approach in learning teacher by using various online resources.
- ii. To know the concept of flexibility to explained by concept map
- iii. Flexibility aspects of teaching learning

IV. Methodology

The data and information have been collected from different source such as published and unpublished work. Secondary data reviews of for different period. In order to asses' educational performance to effective planning and designing for decision makers were collected and processed to summarize succeeding pages.

V. Literature Review

Ken A. Graetz (2020), he focuses on his article “The psychology of learning environments” that, different devices and distraction in college classrooms, collaboration in the classroom, virtual learning environments and college classroom of mystery and enhancement. In his article he describes that student probably find today's brick and monitor college classrooms quite coherent and legible. Students make perfect sense to those who expect to sit facing forward and listen quietly coherence. Virtual learning environments may legibility but are probably perceived as more complex and mysterious.

Brian J. Beatty (2019), his book Hybrid – Flexible Course Design- Implementing students directed hybrid Classes provides information towards the readers with methods, case stories and strategies related to Hybrid- Flexible course design for those students solve critical needs to take advantage of emerging opportunities to improve their education practice, enabling them to serve more students. The Author describes HyFlex design.

Justin Raudys (2018), article on Flexible seating: 21 Awesome ideas for your classrooms, (prodigy). Describes differentiated instructional research to shown deep impact on how students learn. Flexible seating into classroom visualizing the change can be daunting.

David Whiteboard (2017), “Developmental psychology and early childhood education”. In his book he describes research and practice to investigate emotional and social development, wellbeing and mental health cultural environment. This book divided into six key parts including learning process, language and literacy and development of learning.

Dak Kopec (2012), “Environmental psychology for design” focuses on many proactive initiatives designed to minimize stress and maximize user satisfaction, helping readers to create more comfortable spaces including learning and education.

A] Description Of Study

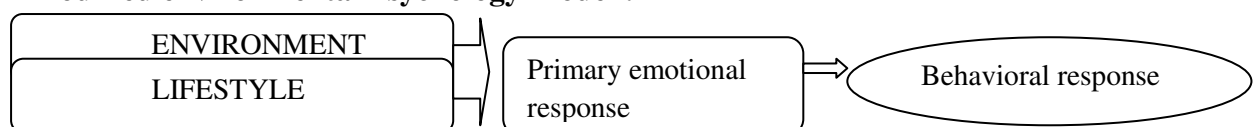
The student's teacher learning process follows the systems approach which has become the modern approach in several branches of science and its own subject field. Various academic programs is focus on the study of behavioral interactions between human beings and the environment in individual and group contexts, and ways to improve them to enhancing the subjective manner. It includes environmental perception and psychological aspects to design and planning. Environmental psychologists use an *ecological* approach prefers to study real, complex environments. While exploring individual differences related to age, gender, and cultural background is impact on particular interaction. Structure of different elements in the physical environment, cultural, technological environment that affects the survival, operations, and growth of an organization. The advanced in computer based discipline is makes fundamental to teaching, learning and student's development.

1. Environmental Psychology and its application

I. Levels of Environmental Psychology for school:

- Interpersonal Communication, Collaboration and Consultation
- Effective Instruction and Development of Cognitive/Academic Skills
- Socialization and Development of Life Competencies
- Prevention, Wellness Promotion and Crisis Intervention
- Home-School-Community Collaboration
- Information Technology

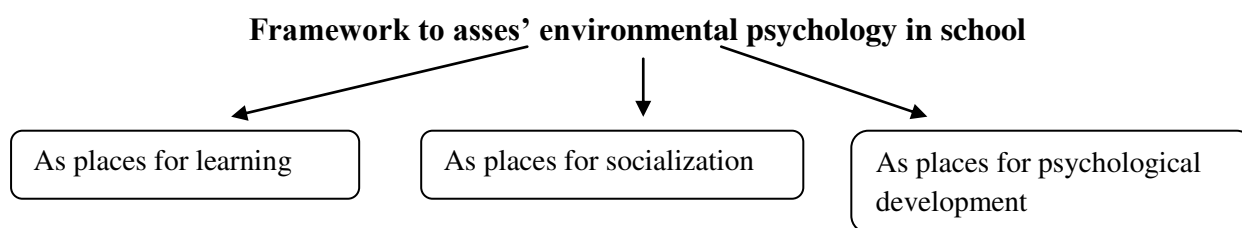
II. Modified environmental Psychology Model :



The environmental psychology models have the changeable condition to learners to environment and lifestyle to directly impact on primary emotional response for make pleasure and dominance. The learner creates the approach to avoidance in effective nature.

III. **Environmental Psychology for Education:**

It is refer to Classroom and laboratory courses teach students how to understand and monitor the effect of environmental conditions on human behavior, implement restorative environments, enact durable conservation plans and assist with property resource management. This program seeks to provide students with an understanding of the relationships between human behavior and natural, social and constructed environments. An understanding of environmental psychology can help graduates to solve problems stemming from human-environment interactions. Once students understand the nature of these interactions, they can design and manage environments to better predict reasonable human behaviors.



1. As place for learning –

The place of learning should be ecological peace surround.

2. As places for socialization-

Learning place should have settled near the accessible point of view.

3. As places for psychological development-

Place has the concerning factors to evaluate the psychological manner to make ideas effects.

IV. **Environment Psychology for Learning Process-**

- Student's can understand current teaching environmental patterns and to continuously expand their proficiency by exploring and learning from new patterns with techniques.
- Firstly, analyses the situations, how being clear-headed can make our behaviors much more effective.
- Clarification of clear conceptualizing knowledge in subject field to justify new ideas to discover seeking behavior. etc
- Students studies are included that deal with the impact of noise and classroom design on learning; the relationship between seating position, achievement and status; spatial cognition; the classroom should be effective to learning environment.
- The need for classrooms to enhance children's feelings of competence, security and self-esteem is also stressed.

B) Implementation flexible approach in learning teacher by using various online resources:

Teacher can uses different online resources for teaching with different application. It will help to listen to the comfort of learners. It depends upon availability and feasibility of use in classroom.

Online Resources:

- Telegram
- Ppt video / audio
- Webex

- Whatsapp
- Email
- Hangouts
- Facebook
- Google Classroom
- Instagram
- Virtual Classroom
- Zoom
- Testmoss
- Google duo
- Skype
- Microsoft Team

CJ Flexibility in the aspects of teaching learning process:

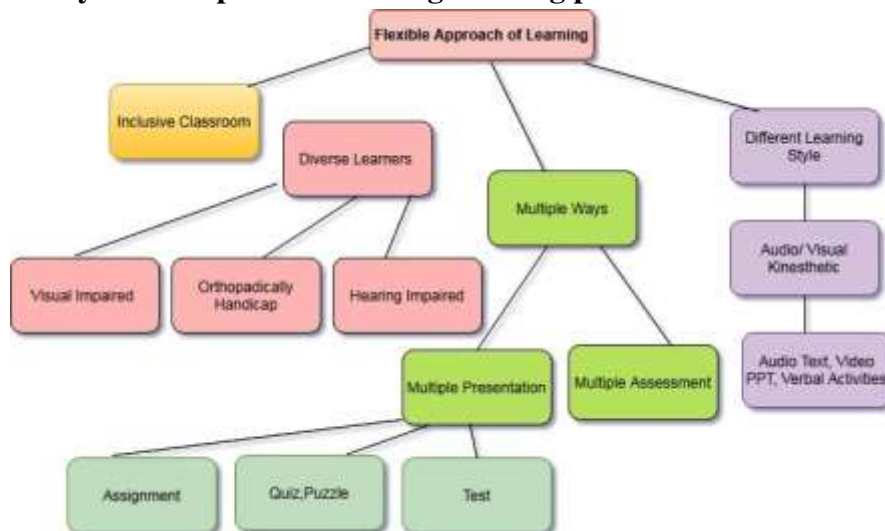


Figure 1- Flexibility in the Teaching Learning Process

Interpretation

It assess to all learners in classroom. Every student can learn with the help of resources. Learner identification and learner potential to design various strategies for analyze the teaching content and evolution for getting various responses. Teacher teaching model and classroom atmosphere is to be greatly affected on student's achievement. It is continuous processes that promotes teaching skills, getting new knowledge and develop new proficiency which help to improve students' learning. Student's performance attributed to ability, motivation and cultural background. A teacher can ensure effectiveness in classroom in applying classroom teaching, seminar and practical topics can enhance qualitative understanding the topics.

Assignments shall be part of evolution of the students. Practices courses like accounting it is expected to conduct numerical problems in the class. Encouraging group learning that plays group discussion or support group learning. Also increase questioning ability. Diverse learners can able to attempt different type of works by using technological approach.



Outcome based Learning

1. Different examples showing to students using the attractive with whiteboard including as on lesson display photos, audio clips and videos as encouraging students to get out their seats with classroom experiments and local field trips for making flexible environment.
2. Worksheet for solving mathematical puzzle, assign scientific experiments and short act play sketches are few examples to how cooperative learning can be incorporated in to classroom.
3. Encouraging students by asking questions and investigating academic concept.
4. Assigning classroom activities involve handing out worksheet that varies in complexity to different groups of students or setting up a range of workstation around the classroom.

Conclusion:

Incorporating technology into our teaching is a great way to actively engage our students specifically as digital media surround. Flexible environmental learning can become more interactive when interacting with technology is used as students can physically engage during lessons as well as instantly research their ideas. Engaging in regular professional development programs is a great way to enhance teaching and learning in our classroom. By using a combination of teaching strategies address students varying learning and academic capabilities as well as make our classroom a dynamic and motivation environment for students. Language diversity, different behavior, different style. Flexibility approach in teaching learning it creates special environment in the classroom.

In short cooperative learning approach is highly structured, clear expectations, high teacher involvement, on-going monitoring, careful teams rotation of roles, supportive peer interaction, conducive environment. Using learning based technological approach deliver strong support and encouragement through systematic classroom interaction from both teachers and students. Therefore, training and continuous professional development are needed for teachers, and collaboration among teachers should be encouraged through holding regular meetings to ensure the success of cooperative learning approach in daily lessons.

References:

1. Carol Ann Tomlinson (2014). *The Differentiated Classroom- Responding to the needs of all learners*, Interim Publisher, Alexandria, USA pp.56-63.
2. Carol S. Weinstein. (1979). *The Physical Environment of School*, Review of the Research, Vol.49 (4) pp. 577–610.
3. Eugene J. McCown and James W. Broyles (1985). Effects of Noise on Sensitivity of Introverts and Extraverts to Signals in a Vigilance Task, *Personality and Individual Differences*, Vol.6 (2) pp. 237–241.
4. Hagen, J.W. and Moffat, C.W. (1992). College student's response to co-operative learning. *College Student Journal* 26(4) pp.531-536
5. Linda B. Nilson and Barbara E. Weaver, eds. (2005), *New Directions for Teaching and Learning: Enhancing Learning with Laptops in the Classroom*, Jossey-Bass, San Francisco, pp. 34-42.
6. Morty Bray (2004). *Technology and the Diverse Learner – A Guide to Classroom Practice*, Corwin Press, Sage Publication Co. California, pp. 11-24.



7. Richard J. Jennings. (1988). Memory Retrieval in Noise and Psycho physiological Response in the Young and Old, Psychophysiology, Vol.25 (6) pp. 633–644.
8. Robert J. Marzano (2019). A Teacher's guide to Standard Based Learning, Library of Congress, USA pp. 169-176.
9. Will Richardson (2020). Using Technology with classroom instruction that works, Mid continent Research for Education and Learning, Roserwood, USA pp. 145-156.





A Special Class of Harmonic Univalent Functions Defined by Using A New Differential Operator

A. N. Metkari¹, N. D. Sangle² & S. P. Hande³

¹Department of Mathematics, Visvesvaraya Technological University, Belagavi, Karnataka, India.

²Department of Mathematics, Annasaheb Dange College of Engineering & Technology, Ashta, Maharashtra, India.

³Department of Mathematics, Vishwanathrao Deshpande Institute of Technology, Haliyal, Karnataka, India.

¹Email: anand.metkari@gmail.com

²Email: navneet_sangle@rediffmail.com

³Email: handesp1313@gmail.com

Abstract:

We define and investigate a special class of Salagean-type harmonic univalent functions in the open unit disk. We obtain coefficient conditions, extreme points, distortion bounds, convex combinations for the above class of harmonic univalent functions.

2000 Mathematics subject classification:30C45, 30C50.

Keywords:Harmonic functions, univalent functions, differential operator.

1. Introduction:

Harmonic functions are famous for their use in the study of minimal surfaces and also play important roles in a variety of problems in applied mathematics for this see [4], [6], [7]. A continuous function $f = u + iv$ is a complex valued harmonic function in a complex domain C if both u and v are real harmonic in C . In any simply connected domain $D \subseteq C$ we can write $f(z) = h(z) + \overline{g(z)}$, where h and g are analytic in D . We shall h is the analytic part and g the co-analytic part if f . A necessary and sufficient condition for f to be locally univalent and sense-preserving in D is that $|h'(z)| > |g'(z)|$ in D ; for this see [5].

Denote by S_H the class of functions $f(z) = h(z) + \overline{g(z)}$ that are harmonic univalent and sense-preserving in the unit disk $U = \{z : z \in C \text{ and } |z| < 1\}$ for which $f(0) = f_z(0) - 1 = 0$. Then for $f(z) = h(z) + \overline{g(z)} \in S_H$, we may express the analytic function h and g as

$$h(z) = z + \sum_{k=2}^{\infty} a_k z^k, \quad g(z) = \sum_{k=1}^{\infty} a_k z^k, \quad z \in U. \quad (1)$$

Therefore

$$f(z) = z + \sum_{k=2}^{\infty} a_k z^k + \overline{\sum_{k=1}^{\infty} a_k z^k}, \quad |b_1| < 1.$$

Note that S_H reduces to the class S normalized analytic univalent functions in U if the co-analytic part of f is identically zero.

In [5] investigated the class S_H as well as its geometric subclasses and obtained some coefficient bounds. Since then, there has been several related papers on S_H and its subclasses such as [2], [12], [13], [9] and [10] studied the harmonic univalent functions.

The differential operator $D_{\alpha,\mu}^n(\lambda, w)$, ($n \in N$) was introduced in [3]. For $f(z) = h(z) + \overline{g(z)}$ given by (1), [1] defined the differential operator as

$$D_{\alpha,\mu}^n(\lambda, w)f(z) = D_{\alpha,\mu}^n(\lambda, w)h(z) + (-1)^n \overline{D_{\alpha,\mu}^n(\lambda, w)g(z)}$$

Where,

$$D_{\alpha,\mu}^n(\lambda, w)h(z) = z + \sum_{k=2}^{\infty} [(k-1)(\mu w^\lambda - \alpha) + k]^n a_k z^k$$

and

$$D_{\alpha,\mu}^n(\lambda, w)g(z) = \sum_{k=2}^{\infty} [(k+1)(\mu w^\lambda - \alpha) + k]^n b_k z^k,$$

where, $\mu, \lambda, w \geq 0, 0 \leq \alpha \leq \mu w^\lambda$, with $D_{\alpha,\mu}^n(\lambda, w)f(0) = 0$.

The generalization of the differential operator for a function $f(z) = h(z) + \overline{g(z)}$ given by (1).

$$D_{\alpha,\mu}^0(\lambda, w)f(z) = D^0 f(z) = h(z) + g(z),$$

$$D_{\alpha,\mu}^1(\lambda, w)f(z) = (\alpha - \mu w^\lambda)(h(z) + \overline{g(z)}) + (\mu w^\lambda - \alpha + 1)zh'(z) - \overline{zg'(z)},$$

In general,

$$D_{\alpha,\mu}^n(\lambda, w)f(z) = D_{\alpha,\mu}^{n-1}(\lambda, w)f(z). \quad (2)$$

If f is given by (1), then from (2), we see that

$$D_{\alpha,\mu}^n(\lambda, w)f(z) = z + \sum_{k=2}^{\infty} [(k-1)(\mu w^\lambda - \alpha) + k]^n a_k z^k + (-1)^n \sum_{k=1}^{\infty} [(k+1)(\mu w^\lambda - \alpha) + k]^n \overline{b_k z^k}. \quad (3)$$

When, $w = \alpha = 0$, we get modified Salagean differential operator [11].

In this paper, motivated by study in [8], we define a new class $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ for the family of harmonic functions f of the form (1) such that

$$\operatorname{Re} \left\{ \frac{D_{\alpha,\mu}^{n+1}(\lambda, w)f(z) - D_{\alpha,\mu}^n(\lambda, w)f(z)}{D_{\alpha,\mu}^{n+1}(\lambda, w)f(z) + (1 - 2\xi)D_{\alpha,\mu}^n(\lambda, w)f(z)} \right\} < \beta, \quad (4)$$

Where, $D_{\alpha,\mu}^n(\lambda, w)f(z)$ is defined by (3), $0 \leq \xi < 1, 0 < \beta \leq 1, n \in N_0$ and $z \in U$.

We let the subclass $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ consisting of harmonic functions $f_n(z) = h + \overline{g_n}$ in S_H so that h and g_n are of the form,

$$h(z) = z - \sum_{k=2}^{\infty} a_k z^k, \quad g(z) = (-1)^n \sum_{k=1}^{\infty} a_k z^k, \quad a_k, b_k \geq 0 \quad (5)$$

The objective of the present paper is to give sufficient condition for functions $f(z) = h + \bar{g}$ where h and g are given by (1) to be in the class $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ and it is shown that this coefficient condition is also necessary for functions belonging to the subclass $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$. Also, we obtain coefficient bounds, distortion inequalities, extreme points and convex combination results for this class.

2. Main Results Coefficient Bounds

In our first theorem, we introduce a sufficient coefficient bound for harmonic functions in $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$.

Theorem 2.1. Let $f(z) = h(z) + \bar{g(z)}$ be so that h and g are of the form (1). Furthermore, let

$$\sum_{k=2}^{\infty} [(k-1)(\mu w^\lambda - \alpha) + 1](1 + \beta) + 2\beta(1 - \xi) [(k-1)(\mu w^\lambda - \alpha) + k]^n |a_k| \\ + \sum_{k=1}^{\infty} [(k+1)(\mu w^\lambda - \alpha) + 1](1 + \beta) - 2\beta(1 - \xi) [(k+1)(\mu w^\lambda - \alpha) + k]^n |b_k| \leq 2\beta(1 - \xi) \quad (6)$$

Where, $\mu, \lambda, w \geq 0, 0 \leq \alpha \leq \mu w^\lambda, n \in N_0, 0 < \beta \leq 1$.

Then f is sense-preserving, harmonic univalent in U and $f \in S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$.

Proof: If $z_1 \neq z_2$.

$$\left| \frac{f(z_1) - f(z_2)}{h(z_1) - h(z_2)} \right| \geq 1 - \left| \frac{g(z_1) - g(z_2)}{h(z_1) - h(z_2)} \right| = 1 - \left| \frac{\sum_{k=1}^{\infty} b_k z_1^k - z_2^k}{(z_1 - z_2) + \sum_{k=1}^{\infty} a_k z_1^k - z_2^k} \right| > 1 - \frac{\sum_{k=1}^{\infty} k |b_k|}{1 - \sum_{k=2}^{\infty} k |a_k|} \\ \geq 1 - \frac{\sum_{k=1}^{\infty} \frac{\left\{ [(k+1)(\mu w^\lambda - \alpha) + 1] \times \right\} [(k+1)(\mu w^\lambda - \alpha) + k]^n}{2\beta(1 - \xi)} |b_k|}{1 - \sum_{k=2}^{\infty} \frac{\left\{ [(k-1)(\mu w^\lambda - \alpha) + 1] \times \right\} [(k-1)(\mu w^\lambda - \alpha) + k]^n}{2\beta(1 - \xi)} |a_k|} \\ \geq 0.$$

Which proves univalence. Note that f is sense preserving in U . This is because

$$|h'(z)| \geq 1 - \sum_{k=2}^{\infty} k |a_k| |z|^{k-1} \\ > 1 - \sum_{k=2}^{\infty} \frac{\left\{ [(k-1)(\mu w^\lambda - \alpha) + 1] \times \right\} [(k-1)(\mu w^\lambda - \alpha) + k]^n}{2\beta(1 - \xi)} |a_k| \\ \geq \sum_{k=1}^{\infty} \frac{\left\{ [(k+1)(\mu w^\lambda - \alpha) + 1] \times \right\} [(k+1)(\mu w^\lambda - \alpha) + k]^n}{2\beta(1 - \xi)} |b_k| \\ > \sum_{k=1}^{\infty} k |b_k| |z|^{k-1} \geq |g'(z)|.$$

It remains to show that $f \in S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$. Suppose that the inequality (4) holds true and let $z \in \partial U = \{z : z \in C \text{ and } |z| < 1\}$. Then we find from definition (3) that

$$\begin{aligned} & \left| \frac{D_{\alpha, \mu}^{n+1}(\lambda, w)f(z) - D_{\alpha, \mu}^n(\lambda, w)f(z)}{D_{\alpha, \mu}^{n+1}(\lambda, w)f(z) + (1 - 2\xi)D_{\alpha, \mu}^n(\lambda, w)f(z)} \right| \\ &= \left| \frac{\sum_{k=2}^{\infty} [(k-1)(\mu w^\lambda - \alpha) + (k-1)][(k-1)(\mu w^\lambda - \alpha) + k]^n a_k z^k - (-1)^n \sum_{k=1}^{\infty} [(k+1)(\mu w^\lambda - \alpha) + (k+1)][(k+1)(\mu w^\lambda - \alpha) + k]^n \overline{b_k} z^k}{2(1-\xi)z + \sum_{k=1}^{\infty} [(k-1)(\mu w^\lambda - \alpha) + (k+1-2\xi)][(k-1)(\mu w^\lambda - \alpha) + k]^n a_k z^k - (-1)^n \sum_{k=1}^{\infty} [(k+1)(\mu w^\lambda - \alpha) + (k-1+2\xi)][(k+1)(\mu w^\lambda - \alpha) + k]^n \overline{b_k} z^k} \right| \\ &\leq \left\{ \frac{\sum_{k=2}^{\infty} [(k-1)(\mu w^\lambda - \alpha) + (k-1)][(k-1)(\mu w^\lambda - \alpha) + k]^n |a_k| |z|^k - (-1)^n \sum_{k=1}^{\infty} [(k+1)(\mu w^\lambda - \alpha) + (k+1)][(k+1)(\mu w^\lambda - \alpha) + k]^n |b_k| |z|^k}{2(1-\xi)z + \sum_{k=1}^{\infty} [(k-1)(\mu w^\lambda - \alpha) + (k+1-2\xi)][(k-1)(\mu w^\lambda - \alpha) + k]^n |a_k| |z|^k - (-1)^n \sum_{k=1}^{\infty} [(k+1)(\mu w^\lambda - \alpha) + (k-1+2\xi)][(k+1)(\mu w^\lambda - \alpha) + k]^n |b_k| |z|^k} \right\} \leq \beta \end{aligned}$$

provided that the inequality (4) is satisfied. Hence, by the maximum modulus theorem, we have $f(z) \in S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$.

The harmonic function

$$\begin{aligned} f(z) &= z + \sum_{k=2}^{\infty} \frac{2\beta(1-\xi)}{\left\{ [(k-1)(\mu w^\lambda - \alpha) + 1] \times \right.} \frac{x_k z^k}{(1+\beta) + 2\beta(1-\xi)} \\ &\quad + \sum_{k=1}^{\infty} \frac{2\beta(1-\xi)}{\left\{ [(k+1)(\mu w^\lambda - \alpha) + 1] \times \right.} \frac{\overline{y_k} z^k}{(1+\beta) - 2\beta(1-\xi)} \end{aligned} \quad (7)$$

Where, $\sum_{k=2}^{\infty} |x_k| + \sum_{k=1}^{\infty} |y_k| = 1$ shows that the coefficient bound given by (6) is sharp.

The functions of the form (7) are in $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ because

$$\begin{aligned} & \sum_{k=2}^{\infty} \left(\frac{1}{2\beta(1-\xi)} \right) \left\{ [(k-1)(\mu w^\lambda - \alpha) + 1] \times \right\} [(k-1)(\mu w^\lambda - \alpha) + k]^n |a_k| \\ &+ \sum_{k=1}^{\infty} \left(\frac{1}{2\beta(1-\xi)} \right) \left\{ [(k+1)(\mu w^\lambda - \alpha) + 1] \times \right\} [(k+1)(\mu w^\lambda - \alpha) + k]^n |b_k| \\ &= 1 + \sum_{k=2}^{\infty} |x_k| + \sum_{k=1}^{\infty} |y_k| = 2 \end{aligned}$$

In the following theorem, it is shown that the condition (6) is also necessary for functions $f_n = h + \overline{g_n}$ where h and $\overline{g_n}$ are of the form (5).

Theorem 2.2 Let $f_n = h + \overline{g_n}$ be given by (5). Then $f_n \in S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ if and only if

$$\sum_{k=2}^{\infty} [(k-1)(\mu w^\lambda - \alpha) + 1](1 + \beta) + 2\beta(1 - \xi) [(k-1)(\mu w^\lambda - \alpha) + k]^n |a_k| \\ + \sum_{k=1}^{\infty} [(k+1)(\mu w^\lambda - \alpha) + 1](1 + \beta) - 2\beta(1 - \xi) [(k+1)(\mu w^\lambda - \alpha) + k]^n |b_k| \leq 2\beta(1 - \xi),$$

Where, $\mu, \lambda, w \geq 0, 0 \leq \alpha \leq \mu w^\lambda, n \in N_0, 0 < \beta \leq 1$.

Proof: The "if" part follows from theorem (6) upon nothing

that $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta) \subset S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$. For the "only if" part, we show

that $f \notin S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ if the condition (4) does not hold. We note that a necessary and sufficient condition for $f_n = h + \overline{g_n}$ given by (5), to be in $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ is that the condition (4) to be satisfied. This is equivalent to,

$$\left\{ \frac{-\sum_{k=2}^{\infty} [(k-1)(\mu w^\lambda - \alpha) + (k-1)][(k-1)(\mu w^\lambda - \alpha) + k]^n a_k z^k - (-1)^n \sum_{k=1}^{\infty} [(k+1)(\mu w^\lambda - \alpha) + (k+1)][(k+1)(\mu w^\lambda - \alpha) + k]^n b_k \frac{1}{z^k}}{2(1-\xi)z - \sum_{k=2}^{\infty} [(k-1)(\mu w^\lambda - \alpha) + (k+1-2\xi)][(k-1)(\mu w^\lambda - \alpha) + k]^n a_k z^k - (-1)^n \sum_{k=1}^{\infty} [(k+1)(\mu w^\lambda - \alpha) + (k-1+2\xi)][(k+1)(\mu w^\lambda - \alpha) + k]^n b_k \frac{1}{z^k}} \right\} > -\beta$$

If we choose z on the real axis and $z \rightarrow 1^-$ we get,

$$\left\{ \frac{\sum_{k=2}^{\infty} [(k-1)(\mu w^\lambda - \alpha) + (k-1)][(k-1)(\mu w^\lambda - \alpha) + k]^n a_k z^k + \sum_{k=1}^{\infty} [(k+1)(\mu w^\lambda - \alpha) + (k+1)][(k+1)(\mu w^\lambda - \alpha) + k]^n b_k}{2(1-\xi)z - \sum_{k=2}^{\infty} [(k-1)(\mu w^\lambda - \alpha) + (k+1-2\xi)][(k-1)(\mu w^\lambda - \alpha) + k]^n a_k - \sum_{k=1}^{\infty} [(k+1)(\mu w^\lambda - \alpha) + (k-1+2\xi)][(k+1)(\mu w^\lambda - \alpha) + k]^n b_k} \right\} < \beta$$

Hence

$$\left\{ \frac{\sum_{k=2}^{\infty} [(k-1)(\mu w^\lambda - \alpha) + (k-1)][(k-1)(\mu w^\lambda - \alpha) + k]^n a_k z^k + \sum_{k=1}^{\infty} [(k+1)(\mu w^\lambda - \alpha) + (k+1)][(k+1)(\mu w^\lambda - \alpha) + k]^n b_k}{2\beta(1-\xi)z - \beta \sum_{k=2}^{\infty} [(k-1)(\mu w^\lambda - \alpha) + (k+1-2\xi)][(k-1)(\mu w^\lambda - \alpha) + k]^n a_k - \beta \sum_{k=1}^{\infty} [(k+1)(\mu w^\lambda - \alpha) + (k-1+2\xi)][(k+1)(\mu w^\lambda - \alpha) + k]^n b_k} \right\} < \beta$$

And so

$$\sum_{k=2}^{\infty} [(k-1)(\mu w^{\lambda} - \alpha) + 1](1 + \beta) + 2\beta(1 - \xi) [(k-1)(\mu w^{\lambda} - \alpha) + k]^n |a_k| \\ + \sum_{k=1}^{\infty} [(k+1)(\mu w^{\lambda} - \alpha) + 1](1 + \beta) - 2\beta(1 - \xi) [(k+1)(\mu w^{\lambda} - \alpha) + k]^n |b_k| \leq 2\beta(1 - \xi),$$

which is equivalent to (8) and so the proof is complete.

3. Extreme Points

In this section, we determine the extreme points of closed convex hulls of $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ denoted by $clcoS_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$.

Theorem 3.1 Let $f \in S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ and $f_n = h + \overline{g_n}$ be given by (5) if and only if

$$f_n(z) = \sum_{k=2}^{\infty} [x_k h_k(z) + y_k g_{nk}(z)], \quad \text{where, } h_1(z) = z, \\ h_k(z) = \frac{2\beta(1 - \xi)}{[(k-1)(\mu w^{\lambda} - \alpha) + 1](1 + \beta) + 2\beta(1 - \xi) [(k-1)(\mu w^{\lambda} - \alpha) + k]^n} z^k, \\ (k = 2, 3, 4, \dots) \quad \text{and} \\ g_{nk}(z) = z + (-1)^n \frac{2\beta(1 - \xi)}{[(k+1)(\mu w^{\lambda} - \alpha) + 1](1 + \beta) - 2\beta(1 - \xi) [(k+1)(\mu w^{\lambda} - \alpha) + k]^n} z^{-k}, \\ (k = 2, 3, 4, \dots) \\ \sum_{k=1}^{\infty} (x_k + y_k) = 1, \quad x_k \geq 0, \quad y_k \geq 0.$$

In particular, the extreme points of $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ are h_k and g_{nk} .

Proof: Suppose,

$$f_n(z) = \sum_{k=2}^{\infty} [x_k h_k(z) + y_k g_{nk}(z)] \\ = \sum_{k=1}^{\infty} (x_k + y_k) - \sum_{k=2}^{\infty} \frac{2\beta(1 - \xi)}{[(k-1)(\mu w^{\lambda} - \alpha) + 1](1 + \beta) + 2\beta(1 - \xi) [(k-1)(\mu w^{\lambda} - \alpha) + k]^n} x_k z^k, \\ + (-1)^n \sum_{k=1}^{\infty} \frac{2\beta(1 - \xi)}{[(k+1)(\mu w^{\lambda} - \alpha) + 1](1 + \beta) - 2\beta(1 - \xi) [(k+1)(\mu w^{\lambda} - \alpha) + k]^n} y_k z^{-k}.$$

Then

$$\sum_{k=2}^{\infty} \left\{ \frac{[(k-1)(\mu w^{\lambda} - \alpha) + 1](1 + \beta) + 2\beta(1 - \xi) [(k-1)(\mu w^{\lambda} - \alpha) + k]^n}{2\beta(1 - \xi)} \right. \\ \left. \times \frac{2\beta(1 - \xi)}{[(k-1)(\mu w^{\lambda} - \alpha) + 1](1 + \beta) + 2\beta(1 - \xi) [(k-1)(\mu w^{\lambda} - \alpha) + k]^n} \right\}$$

$$+(-1)^n \sum_{k=1}^{\infty} \left\{ \frac{[(k+1)(\mu w^\lambda - \alpha) + 1](1+\beta) - 2\beta(1-\xi)}{2\beta(1-\xi)} \frac{[(k+1)(\mu w^\lambda - \alpha) + k]^n}{2\beta(1-\xi)} \right\}$$

$$= \sum_{k=2}^{\infty} x_k + \sum_{k=2}^{\infty} y_k = 1 - x_1 \leq 1$$

and so $f_n \in S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$

Conversely, if $f_n \in clcoS_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ then

$$a_k \leq \frac{2\beta(1-\xi)}{[(k-1)(\mu w^\lambda - \alpha) + 1](1+\beta) + 2\beta(1-\xi)} \frac{[(k-1)(\mu w^\lambda - \alpha) + k]^n}{2\beta(1-\xi)}$$

and

$$b_k \leq \frac{2\beta(1-\xi)}{[(k+1)(\mu w^\lambda - \alpha) + 1](1+\beta) - 2\beta(1-\xi)} \frac{[(k+1)(\mu w^\lambda - \alpha) + k]^n}{2\beta(1-\xi)}$$

Set

$$x_k = \frac{2\beta(1-\xi)}{[(k-1)(\mu w^\lambda - \alpha) + 1](1+\beta) + 2\beta(1-\xi)} a_k, \quad (k = 2, 3, \dots)$$

and

$$y_k = \frac{2\beta(1-\xi)}{[(k+1)(\mu w^\lambda - \alpha) + 1](1+\beta) - 2\beta(1-\xi)} b_k, \quad (k = 1, 2, \dots).$$

Then note that by Theorem 2.2,

$$0 \leq x_k \leq 1, \quad (k = 2, 3, \dots) \quad \text{and} \quad 0 \leq y_k \leq 1, \quad (k = 1, 2, \dots). \text{ we define}$$

$$x_1 = 1 - \sum_{k=2}^{\infty} x_k - \sum_{k=1}^{\infty} y_k$$

and note that by Theorem 2.2, $x_1 \geq 0$. Consequently, we define $\sum_{k=1}^{\infty} x_k h_k(z) + y_k g_{nk}(z)$ as required.

4. Distortion Inequalities

In this section, we determine the Distortion bounds for functions in the class $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$.

Theorem 4.1 Let $f_n \in S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$. Then for $|z| = r < 1$ we have

$$|f_n(z)| \leq (1+b_1)r + \left\{ \frac{2\beta(1-\xi)}{\left[\frac{\mu w^\lambda - \alpha + 1}{1+\beta} + 2\beta(1-\xi) \right] [\mu w^\lambda - \alpha + 2]^n} - \frac{\left[\frac{2(\mu w^\lambda - \alpha + 1)}{1+\beta} - 2\beta(1-\xi) \right] [2(\mu w^\lambda - \alpha) + 1]^n}{\left[\frac{\mu w^\lambda - \alpha + 1}{1+\beta} + 2\beta(1-\xi) \right] [\mu w^\lambda - \alpha + 2]^n} b_1 \right\} r^2,$$

and

$$|f_n(z)| \geq (1-b_1)r - \left\{ \frac{2\beta(1-\xi)}{\left[\frac{\mu w^\lambda - \alpha + 1}{1+\beta} + 2\beta(1-\xi) \right] [\mu w^\lambda - \alpha + 2]^n} - \frac{\left[\frac{2(\mu w^\lambda - \alpha + 1)}{1+\beta} - 2\beta(1-\xi) \right] [2(\mu w^\lambda - \alpha) + 1]^n}{\left[\frac{\mu w^\lambda - \alpha + 1}{1+\beta} + 2\beta(1-\xi) \right] [\mu w^\lambda - \alpha + 2]^n} b_1 \right\} r^2.$$

Proof: We only prove the right-hand inequality. The proof for the left hand inequality is similar and will be omitted. Let $f_n \in S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$. Taking the absolute value of f_n we have

$$\begin{aligned} |f_n(z)| &\leq (1+b_1)r + \sum_{k=2}^{\infty} a_k + b_k r^2 \\ &= (1+b_1)r + \left\{ \frac{2\beta(1-\xi)}{\left[\frac{\mu w^\lambda - \alpha + 1}{1+\beta} + 2\beta(1-\xi) \right] [\mu w^\lambda - \alpha + 2]^n} \times \right. \\ &\quad \left. \sum_{k=2}^{\infty} \frac{\left[\frac{\mu w^\lambda - \alpha + 1}{1+\beta} + 2\beta(1-\xi) \right] [\mu w^\lambda - \alpha + 2]^n}{2\beta(1-\xi)} a_k + b_k r^2 \right\} \\ &\leq (1+b_1)r + \frac{2\beta(1-\xi)}{\left[\frac{\mu w^\lambda - \alpha + 1}{1+\beta} + 2\beta(1-\xi) \right] [\mu w^\lambda - \alpha + 2]^n} \times \\ &\quad \sum_{k=2}^{\infty} \left\{ \frac{\left[\frac{(k-1)(\mu w^\lambda - \alpha + 1)}{1+\beta} + 2\beta(1-\xi) \right] [(k-1)(\mu w^\lambda - \alpha) + k]^n}{2\beta(1-\xi)} a_k + \right. \\ &\quad \left. \frac{\left[\frac{(k+1)(\mu w^\lambda - \alpha + 1)}{1+\beta} - 2\beta(1-\xi) \right] [(k+1)(\mu w^\lambda - \alpha) + k]^n}{2\beta(1-\xi)} b_k \right\} \\ &\leq (1+b_1)r + \frac{2\beta(1-\xi)}{\left[\frac{\mu w^\lambda - \alpha + 1}{1+\beta} + 2\beta(1-\xi) \right] [\mu w^\lambda - \alpha + 2]^n} \times \\ &\quad \left\{ 1 - \frac{\left[\frac{2(\mu w^\lambda - \alpha + 1)}{1+\beta} - 2\beta(1-\xi) \right] [2(\mu w^\lambda - \alpha) + 1]^n}{2\beta(1-\xi)} b_1 \right\} r^2. \\ &\leq (1+b_1)r + \left\{ \frac{2\beta(1-\xi)}{\left[\frac{\mu w^\lambda - \alpha + 1}{1+\beta} + 2\beta(1-\xi) \right] [\mu w^\lambda - \alpha + 2]^n} - \right. \\ &\quad \left. \frac{\left[\frac{2(\mu w^\lambda - \alpha + 1)}{1+\beta} - 2\beta(1-\xi) \right] [2(\mu w^\lambda - \alpha) + 1]^n}{\left[\frac{\mu w^\lambda - \alpha + 1}{1+\beta} + 2\beta(1-\xi) \right] [\mu w^\lambda - \alpha + 2]^n} b_1 \right\} r^2. \end{aligned}$$

The following covering result follows from the left-hand inequality in Theorem 4.1.

Corollary 4.1 Let f_n of the form (5) be such that $f_n \in S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$. Then

$$\left\{ \omega : |\omega| < \frac{\left[\begin{array}{l} \left[\mu w^\lambda - \alpha + 1 \quad 1 + \beta + 2\beta(1-\xi) \right] [\mu w^\lambda - \alpha + 2]^n - \\ \left[\mu w^\lambda - \alpha + 1 \quad 1 + \beta + 2\beta(1-\xi) \right] [\mu w^\lambda - \alpha + 2]^n \times \\ \left[2 \quad \mu w^\lambda - \alpha + 1 \quad 1 + \beta - 2\beta(1-\xi) \right] [2(\mu w^\lambda - \alpha) + 1]^n \\ \left[\mu w^\lambda - \alpha + 1 \quad 1 + \beta + 2\beta(1-\xi) \right] [\mu w^\lambda - \alpha + 2]^n \end{array} \right]}{\left[\mu w^\lambda - \alpha + 1 \quad 1 + \beta + 2\beta(1-\xi) \right] [\mu w^\lambda - \alpha + 2]^n} \right\} \subset f_n(U).$$

5. Convolution Property

In this section, we illustrate that the class $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ is closed with regard to convex combination of two harmonic functions of the form.

$$f_n(z) = z - \sum_{k=2}^{\infty} a_k z^k + (-1)^n \sum_{k=1}^{\infty} b_k \bar{z}^{-k}$$

and

$$F_n(z) = z - \sum_{k=2}^{\infty} A_k z^k + (-1)^n \sum_{k=1}^{\infty} B_k \bar{z}^{-k}$$

we define the convolution of two harmonic functions f_n and F_n as

$$f_n * F_n(z) = f_n(z) * F_n(z) = z - \sum_{k=2}^{\infty} a_k A_k z^k + (-1)^n \sum_{k=1}^{\infty} b_k B_k \bar{z}^{-k} \quad (9)$$

Using this definition, we show that the class $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ is closed under convolution.

Theorem 5.1 For $0 \leq \xi_1 \leq \xi_2 < 1$ let $f_n \in S_H^n(\lambda, w, \mu, \alpha, \xi_1, \beta)$ and $F_n \in S_H^n(\lambda, w, \mu, \alpha, \xi_2, \beta)$. Then the convolution $f_n * F_n \in S_H^n(\lambda, w, \mu, \alpha, \xi_1, \beta) \subset S_H^n(\lambda, w, \mu, \alpha, \xi_2, \beta)$.

Proof: For f_n and F_n as the theorem 5.1 we write

$$f_n(z) = z - \sum_{k=2}^{\infty} a_k z^k + (-1)^n \sum_{k=1}^{\infty} b_k \bar{z}^{-k}$$

and

$$F_n(z) = z - \sum_{k=2}^{\infty} A_k z^k + (-1)^n \sum_{k=1}^{\infty} B_k \bar{z}^{-k}$$

Then the convolution $f_n * F_n$ is given by (9). We wish to show that the coefficient of $f_n * F_n$ satisfy the required condition given in Theorem 2.2 For $F_n \in S_H^n(\lambda, w, \mu, \alpha, \xi_2, \beta)$ we note that $A_k < 1$ and $B_k < 1$. Now, for the convolution function $f_n * F_n$ we obtain

$$\begin{aligned}
 & \sum_{k=2}^{\infty} \frac{[(k-1) \mu w^{\lambda} - \alpha + 1] (1 + \beta + 2\beta(1 - \xi_1)) [(k-1)(\mu w^{\lambda} - \alpha) + k]^n}{2\beta(1 - \xi_1)} a_k A_k \\
 & + \sum_{k=1}^{\infty} \frac{[(k+1) \mu w^{\lambda} - \alpha + 1] (1 + \beta - 2\beta(1 - \xi_1)) [(k+1)(\mu w^{\lambda} - \alpha) + k]^n}{2\beta(1 - \xi_1)} b_k B_k \\
 & \leq \sum_{k=2}^{\infty} \frac{[(k-1) \mu w^{\lambda} - \alpha + 1] (1 + \beta + 2\beta(1 - \xi_1)) [(k-1)(\mu w^{\lambda} - \alpha) + k]^n}{2\beta(1 - \xi_1)} a_k \\
 & + \sum_{k=1}^{\infty} \frac{[(k+1) \mu w^{\lambda} - \alpha + 1] (1 + \beta - 2\beta(1 - \xi_1)) [(k+1)(\mu w^{\lambda} - \alpha) + k]^n}{2\beta(1 - \xi_1)} b_k \\
 & \leq \sum_{k=2}^{\infty} \frac{[(k-1) \mu w^{\lambda} - \alpha + 1] (1 + \beta + 2\beta(1 - \xi_2)) [(k-1)(\mu w^{\lambda} - \alpha) + k]^n}{2\beta(1 - \xi_2)} a_k \\
 & + \sum_{k=1}^{\infty} \frac{[(k+1) \mu w^{\lambda} - \alpha + 1] (1 + \beta - 2\beta(1 - \xi_2)) [(k+1)(\mu w^{\lambda} - \alpha) + k]^n}{2\beta(1 - \xi_2)} b_k
 \end{aligned}$$

Since $0 \leq \xi_1 \leq \xi_2 < 1$ and $f_n \in S_H^n(\lambda, w, \mu, \alpha, \xi_1, \beta)$. Therefore

$$f_n * F_n \in S_H^n(\lambda, w, \mu, \alpha, \xi_1, \beta) \subset S_H^n(\lambda, w, \mu, \alpha, \xi_2, \beta).$$

6. Convex Combination

In this section, we illustrate that the class $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ is closed with convex combination of its members.

Theorem 6.1 The class $S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ is closed under convex combinations.

Proof: Let $f_{n_i} \in S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ for $i=1, 2, \dots$ where f_{n_i} is given by

$$f_{n_i}(z) = z - \sum_{k=2}^{\infty} a_{k_i} z^k + (-1)^n \sum_{k=1}^{\infty} b_{k_i} \bar{z}^k.$$

Then by (8),

$$\begin{aligned}
 & \sum_{k=2}^{\infty} \frac{[(k-1)(\mu w^{\lambda} - \alpha) + 1] (1 + \beta + 2\beta(1 - \xi)) [(k-1)(\mu w^{\lambda} - \alpha) + k]^n |a_k|}{\beta(1 - \xi)} a_{k_i} \\
 & + \sum_{k=1}^{\infty} \frac{[(k+1)(\mu w^{\lambda} - \alpha) + 1] (1 + \beta - 2\beta(1 - \xi)) [(k+1)(\mu w^{\lambda} - \alpha) + k]^n}{2\beta(1 - \xi)} b_{k_i} \leq 2. \quad (10)
 \end{aligned}$$

For $\sum_{i=1}^{\infty} t_i = 1$, $0 \leq t_i \leq 1$, the convex combination of f_{n_i} may be written as

$$\sum_{i=1}^{\infty} t_i f_{n_i}(z) = z - \sum_{k=2}^{\infty} \left(\sum_{i=1}^{\infty} t_i a_{k_i} \right) z^k + (-1)^n \sum_{k=1}^{\infty} \left(\sum_{i=1}^{\infty} t_i b_{k_i} \right) \bar{z}^k.$$

Then by (10),

$$\begin{aligned} & \sum_{k=2}^{\infty} \frac{[(k-1)(\mu w^{\lambda} - \alpha) + 1](1 + \beta) + 2\beta(1 - \xi)}{\beta(1 - \xi)} \frac{[(k-1)(\mu w^{\lambda} - \alpha) + k]^n |a_k|}{\left(\sum_{i=1}^{\infty} t_i a_{k_i} \right)} \\ & + \sum_{k=1}^{\infty} \frac{[(k+1)(\mu w^{\lambda} - \alpha) + 1](1 + \beta) - 2\beta(1 - \xi)}{2\beta(1 - \xi)} \frac{[(k+1)(\mu w^{\lambda} - \alpha) + k]^n b_{k_i}}{\left(\sum_{i=1}^{\infty} t_i b_{k_i} \right)} \\ & = \sum_{i=1}^{\infty} t_i \left\{ \sum_{k=2}^{\infty} \frac{[(k-1)(\mu w^{\lambda} - \alpha) + 1](1 + \beta) + 2\beta(1 - \xi)}{\beta(1 - \xi)} \frac{[(k-1)(\mu w^{\lambda} - \alpha) + k]^n |a_k|}{a_{k_i}} \right. \\ & \quad \left. + \sum_{k=1}^{\infty} \frac{[(k+1)(\mu w^{\lambda} - \alpha) + 1](1 + \beta) - 2\beta(1 - \xi)}{2\beta(1 - \xi)} \frac{[(k+1)(\mu w^{\lambda} - \alpha) + k]^n b_{k_i}}{b_{k_i}} \right\} \\ & \leq 2 \sum_{i=1}^{\infty} t_i = 2. \end{aligned}$$

This is the condition required by (8) and so $\sum_{i=1}^{\infty} t_i f_{n_i}(z) \in S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$.

Theorem 6.2 If $f_n \in S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ then f_n is convex in the disc.

$$|z| \leq \min_k \left\{ \frac{\beta(1 - \xi)(1 - b_1)}{k \left[\beta(1 - \xi) - ((\mu w^{\lambda} - \alpha + 1)(1 + \beta) - \beta(1 - \xi)b_1) \right]} \right\}^{\frac{1}{k-1}}, \quad k = 2, 3, \dots$$

Proof: Let $f_n \in S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ and let $0 < r < 1$, be fixed. Then

$r^{-1} f_n(rz) \in S_H^n(\lambda, w, \mu, \alpha, \xi, \beta)$ and we have

$$\begin{aligned} \sum_{k=2}^{\infty} k^2 (a_k + b_k) &= \sum_{k=2}^{\infty} k (a_k + b_k) k r^{k-1} \\ &\leq \left\{ \sum_{k=2}^{\infty} \frac{[(k-1)(\mu w^{\lambda} - \alpha) + 1](1 + \beta) + 2\beta(1 - \xi)}{\beta(1 - \xi)} \frac{[(k-1)(\mu w^{\lambda} - \alpha) + k]^n |a_k|}{a_k} \right. \\ & \quad \left. + \sum_{k=1}^{\infty} \frac{[(k+1)(\mu w^{\lambda} - \alpha) + 1](1 + \beta) - 2\beta(1 - \xi)}{2\beta(1 - \xi)} \frac{[(k+1)(\mu w^{\lambda} - \alpha) + k]^n b_k}{b_k} \right\} k r^{k-1} \leq 1 - b_1 \end{aligned}$$

$$\text{Provided, } k r^{k-1} \leq \frac{1 - b_1}{1 - \frac{(\mu w^{\lambda} - \alpha + 1)(1 + \beta) - \beta(1 - \xi)}{\beta(1 - \xi)}}$$

Which is true if

$$r \leq \min_k \left\{ \frac{\beta(1 - \xi)(1 - b_1)}{k \left[\beta(1 - \xi) - ((\mu w^{\lambda} - \alpha + 1)(1 + \beta) - \beta(1 - \xi)b_1) \right]} \right\}^{\frac{1}{k-1}}, \quad k = 2, 3, \dots$$

References:

- 1- S. Altinkaya and S. Yalcin, "On a Class of Harmonic Univalent Functions Defined by Using a New Differential Operator", Th. Appl. of Math. And Comp. Sci., 6(2)(v) (2016), 125-133.



- 2- Y. AVCI and E. Zlotkiewicz, "On harmonic univalent mappings", Ann. Univ. Mariae Curie-Sklodowska Sect. A., 44(v) (1990),1-7.
- 3- R. Bucur, L. Andrei and D. Daniel, "Coefficient bounds and Fekete-Szego problem for a class of analytic functions defined by using a new differential operator", Appl. Math. Sci., 9(v) (2015), 1355–1368.
- 4- G. Choquet, "Sur un type de transformation analytiquegeneralisant la representation conforme et definie au moyen de fonctionsharmonique", Bull. Sci. Math.,89(v) (1945),156–165.
- 5- J. Clunie and T. Sheil-Small, "Harmonic univalent functions", Ann. Acad. Sci. Fenn. Ser. A I Math., 9(v) (1984),3-25.
- 6- M. Dorff, "Minimal graphs in R^3 over convex domain", Proc. Am. Math. Soc., 132(v) (2003), 491–498.
- 7- P.L. Duren, "Harmonic mappings in the plane", Cambridge University Press, (2004).
- 8- T. Gencel and S. Yalcin, "A Special Class of Harmonic Univalent Functions", Sarajevo Journal of Mathematics., 4(17) (v) (2008), 197-206.
- 9- J.M. Jahangiri and H. Silverman, "Meromorphic univalent harmonic functions with negative coefficients", Bull. Korean Math. Soc., 36 (v) (1999), 763-770.
- 10- A.N. Metkari, N. D. Sangle and S. P. Hande, "A New Class of Univalent Harmonic Meromorphic Functions of Complex Order", Our Heritage., 68(30)(v) (2020), 5506–5518.
- 11- G.S. Salagean, "Subclasses of univalent functions", Lecture Notes in Math. Springer-Verlag Heidelberg,(1013) (1983), 362–372.
- 12- H. Silverman, "Harmonic univalent functions with negative coefficients", J. Math. Anal. Appl., 220(v) (1998), 283–289.
- 13- H. Silverman, "Subclasses of harmonic univalent functions", Physical Review A, 28(v) (1999), 275–284



Globalization and Diaspora in Indian Literature : A Study of 'Ila' in Amitav Ghosh's *The Shadow Lines*

Anusha Hegde

MA English, Final Year,

Central University of Karnataka, Kalaburagi

Email Id: anusha3hegde@gmail.com

Contact No.: 9741992769

Introduction:

All experiences commonly shared by a large community or society does have an impact in one or the other way over the world. Globalization is one such process, which, after receiving its stimulus in the West, rapidly took over the lifestyle and thinking of the East, propelled by processes such as colonization, migration and global trade. India was nonetheless affected in several manners. The globalized scenario in the country is lately tries to ape the West in all spheres blindly. However, this aping also leads to severe cases of identity crisis and a sense of loss and disillusionment in the minds of people heavily in conflict between the western liberal modernity that is gaining momentum somewhat as a status quo, or being rooted to the culture one is born into, is familiar with and is an integral part of one's existence that cannot be wholly erased. Critics today also see globalization "...as another form of Western domination over the 'Third World' with detrimental effects upon local communities and culture." (Cuddon and Habib) Keeping this perspective in mind, it is essential to understand the way Diaspora face the problems of assimilation, identity and cultural rootlessness in this globalized world. The paper wishes to analyze one of the most intriguing characters in Ghosh's *Shadow Lines*- Ila. She represents the true picture of an Indian-origin woman with her life spent and experiences gained from different parts of the world. A true amalgamation of the western ideology with a consciousness of being somewhere judged according to the quintessential Indian feminine-matrix back home in Calcutta, Ila's journey of self-exploration and self-assertion raises many questions on the benefits and the disadvantages of being an Oriental in the midst of the Occident. To better understand her personal take on life, a comparative analysis between Ila and Twinkle, the protagonist of Jhumpa Lahiri's short story, "This Blessed House" is also given. The main focus remains on Ila however.

Keywords:

Affective Erethism, Cultural Diaspora, Identity, Indian Culture, White Culture, Nationality, Occident, Orient, Third World, Globalization.

On Amitav Ghosh:

Amitav Ghosh is an author whose works have managed to garner the richness of Bengal Renaissance- seen in his love for lyrically capturing the essence of his cultural ancestry (we see a lilt of historicism there), and the self-conscious outlook of postmodernism (Chaudhari538) He was born in 1956 in Calcutta and has earned his education from St. Stephen's College, Delhi and a D Phil in Anthropology from the Oxford University, England. Recipient of the Padma Shri, Sahitya Akademi award for *The Shadow Lines*, he was awarded the Jnanpith in 2018 for "outstanding contribution towards literature". His works include *The Circle of Reason* (his first book and that which won him the Prix Medicis Etranger Award). *In an Antique Land*, *The*



Calcutta Chromosome (Arthur C Clarke Award), *Dancing in Cambodia and Other Essays*, *Countdown*, *The Glass Palace* and others.

The Enigma called Ila:

The character of Ila draws the undivided attention of the narrator from the beginning of their acquaintance as they both are of the same age, but have been brought up in different atmospheres. They look alike, making them look like twins, as their elders saw it. However, the narrator, aside from the obvious love for her garnered from childhood, is enamored by the culture she portrays as her own and which, according to Ila, is far different from the culture he has grown up in.

In Ila, we see the desire to distance oneself from the reality that one's birth constructs around one, by making use of every opportunity to create another. In Ila, we understand the creole phenomenon of *affective erethism* that Frantz Fanon, in his *Black Skin, White Masks*, observed in Mayotte Capécia's *I Am a Martinican Woman*, in Mayotte's claim, "I loved him because he had blue eyes, blond hair, and a pale complexion" (Fanon 25)

With this example in mind, look at Ila's description of Nick Price and the same features that she wishes her make-believe, play-daughter Magda (during the game of Houses) will have. The complex of gaining the *white* look and ingraining it has become a fundamental need in Ila, as she feels suffocated in the presence of even slight traces of what India is, with regard to looks, behavior or socio-cultural expectations from people.

Ila stresses repeatedly that she is free, when she visits Calcutta after months spent abroad, since she is not exposed to Indian culture. But, her recurrent encounters with the Empire, the *white* culture of London and the material opportunities it offers has made her look at India as a "middle-class suburb..." where "nothing really important ever happens ... that's really remembered..." (Ghosh 114-115). She sees the West as an area where all the wars and the fascist movements have set "a political example to the world" (Ghosh 115). She refuses to associate with Indian society and its problems. Ila rushes away from the narrator after he and Robi drag her out of a pub, telling the true reason she took refuge in London: "It's only because I want to be free... Free of *you*! Free of your bloody culture and free of all of you" (Ghosh 98).

Th'amma, the narrator's grandmother who had taken part in the revolutions of freedom in Bangladesh as a youngster, has a different definition of freedom. She sees Ila's concept of freedom to be her desire "to be left alone to do what she pleases: that's all that any whore would want" (Ghosh 98). Th'amma represents the Indian conception of a woman's freedom- bound by ethical, moral norms of conduct, but with an outlook that went beyond personal "wants" and ambitions. The cultural difference is seen in the Indian and the *westernized* Indian.

The binary of Indian and Western is also seen in the conception of beauty by the two perspectives. We have Ila who refuses to bend down to traditions and wear the quintessential Indian dress, and opts for the t-shirts, shorts and jeans which entrances the narrator, who relies on imagination to get a taste of what the west looked like. Th'amma is left astonished yet pleased when Ila, in her childhood, is made to wear a saree and plait her hair, making her look "like any Bethune College girl on her way to a lecture" (Ghosh 20). According to Ila, culture here became an imposition on her *personal choice*, while Th'amma sought to define *freedom* as an aspect *subject to* generally accepted social notions on individual action.



With regard to the process of globalization, especially in the Post-World War scenario, we see that the concept of “Diaspora” has also been used to capture *“the assertion of identities...a working definition of the postmodern condition, especially in global cities with a heterogeneity of nationalities and races interacting with each other in an ever-increasing multiplicity of identities”*. (Hawley 146) Ila faces this problem when she finds herself bullied in the school, however, in the story that she creates and *transposes her experience on Magda* during Houses, we see that she is in *denial*. Be it then in her guilelessness of childhood, or when she comes to know of Nick’s extra-marital affair yet downplays it rather pathetically by repeating in a self-assuring manner to the narrator, “I made it all up”(Ghosh 274)

Twinkle and Ila:

On looking at Ila and Twinkle, the protagonist of Jhumpa Lahiri’s “This Blessed House”, we find stark similarities in lifestyles and attitude towards life in general. Both have a liberal outlook towards culture, seem to assimilate well in the matrix culture of the West. However, Twinkle, though brought up in a western environment, seems to retain some amount of respect towards her native Indian culture as she agrees for an arranged marriage barely after knowing Sanjeev for a few months and is less conscious in front of her American guests in a salwar suit. In Ila’s case, be it her thinking, actions or attire- she makes it an effort to emulate *Magda*, her perception of being beautiful and smart, and the *alter-ego* she so desperately wishes she could be. In order to make others accept her as a quasi-Magda, she *physically and consciously so* removes herself from her native environment.

While Twinkle’s curiosity and the current globalized time she lives in, she has managed to dissolve into the new culture without any hesitation. However, Ila, in the time period when India as an independent nation had yet to experience globalization or had the knowledge of assimilation, we see Ila struggling to find her identity and makes a wrong choice of life and the partner she wishes to share it with by basing her reality on an imagination that grew as a response to the dominating and alluring effect of the Occident over the Orient.

Conclusion:

Ila realizes the image of a *cultural diaspora* and the associated loss of identity by the end of the novel. She wishes to be with the narrator at the time of his imminent departure from London as she sees this as the cutting away of some form of familiar comfort and belonging, her only thread of finding solace of being rooted *somewhere* or to *some people*. However, her conditioned hybridized self refuses to let go of the habit of creating an illusionary space to escape her reality.

Ila stands defeated in her own revolution or rebellion as she ultimately fails to provide herself a definite identity. In her distant and aloof outlook towards India, which she refuses to identify with, we find her to have “baffled” the narrator with “the mystery of difference”. (Ghosh 34)

By the end of the novel, we find her disconnected from her *home* in all senses and in limbo between what she rejected beyond repair and what she chose but in vain. The only thing that shines in her life is her ability to make choices, which was largely refused to home-bound Indian women then.



Works Cited

- “Amitav Ghosh honoured with 54th Jnanpith Award for ‘outstanding contribution towards literature’”. *The Economic Times*, 12 August 2019. <<https://economictimes.indiatimes.com/magazines/panache/amitav-ghosh-honoured-with-54th-jnanpith-award-for-outstanding-contribution-towards-literature/articleshow/67093327.cms?from=mdr>>
- Cuddon, J A. *The Penguin Dictionary of Literary Terms and Literary Theory*. Revised by M A R Habib, 5th ed. Penguin Books, 2014.
- Fanon, Frantz. *Black Skin, White Masks*. Translated by Richard Philcox. Grove Press, 2008.
- Ghosh, Amitav. *The Shadow Lines*. 2nd ed. Penguin Books India and Ravi Dayal, 2008.
- Hawley, John C., ed. *Encyclopedia of Postcolonial Studies*. Edited by John C. Hawley, South Asian ed. Greenwood Press, 2004.
- Lahiri, Jhumpa. *Interpreter of Maladies*. Houghton MifflinHarcourt, 1999.
- The Picador Book of Modern Indian Literature*. Edited by Amit Chaudhari, 2nd ed. Picador India, 2001.





A Comprehensive Study on The Economic Growth of India Due to Covid-19

Gourab Das

Assistant Professor

Department of Commerce

Vidyanagar College

South 24 Parganas, West Bengal

2009gourabdas@gmail.com

Mob: 9038694600

Abstract:

The Novel Corona virus outbreak has resulted in a public health emergency with severe consequences for the world Economy. It is an unprecedented shock to every economy. The outbreak originated from Wuhan city of china and has spread across major 185 countries. Lack of any known vaccine is a major limitation to control such outbreak still there is no vaccine to prevent it. Due to this we need a prolonged country-wide lockdown which cause global economic downturn and associated disruption of demand and supply chains, Indian economy is likely to face a serious period of battle with its existence. Job losses and salary cuts are likely in the high-risk services sector, including airlines, hotels, malls, multiplexes, restaurants, and retailers, which have seen a sharp fall in demand due to lockdowns across the country. Govt of India together with all State Govt have already taken some steps for revive but it is not enough. We should come together and face these challenges to overcome it.

Keywords: Covid-19, pandemic, economic slowdown, supply chain, informal sector, industry etc

Introduction:

The Novel Corona virus outbreak has resulted in a public health emergency with severe consequences for the world Economy. It is an unprecedented shock to every economy. The outbreak originated from Wuhan city of china and has spread across major 185 countries. Lack of any known vaccine is a major limitation to control such outbreak still there is no vaccine to prevent it. Many countries have announced lockdown to resist such a pandemic. Lifestyle of major countries such as USA, BRITAIN, FRANCE etc have changed a lot while facing such pandemic. Lockdown seems to be quite effective to restrict the pandemic up to a certain extent. China was the first to announce a lockdown in HUBEI city following that France, India ,USA also observed complete lockdown.

India was quick to act as it imposed several measures such as VISA advisories mandatory testing and quarantine of passengers from foreign country temporary suspension of visas. Following the biggest economy US each and every country have faced or still facing huge financial stress. As because the whole globe is in a shut down position some of the activities are allowed but they are not hitting the economy directly so it leads to a CRISIS Position. All the Global Supply chains, transportation system , and import and export industry are affected along with all the other Para related industries are affected.



Literature Review:

Li, wang et.all (2020) showed in their study, increase of stress anxiety etc over the people of china. People are more concern with health and hygiene of the family rather than any economic activity in the epidemic period.

Sumner, Hoy and Juarez (2020) suggested the potential short-term economic impact of COVID-19 on global monetary poverty.

Dev and Sengupta (2020) explained that Covid-19 created an unprecedented challenge for India especially of the sector like finance and industry. Lockdown social distancing difference concepts crated a barrier in labour centric industry which effect Indian economy at large.

Ubed & sawai (2020) observed the pestilence can turn into a definitive driver of national tourism industry to the breakdown, as it influences every single human movement, similar to social, strict, athletic, creative and social. The Corona Virus has shaken the world tourism industry, with enormous lodging networks and advanced stages, for example, booking being compelled to drop reservations in the Asian nation.

Objective of the study:

The primary objectives of the study are -

1. To understand the growth projection during Covid-19.
2. To examine the effect of Covid-19 in Indian economy.

Research Methodology:

The paper performs an extensive research on the basis of the data and information obtained from secondary sources. It involves the use of journal, research paper, and various reports of WHO and authenticate finance website and online resources etc. for the collection of secondary data needed in the analysis.

Economic Forecasts

Global Growth:

The financial situation of different nations remains highly fluid. Uncertainty about the length and depth of health care crisis related economic effects are influencing perceptions of risk and volatility in the global financial scenario. Compounding the economic situation is a historic drop in the price of crude oil that reflects the worldwide decline in economic activity. On april 29 2020 Federal Reserve Chairman Jay Powell stated that the Federal Reserve would use it full range of tools to support economic activities as because the commerce department stated in a report that a 4.8% drop in US GDP in the first quarter of 2020-05-13

The organization for Economic Cooperation and Development (OECD) On march 2 2020 lowered its forecast of global economic growth by 0.5% for 2020 from 2.9% to 2.4%based on the contingent assumption that the impact of the novel virus will be seen from the first quarter. Highlighting the projected decline in global economic activity as the “Great Lockdown” the IMF reported and updated forecast on 14th April 2020. As per the report that the global economy would experience its “Worst Recession since the Great Depression”. The Global trade is also projected to fall in 2020by 11.0% and crude oil prices are projected to fall by 42%. The IMF also reported that many nations are facing a multi layered crisis that includes health crisis, financial crisis, capital outflow and many more.



Economics Of Pandemics.

The Indian equivalent of the Depression is an economic crises like the BOP crisis of 1990-1991 the external shock induced growth crisis of 2008-2009 and the crisis induced by SARS COV2 PANDEMIC . The growth recession of 2019 was particularly severe and could be described as a GREAT GROWTH RECESSION. A completely new element has been added to Crisis management and Crisis handling.

India's Growth Projections Revised Down

Most credit agencies have therefore revised their 2020 and 2021 growth projections of india keeping view the negative impact of corona virus in the nations economy.

FITCH RATINGS:- Fitch also cuts its forecast of growth to 4.9% 2019-20 from 5.1% projected earlier.

MOODYS :- Moodys investors service has revised down its growth for india to 5.3% from 5.4%

BARCLAYS:- Barclays has lowered indias growth forecast to 5.6% for 2020 as against 6.5% projected earlier.

S&P GLOBAL RATINGS:- S&P has lowered its economic growth forecast to 5.6% for 2020 as against 6.5% projected earlier.

Impact On Indian Economy

India's real GDP growth decelerated to its lowest in over six years in 3Q 2019-201, and the outbreak of the COVID-19 posed fresh challenges. Steps taken to contain its spread, such as the nationwide lockdown have brought economic activity to a near-standstill, with impacts on both consumption and investment. While Indian businesses, barring a few sectors, can possibly insulate themselves from the global supply chain disruptions caused by the outbreak due to relatively lower reliance on intermediate imports, their exports to COVID-19 infected nations could take a hit. In sum, the three major contributors to GDP -- private consumption, investment and external trade -- will all get affected.

THREE SCENARIOS CAN BE USED TO EXPLAIN THE ECONOMIC EFFECTS OF COVID 19

- 1 . Quick retraction across the globe including India by end April to mid may
2. While India is able to control covid 19 spread there is a significant global recession.
3. COVID 19 proliferates within India and lockdowns get extended

Fiscal Policy Measures

Fiscal stimulus is completely the wrong thing to do in a lockdown. Fiscal expenditures must focus primarily on ensuring human survival and secondarily on ensuring against bankruptcy. The economic relief package announced by the government are rightly designed to deal with phase 1 that is the impact of the lockdown which covers about 2/3rd of the economy and the succeeding 4-6 weeks . The best part is the assurance that the govt now has its ears to the ground and using information to design and modify packages. The challenge is therefore shifting to effective implementation. AS states are responsible for both health and welfare and effectiveness of health and social welfare measures depends on the states who are present at the ground level.

Once the lockdown is over and we enter phase 2. Fiscal measures must be targeted at industries and sectors which are most severely affected by the Epidemic and whose situation has



worsened because of the Pandemic. In this context, elimination of cesses and surcharges in both GST and personal income tax will play an important role.

Once the economy comes out of the crises mode and enters Phase 3, the primary policy issue will be how to speed its recovery back to its growth potential. In this context tax reforms are more important than expenditure reforms. Tax reduction must be considered as part of these tax reforms, to provide short term stimulus, while ensuring long term fiscal sustainability through improved voluntary compliance and higher buoyancy. Direct cash transfers will be necessary for those affected by crisis. But an increase in DCT for a wider population will be sustainable if and only if combined with reduction of leakages) in major subsidies like fertilizer and food corporation

Hypothetical Impact Of Covid 19 Pandemic On The Nations Economy

Once the economy comes out of the crises mode and enters Phase 3, the primary policy issue will be how to speed its recovery back to its growth potential. In this context tax reforms (Direct Tax Code, GST) are more important than expenditure reforms. Tax reduction must be considered as part of these tax reforms, to provide short term stimulus, while ensuring long term fiscal sustainability through improved voluntary compliance and higher buoyancy. Direct cash transfers will be necessary for those affected by crisis. But an increase in DCT for a wider population will be sustainable if and only if combined with reduction of leakages (inefficiency and corruption) in major subsidies like fertilizer and food corporation.

According to the bank, although the worst-case scenario is hypothetical, it is primarily meant for guiding policy makers in determining how costly an outbreak could be, so that they can properly evaluate the benefits and costs of prevention and early response.

The Corona virus outbreak has serious implication for the Indian economy. It has disrupted production and transport of key equipment imported for use in solar power plants in India and is likely to jack up the prices of solar power apart from impacting projects' completion schedule unless urgent measures are taken, according to CII.

Adversely Affected Sectors

- Apparel & Textile will get hit adversely due to disruption in labour supply, raw material unavailability, working capital constraints and restricted demand due to limited movement of people and purchasing ability.
- Auto sector (which includes automobiles and auto parts) will continue to face challenges on account of lack of demand, global recession and falling income levels.
- Aviation & Tourism is one sector which has the highest probability of going under without direct government intervention. In the next 12 months, it's highly unlikely people will travel for leisure apart from very essential travel.
- Shipping and Non-Food Retail – Non food retail chains and global shipping businesses will find this 12 month period very challenging.
- Building & Construction businesses are generally leveraged and hence will face the dual challenges of high-interest payments and lack of sales.

Implications On The Workforce

Job losses and salary cuts are likely in the high-risk services sector, including airlines, hotels, malls, multiplexes, restaurants, and retailers, which have seen a sharp fall in demand due



to lockdowns across the country. If the current global and domestic economic slowdown persists, it will impact demand and realization.

Undoubtedly, with this crisis impacting the business around the country, it will create very challenging situations for the workforce. Companies are not meeting the revenue targets hence, forcing employers to cut down their workforce. The World Travel & Tourism Council has predicted 50 million tourism jobs getting eliminated because of the pandemic. Not only the employees of multinational companies, but daily wage workers have been impacted the most during this crisis.

The International Labor Organization has called for urgent, large-scale and coordinated measures across three pillars - protecting workers in the workplace, stimulating the economy and employment, and supporting jobs and incomes.

According to a preliminary assessment report, nearly 25 million jobs could be lost worldwide due to the coronavirus pandemic, but an internationally coordinated policy response can help lower the impact on global unemployment.

Overall Impact Of Covid 19 On Indian Economy:

Analysts and Economists stated that lockdown situation had badly impacted the countries worldwide some of the major observations are cited below:

1. There is a situation of worse Unemployment in the nation .
2. Expecting biggest stock market crash .i.e Nifty will fall below 5000-7500 points
3. No job security among all sectors , companies are laying off their employees
4. Daily wage workers and skilled labourers faced a lot
5. It is supposed to create a huge depression alike the Great Depression of 1929.
6. Education of school going students has come to a standstill.
7. Indian exports and imports are impacted a lot due to non availability of transport and labour .
8. Peoples normal lifestyle has been impacted too .
9. Indian companies selling their shares to foreign B players.
10. Pandemic impact on Agricultural ,MSME, travel and tourism etc are effected.
11. International rating agency Fitch slashed GDP For 2020-21 to 0.8%.
12. Cotton prices have been reduced by 3% In the nation
13. Fresh equity investments into the countrys real estate sector could slow down.
14. Petrochemical price are likely to be low
15. Increased pressure on supply chain of india due to non availability of labour.

Preventive Measures Taken By The Government Of India To Revive Economy

- 1.The Governl ment will invest 10,000 crore under National Investment Infrastructure Fund (NIIF) whereas the rest of the investors like LIC,DFI and SWF .
- 2.The government will provide automated electronic refund system for paying gst returns.
3. Granting relief to MSMEs government also made a statement regarding EXPORT CREDIT GUARANTEE CORPORATION (ECGC) will increase the scope of export credit insurance.
- 4.The government will infuse INR 20,000 Crore affordable housing package to benefit around 3.5 lakh homeowners.s



5.Rs 1.57 lakh crore tax refunded this year vs 1.23 lakh crore last this step will boost consumption in economy . Income tax refund up 27% so far in FY 2020.

Conclusion:

The situation of Covid -19 is alarming and it disturbs all over the world economy. Topmost economy of the world like UK, US, France etc has gone through the crucial situation. Stock market of all over the world crashed and oil prices decreased day by day. Unemployment increases in a hurricane speed. It influenced all the human activity both social and economical. In this situation all the country must work together so that they can protect human being as well as repair the economic damages. Only then economy can be survived. All the Global Supply chains, transportation system , and import and export industry are affected along with all the other Para related industries are affected. It has also disrupted production and transport of key equipment imported for use in solar power plants in India. Job losses and salary cuts are likely in the high-risk services sector, including airlines, hotels, malls, multiplexes, restaurants, and retailers, which have seen a sharp fall in demand due to lockdowns across the country. Govt of India together with all State Govt have already taken some steps for revive but it is not enough. We should come together and face this challenges to overcome it.

Bibliography:

1. Sijia Li, et. All. (2020) “The Impact of COVID-19 Epidemic Declaration on Psychological Consequences: A Study on Active Weibo Users” International Journal of Environmental Research and Public Health page 1-9 Vol2
2. Sumner,et.all (2020), Estimates of the impact of COVID-19 on global poverty, WIDER Working Paper 2020/43, Vol Apr 2020
3. Dev and Sengupta, “Covid-19: Impact on the Indian Economy” Indira Gandhi Institute of Development Research, 2020.
4. Ubed & Sawai,” Impact of Corona Virus COVID 2019 on Tourism Industry” Purakala, Vol-31-issue-39-May 2020
5. <https://www.thehindubusinessline.com/economy/trade-impact-of-coronavirus-for-india-estimated-at-348-mn-unreport/article30988253.ece#>
6. https://covid19.who.int/?gclid=EAIaIQobChMIr4vn9ubn6QIV2ARyCh0-2QGbEAAYASAAEgIqbvD_BwE
7. https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200308-sitrep-48-covid-19.pdf?sfvrsn=16f7ccef_4
8. https://www.wto.org/english/news_e/pres20_e/pr855_e.htm



The Impact of Globalization on Indian Culture and English Literature

Ms. Surekha M. Mangrulkar

MA (English Literature) SET (Pune University)

Pune, Maharashtra, India

mangrulkar_surekha@yahoo.com

Abstract:

The present study analyses the impact of globalization on Indian culture & literature. The effect of globalization can be seen in the Indian literature. Indian fictions find reflections of various globalization themes. Globalization has assisted in the creation of an American atmosphere in India. Indian culture is exception to this transformation process. With the emergence of globalization in India, our old traditions and customs have loosened up their holds. Globalization has brought about a radical socio-economic change in India through its implementation goes back only two decades. Its impact is marked in literature and culture which has diluted the traditional culture of India and literary background. Globalization unites the country with the rest of world an accelerated socio-cultural assimilation in India very fast which is clearly mark in literature. Different aspects of globalization such as economics, social and culture have important implication for human life. The existing paper is attempt to explore the impact of globalization on some novels. Novelist observed the change in cultural, traditional life style of the people because of globalization. So, they explain the problems of India after globalization. These problems are multicultural, multilingual, multiethnic and modern society.

Keywords: Globalization, impact, changes, culture, Indian English literature.

India has a rich cultural milieu which is well known to the whole world. Globalization has not only led the westernization of India, but on the contrary. The Indian culture has also spread its impact globally. Culture & Tradition of any geographical region, hold a special significance with respect to their distinctiveness and that is differentiating feature of geographical boundary. The effects of globalization can be seen in the literatures of the world too. From the 20th Century as good deal has been written on globalization and responses to the same. On one hand, many researchers observe and examine works of literature so as to find reflections of varied globalization themes within the text and contexts. On the other hand, literature and literary studies are developed in to a podium for supporting, evoking and Interpreting different social, literary, cultural and political concepts within the globalization realm.

Globalization began in India with the introduction of new economic policy in 1991. Economic activities cannot be separated from social, political and cultural aspects. Indian culture has undergone the transformation of life style. Indian culture example of deep-rooted tradition, customs and conventions have started to loosen their hold because of the effect of globalization. India is considered as one of the famous countries for the rich cultural background all over the world. Globalization transform India in to modernization. Modernization is misinterpreted as imitating western etiquettes and life style. As India is changed by western culture and life style. Indian culture and tradition have also effects on western minds. No country is unique because of its only geographic characteristics but India is unique because of her cultural and traditional uniqueness also. Geographic uniqueness cannot be easily changed but the cultural uniqueness



can be affected because of the globalization. The effect of globalization can be faster and remarkable in the developing country like India.

After globalization, Indian English literature started to project the issues like loss of identity, multiculturalism, immigration, hybridization, loss of national or regional identity etc. Globalization speeded the process of intermingling of cultural conventions and marketing of cultural icons, 'Ching-Chang', 'Yippee', 'Pasta', 'Domino's pizza', 'MacDonald's Burger', 'Hakka noodles', 'Schezwan Rice' etc. These names can be easily found in Metropolitan cities. Chinese, English, American products and brands gained importance than local Indian brands and names. The celebration like friendship day, Valentine's day, Father's day, Mother's day are the effects of globalization. No doubt, globalization has some opportunities and benefits. However, some problems regarding culture, tradition and ethnicity cannot be neglected. English literature reflects changes that have occurred in Indian culture, tradition, ethnicity due to globalization. The number of internationalist Indian is growing and hence their life style is changing. The effects of globalization are immediate in literature because literature is a sensitive field. Literature of all languages and countries has been influence by the globalization. Indian English literature is one of them. In the era of globalization, English language gained much importance. It is used by educated people for communication. It became not only popular but also powerful language. Indian English literature reflects the various aspects of globalization. Some writers think that Indian writing shows new aspects of Indian culture. The process of globalization has touched and changed all the walks of life. India is reaching toward various milestone. The remarkable impact of globalization can be seen in urban life. Socio-economic, socio-political factors always influence literature, which is reflection of these factors.

India English poetry reflects the themes of rootlessness and alienation. The new generation poets have changed their views during the process of globalization. Dramatists started to do new experiments. They revisited Indian mythology and sought a fresh interpretation in the light of globalization. The contemporary Indian English dramatists tried to break the cultural boundaries as well as they went back to their traditions. They wanted to recover their ancient traditions. The dramatic productions of regional languages have been translated in to English. This process of translation has many advantages. Literature, especially drama came up to material level by crossing the regional boundaries. Vijay Tendulkar's plays are good example of this type. The translation of epics and classics in to English helped many writers in various ways. These translations played an important part in Indian English literature. When prescribed in curriculum help students and scholars to fire their imaginations. No doubt, these translations made people aware of ancient traditions and conventions. With this, simultaneously translation of regional drama helped to create national theatre. As a result, Indian national drama became a river of many regional streams. The translations helped to mitigate the regional language gaps. They also help to increase the creativity of contemporary writers. Some of the novel shows the impact of globalization. Arundhati Roy's 'The God of small things'(1997), Aravind Adiga's 'The white tiger'(2008), Chetan Bhagat's 'Half girlfriend'(2014), Vikram Chandra's 'Red earth and pouring rain'(1998), Kiran Desai's 'The inheritance of loss'(2006), Mohansingh Hamid's 'Moth Smoke'(2000) are the novels which deal with the impact of globalization.

The white Tiger (2008) is Aravind Adiga's first Novel and won booker price. Aravind Adiga became world famous because of this novel. The novel shows economic progress of India in the world and at the same time the opposite pictures of Indian rural poverty. Rural and poor



India is represented by Balram, The protagonist of the novel. The remarkable changes in Indian society have been changed. Because of the life style of rural, poor Indians are turned between the new modern life and old values. At one hand, Indian economy is progressing and on the other hand poor people in rural India is suffering. The novel also shows class struggle in India. Balaram Halwai, a village boy narrates his story in a globalized world. He goes to Delhi, Bangalore and ultimately, he goes beyond his caste and he becomes a successful businessman. The novel deals with the issues like caste, religion, corruption and poverty in India. The novel takes place in the era of globalization and the fastest growing economy. Globalization made it possible to create an American atmosphere in India. India is looking like America having shopping malls, cinema hall, American express and companies. So, Ashok says, "There are so many more things I could do here than in New York now... the way things are changing in India now, this place is going to be like America in ten years" (The white Tiger 77). Balram materialized the opportunity of globalization. He says, "I'm always a man who sees tomorrow when others see today" (The white Tiger,277). In this way, the novel is contemporary on the impact of globalization on rural India and International India.

In Arundhati Roy's The God of small things, Larry McCaslin, an American research Scholar falls in love with Rahel, Daughter of Ammu. He first meets her in the school library and later in the Khan market of Delhi. Rahel wears Jeans and T-shirt. She, a girl of new era is quiet conscious about her look and figure. The narrator says:" She was in jeans and white T-shirt.Part of an old patch work bed spread was buttoned around her neck and trailed behind her like a cape. Her wild hair was tied back to look straight though it wasn't. a tiny diamond gleamed in one nostril" (The God of small Thing 18). Wearing jeans and casual dress material has become a status symbol in this era. People have forgotten to wear their traditional cloth patterns. Estha, Rahel's brother is also fond of wearing tight jeans. His favorite color is blue. He represents the new generation influence by global thought and ideas. The characters, depicted in the God of small things, represents the educated and small middle of Indian society which is highly fascinated by the cultural manifestation of globalization. There are a number of characters portrayed in the novel who watch out American TV programs and Hollywood movies. This shows that the middle class of Indian society is in the grip of America and western culture.

Thus, the novel of Chetan Bhagat's reflects this new philosophy of modernized Indian people. New trends are immerging in Indian cultural, traditional, economic and political scenario. Bhagat's first novel, five point someone: what not to do at IIT (2004). The novel is narrated by Hari. It deals with the lives of three friends. It shows the struggle of students to sick admission in Indian Institute of technology Delhi. Hari, Ryan, Alok protest against the method of "Continuous mugging, testing and assignments, where is the time to try out new ideas" (Five point someone,25). Further the questions, "Where is the room for original thoughts? Where is the time for creativity?" (Five Point someone,35). They became frustrated because of monotonous academic work. The novel shows the problems of young generation and criticizes technology in India and also, he depicted importance of English language in India. Bhagat's Half girlfriend (2014) is a romantic novel it is a rural-urban love story of Madhav Jha, Bihari boy & Riya "High class speaking rich Delhi girl". Riya Somani refuses to be a girlfriend but wants to be his "Half Girlfriend". Riya marries Rohan even though Madhav loves her and settles in London. Madhav is her childhood friend. Afterwards Riya divorced from Rohan. She returns from London and meets Madhav. Madhav now looks after his mother's the old school in his village. The condition



of the school was not proper. He needs money for school. He requests local MLA Ojha for financial aid but MLA refuses to finance. Later on, Ojha tells about the visit of Bill Gates to some of the schools in Bihar. Madhav wants the development of his school through the funds of Bill Gates. He prepares the speech for Bill Gates with the help of Riya. Both are successful in raising funds for school. After that Riya goes to New York pretending having Lung Cancer. There she becomes a singer. Madhav goes to New York and meets her. Madhav and Riya marry after three years. In this novel Chetan Bhagat emphasizes the need and importance of English language.

So, literature has always been keen to observe and portray the changes occurring in human society. The writers are artists to portray and display the new waves and streams of the way of thinking and changed. Globalization has impact on all cultures and countries. Globalizations has merits as well as demerits. Literature reflects whatever is happening in the society. Indian English literature shows impact of globalization on Indian life style values and cultural aspects. No doubt, Indian culture is influenced by the world culture. But especially, there is an impact of western culture on Indian. We cannot totally reject or accepts the impact of globalization. We have to be very careful in accepting and rejecting them keeping in our mind our cultural, national, traditional high values. The impact of globalization will continue in the future also. So, we have to highlight our cultural, traditional, national, regional and rural values.

References:

1. Gupta, Suman. Globalization and literature, Cambridge: Polity press: 2009.
2. Dadhich, Anant. Globalization and Indian woman English novelist. Jaipur: Yking Books,2020. Print.
3. Adiga, Aravind. The white Tiger: A Novel. New York: Free 2008.
4. Roy, Arundhati. The god of small thing. New Delhi: India Ink, 1997. Print.
5. Bhagat, Chetan. Half Girlfriend. New Delhi: Rupa, 2004.
6. Bhagat, Chetan. Five Point Someone: What not to do at IIT. New Delhi: Rupa, 2004. print.



Social Media Attack Against Transgender Community in the Era of Globalisation

Anagh,

Research Scholar,

Mahatma Gandhi University

Gender identity is not only linked to a person's private feelings, but also to the feedback received from others. A transgender man or woman, as any individual, knows him or herself by observing what other people feel and think about him or her (Cipolletta 2011, Iantaffi & Bockting 2011, Faccio et al. 2013). In the search for gender identity, transgender people are often alone. Stigma and discrimination are the main causes of inequality in health (World Professional Association for Transgender Health 2012). Due to this inequality, transgender people are at a high risk of depression, suicide and HIV (Poteat et al., 2013). The family, very often, is not supportive (Association of Lesbian, Gay, Bisexual and Transgender Issues in

Counseling 2009). Kuvalanka et al. (2014) highlighted that parents' acceptance of their child's gender nonconformity may vary between "my son is gay" or "it is just a phase" to a total non-acceptance. Furthermore, Gooren et al. (2015) state that there is little knowledge about transitional technologies for transgender people, particularly among transgender men and mental health professionals. Gender identity is not only linked to a person's private feelings, but also to the feedback received from others. A transgender man or woman, as any individual, knows him or herself by observing what other people feel and think about him or her (Cipolletta 2011, Iantaffi & Bockting 2011, Faccio et al. 2013). In the search for gender identity, transgender people are often alone. Stigma and discrimination are the main causes of inequality in health (World Professional Association for Transgender Health 2012). Due to this inequality, transgender people are at a high risk of depression, suicide and HIV (Poteat et al., 2013). The family, very often, is not supportive (Association of Lesbian, Gay, Bisexual and Transgender Issues in Counseling 2009). Kuvalanka et al. (2014) highlighted that parents' acceptance of their child's gender nonconformity may vary between "my son is gay" or "it is just a phase" to a total non-acceptance. Furthermore, Gooren et al. (2015) state that there is little knowledge about transitional technologies for transgender people, particularly among transgender men and mental health professionals. Gender identity is not only linked to a person's private feelings, but also to the feedback received from others. A transgender man or woman, as any individual, knows him or herself by observing what other people feel and think about him or her (Cipolletta 2011, Iantaffi & Bockting 2011, Faccio et al. 2013). In the search for gender identity, transgender people are often alone. Stigma and discrimination are the main causes of inequality in health (World Professional Association for Transgender Health 2012). Due to this inequality, transgender people are at a high risk of depression, suicide and HIV (Poteat et al., 2013). The family, very often, is not supportive (Association of Lesbian, Gay, Bisexual and Transgender Issues in Counseling 2009). Kuvalanka et al. (2014) highlighted that parents' acceptance of their child's gender nonconformity may vary between "my son is gay" or "it is just a phase" to a total non-acceptance. Furthermore, Gooren et al. (2015) state that there is little knowledge about transitional technologies for transgender people, particularly among transgender men and mental



health professionals. Today's trans youth grew up with the internet and online LGBTQ resources and spaces are important to these communities.

The literature on online support has grown tremendously over the last decade, but little attention has been given to understanding how various features of online communication may affect users' perceived support (Li & Feng 2015). Knowing the impact of online comments on online users' perceptions is particularly relevant when the communication implicitly refers to people who face the problem of harmonizing their gender identity with their body, i.e. transgender people. While many recent studies have explored the role of the Internet in the lives of socially marginalized people (Braithwaite et al. 1999, Mehra et al. 2004, Barak & Bloch 2006, Bowker & Tuffin 2007, Barak & Sadovsky 2008, Chuang & Yang 2010, McCormack 2010, Boepple & Thompson 2014, Hixson et al. 2015) few were dedicated to transgender users (Whittle 1998, Mehra 2004, Marciano 2014)

Social media platforms have been vital spaces for transgender people to gather and form a community, according to Gillian Branstetter, a trans advocate and the former spokeswoman for the National Center for Transgender Equality. However, she added, the hostility they frequently face on these platforms make trans individuals more apprehensive about using them.

According to a recent report from the anti-bullying organization Ditch the Label and its analytics partner, Brandwatch, 1.5 million (or 15 percent) of the 10 million transgender-related comments on social media platforms over a three and a half year period starting in 2016 were found to be transphobic.

Brennan Suen, the LGBTQ program director for Media Matters, a progressive nonprofit that monitors and analyzes misinformation across U.S. media outlets, singled out Facebook as "one of the biggest bad actors." He said much of the anti-trans rhetoric found on social media has been spread by far-right publications whose content has gone viral on the platform.

Online communities and interviews were analysed using Grounded Theory (Glaser & Strauss 1967). The basic idea of this approach is that theories should be developed from (grounded in) empirical materials and consecutive analysis. While collecting data, the three stages for building a Grounded Theory were implemented. In the first stage (open coding), hundreds of codes were obtained by identifying anchors that allow the key points of the data to be gathered. Axial coding (the second stage) brought together all the codes to create new and wider categories. Finally, selective coding (the third stage) integrated and refined the categories in order to identify a core category. The core category represents the main theme of the research and may evolve out of the list of existing categories, or may be defined by using another more abstract term or phrase (Strauss & Corbin 1998). At this stage, the results of the analysis of online communities and interviews were merged together, so the identification of the core category was the result of both sets of analyses.

A recent report from Popular Information — a newsletter created by journalist, lawyer and ThinkProgress founder Judd Legum — found that 14 Facebook pages with a combined 7.5 million followers are exclusively posting articles from The Daily Wire, which regularly publishes anti-LGBTQ stories. The administrators for those pages claim to be unaffiliated Facebook users but appear to be centrally controlled by The Daily Wire, which would be a violation of Facebook's community standards against inauthentic behavior. The pages frequently share the same articles simultaneously and help the conservative outlet's content go viral. In September, The Daily Wire received 15,283 engagements per story on Facebook compared to



1,871 for The New York Time, 2,119 for The Washington Post and 6,824 for The Huffington Post, according to the Popular Information report.

In a statement to NBC News, Jon Lewis, the vice president of The Daily Wire, claimed the company has “always worked to comply with Facebook policy.”

A Facebook spokesperson told once told to an online news media that the company announced the new transparency policy earlier this month that it is applying to the 14 pages exclusively promoting The Daily Wire’s content, but the spokesperson did not confirm how the policy would be applied or whether the pages would removed.

Online communities and interviews were analysed using Grounded Theory (Glaser& Strauss 1967). The basic idea of this approach is that theories should be developed from Transphobia goes beyond the far-right mediasphere. Katelyn Burns, a Washington, D.C.-based freelance journalist who is transgender, said she regularly deals with harassment on social media, most of it from “trans-exclusionary radical feminists,” commonly referred to as “TERFs” or “gender critical feminists.”

Reference:

Olu Jenzen (2017) Trans youth and social media: moving between counterpublics and the wider web, *Gender, Place & Culture*, 24:11, 1626-1641, DOI: [10.1080/0966369X.2017.1396204](https://doi.org/10.1080/0966369X.2017.1396204)
<https://www.nbcnews.com/feature/nbc-out/frightening-online-transphobia-has-real-life-consequences-advocates-say-n1089456>
<https://www.hrc.org/resources/violence-against-the-transgender-community-in-2019>





Impact of Globalisation on Sustainable Development in Indian Prospects

Dr. Aneeta Sen

Assistant Professor

(Economics)

Govt. P.G. College Pipariya

Dist. – Hoshangabad

Email- drsenaneeta@gmail.com

Abstract:

The term globalization means interconnection of economies or countries as a whole with the flow of goods and services, ideas, technologies, capital, finance, jobs and people. Globalization has two facet related to benefits and losses. Globalization describes interdependencies of nations all over the world. Since the globalization introduced in Indian economy as economic reforms there is so much increase in economic growth has been found. Along with rise in economic growth, Indian Economy found so many barriers or hurdles in the path of development. Not only India but the globe finds difficulties with globalization like rise in income but also rise in income inequality, overuse of natural resources, climate change, environmental degradation, other trade conflict and last but not the least, sustainable development. This paper tries to study, how the globalization impacts Indian economy and the sustainable development and what should be the method to sustainable development with globalization.

Keywords- *Globalization, Impact, Economy, Sustainable Development.*

1. Introduction

1.1 What Is Globalization..?

Globalization is the spread of goods and services, technologies, capital, finance, information, and jobs across national borders and cultures. In economic terms, it describes an interdependence of nations around the globe fostered through free trade.

According to WHO “Globalization, or the increased interconnectedness and interdependence of peoples and countries, is generally understood to include two inter-related elements: the opening of international borders to increasingly fast flows of goods, services, finance, people and ideas; and the changes in institutions and policies at national and international levels that facilitate or promote such flows. Globalization has the potential for both positive and negative effects on development and health.” It can be defined simply as an expansion of economic activities across political boundaries of nation states. According to Giddens “Globalization can thus be defined as the intensification of worldwide social relations which link distant localities in such a way that local happening are shaped by events occurring many miles away and vice-versa.”

The primary work of the globalization is to expansion of trade and investment on global scale. Globalization has set in motion a process of far-reaching change that is affecting everyone. Globalization has both positive and as well as negative impacts on various sectors of Indian Economy. So Globalization has taken us a long way from 1991 which has resultant in the advancement our country. Globalization describes a process by which regional economies,



societies and cultures have become integrated through a global network of communication, transportation and trade. This term Globalization is used to define economic Globalization.

1.2 What Is Sustainable Development..?

Sustainable development is aimed at the needs of present without compromising the ability of future generations to meet their needs. Sustainability is based on the idea that human activities are dependent on environment and resources. Health, social security and economic stability of society are essential to define quality of life. Sustainable development would not be possible without the contribution of each individual. Sustainable development is in the news every day as the world copes with climate change, biodiversity loss, conflicts and resource scarcity. "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (IISD Org.) The concept of sustainable development can be interpreted in many different ways, but at its core is an approach to development that looks to balance different, and often competing, needs against an awareness of the environmental, social and economic limitations we face as a society. Sustainable development is a concept that appeared for the first time in 1987 with the publication of the Brundland Report, warning of the negative environmental consequences of economic growth and globalization, which tried to find possible solutions to the problems caused by industrialization and population growth. The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030.

2. Research Objective

Every study has some objectives and goals which helps the researcher to concentrate on the particular work. The present study has also objectives which are as follow-

- To study the concept of globalization and sustainable development.
- To study the impact of globalization on Indian Economy.
- To study the impact of globalization on sustainable development.
- To find the solution and recommend some possible measures.

3. Research Method

This study is purely based on the secondary data collected from different sources i.e. Journals, Magazines and published data relating to Indian Economy, Globalization and Sustainable Development. Various Journals, books and studies on the subject have been referred in this study. Different sites have also been searched for collection of data for this study. This study is conceptual and descriptive by nature.

4. Impact Of Globalisation On Economy

Indian economy had experienced major policy changes in the early 1990s. The new economic reform is popularly known as Liberalization, Privatization and Globalization. The Indian economy was in major crisis (financial crisis) in 1991. Major reasons behind the situation of financial crisis was stagnant economy, mounting fiscal deficits, current account deficits in international trade and high rate of inflation during the preceding many years. Towards the end of the 1980s, India was facing a problem of balance of payment crisis. The current account deficit in 1990-91 massively weakened the ability to finance deficit. The trade deficit increased



from Rs. 12,400 crore in 1989-90 to Rs. 16,900 crore in 1990-91. The GDP ratio increased from 2.3 in 1989-90 to 3.1% in 1990-91. India's foreign exchange reserve stood at Rs. 5,277 crore in 1989 which was declined to Rs. 2,152 crore in 1990. Such a situation demanded some drastic steps including major structural changes in Indian Economic policies. At this point, Indian Government had no option but to accept the precondition of joining stream of Globalization. Globalization in India is generally taken as integrating the economy of the country with the rest of the world. Globalization in India provides the facilities of foreign direct investment to foreign companies to invest in different sectors of the economy of India. Globalization removes the barriers to the entry of multinational companies and allows Indian companies to collaborate with foreign companies. It also removes the quantitative restrictions of import like tariff, import duties, import quota etc.

The adaptation and process of globalization in Indian Economy came down the fiscal deficit, raised the real GDP by 7% in the period of 1991-2001, which was 5.6 in 1980-90 and 9.7% in 2007-08. Foreign exchange reserve increased by \$39 billion in 2000-2001, \$145 billion in 2005-06, \$351.83 billion 2015-16 and as on June 2020 it is \$505.57 billion. Foreign Direct Investment in India increased after globalization it was \$37,745 million in 2009-10 and \$64,375 million in 2018-19. FDI inflows have recorded a steady growth every year. A large number of employment opportunities generated, domestic consumption increased due to increase in income. Consumers have also benefits of choices or options they got things in low prices. Where there globalization has some benefits for the economy it also brought some difficulties too like interdependency of the nations. Indian economy is not only the single operator to run economy due to globalization. This has been proved in present condition when China is doing wrong things, which is not justifiable, even threatens the India on boycotting Chinese product. India even other countries can't take any strict decision against the china because maximum countries across the world are using his products and have no substitutes of his products. So we can say interdependency is the cause of globalization which is not good. Globalization gives exposure to the foreign brands and abolished the Swadeshi Movement of Mahatma Gandhi. Removing the restrictions of the imports local market is getting suffered. Agriculture sector which is the backbone of the economy has been neglected. Due to technology exchange unemployment increases and due to over production and over use of resources the economy is suffering and facing many problems like ecology degradation, biodiversity loss etc. Globalization has two faces it provides help in the form of capital and finance and on the other hand it is dangerous too.

5. Impact of Globalisation On Sustainable Development

Globalization has advantages that cover many different areas of an economy which has been discussed in early chapter and can be clearly seen in present era of modernization in India. It mutually developed economies all over the world and increased social, financial, cultural exchanges. The most powerful impacts of globalization can be seen on economies of the world. Globalization fostered global trade as well a rapid global industrial development that allowed the rapid development of many of the technologies and commodities we have available nowadays. Along with advantages of globalization it impacts adverse too. There are four factors that accelerate globalization that is, the market imperative, IT imperative, Resource imperative and ecological imperative. Due to globalization, interdependency between nations and their activities one and on other adversely impacted natural resources, misallocation of land, mineral



resources, wealth etc. The undeveloped nations need the capital, technology, and brainpower of the wealthier countries, while the First World economies are progressively dependent on the natural and human resources of the developing nations. For example over production of food crops, overuse of land makes land monotonous and infertile. Extensive cultivation has helped to sustain people throughout the world but it has introduced several environmental problems. On top of overuse, land expansion is also a critical means of land degradation. As the availability of cultivable land decreases, forest land and hillsides are used to expand. Globalization does have great effect on the ecologies and environments of nations which need to safeguards that lessen the negative effects rather than exploiting without regard to such concerns. The ecological consequences of increasing globalization turn out to be the main problem of the future. Biodiversity is also negatively affected when ecological processes are disturbed. Much concern has been generated in recent times regarding the pivotal role played by multinational enterprises in determining the environmental implications of continuing economic globalization. Yet, although some commentators have cast multinationals as an enemy of sustainable development, others have cast them an ally, at least potentially. The greatest challenge of globalization represents sustaining the increasing prosperity for all without over-exploiting the environment and natural resources. The above-mentioned challenges cannot be solved by single actors alone, neither public nor private ones. The CO₂ emissions, as the most mentioned ecological challenge, do not stop at national borders; neither can inflation or unemployment in interdependent markets be controlled by one state alone. Also pandemics, to come back to that example, do not know borders. but require effective partnerships.

6. Conclusion And Recommendations

The idea that globalization has some merits and some demerits for each facet makes it difficult to understand whether or not globalization is sustainable. Globalization has its own negative as well as positive impacts in modern era. It is the government which can reap the benefits from globalization if it prepares and implement pro-people policies to attract foreign direct investment. Our policy implications have been against common man. The common people have been facing many challenges in this modern era, such as lack of water, electricity, poverty, hunger, unemployment, climate change, pollution etc. these are the results of inequality, govt. policies, modern technologies and this results un-sustainability. It can be resolved by promoting sustainable development towards social progress, environmental safety along with economic development. Sustainable development is not only the Govt. policy makers' cup of tea it need the flavor of public awareness and feel of responsibility. If the government and the public decide to save our resources, environment, land nobody can stop them but it needs patience, awareness, sacrifice and sense of responsibility towards our motherland and future generation. If globalization does not succeed in achieving sustainability in all three dimensions - economic-ecological-social - it will increasingly come under pressure. Pandemics such as the potential mutation of the bird flu, virus, globally organized crimes and climate change are further challenges, which question the benefits of globalization. The study can be concluded with the request of the world's policy makers, people of the earth not only India because sustainable development is the need of the globe, so we all have to save it by scarifying some comfort of ours not the development.



References:

- Raghunath. (2017). Globalization and Its Impact on Indian Economy. International Journal of Research - Granthaalayah, 5(6), 544-549.
- Sharma Amit. (2017). Impact of Globalization on Sustainable Indian Economy. International Journal of Business Administration and Management. Vol. 7 (1). ISSN 2278-3660.
- Kumar Anil (2015). Globalization and Its Effects on Indian Economy. Paripex - Indian Journal Of Research. Vol. 4(8), 368-369.
- Makasi Africa. (2015). Globalization and Sustainable Development: A Conceptual Model. Mediterranean Journal of Social Sciences. Vol. 6 (4), 341-349. ISSN 2039-2117.
- KUMAR PRASANNA N. (2013). Globalization and Its Impact On Indian Economy. Innovare Journal of Business Management. Vol 1(3). Issn- 2321-6816.
- Popli G.S.& Kumari Sima (2012). Study on the effects of Globalization & Sustainable Development: India's Perspective. <https://papers.ssrn.com>
- Zollinger Urs. (2007). The Effects of Globalization on Sustainable Development and the Challenges to Global Governance. Paper on behalf of the Swiss Agency for Development and Cooperation (SDC) on the occasion of the Certificate Course "Sustainable Development" at the University of Berne.
- Cardone Patrick et.al. The Implications of Globalization on the Sustainability of Society.
- Ayush.ilnu. Globalisation & its impact on Indian Economy: Development and Challenges. Available on <http://www.legalservicesindia.com/article/1018>
- Das Madhurima
- TWN Third World Network. Effects of globalisation on sustainable development after UNCED. <https://www.twn.my/title/rio-cn.htm>
- http://granthaalayah.com/Articles/Vol5Iss6/66_IJRG17_A06_442.pdf
- <http://www.sd-commission.org.uk/pages/what-is-sustainable-development.html>
- <https://www.worldwidejournals.com/>
- <https://doi.org/10.5281/zenodo.822676>.
- <https://www.investopedia.com/terms/g/globalization.asp>
- <https://www.who.int/topics/globalization/en/>
- <https://youmatter.world/en/definition/definitions-globalization-definition-benefits-effects-examples/>
- <https://www.ingentaconnect.com/content/intellect/tmsd/2002/00000001/00000001/art00004>
- <https://www.inderscienceonline.com/doi/abs/10.1504/IJSD.1998.004200>
- <https://web.wpi.edu/Pubs/E-project/Available/E-project-101810-122217/unrestricted/IQP.pdf>



Reflection of Globalization in Chimamanda Ngozi Adichie's *Purple Hibiscus*

Dr. Manoj Limbraj Somwanshi

Asst. Prof., Dept of English,

Shankarrao Jawale Patil Mahavidyalaya, Lohara Dist. Osmanabad

Email- manojlimbrajsomwanshi81@gmail.com

Mobile No. 9158528277

Abstract:

Literature is known as the mirror of the life and society, that it reflects all aspects of life of the environment in which a literary work sets. The present papers attempts to study the global and national outlook of Chimamanda Ngozi Adichie's novel Purple Hibiscus. The novel portrays the social, political, cultural, economic and historical issues in this era of globalization. It covers the issues like business, economy and also breakdown of families. The Nigerian Civil war caused many disastrous among the society. The economy of Nigeria had caused regress and downfall of country. Her contemporary writers also wrote about the issues of globalization in their writings. Adichie had portrayed the realistic picture of Nigerian culture in her novel Purple Hibiscus. Post-colonial literature depicts the slight development in various sectors.

Key Words: Globalization, Nigeria ,Socio-cultural, Political, Civil War.

Introduction

The concept of Globalization is not new, it has been around since the beginning of time, it has manifested itself through the colonies of European countries to colonize Africans and divide them. African countries became free from colonization and the influence of colonial master is increasingly being felt. The culture and globalization is also related to each other. The literature is the mirror of the society. Human beings are needed luxury and entertainment, however, science and technology has been developing day by day. We noticed improvement in literature and globalization has reflected upon literature and culture as well. The present age is the of online resources and the world is coming nearer. One person can directly be contact to each other within few seconds.

The trends in the money market affect literature and language. Because the literature is product of society. It has always been subject to socio-political and economic pressures. Literature is life and the every individual experience goes though in life has always been the subject matter of literature. In the words of Mary Modupe Kolawole, "from the beginning, literature ... was often a recreation of cultural histories with political and ideological undertones". Literature reflects globalization from the past including the myth, legends, history and cosmological experience. The myth of Oedipus for instance has always existed with the people of Greece long before Sophocles carved out a story for the theatre out of it. In the same vein, some of the historical tragedies of William Shakespeare are written from the monarchical history of the English as found in Raphael Holinshed's Chronicles of England.

The myth of Oedipus for instance has always existed with the people of Greece long before Sophocles carved out the story for the theatre out of it. As we thought about the history of the tragedies of William Shakespeare it has been roots of British culture and globalization. Particularly Raphael Holinshed's Chronicles of England, Ireland and Wales which contains historical facts about the past kings and queens of those countries. The novel Purple Hibiscus is



the reflection of globalization in Nigerian concept. The impact of Globalization upon Nigeria is one of the part of influence of American, European and Western Culture. During colonial Era they had suppressed by foreign white settlers and they had nothing to project. So colonized countries had less developed in all spheres of knowledge and development. The Nigerian Civil war is the event which gives birth to most of the literary work in Nigeria.

The Biafra War has generated an impressive body of literature that literary critics have come to regard about historical event as important in both the periodization and the aesthetic development of Nigerian literature. The characters, Onukaogu and Onyerionwu also confirm the fact that “up to the present time, the Nigerian Civil war has not ceased to generate literature and in all genres, too”. Most of the writers in Nigeria had written about the historical event. They didn't portrayed the history but added their own creativity. Specifically it gives birth to creative writing in Nigeria. The novel *Purple Hibiscus* is also the creation of history and new ideas of local identities. They wrote about Nigeria and particularly about African strategy in the light of globalization. The present work of Adichie is perfectly fits in the structure of globalization. Adichie focusses many issues about the development of Nigerian Literature, culture and local progress in the era of globalization. Her creative writing digs up those issues that have continued to dog Nigeria's footsteps in her bid to develop in an era of globalization. She had proven her country is one step ahead in this era of globalization.

The horrors of Nigerian Civil war are reflected in the present novel, *Kambili and Jaja* lives uncertain along with the whole nation. She has used Nigerian language throughout and it adds the reality of the actual condition in the country. These innocent children faced evil circumstances during the war situation. Through such circumstances they knew the reality of life in the age of globalization. *Kambili Achike* the narrator of the novel lives with her father Eugene, mother Beatrice and older brother, Jaja in Enugu. She was conservative person who disliked her father's views about foreign religion. One incident occurred when she was beaten by her father that he throws his missal to her because she refuses to receive communion at church. One day the family visits Father Benedict, their white priest that Mama was pregnant and sick and doesn't want to leave the car at that time father beats Mama until she has a miscarriage. *Kambili* had ranked second in her class, disappointing Papa.

The Africans became globalized in all spheres, the Western world hegemony is openly being played at the expense of poor Africans who are exposed to foreign films, television program and also foreign goods to be supplanting the national African culture. It can simply be described as a one way flow of media programs. The western countries has hacked all the market of Africa and their local product was less. Even Media and film programs had also had the product of the American and European hegemony. The behavior of her father is different at home and in society. He was very strict at home and friendly and socialistic in the society. He was the owner of newspaper named *Standard* which is the only paper that criticize the new Nigerian Head of State.

... could illuminate works of literature by studying what gave birth to them: the intellectual and cultural environment from which they came, their sources and antecedents, authors' lives, authors' intentions, and authors' language. They believed that their approach was “scientific” because they were dealing with objective reality historically verifiable facts... (Griffith, 129- 130).



All family of Papa Nnukwu goes to their home village of Abba. They live there, but Papa doesn't speak to him because his father sticks to his traditional religion and won't become Catholic. Kambili and Jaja visit Papa Nnukwu briefly. Auntie Ifeoma Papa's widowed sister and a University professor also arrives there. She seems fearless and wish to criticize both Papa and the government. Amaka, Obiora and Chima the children of Auntie Ifeoma are precocious and outspoken. The characters in the novel have touch of global world, they are all educated and some beliefs in their own religion and Christianity. The novelist have thrown light on the Nigerian culture and it has been also developing like a global village.

The issues like poverty are discussed in the novel, Ifeoma's poverty is one of them and the constant laughter in her house fascinated by the purple hibiscuses in Ifeoma's garden. Father Amadi a Nigerian priest comes to dinner which shows their own identity. The literature of the Postcolonial period has influence of their own culture as well as British and American culture. The issues like migration, hybridity, loss of identity, multi culturalism and disappearance of rigid national identities. The impact of globalization can be found in the metropolises across the world which have suddenly become cosmopolitan and multicultural. The political strategies is also have impact upon the Nigerian Society particularly turmoil cause the Military Coup that is result of globalization. The process of globalization is decentred and it is in this context of globalized cultural regimes of new forms of domination and exploitation of multiple displacements and cultural alignments that new approached to culture and literature and new forms of writing and cultural practices emerge.

Conclusion:

The impact of globalization on Nigerian culture is reflected in the novels of Chimamanda Ngozi Adichie. The novel *Purple Hibiscus* is the blending of literature, culture and globalization. The purple hibiscus in the yard protagonist Kambili Achike is described the dawn of freedom and also improving in the globalization. The novel portrays the recent phenomenon of the emergence of the powerful post- colonial discourse writing back to the entire and asserting the identities of the African nation. Literature of Post- colonial times reflected the increased flow of people from one country to the other mostly to the land of colonizer and dealt with consequent issues like migrancy, hybridity, loss of identity, multi culturalism and disappearance of rigid national identities. The visible impact of globalization can be found in the metropolises across the world which have suddenly become cosmopolitan and multicultural.

References

- 1- Adichie, Chimamanda Ngozi. *Half of a Yellow Sun*. Lagos: Farafina, 2007.
- 2- Anyokwu, Christopher. "Postmodern Gothic and Chimamanda Adichie's *Purple Hibiscus*. *Papers in English and Linguistics*. Vol 10, 2009. 105-125.
- 3- Killam, Douglas and Rowe Ruth. *The Companion to African Literature*. Oxford: James Currying Bloomington & indianapolis Indiana University Press, 2000.
- 4- Ekwuazi, Hyginus. "NLNG has learnt from last year's literary award mistake". Interview with Adewale Oshodi. In *Arts and Review*, Nigerian tribune, Tuesday 31 August, 2010. p.31.



Land use Land Cover Change impact on Water Resources : A Review

Dr. Dede Deepak Kashinath

Assistant Professor, Geography Department,

Santosh Bhimrao Patil Arts Science and Commerce College, Mandrup, South Solapur

District Solapur

Email Id: dededeepak@yahoo.com

Abstract:

The land use change has for the most part happened locally, provincially and worldwide in the course of the most recent couple of decades and will carry on later on too. The augmentation in urbanization majorly affects groundwater and it is real worry over the couple of years to the individuals who are engaged with groundwater ponders. The development of the urbanization territory brings about reduction in penetration, which influence the groundwater revive and capacity. The land use change must be assessed appropriately utilizing traditional just as most recent methods of Remote Sensing and Geographical Information System (GIS). The overpopulation frequently prompts increment in nourishment and fuel requests with speedy change in land use design. From the period when the human advancement began, humankind's trust on condition is more noteworthy, surplus chase of advancement, solace and security has brought about expanded weight on the earth. Legitimate arranging and the board for advancement of normal assets without undermining the earth is a pivotal worry to be dealt with for the total populace. Thorough endeavors on the rate and example of land utilize change are key for appropriate usage and execution. Land use change example uncovers the pace of progress of groundwater energize. It is important to distinguish the land use change in the over a significant time span available land use, and its dispensed and potential changes are real fundamentals for arranging and the executives. The accomplishment for appropriate socio-economic upliftment of a district and nation is legitimate land use arranging and the executives.

Keywords: GIS, Land use, groundwater

Introduction:-

Water is basic for supporting life on earth. The interest of water is expanding year to year with the consistently rising populace. For masses, populace water is the essential necessity for drinking and sustenance creation. For farming segment, the supply of water for water system requires substantially more exertion as the wellspring of water is restricted and non uniform circulation example of water regarding reality (cgwb.gov.in). Contingent upon single hotspots for any object is much inconsistent and utilizing water for at least two elective sources with monetary condition is drawing the consideration of organizers, specialists, and chiefs. The possibilities of rehearsing conjunctive utilization of surface and groundwater will be better, if one comprehends the hydrological equalization cycle the different hydrological parts are evaluated on a regular reason for storm, Pre-rainstorm and Post-rainstorm seasons. Crisp water is the business of the planet. Nobody can get by without it. A definitive wellspring of crisp water is downpour and day off. Crisp water frameworks are the waterways, streams, lakes, groundwater, cavern water, ice sheets and wet terrains.



Interest for groundwater is expanding while the water assets remain practically consistent. In this way, ceaseless withdrawals of groundwater may bring about exhaustion of water table. It is important to keep up the water level variances must be kept inside a specific range over the rainstorm and non-storm seasons (www.sys.virginia.edu). Inspire of the great normal accessibility of groundwater, there are a few territories in the nation having shortage of water. From days of yore, in most recent couple of decades the essentialness of groundwater has expanded as it is one of the real wellspring of water for the sustenance generation in India.

The encouraged water is exposed to different procedures, for example, block attempt, vanishing, and surface spillover out of which, a portion of the invade into the dirt which is utilized by plants and remaining water proceed percolating more profound into the dirt segment which adds to groundwater revive . Groundwater is personally associated with the scene and is helpless against the anthropogenic exercises on the land surface. Land use impacts of groundwater assets through changes in recharge and by changing requests for water (David N. Lerner 2009).

Water is a delicate issue for the presence of every single living life form. Just couple of utilization salt water like coral reefs, warm blooded creatures like blue whale, jellyfish and so forth however larger part of living life forms must approach new water to live. Hardly any earthbound warm blooded creatures, particularly desert rodents make due without drinking yet they do multiply water through the digestion of oat seeds and they additionally have versatile highlights which encourages them to moderate water to the most extreme degree. Saline water in seas, oceans and saline groundwater make up about 96.5% of it. 2.5–2.75% is crisp water, including 1.75–2% solidified state in ice sheets, ice and snow 0.5–0.75% as new groundwater and soil dampness, and under 0.01% of it as surface water in lakes, marshes and waterways.

Ongoing exercises conveyed or done for the sake of human advancement has influenced the amount and nature of groundwater. The expansion in the industrialization and fast populace development has brought about quick increment in land-use change marvels in numerous regions (J. Dams, 2008). The board techniques on the advancement of groundwater asset while the developing interest for water by networks and ventures. For instance, Urban/Land use, Cropping Pattern, Industrialization and so forth. The interest of water is expanded; this interest is meeting with groundwater.

The effect of urbanization involves in groundwater amount and subjective examinations. Expanded in urbanization, diminishes penetration. Land use arranging and the board methodologies are key for improvement. It has been accounted for that in numerous pieces of the nation the water table is declining at the pace of 1-2m/year.

Review Of Literature:

Groundwater is the water held underground in the dirt or in pores and cleft in shake. A group of porous shake which can contain or transmit groundwater is called a spring when it can yield a usable amount of water. The profundity at which soil pore spaces or breaks and voids in shake can't hold or contain any more measure of water is known as the water table. Groundwater is revived from leaking of downpour water from pores of the upper soil layer which at last streams to the surface normally. The normally happening release regularly gathers at springs and leaks, which in the end frames desert gardens or wetlands. Groundwater is likewise utilized with



the end goal of water system, community, and modern use by building and working extraction wells.

Twenty one percent of the world's new water is groundwater, which is about 0.61% of the whole world's water. The aggregate sum of freshwater put away in the day off ice pack, including the north and south shafts is generally equivalent to overall groundwater stockpiling. This makes it critical asset that can be utilized as a characteristic stockpiling that can cushion against deficiencies of surface water, as in during times of dry season.

Human exercises have applied little to huge scale changes on the hydrological cycle. The momentum situation in regards to groundwater assets proposes that all around there is a water emergency as far as amount (accessibility) and quality. Along these lines there is an extraordinary requirement for the evaluation and observing of value and amount of groundwater assets at nearby level. Land use changes are modifying the hydrologic framework and have possibly huge effects on water assets. The expansion in populace and the fast financial advancement drives land use change. (K. Schneider 2013).it is the one of the most lively investigate theme in the field of hydrology. (Wang genxu, 2005)

The assessment of land use changes must be finished by both customary and most recent methods, for example, Remote Sensing and Geographical Information System (GIS).

Land Use Change Sway On Groundwater:

In the course of the most recent couple of decades, a noteworthy concern is the effect of urbanization on groundwater, and specifically, to those associated with groundwater amount and subjective examinations. Urbanization brings about expanded in impenetrable territory because of diminished penetration, lastly influencing the groundwater stockpiling. Because of increment of settlement region will straightforwardly affect the diminishing of ground water level. The social and financial improvement of a district lies in appropriate land use arranging and groundwater the board of the locale. Over populace has brought about increment popular, which inevitably has lead to quickened pace of urbanization that outcomes in decrease in penetration, and in this way influencing the groundwater energize and capacity.

Appraisal of Annual renew capable groundwater assets utilizing water level variance approach and exact standards, estimation of the yearly amount of groundwater withdrawal and arrangement of the evaluation units dependent on the status of groundwater use and water level pattern are the philosophy received for groundwater perception

Effect On Groundwater Energize:

As there is increment in use of groundwater a noteworthy concern is additionally the lessening in pace of energize of groundwater. The pace of energize is diminishing exponentially with time.

Earth's biggest freshwater asset is Groundwater. Decreased unwavering quality of surface water supplies in the western US with anticipated environmental change during the following century may bring about expanded dependence on groundwater. Boundless changes in LU/LC have happened because of agrarian extension. In the previous 300 years, developed cropland has expanded by variables of 70 in the US and 5 internationally (Richards, 1990).It is imperative to see how land use change impacts groundwater energize, particularly for areas that are experiencing fast urbanization and there is constrained surface water. In this investigation, the hydrological forms and energize capacity of different land use types in Guishui River Basin,



China (in Beijing Municipality) were broke down. The outcomes show that groundwater energize represents just 21.16% of the precipitation, while 72.54% is lost as evapotranspiration. The yearly lumped groundwater revive rate diminishes in the request for cropland, meadow, urban land, and woods. Land use change has brought about a decline of 4×10^6 m³ of yearly groundwater revive in the examination region, with a spatially arrived at the midpoint of pace of 100.48 mm/yr and 98.41 mm/yr in 1980 and 2005, separately. This variety has fundamentally originated from an expansion of urban region and provincial settlements, just as a reduction of cropland.

Another issue with groundwater is the defilement of the water. Being a sustainable source groundwater must be shielded from pollution. Many creating nations have received the idea of a zone of security for regions containing. In India, one such territory is Tirupur, a bone-dry locale and quick extension of the material business has taken. Material creation, especially coloring and fading is water concentrated and produces enormous amounts of profluent. One of the most noteworthy difficulties for the Tirupur material industry today is water for fading and transfer of gushing.

A training, for example, escalated water system in significant channel directions, which results in overexploitation of groundwater, has presented major issues for groundwater supervisors in India. Ongoing inquires about have demonstrated that the water table is declining at the pace of 1–2 m/year (Singh 2010) in numerous pieces of the nation. On the off chance that these issues are ignored, at that point the day where there is issue of water shortage is not far. The water falls in light of diminished soil invasion, for example through non-preservation cultivating procedures and compaction (Tejwani, 1993). What's more, substantial touching may prompt decreased penetration and groundwater energize (Chomitz and Kumari, 1996). On the off chance that the penetration limit is generously diminished, this can prompt water deficiencies in dry seasons, even in locales where water is generally bounteous, as on account of moving development in Cherapunji area, India (FAO, 1999). Groundwater revive can be decreased as a result of planting of profound establishing tree species, for example eucalyptus (Calder, 1998).

Groundwater revive is likewise influenced via land use and land spread in semi-dry or bone-dry territories. Varieties in revive related with LU/LC changes can impactsly affect groundwater quality since thick unsaturated zones in semiarid and dry locales contain a repository of salts that gathered more than a huge number of years (Allison et al., 1990; Phillips, 2003; Walvoord et al., 2003) and can be flushed into fundamental springs.

China have been chosen for study, bringing about that groundwater revive underneath common meager little grass was 100 mm/year, yet the transformation to winter wheat around 100 years back has decreased groundwater energize to 55 mm/year. (Tianming,2010). In parched and semi-dry territories, groundwater asset is a touchy factor of biological condition and keeps up vegetation in normally happening desert springs, just as the social solidness and economy in this desert condition. An exact comprehension of the spatiotemporal changeability of groundwater is exceptionally for making sensible arrangements of desert spring advancement and guaranteeing environment supportability (Wang, 2015)

It is critical to realize how land use change impacts the groundwater release particularly for districts that are experiencing quick impenetrability. In this examination, the hydrological procedure and revive accessibility of different land use types in guishui stream bowl, china were



contemplated. it was discovered that groundwater energize predicts diminishes arranged by cropland, prairie, urban land and backwoods respectively.

The effect of urbanization involves in groundwater amount and subjective investigations. Expanded in urbanization diminishes invasion. It has been accounted for that in numerous pieces of the nation the water table is declining at the pace of 1–2 m/year (thirdworldcentre.org). The amount and nature of groundwater are changing because of human action. Since the time of industrialization and fast populace development, land-use change wonders have firmly quickened in numerous locales which legitimately affecting the hydrology of the catchment region (J. Dams, 2008)

The impacts of land use change on hydrology leads at present to the outcomes that convey a considerable amount of vulnerability. Evident impacts are that a timberland spread will expand the evapotranspiration, and that urbanization will decrease evapotranspiration and penetration and increment surface spillover..

Effect On Groundwater Storage:-

The momentum land use change is record throughout the most recent 150 years, which has significant effect on water cycle designs. A lot of this land has changed to agrarian that caused a huge loss of wetlands and woods. In the most recent decades, couple of horticultural grounds has been moved to urban uses because of urban spread. The land use effects demonstrate the poor water quality.

The quick increase in impenetrable territory has brought about diminishing in penetration of ground water. The weariness of ground water stockpiling due to previously mentioned truth and furthermore extraction of more groundwater to satisfy the interest. Forestation in the examination territory has brought about higher penetration to the spring in numerous areas inside the investigation region. The investigation saw expanded social and monetary state of the individuals of the examination region because of the water system framework that guarantees round the year development. Indira Sagar Canal Command has upgraded the nourishment generation in the region and state overall. A significant component of the water cycle that depicts the loss of water from the groundwater compartment to surface waters is Base stream release. Groundwater release is affected by atmosphere, watershed, and land use/the executive's conditions. Woodlands are a significant segment in the adjustment of groundwater release and stream. This has added to a critical diminishing in the base stream release, in charge of the support of the stream during the dry winter season. To survey the hydrological and monetary advantages of three land protection programs in the bowl, an exact relationship was gotten between the base stream record and the standardized bowl bend number, adjusted with watched stream and precipitation information. The outcomes show that if reforestation and best administration practices are executed in the bowl, up to 755 x 106 m³/an of extra base stream release would result during the dry season, with extra incomes up to US\$ 1.03 million every year for the water service organization (Henrique et al., 2011)

To explain the connection between landuse changes, the reductions in groundwater table, land use changes. The outcomes appeared the territory of exposed sandy land in the investigation locale strongly diminished. Rural land and woodlands were the two noteworthy ones for water utilizations separately.



Effect On Groundwater Quality:-

Freshwater is an important characteristic asset whose amount and quality is fundamental for supportable improvement. The nature of water has as of late progressed toward becoming as significant as its amount since water quality legitimately influences human and environmental wellbeing and the utilization of water assets. Groundwater age, and its effect on contemporary water science, should be precisely portrayed to evaluate the transiently fluctuating effects of land use on water quality. The time slacks between solute contributions at the land surface and effects on stream science can be a significant factor for overseeing area use in provincial watersheds. (Chavare, 2020) The investigation uncovers a fast crumbling of groundwater quality related to the expansion in developed land with answered sanitation and poultry ranches. Occasional fluctuation of the groundwater quality was additionally evaluated.

Sewage transfer plant contributes the most in sully of groundwater in the zones where septic frameworks are stuffed as in subdivided tracts in rural regions and in regions where the bedrock is secured by immaterial measure of soil. Fecal microscopic organisms, including Coliform and Escherischia coli, are the ones, which for the most part debase groundwater, and these are utilized as a bio-observing instrument for drinking water quality. The gastrointestinal tract of people and other warm-blooded creatures is the home of fecal coliform microorganisms. The hints of these microscopic organisms in groundwater show the corruption by human or creature night soil and might be identified with septic tank squander.

Water quality appraisal includes assessment of the physical, synthetic, and organic nature of water in connection to common quality, human impacts, and planned uses, especially utilizes which may influence human wellbeing and the soundness of the amphibian framework itself.

Land Use Change Sway On Surface Water:

The fundamental purpose behind land use change example is the quick improvement in financial, which incorporate difference in cropland to urbanization, just as changes inside classes, for example, an adjustment in harvests or yield revolutions. Especially in districts where restricted water is accessible, land use changes may bring about an addition of water shortage and accordingly add to a decrease in expectations for everyday comforts. This is for the most part valid on account of the quick creating city like Pune in India. The real land use changes that were perceived were an expansion in urbanization from 5.1 % to 10.1 % and farming from 9.7 % to 13.5 % of the catchment territory during the 20 years. Urban development was generally experienced in the eastern part and change to cropland in the mid-northern piece of the catchment. Urbanization lead to ascent of water yield by 7.6 %, and a related decrease of evapotranspiration, while the expansion of agrarian zone brought about an expansion of evapotranspiration by up to 5.9 %. (K. Schneider et al 2015)

Conclusion:-

Hydrologic impact of land use change can be critical and have an assortment of worldly and spatial outcomes both positive and negative for people. The interest of water increments as gauge world- wide, incorporating into those territories, which are as of now encountering high water-stress. Certain land use and land spread changes, some of which are going on at an expanding rate, and have unmistakably negative effects on water assets.



The effect of urbanization on groundwater has a noteworthy worry over recent decades, and specifically, for those engaged with ground- water amount and subjective investigations. Addition in impenetrable territory because of urbanization brings about diminished invasion, lastly influencing the groundwater stockpiling.

Existing writing showed that progress has been made in distinguishing the potential outcomes of different land changes and groundwater the executives, however there stays a reasonable need to improve the instruments accessible to water asset organizers to anticipate and deal with the particular effects of land change on Groundwater.

References:

1. Ahmed, M.F. (2010), Environmental Engineering for Sustainable Development, Proceedings of the Specialized Seminar'10: Sustainable Development & Environmental Friendly Building Materials, Department of Civil and Environmental Engineering, Shahjalal University of Science and Technology, Sylhet: 7-12
2. Allison, G. B., et al. "Land clearance and river salinisation in the western Murray Basin, Australia." *Journal of Hydrology* 119.1-4 (1990): 1-20.
3. Calder, I. R. (1993): Hydrologic effects of land-use change, in: *Handbook of hydrology*, edited by: Maidment, D. R., McGraw-Hill, New York, USA, 13.1-13.50
4. Chapman, Debora. "UNESCO/WHO/UNEP." *Water Quality Assessments-A Guide to Use of Biota, Sediments and Water in Environmental Monitoring-* (1996)
5. Chomitz, Kenneth M., and Kanta Kumari. "The domestic benefits of tropical forests: a critical review emphasizing hydrological functions." (1996)
6. Dhirendra Kumar Singh and Anil Kumar Singh, (2002), *Groundwater Situation in India: Problems and Perspective*. Volume 18, Issue 4.
7. Henrique M.L. Chaves, Ana Paula S. Camelo & Rejane M. Mendes, 2011. *Groundwater discharge as affected by land use change in small catchments: a hydrologic and economic case study in Central Brazil*. 2011 by Taylor & Francis Group, LLC



Awareness Regarding Learning Disabilities Among Elementary School Teachers

*** Prof. Ramkumar Garg,**

Principal Guru Dronacharya College of Nursing, Yol, Dharamshala
Principalnsg9@gmail.com 9355641979

****Dr. Bhartendra Sharma,**

Associate Professor, Amity University Haryana
Bsharma2@ggn.amity.edu 8130347768

*****Dr. Prabha Garg**

Professor Guru Dronacharya College of Nursing, Yol, Dharamshala
gargprabha36@gmail.com 7015798634

Abstract:

*Elementary School teachers educate children's from pre-school playgroup up to the eighth grade. They introduce children's to the educational basics: numbers, language, science and socio studies. They also help children's expand into healthy confident, socially aware young people and work closely with parents to help the children's for their full potential. **Learning disabilities** are problems that affect the brains ability to receive process, analyze, or store information's. **Awareness** is knowledge that something exist, or understanding of the situation or subject at the present time based on information or experience. **Objective** of study was to assess the level of awareness regarding learning disabilities among elementary school teachers. **Material and Method** Non- experimental research approach was used to assess the level of awareness regarding learning disabilities among elementary school teachers. Total 100 samples were included in study form selected schools of District Dholpur, Rajasthan. Descriptive and Inferential statistics was used for data analysis. The study result revealed that majority of elementary school teachers having average level of awareness regarding learning disabilities and significance association was found with education of teachers($p > 0.05$).*

Introduction:

A teacher plays an important role in any educational system. Teacher is an artist who moulds and shapes the physical, intellectual and moral power of children's. Often the children with severe learning problems enter into the special schools meant for them. But many students with learning disabilities are admitted in normal schools and fail to succeed in their education and eventually quit school early.

At the primary level the teacher should play a vital role in identifying children with learning disabilities. Learning disabilities in school aged children are one of the common problems that need special attention from family, neighbours, social circles and teachers. The source of best support and good resources should be found in the school environment by teacher. The right type of teacher with right type of knowledge and skills or competencies can do better justice to the children with Id than teacher with general pedagogy backgrounds. The teachers require specific abilities to knowledge of different type of learning disabilities, causative factors, development of instructional strategies, apart from given guidance and counselling.

Objectives:

1. To assess the level of awareness regarding learning disabilities among elementary school teachers.
2. To find out the association between awareness of learning disabilities with selected socio-demographic variables

Methodology:

A non experimental descriptive design was used & purposive Non probability sampling technique was used. Setting of the study was selected schools of Distt Dholpur Rajasthan. Present study sample size was 100 elementary school teachers. Data was collected through questionnaire & the questionnaire consists of two sections. The first section consists of demographics characteristics of participants. The second section consisted of structured questionnaire to assess the level of awareness regarding selected learning disabilities among elementary school teachers. In present study, content validity of the tool was determined by expert opinion and suggestion on relevance of the item .The data were analysed by using descriptive & inferential statistics.

Results

Table 1: Demographic details of the Respondents: N=100

Demographic characteristics	Frequency(f)	Percentage (%)
Age (in years)		
25-32	39	39%
33-40	33	33%
41-48	12	12%
Above 48	16	16%
Gender		
Male	40	40%
Female	60	60%
Marital Status		
Married	22	22%
Unmarried	78	78%
Having Children		
Yes	12	12%
No	88	88%
Teaching Experience		
0-3	44	44%
4-6	17	17%
7-8	14	14%
Above 8	25	25%
Educational Status		
Bachelor	78	78%
Master	12	12%
B.ed	10	10%
CLASS TAUGHT		
1-3 CLASS	8	8%
4-6 CLASS	53	53%
7-8 CLASS	39	39%

Table 2: Knowledge of elementary school teachers about learning disabilities

N=100

S.NO	Level Of Awareness	Score Range	Frequency	Percentage %	Mean±Sd
1	Poor	0-8	22	22%	11.51±2.09
2	Average	9-17	68	68%	
3	Good	18-25	10	10%	

Table 3: Association between the levels of awareness regarding learning disabilities among the selected demographic variables

N=100

Sr.No	Demographic variable	Frequency(f)	D f	Chi Square(x ²)	Table value	p-value
1	Age(in years)					
	25-32	39	3	2.7	7.8	0.4
	33-40	33				
	41-48	12				
	Above 48	16				
2	Gender		1	2.5	3.8	0.2
	Male Female	40 60				
3	Marital Status		1	1.6	3.8	0.3
	Married Unmarried	22 78				
4	Having Children		1	2.8	3.8	0.3
	Yes No	12 78				
5	Teaching Experience		2	1.1	5.9	0.5
	0-3	44				
	4-6	17				
	7-8 Above 8	14 25				
6	Educational Status		3	9.7	7.8	0.4* (S)
	Bachelor	78				
	Master	12				
	B.ed.	10**				
7	Class Taught		3	2.7	7.8	0.4
	1-3	8				
	4-6	53				
	7-8	39				

Discussion:

It was found that out of 100 elementary school teachers majority 39 (39%) belongs to age group 25 to 32 years. Majority of gender of elementary school teachers were 60(60%) belongs to female category. Majority of marital status in elementary school teachers 78(78%) were



unmarried. Majority of parenthood 88(88%) elementary school teacher don't have children. Majority of teaching experience in elementary school teachers 44(44%) having experience 0-3 years. Majority 78 (78%) of educational status of elementary school teachers having bachelor degree. Majority 53(53%) of elementary school teachers taught 4th-6th class

There was significance association was found with education of teachers ($p \geq 0.05$) & no significant association found between the level of awareness regarding learning disabilities with selected socio-demographic variables i.e. Age, Gender, Marital status, having children, Teaching experience, and Class taught.

Conclusion:

This study assessed the knowledge of elementary school teacher about learning disabilities among children. The government efforts of creating awareness & training of elementary school teachers about learning disabilities among school children. The findings of the study demonstrated that In elementary school teachers, the majority (68%) having average level of awareness regarding learning disabilities and (10%) were having good level of awareness regarding learning disabilities & there was significance association was found with education of teachers($p > 0.05$).

Recommendation: Based on findings the following recommendation are as follows:-

1. The study needs to be replicated on a large sample to validate and generalize its findings.
2. Similar study can be conducted in different setting
3. Comparative study can be conducted between Rural School vs Urban Schools
4. Comparative study can be conducted between Govt School Vs Private School

References

1. Vyas JN, Ghimire SR. Textbook of Postgraduate Psychiatry. Vol.2.3rd ed. New Delhi: Jaypee brothers medical publication Ltd; 2016.
2. Galder GM, Andreasen NC, Lopez JJ, Geddes JR. New Oxford Textbook of Psychiatry Vol 1. 2nd Ed. New York: Oxford University Press; 2009.
3. Krishnakumar 4. Coping with a disability, Frontile, April (1999), Retrieved march 21 (2015), from: <http://www.frontile.in/static/fl/16081140.htm>.
4. Ghimire, S. (2017). Knowledge of primary school teachers regarding Learning Disabilities in School Childrens. Jornal of Nobel Medical College, 6(1), 29-35. <https://doi.org/10.3126/jonmc.v6i1.18084>.
5. Adebowale.O.F,& Moye G.P. (2015) Teachers, Knowledge of and attitude towards L.A. online Education Journal. Retrieved from www.org.com.
6. Ghimire, S. (2017). Knowledge of primary school teachers regarding Learning Disabilities in School Childrens. Jornal of Nobel Medical College, 6(1), 29-35. <https://doi.org/10.3126/jonmc.v6i1.18084>.
7. Bestern A, Soni N. Intensive care Manual. 6th ed. Philadelphia USA: Elsevier Publications; 2009.
8. Alhifthy, E. H., Solaim, M. N., & Alghamdi, A. A. (2017). Awareness of Riyadh's elementary school teachers about reading disability (Dyslexia). Current pediatric research, 21(4), 636-639.



9. Asian online journal Publishing group.244 fifth Avenue Suite D42, NewYork, Ny 10001.
<https://www.asianonlinejournal.com>.
10. Adebawale.O.F,& Moye G.P. (2015) Teachers, Knowledge of and attitude towards L.A. online Education Journal. Retrieved from www.org.com.
11. Kamala R, Ramganes E (2003). Knowledge of specific learning disabilities among teacher educators in puducherry,Union Territory in India. International Review of Social Sciences and Humanities; 6(1): 168-175.
12. Aladwani, Amel M.Shaye. Shaye S. A1(2013) Primary School Teachers Knowledge & awareness of Dyslexia in Kuwaiti Students Academic Journal, 132(3) Retrieved from <http://www.questia.com/library/journal/IGI-283945585/> Primary school- teachers-knowledge-and-awareness-of article details.
13. Lingeshwaran .A. Assessing Knowledge of primary school teachers on specific learning disabilities in two schools in India. Journal of Education and Health Promotion. 2013; 2:30. [DOI:10.4103/2277-9531.115807] [PMID] [PMCID].
14. Bender,W.(2011). Learning Disabilities, characteristics, identification & teaching strategies section 3 Placement, services and educational Tr.
15. Krishnakumar 4, coping with a disability, Frontile, April (1999), Retrieved march 21 (2015), from:[http:// www.frontile. in/static /fi/16081140](http://www.frontile.in/static/fi/16081140)





A Study on The Different Types of Digital Marketing Category Working Strategies in India

Mr. J. Kumaravadivelan.

M.Com.,M.Phil.,M.B.A.,Dpcp.,(Tnset),.

Assistant Professor & Head In Commerce Shift –Ii

Pachaiyappa's College For Men, Kanchipuram.

Tamilnadu - 631502

Email Id: Kumaravadivelanjt@Gmail.Com.

Whatsapp Mobile No: 9600999821.

Abstract:

A smart on-line marketing agency has sensible communication skills and then a similar is same relating to operative ways that. Once you get connected with such a company, they attend all of your queries with truth therefore as that things are clear to you. Before you finalize a deal, get in touch with them in person to read the terms of service. Another necessary face to selecting the correct paid search marketing agency is to trip their scientific discipline system and company. It's imperative to determine their scientific discipline system whether or not. It's Search Engine Optimisation friendly or not. The separate digital marketing is created this may be helpful to induce agreement and buy-in by showing the opportunities and issues and contrive a path through setting goals and specific ways that for digital equally as however you integrated digital marketing into utterly totally different business activities. The digital becomes integrated into marketing strategy, it is a core activity, "business-as-usual", however does not warrant separate bobbing up with, aside from the ways in which. If you are doing not have a technique, or maybe you have choose to review that business problems are necessary to incorporate among a strategic review, throughout this study connection the numerous kinds of digital marketing operative ways that and handling manner.

Key Words:

Traditional Marketing - Kinds of Digital Marketing – Working – Strategies.

Introduction:

In our many years of work with internet you things, we have seen the massive growth in digital marketing. Twenty some years past, you would be a fool for finance in digital marketing. But now, you are a fool if you aren't. More and more companies unit of measurement running their marketing budgets into digital. It's thought-about cheaper compared to print marketing and advertising on TV and radio. Digital marketing campaigns unit of measurement easier to line up, run, monitor and so the results unit of measurement track in a position and measurable during a very methodology that non-digital marketing and advertising can't provide. Put simply, we tend to tend to face live very among the digital age.

But for the business taking their beginning into the world of digital marketing, it will seem barely discouraging. All the word and technical nonsense can merely cause you to want a ruminant in headlights – that is not ideal. The core disadvantage that forestalls most firms from finance in digital marketing is that they don't perceive what they need. And a couple of digital marketing agencies would profit of that, providing you the 'full works'. Finance in digital marketing is also a huge decision, but you don't need to be compelled to shop for the entire



theme. Generally it is a bit PPC work to shift some seasonal product that unit of measurement on sale, or some social media marketing to grow you are following on-line. Regardless of your desires, once it involves finance in digital marketing, you would prefer to capture the right service for your goal as luck would have it for you, the Revive team has place our noggins on to come back up with an instantaneous list of the varied styles of digital marketing – thus, you may higher understand what to take a position in.

Traditional Marketing:

We tend to consider digital marketing, and we are barely biased, by no suggests that does one need to invest all of your money into a alone digital budget. Print marketing continues to be a decent because of generate some leads, but it's diminished over the years. Digital marketing is taking over, but the 'traditional' ways in which of marketing haven't been totally forgotten. However, keep in mind that print marketing is turning into less and fewer relevant, but not entirely obsolete. With everything moving towards turning into digital, you will see why. Magazines unit of measurement scan on pill devices and adverts appear on our social feeds, thus print is on the answer. it ought to be slowly disappearing, but it will totally happen eventually. So, once it involves gazing your marketing budget, maybe admit devoting extra cash to digital as crucial print.

Digital Marketing Categories:

Using digital marketing whereas not a strategic approach continues to be commonplace. I am positive many of the companies throughout this category unit of measurement exploitation digital media effectively which they may positively be getting nice results from their search, email, or social media marketing. But I am equally positive that tons of unit of measurement missing opportunities for higher targeting or optimization, the majority of firms in our analysis do take a strategic approach to digital. If you are doing not have a way, or maybe you would like to review that business issues unit of measurement very important to include at intervals a strategic review.

The most very important 10 categories of digital marketing operative ways in which unit of measurement mentioned all right one by one:

1. Search Engine Marketing(SEM):

SEM or search engine marketing is sometimes thought-about to cover every Pay Per Click(PPC) and search engine Optimisation(SEO) work. Conveyance in traffic to your computing machine via search engines isn't any sure bet, that's why SEO and PPC work to look into conveyance same traffic in through every paid and unpaid suggests that. PPC paid advertising, and SEO, that works on conveyance in organic traffic. This doesn't mean that SEO work is free, but we will get into the little print below.

Strategy:

Keywords lay at the core foundations of any digital marketing strategy. Initial you would prefer to spot the keywords that unit of measurement relevant to your business's services or product. The keywords need to be compelled to be ones that your prospective customers unit of measurement very in all probability to use once making an enquiry question. a technique easy because of begin with keywords is by exploitation Google Keyword Planner.



2. Pay-Per-Click (PPC):

PPC, or Pay-per-click, is also a sort of advertising on search engines, like Google and Bing. It's however of moving to the best of programme results pages by paid suggest that. It's referred to as PPC as results of your ad account is charged every time one of your adverts is clicked. the worth of each ad, or CPC (cost per click), depends on the quality score of your computing machine and so the selected keyword's competition. PPC campaigns are usually a brief resolution, and plenty of use it to shift product or seasonal deals, as the way to boost revenue. There unit of measurement around four spots for Ads on Google, thus getting your computing machine among the for a particular keyword are usually troublesome. SEO work is regarding your ranking being 'earned', but PPC your ranking on the first page is bought.

How it Works:

By bidding on a particular keyword or search term, you may build your methodology into the four ad areas on provide by Google. Through tools like Google AdWords, PPC professionals work on finding keywords that your computing machine will perform well and captivated to the competition, CPC is determined. Through bidding on keywords, against competitors, your ad looks in relevant search results and might charge you if a user click on your ad.

Strategy:

Many of our shoppers use every short and long-running PPC campaigns. Captivated to what you're exploitation your PPC for, it are usually either

3. Social Media Marketing(SMM):

Social media marketing is that the tactic of performing on marketing through, you guessed it, social media. With social platforms like Facebook, Twitter and Instagram (to name a few) ever growing, businesses on-line need to be compelled to speculate in therefor social media marketing so on grow their following and reach a complete new pool of potential customers. Captivated to your business kind, there's a social network out there for you. All businesses would move to urge on Facebook, but if you consider B2B, LinkedIn is that the one for you. If you're a 'visual business', then Instagram is that the best. We tend to tend to would possibly persist and on, but you get the aim. You got to get on social media if you aren't, but do you market on social media?

How it Works:

Through like campaigns and targeted ads, the goal is to grow your following on social media among the hopes of gaining tons of business through these platforms. Sites like Facebook collect data regarding your likes and interests, to boot as personal factors like age, location etc. All of this information is procurable to Facebook business users to make targeted ads to seem on a opt for demographic's news feed. These ads ar usually accustomed promote product, services or stimulate users to 'like' your page, keeping them up to this point beside your posts.

Strategy:

SMM ar usually every a long-term or short investment. Whereas maintaining social media is important, exploitation targeted ads via the service doesn't have to be compelled to continue forever – otherwise, it'd worth lots.

4. Content Marketing:

This sort of marketing is also a awfully very little whole completely different than the previous ones we've mentioned. It's not most regarding directly marketing product and services



to customers, but rather creating enriching and valuable content that enhances consumer experience. Variety of the biggest brands among the planet will actively post blogs, photos and videos with relevancy their business that unit of measurement amusing and informative too. It's what establishes your business as a whole and essentially what makes your customers like you tons of. It's like marketing your complete whereas not the aim to AN incentive to sell one thing behind your posts – simply providing information that is every enriching and interesting.

How it Works:

Through posting blogs, videos and photos, you build up a loyal shopper base that visits your computing machine for content that serves a purpose. Whether or not or not that be informative content regarding your business or trade data you share, your customers will appreciate the trouble behind every journal or video you post. It's regarding being attentive of your consumer desires and producing what they need. If your content is share-worthy enough, it will facilitate drive in traffic and possibly tons of business.

Strategy:

Content marketing got to be a long-term investment, and like SEO should be worked on constantly therefore on yield results.

5. Email Marketing:

Another reasonably marketing is email marketing, and you've guessed it, it involves email. It's a sort of marketing that sends information, offers, blogs etc. on to your mailing lists inboxes. Through an ocean of emails, your marketing email will appear, but the trick is getting it scan. Yes, it ought to emerge aboard 100s emails, and if you can't manufacture an email that's attention-getting, then it will be lost. As luck would have it there unit of measurement email marketing tools and agencies (like us), which is able to assist you. Email marketing is also a decent method of reaching your customers, interacting with them once purchases or even inflicting them a report. Be warned, inflicting unsought emails will land you a locality among the spam box. So, certify you've gathered your listing by your own suggests that and not from a third-party company. They need to be your customers or have opted into receiving your mail.

How it Works:

By exploitation your existing listing, you may manufacture a prospective list of recipients for your mail. Whether or not or not it's for remarketing or to update them on a replacement journal post, you'd prefer to send the right email to the right people. Once you've designated the mail you're getting to send, exploitation email marketing tools or a digital marketing agency *cough*, us, *cough* you may vogue an on-brand email to channel to your listing. This might herald traffic to your computing machine, or even assist you sell some product with distinctive discount codes. With the analytic tools, you may monitor things like gap rate and even what range clicked through on a link.

Strategy:

Email marketing is usually thought-about short term but is usually used as long-term. If you're inflicting out distinctive discount codes for a brief time, it are usually a brief fix to boost sales. Or if you choose on to send blogs or newsletters, to boost your computing machine traffic, it is usually used future. Merely don't send email once emails on a daily basis – people don't like that.



6. Influencer / Affiliate Marketing:

Both influencer and affiliate marketing use those in a very position of 'power', generally social media influencers or trade consultants etc. this could be to assist you in marketing a product or service to their audience. It's become tons of and tons of widespread in recent years, through sites like Instagram and YouTube, where firms will enlist a standard influencer, to plug their product or services on their social pages or affiliate websites. These collaborations can involve giving freely distinctive discount codes, sponsored journal posts or prize attracts etc. for the influencer's audience, to form some buzz around your complete and business.

How it Works:

This investment cycle entails finding someone with AN outsized following. This might get on social or in trade then approaching them with collaboration. Most would need payment or a cut of the sales that return from their audience obtaining their product or services. Then, they will manufacture posts, blogs or videos, to 'show off' your collaboration and hopefully herald tons of sales for your business. It's regarding finding the right influencer for your business.

Strategy:

Influencer or Affiliate marketing are usually a brief campaign, to help herald tons of sales or increase computing machine traffic. Influencers won't generally endlessly promote for extended than weekly or less. This could ensue to their following disengages (they get bored of seeing your product on their 'idols' feed).

7. Micro - organism Marketing:

You know those micro-organism videos you see online? Well, some companies use those as a wise type of selling. Whether or not it's teaming up with a popular organism content creator, trendy social media influencer or marketing it themselves, the thought of micro-organism marketing is to form one factor share worthy – by making it funny, on trend and topical.

How it Works:

Viral videos or photos will indirectly promote a product or service (be it the merchandise being closed or the service being utilized or simply featured), then the hopes square measure that this will be shared around social media. The basics of organism mercantilism square measure very easy. You manufacture a touch of content that is therefore compelling that folks World Health Organization move with it's going to would like to share it with their friends and family instantly.

Strategy:

This is a superb alternative for B2C businesses, and there square measure an excellent deal of influencers and content creators out there an agency can mix influencer mercantilism with organism mercantilism therefore on maximize the reach of your organism content. However, do bear in mind that organism mercantilism is one in each of the foremost hard kinds of digital marketing, but it isn't impossible to realize. An honest gap to make is by researching what has worked among the past and what has unsuccessful. If you manufacture a touch of content that goes micro - organism then not entirely are you able to see an increase in ROI, but you'll jointly generate an increase in complete awareness. At the aspect of shoppers associating positive values and organism content at the side of your business.



8. Radio Advertising:

Whilst radio used to be entirely supported radio waves, it's presently all digital. Which means, radio advertising presently falls into the realm of digital marketing (welcome to the club radio!)? Radio ads square measure a superb due to get your business or complete detected, and it's never been easier to undertake to with digital advertising.

How it Works:

You can presently use targeted radio ads for numerous locations. So, whether or not you're targeting a region or national consumer base, your radio advertising are detected by the correct people. There's jointly the selection to advertise through Spotify, for non-premium users. The ads they are going to listen to are targeted towards them supported their age, location, gender and extra – thanks to the account knowledge they provide to Spotify.

Strategy:

Look into targeted location ads if you're a region business, and if you're a national one, examine Spotify advertising to directly target a opt for demographic. Fixing Spotify ads was once quite a wordy task, but presently the leading audio streaming platform has Associate in nursing incredibly straightforward self-service ad platform. Spotify Ad Studio jointly includes a handy voice-over alternative where you type in what you'd just like the ad to sound like, which they use their own in-house voice actors to form your advertising.

9. Television Advertising:

Radio isn't the only real issue to maneuver over to digital. There square measure several selections for those that would like to advertise on TV whereas not paying expensive ad slot costs on time TV. However, even with the digital shift and social fragmentation of TV Advertising, some still take into consideration the 30-second ad as being a big advertising tool among subsequent few years.

How it Works:

Marketers square measure navigating this mercantilism channel by combining personal info regarding customers, at the aspect of utilising new delivery ways that for TV Advertising, like offered ads. They are jointly inserting TV Advertising at the very center of cross-channel mercantilism campaigns. So, if a consumer sees an advertisement on TV, they are going to jointly see it on their digital devices reinforcing the ad's message. To boot, TV ads can presently be targeted on to locations or demographics through things like Virgin or Sky TV. But, it's not merely on your TV. If you use on demand or catch up TV, adverts may additionally appear midway through your stream (like on All 4). It permits you to have targeted ads for selected audiences.

Strategy:

While TV Advertising remains as a heavy a part of the marketing mix, it's essential to adapt and pivot your strategy supported your audience's demographic and where they consume video content. Not entirely can TV Advertising reach a rapidly growing generation of shoppers UN agency square measure choosing to cut the wire from ancient TV. But, the unquiet evolution of data-targeting capabilities presently means that you will be able to modification your TV ads for audiences on the massive screen. By taking advantage of this video intelligence means that space you're able to target your made public target market with extra TV ads that square measure



specifically catered to their personal interests and infrequently which is able to build the foremost impact.

10. Mobile Advertising:

Mobile advertising square measure some things that spans across all types of digital marketing. we have mentioned on prime of whether or not it's mobile social ads, mobile search ads or even mobile TV and radio ads, every type of digital marketing. we have mentioned are transferred to mobile. Businesses all over the earth square measure shifting extra of their advertising budget into mobile as a results of customers pay longer on their mobile devices over the opposite device.

How it Works:

You can target mobile ads by audience segments or by victimization geofencing. Geofencing is one in each of the foremost trendy ways that as a result of its predicated on a consumer's physical location. This will be a lazor-focused strategy as you are able to target mobiles ads to a clearly made public and relevant audience.

Strategy:

You need to painstakingly admit the thanks to adapt your broader advertiser strategy and optimise it for the mobile device atmosphere. You would prefer to suppose that you just simply have the way smaller screen size to work with that intrusive interruptions tend to be less appreciated on mobile than the opposite device. Once you've prepared everything, you are able to launch your ad to the mobile device spectrum and begin testing conversions. You will be able to collect info by victimization key metrics once running your mobile movement therefore invests even longer in perfecting your strategy once you acknowledge that it's operative. Knowing the fine details will assist you pivot and generate a mobile movement that features a high conversion rate. You will be able to collect and analyse this info through sources like Google Analytics.

Conclusion:

Digital marketing wasn't constantly the conclusive game-changer that is of late – two to three decades past, it would square measure exceptional to line aside resources for it. Today, it's very easy to induce a well-planned digital marketing strategy off very cheap, run and even improve it. There is very little doubt regarding the actual fact that digital marketing is that they would love of the hour for every enterprise. Social media and digital marketing facilitate multiple brands and business organizations to establish the inspiration of enlargement. Many companies will offer you with a 'complete package' of varied digital marketing services whereas making you is thinking that you just would love all of them. A unique digital marketing strategy that takes your individual desires into thought is that the one you would like to like as a result of its guaranteed to yield nice results once implemented well.

References:

(i) Books and Journals:

1. Andaleeb, S.S. and Hasan, K. (Ed.), (2016), Strategic Marketing Management in Asia, Emerald Group Limited.
2. Romaniuk, J., & Nenycz – Thiel, M. (2013). Behavioural brand loyalty and consumer brand association. Journal of business research.



3. Kotler, p.(2007).marketing management analysis planning implementation and control. New delhi, india: prentice hall.
4. Kotler, p., & Keller, K.L.(2009).marketing management(13th ed.,vol.1) Upper Saddle River, NJ:Pearson Prentice Hall.
5. Shaw,E.H.,& Jones,D.G.B.(2005). A History of Schools of Marketing Thought.Marketing theory

(ii)Citation:

- 1.<https://doi.org/10.1108/978-1-78635-746-520161020>
- 2.<https://www.ama.org/AboutAMA/Pages/Definition - of - Marketing.aspx2007>.
- 3.<https://media3.bournemouth.ac.uk/marketing/02defining/02ddefining.html>
- 4.<https://www.economist.com/node/16220584>
5. Search engine: www. google.com

(iii) News Papers and Magazines:

1. THE HINDU
2. THE ECONOMICS TIMES
3. FINANCIAL CHRONICLE





Knowledge, Attitudes and Practices of Indians Towards COVID-19

***Dr. Bhartendra Sharma,**

Associate Professor,
Amity University Haryana,
bsharma2@ggn.amity.edu,
8130347768

****Prof. Ramkumar Garg,**

Principal
Guru Dronacharya College of Nursing, Yol, Dharamshala,
ram20368@gmail.com,
9355641979

*****Dr. Prabha Garg,**

Professor,
Guru Dronacharya College of Nursing, Yol, Dharamshala,
gargprabha36@gmail.com, 7015798634

*Corresponding Author: Dr. Bhartendra Sharma.

Guide & * Co-guide

Abstract

Although, all the countries have used various measures to reduce the transmission of the COVID-19 like complete or partial lockdown, travel restrictions, social restrictions etc but the effectiveness of these measures completely depend on the cooperation of the society members. The knowledge, attitudes and practices of people toward any disease play a vital role in determining a community's readiness to accept behavioural change measures from government authorities. The aim of this study was to determine the knowledge, attitudes and practice level toward COVID-19 among the general public of India. A cross-sectional online survey was conducted between 25th March and 31st March 2020. 650 completed survey were received. The data was collected by following questionnaires: demographic characteristics questionnaire, knowledge questionnaire with 10 items, attitudes questionnaire with 3 items and practices questionnaire with 3 items. Descriptive & inferential statistics were used to analyse the data. The overall correct response rate of the knowledge questionnaire was 85.11%. Most participants held positive attitudes toward the COVID-19. 83.07% agreed that COVID-19 will be successfully controlled shortly, 94.61% of people agreed that Indian can win the battle against the COVID-19 virus and 86.76% of them agreed that the government of India is handling the COVID-19 health crisis very well. Most participants (84.30%) were avoiding going to crowded areas and 84% practising proper hand hygiene, however, only 63.84% used face mask when leaving the home.

Introduction

As we all know that coronavirus disease also known as COVID-19 was first discovered in December 2019 at the Wuhan city of China. In March 2020, the world health organization (WHO) had declared it as a pandemic and issued guidelines to reduce the transmission. But presently it has spread more than 200 countries. By following the WHO guidelines, each country is making strategic plan to control its transmission like complete/partial lockdown, travel restrictions, social distancing, adopting quarantine measures, providing health care services for



COVID-19 patients. The success of government plans in controlling the COVID-19 mostly depends on cooperation of community people. The more the public will follow the guidelines issued by the government the early the COVID-19 would be controlled. If the people are negligent about the preventive instructions given by government, then it will be very difficult to control the disease. As of now, although the scientists around the world are struggling very hard to discover the vaccine/medicine effective against COVID-19 but still there is no such drug discovered. Therefore, following the prevention guidelines is the only hope now. There are many myths and false beliefs also among people about COVID-19, which are creating further confusion among general public. So, the researcher identified that there is need for assessing the knowledge, attitude and practices of Indians about COVID-19, which would help in identifying the knowledge, attitude and practice gap and further help the health personals, policy maker, government stakeholders in providing awareness on those aspects.

Objectives:

1. The study aimed to assess the knowledge, attitude and practices of Indians regarding COVID-19.

Methodology:

A nonexperimental web-based cross-sectional online survey was conducted between 20th March and 05th April 2020. Data collection was performed online using the google form platform. The call for participation was made on social media. The questionnaire consists of four sections. The first section consists of demographics characteristics of participants. The second section has five knowledge-based questions focus on knowledge of general public of India on COVID-19. This questionnaire was developed based on WHO myth busters. The third section consists of three attitude questions. To measure attitudes towards COVID-19, surveyed participants were asked whether they agreed, disagreed or were not sure that the pandemic would be successfully controlled. They were also asked about their confidence towards the government in winning the battle against COVID-19 (yes or no) and about the ability of the government in handling the COVID-19 crisis (agree, disagree, or not sure). The fourth section consists of three practice questions, to measure practices, participants were asked yes/no questions on whether they had avoided going to crowded places; wore a face mask when leaving home; and whether they practiced proper hand hygiene. By using the Google forms, the questionnaires were distributed among the general public through emails, Facebook, WhatsApp, LinkedIn, Instagram. The people were also requested to circulate the survey link among their friends, family members, colleagues. The data were analysed by using descriptive & inferential statistics.

Results

Table 1: Demographic details of the study participants:

n=650			
Demographic Characteristics	Categories	f	(%)
Age	18-30years	321	49.38
	31-50years	249	38.30
	>50years	80	12.30
Gender	Male	409	62.92



	Female	241	37.07
Education	10 th	65	10
	12 th	114	17.53
	Graduation	191	29.38
	Post graduation & above	280	43.07
Occupation	Professionals	301	46.30
	Business	211	32.46
	Unemployed	42	6.46
	Skilled worker	60	9.23
	unskilled worker	36	5.53
Monthly income	< 10000 Rs.	45	6.92
	10001- 20000	209	32.15
	20001-30000	155	23.84
	>30000	241	37.07
Source of information on COVID-19	Internet	368	56.61
	Health care professionals	68	10.46
	Television	155	23.84
	Social media	59	9.07

Table 2: Knowledge of research participants (Public) on COVID-19

n=650					
Sl.no	Questions	Correct responses		Incorrect responses	
		f	%	f	%
1	What is COVID-19?	512	78.76	138	21.23
2	Which virus causes the disease COVID-19?	539	82.92	111	17.07
3	What is the official name for the disease that is causing the 2019 novel coronavirus outbreak?	610	93.84	40	6.15
4	What type of people are at the risk of acquiring COVID-19?	516	79.38	134	20.61
5	Which body organ will be affected by the new coronavirus?	614	94.46	36	5.53
6	What are the symptoms of COVID-19?	634	97.53	16	2.46
7	How does the new coronavirus transmit/spread?	582	89.53	68	10.46
8	What happens to a person suffering from COVID-19?	415	63.84	235	36.15
9	What need to be done if a healthy person come in contact with COVID-19 infected person?	567	87.23	83	12.76
10	What are the precautions that need to be taken to protect from the coronavirus?	544	83.69	106	16.30

Table 3: Attitude of research participants (Public) on COVID-19

n=650

Do you agree that COVID-19 will be successfully controlled?			Do you have confident that Indian can win the battle against the COVID-19 virus?		The government of India is handling the COVID-19 health crisis very well.		
Agree	Disagree	I am not sure	Yes	No	Agree	Disagree	I am not sure
540 (83.07%)	44 (6.76%)	66 (10.15%)	615 (94.61%)	35 (5.38%)	564 (86.76%)	33 (5.07%)	53 (8.15%)

Table 4: Practice of research participants (Public) on COVID-19

n=650

Did you avoid going to crowded places?		Did you wear a face mask when leaving the home?		Did you practice proper hand hygiene by frequently washing your hands and using hand sanitizer?	
Yes	No	Yes	No	Yes	No
548 (84.30%)	102 (15.69%)	415 (63.84%)	235 (36.15%)	546 (84%)	104 (16%)

Discussion:

As the COVID-19 is a new virus affecting human beings severely. There were very limited studies in India related to the knowledge, attitudes and practices of general public toward COVID-19. It is therefore of utmost importance that the knowledge, attitudes and practices of the population be studied to guide these efforts. The correct response rate of COVID-19 knowledge was 85.11%. Several studies conducted in other Asian countries have indicated high levels of COVID-19 knowledge among the general population [Zhong B et al. 2020] and healthcare workers [Giao H et al. 2020].

The present study found that a large majority of participants held positive attitudes toward overcoming COVID-19. High levels of positive attitudes were also detected in the KAP study conducted in China [Zhong B et al. 2020].

In the current study, most participants reported taking precautions such as avoiding crowded places (84.30%) and practising proper hand hygiene (84%). This indicates a general willingness for participants to make behavioural changes in the face of the COVID-19 pandemic. Only 63.84% of the participants wore face mask when leaving the home.

Conclusion:

This study assessed the knowledge of general public of India on COVID-19. The government efforts of creating awareness by various means for general public about the various precautions to be taken to prevent the transmission of disease. The findings of the study demonstrated that the public had good knowledge on various aspects of COVID-19 prevention and people are very positive in overcoming the pandemic. However, still there is need for



combined efforts of governments and nongovernment organizations to educate the people to avoid the false beliefs especially among the people who are elderly, having low level of education and non-professional workers on various aspects of COVID-19.

References:

16. Giao H, Nguyen TNH, Tran VK, Vo KN, Vo VT, Pham LA. Knowledge and attitude toward COVID-19 among healthcare workers at District 2 Hospital, Ho Chi Minh City. *Asian Pac J Trop Med*. 2020; 13. <https://doi.org/10.4103/1995-7645.280396>
17. Zhong B, Luo W, Li H, Zhang Q, Liu X, Li W, et al. Knowledge, attitudes and practices towards COVID19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: a quick online cross-sectional survey. *Int J Biol Sci*. 2020; 16:1745–1752. <https://doi.org/10.7150/ijbs.45221> PMID: 32226294
18. Ajilore K, Atakiti I, Onyenakeya K. College students' knowledge, attitudes and adherence to public service announcements on Ebola in Nigeria: Suggestions for improving future Ebola prevention education programmes. *Health Education Journal*. 2017;76(6):648-60. Epub 2017/10/01.
19. Bell DM. Public health interventions and SARS spread, 2003. *Emerging Infectious Diseases*. 2004;10(11):1900-6. Epub 2004/11/20.
20. Dailymail.co.uk. 600 people have been killed and 3,000 left in hospital in Iran after they drank neat alcohol in the mistaken belief it cures coronavirus. [updated 2020 April 7; cited 2020 Apr 19]. Available from: <https://www.dailymail.co.uk/news/article-8196535/600-people-died-Iran-drinking-neat-alcohol-cure-coronavirus.html>.
21. Eurosurveillance Editorial T. Note from the editors: World Health Organization declares novel coronavirus (2019-nCoV) sixth public health emergency of international concern. *Euro surveillance : bulletin European sur les maladies transmissibles = European communicable disease bulletin*. 2020;25(5). Epub 2020/02/06.
22. Kok G, Jonkers R, Gelissen R, Meertens R, Schaalama H, de Zwart O. Behavioural intentions in response to an influenza pandemic. *BMC Public Health* 2010;10:174
23. Livemint.com. WhatsApp announces 2 billion users worldwide. [updated 2020 February 12; cited 2020 Apr 19]. Available from: <https://www.livemint.com/technology/tech-news/whatsapp-announces-2-billion-users-worldwide-11581516342061.html>.
24. National Center for Biotechnology Information. PubChem Database. Methanol, CID=887, [cited 2020 Apr 20]. Available from: <https://pubchem.ncbi.nlm.nih.gov/compound/Methanol>.
25. PuvvadaRK, Krishna U, Shilpa P, Balaji SG. 2020. <https://www.medrxiv.org/content/10.1101/2020.04.22.20075267v1>. doi: <https://doi.org/10.1101/2020.04.22.20075267>
26. Tachfouti N, Slama K, Berraho M, Nejari C. The impact of knowledge and attitudes on adherence to tuberculosis treatment: a case-control study in a Moroccan region. *The Pan African medical journal*. 2012;12:52. Epub 2012/09/01.
27. Who.int. Coronavirus disease (COVID-19) Pandemic, c2020 [updated 2020 April 19; cited 2020 Apr 19]. Available from: <https://www.who.int/emergencies/diseases/novelcoronavirus-2019>.



28. World Health Organization. WHO announces COVID-19 outbreak a pandemic. <http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid19/news/news/2020/3/who-announces-covid-19-outbreak-a-pandemic> [Accessed 12 March 2020].
29. Zaki AM, van Boheemen S, Bestebroer TM, Osterhaus AD, Fouchier RA. Isolation of a novel coronavirus from a man with pneumonia in Saudi Arabia. *N Engl J Med* 2013;369:394
30. World Health Organization. Coronavirus disease 2019 (COVID-19): Situation report– 91. [internet]. WHO;2020. Available from: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200420-sitrep-91-covid-19.pdf?sfvrsn=fcf0670b_4
31. 5. Cao J, Tu W-J, Cheng W, Yu L, Liu Y-K, Hu X et al. Clinical features and short-term outcomes of 102 patients with corona virus disease 2019 in Wuhan, China. *Clin Infect Dis.* 2020;ciaa243. <https://doi.org/10.1093/cid/ciaa243> PMID: 32239127
32. Person B, Sy F, Holton K, Govert B, Liang A. Fear and stigma: the epidemic within the SARS outbreak. *Emerg Infect Dis.* 2004; 10:358–63. <https://doi.org/10.3201/eid1002.030750> PMID: 15030713
33. The Lancet. (2020). Redefining vulnerability in the era of COVID-19. [editorial] *The Lancet* 395(10230): P1089. [https://doi.org/10.1016/S0140-6736\(20\)30757-1](https://doi.org/10.1016/S0140-6736(20)30757-1)





Assessment of Water Quality Status of Krishna River Basin of Karnataka

Dr.(Mrs). Sunanda. I, Kittali

Assistant Professor in Geography,

Rani Parvati Devi College of Arts and Commerce, Belagavi, Karnataka

Abstract:

Optimal management of water resources is the necessity of time in the wake of development and growing need of population of India. The National Water Policy of India (2002) recognizes that development and management of water resources need to be governed by national perspectives in order to develop and conserve the scarce water resources in an integrated and environmentally sound basis. Climate change affects water resources through changes in evaporation, groundwater recharge, temperature, runoff and rainfall. Such changes affect the mobilization of nutrients, distribution and mobility of pollutants in freshwater systems. The direct and indirect climate change impacts on water quality comprise biological, physical and chemical changes. Biological changes include pathogenic microbes in water. Physical changes include increased water temperature, reduced river and lake ice cover, more stable vertical stratification and less mixing of water of deep-water lakes, and changes in water discharge, affecting water level and retention time. Chemical changes include increased nutrient concentrations, water color and decreased oxygen content. The main objective of this paper is to assess the water quality at different point location in Krishna river course of Karnataka. Based on the Primary and secondary data narrate the water quality through some important laboratory tests. On the basis of result it is now accepted that some human-induced climate change is unavoidable. Potential impacts on water supply have received much attention, but relatively little is known about the concomitant changes in water quality. This paper fills a real gap on climate change impact on river water quality in Krishna River Basin of Karnataka.

Keywords: Climate change, Water quality, Surface water, Micro-pollutants, Physico-chemical parameters,

Introduction:

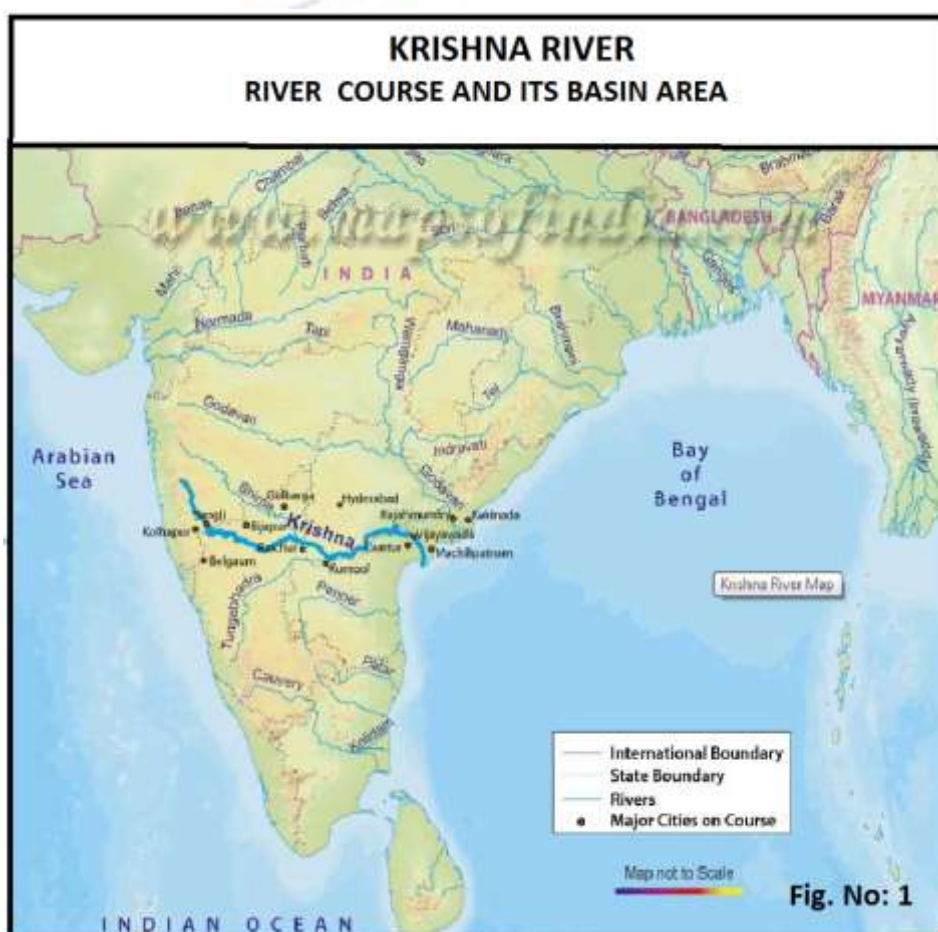
The 2007 Conference of the Parties to the United Nations Framework Convention on Climate Change, in Bali and the latest IPCC Report (2007) confirmed the consensus amongst scientists and policy makers that human-induced global climate change is now occurring. However, there is less certainty about the magnitude of future temperature changes and how these will drive precipitation, evaporation and hydrology at regional scales. Nonetheless, climate model scenarios provide the best available information for assessing future impacts of climate change on the water quality and ecology of surface water bodies

This paper provides a review of water quality seen through the lens of anticipated impacts in Karnataka State. The material is organized as follows. First, this researcher has review the potential impacts on surface water bodies, such as rivers and lakes, in terms of their hydrological regimes, hydro-morphology, nutrient status, mobilization of toxic substances and acidification potential. Second, she reviews long-term changes in the water quality for specific aspects of freshwater environments, such as estuaries and urban areas. These sections are followed by a review of recent water quality model developments and the treatment of uncertainty. The question of uncertainty is important, as predictions years into the future, based on uncertain GCM model outputs and uncertain process model parameters, will inevitably be used. Assessing

this uncertainty is important. However, as was shown in the acid rain projects in the 1980s, uncertain models can provide some extremely useful information for planners and managers (Cosby et al., 1986). A testament of this is that those models have correctly predicted the broad recovery of acid lakes and rivers across northern Europe (Wright et al., 2005). Finally, the indirect consequences to water quality of wider climate change policies affecting land and water management or emission reductions are considered.

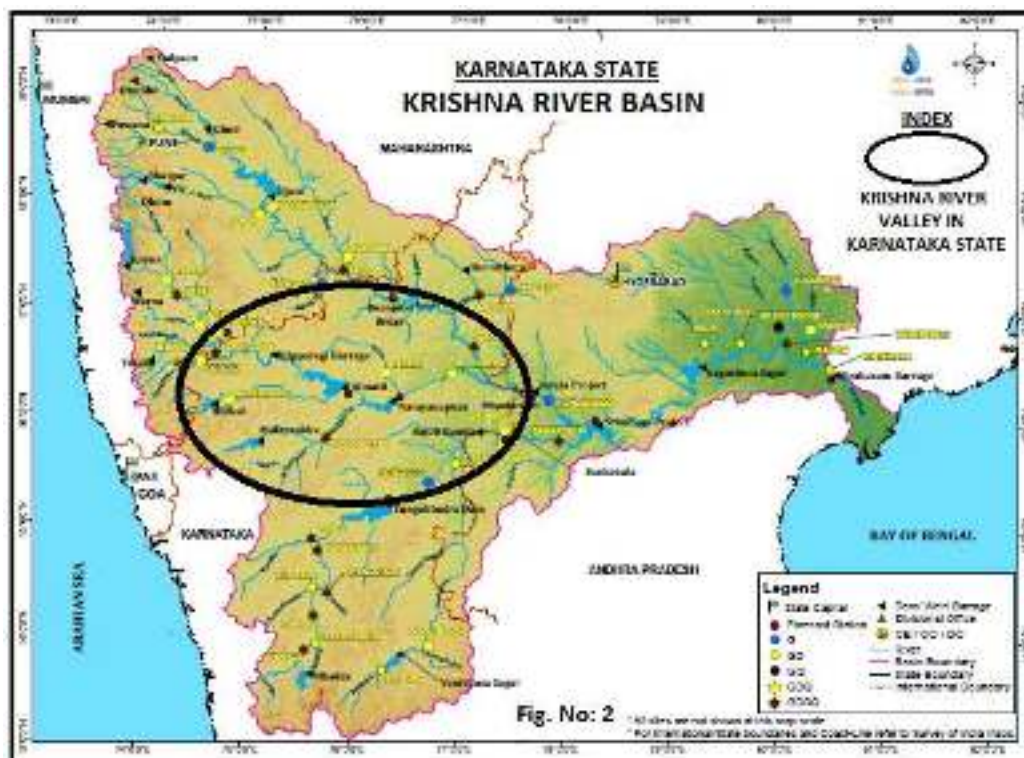
Study Area:

The Krishna River is the fourth-biggest river in terms of water inflows and river basin area in India, after the Ganga, Godavari and Brahmaputra. Krishna basin lies between latitudes 13° 07' N and 19° 20' N and longitudes 73° 22' E and 81° 10' E with the catchment area of 2,58,948 sq km., spanning across the three major basin states (Maharashtra (26.81%), Karnataka (43.74%) and Andhra Pradesh (29.45%). The Krishna river originates in the Western Ghats near Mahabaleshwar in Maharashtra state. It flows across the whole width of the peninsula, from west to east, for a length of about 1400 kms, through Maharashtra (a distance of 305 kms; catchment area 69,425 sq.kms), Karnataka (length 483 kms; catchment area 113,271 sq.kms) and Andhra Pradesh (length 612 kms; catchment area 76,251 sq.kms). The principal tributaries of the Krishna in Karnataka are: (i) Ghataprabha (Origin in the Western Ghats and flows eastwards and joins the river Krishna. The river forms the well-known Gokak Falls in Belgaum District), (ii) Malaprabha (origin in Western Ghats and flows first in easterly and north-easterly directions and joins river Krishna at Kudalasangama), (iii) Bhima (originates in the forest of Bhimashankar in Pune, and flows through the states of Maharashtra and Karnataka and joins Krishna near Kudlu in Raichur taluk and (iv) Tungabhadra (formed in the district of Shimoga, by the union of the Tunga and the Bhadra rivers. The river Tungabhadra flows east across the Deccan Plateau and join river Krishna in Andhra Pradesh). The annual average water flow in the river course is about 11,10,000 cubic feet's (31,000 cubic meters). sharing the available water in the river course among the riparian state awarded as per the award of Bachawat commission dated 29 November 2013. An average annual surface water potential of 78.1 cubic kms has been assessed in this basin. Out of this, 58.0 cubic km is utilizable water. Cultivable area in the basin is about 203,000 sq.kms, which is



10.4% of the total cultivable area of the country. As the water availability in the Krishna river was becoming inadequate to meet the water demand.

In Karnataka state the river Krishna flows 483 kms long through the Belagavi, Bagalkot, Vijayapur, Gulbarga district and spread about 1,13,271 sq.kms catchment area.



Objectives:

The main objectives of this paper are:

- to study the available quantity of water in river course within the Karnataka region
- to assess the water quality in the different location of the river course.
- to analyze the impacts of water quality on surrounding environs.

Data Collection:

The necessary data is collected from secondary sources i.e., Krishna Bhagya Jala Nigam Ltd. (KBJNL), Water Resource and Conservation Board (WRCB), Krishna Command Area Development Authority (CADA).

Methodology:

Based on the available data apply the simple technique to narrate the water quality and quantity and its impact on surrounding environs.

Water quality Assessment: Water samples were collected at representative sample sites using polyethylene containers through grab sampling method. The representative sample sites were picked so as to represent the entire aquatic ecosystem taking in to consideration number of feeders or tributaries, sources of point and non-point pollution and outlet for various uses, etc.

Sample collection sites:

- Sample collection location where principal feeder tributary namely: Sample collection at confluence points of Ghataprabha, Malaprabha, Bhima rivers joins to Krishna river

course in different parts of Karnataka. The Tungabhadra river is not consider for study because it joins to the Krishna river in Teangan state. Because of this region only 3 tributaries are consider for study.

- Central part of Lal Bahaddur Shastri reservoir of Alamatti Dam and Basavasagar reservoir of Narayanapur Dam to get a general quality of the water.
- Outlet from the Alamatti and Narayanpur dams.

The Physico-chemical and biological analyses for the representative samples is being done since February 2015, as per the standard methods prepared and published by NEERI (Indian Standard Specifications [IS: 1050-1983] and [IS: 2490 -1982]) and American public health association (APHA). The parameters include pH, temperature, color, transparency, turbidity, conductivity, total suspended solids, alkalinity, acidity, dissolved oxygen, chlorides, sulphate, total hardness, iron, residual chlorine, fluorides, ammonia, sodium, potassium, nitrates, phosphates and coliform bacteria.

Analysis Of Available Water Quality Of Krishna River In Karnataka Region:

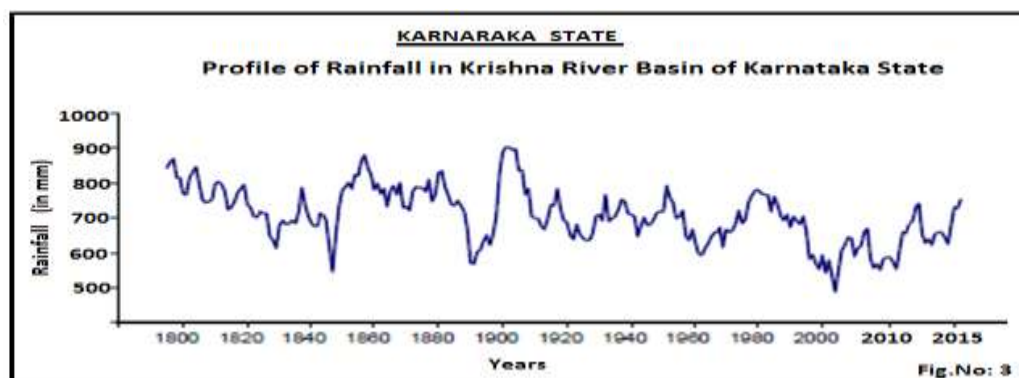
Rainfall Profile:

The Karnataka Krishna basin receives its maximum rainfall during the south-west monsoon. The monsoon winds strike the west coast of the Indian peninsula from the west and south-west and strike the Western Ghats or the Sahyadri Range, which present an almost uninterrupted barrier ranging from 610 m to 2,134 meters in height. According to the India-WRIS database the average annual rainfall in the Karnataka Krishna river basin for the period of 1800 to 2015 is 859 mm. The south-west monsoon sets in the middle of June and withdraws by the middle of October. About 90% of annual rainfall is received during the Monsoon period, of which more than 70% occurs during July, August and September. The distribution of annual average rainfall for Krishna basin has been shown in Table No: 1. Western parts of the basin receive maximum rainfall. However, around 203 blocks of 16 districts falling in the basin are drought prone (Source: Drought Prone Areas Program, DPAP, MoRD, 2012).

Table No: 1. Rainfall Profile in the River Krishna Basin

S. No.	Year	Rainfall (in mm)	S. No.	Year	Rainfall (in mm)
1	1971	565.46	6	1995	955.31
2	1975	953.69	7	2001	867.09
3	1981	555.36	8	2005	636.31
4	1985	565.26	9	2011	644.35
5	1991	750.35	10	2015	684.28

Source: WRIS database.



Temperature Profile:

The western area of the Karnataka Krishna river basin being closer to sea, is less continental and presents a comparatively low annual range of temperature. In winter while the maximum temperature in all parts varies between 30° C and 35° C, the minimum shows the significant variations. The places away from the coast show decreasing to minimum. Night temperatures are the main elements which make the winters more severe in central and western parts. In summers, while the western parts show a moderate heating, an effect of altitude and nearness to sea, the places deep inside the land and those remote from the maritime influences and at comparatively lower altitudes, show higher temperature. In contrast to diurnal heating in these parts the cooling in the night is slow.

According to the India-WRIS database the average annual mean temperature in the Karnataka Krishna river basin for the period of 1971 to 2015 is 26.32° C. During January, which may be taken as representative of the winter months the average mean temperature for the period of 1971 to 2015 in the basin is 22.39° C. During April, which may be taken as representative of the summer months the average mean temperature for the period of 1971 to 2015 in the basin is 29.50° C. During July, which may be taken as representative of the monsoon months the average mean temperature for the period of 1971 to 2015 in the basin is 26.10° C. During October, which may be taken as representative of the post-monsoons months the average mean temperature for the period of 1971 to 2015 in the basin is 25.78° C. Monthly average temperature profile chart of the basin which depicts the maximum, mean and minimum temperature for the period of 1971 to 2015 has been shown in Table No: 2.

Table No: 2. Average Temperature Profile in the River Krishna Basin (1971.2015).

Sl. No.	Months	Maximum Temperature (° C)	Minimum Temperature (° C)	Average Mean Temperature (° C)
1	January	30.12	16.02	23.08
2	February	34.18	19.89	27.09
3	March	35.68	20.53	28.05
4	April	37.24	23.59	30.45
5	May	37.40	24.87	31.08
6	June	33.11	23.68	28.53
7	July	30.28	22.75	26.51
8	August	29.53	22.35	25.49
9	September	30.62	22.17	26.35
10	October	31.20	21.15	26.54
11	November	30.42	18.75	24.46
12	December	29.44	16.50	22.80

Source: WRIS database.

Status Of Water Quality:

The Physico- chemical and biological characterization of water quality at various representative sites near the Krishna river valley. The water analysis results from Feb to July 2015 shows that the pH varies from 6.53 to 7.74, temperature ranges from 23.3 to 31.50C, dissolved oxygen ranges from 5.0 - 8.0 mg/l, turbidity fluctuates from less than 10 NTU - 75 NTU (mon), electrical conductivity ranges from 0.005 - 0.44 ms/cm, total suspended solids ranges from 21.3- 110 mg/l, alkalinity and acidity ranges from 20-68 mg/l and 2.5 - 20 mg/l

respectively, chlorides ranges from 4.9-24.9 mg/l and total hardness ranges from 27.25-81.7 mg/l. Sodium and potassium varies from 4.433-32.02 and nil- 2.5 mg/l respectively, sulphate ranges from 2.93-32.02 mg/l, nitrates and phosphates ranges from nil-0.42 and nil-0.032 mg/l respectively. Concentration of iron and ammonia shows less than 0.3 mg/l and less than 0.2 to 3 mg/l at varies sampling points respectively. Residual chlorine shows less than 0.2 mg/l and fluoride fluctuates between 0.6 and 1.5 mg/l. Color, varies from color-less to brownish color. Monsoon samples contain coliform bacteria at Krishna. River streams and it shows nil at remaining representative sampling sites.

Water Quality Assessment:

The water quality of river Krishna of Karnataka region with respect to pH, Conductivity, Dissolved oxygen(DO), Biochemical Oxygen Demand (BOD), Total Coliform (TC) and Faecal Coliform(FC) is being observed. The criteria for pH is 6.5 to 8.5. pH is observed in the range of 6.7 to 9.0. Higher values of pH are found at Jamakhandi Barage (9.0), Kudachi (8.7), Ghataprabha Confluence (8.6), Ankali Bridge along Chikkodi Kagwad Road, U/s of Ugarkhurd Barrage (8.7) and D/s of Devsagar Bridge (8.6) in Karnataka.

The criteria of conductivity for irrigation is 2250 μ mhos/cm. Conductivity in the basin varies from 75 to 19960 μ mhos/cm. Conductivity is not meeting the criteria near Andhra Pradesh border due to estuarine region.

The criteria for DO should be more than 4 mg/l. DO in the basin ranges from 0.0 to 12.6 mg/l. The lower value of DO is observed at Kudachi Bridge (0.0 mg/l), Chikkodi (3.1 mg/l) Hipparagi (3.6 mg/l), Alagur (3.8 mg/l) near Jamakhandi.

The criteria for BOD should be less than 3 mg/l. BOD ranges from 0.3 to 9.6 mg/l. High values of BOD are observed in Alagur barrage (9.6 mg/l), Malaprabha confluence at Kudal Sangam (9.5 mg/l), Ghataprabha confluence at Chikk Sangam (9.2 mg/l), Krishna Bridge at Kilhar-Korti (9.1 mg/l), D/s of Devsagar Bridge (5.8 mg/l) in Karnataka.

Faecal Coliform should be less than 2500 MPN/100ml. Faecal Coliform (FC) ranges from 0 to 1400 MPN/100 ml and is meeting the criteria.Total Coliform should be less than 5000 MPN/100ml. The Total Coliform count varies from 8 to 170000 MPN/100 ml. High values are observed at A/c of near Bhima river confluence at Gulbarga district

The River Bhima is not meeting the criteria at Dhulakhed Bridge, Canegoan bridge the lower value of Do is observed near Jamakhandi (0.0 mg/l), High values of BOD are observed in Bhima river confluence near Malkapur (28.5 mg/l),.

Regarding the water quality of other tributary streams including Ghatprabha,Malprabha, Tunghabhadra, Tungha, Bhadra, rivers-Low value of pH is observed in Bhadra at Malleswaram D/s of KIOCL in Karnataka. Higher values are observed in Ghatprabha at D/s of Mudhol Rd. Cross Bdg. Malprabha at D/s of Aihole Town, Tunghabhadra at Haralahalli Bridge and Ghatprabha at W.A. Point to Gokak Town (8.7) in Karnataka.

The higher values of conductivity are observed in River Malprabha at D/s of Aihole Town (3800 μ mhos/cm) in Karnataka. The lower value of DO is observed in River near Gokak town of Ghataprabha.

High values of BOD are observed in River Bhadra at Bhadravathi D/s (5.8 mg/l), River Ghatprabha at W.A. Pointto Gokak Town (5.4 mg/l), River Tungabhadra at Ullanur (5.2 mg/l), Haralihalli Bridge (3.7 mg/l) &Honnali Bridge (3.4 mg/l), River Tunga at D/s of Shimoga Town

(4.3 mg/l) & D/s of KIOCL Road Bridge, Near Holehunnur (3.4 mg/l), River Malprabha at D/s of Khanapur Town & D/s of Aihole Town (3.4 mg/l) and Confluence point of Tunga & Bhadra at Kudli (3.1 mg/l) in Karnataka.

The maximum number of Faecal Coliform (9000 MPN/100ml) is observed in River Tungabhadra at Ullanur in Karnataka & River Malprabha confluence.

Total Coliform is observed higher than the criteria in River Bhadra at Bhadravati and Tungabhadra at Ullanur (16,000 MPN/100 ml), Tungha at D/s of Shimoga Town and Bhadra at D/s of KIOCL Bridge near Holehunnur (9000 MPN/100ml) in Karnataka.

Table No: 5. Water Quality level in the different location of Krishna river course in Karnataka

Sl. No	Parameters	Sample Collected	Number	at	Locations										
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHYSICAL PARAMETER															
Transparency (cm)		23	16	14	8	50	45	50	43	34	53	45	42	8	8
Temperature (°C)		23.8	24	23.9	24.3	23.3	24.1	24.8	26	24.5	23.4	25.5	24.5	24.1	24.4
EC (mc/cm)		0.03008	0.04416	0.04032	0.0608	0.02048	0.02688	0.02944	0.02496	0.02304	0.02016	0.02528	0.02024	0.02952	0.0672
Total Suspended Solids (mg/l)		65	78	76	110	40	35	65	55	65	45	55	55	102	108
Turbidity (NTU)		50	35	30	60	<10	<10	<10	<10	<10	<10	<10	<10	25	25
Color *		Brownish	Brownish	Brownish	Brownish	colorless	colorless	Light brown	Light Brown	Light Brown	colorless	Light Brown	Light Brown	Brownish	Brownish
CHEMICAL PARAMETER															
pH*		7.09	6.89	6.97	6.98	6.95	7.22	6.94	6.65	6.6	6.93	6.8	6.99	7.01	6.96
Alkalinity (mg/l)		35	30	35	45	20	20	20	20	20	20	25	25	55	50
Acidity (mg/l)		5	5	5	5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Chlorides (mg/l)		19.9	14.9	14.9	14.9	14.9	19.9	14.9	14.9	14.9	19.9	14.9	14.9	19.9	24.9
Total Hardness		59.5	59.9	76.3	82.2	62.3	49.5	60.9	38.15	54.5	49.5	49.05	43.6	54.5	54.5
(mg/l)															
Dissolved oxygen (mg/l)		7.7	7.5	7.6	7.7	7.7	7.8	7.7	7.7	7.9	8.0	7.7	7.8	7.3	7.4
Sodium (mg/l)		8.31	13.77	11.33	17.66	4.433	5.63	5.924	5.82	5.24	4.46	5.708	6.036	15.457	29.2186
Potassium (mg/l)		1.134	2.151	1.564	2.151	0.195	0.743	0.860	0.743	0.391	0.2346	0.7039	0.899	1.447	2.5029
Sulphate (mg/l)		4.96	11.278	9.47	22.10	7.44	2.93	4.511	11.278	10.15	7.44	7.66	6.76	21.20	20.07
Nitrates (mg/l)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phosphate (mg/l)		0.014	0.0143	0.014	0.0197	0.005	0.0097	0.011	0.019	0.01	0.015	0.01	0.019	0.018	0.03
Iron (mg/l)		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Ammonia (mg/l)		0.2	0.2	0.2	2	0.2	<0.2	2	0.2	3	1.5	1.5	1.5	3	2
Residual Chlorine (mg/l)		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BIOLOGICAL PARAMETER															
Coliforms *		ND	Present	Present	Present	Present	ND	ND	ND	ND	ND	ND	ND	Present	Present

Source: Laboratory Experimental Calculations.

River Water Pollution:

Most of the years, the Krishna river water not reaches the sea coast due to full utilisation of water mainly in agriculture. Closed river basin of Krishna means that the river



ecosystem is on the verge of death. The river receives the waste from the large number of Settlements (Towns and Villages), industries, agriculture field. The river basin population has increased to 80 million enhancing pollution load many folds into the river. Adequate average and minimum continuous environmental flows to the sea are not taking place in most of the years constricting salt export and leading to formation of saline and sodium alkaline soils in the lower reaches of the river basin. High alkalinity water is discharged from the ash dump areas of many coal fired power stations into the river which further increases the alkalinity of the river water whose water is naturally of high alkalinity since the river basin is draining vast area of basalt rock formations. The following are the few coal fired power stations located in the river basin.

Conclusion:

The Krishna and its tributaries are an inter-state river system flowing through the state of Karnataka. Its principal tributaries joining from right are the Ghatprabha, the Malprabha and the Tungabhadra whereas those joining from left are the Bhima and Doni. The basin falls into four major Agro-Climatic Zones and six Agro-Ecological Zones. As per the assessment of LULC (2005-06), Major part of the basin (75.86%) is covered with Agricultural area. Approximately 10% of the basin area is covered by forest, wasteland covers around 7% of the total basin area and around 4% of the basin area is covered by water bodies. Numbers of small and large projects have been constructed in the basin and some are under construction. The approach all along has been to construct projects for the benefit of the particular state concerned except in a few cases where the projects are being constructed jointly by two states.

Systematic and Scientific exploratory work is needed for a quantitative and qualitative assessment of the ground water resources in the basin so that these resources can be exploited in a national way either independently or in conjunction with surface waters. There is need for inter-State co-operation and agreement in respect of soil Conservation measures to conserve the storage capacities of existing and proposed reservoirs in the basin. The holistic approaches in planning involving all components are required to maintain the health as well as to ensure the sustainability. This requires timely and accurate data pertaining to the quality and quantity. This necessitates inventorying, and regular mapping and monitoring involving hydrology, and physico-chemical and biological properties.

This indicates that the land-use pattern in the catchment area plays a major role in the health of the aquatic ecosystem, which is evident from the water and soil quality analyses. The occurrences of perennial streams highlight a vital relationship between the ecology and hydrology. This result could be a pointer to the decision-makers considering a severe water stress faced in various parts of the Country. Hence, forest management activities should incorporate multifarious objectives of improving water production, both by quantity and quality through an appropriate land use planning. The main conclusion which can be drawn is that a degradation trend of drinking water quality in the context of climate change leads to an increase of at risk situations related to potential health impact.

References:

1. Adams, R. & Younger, P. L. (2001) A Strategy for Modelling Ground Water Rebound in Abandoned Deep mine Systems, Journal of Groundwater, Vol: 39, pp. 249–261.



2. Adamson, J. K., Scott, W. A. & Rowland, A. P. (1998) The Dynamics of Dissolved Nitrogen in a Blanket Peat Dominated Catchment, *Environment Pollution Journal*, Vol: 99, pp. 69–77.
3. Aherne, J., Larssen, T., Cosby, B. J. & Dillon P. J. (2006) Climate Variability and Forecasting Surface Water Recovery from Acidification: Modelling Drought-Induced Sulphate Release from Wetlands, *Science Journal- Total Environment*, Vol: 365, pp.186–199.
4. Mane S. P, Shinde A. S., (2014) “A Study Changing Pattern of Rain Water Harvesting Management An Ancient To Modern Age In India- Geographical Analysis” *Review of Research* Vol. 3/Issue. 10, ISSN: 2249-894X
5. Andersen, H. E., Kronvang, B., Larsen, S. E., Hoffmann, C. C., Jensen, T. S. & Rasmussen, E. K. (2006) Climate-Change Impacts on Hydrology and Nutrients in a Danish Lowland River Basin, *Science Journal- Total Environment*, Vol: 365, pp.223–237.
6. Arheimer, B., Andreasson, J., Fogelberg, S., Johnsson, H., Pers, C. B. & Persson, K. (2005) Climate Change Impact on Water Quality: Model Results from Southern Sweden. *Ambiography*, Vol: 34, pp.559–566.
7. Arnell, N. W. (2003) Relative Effects of Multi-Decadal Climatic Variability and Changes in the Mean and Variability of Climate due to Global Warming: Future Stream Flows in Britain, *Journal of Hydrology*, Vol: 270 Part:3-4, pp.195–213.
8. Barrett, M. H., Hiscock, K. M., Pedley, S., Lerner, D. N., Tellam, J. H. & French, M. J. (1999) Marker Species for Identifying Urban Groundwater Recharge Sources: A Review and Case Study in Nottingham, UK, *Water Research Journal*, Vol: 33, pp .3083–3097.
9. Bates, B. C., Kundzewicz, Z. W., Wu, S. & Palutikof, J. P. (eds) (2008) *Climate Change and Water. Technical Paper VI Of The Intergovernmental Panel On Climate Change*, IPCC Secretariat, Geneva, Switzerland.
10. Govt of India (1972) *Report of the Irrigation Commission, Volume III (Part 1 & 2)*, Ministry of IR and Power, New Delhi.
11. Govt. of india (1989) *Major River Basins of India – An Overview*, Central Water Commission, New Delhi.
12. Govt. of India (2007) *River Basin Atlas of India, 2012*, RRSC-West, NRSC, ISRO, Jodhpur, India.
13. India-Water Resources Information System: www.india-wris.nrsc.gov.in
14. *Water Year Book, CWC, 2009-2010*. Central Water Commission, New Delhi.



Globalisation and Sustainable Development in the Present Scenario with Special Reference to Education and Agriculture

Dr. Caroline David

D. T. S. S. college of Commerce Malad East

Email:- josimcaroline@yahoo.com

Abstract:

There is a need for sustaining our development in this state of COVID 19 as some feel our economy may take a V curve or U curve or L curve. Challenges are there because now we are no more independent economy. Globalisation has made us more dependent on other countries. India is facing many challenges from different angles. But if we work wisely we will be able to come out of these crisis too. Our economy was experiencing recession before COVID 19 attack, but now this virus is adding petroleum to the fire. Globalisation has helped our economy in many ways but it has made us crippled too. The moment the lock down was announced and the flights to other country's was stopped completely our exports and imports also stopped. We can still work at sustainable development with proper and sincere efforts of our government and cooperation of the people. Our government should be focused on bringing our economy to the shore that is out of this virus and work at sustainable development.

Keywords: Globalization, sustainable, development, COVID19, economy

Methodology : Purely based on secondary data .

Aim:

1. To make people support the government in developing domestic industries by using domestic goods and by producing those goods which we were importing from other countries.
2. To aim at becoming self-sufficient and self reliant.
3. The planners should plan for a new monetary, Fiscal and economic policy keeping in mind the state of the economy due to COVID 19, which is an intension of reaching the vulnerable and poor section of the society.

Introduction: Before British rule India was a self sufficient and self reliant economy with no international trade. With international trade and more after globalization we have become more and more dependent on other countries. It's not that we lack skills and resources to produce those good in our country but we have got addicted to be dependent on other countries.

Almost India has become a dustbin for Chinese electronic and other products. Similarly India imports gold, precious stones, crude oil, heavy machineries India is the biggest importer of crude oil.

In India people are crazy after gold. Therefore in sun storm rain there is a demand for gold. This has made **India** become the second largest **importer of**, gold after crude oil. Since more or less, 2018 Saudi Arabia, is nearly, the largest supplier of crude oil to **India**. India also imports Oil imports from Nigeria. India imports mostly maximum gold from **Switzerland**, followed by **United Arab Emirates**, **United States of America**, **Ghana** and **South Africa**.



What is Globalization?

The whole world becomes a common market for trading ,without any restrictions or barriers.It combines national economies through trade ,investment,capital flow,labour migrationand technologyIt flattens the world economythrough subcontracting,supply bindingand political liberalization too.Due to which the economies globally starts growing with the help of each other. Relations between countries start improving and there are less chances of war.

Globalization helps in joining the economies of the world, due to which there are influences of economies and their culture,exchange of ideas and even ,technology not forgetting ,anti-terrorist safeties.It interconnect the economies in the globe. It helps creating employment too .

Most economies agree that globalization provides a net benefit to individuals economies around the world by making markets more efficient ,increasing competitions,limiting military conflictsand spreading wealth more equallyaround the world .In humble words globalization is the linking of different parts of the world ensuing the expansion and spread of international culture,economic,and politicalactivities.It is the movement and integration of goods and peopleamong different countries.

It is the spread of technological material and jobs across the borders and cultures.In economic term it describes an interdependence of nations around the globe raised through free trade, which means no restriction or liberalization of trade.But it also has its bad side that is;

1.It gives credit facilities so we are sunk in debts. 2.Decreasein the flow of finance across local and national boundaries. 3.Decreasing aggregate demand due to which the world economy gets into a vicious cycle of income and employment . 4.New risk and uncertainties. 5.Unstable and unpredictable demandand business opportunities. 6.No pricing power. 7.Under constant pressure by new competitors 8.Undermine profitabilityas you have to sell at a lower price in the competitive market .9.Devaluation of our currencies inorder to make our goods cheaper for foreigners.10.Raising trade barriers.11.Most importantly is disturb the self reliance and self sufficiency of countries

What is the meaning of sustainable development?

“Sustainable**improvementmeans all around improvement** in the **management** and preservation, maintenance of the **useful resource** ,technology ,educational and training institutions ,**industries, development in agriculture** in such a way as to **fulfill the wishes of the existing people** keeping in mind that there is sufficient for the future generations. Such sustainable **development** mobilisesutilises and also conserves the natural resources and man made resources on land, in water, plants and animals , genetic resources and is thus ecologically and naturally non-degrading, technically appropriate, economically and socially acceptable.

Foreign direct investment:

Foreign direct investment in India is a major monetary source for economic development in India. Foreign companies invest directly in fast growing private Indian businesses to take benefits of cheaper wages and changing business environment of India.

FDI can be an effective way for you to enter into a foreign market, to acquire important natural resources, to reduce your cost of production etc.FDI is the positive effect of globalisation By development we mean growth plus change for the better. It include growth hence it is a wider concept than change.India is still in the process of developing we have not yet developed.



Sustainable development is a road to full filling human wants and human development and helping the country to achieve the goal of developed Economy. Simultaneously making the best use of what ever resources we have keeping in mind the future of the coming generation by maintaining the stability of the economic system and the environment . Sustainable development gives importance to all the sectors .Sustaining the development in all the sectors during the corona virus spread is a very difficult task but not impossible .

Sustaining our industries, agriculture , service sector etc.It is the need of the hour and a must for an economy especially in India as with great difficulty India has grown to this level since independence. Hopefully we don't go back to where we had started . It is not possible but we cannot take a risk of falling into the trap of deflation .We have to have an effective demand to maintain our sustainability.

COVID 19 has almost destroyed the sustainability of all the economies and put a stop to globalization for the present period. Education is totally disturbed . Many students are with out education .Online teaching is on which is creating unemployment and at the same time not reaching the out to the vulnerable section of the society as they do not have computers and net facilities Tourism is gone for a toss.Many teachers will loose their jobs and many schools will have to close down. Agriculture is also effected as the demand for food grains has gone down which goes against the theory of effective demand.

Agriculture being our backbone and support since years , should be given priority .People who have migrated back to their villages should be retained over there they should be educate to work in the fields or the government should change its investment and employment policy and create employment for them in villages this will lead to balanced regional development and inclusive growth It will also lead to irradiation illiteracy ,poverty and unemployment.Its hightime that we learn a lesson which the Britishers taught many years back and today COVID 19 is changing us to some extent for the better. Heavy dependence on foreign countries is a threat to our nation .Our Human resources which are utilized outside example our doctors, engineers should now come back and be a boon to our country. We have to work at sustaining our development .We should focus more on Agriculture, education, health sector and tourism inside our country so that the resources circulate within our country and it leads to effective demand. We should think how to earn revenue.

Yes we have to blow with the wind . Just as we need an umbrella during rainy season. Today the need is of Sanitizers ,detol, mask ,gloves , mobs ,face protector, dish washer, computer, rain cards , Aneroid phones, mobsbecause due to lock down we have to do our own work .COVID 19 has changed our lives right from eating to resting .It has made us aware of health and hygiene ,cleanliness, developing a strong immunity, especially to the ones who smokes, drink alcohol ,chew tobacco etc. To some extent it has improved the lifes of people that is human resources sustainability .Corona virus has sustained our environment to a great extent example life on earth ,that is plant and trees and their importance is understood more during this time by mankind and life in water has also improved. Due to Corona virus we are getting back what God has created for us . It has brought us close to our families and have connected us virtually to people far and wide through conferences and webinar. It has taught us the importance of saving but it is depriving the poor and the vulnerable of food and education which is very painful.



Agriculture is a sustainable resource as it not only provides foodgrains to us but also raw material for industries and the service sector and creates a demand for the other two sectors and most importantly it can absorb as many people for employment. Since we are blessed with human resource and agricultural resources, the development of this sector can help us sustain our development through good health, education and standard of living. We have to increase our living standards and protect our environment which is disturbed because of corona virus although corona virus has helped in reducing pollution in our country.

Proper planning is the need of the hour and unity among the people and a fatherly touch and care by our leader will help the economy to sustain to a great extent. Politics and selfishness on the part of our leaders will only ruin us at this sad time. We have to think rationally and act wisely. We have fifty, fifty kind of population in the sense nearly half are educated and half are illiterate. We have to give more importance to these vulnerable people in our planning as they are also the pillars of our economy and a part of us. It's just that they are fatal to remain poor. A poor man is poor because he is poor.

How can we attain sustainability in this coronavirus spread?

This pandemic is a humanitarian crisis. Fear kills a person's ability to think and act. Thus we have to focus on health and sanitation so we have to invest in medicines, hospital and health care centers in each and every remote place in India. We have to be well prepared for any the worst happening in future. Corona virus is improving our country's health care sector. We have to educate the people in the country about the necessary precautions in a better way than frightening them. We have to create job opportunities everywhere to stop the migration of people and the collection of people in some places which lead to the development of slum congestion and lack of sanitation and hygiene. We have to see that salaries are at par for the same job in different places. Equal distribution of hospitals and schools. See that there are few students in each class so that there is social distancing and the teacher can monitor the students well. Thus sustainability teaches us that there is a way to progress and prosper in harmony with the planet and God. It's about maintaining a healthy balance between people and the environment.

India has not given much importance to the health care department and agriculture which is the bread and butter of so many and of course the food supply source for the entire country is not given priority as it should get. Facilities in India are not evenly spread for example the poor man areas have no government hospitals, schools, offices, manufacturing units and some areas still don't have electricity and transport facilities till date.

The COVID 19 pandemic is proving to be the ultimate disrupter for almost all the spheres of life and sectors of the economy. But the most important sectors which we have to give priority are

1. Agricultural sector : India is an agricultural economy. A bird in hand is worth two in a bush. Since we are blessed with human resources and agriculture we should set up more agricultural based education colleges in the villages which will kill two birds at a time. One is increase our agricultural production and our exports in agriculture and stop migrant workers from coming back or sending their children to Mumbai and other places for education at the cost of their families standard of living.

2. Education sector: We can cover up for our losses through education. All those who have come back to India because of COVID19 spread should stay back in our country and invest in



education in our country .We too have a developed education industry .This will stop drain out of resources and brain drain too.

3.Tourism: Even we should stop going abroad during our vacation instead for few years travel in our own country and increase the returns from tourism industry.

But even in crisis we have to search opportunity .The crisis has made us realize where we lack and what are the flaws in our economy .The transition is not going to be easy . It has made us rethink and reimagine .It will obviously be very challenging .We will have to make strong sets of rules to discipline the people in the economy .But they say practice what you preach .This is not the time to think politics do politics .This is not the time to be selfish as a government ,one is parenting the economy .Only if you feel that one is a parent and the economy is one's child then one will selflessly start thinking in the right direction.Many rich people have come forward to help the poor and NGOs too but what about the Father of the economy is he willing to sacrifice for the nation.

Yes we can do it in unity with the government .By punishing the illiterates and the poor who are trying to reach back to their loved one ,jailing the migrant workers breaking the rules will only make matters worst .Jail is not a place for a person to improve infact it gives birth to bigger crimes and it a big waste of human resources.Foreign countries do not waste their human resources by punishing them that is sending them to jail. India has to improve in this respect .Our laws have to change .The law maker are the law breakers . Many are innocent among them .Mind is the best of friend and can be your worst enemy .These innocent will suffer more in the prison .Prison should be the last alternative. Those in charge of protecting the country should not take advantage of their chair .One reason why are country is not progressing .Our system and the way they deal is totally wrong .Advocate are not honest with their profession .People can win even if they are wrong if they have money power. Poor suffer in this aspect too.

While doing my minor research on children in the remand home .I understood that life in prison is like death .This pandemic has generated a turning point in history.

The COVID 19 pandemic was introduced in Iran through globalization-triggered international arrangement and raised through political and religious processes.Infact it is foreigners who brought COVID to India.Due to globalization many people have gone abroad for jobs and they have become unemployed and their return back to India has contributed to the spread of this virus allthrough out the country.

There will be a need to redefine the definition of globalization and make it more human-centric instead of market and profit focused .

Before globalization the market was based on efficiency and social justice, the goal of our government. Globalization and the greed for money has put an end to such government.Yes globalization unites the people in the world and makes them come closer but at the same time makes the people selfish and practical.

Could corona virus bring about waning of globalization?

Contagions are threats to mankind they bring uncertainty and fear in human mind they make human feel insecure and change their behavior .People become more apprehensive and gullible. They are not willing to trade with foreigners or even deal with them.

Many place of work have closed down completely and the supply of goods have decreased and people are not willing to do with any thing with long distance A new environment of uncertainty and insecurity has sneaked in which will effect the global economy



The division of labor on a worldwide scale also contributed to the shortages and even cutoffs of anti -pandemic materials in some countries. With the disease of corona virus causing an economic recession and a decline in living standards racism populism and extremism are on the rise. Globalization then will become the scape goat of the predictable social confusion.

Conclusion :

COVID 19 is likely to quicken the waning of globalization and will disturb the sustainability of our economy by making us more self reliant and self sufficient. Globalization has passed the point of no return .The great uncertainties surrounding the pandemic have made cynicism prevail as a result globalization will be given lesser importance and the world will enter an era of stunned globalization even an era of de-globalization and counter globalization. Our Prime ministers ideas of Make in India, Skill India and invest In India are very good only if it is actually put into practice properly, administered and monitored too ,as it will create a large amount of jobs for the unskilled and poor and help in sustaining our economy .The Atmanirbhar Bharat is the vision of not only our Prime Minister but all the citizens ,for making India self -reliant nation, also a big step in achieving sustainable development

References:

1. Dr. S.D. Shinde (2012), "Land use Mapping in Parts of Western Maharashtra Based on Remote Sensing Techniques", Proceedings of International Level Seminar organized by G.K.G. College, Kolhapur, India pp.96-102
2. Mane Santosh P. (2018) "Impact of Irrigation on Agriculture in Malshiras Tahsil of Solapur District (Ms): A Geographical Analysis" unpublished M.Phil. Dissertation submitted to Shivaji University, Kolhapur.
3. Dr. D. C. Kamble and Mr. Santosh P. Mane (2018), "Agriculture Productivity in Malshiras: A Geographical Analysis", Aayushi International Interdisciplinary Research Journal (ISSN 2349-638x) Impact Factor 4.574, Volume 2, Issue-9 Pp-658-662
4. **Subhash Chavare** Prasadsinh Dalavi, and R. Jegankumar, (2014), "**Agricultural Land Suitability Analysis of Swetha River Basin**" Proceedings of National Conference on "Geoinformatics in Rural, Urban & Climatic Studies".
5. Dr. S. D. Shinde & Dr. P.V. Patil (2009) "Levels of Agricultural Technology in Sangli District of Maharashtra", Bhugolshastra Sanshodhak Vol. 4 (1&2) pp 29-34.
6. Dr. A. M. Kamble, A. P. Waghmode & Santosh P. Mane (2019) "A Study of Socio-Economic Status And its Impact on Wrestling Player's Performance in Solapur University (MS) India" Review of Research, ISSN: 2249-894X, Pp-1-8.
7. Dr. Banduke D. K. & Santosh P. Mane (2019) "Rice Productivity in Satara District: A Geographical Analysis." Research Journey Impact Factor - (SJIF) – 6.261, (CIF) - 3.452(2015), (GIF)–0.676 (2013) Special Issue 144, Pp-159-165.
8. Dr. D. H. Bhojane, **Santosh P. Mane** (2020), "Satisfaction Of Irrigated And Non-Irrigated Farmers", Research Journey, Impact Factor - (SJIF) – 6.261, (CIF) - 3.452(2015), (GIF)–0.676 (2013) Special Issue 236(C), Pp-142-147
9. Subhash Chavare, Santosh P Mane, Sudhakar Koli, Somnath Gaikwad, Atish Patil and Meena Potdar, (2020), "Watershed Prioritization for Soil Conservation using Morphometric Parameters and GIS of Bend Watershed", Juni Khyat (UGC Care Group I Listed Journal) Vol-10 Issue-5, ISSN 2278-4632
10. <https://tradingeconomics.com/india/imports>
11. <https://tradingeconomics.com/india/imports-from-china>
12. <https://www.quora.com/Which-country-does-India-import-gold-from>



Distinctive Characteristics of the Tribes in India

Dr. Achole P. B.

Associate Professor

HOD Department of Geography

Azad Mahavidyalaya, Ausa, Dist- Latur.

Mr. Swami B. M .

Assistant Professor

Department of Geography

Walchand College Arts and Science, Solapur.

Abstract:

India today displays a very high degree of social and ethnic diversity .the population of India subsumes within it multitude of caste and tribal groups representing different stage in the social evolution of the mankind .the tribes believe that their life and work are controlled y supernatural beings whose abode is around the hills ,forests, rivers, and houses. It is very difficult to standardize the gods and spirits as their composition continually changes when old ones forgotten with introduction of new ones. (Shinde, 2007) The tribal people expresses their cultural identity and distinctiveness in their social organization ,languages ,rituals and festivals and also in their dress, ornaments, art, and craft. They have retained their own way of managing internal affairs of the village. Considering the widespread distribution of tribes all over the country it is necessary to group them in to broad geographical regions on the basis of ecology any society- tribal or otherwise, comprises of organized groups of people who have learnt to live and work together interacting in the pursuit of common goals. Evidently, tribal communities have either by their choice favored concentration in inhospitable environments, (Chavare, 2020) or conversely the peasants societies have pushed them and confined them to these enclaves thus having free access to the potentiality rich lands suited pre-eminently to the agricultural pursuits.

Key words: Tribe, Culture, Kinship.

Objectives:

1. Study Of Different characteristics of the tribes in India.
2. Find out the economic pursuits of tribes in daily routine life.

Methodology:

The present study on distinctive characteristics of tribal people in India totally based on secondary data .the has been collected from the several cultural and socio- geographical books and related of tribal communities development articles ,magazines research papers ,reports, and pre-historic governmental websites as well as published books and ancient religious literature with daily news papers.

Introduction :

India has traditionally been the home of different cultures and people communities unity in diversity is one of the most prominent features in the people of India .among the diversified population a significant portion is comprised of the the tribal people, the original inhabitants of the land the tribal culture of India and their traditions and practices pervade almost all of the



aspects of Indian culture and civilization .the early humans were dependant on their immediate surroundings the environment offered them variety of choices food in the form of foliage ,seeds ,fruits. On the theoretical plane it may be necessary to distinguish between as category perceived on the basis of a classical tribal paradigm and the scheduled tribes of the modern Indian state.Developing the definitions of a tribe according to the classical paradigm may also be necessary to remove some misgiving which are likely to exist on this subject (Mali, 2013) .their living perfectly depicts a well balanced give and take procedure that in no ways disrupts the ecological balance.

Meaning of tribe:

‘tribe’ is the word used in India to refer to inhabitants known elsewhere as ‘Indegenious’.Britishethnographers classified tribal as ‘Animists’as per the national census, they are classified as ‘Aboroginals’and listed according to thetribe. inIndiacommonly known as ‘Adivasi’is meaning ancient inhabitants.

While evolving a definition of tribe, ‘André Beteile’ noted the conventional lack of interests of he sociologists and the social anthropologists in a clear definition.

“A tribe is an an ideal state, a self contained unit. It constitutes a society in itself.”

‘A collection of families on group of families bearing a common name members of which occupy the same territory, speak the same language and observed certain taboos regarding marriage, profession or occupation and have developed a well assigned system of reciprocity and mutuality of obligation.-D,N.Mujumdar.(P.N.240).

‘Tribes as a group speaking a common dialect and inhabiting a common territory.-W.J .Perry.

Distinctive characteristics of the tribes in India :

Sense of unity :

Unless and until ,a group living in a particular area and using that area as common residence, does not posses the sense of unity is an invariable necessity for a true tribal life. The very existence of a tribe depends upon the tribal’s sense of unity during the times of peace and war.

Definite common topography :

Tribal people live within a definite topography and it is a common place forbs all the members of a particular tribe occupying that region..

Common dialect :

Members of a tribe exchange their views in common dialect. This elements further strengthens their sense of unity.

Endogamous group :

tribal people generally do not marry outside their tribe and marriage with in the tribe is highly appreciated and much applauded. But the pressing effects of changes of following the forces of mobility have also changed the attitude of tribal’s and now, inter –tribe marriages are becoming more and more common.

Significance of kinship :

Kinship forms the basis of tribal social organization .most tribes are divided into exogamous clans and lineages.The marriage among tribal’s is based on the rule tribal endogamy .marriage is viewed as contract and there are no prohibition on divorce and remarriage.



Rudimentary type of religion:

Tribes believe in certain myths and rudimentary type of religion. Further, they believe in totems signifying objects having mystic relationship with members of the tribe. has given the following characteristics of the tribal people:

- Geographical isolation or semi-isolation
- Unacculturated or partially acculturated in the national society
- Largely or entirely independent of the national economic system.
- Ethnic distinctiveness from the national society.
- Economic base tightly dependant on their, specific environment.
- Possessing leadership but no more national representation and few, if any political rights

Ties of blood relationship :

Blood relation is the highest bond and most powerful energy inculcating sense of unity among the tribals.

Protection awareness:

tribal people always need protection from intrusion and infiltration and for this a single political authority is established and all the powers are vested in this authority. The safety of the tribal is left to the skill and mental power of the person enjoying political authority. The tribal chief is aided by a tribal committee, in the events of contingencies. Tribes divided into a number of small groups and each group is headed by its own leader., the chief of a group works according to the directives received by him from the tribal chief.

Egalitarian values :

The tribal social organization is based on the egalitarian principle. Thus there are no institutionalized inequalities. thus men and women enjoyed equal status and freedom. however some degrees of social inequality may be found in case of tribal chiefs or tribal kings who enjoy a higher social status, exercise political power and possess wealth.

Distinct political organization :

Every tribe has its own distinct political organization which looks after the interests of tribal people. The whole political authority lies in the hands of tribal chief. In some tribes, tribal committees exist to help the tribal chief in discharging his functions in the interests of the tribe.

After discussing distinctive features of tribe, we will discuss economic activities of tribal populations in India.

- **Economic pursuits of tribe :**

Food gatherers and hunters ;

Food gathering, hunting and trapping animals were the first adaptation mankind made and it lasted for thousand of years before being taken over by animal husbandry and agriculture and then by industrialization. now there are very few tribes on the mainland who have exclusively by food collection and hunting however, the cholenaians of Kerala present a classical example of this kind of economy.

Shifting cultivation : several specialized techniques are used in this form of cultivation. Such cultivation is widely practiced in the tribal regions of north-east India the Khasi of Meghalaya practices this form of cultivation. Bihar, Orissa, Madhya Pradesh, and Jharkhand also practise shifting cultivation.



Artisans:

The number of tribes subsisting on crafts like basket making, toolmaking, spinning and weaving small, such as tribes either combine these occupations. The Toda of the Nilgiris has exchange relation with the Badaga for agriculture products. The Bihar makes ropes and in the past were nomadic.

Settled agriculture:

Settled agriculture is practiced by a majority of tribal population in middle, western and southern regions of the country. Tribes having a tradition of agriculture are being increasingly drawn in to economic, social, political network of the wider society.

Wage labourers:

Many of the tribal people had to leave their traditional occupations and seek employment in these enterprises as wage laborers. Mining and industrial development also increased in tribal areas. The tribal of Chota Nagpur were taken to north-east India to work on tea plantations.

The folk artists :

There are variety of groups who carve out a living for themselves by performing acrobatic feats, entertaining people and providing some services to their patrons. A tribe of Madhya Pradesh the official genealogists to the Gond. Their women act as midwives to the Gond also tattoo Gond girls.

The pastoralists and cattle herders:

The classical example of the pastoralist tribe are the Toda in the Nilgiris and the Gujjar, the Bakarwal and Gaddi in Himachal Pradesh. Their buffaloes are individually owned but their buffaloes for pasture. Like artisans they too. Exchange the dairy products for other items of their use particularly agriculture products. In the past, the Toda had exchange relation with the Badaga.

• Recent economic changes :

The economic scene in the tribal regions has been changing.

1. Forest resources reservation.
2. Big projects like hydro-electric reservoirs.
3. A number of big industries like steel plants have been established in their areas. to the opportunity for employment as wage laborers.
4. Penetration of market economy producing for meeting their own needs.
5. Development measures are designed to promote settled agriculture and intensive cultivation.

Conclusion:

tribal responses to the developmental process may be examined in two crucial areas. first, structural changes in agricultural work force and secondly the shift of tribes from pre-literate to literate status as well as undeveloped economic process to advance economic development interaction. Tribal assimilation in to the peasant mode of production is tortuous process. It is well known that the Indian tribes picked up the art of agriculture quite early in history, although tribal agriculture remained mostly subsistence in character. (Pawar, 2020) The integration of the domestic market induced in the market forces to penetrate in to the tribal regions drawing the backward economies in to whirlpool of an external market. Inevitably, Chota Nagpur and other parts of the mid-Indian and north east tribal region became a focal point of developmental



activity on an unprecedented scale. These developments resulted structural changes in the tribaleconomies location of industry, miningestablishment,river valley projects and fencing of reserved forests accelerated the process of displacementfurther. All this requires different organization of economic activities.

References :

1. RenuDevi,Cultural Geography ,(2019) Pratham Publication New Delhi.(P.N.223-227).
2. Ahmad,Aijazuddin .Social Geography (1999) Rawat Publication ,Jiapur(P.N.114).
3. MuzumdarD.N.;An Introduction To Social Anthropology,(1956) Asia Publishing House Of Private Limited Bombay.(P.N.-240).
4. Bagchi,D.AliRajpur: (1970),A Study In Urban –Tribal Relationship, The DeccanGeographer,Vol.VIII
5. Beteille ,Andre (1977) The Definition Of Tribe In RomeshThaper (Ed)Tribe,Caste,AndReligion, Delhi Macmillan Company Of India P.N.7
6. Bose N..K. (1969) The Tribal Situation Man In IndiaVOL..XIX.
7. Singh K.S. :The tribal Society In India, AnAnthrop-Historical Perspective (1985) New Delhi,Manohar Publications.
8. Joshi Y.G. Spatial impact Of Tribal Development Block On TheAgricultural Development VOL.XIIV.
9. PathiJaganath ,TribalPeasantry : (1984) Dynamics Of Development, Inter –India Publication, New Delhi .
10. www.indiatribes.com
11. <http://www.un.org/news/pres/docs/doc.htm>2015.
12. www.mrdc/prg/references/glossary/b.asp
13. www.originpeopleindia.com
14. <http://www.tribalsocietyinfo.com>



Spatial Distribution of Crimes Against Women in India A Study in Crimes Geography

Dr. Tathe Sarjerao Vishwanath

Head, Dept. of Geography
Sant Ramdas Art's, Commerce
And Science college Ghansawangi
Dist. Jalna.

Email- tathe.sarjerao@gmail.com

Introduction:

Modern Times are different from the past in many ways. In 21st century the world at large and India particular are abreast with peculiar and difficult situations. Through these peculiarities and social spaces yet these have spatial significance for the marginalized. Ceremonies and sub alter us. This paper tries to focus on the difficulties and peculiarities that the woman in India are affront with in the beginning of the new millennium. Once again there are a host of issues ranging from fight against non-recognition, mal-distribution, discrimination exploitation, alienation and ultimately annihilation that have become part of the baggage that women in India continue to carry over the generations without any reprieve. Each one of these has great significance for a meaningful experience of women. But ironically enough women have so far tolerated and accepted these as a part of their destiny without registering genuine and significant protests against these injustices at the macro level. They have been carrying these like dead albatross around their necks for many centuries. If someone is to believe the findings of the 2001 census data then it is evident that women in India are confronted with the question of their very existence. Declining female sex ratio particularly between the age group of 0 to 6 years age category. In many regions of the country is indicative of a deep social pathology and crime/violence against women. The data is also indicative to the fact that women in India are suffering from entrenched discrimination and crimes that are structured in nature and needs critical insights into the structures of the society.

Objectives:

The paper has attempted to map the intensity of violence against women at the district level in India and to find out some of the important determinants of crime against women. More over attempts have also been made to identify reasons for spatial variations. Database and methodology: The data published by national crime record bureau which is also the apex body at the national level that collects crime related data at the district level has been used in this article. All the data collected by the NCRB are based on the registered crime report. The researcher is well aware of the fact that only a small proportion of the total crimes committed get registered at a particular point of time and majority of the crime fail to reach at the registration stage owing to various reasons. But this in no way undermines the importance of such a study because the error of under reporting is evenly distributed among all the district of the country and no religion has inbuilt special preferences to wards under reporting. However this does not mean that improvement in level or Awareness and improvement have not been effective in proper reporting. In this study six mas Or crimes against women were selected to find out the level of crime among 700 hundred districts of India by using Principal components analysis. Following

variables were selected for the analysis, namely, number of women raped per lakh females population, number of women kidnapped per lakh females population number of women molested per lakh females population, sexual harassment lakh female population securely by husband to per lakh women in the age group of above 15 years of age and death of women due to negligence to per lakh female population.

Crime against women in India over time:

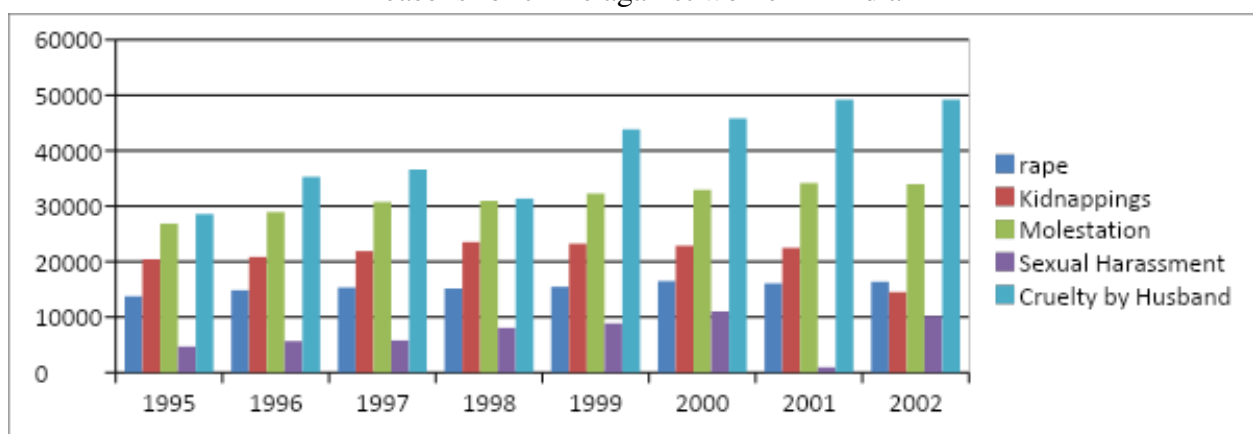
It was mention in the previous section that crime are relative concepts. These are the product of the socio-cultural and temporal contexts in which an activity either gets fame and notoriety. This is also evident from the data supplied by the national crime record bureau. The data reveals that though the crime against women are as old as patriarchy yet crimes like dowry deaths, molestation, sexual harassment and cruelty by husband could be recognized as crimes only after 1995 and kidnapping were the only two crimes recognized against women. It is indicative of the rigged Male mindset and it's insensitive towards the issue related to crime against women. It is interesting to notice here that through dowry deaths are the most sensational and have registered alarming increase over the years yet there was no mention of this. Particular crime before 1995 moreover there are still some states in the country that have not reported cases of dowry deaths so far. This may be due to absence of dowry as a social custom among many communities in the country. Hence inadequate representation from most of the states of India was one of the major considerations for excluding this particular variables for the purpose of building a composite index. It is evident from the table and the diagram that there is discernible increase in the number of all the crimes listed against women from 1995 to 2002. Some of the obvious impressions that can be arrived at from these are.

Table no 1

Reasons for crime against women in India 1995-2002.

Years	Rape	Kidnappings	Molestation	Sexual Harassment	Cruelty by Husband
1995	13754	20420	26856	4689	28579
1996	14846	20848	28939	5671	35246
1997	15330	21898	30764	5796	36592
1998	15151	23520	30959	8053	31375
1999	15468	23236	32311	8858	43823
2000	16496	22871	32940	11024	45778
2001	16075	22487	34124	946	49170
2002	16373	14506	33943	10155	49237

Reasons for crime against women in India





1. Cruelty by husband is the most dominant form of crime against women followed by molestation and kidnapping there were 28579 cases of cruelty by husband in 1995 and it increased to 49237 in 2002. Hence domestic violence is the most dominant universal crime against women in India. 2) Kidnapping and rape were the only two crimes registered against women for a long time and these have indicated relatively low magnitudes as against crime like cruelty by husband. 3) Cases of sexual harassment are relatively less than other crimes yet these have also indicated gradual increase. The number of such crimes was 4689 in 1995 which reached up to 10155 in 2002. Scholars have attribute many factors for such an alarming increase in the number of crimes against women. The author is of the view that increase in the level of awareness among the women about their rights improvement in their economy and social positions have empowered the women to stand and fight for their own rights. There has been significant increase in the number of crime reporting. Women are no more contented with distributive justice alone rather they want this along with proper recognition. This has threatened the age old patriarchal denomination. Consequently our society is experiencing a silent but continuous struggle for the gendered space in every spheres of our society. This is also the reason that women are being subjected to various news forms of crime from time to time and in the process they are also being targeted due to their increasingly visibility. Different regions of India have responded differently to this process of context for space between the genders in the following an attempt has been made to capture the spatial dimension of the same.

Spatial variations in the level of crime against women in India:

It is evident spatial variation in the distribution of crime against women in India that there exists a large variation among the districts. Table appears to be defining many biological, psychological, sociological, ecological, economic theories of crimes looking at the table superficially there seems to be conspicuous absence of any coherent pattern in the distribution of crimes against women in India.

Conclusion:

On the basis of the foregoing discussion it can be concluded that crime against women is a serious complex and sensitive issue. The so-called crimes recorded by the national crime record bureau are only a tip of the iceberg. Legal crimes are superficial and these are related to problems of law and order in the states and districts. These are important but ironically the crimes that are most significant and structural in nature are completely missed in these data. A meaningful study of crime against women must include ontological epistemological, redistribution and recognition crimes. Moreover the so-called saga of modernization and development has also adversely affected the position of women in the society. It is noticed that higher urbanization and modernization have also contributed in increasing the levels of crimes against women. This does not mean that modernization, urbanization and development are intrinsically related to increasing crime against women. On the country it simply means distorted and truncated development and arrested modernization are mainly responsible for the worsening conditions of women in India. The alternatives are many but the experience of some of the states show that proper democratic consciousness and empowerment movements among the masses can bring significant changes in the condition of women. However the most significant changes



needed is the change in the mindset is in the commanding position there is no reprieve for women from crimes.

References:

1. B.S.Butala "Political economy of underdevelopment " Har Anand publication and visas publishing house pvt. lid. New Delhi.
2. Census of India 2001 provisional population total part 1 of 2001 p-92
3. F Engels(1977) "The origin of the Family, private property and the state" Progress publishers Moscoe.
4. Mancy Fraser(1995) "From redistribution to recognition, Dilemmas of justice in a post socialist Age" New Left Review no.212.
5. Ashis Nandi (1999) "At the edge of psychology, Essays in politics and culture " oxford university press, New Delhi.
6. Simone de Beauvoir(1983) "The second sex" penguin Books Harmonds worth UNDP(1998) "Human development Report 1997-98" UNDP New York.





Need & Use of Environmental Studies

Dr. R. D.Khakre

Head Dept. Of Geography
Jaikranti Arts Sr. College, Latur

Studies of environmental science are getting a lot of attention not only in the field of pollution control but also in situation life and nature.

It helps us to understand the nature of the environment and its compounds, the nature of disturbing factors, and the various methods to overcome disturbing factors. the disturbing factors pressurize sustainability and natural living.

environmental science is now a mature, valuable, discipline. the past three decades have witnessed a growing awareness of the effects of human activity upon our earth resources and during this period environmental studies have emerged as a multidisciplinary field of study to exam the interaction of the people and the environment.

the scope of environmental science and its management plans, biomedical waste treatment, and fly ash management.

Objectives

- 1)To study the environmental changes occur in daily life.
- 2)Study of different components of environmental science.

Importance of environmental studies.

the study of the environmental science makes us understand the scientific basis for establishing a standard which can be considered acceptably safe clean and healthy for man and nature eco-system includes both physical and natural science.

most environmental scientists agree that if pollution and other environmental deterrents continue at the present rates the results will be irreversible damage to the ecological cycle and balances in nature upon which all life depends. environment scientists warn that fundamental and perhaps drastic, changes in human behavior will be required to avert an ecological crisis.

To safeguard healthfully environment that is essential to life, the human must learn that earth does not have infinite resources .earths limited resources must be conserved and where possible, use .furthermore humans must devise new strategies that mesh environmental progress with economic growth .the future growth of developing nations depends upon the development of sustainable conservation methods that protect the environment while also meeting the basic needs of citizens.

Need For Public Awareness

awareness regarding the state of the environment is most for every human being living on this planet. already the world is surrounded by several environmental problems, the effect of which is directly felt by its inhabitants. nobody can escape the wrath if fallen many it is the people of developing countries or these from the developed ones.

looking at the present pathetic state of the environment and the knowledge people have about it, it has become evident for every country to educate their message so that they could start understanding the problems that they are facing at present and world have to face in the future. almost all nations of the world have geared up



in creating awareness in their people .media is playing a leading role in this process several men are being employed to educate the message .various advertisements, documentaries, feature films, etc.are being made to be telecasted on the video media newspapers and other magazines publishing out a lot of articles on these subjects.

Environmentalism

It refers to the movement to protect the quality and continuity of life through conservation of energy resources, prevention of pollution, and control of pollution. The philosophical foundations for environmentalism in the United States were established by Thomas Jefferson, Ralph Waldo Emerson, and Henry David Thoreau. In 1864, George Parkins Marsh published *Man & Nature*, in which he anticipated many concepts of modern ecology. Organized environmentalism began with the conservation movement in the late 19th cent., which urged the establishment of state and national parks and forests, wildlife refuges, and national monuments intended to preserve noteworthy natural features.

The "New Environmentalism" In the 1950s and 1960s, the public was becoming aware that conservation of wilderness and wildlife was but one aspect of protecting an endangered environment. Concern about air pollution, water pollution, solid waste disposal, dwindling energy resources, radiation pesticide poisoning (particularly as described in Rachel Carson's influential *Silent Spring* 1962), noise pollution, and other environmental problems engaged a broadening number of sympathizers and gave rise to what became known as the "new environmentalism." Public support for these issues culminated in the Earth Day demonstrations of 1970. The new movement had a broader goal-to preserve life on the planet. The more radical groups believe that continued industrial development is incompatible with environmentalism. Other groups, notably Greenpeace, which advocated direct action to preserve endangered species, often clashed violently with opponents. Less militant organizations called for sustainable development and the need to balance environmentalism with economic development.

On an international level, concern for the environment was the subject of a UN conference in Stockholm in 1972, attended by 114 nations. Out of this meeting developed the United Nations Conference on Environment and Development (1982).

Environmental changes during the lockdown

the air has become so clear that the Himalayan mountain peaks are visible from Jalandhar in Punjab situated 140 km away. the residents of Jalandhar say that for the first time in 20-30 years the air has become so clean that they can see the Himalayan peaks from Jalandhar such news reports are pouring in from worldwide.

the air has become cleaner, the water has become cleaner, the pollution level has fallen.

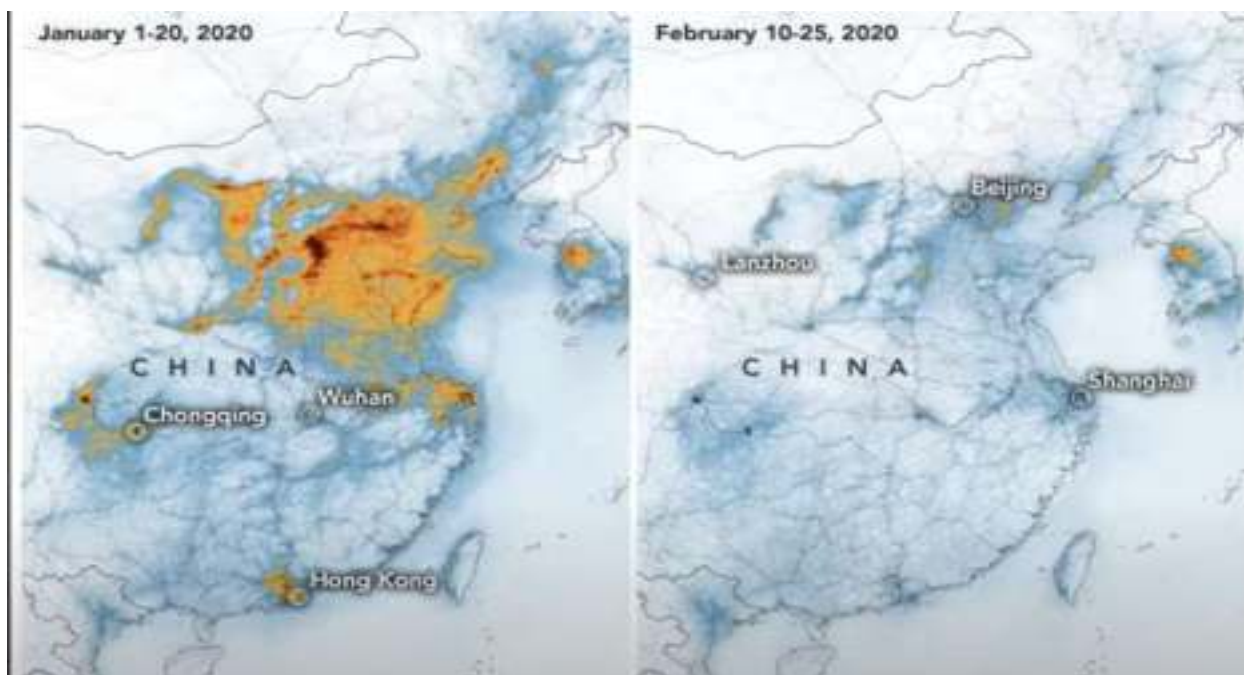
what is the impact of coronavirus and lockdown on the environment? what can we learn from this?

and why are economy and environment always seen inversely proportional to one another?

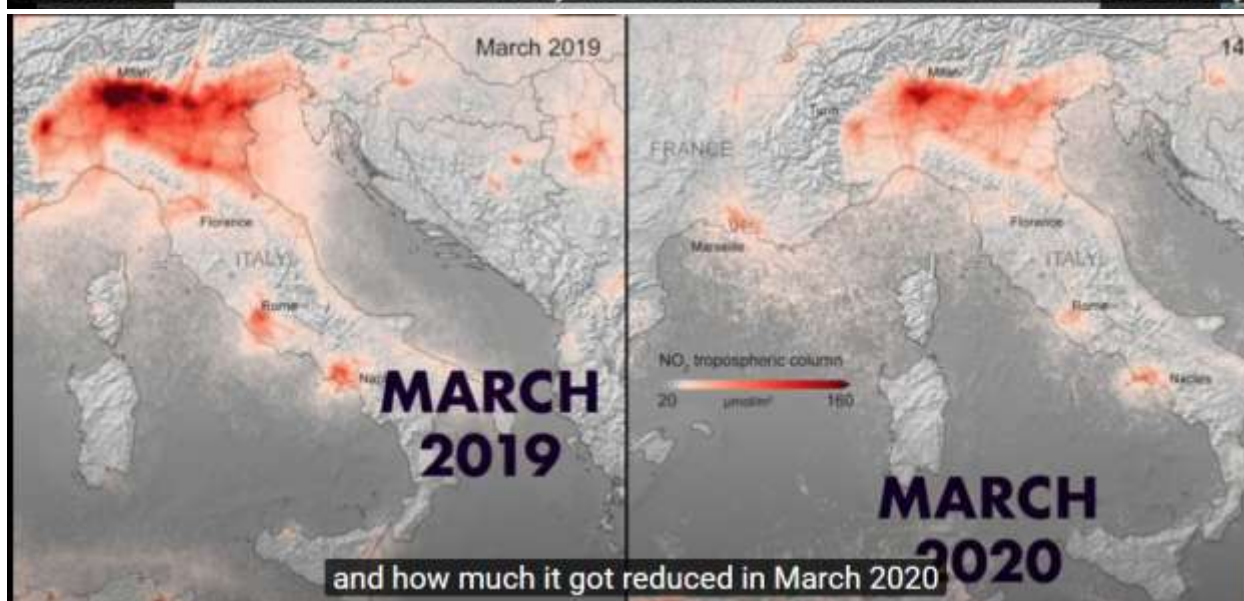
that when then economy stumbles, the environment to become better

Air Pollution

NO₂(NITROGEN DIOXIDE) is a toxic gas that is emitted from the engines of cars , buses , trucks, and factories. the WHO states that if this gas is more in concentration than 200 micrograms per cubic meter than it can cause an enormous inflammation in your breathing pipe which can lead to problems like asthma.now, due to this lock down the number of cars plying on the roads have become fewer factories have shut down and hence, the cities all over the world concentration of NO₂ in the air has fallen drastically. have a look at the first example in china look at the levels in January and then look at how much it has fallen in February. Thesame thing was witnessed.



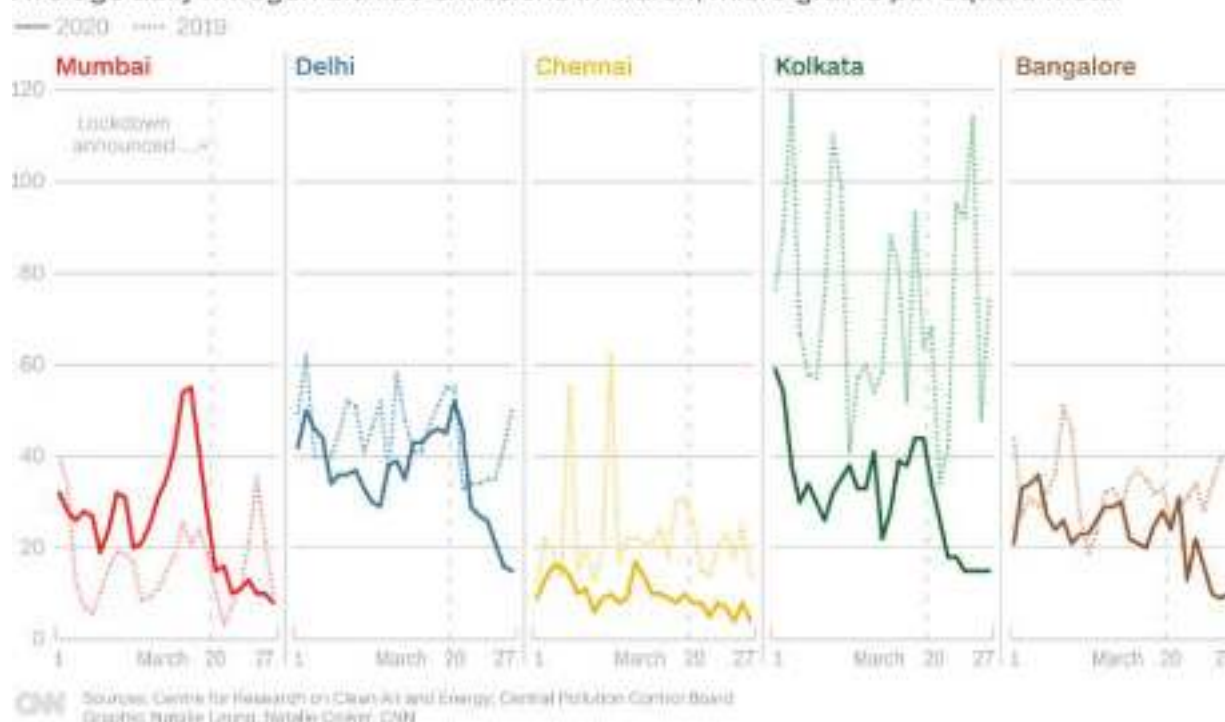
Look at the levels in the month of January and then look at how much it has fallen in February



and how much it got reduced in March 2020

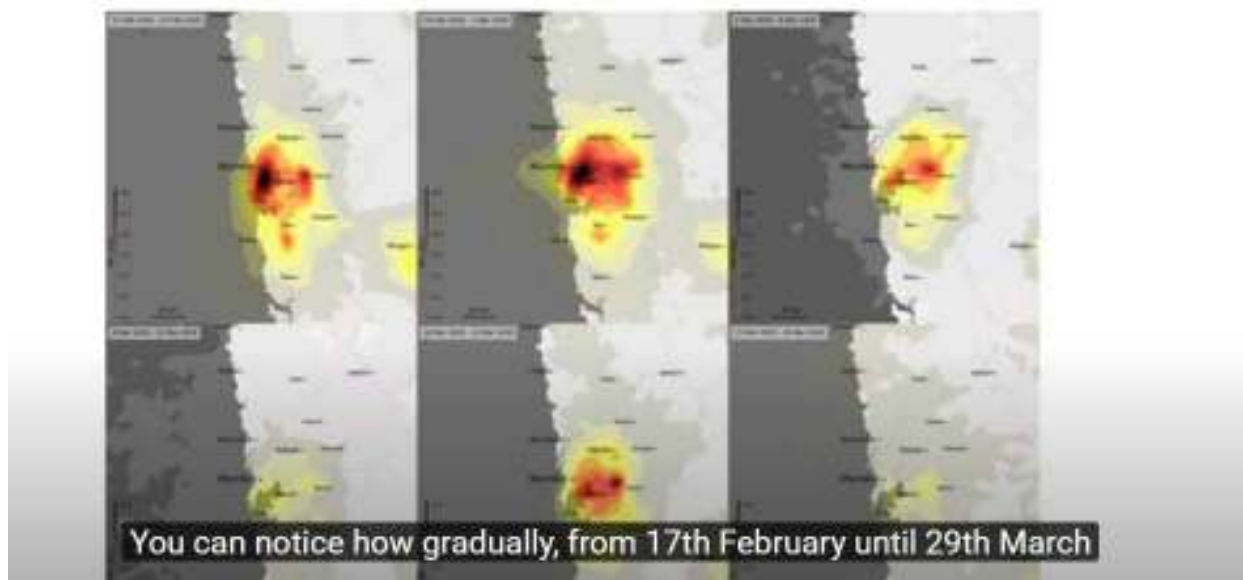
NO₂ levels fell dramatically after India's lockdown

Average daily nitrogen dioxide emissions in March, micro grams per square meter



Weekly NO₂ levels around Mumbai between 17th Feb 2020 to 29th March 2020

Data Source- TROPOMI SSP



in the cities of Europe - in Spain, the UK, Italy, take an example of Italy - notice how much of NO₂ was present in Italy in March and how much it got reduced in March 2020. Exactly the same thing was witnessed in Indian cities to look at Delhi, Mumbai, Bengaluru, Chennai, Kolkata. We can observe how the NO₂ concentration has fallen compared to 2019 in these cities and if you want to look at the comparison of the past one month.



References:

1. Santra S.C. 2004 environment science,new central book agency private limited kolkata.
2. Harish sharma Himalaya publication house New Delhi.
3. V.K. Sharma, EnvironmentChanges, Arya pub, Delhi.
4. B.L.Sharma (2009) Human And Environment, Malik and kampny,jaipur.
5. CNN web page on NO2 levels after lock down.
6. Global times, Newspaper.





The Effect of Climate Change on Agriculture and Food Security

Asst. Prof. Sandip Tukaram Patil,

Incharge Principal,

Dr. J. P. Naik Mahavidyalaya Uttur,

Mobile: 09763072083

Abstract:

Agriculture and food security are among the major casualties of climate change in India. Strategies such as adopting necessary mitigation measures and reducing green house gases emissions along with widespread awareness on this issue are needed. Climate change is an emerging human security issue that threatens various communities. The nature and amount of climatic changes not only hinders human development and environmental security, but also forms a major human security hazard at national and livelihood levels, mostly for the world's most weak groups. South Asian countries like Bangladesh, Srilanka, India, Pakistan, Nepal, and Maldives are the poorest countries in southern hemisphere. Both physical and geographical situation of these countries makes them weak to the natural calamities. But now a day, climate change is indirect threat that possibly affects the agriculture, fishery, livestock and human life of a country. The Food and Agriculture Organization of the United Nations (FAO) also warns about the harmful consequences, in particular for smallholder subsistence farmers in what are in any case marginalized regions. The impact of climate change on food security will be substantive. The increasing surface temperature influence factors very relevant for food security as precipitation, water availability, weather extremes, and sea level rise. Only malnutrition or hunger consideration is just not enough to recognize the impact of climate change, it also affects the unit, the regions and the person who was already the most terrible victim of poverty.

Key words: Climate Change, Food Security, Poverty

Introduction:

The peace and extent of warming across India is wide spread and undisputed. It adverse impact on wildlife, agriculture, incidence of diseases, local weather, rise in sea level, increased frequency of heat waves, rising tropical air, changed precipitation, temperature pattern, decreased in cloud cover, increased land – sea temperature, changed wind direction and wind stress over the sea surface etc. Climate change has emerged as the most serious environmental threat of the 21st century. Since last few years due to the green house effect the temperature of the earth is rising. Most countries on earth are discussing environmental problems and how to limit them. Environmental problems on a global scale can originate from any corner of the world and affect all ecosystems of the earth. Such problems directly or indirectly can affect human beings. Giving rise to grave concern among nature lovers and conversation, a study published in current science on August 15, 2011 said that over 56 percent of India's forests would be transformed under global warming before the turn of the 21st century. The study authored by scientist at the Indian Institute of Science (IISC), Bangalore says that some parts of the Western Ghats Will be among the most vulnerable regions. (Competition Success Review, P.19) Climate change is greatest environmental challenge, which is facing mankind on earth. This climate change is rapid, continuous, and irreversible. Paleoclimatological records show extremely low temperature during a previous ice age of about 160,000years ago. At that time, the global mean



temperature was about 5°C colder than at present and the North American Continent was covered by an ice sheet. It is estimated that temperature have been increasing at the average rate of 0.3 percent per decade or 5°C in 170 years due to industrialization with the doubling of carbon dioxide concentrations expected within 40 years, arising from current industrial systems the mean global temperature will probably be raised by 1.5 to 5°C . Due to this the universal temperature will be raised by 1°C to 5°C in the next century. The hottest 10 years in the 20th century are measured in the last 15 years. Among these 1998 is considered as the hottest year. The information published by World Weather Organization on 3rd Dec. 2010, the year 2010 will be recognized as the hottest year till now since 1850. According to data completed by the World Meteorological Organization (WMO) that were released on December 3, 2010 (Jan- Oct) is now estimated at 0.55°C above the 1961-1990, annual average of 14°C . At present 2001 nominal value is the highest on recorded, just ahead of 1998 and 2005. From 2001 to 2010, global temperature have averaged 0.46°C . above the 2000-2009 average and the highest value ever recorded for a 10 year period. Recent warming has been especially strong in Africa, part of Asia and Arctic, the Saharan Arabian; East Arctic, Canada sub regions have all had 2001-2010 temperatures 1.2°C - 1.4°C . above the long term average and 0.7°C to 0.9°C warmer than any previous decade. Surface air temperature over land was above normal across most parts of the world. Only limited land areas had below normal temperature in 2010, the most notable beings parts of Western and central Siberia in Russia, part of South America interior Australia, part of Northern and Western Europe, Eastern China and the Southeast United States it was the coldest year since 1961 for the Northern European region, and since 1998 for northern Asia mainly due to below normal temperature during winter. Other weather –related anomalies during 2010 included abnormal patterns of food in many regions. Pakistan experienced its worst ever flooding during the year, due to exceptionally heavy monsoon rain the country witnessed in July and August more than 1500 lives were lost to the catastrophic floods and over 2 million people were displaced large swathes of the nations agricultural land were inundated, leading to a huge loss of crops and live stock. In terms of the number of the people affected the United Nations rated the Pakistan floods as the gravest humanitarian crisis in recent history. Sea level, plants, living organisms, society and human health will be badly affected due to the rise in temperature, rising population, rapid urbanization, industrialization, deforestation and waste production. And also putting enormous pressure on the natural resources and has led to qualitative and quantitative degradation of land, water, air, biodiversity, forests and bio-resources, shrinking arable land, and farm size, growing regional disparity, depleting natural resource base, increasing biotic and a biotic stresses. The life of many plants and animals has come in to danger due to the deforestation. Many species are threatened of extinction. About 70% of our soil is badly affected. Land pollution is causing due to industrial effluents and the use of chemicals and pesticides. Due to this today's generation is thinking about other occupation instead of farming. In the last 20 years, nearly 1200sq.km of forest has disappeared under the government's programmers and much more illegally (Agarwal, P.6). It is therefore necessary to have at least 30 % of the land under the forest for the maintaining ecological balance. One of the major challenges is food security for rising population. We have very daunting challenges before us. Safeguarding and protecting our environment is a prime responsibility of every individual, society and institution. Sustainable development should be at the core of any human activity if we are really concerned of the environment.



Objectives Of Study:

1. To study the Climatic variation and its impact on Environment.
2. To study the effect of climate Change on Agriculture and Food Security.

Research Methodology And Source Of Data Collection: Present research is based on the secondary information sources. Secondary data is referred from Various Books, Journals, Magazines and News Papers etc.

Climatic Variation:

Country is facing unpredictable weather for last few years. There is different in guesstimate given by meteorological department. Sometimes guessing is proving are wrong. Sometimes high temperature, sometimes low temperature, sometimes heavy rainfall, sometimes snow fall, sometimes very heavy rainfall. Due to this indefinite weather atmosphere is totally changed. Change in relative humidity in atmosphere, change in average monthly rainfall and annual rainfall, change in days in wet seasons is taking place. There has also been a significant change in the monsoon period. While August September was the usual period of floods twenty years ago, at present it is unpredictable. In 2007, there were heavy rains in July causing sudden flooding. In 2008, rains began at the end of May. Heavy rainfall throughout June and July caused floods for which people were ill prepared, and had very little time to respond. Consequently there was considerable loss of life and property (Shiraz A .Wajh P. 8). In the year 2007, 17 million people from India were affected by flood. In 2007 Kashmir has experienced the hottest summer in last three decades. In 2005 the problem of big flood was created in Maharashtra. There was a danger of flood in front of Raigad, Thane, Ratnagari, Sindhudurg, Sangli and Satara Districts in Maharashtra State At the same time On 26 July 2005 Mumbai witnessed heavy rainfall of 994mm in a single day. In the next three years there was heavy rainfall in Maharashtra. On 1st June 2007 Mahabaleshwar witnessed heavy rainfall of 9.38 inch. On 11th Nov.2009 due to the Fayan storms occurred on Kokan costal area, in 24 hours there was heavy rainfall in 19 districts of the state. Due to the Fayan storms occurred on kokan costal area after 43 years there was heaviest rainfall of 123.3 mm, in Pune district in last 75 years. On second November 1994 in the same month there was rainfall of 96.8 mm. At the same time the speed of wind in Pune was 68 km. per hour. This is record breaking speed of wind and low presser in this month in last 70 years. In 2010 there was rainfall in February and March. In November there was unexpected rainfall, in December the temperature in Wardha was decreased 4.5⁰ c. In most of the places in Maharashtra state the maximum Temperature was 1⁰ c to 5⁰ c. unusual rainfall (60 cm rainfall in 5 days, August 19-23, 2006) in Barmer districts of Rajasthan in 2006 was not recorded in the past 200 years.

Impact Of Climate Change:

Climate change is affecting India is a big way and its impact are many and serious-erratic monsoon, migration of agriculture zones, sea level rise, spread of tropical diseases, change in availability of fresh water, floods, droughts, heat waves, storms, hurricanes etc. 33% of total land should be under forest but now it is near about 20 %. Due to this carbon dioxide is rising in atmosphere. In last 50 years the ice near the North Zone has been decreased by 15 %. It is clear through the satellite photographs that the area and thickness of ice in the ocean in Arctic region is decreasing. The thickness of ozone layer is decreasing up to 30 dib son unit due to



chlorofluorocarbon and Bromine. Ozone layer is very precious for living organisms. The layer of sea water has risen by 10 to 20 cm. Because of this the life of people in coastal area is in danger. The possibility has been pointed that the temperature of sea water will be increased by 1.4°C to 5.8°C during 1999 to 2100 (Agro 1, 4 Dec, 2010). The ill-effect of burgeoning population is currently being seen around the world. Due to climate change and rising world population and increasing pressure on grassland for agriculture, it is not surprising that desertification is widespread in the world today. Although reliable data are lacking, the current global rate of desertification may be as great as 200,000 square Kilometers annually. The largest and most divesting recent example is found in the Sahel, a region on the southern fringe of the Sahara of Africa, where drought began in 1968 and extended through 1970s. Grazing lands declined dramatically, millions of herding animals died, and more than 100,000 people died of starvation as the landscape deteriorated. (William Marsh and Grossa JR., P.28). Over 56 percent of India's forests would be transformed under global warming before the turn of 21st century That's why the Northern and Central parts of the most deciduous and evergreen forest of Karnataka are at the greatest risk.

Now on-earth, water tables are falling, soil is eroding, glaciers are melting and fish stocks are vanishing everywhere, besides close to a billion people go hungry each day (Competition Success Review, Sept. 2011, P.25.) Given a trend towards global warming what will the environmental effect be?. The increased heat content of the troposphere will strengthen certain air masses, increasing their moisture content leading to greater storminess in some regions. That storms and precipitation on the Pacific coast of the Americans increases substantially with only $1-2^{\circ}\text{C}$ of atmospheric warming associated with El Nino, the periodic buildup of warm water in the east Pacific near the equator. In other regions, such as under the sub-tropical high pressure cells, the increase in heat may have stabilizing and drying effect.

Atmospheric disasters are increasing day by day. Due to the rise in temperature of water, Hurricane Storms are creating and affecting the sea life for exam. Fayan Storms on 11th Nov. 2011. The Cyclones are creating on land and affect the agriculture and human life. E.g. On 1st April 2009, near Bhubaneswar, in the central region finel type storms destroyed a large area (200 m 3km in 5 minutes. The farm tractor was tossed up 20 m and then fell on the ground driver died. Bullock cart was also tossed up. People collecting potatoes in the field were tossed up and then died. The speed of the storm was 200km hour. (Marathi Science Magazine, May 2009). Due to rise in temperature the water level on ground will be decreased. Due to the vaporization of water the land will lose its wetness and it will affect the crops. The problem of drought will be created. By the rise in deserted area, natural plants and farm land will be destroyed.

The cycle of season has been changed in last four years. Delayed rain, rise and fall in cold, cloudy atmosphere, very hot summer all these factors are affecting the crops. Field of farms has been affected badly. Due to this, Orange in Vidarbha, bananas in Jalgaon, Grapes in Nashik and sugarcane in western Maharashtra has been badly affected by natural disaster. The UN announced on June 20, 2011 that famine had hit some parts of the impoverished African nation of Somalia. The UN said that two parts of the country, both under the Sway of rebels, were suffering from the famine with up to 350,000 people affected it was also declared that it was the most severe food crisis in Africa in two Decades. The famine is basically the result of a severe drought, which has affected more than 10 million people in the horn of Africa. Therefore according to UN famine implies that at least 20 percent of household face extreme food shortage



with limited ability to cope, acute malnutrition in over 30 percent of people and two deaths per 10000 people every day. According to UN malnutrition rates in Somalia were currently the highest in the World, with peaks of 50 percent in certain areas of southern Somalia. Following the famine, over 78,000 Somalis have fled their nation to seek refuge in neighboring Ethiopia and Kenya in the last two months. According to UN humanitarian agency, the deficient rains witnessed in the region in 2010 were some of the worst in the world on record (Competition Success Review, p. 99.)

Food Protection:

While studying climate variation and its impact on food protection, increasing greenhouse gases is a causing concern. The advanced technologies and industrialization has developed our life style but for this we are using natural resources, natural air water excessively. Increasing pollution and degradation of environment is giving the indication of danger to the whole human being. By thinking about the protection of environment, the world environment organization has started to solve the problems like rise in temperature, climate variation, desertification, acid rain, pollution and degradation of environment due to the change in weather in last few decades the food protection has come in danger. Food protection has become Universal problem. Among the 6 billion people helpless and hungry. (Report of Agricultural Organization, Year, 2008). As far as the increasing population of the world is concerned, demand for food has been increased. Therefore food safety is totally depending upon sustainable production. To satisfy the demand of food sustainable production is the only way.

For decades food security has been the bane of developing nations across the world. The report revealed that 14.7 percent of American households faced food security some times during 2009, including 5.7 percent with very low food security. While the latest figures for food security and very low food security showed only a slight increase from their 2008 levels of 14.6 percent and 5.7 percent respectively, these nonetheless hovered the highest recorded levels since 1995, when the first national food security survey was conducted (Competition Success Review, Jan. 2011.)

Due to the increasing demand and unsustainable and insufficient amount of food items the problem of poverty is also increasing day by day. Intensity of poverty and hunger with the food protection is high because of increasing of food demand and less scale of unsustainable food demand. The following table shows the scale of world hunger.

The scale of world hunger (2010)

Country	Numbers in Lakh
Developing Countries	832
Developed Countries	16
India	231
North Africa	33
Latin America and Saudi Arabia	45
China	123
Part of Asia and Pacific Ocean	189
South Africa	212

Source: Yojana periodicals Oct. 2010



The problem of increasing world population and decreasing food production has become very serious. If we don't think about farmers and workers, how can we manage food protection? The world population increases by 100 crore after every 13 years. In 1960 the world population was 300 Crore. In 2011, it was 700 crore and 2025 it might be 800 crore. In the year 2008- 2009 world food production was 1792 Lac tones, in 2009- 2010 it was 1748 Lac tones. As far as today's situation is concerned, the amount of food production needed is 2025 Lac tonnes (Agro 1, 24 Dec. 2010). The Problem of food protection has become serious due to the increasing cost of food items.

Today our country is also affected by the problem of food protection. Due to the increasing costs of food items the class of poor people is going away from the food protection. According to the report of Prof. Swaminathan number of malnutrition people has been increasing. Agricultural ministry has declared that by 2012 the demand of food will increase by 2.50 crore tones. To satisfy this increasing demand, it is decided to increase the production of wheat by 8 Lac tones, rice by 10 Lac tones and pulses by 2 Lac tons in the next four years. Due to the heavy rainfall in Bhandara district of Maharashtra state, in October and November out of the whole area 20 percent rice was totally destroyed. Due to this climate change the food protection of farmers depending on the production of rice has come in danger. The production of rice in Raigad, Ratnagiri, Sindhudurg, Satara, Pune, Gondia, Kolhapur and Gadchiroli is also affected. (Agro 1) Also there was loss of 20535 hector of mazy, 5767 hectare of Jawar, 6237 hector of Grapes, 50 hector of Onion.

The food protection of the poor farmers was come in danger due to the unexpected rainfall in 2010. Before this the farmers were affected by the insufficient rainfall. Now they have to face this dual situation. That's why the equation of climate change and food protection has been created. This is the result of imbalance in nature. The number of poor and hungry people might increase. This is the real danger in the 21st century.

Solution And Planning:

1. We should control the quantity of green house in atmosphere which is responsible for the climate change.
2. If we plant trees on large scale then it will help to control the CO₂ in atmosphere. According to famous Thinker New Berger Tidal forest decreases the air pollution up to 80%
3. Fuel is brunt on large scale for the cause of formation of energy and vehicles. Half brunt fuels produce Poisonous substance. So we should control the use of energy and we should solar energy and biogas
4. In hill side region we should use animals like horse and Antyhorse for transportation. For agriculture work we should use Bullock cart.
5. In the main cities like Mumbai, Calcutta we should use CNG gas as an option to petrol and diesel.
6. For the protection of soil and we should use sprinkler method and Dot method.
7. For protection the environment and preserving natural resources we should think about sustainable farming and use of fertilizers.
8. We should use modern bio technology as an option for fertilizers and insect sides which affect the environment and production of agriculture.



9. For satisfying the need of food of the increasing population we should plan the use of land. We should think what we have and what the needs of people are.
10. Farmer should also change their crop method according to the weather.
E.g. According to the chemistry professor in Shivaji University Dr. B. S. Mohite the rain is delaying 5 days per year. In 2011 the rain will start from the 4th week of July. So, farmers should plan their work by thinking all this.
11. We should have modern technology which tells the farmers about weather guestiment & when to take a particular crop.
12. Food security is the need of 21st century. We should solve this problem by bringing new technological things through research.

References:

1. Dhere A.M., Mane A.V., Power C.B., Patil D.A.(Apr-2010), "Environmental Studies" P.160
2. Samant jay sha (2007) "Environmental Studies" Shivaji University, Kolhapur.P.169
3. Sawant Prakash, (july 2009) "Agriculture Geography" Phadake Prakashan Kolhapur ,P.123 to 125
4. Marsh Willam m., Johm m. Grossa, JR. " Environmental Geography, Science, Land use and Earth systeem, P. 28, 181.
5. Competition Success Review. Sept.2010, P.51. jully 2011, P.2. Sept. 2011, P.25. Jan. 2011, P. Apr. 2011, P. 26. May 2011, P.18, 19.
6. S.S Purohit and R Ranjan. "Ecology, Environment and Pollution" 2003. P. 739, 743
7. LEISA INDIA Dec.2008 "Dealing with Climate Change" volume 10 No.4 published by AME Foundation in Collaboration with ILEIA P.6,7
8. Marathi Science Magazine 1may 2009.
9. Yojana Magazine Oct.2010 "Food Protection" P.19-27.
10. Lokprabha Magazine Oct.2010 ,P.20
11. Saptahik Sakal Magazine May2010,P.5,6
12. Sakal Agro1, 14Jan. & 4,24,25Dec.2010
13. Dainik Lokmat 1Jan.2011, Dainik Sakal 19 Aug.2010



Covid-19 Pandemic Dislocates Real Estate Development Sector in India

***Hitesh U. Shingadia, *Mahesh Korna and *Vaibhav Prakash, #Krunal J. Damania**

*SVKM's Mithibai college of Arts, Chauhan Institute of Science and Amrutben Jivanlal College of Commerce and Economics (Autonomous) Vile Parle (West) Mumbai - 400056 Maharashtra

#N.L. Dalmia Institute of Management Studies and Research Sector 1, AG Nagar, MIDC, Mira Road, Mumbai - 401104 Maharashtra

hiteshshingadia26@gmail.com; maheshkorna@gmail.com; vaibhavprakash07@gmail.com; damaniakrunal9@gmail.com

Abstract:

The outbreak of COVID-19 began in late 2019 in Wuhan city of China. The Wuhan Municipal Health Commission, reported a cluster of cases of Pneumonia in Wuhan, Hubei Province. That's how the novel coronavirus was identified. By early 2020, COVID-19 had reached many countries, carried there by the international travelers from the affected zone. India reported its first positive case on 30th January 2020. India had begun thermal screening of international passengers arriving from various cities from January 2020 itself. India recorded very few cases in the month of February 2020. However, in March 2020, the government had drawn up plans to deal with the pandemic situation in the country. On 22nd March 2020, at the request of Prime Minister Narendra Modi, India observed voluntary public curfew (Janta curfew). Further on 24th March 2020, a nation-wide mandatory lockdown for 21 days was announced. Again, on 14th April 2020, the nationwide lockdown was extended till 3rd May 2020 which was followed by a further extension of two weeks with some relaxations in the non-hotspot areas. The immediate response to the announcement of the national lockdown was the attempted flight of millions of migrant workers from various cities of India, back to their rural residences. For these workers, who survive on daily wages and work in India's large informal sector, the shutdown of economic activity meant that they had no means of livelihood at their work place. At the same time, it has disrupted industries, trade, and business cycles, thus halting global economic activity significantly. One of such sectors which is worst affected by COVID-19 pandemic is the real estate sector.

The Indian Real Estate sector has been successful in overcoming many challenges in the past. The sector after coming on terms with demonetization and other reforms like RERA, GST and ban on the subvention scheme was attempting to get back its growth trajectory. However, the current coronavirus lockdown will surely hurt the sector and deaccelerate its momentum. Amidst the COVID-19 uncertainty, it is anticipated that the sector will see a further decline in the FDI inflows. Real estate sector contributed nearly 6% to India's GDP in 2017. As per the projected growth trends during the pre-COVID-19 era, the sector's contribution was likely to rise to 13% of India's GDP by 2025. To combat the economic impact on the sector, the Government of India and the Reserve Bank of India have announced several measures such as Lowering the interest rates, Reduction of the Cash Reserve Ratio (CRR) and 3 months of moratorium for all loans. These measures will support the sector to recover from the current economic crisis.

Keywords: COVID-19, Lockdown, Real Estate Impact, Moratorium, Fiscal Measures.



Introduction:

The Coronavirus outbreak, which was originated in China, has infected lakhs of people worldwide. The pandemic is having a noticeable impact on global economic growth. Initially, the economic effects of the virus were expected to be short-term supply issues as factory output fell because workers were quarantined to reduce the spread of the virus through social interaction. Government of India enforced a nationwide lockdown to control the spread of coronavirus outbreak (Table 1). Numerous containment measures had already been imposed, varying in intensity across the country, including travel restrictions (complete restriction of incoming international commercial passenger aircraft and some restrictions on domestic travel including cancellation of domestic passenger air traffic); closing educational establishments, gymnasiums, museums, shopping malls and theatres; bans on mass gatherings and encouraging firms to promote remote work.

Table 1 Phases Of Lockdown And Reported Covid-19 Cases

Phase	From	To	Period (in days)	Covid-19 positive cases
I	25 March 2020	14 April 2020	21	10,440
II	15 April 2020	3 May 2020	19	42,496
III	4 May 2020	17 May 2020	14	95,622
IV	18 May 2020	31 May 2020	14	1,82,143
V	1 June 2020	30 June 2020	30	3,32,424 (as on 15 June'20)

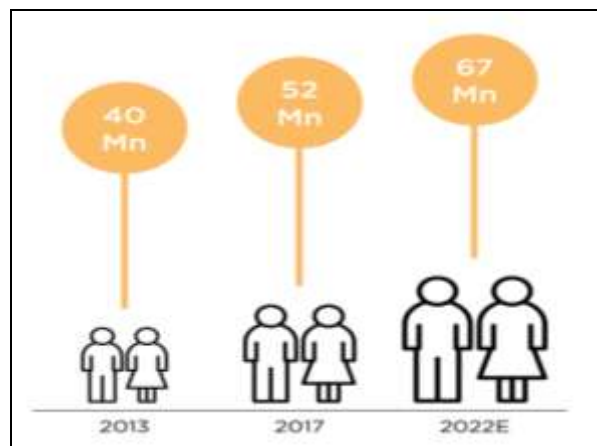
Source: www.thehindu.com

The immediate response to the announcement of the national lockdown was the attempted flight of millions of migrant workers from Indian cities back to their rural residences. For these workers, who survive on daily wages and work in India's large informal sector, the shutdown of economic activity meant that they had no means of livelihood in their places of work. It is likely that the lockdown policies along with the global economic contraction associated with the COVID-19 pandemic will affect the poor and the vulnerable both in the rural and urban sectors. The drop in economic activity by delays in supplies of intermediate and finished goods through supply chains, closure of factory due to labor shortage and unprecedented fall in demand. One of such sectors which was worst affected by COVID-19 pandemic was real estate sector. Residential, commercial, and retail are the three key asset classes, which have primarily been contributing to the sector's growth. Real estate contributed nearly 6% to India's GDP in 2017. As per the projected growth trends during the pre-COVID-19 era, the sector's contribution was likely to rise to 13% of India's GDP by 2025, ANAROCK (April 2020) Fig:1. After agriculture, real estate is the largest employment generator in the country. Employment in real sector was estimated to 67 Million by 2022, ANAROCK (April 2020) Fig:2. The sector creates tremendous opportunities for the skilled and unskilled workforce. It has also been instrumental in employing large masses of migratory populations that come to the metropolitan cities in search of work. As per the Economic Survey 2017-18 (March 30, 2018), employment is expected to grow at a compounded rate of 5% mainly for construction and development.

Fig 1: INDIAN REAL ESTATE CONTRIBUTION TO GDP



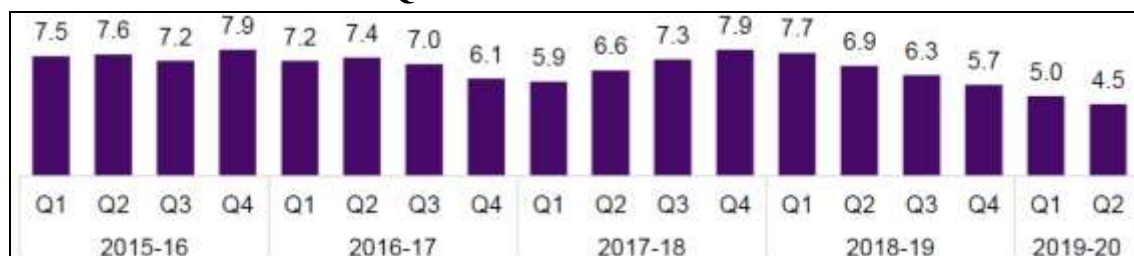
Fig 2: EMPLOYMENT IN INDIAN REAL ESTATE SECTOR



Source: ANAROCK Research

Indian real estate sector, which was already struggling to re-emerge from the past turbulence of structural changes, policy reforms, and the liquidity crisis, is now set to witness another major fallout. In usual times, the ongoing period normally sees an uptick in residential real estate activities owing to festivals like Ugadi, Gudi Padwa, Akshaya Tritiya and Navaratri when new launches and housing sales spike up. Upcoming vacation time for Indian schools beginning April till June-end also gives time to homebuyers to make purchase decisions. Country-wide lockdown until mid-April has halted all activities. As evident, project sites are shut, site visits have stopped, and construction activity has come to a grinding halt, eventually impacting housing sales. Also, developers have deferred their new project launches for an unknown period. Besides residential segment, commercial real estate is also not immune to the Covid-19 fallout. Corporate occupiers are seen delaying their leasing decisions and still several MNCs and businesses are testing new waters of the work from home option. If proved successful, it could impact rental activities in the future. Shrinking Indian economic growth coupled with global economies sharp reaction to the ongoing COVID-19 pandemic will certainly impact Indian office segment. India's GDP growth rate slipped to 4.5%, nearly 7-year low, in 2Q 2019-20 and amidst the current turmoil, its improvement surely seems miserable (Chart: 1).

CHART:1 QUARTERLY ESTIMATES OF GDP



Source: Quarterly estimates of GDP for 3Q (2019-20), (MoSPI), 28 February 2020

Retail businesses, highly dependent on consumer spending, are also witnessing a momentary slowdown and reduced interest from global brands who may now consider revising their expansion plans. "Low footfalls and subsequent closure of malls will impact developers' debt servicing against the project. Even a relaxation from banks for the short-to-medium term should not have a big impact. However, if the virus scare continues beyond one to two quarters, debt



servicing challenges may last for a longer period,” points out Rohan Sharma, research head, Cushman and Wakefield(Housing.com, 27 May 2020).

The Government of India and the Reserve Bank of India have also announced several measures to combat the social and economic crisis arising out of the COVID-19 breakout:

- **Lowering the interest rates**

Repo rate and reverse repo rates were reduced by 75 bps and 90 bps, respectively. Hereafter, the revised repo rate stands at 4.4% and the reverse repo rate at 4%. This is going to make credit more attractive and infuse liquidity in the system. The reduction in reverse repo rate is a strategic move

to discourage banks from parking their excess funds with the central bank as lower rates will now compel banks to deploy the amount for credit offtake to ensure continued liquidity.

- **Reduction of the Cash Reserve Ratio (CRR) by 1%**

The Reserve Bank has reduced the CRR by 1% which is likely to release primary liquidity of around INR 1.37 Lakh crore across the banking system of the country. The minimum daily CRR balance has also been reduced from 90% to 80%. This is a one-time dispensation available up to 26th June 2020.

- **Three months of moratorium for all loans**

Anticipating a rise in defaults following the recent COVID-19 pandemic, the Reserve Bank has allowed a moratorium of 3 months to all term loans from all institutions. The central bank has been sensitive to the ongoing issues and has assured that this will not impact asset classification downgrade. This is an important step to regulate and supervise the monetary system of the country and may help individuals and companies to manage their working capital and ensure business continuity.

The Union Housing and Urban Affairs Ministry will advise States and Union Territories and their regulatory authorities to extend the registration and completion date of real estate projects by six months as part of economic relief measures announced by Finance Minister Nirmala Sitharaman(THE HINDU May 13, 2020).

Materials And Methods:

Relevant and authentic information was collected, analyzed, and compiled using secondary data sources across the array of the International Economic Data Reports, Government sites and Newspapers, Journal resources and blogs of distinguished authorities and establishments in the present investigation. Impact of covid-19 pandemic on Indian Real Estate was analyzed through three parameters in the current study, viz.

- Residential
- Commercial
- Retail

Authentic sources were referred for preparation of this manuscript, acknowledged and cited in the bibliography.

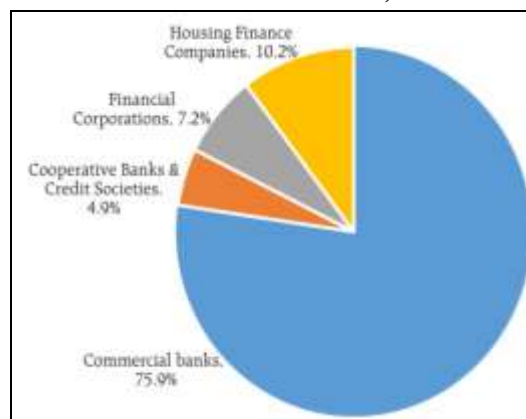
Results And Discussions:

Residential

The Indian residential sector has been grappling with subdued demand for the past few years. To stay afloat amidst changing dynamics, developers tried to pull all levers like restricting

supply, focusing on execution, reducing unit sizes, and developing affordable housing projects. However, the liquidity crisis and subsequent fallouts of various financial institutions further impacted residential sector. Amidst these changing dynamics, Private Equity players shifted their attention totally towards commercial assets. As per ANAROCK Research, residential Private Equity investments share of the overall inflows declined from 53% in 2015 to 8% in 2019. COVID-19 has severely hit residential real estate business and the sector has come to a standstill. With a screeching halt to site visits, discussions, documentation and closures, the early indicators depict that we are likely to face a tough time for the next few quarters and the sector's recovery has been pushed further away by at least a couple of years. Borrowings from commercial banks have the highest share in households' financial liabilities. At the end of Q4:2019-20, outstanding loans availed by households from commercial banks accounted for the bulk of their total financial liabilities (75.9 per cent), followed by the HFCs, NBFCs, cooperative banks and credit societies (Chart 2).

Chart 2: Composition Of Household Financial Liabilities - Outstanding Position (As By March 2020 End)



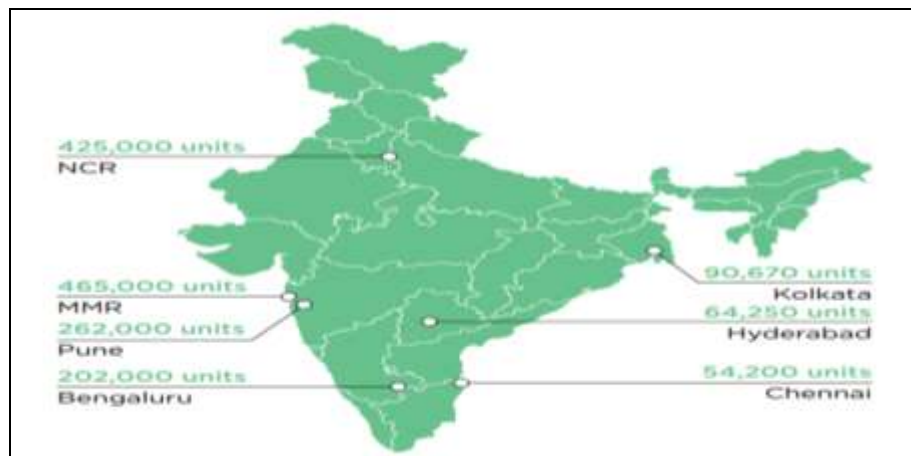
Source: RBI Bulletin June 2020

Challenges amidst the current COVID-19 situation:

- **Construction delays**

As per ANAROCK Research, more than 15.62 Lakh units launched between 2013 till 2019 across the top 7 cities of India are in various stages of construction. Of this, MMR and NCR together comprise of 57% or about 8.9 Lakh units (**Fig: 3**). With India being locked down until mid-April 2020 (as per the current advisory) there will be massive disruptions in the construction material supply even after the lock down ends, leading to disturbances and delay in the construction activity.

Fig: 3 UNDER-CONSTRUCTION UNITS (TOP 7 CITIES)



Source: ANAROCK Research

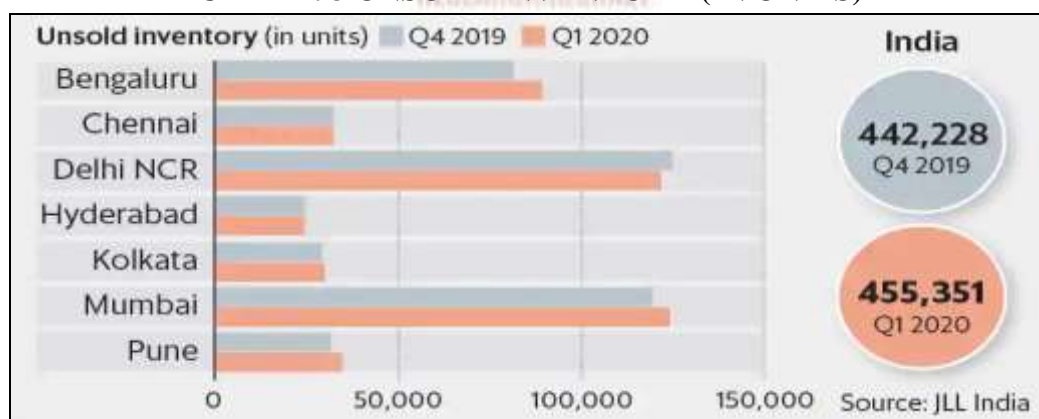
- **Sales slowdown**

Considering that residential real estate sales are highly dependent on physical site visits, interactions, discussions, and physical documentation, we believe that sales in 2020 might be significantly hit due to the current COVID-19 outbreak in India. Many homebuyers will consider postponing their decisions either to stay away from the project sites or in the expectations of a price correction.

- **Unsold Inventory stockpile**

The COVID-19 lockdown further threatens the housing sector that has already seen a rise in unsold inventory of houses across leading cities in the country, JLL India, 2020 (Chart: 3).

CHART: 3 UNSOLD INVENTORY (IN UNITS)



Source: JLL India

Commercial:

Magnitude of the current slowdown on office segment is tough to predict as the world, particularly the First World, is still reeling under the impact of the virus. Considering the present scenario and assessment of past global crisis in the last decade, estimates that supply and net absorption will be significantly lower in 2020 (JLL India, 2020). Predictions for 2020 are based on previous period of sluggish demand experienced in India during 2012-14 and the global economic crisis of 2008. Both these periods seem relevant as the Indian office segment has a direct and proportionate correlation with economic activities. It is also heavily dependent on

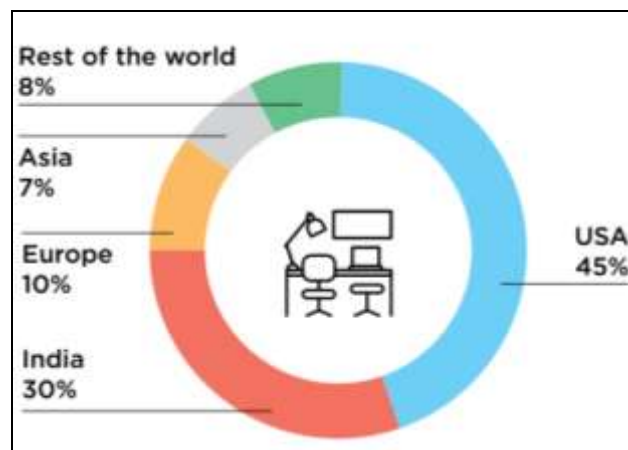
global companies that expanded their operations in India and have been driving demand for Indian office real estate.

Challenges amidst the current COVID-19 situation:

- **Reduced demand**

Amidst the pandemic and the global health crisis, the demand for office space is likely to drop. As many occupiers may not be able to assess the impact until the situation is resolved, they will reassess their position. While there will be some significant slowdown in their businesses, the expansion or consolidation plans may also be shelved. ANAROCK Research examines the situation in the light of previous impacts of economic slowdown and the global economic crisis. Net absorptions in 2020 to drop to 34% from the Pre COVID-19 estimates (ANAROCK, April 2020). As most corporate occupiers in Indian office space are MNCs in the IT sector, which are headquartered in Europe or United States. ANAROCK analysis further indicates that US-based companies account for 45% occupiers, followed by India-based companies at 30%. Incidentally, countries within the European Union – one of the worst affected – contribute 10% of the overall leasing in the Indian office market (Chart:4). However, the current testing time will compel many Indian operators to explore various options that can be leveraged in the future to optimize cost.

CHART: 4 OFFICE SPACE OCCUPIERS: GEOGRAPHICAL SPREAD



Source: ANAROCK Research

- **Reconsideration at office space requirement**

Layout of workstations and production areas may be revisited to optimize real estate requirements based on a new work schedule and regime. Occupiers may consider flexible working schedules based on rostered days of work; thereby reducing the space requirement resulting in reduced operations cost. Tele-commuting and rostered timings may become the new norm for offices depending on the nature of business. While all occupiers may not change, there will be many that will prefer technology enablement and flexible schedules to optimize cost. According to Global Workplace Analytics, employers can save over USD 11,000 per halftime telecommuter per year. Having experienced telecommuting during the COVID-19 pandemic, many companies may consider this as a long-term strategy, which will result in optimizing their real estate requirement and operations cost.

Retail Realty Sector

The Indian retail realty sector was already reeling under the contrast of vacant spaces at a few unsuccessful malls and no or low vacancy in successful ones and, more lately, tepid



consumer demand resulting into dropping sales for the retailers. As for the issue of failed malls, there was improvement in the past three years or so with wrongly developed products being knocked off the shelf and new malls being developed keeping in mind consumer interest and experiential shopping being the epicenter of developments. Global retailers had begun to take keen interest in the burgeoning Indian retail market and as per our pre-COVID-19 estimates, net absorptions were looking northwards and vacancies declining. COVID-19 has already hit the country and pressures are mounting on the Indian retail market with all cities under lockdown mode. While India is in the early stages of COVID-19, shutting down of retail malls and high-streets can halt on the growth of this key asset class within the Indian real estate sector.

- **Dip in consumer spending**

Retailing as a business is seasonal and the current COVID-19 crisis indicates that during this year's vacation season, Indians will be either locked down in homes or prohibited to congregate, thus there will be muted buying and muted spend on eating out, recreation and entertainment. As a result, in our opinion, consumer spending is likely to dip in the current year. Not only lockdowns and social distancing but also the overall economic gloom and employment uncertainty are likely to bear an impact on consumer spending.

- **New mall completion delays**

As per pre-COVID-19 ANAROCK estimates, around 8.4 Million square foot mall space was planned to complete across the top 7 cities in 2020. Considering the possibility of further decline in consumer spending, social distancing being the new norm, possible delays in new leasing activity, and the dearth of skilled and unskilled labor to complete projects, the planned new completions across the top 7 cities might drop to between 30%-50% overall in 2020 as there may be a minimal activity in First half 2020 and the subsequent Second half may also remain fairly muted. Also, new mall additions in tier II cities may be relooked by developers and investors as there will emerge investment or acquisition opportunities in the tier I cities itself due to the unprecedented crisis that has hit the Indian retail sector.

- **Leasing activity slowdown**

Presently, malls across the top 7 cities have an overall vacancy rate of around 14%, declining steadily over the last few years. It was due to a combination of factors including restricted supply and improving leasing activity. However, amidst the current COVID-19 pandemic, we believe that leasing activity might slow down significantly as retailers may go on a wait-and-watch mode. Both domestic and global brands may re-strategize their expansion plans as business will be impacted for a significant part of H1 2020. In the years to come, we might witness a polarized absorption scenario with malls at good locations depicting higher occupancy while retailers may move out of other locations which do not generate significant footfalls. Also, even after the lockdown ends, there might be restrictions on the footfalls as the social distancing norms may extend for malls which have a high population density. Amidst low footfalls, the leasing activity may continue be slow in 2020.

Expected Outcome:

Residential sector

- Developers moving from physical to digital. Developers with end-to-end digital solutions performed better in the lockdown. Digital is the way forward.



- Consolidation to increase, rise in trust for branded developers. Financially strong and organized players are likely to occupy 75%-80% market share in the coming years.
- Demand for townships to rise. Township projects are currently less than 5% in Top 7 cities across India. With a desire to reside in a controlled environment, demand to rise.
- Need for larger, flexible homes to rise. A rising need for functional and flexible homes with an ability to convert rooms into workspaces. Product offerings may be redesigned
- Reverse migration may create housing demand in tier II & tier III. Top 7 cities presently account for around 70% of the overall residential market. The share is likely to decline in the future periods.

Commercial sector

- Demand for flexible spaces may rise, albeit after some time. Co-working spaces account for nearly 3% - 4% of the occupied office space. Rising demand for flexible workspaces may lead to an increase in its share to 6% - 7% in the future.
- New layouts to emerge as per social distancing norms. Allocation of space per capita has reduced from 100-125 square foot in the last decade to 75-100 square foot currently. Due to social distancing norms, space allocation per capita may rise.
- Decentralization of operations to ensure business continuity. Trend reversal from the prominent consolidation during the past few years. Companies to consider decentralizing office space to ensure business continuity.
- Work from Home (WFH) to emerge as a blended option. WFH has its own set of challenges from a dedicated workspace to team collaboration to internet connectivity. Blended option with rostered workdays seems to be a likely option. Technology to dominate building operations & management. Safety and hygiene of the employees to emerge as a top priority. Contactless building operations & automation to rise.

Retail sector

- Growth of organized retail to slow down. Organized retail accounting for nearly 10% of the market was expected to grow to 25% in 2025. Malls have been shut for over a month, local small retailers run 12 Mn shops & generate annual business of INR 700 Bn.
- Online businesses to gain momentum. E-commerce giants added over 5,000 people to their delivery fleet. Consumer base expanded as senior citizens embraced technology.
- Essentials to drive demand. Shopping for non-essentials and aspirational products not on the mind of consumers. Multiplexes may take longer to recover.
- Footfalls to be restricted. Average footfalls in major malls across top cities vary between 30,000 – 60,000 per day. Due to social distancing norms, footfalls are likely to decline.
- Hygiene & sanitation to take center stage. Patrons will be critical to hygiene and sanitation practices. Malls that are better poised to offer the same are likely to benefit.

Conclusion:

The household sector is the most sustainable and self-reliant source of financing for the Indian economy. Its role is likely to become critical in the context of the policy effort gathering critical mass to lift the Indian economy from the vice-like grip of a slowdown and, more recently the life-threatening COVID-19 pandemic. In the current COVID-19 pandemic situation, the governments and central banks are introducing innovative measures and stimulus packages to



ensure that the economy keeps on ticking during this tough time. Households continue to rely heavily on the banking sector for borrowing and investing their surpluses, although the share of bank deposits in their financial assets has undergone a secular decline. A recent shift is visible in favor of financial assets in mutual funds and insurance. On the liabilities side, a significant decline in the share of borrowings from the banking sector in total liabilities during 2019-20 reflected the economic slowdown and risk aversion of banks. COVID-19 related uncertainties have resulted in an outflow from mutual funds and a flight to currency holdings. Going forward, a spike in net financial assets of households is likely in the first quarter of 2020-21 on account of a sharp drop in lockdown induced consumption. Lags in the pickup of economic activity may cause the financial surplus of households to taper off in subsequent quarters. With construction activity at a standstill, there is a possibility of a shift by households from physical to financial assets.

Acknowledgement:

Authors are thankful to Management and Principal of SVKM's Mithibai College and N.L. Dalmia Institute of Management Studies and Research for their encouragement and support.

References:

- COVID-19: Impact on the Indian Real Estate Sector, ANAROCK, April 2020.
- India Real Estate: A different world post COVID-19, ANAROCK, May 2020.
- Quarterly estimates of GDP for 3Q (2019-20), Ministry of Statics and Programme Implementation (MoSPI), 28 February 2020.
- Quarterly Estimates of Households Financial Assets and Liabilities, RBI Bulletin June 2020.
- Sunita Mishra, Impact of Coronavirus on Indian real estate, Housing.com, 27 May 2020.
- www.cushmanwakefield.com/en/india.
- www.jll.co.in.
- www.livemint.com/Will India's real estate prices finally face a reality check now? 06 April 2020.
- www.thehindu.com/news/national/coronavirus-lockdown-ministry-to-advise-real-estate-regulators-to-extend-project-completion-deadlines/article31577007.ece.



Impact of COVID- 19 on Agriculture in India

Dr. Rahul N. Surve

Associate Professor

Dept. of Extension Education

Smt. Ratnaprabhadvi Mohite Patil College of Home Science for women, Akluj, Tal- Malshiras
Dist- Solapur.

Prof. Kore K. K

College Director of Physical Education

Smt. Ratnaprabhadvi Mohite Patil College of Home Science for women,
Akluj, Tal- Malshiras Dist- Solapur.

Abstract:

Agriculture is the backbone of Indian economy. COVID-19 has struck deep into the global economic system and India isn't any exception. In the close to future, there will be limitations like weak financial quarters, activity losses, profits cuts, and lower income margins. However, this section too shall pass. Today, everybody is talking about the impact of COVID-19, however simplest from a countrywide attitude or urban centric angle. Unfortunately, not an awful lot has been spoken approximately the impact of COVID-19 on the rural quarter, which constitutes a big part of the economic system and standard consumption across product categories within the country. But agriculture being the backbone of the country and the economy has been impacted in a negative way with enormous disruption in the provide series and cropping decisions for imminent agricultural seasons. All these have a negative implication on the farming group of people that is and will be undergoing serious inimical and mind losses.

Key words: Country Lockdown, Policy Implications, Food, agriculture, Impact on market etc.

Introduction:

Indian agriculture has done pretty well during the recent period. The annual growth has been 3.5 to 5 percent during the last five years and the growth broad-based both in terms of the production and regions. The advanced estimates of agricultural production for 2019-20 are optimistic and the growth is likely to be more than 3.5 percent. Foodgrain production is likely to be 292 million tonnes (2.4 percent higher than 2018-19), as per the second advance estimates. Also, the horticulture production in 2019-20 is expected to be 0.84% higher than 2018-19. But it is to be noted that any deviation in normal operation may give some set-back to these estimates, particularly the impact of late rains and hailstorm on rabi crops. Further, as per the FCI as in March 2020, the stocks of wheat and rice in the central pool stand at 58.49 million tonnes, which is more than double the operational buffer-cum-strategic stock of 21.04 million tonnes. All these points to more than adequacy of the food supply in the country.

The lockdown in the wake of COVID-19 has disrupted economic activities and the supply chains significantly. The millions of people are infected with COVID-19 globally and the death toll is rising fast. It is expected the lockdown shall flat the infection curve soon and essential economic activities and services shall be in place. In India, the rate of infection, fortunately, is not that rapid due to timely interventions by the government, but the impact of COVID-19 coincides with the economic slowdown. It is expected that the lockdown shall further reduce the economic growth about 10 percent or more. This is likely to have an impact on



demand for agricultural products, dislocation of labour force and disruption of supply chains. These developments shall have implications for the social safety net programs of the government. This article discusses some of the impacts of lockdown within agriculture. The impacts of economic slowdown on agriculture are also discussed. To stay away from the antagonistic effect of Covid-19 flare-up and to keep the agribusiness section unaffected the legislature should give specific rules for horticulture activity, the value structure ought to be thought about and changed such that the ranchers are not under any sort of monetary misfortunes, the cultivating network alongside the workers ought to be shielded from Corona infection by keeping up social separating alongside help with managing the frenzy and mental misfortunes during this time and obviously giving the ranchers a stage for direct advertising to fulfill the need of the shoppers by home conveyance of the farming create and evade any sort of wastages in the reaped items.

Objective:-

1. To study on Challenges of the agriculture in COVID 19
2. To determine the impact of COVID 19

Methodology:-

This research is mostly descriptive in nature. Secondary sources of data have been used for this Secondary data has been collected from different published sources like books, journals, newspapers and magazines, and web sites.

Challenges of the agriculture in COVID 19

- Buying of grains by government organizations.
- Disturbances in the assortment of harvests from the homesteads by private dealers.
- A Migration and lack of laborers to collect the rabi crop.
- Lack of the transportation.
- Conclusion or restricted tasks of APMC mandis.
- Shutdowns in the retail farming markets.
- These elements have prompted an emergency in a scope of yields as well: wheat, grapes, watermelons, bananas, muskmelon, chana, cotton, chilies, turmeric, cumin, coriander, onion, and potato.

Harvest and Post-harvest Operations

The immediate implications of the lockdown are for crop harvesting and marketing of agricultural commodities. It appears that harvesting operations might have seriously affected by the lockdown which is not true. Crop harvesting is near completion in the southern and central India and it will start in the middle of April in northern India. There is a possibility of labour scarcity, particularly in the north-west India, where operations are done through contractual arrangements between farmers and labour contractors. However, two factors indicate that harvesting operations shall not be affected. First, labour from cities has gone back to the villages and for them agriculture can be now a major source of income. Even there is labour scarcity, it will be compensated by family labour—farmers use more family labour during peak agricultural operations. Since more than 80 percent of the holdings are small and marginal, family labour should be adequate for harvesting operations. Secondly, the use of machine labour is rising and all the medium and large farmers use machines for harvesting.



Marketing in Lockdown period:

The major problem is with the marketing of farm produce in the wake of lockdown. The Government has now exempted marketing from the lockdown but still there are not many buyers in the market and there are transport bottlenecks. This is partly non-availability of buyers and largely due to market uncertainty and misinformation. Therefore, the government should disseminate information about markets, good practices for social distancing and movement of products to ensure supply chains. The following are some specific recommendations.

a) The movement of farm produce does not necessarily involve the movement of a large number of people. There are well-established market channels and transactions can take place without the physical presence of farmers. Therefore, transportation logistics are more important. These can be arranged by farmers' groups or traders for reliability and the new guidelines help address this bottleneck.

b) Procurement of wheat can be staggered through price incentives and scheduling of market arrivals. Traders have the contact of farmers for such scheduling. Produce can be delivered at the intended destinations, markets or warehouses.

c) The Government, under e-NAM, has initiated new provision to provide the database of logistic providers to traders. Using these links, traders would be able to get access of over 3.75 lakhs trucks across the country. However, the reluctance of truck operators could pose hurdles to this initiative.

d) There is a need to notify a large number of warehouses as deemed markets to increase the coverage and reach among the farmers. In this regard, all Central Warehousing Corporation (CWC) and State Warehousing Corporation (SWC) along with PAC warehouses should be notified as deemed markets, at least for the next three to six months.

e) *Credit*: Farmers storing their produce in these accredited warehouses would also be able to get finance through electronic Negotiable Warehouse Receipts (e-NWRs). After notifying the CWC and SWC warehouses as deemed mandis, Central/State government(s) should also provide the necessary support and resources to strengthen the ecosystem. Moreover, farmers should be encouraged to use these warehouses to store at lower storage costs along with getting finance through e-NWRs at a subsidized finance cost.

f) For perishables like fruits and vegetables, a compact marketing channel can be evolved and products can be delivered directly in the terminal markets or to the bulk buyers. This shall reduce wastage and foster links with farmers. In the process, the IT-enabled marketing system shall evolve which shall be more efficient and transparent.

g) In the case with a limited purchase during the lockdown, product diversification may be attempted by farmers. Some examples are ghee making from milk, raisin making from grapes, and oil extraction from rapeseed and mustard. This can be an opportunity to diversify the product range and the beginning of processing by farmers.

Impact on market arrivals:-

The impact of COVID-19 on agricultural markets reveals that the market arrivals declined significantly during the first March to 10th April. India's cereals, pulses and potato arrivals declined enormously in this period in 2020 as compared to the same duration in 2019. It was noticed that wheat arrival declined by 59 percent; Bengal gram arrivals declined by 78 percent; urad and green gram also declined by more than 50 and 60 percent, respectively



(Source: AGMARKNET). A part of the decline in the arrivals of wheat and gram could be attributed to excess rains in March, delaying harvesting of these crops. Overall the movements of essential commodities have been stuck due to lockdown which is affecting both farmers as well as consumers. A decrease in the market arrivals should not be considered as low income of farmers as the productivity levels of these crops are normal and the product shall be brought by the farmers after normalcy or relaxation in the movement of farm produce, which is announced by the government.

Alleviation Measures

1. The poor segments of society are consistently the hardest hit in any fiasco or pandemic circumstance. With around 85 percent of Indian homestead family units being little and minor ranchers, and a huge piece of the populace being landless ranch workers, government assistance measures to contain any harm from COVID are certainly going to assist them with true usage.
2. The focal point of the Government accordingly must be to secure the lives of each resident. In any case, individuals living on horticulture and partnered exercises, generally those losing their salary from casual work at this lockdown period, must be furnished with elective roads (money moves) till the economy ricochets back (when this wellbeing emergency is effectively survived).
3. To support the interest for horticultural products, interests in key coordination's must be improved. In addition, web based business and conveyance organizations and new companies should be supported with appropriate arrangements and motivating forces.
4. The little and medium endeavors, running with crude materials from the agribusiness and unified division or something else, additionally need unique consideration so the provincial economy doesn't fall.
5. To forestall the prompt worries of shortage of homestead work, approaches must encourage simple accessibility of hardware through state elements, Farmer Producer
6. Organizations (FPOs) or custom employing focuses (CHCs) with reasonable motivators. It is likewise proposed to investigate utilizing NREGS assets to pay some portion of the ranch work (with ranchers paying the equalization wage add up) to diminish the financial weight on the rancher, while guaranteeing wage work to the landless workers and laborers.
7. To answer inquiries identifying with the reported proportions of Government and tending to complaints of ranchers, other than giving warnings on ranch activities; accessibility of agriinputs, devoted cost free help lines/call focuses (in neighborhood/vernacular dialects) must be built up by the Government.
8. Agribusiness in India is a State subject, and as has been seen in past years, approaches and projects fluctuate from one State to the next. Be that as it may, rural exercises, being interconnected in neighboring areas, agri-sops or advantages must not contort the market situation. Waiver of ranch credits, confirmations recommend, have not completely profited most of little and minor ranchers. Or maybe, it influences the future credit conduct of the borrowers and in this manner contrarily impacts the horticultural credit culture by and large. As the kharif (stormy/wet) season is quick drawing nearer,



institutional loaning of harvest advances ought to be extended and encouraged for smooth (and adequate) progression of credit to acquiring ranchers.

Employment and the Rural Poor

In India, the estimate by ILO, CMIE and other researchers have pointed to a challenging unemployment situation, which further deteriorated by the current lockdown in the country (Bloomberg Quint 2020). There are no data available to assess the current labour market scenario and its effect on their income. The data available upto early 2020 indicate slighting weakening trend in the real wages of rural workers since 2019. This trend is true for real wages of farm and non-farm workers (Fig 3). If during the lockdown period, rural non-farm workers are back in the villages, the wages may remain stagnant. But in the areas where rural migrant workers are important, there could be increase in the wages of farm workers during the period of lockdown and beyond.

Demand for Food

As per the formulation developed by FAO (2011), 'food and nutritional security exist when all people at all times have physical, social, and economic access to food of sufficient quantity and quality in terms of variety, diversity, nutrient content, and safety to meet their dietary needs and food preferences for an active and healthy life, coupled with a sanitary environment, adequate health, education and care'. Depending on the conditions of the lockdown, food and nutritional security are likely to be adversely affected due to demand and/or supply-side shocks in the food system. The magnitude of adverse effects will depend on the duration and severity of the outbreak in the country.

Policy Implications

We don't anticipate a major long-term impact of the lockdown or lower economic growth on Indian agriculture. A normal agricultural growth in 2019-20 and exemption of farm operations during the lockdown period shall contribute to better farm income. For marketing of agricultural produce also, special efforts are made to ensure smooth functioning of supply chains of the perishable commodities. These direct interventions are further strengthened by a positive forecast of IMD for a normal monsoon in 2020 which is extremely important for the coming kharif season. Agriculture shall also support some migrant labourers who are back in the villages, provided they are willing to work on the farm. The return of migrant labor to the cities may take some time and therefore expected loss of employment and income particularly in the rural non-farm sector and urban casual workers which form about 15-20% of the total workforce, may be worst affected. Therefore, providing a social safety net in the form of food, health and other essential commodities should be the priority of the government. Some sectors like tourism, hospitality, transport, and real estate may bear the impact for an extended period and therefore these sectors will need special attention, particularly measures for the welfare of the casual workers.

The following are some of the priorities of the Government for the agricultural sector:

1. Upscaling of farmer advisories for the lockdown period, particularly for farm operations and social distancing. This should be in local languages with simple messages. KVK network of ICAR is a great strength in this respect.



2. Farmers should be advised for delayed marketing of those products which are storable like foodgrains, rapeseed and mustard, and some overstocking of aquaculture and meat animals. The use of meat and fish should be examined and tested for safety at different levels.
3. Facilitate supply chains of perishable commodities like milk, eggs, fruits and vegetables. The movement of commodities does not mean the movement of a large number of people. Digital contacts can help reduce the movement of people as farmers and traders have direct and repeated transactions.
4. The central and State Governments can plan procurement of wheat and gram and the products can be delivered at the place these are needed. Also, make eNAM operational in all the mandis.
5. There is adequate time to plan for the next kharif season for the supply of seeds and fertilizers. Similarly, the supply chain of mango and litchi can be planned to avoid any income loss to the farmers.
6. Promote farm mechanization like adoption of paddy transplanters following custom hiring models. Also promote drum seeded rice to cope with shortage of labour. Promote clusters of pulses and oilseeds for higher production through price incentives and procurement logistics
7. Strengthen research on biosecurity, zoonotic diseases, microbiome, and natural barriers to plant and animal diseases and natural calamities.
8. Credit delivery for agriculture and allied sectors appears to be normal until January 2020, but more liquidity should be injected in agriculture, particularly for commercial and processing activities.

Conclusion:-

The most responsive cultivation sector which is the spine of our nation is also hit with the externalities of Covid-19 eruption. Although not directly, but circuitously the result of corona virus scattering effect i.e. lockdown across the kingdom have twisted out to be a black opening for the farming community. Mostly due to lockdown the restrictions on the movement of agriculture commodities from its place of production to the ultimate consumer has been hampered. Another problem lies with the shortage of labour force due to the fear of viral transmission which ultimately leads to the wastage of harvested commodities, mainly fruits and vegetables which are perishable in nature, in the farmer's field itself. The ranchers are probably going to feel a dunk in their pay. Generally because of lockdown the limitations on the development of agribusiness wares from its place of creation to a definitive shopper have been hampered.

Another issue lies with the deficiency of work power because of the dread of viral transmission which eventually prompts the wastage of reaped items, for the most part foods grown from the ground which are transitory in nature, in the rancher's field itself. The Corona infection pandemic has put a potential effect on the agribusiness item store network which is a mind boggling web of maker, transporter, distributor, retailer lastly the customer. Likewise the arranging of the Kharif and rabi crops has been placed into an end which will cause a significant halt in the up and coming agrarian seasons.

At this point, it is important to note that the prices of some of the commodities tend to increase during this period because of their non-availability or low production. Examples are milk and vegetables and therefore moderate price increase is normal. The price of offseason



vegetables is also comparatively higher. This means the focus should be on the supply of the product which is available with farmers or traders.

References:

1. M. Alaguraja, Dr G.Nedumaran, M. Manida, Performance of Khadi and Village Industries Commission through Micro, Small, & Medium Enterprise, AEGAEUM JOURNAL, Volume 8, Issue 3, Pages 677-68, 2020/3.
2. S. Mahendra Dev and Rajeswari Sengupta, Covid-19: Impact on the Indian Economy, Indira Gandhi Institute of Development Research, Mumbai April 2020.
3. Dr.G.Nedumaran, M.Manida, E-Agriculture and Rural Development in India, JAC : A Journal Of Composition Theory, Volume XIII Issue I JANUARY 2020, ISSN : 0731-6755, Page No: 105-114
4. Dr G. Nedumaran, M. Manida, Impact of FDI in Agriculture Sector in India: Opportunities and Challenges, International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8, Issue- 3S, October 2019, DOI: 10.35940/ijrte.C1081.1083S19, pp-380.
5. www.orfonline.org/expert-speak/impact-covid19-rural-lives-livelihoods-india-64889
6. www.mssrf.org/content/covid%C2%AD-19-pandemic-and-indian-agriculture-note
7. www.preventionweb.net/news/view/71330
8. (<https://github.com/pastelsky/covid-19-mobility-tracker>)
9. http://www.ncap.res.in/agri_lock.pdf





Urban Outgrowth in Thanjavur City in Tamilnadu, India-A Geomatics Study

¹Rajakokila K. and ²Neelakantan R.

¹Guest Faculty, Department of Geography, Bharathidasan University, Tiruchirapalli

²Professor, Department of Industries and Earth Sciences, Tamil University, Thanjavur

Email: k.rajakokila@gmail.com and neels2004@gmail.com

Abstract :

Modernization due to scientific development increases the urban growth naturally. Fringe areas and nearby villages were start merging and become part of the city due to the process of suburbanization. Over the last decade, there has been a rapid increase in the amount of literature on the topic of urban sprawl. This study attempts to measure the urban sprawl using Shannon entropy analysis for characterizing urban sprawl in Thanjavur which has not been measured or characterized yet. This study identifies the pattern of urban sprawl for the past four decades from 1975 to 2015, and then the urban form of Thanjavur is quantified through Shannon entropy analysis in the context of sprawl dynamics. The study concluded that the city is sprawling rapidly towards southern part, also observed the effect of the agricultural lands that are being converted into built up areas.

Keywords: Urban Sprawl, Shannon Entropy analysis, GIS, Remote Sensing

I. Introduction:

Rapid and unprecedented population growth have contributed to common, pressing issues for India's cities. Many of these are inherently linked to transportation, including reducing urban sprawl, ensuring safe access to city services, and addressing the real estate industries' roles in determining cities' designs. While suburbanization is a common phenomenon in most urbanizing countries, what makes India's predicament particularly worrying is that it is occurring at a relatively early stage of India's urban development.

According to the 2011 Population Census data, urban India grew by 90 million people in the previous decade. During this period, 2774 new towns were born with over 90% of the new towns belonging to the category of census towns. An estimated one-third of these new towns are located in close proximity to India's large cities (in a 50 km neighborhood of million-plus cities). These suburbs occupying just 1% of India's land area provide about 18% of the country's employment. These statistics provide staggering evidence of India's rapid suburbanization in the previous decade.

Awkward and irregular spatial growth of a town or city mainly due to the increase in population, can be termed as urban sprawl. Hence if any area which is under the jurisdiction of a municipality corporation, cantonment or any notified town, which exceeds its administrative boundary and grows outward without any check it is considered to be a sprawl. The area which the increasing population occupies will indicate the nature and type of the sprawl. The infilling of vacant lands within any area is an example of under bound sprawl.

In recent times study related to sprawl are increasing more and more. **Nisha Radhakrishnan (2014)** explained that the present and future impact of urban sprawl on infrastructural development can also be statistically analyzed with the unique visualization and geographic analysis will only be useful by having adequate thematic mapping. In recent past, there has been considerable infrastructural, industrial and transportation network, but accurate



documents and full-fledged information are not available stating the changes. Also stated that there is no up-to-date information relating to land use/land cover, transportation network, census changes etc., are available at the municipal and state level. **Joshi and Bindu Bhatt (2013)** showed the quantification of urban sprawl using entropy approach which reflects concentration or dispersion of spatial variable in a specified area of Vadodara taluk of Gujarat.

Li Feng (2012) extracted the built-up areas for four different years from classified images and these were together with landscape metrics such as contagion index, fractal dimension index and shape index were used to recognize the spatial patterns of sprawl and from classified images, rapid urban expansion with low density towards the urban fringe has been observed in the area of Nanjing city in China. **Jamal Mohammadi et al (2012)** studied Holderness and Shannon entropy method to measure the model of urban growth of the area of Urmia city, Iran and found the effective factors on the sprawl taken in the hand are social, cultural, economic, natural geography, political, physio-spatial, etc. **Mahdi Sabet Sarvestani, et al (2012)** described that, in Shiraj city of Iran sprawl and growth pattern are supported by Shannon's entropy. Identification of sprawl concluded that it is possible based on historical problems prediction of future urban growth by using spatial statistical models, cellular automata, etc.

Nina Singh and Jitendra Kumar (2011) have alarmed that the extent of urban transformation will raise concern about the city sustainability and there is a need for equitable distribution of public resources and balanced spatial and territorial development, particularly through investments in urban infrastructure and services. **Sulochana Shekhar (2005)** has studied sprawl modeling of Pune city and find out the pattern of urban sprawl and analysis of spatial and temporal changes could be done. She quantified the urban sprawl in terms of change in built-up area also tried to analysis civic amenities in the different wards of the Pune city. Further in the Shannon entropy which proved to be efficiency in monitoring and measuring the urban sprawl of Pune, and showed that the city is under highest rate of sprawl and it is take place at the cost of adjacent agricultural and forest land. **Anthony Gar, Oh Yeh and Xia Li (2004)** have studied that the entropy is a good indicator to identify the spatial problem of land development and in identifying which town has better spatial efficiency in land development. Furthermore, two dimensional entropy spaces can be used to differentiate various growth patterns clearly.

Urban planners should know about the urban growth trend in order to develop future urban planning. In this context the Thanjavur city has been taken for the study and analyses the temporal changes of the urban sprawl using geospatial data, statistical techniques i.e. Shannon entropy analysis along with GIS.

II. Study Area:

Thanjavur is a historical city located in the centre of Cauvery delta region surrounded with agricultural land, and having $10^{\circ}48'$ North latitude to $10^{\circ}8'$ North latitude and $79^{\circ}09'$ East longitude to $79^{\circ}15'$ East longitude covering SOI top sheet no 58N/1 and 58N/2 and shown in Fig 1. The town spreads over an area of 36.33 sq.km area and it is well connected by roads and railway network with the adjoining district viz, Tiruchirapalli, Thiruvarur and Pudukottai. The climate is fairly healthy with average annual temperature of 31° Celsius and mean rainfall amount of 104 cm. The city population in 1970 is about 1,40,547 and in 2011 it is increased to 2,22,943.

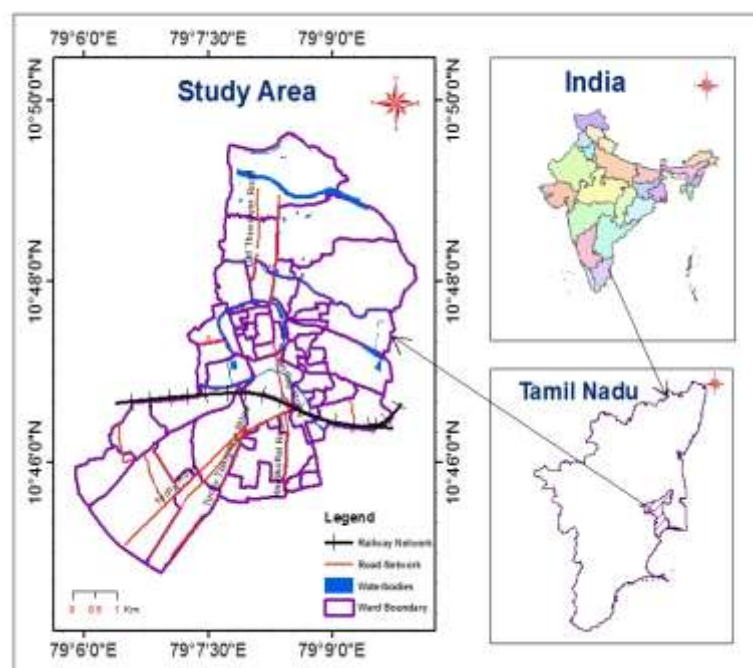


Fig 1. Study Area

III. Materials and Methods

The sprawl pattern here in the sense of urban outgrowth is described using various metrics. The built up is considered as one of the important parameters for quantifying urban sprawl. Built ups can be delineated using topo sheets and satellite imageries using Arc GIS software. The methodology includes, quantification of spatial data using Arc GIS 10.1 to find out the sprawl, for that built-up area were mapped from the topographical sheet for the year 1975 and converted in to digital format. Next, for 1995, the built-up area was mapped from LANDSAT ETM+ and the same has been done. Finally, for 2015, the built-up area was mapped from IRS P6 satellite data and the changes were measured using Shannon entropy method.

IV. Shannon Entropy Analysis:

Sprawl is seen as one of the potential threats for such development when rural pockets are linked to a city by a road, in the initial stages, development in the form of service centers such as shops, restaurant, etc., is seen on the roadside, which eventually become the core of trade and industry activities leading to sprawl. In order to find out the sprawl one of the technique used to widely is Shannon Entropy. The term Entropy is most frequently used while describing the quantity efficiency of elements. Entropy is related to the expansion of the spatial variable in a given area or limit, which was given by Shannon's Entropy. As an important exercise, the Shannon's entropy approach (Yeh and Li, 2001 and S. Shekhar 2005) was quantified to detect the urban sprawl phenomenon. Entropy value varies from 0 to 1. If the distribution of built-up is most concentrated in one area, the lowest Entropy value is 0. Distribution of built-up across space will give the maximum Entropy value 1.

This Entropy (E_t) method could be calculated using following formula.

$$E_t = -\sum_{j=1}^m PD_j [\log (1/PD_j)] / \log (m)$$

Where $PD_j = D_j / \sum_{j=1}^m D_j$

D_j is the density of land growth. That equals to quantity of Built-up land divided by the total quantity of land in the j^{th} zone in the total of m zones.

Zonal Analysis

The urban sprawl analysis is conducted to find out the sprawl outside the city i.e. nearby adjacent village using maximum likelihood classification for the selected variables. CBD (Central Business District) is the more dynamic and populated point of a city, it is the commercial, office, retail and cultural centre of the city and usually the meeting point of transportation.

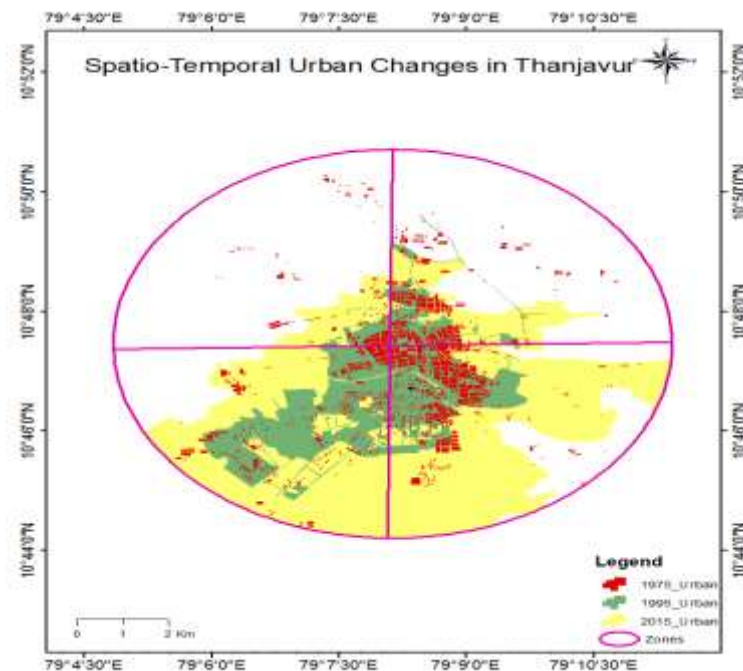


Fig 2. Spatio-Temporal Urban built-up Changes

To find out the urban sprawl in the outer areas of the city, A circle of 6 km radius around CBD are made and that was divided into four quadrant zones viz., Northeast, Southwest, Southeast, and Northwest directions (NE, SW, SE, and SW). The built-up areas of 1975, 1995 and 2015 are mapped using the satellite data and were overlaid and divided into four zones. Then all the three years built-up areas calculated to find out, to which extent the sprawl is developing and thus shown in Fig 2. Based on the calculation of built up areas, Shannon entropy analysis done for the taken periods. In 1975, higher concentration of built-up area is found in the Southeast zone area having 1.304 sq.km with 25.84%, whereas the lower concentration observed in Northwest zone only 0.468 sq.km constituting 9.27%. In 1995, the higher concentration in the Southwest zone as 7.92 sq.km with 47.62% and whereas lower one found in Northwest zone having only 0.823 sq.km with 4.95%. In 2015, the higher concentration found both in Southeast and Southwest zone as 22.39 and 22.04 sq.km respectively and whereas lower one found in Northwest having raised to 3.3 sq.km.

Table 1 Zonal Built-up Area of 1975

Zone	Total Area	Built-up Area	Built-up Density	Built-up %	PDj	1/PDj	Log(1/PDj)	PDj*Log(1/PDj)	Log (4)	PDj*Log(1/PDj)/log(m)
------	------------	---------------	------------------	------------	-----	-------	------------	----------------	---------	-----------------------



NE	28	1.30 4	4.657	25.8 4	0.2 58	3.87	0.588	0.152	0.60 2	0.252
SE	28	2.17 4	7.764	43.0 8	0.4 31	2.32 1	0.366	0.158	0.60 2	0.262
SW	28	1.1	3.929	21.8	0.2 18	4.58 7	0.662	0.144	0.60 2	0.24
NW	28	0.46 8	1.671	9.27	0.0 93	10.7 82	1.033	0.096	0.60 2	0.159
Total		5.04 6	18.02 1		1	1	0			

Table 2 Zonal Built-Up Area of 1995

Zones	Total Area	Built-up Area	Built-up Density	Built-up %	PDj	1/P Dj	Log(1/ PDj)	PDj*Log(1/ PDj)	Log (4)	PDj*Log(1/ PDj) /log(m)
NE	28	2.28 1	8.146	13. 71	0.1 37	7.2 93	0.863	0.118	0.6 02	0.197
SE	28	5.61	20.03 6	33. 73	0.3 37	2.9 65	0.472	0.159	0.6 02	0.264
SW	28	7.92 2	28.29 3	47. 62	0.0 49	20. 21	1.306	0.065	0.6 02	0.107
NW	28	0.82 3	2.939	4.9 5	0.0 49	20. 21	1.306	0.065	0.6 02	0.107
Total		16.6 36	59.41 4		1	1	0			

Table 3 Zonal Built-Up Area of 2015

Zones	Total Area	Built-up Area	Built-up Density	Built-up %	PDj	1/P Dj	Log(1/ PDj)	PDj*Log(1/ PDj)	Log (4)	PDj*Log(1/ PDj) /log(m)
NE	28	6.103	21.79 6	11. 33	0.1 13	8.82 3	0.946	0.107	0.60 2	0.178
SE	28	22.39 3	79.97 5	41. 59	0.4 16	2.40 5	0.381	0.158	0.60 2	0.263
SW	28	22.04 6	78.73 6	40. 94	0.4 09	2.44 2	0.388	0.159	0.60 2	0.264
NW	28	3.302	11.79 3	6.1 32	0.0 61	16.3 06	1.212	0.074	0.60 2	0.123

Tot al	53.84 4	192.3	1	1	0	0		
-----------	------------	-------	---	---	---	---	--	--

Based on the zonal analysis, by using temporal data Shannon entropy values are computed. Thanjavur is experiencing overall Sprawl in southern directions. The graphical representation of the zonal analysis is shown in Fig 3. The tabulation of the zonal analysis is shown in Table 4.

Table4 Zonal Analysis

S.No	YEAR	NE	SE	SW	NW
1	1975	0.252	0.262	0.24	0.159
2	1995	0.197	0.264	0.107	0.107
3	2015	0.178	0.263	0.264	0.123

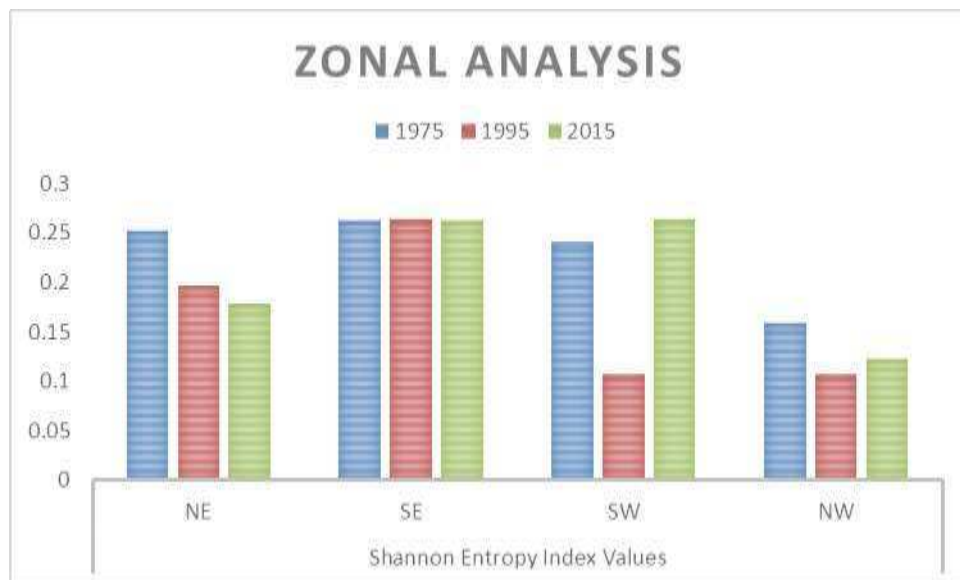


Fig. No-3 Zonal Analysis

V. Results and conclusions:

Urban Sprawl refers to the expansion of the city beyond its established borders engulfing the adjacent villages and the nearby land. Though this phenomenon witnessed all over the world, it is also being witnessed in India. In the current scenario the city does not expand by increasing in density but by the geographical expansion. It has been observed that the rural areas adjacent to the periphery of cities generate more economic growth and employment than the cities themselves. This unplanned outgrowth of the city by the increasing periphery of the urban area or the frequent migration from the neighboring rural inhabitants leading the urban outskirts gradually into uncontrolled development. Thanjavur city has been experiencing a large influx of population due to unprecedented rate of urbanization from all parts of Thanjavur District, which led to the rapid expansion and sprawling of the younger settlements resulting in land cover changes from rural to urban. The built-up areas were obtained from topo sheets and satellite imageries for two time periods viz 1975 and 2015 covering 40 years. Furthermore, analysis of the



imageries revealed significant dynamic changes in the growth of settlements in Thanjavur municipality over time period. The study shows a discontinuous spread of settlements in the Northern part and in the southern part pattern is like leapfrogging into each other along the national and state highway and, fast spreading into the hinterland and converting the viable agricultural lands into urban development, which is an evidence of rapid sprawl. This research conceptualized urban sprawl from a geographic perspective in order to assess the spatial distribution of Sprawl patterns and Built up change.

References:

1. **Anthony Gar On Yeh & Xia Li**, "Towards Digital Earth-Proceedings of the International Symposium on Digital Earth, Science "Press-1999, Measurement of urban sprawl in a rapid growing region using Entropy, Centre of urban planning& Environmental management, Honkong University.
2. **Li Feng** "Spatial Pattern Analysis of Urban Sprawl: Case Study of Jiangning, Nanjing, China" *Journal of Urban Planning and Development* 138(3):263–269 · September 2012.
3. **Joshi and Bindu Bhatt**, "A geospatial approach for assessing and modeling spatial accessibility of the primary health centers in the tribal talukas of the Vadodara district", *International Journal Of Geomatics And Geosciences*, Volume 3, No 3582.
4. **Jamal Mohammadi, Asghar Zarabi & Omid Mobaraki**, *Journal of Urban & Regional analysis*, Vol IV 1, 2012, pg 77-89, "Urban Sprawl Pattern & Effective Factors On Them: The Case Of Urmia City", Iran, Dept of Geography, Isfahan University
5. **Mahdi Sabet Sarvestani, Ab.Latif Ibrahim & Pavlos Kanaroglou**, "Three Decades Of Urban Growth In The City Of Shiraz, Iran, A Remote Sensing And Geographic Information Systems Application", www.Elsevier.com, Regional development fund – European union, Urban SMS (Soil Management Strategy).
6. **Nisha Radhakrishnan** "The Linkages between Real Estate Tourism and Urban Sprawl in Majorca (Balearic Islands, Spain)" , *Analysis of Urban Sprawl Pattern in Tiruchirappalli City Using Applications of Remote Sensing and GIS*.
7. **Nina Singh & Jitendra Kumar**, www.SciRP.org , urban growth and its impact on cityscape: A geospatial analysis of Rohtak city, India, Dept of Geography Maharishi Dayanand University, Rohtak, India Nov-24-2011.
8. **Sulochana Sekhar** " Urban Sprawl Assessment Entropy Approach", *Changing Space of Pune – A GIS perspective GIS development Map World Form* , Hyderabad , India.



The Impact of Globalization on Contemporary Literature, Environment and Society

Shri. Dipak Shrihari Bhasme

Marathi/English Department ,

Gramin Vidya Vikas VidyalyaChapalgaon,
Taluka-Akkalkot ,Dist- Solapur, Pin Code-413216

Emai Id-Deepakbhasme 225@Gmail. Com.

Mo.No. 9371450225

Abstract:

Globalization is frequently only connected with overall monetary joining and the development of a borderless worldwide market. Nonetheless, globalization likewise includes far reaching developments on the social, social and political landscapes. Globalization isn't a comprehensive or dynamic type of internationalism. Or maybe, it is the effective development on a world size of specific localisms of social, financial, and political association, which are neo-liberal and entrepreneur in character. The blend of material and ideological components that make this extension potential makes globalization a domineering procedure. Nor does globalization make or empower monetary opportunity, openings, and decision at all levels; rather it is increasingly similar to a monoculture of thoughts, legislative issues, and financial models. The significant results of globalization have been: the transmogrification of customary religions and conviction frameworks; the start of the deterioration of the conventional social textures and shared standards by industrialism, digital culture, brand new religions and changing hard working attitudes and work rhythms; the quick spreading anomie compelling a consistently expanding number of people to fall back upon the effectively open bombastic strict clichés, and ascribing to religion the creation and increasing speed of fanatic, fundamentalist and psychological militant propensities in the underdeveloped nations. To summarize, culture as a method of human life is continually experiencing change. Certain advancements in modern times have assisted with quickening this procedure of progress in an exponential way including two significant results:

(a) decrease in social assorted variety; and

(b) expanding authoritative control for the sake of facilitated commerce and opportunity of correspondence, at all levels. The ramifications of this change are shifted and there are no signs that they are in any capacity expanding the social, material or otherworldly prosperity of humankind. At long last, it tends to be said that each culture of world was influenced by one way or other as far as its impact and character. Just one culture commands that is western culture. Western culture likewise commands because of intensity approach of Western World. Today, every culture of the world is under the umbrella of Western culture, It was consistently enthusiasm of West to run over the world particularly to underestimate the creating scene. West gets fruitful in its crucial actualizing a trademark that was globalization. Through this procedure West anticipated, its own way of life, country, economy, values, over the globe and so forth.

Introduction :

Globalization is regularly only connected with overall monetary incorporation and the development of a borderless worldwide market. Nonetheless, globalization likewise includes



major developments on the social, social and political territories. Globalization isn't a comprehensive or dynamic type of internationalism. Or maybe, it is the effective extension on a world size of specific localisms of social, monetary, and political association, which are neo-liberal and industrialist in character. The blend of material and ideological components that make this extension potential makes globalization an authoritative procedure. Nor does globalization make or energize monetary opportunity, openings, and decision at all levels; rather it is progressively likened to a monoculture of thoughts, legislative issues, and financial models. The significant outcomes of globalization have been: the transmutation of customary religions and conviction frameworks; the start of the deterioration of the conventional social textures and shared standards by commercialization, digital culture, modern religions and changing hard working attitudes and work rhythms; the quick spreading anomie driving a consistently expanding number of people to fall back upon the effectively available self important strict platitudes, and ascribing to religion the creation and speeding up of fanatic, fundamentalist and fear based oppressor inclinations in the underdeveloped nations. To summarize, culture as a method of human life is continually experiencing change. Certain improvements in modern times have assisted with quickening this procedure of progress in an exponential way including two significant results:

(a) decrease in social decent variety; and

(b) expanding domineering control for the sake of unhindered commerce and opportunity of correspondence, at all levels.

Globalization and Literature :

Globalization and investigates globalization's consequences for and suggestions for contemporary writing. The period of globalization is commonly characterized as a period where the sway of country states has declined and methods of trade work without any difficulty and speed across national limits, creating designs of intensity that surpass the limits of the country state. It is said to have been "conceived" with the fall of the Berlin Wall in 1989 and the resulting end of the Cold War. However, this exposition likewise considers manners by which globalization is connected to the more extensive history of innovation and to the disparities created and duplicated in free enterprise and imperialism. It further proposes that globalization's effect on writing is complex, with both positive and negative affiliations. The distributing business has itself gotten more globalized (and united into worldwide media aggregates), however the World Wide Web at the same time permits ever more prominent access to scholarly messages. Then, the topics of hybridity and multi-rootedness – partially, articulations of the emotional experience of globalization – are progressively predominant in abstract writings. The paper finishes up by investigating the subject of how globalization may be molding new scholarly structures, and recommends that contemporary artistic hypothesis and analysis must recognize globalization from postmodernism.

'World writing' has a few particular implications. Generally significant for the current investigation, it might allude to the results of expanded cooperation across scholarly customs in a globalized political economy. The subsequent 'worldwide writing' includes broad assembly in account rehearses. The outcome is a decreasing of social assorted variety in narrating. Globalization may likewise prompt certain sorts of dissimilarity. This may appear to in part offset the intermingling. Notwithstanding, in an inconsistent, worldwide economy, difference is



frequently guided by authoritative social practices, regardless of whether this happens contrarily. In particular, such disparity generally works through character based disavowal of worldwide normalization with an ensuing rearrangements and twisting of putatively indigenous conventions. Accordingly, in inconsistent worldwide conditions, both assembly and dissimilarity have the impact of lessening the decent variety of story societies. In result, the globalization of writing may effectsly affect the feel - and in reality the morals and governmental issues - of account. The paper closes with certain opportunities for turning around this pattern.

Globalization and Environment :

Natural security can involve a delay monetary development for the time being. Enterprises that need to acclimate to natural guidelines face disturbance and greater expenses, hurting their serious position. The inquiry is what to think about this. Some contend that it might be worth more slow financial development so as to ensure nature. Others state that the free market and mechanical advances are the best devices to take care of natural issues and lift individuals out of destitution, instead of more prominent guideline. The connection between the earth and monetary improvement might be more perplexing than that, be that as it may. Truth be told, from multiple points of view, ensuring the earth and advancing monetary development are correlative objectives. Neediness in creating nations is a main source of natural debasement. For example, "slice and-consume" land-clearing by resource ranchers has been a significant reason for exhaustion of the Amazon rainforest (Butler, 2012). Boosting monetary development may then be a powerful apparatus to advance insurance of nature. This is the thought behind the reasonable improvement development, which tries to progress monetary open doors for less fortunate countries in earth cordial ways.

The expanding pace of globalization and how it influences nature has been a significant worldwide concern. Despite the fact that the examination has been full of differentiating results, there are numerous who unequivocally accept that expanded globalization has been hurtful to nature.

An enormous number of naturalists who bolster this view base their contentions on the reason that globalization prompts an expansion in worldwide interest, bringing about expanded creation. This in a roundabout way adds to the abuse of the earth and the consumption of common assets.

In the midst of rising ecological concerns, a significant inquiry is whether deglobalization would have the contrary effect on the earth. Put in an unexpected way, in the event that globalization is destructive, at that point would it be a good idea for us to expect that the current deglobalization pattern will be less hurtful for nature?

It's a significant inquiry to pose to right currently considering the mounting against globalization opinions that have inundated the Global North.

WTO and RTAs help protect the environment :

Globalization accomplished through multilateral dealings by means of the World Trade Organization has likewise shown that albeit ecological security isn't a piece of the WTO's center command, it has prodded eagerness inside its part nations for reasonable turn of events and naturally well disposed exchange strategies.



There are a few WTO exchange related estimates that are good with ecological security and manageable utilization of normal assets. For example, the green arrangements of the WTO direct nations to secure human, creature or vegetation and ration their modest common assets.

Aside from the WTO, local exchange understandings, known as RTAs, are another element of globalization that advance ecologically economical arrangements. As nations try to join RTAs, they are likewise settled on to at the same time grasp ecological participation understandings.

Numerous nations, incorporating Canada and those in the European Union, have created national strategies that specify that preceding consenting to any exchange arrangement, natural effect evaluations must be completed. That implies that any nation that consents to exchange arrangements with those nations should likewise naturally sign ecological participation bargains.

Globalization and Society

the reason for this introduction, I will examine globalization and its effect on individuals at social, social, and mental levels. As a social researcher, I am keen on how social orders and individuals change as a result of this monetary marvels and how the procedure of progress can affect families, people and networks. Globalization is related with quick and noteworthy human changes. The developments of individuals from provincial to urban territories has quickened, and the development of urban communities in the creating scene particularly is connected to unacceptable living for some. Family interruption and social and aggressive behavior at home are expanding. For instance, 2004 New Delhi police reports demonstrate that passings in the city of around six ladies regular are share related suicides.

Ideas of national character, and of family, employment and convention are changing quickly and essentially. There is worry that seriousness acquainted by globalization is driving with increasingly individualistic social orders. Then again, quick change can energize fundamentalism, a longing for the past, and lost resistance for contrasts in religion and culture. The country state is losing impact comparative with worldwide monetary weights, and in certain nations there is a disappointment or delay to create social arrangements. These progressions improve the probability that defenseless individuals will be misused, and dangers to the human privileges of less capable individuals will increment.

It is accepted by financial experts that the accident of the securities exchange in Asia in 1994 was a case of the quick spread of antagonistic human outcomes in light of the reliance of economies and individuals. A great many individuals lost thriving and vocations, and training and wellbeing administrations were among those cut over the locale. The impacts, including social agitation and neediness, are as yet obvious. Abusive behavior at home and self destruction expanded in this period in a few of the nations in the area. It is accepted that the unlawful medication exchange has developed as of late to frame a noteworthy extent of the complete business volume on the planet.

Finally we can reason that Globalization and minimization go connected at the hip in India. With a huge number of poor ranchers, rustic workers, urban jobless, ghetto inhabitants, 3 million outcasts, 100 million road kids, and the millions dislodged by 'the turn of events' ventures, neediness in this period of globalization has expected new measurements. The subject of "are the poor getting less fortunate?" identified with disparity both broadly and universally. It is clear that so as to guarantee that the likely gains from globalization are shared among all



gatherings (rich and poor nations and between bunches inside a nation) significant changes might be required. As Amartya Sen states, "Regardless of whether the poor were to get only somewhat more extravagant, this would not really infer that the poor were getting a decent amount of the possibly tremendous advantages of worldwide monetary interrelations

Conclusion:

Globalization is neither acceptable nor terrible. Or maybe, certain parts of the complex, and multi-faceted procedure of globalization have impacts that can be seen in various ways relying upon the qualities in question. Singular free decision is significant, however so is a general public's capacity to settle on choices as indicated by what is best for the entirety of its individuals. The free market is significant, however so is the capacity of governments to manage issues when the free market falls flat. Neighborhood just responsibility is significant, yet so is global concession to issues that must be unraveled with participation a long ways past the immediate control of individual residents. The significant outcomes of globalization have been: the transmogrification of conventional religions and conviction frameworks; the start of the crumbling of the customary social textures and shared standards by industrialism, digital culture, brand new religions and changing hard working attitudes and work rhythms; the quick spreading anomie constraining a regularly expanding number of people to fall back upon the effectively open self important strict platitudes, and ascribing to religion the creation and increasing speed of radical, fundamentalist and psychological militant propensities in the underdeveloped nations. Any reasonable person would agree that the effect of globalization in the social circle has, most for the most part, been seen in a negative light. Commonly, it has been related with the demolition of social characters, casualties of the quickening infringement of a homogenized, westernized, buyer culture. This view, the body electorate for which stretches out from (a few) scholastics to against globalization activists (Shepard and Hayduk 2002), will in general decipher globalization as a consistent augmentation of – in reality, as a code word for – western social dominion. Qualities can assume a job in characterizing globalization. A meaning of globalization as "Americanization" or, maybe, the "McDonaldization," of the world presents globalization as a procedure driven by American buyer culture that turns over different societies. Then again, another meaning of globalization would feature its multifaceted effect, considering the idea of globalization as a way societies connect and gain from one another. It is critical to make reference to here that each culture of the world have been influenced by the imposing business model of western culture. Along these lines, the arranging of the west to homogenize the world so as to lead over it got effective through the instrument and methods for globalization. First they caught advertise then step by step and gradually every field was constrained by them. Each country on the planet has its unmistakable culture and qualities which is transmitted to them by their predecessors which can be called ones social legacy. However, globalization has some great measurements additionally yet for the most part its advantage goes to well of nations of the world particularly to west

References:

1. Adam Hochschild, "Globalization and Culture" Economic and Political Weekly,
2. Richard Barnet and John Cavanagh, "Homogenisation of Global Culture" in Jerry Mander and Edward Goldsmith (eds),



3. Geeta Kapoor, “Globalization and Culture”’,
4. Krishn A Goyal, “Impact of Globalization on Developing Countries” International Research Journal of Finance and Economic,
5. Woods, Ngaire 'Editorial introduction. Globalization: Definitions, debates and implications',
6. Bharadwaj, Atul' “Understanding the Globalisation Mind Game”, Strategic Analysis,
7. Samuel P. Huntington, “Robust Nationalism”, The National Interest.
8. Ali M. Alli, Globalization: Its Effects, International Business and Economics Research Journal
9. Yurlov, Felix N., “Globalization, Inequality and Threat to Sustainable Development",
10. Samuel p. Huntington, The Clash of Civilizations and The Remaking of World Order.





Fan Performativity in Global Fandoms

Praveena Thompson

Associate Professor

Department of English

University College Thiruvananthapuram, Kerala

Globalisation has expanded the audience base of television programmes beyond imagination. National and linguistic boundaries have been reduced to nought by the Over The Top streaming platforms which provide multilingual subtitles to make a wide array of shows available to viewers from all parts of the world. Global convergence of media has brought about a multidirectional flow of cultural goods to geographically dispersed cultures, according to Jenkins, and this global convergence is giving rise to a new pop cosmopolitanism. This pop cosmopolitanism paves the way for broader cultural experiences and an aggregated global consciousness. People develop a taste for international food, music, cinema, and literature. While young Americans have started consuming Japanese manga and Bollywood movies, there is an undeniable threat of western media dominating and casting its homogenising influence over other cultures. Several media companies have emerged as beneficiaries in this scenario with their products being exported to the far reaches of the world. Even sitcoms meant for a niche audience have become overwhelmingly popular among people from diverse backgrounds. Music bands from countries like Korea, "K-pop", have millions of fans worldwide. Popular culture scholars are perforce guided to move their gaze beyond national specificities.

Fans and fandoms have existed for centuries, but they have been marginalised and othered because their responses to works are perceived to be emotional rather than rational, in contrast to critics and scholars. The etymology of the term 'fan' with links to 'fanatic' has served to accentuate this devalued assessment of fans by mainstream society. With the dawn of the digital age, fans have become considerably more liberated and empowered. Jonathan Gray et.al. point out that the changing cultural status of fans is probably best illustrated by the efforts of those in the public gaze, such as celebrities and politicians seeking to connect with consumers and fans by publicly emphasizing their fan credentials. They also opine that fandom has emerged as an ever more integral aspect of lifeworlds in global capitalism, and an important interface between the dominant micro and macro forces of our times.

Online fandoms have given free rein to the creativity of fans which is fettered by copyright laws in the outside world. Their derivative works are edited and circulated among the fans themselves with an inbuilt feedback mechanism in the form of kudos, bookmarks, and comments. Fan studies scholars like Jenkins liken fans to nomads who poach on lands belonging to others, in order to fashion their transformative works. In the process they become prosumers—at once consumers and producers.

According to Fiske, fans are semiotically, enunciatively, and textually productive. Semiotic productivity refers to activity which is characteristic of popular culture as a whole and "consists of the making of meanings of social identity and social experience from the semiotic resources of the cultural commodity". When these meanings are communicated to others, enunciative productivity takes place. Textual productivity refers to the actual production of texts making use of the characters or setting of the works fans are attached to.



Abercrombie and Longhurst feel that “the performer-audience interaction occurs within, or represents critical areas in which a society is self-reflexive; it provides a kind of window, ‘a limited area of transparency’, through which an examination of socially and culturally sensitive issues is possible”. They go on to explain the notion of diffuse audiences, which refers to several processes operating at different levels. One is the excessive amount of time spent in consumption of mass media which secondly makes media constitutive of everyday life. The third way is “via what Kershaw(1994) calls ‘the performative society’.” There is a tendency to see all art as performance and to regard unartistic events of various kinds as performance art. Schechner argues that the broad spectrum of performance includes a whole variety of performative behaviour exhibited in terms of various complex relationships among the players- spectators, performers, authors, and directors- which can be pictured as a performance quadrilogue. The members of this diffuse audience yearn for the opportunity to connect with other like-minded people and share their experiences and thoughts about the work that they are passionate about, or to performatively critique the work all the while performing their identity as fans.

Fanfiction is a way to interrogate and subvert the dominant narrative and assuage the frustrations they feel with the text they are emotionally invested in. This paper argues that racebending fanfiction is a performative criticism of the lack of representation of diverse races in works in spite of having a global reach and appeal. In order to substantiate this argument, the racebending fanfiction based on the TV show which became a global phenomenon, *Game of Thrones*, is analysed. The show is an adaptation of George R.R. Martin’s *A Song of Ice and Fire* series of novels.

Some shows deliberately “whitewash” the characters in an ethnically diverse story as in the case of *The Last Airbender*, and racebending fanfic was a way to dissent with this. Subsequently, it became a means to disrupt the hegemonic homogeneity of the racial representation in the media texts they actively engage with. Animated shows featuring characters of varying ethnicities have been whitewashed by assigning white voice actors to them. Many successful long-running shows are marked by the determinedly white character line-up. The pop cosmopolitan fan base will almost certainly have disagreements with the gaping absence of diverse races and cultures in global media programmes. Fanfiction which appropriates existing characters echoes the decontextualizing of behaviour which accompanies performance, according to Francesca Coppa. Just as multiple productions of Shakespearean plays do not become irrelevant because each performance supplements the material lacking in the text, so also does fanfiction supplement material absent or glossed over in the canon. In their performances, fans get the chance to address culturally sensitive issues such as race which is part of their identity.

Game of Thrones, despite being set in a fantasy land with multiple imaginary cultural, religious, and linguistic groups populating it, abjectly fails to include people of colour in its narrative. All the major characters are white, a fact which rankles with some of the fans who would like the show to be more inclusive. Fanfiction blurs the line between criticism and creativity. Fans read the canonical texts critically and performatively through fanfiction. It is the deficiencies which fans identify, that they remedy or attempt to remedy through the fanfiction they produce.

The fanfic by Archive user Dialux, called *and we can see the future and the dreams it’s made of* introduces Indian characters and Indian culture to the *Game of Thrones* universe. Jon



Stark's father Rhaegar is alive and it is with him and his two legitimate children that Jon grows up after his mother's death. His mother's people, the Northerners, have never ceased waging war on the Targaryens for as long as he can remember. He grows up unloved and alienated in his father's household and proves his strength and valour on the battlefield. Following the death of his father and brother on the battlefield, Jon unexpectedly sees himself wearing the crown. The North sues for peace and as part of the agreement, his uncle Ned Stark gives his daughter Sansa to be his wife. The description of the marriage ceremony is typically Indian, and so are their attire and ornaments. The colour of his eyes and skin which made him stick out like a sore thumb at his father's court is now blended with the similar looking members of his mother's and his wife's family. The racial difference is partially responsible for the lack of complete acceptance by his father's family. In this fanfic, Jon, Sansa and Ned are subjected to racebending in order to performatively criticise the lack of brown characters in such a vast canvas. The rejection Jon faces because of his illegitimacy and mixed race heritage further serves as a commentary to the subtle racism of the show's producers. Turbans, tikas on foreheads, and talk of jathakas announce the Indianness of these characters unapologetically.

Winter's Gift by Littlefeather, an Archive user who gives a declaration of being a member of the Lakota nation in the prefatory comments to their fanfic, presents Sandor Clegane and Bronn as Native American half-brothers with a father named Chief Standing Bear. Gregor Clegane, Sandor's canonical brother who scars him as a child and comes to be known as The Mountain, makes an appearance in the fanfic as the largest man in the tribe, the Mountain that Rides, who abuses his mother during his younger days, and was killed by Sandor driving his lance through the large man's heart. In the course of his revengeful killing, his face gets badly burnt. Here too, racism is something which is keenly felt by the characters: "The whites only see skin color, my son", Sandor's mother warns him. The writer gives us insights into the Lakota culture with each chapter. They imitated the wolf's behaviour in hunting and also patterned their family dynamics after wolves. So it is inevitable that Sansa Stark, who canonically bears a wolf as her family sigil, would be paired with Sandor Three Hounds. The Lakota people and their customs are faithfully represented, unlike the usual romanticising or infantilising that haunt the rare appearance of this race in mainstream media.

These stories and their treatment make it evident that the protest against the inherent racism of mainstream media and *Game of Thrones* in particular has been performed by the fans. Even while the audience base spreads globally to encompass diverse races and nations, media houses cling on to imperialistic notions regarding the treatment of issues of race in their programmes. Armed with the freedom and sense of community that online fandom offers, fans are thus anything but dupes who uncritically consume everything about the media object they ardently engage with. They negotiate and oppose the coding of the canon and make their disagreements and grievances known performatively through their fanfiction, thereby taking a stand and demanding better representation in the works that only exist because of their support and engagement.

Works Cited

Abercrombie, Nicholas and Brian Longhurst. *Audiences*. New York University Press, 2007.



- Coppa, Francesca. "Writing Bodies in Space: Media Fiction as Theatrical Performance". *The Fan Fiction Studies Reader*, edited by Karen Hellekson and Kristina Busse, The University of Iowa Press, 2014, pp 218-237.
- Dialux. *and we can see the future and the dreams it's made of*.
Archiveofourown.org/works/15783822.
- Fiske, John. "The Cultural Economy of Fandom". *The Adoring Audience: Fan Culture and Popular Media*, edited by Lisa A. Lewis, Routledge, 1992, pp 30-49.
- Gray, Jonathan et al. "Introduction: Why Study Fans?" *Fandom: Identities and Communities in a Mediated World*, edited by Jonathan Gray et al., New York University Press, 2007, pp 1-16.
- Jenkins, Henry. *Fans, Bloggers, and Gamers: Exploring Participatory Culture*. Routledge, 1992.
- Littlefeather. *Winter's Gift*. archiveofourown.org/works/1840075.
- Schechner, R. *Performance Theory*. Routledge, 1988.





The Impact of Globalization in Common Man's Life with Reference to Aravind Adiga's Last Man in Tower

Imran Ahmed.T

M. Phil. Research Scholar (FT)

PG & Research Department of English

Mazharul Uloom College

Ambur, Tamil Nadu

Email: imrananas5@gmail.com

Phone: 6380566031

Dr. A. Shafee Ahmed Khan

Head and Research Supervisor

PG and Research Dept of English

Mazharul Uloom College

Ambur, Tamil Nadu- 635802.

Abstract:

The present paper attempts to explore the pathetic condition of common man in the age of Globalization. The development of globalization circumscribes many spheres of life which mingled directly or indirectly with each other. Globalization promotes the wealthy more than the poor. It analyses how a common man faces difficulties to resist the realities of contemporary changes which occurs in the society. Its main fixate is on the issues related to human society, the resistance and acceptance of an individual or of a group for the welfare of human being in a society. Aravind Adiga's novel Last Man in Tower shows setting of Mumbai in the era of globalization. It clearly depicts the pathetic condition of victims and what compels a common man to commit murder, to rob poor people and to force them to go on wrong path. Adiga has explored the accuracy of life and presented the intimate views of the social life of common people. The characters of Adiga are too much real in society; his characters and situation are also real rather than celestial. In Last Man in Tower Aravind Adiga explores Mumbai as a trade and economic hub which has materialized as a place of various opportunities. To have a small house in Mumbai is an unattainable dream of poor because of the crooked politicians and their intimate relationship with the builders to grab it. The novel revolves around contradiction between the retired school teacher and the greedy builder. Thus, the process of globalization exerts its influence which has its advantages and disadvantages. . Aravind Adiga detects the situation around him and depicts the same in Last Man in Tower. The study examined the travails, pains, trauma and emotional struggles of the retired school teacher who faces challenges and threats of an emerging new world in the impact of globalization

Keywords: Globalization, Common Man, Travails, Trauma, Emotional Struggles, Builders.

Introduction:

Globalization stills an age long phenomenon which is inexhaustible in all walks of life. It is a complex phenomenon which has a considerable influence on several areas of modern societies. As such, that phenomenon needs continuous investigation. Therefore Scholars of all spheres have enchanted to study this phenomenon. The term, globalization is a very intricate to understand due to its mixed nature. There is no perfect section to say that globalization belongs to certain knowledge, disciplines or time period. Due to its multidisciplinary and extensive nature, it is not easy to assimilate at once. Globalization is the process of communication, integration and exchange of anything in all walks of human life taken place among the people around the globe. Due to the advancement of science, technology, and telecommunication the



sphere of globalization has been enlarging day by day in the world.. Many domains like literature, economics, sociology, anthropology, political science, psychology, science, arts, language and many other disciplines are shaped by this global phenomenon.

India notices countless conversion in the age of globalization. The nation of diversity in every form has different shades of globalization. Indian Writing in English is one of the seedlings which have bloomed in the globalized world. The great novelist R.K. Narayan, Mulk Raj Anand, and Raja Rao have set the landmark in Indian English Writing. The same direction of legacy is being followed by the contemporary writer in fictional writing. And the Diaspora writing from the west assumes greater importance in the context of Globalization. Many Indian English novelist like Anita Desai, Bharati Mukherjee, Salman Rushdie, Amitav Ghosh, Vikram Seth and many others reside in the west. Our writer Aravind Adiga is one of those contemporary writers who have obtained distinction to Indian Writing in English. He was born in India and immigrated to Australia. He is the fourth Indian English novelist to obtain the Man Booker Prize for his first novel *The White Tiger*. We can see the process of globalization in his writing. In the novel, *Last Man in Tower*, he depicts the picture of common man and his experiences to convey positive and negatives of globalization. Adiga depicts globalized environment in his work which revolves around Mumbai, the second capital of India.

Restoration In Globalized Mumbai:

Aravind Adiga has flourished to sketch the picture of globalized Mumbai. Globalization has brought many things to Mumbai. Adiga simply spread the remembrance of Mumbai here and there in the novel *Last Man in Tower*. These anecdote make us realized that we are visiting the different places in globalized Mumbai. Haji Ali Dargah, Siddhi temple, Mount Marg, Malabar hill, Versova beach, Marine lines, Barbourne Stadium, etc. are the places specified in the novel. The famous Biryani, Vada pav, Bhelpuri, and etc. are the cafeteria enjoyed in the novel. Globalization has introduced inn like Mcdonald and chow mein which have become the essential part of Mumbai life. Adiga clearly mentioned the Mumbai life in different dimension through the help of people and places. He depicts the picture of works undertaken by the Corporation where works lack progress and citizens face annoyance in the novel. Mumbai Central, Marine Lines, Elphinstone Road, Church gate, Charni Road, Grant Road, etc. are local train station in Mumbai. The crowd in local train station is harrowing. Mumbai is known for its crowded local trains. And our Masterji has even lost his daughter Sandhya in train accident. The general slum and pollution in Mumbai are described about in *Last Man in Tower*. The unreliable water supply and daily traffic jams depicted in the novel make reader realized of actual Mumbai. Globalization has its advantages and disadvantages. Mumbai witnesses both the view of good and bad outcome of globalization on Mumbai.

Post Colonial Resistance And Neo-Colonial Acceptance:

The novel *Last Man in Tower* by Adiga turns around two diametrical forces: the retired school teacher who indicates a postcolonial resistance and the greedy builder who stands for neo-colonial acceptance in the novel. Aravind Adiga is an ardent observer of life around him, its social harms, corruption and growing difference between the rich and poor. This novel is the picture of contemporary India. His glimpse on the growing gap between the rich and poor and the failure of the police in tracking the criminals are clearly shown in this novel. Adiga's novels also deal with other serious topics like corruption, poverty, terrorism, political turmoil caste and



class discrimination etc. The novel Last Man in Tower shows the setting of Mumbai in the era of globalization. The novel is about the New India discuss the postcolonial themes of Neo-Colonialism and globalization. The practice of globalization in India initiated with the addition of New Economic Policy in 1991 after following the import exchange for nearly 40 years. The globalization and liberalization and privatization are interdependent. Globalization though is regarded a stage of progress for the developing countries like India towards huge developments, has its darker sides as the system permits and empowers native micro-agents of neo-colonialism like Dharmen Shah in Last Man in Tower. Thus, the phenomenon of globalization has its effect either conscious or unconscious manner over all the characters in the novel. The novel reveals the mystifying tension between traditional values (Masterji) and modern living (Builder), between ideas of development and disorder.

The Impact Of Globalization In Common Man's Life:

Aravind Adiga's Last Man in Tower tells the unpleasant and traumatic experiences of 61 year old science teacher Mr. Yogesh A. Murthy who is named reverently as Masterji. The novel begins with the picture of Vishram Society Tower-A's building plan and its dwellers. It brings a brief over view of the society as "unimpeachably pucca," however, the "rainwater-stained, fungus-licked grey" face of the tower caused by "more than four decades of monsoons, erosion, wind-weathering, air pollution, and the gentle but continual vibration caused by low-flying planes" reveals a state of complete collapse in the next monsoon (Last Man in Tower 9). Tower A which was built on 14 November 1959 is recognized everywhere in today's globalized Mumbai. Vishram Society is one of the admired societies in its neighbourhood. All the dwellers of Vishram live in unity and harmony with neighbourhood distinctiveness till Dharmen Vrijesh Shah, a big property developer appears in the society. He wants people of Vishram Society to vacate the building for his big project for fulfilling his dream. Shah finds no trouble in making the dwellers of Tower B. Because it filled with young executives and IT professionals, accept his proposal for vacate the tower. However, a few of the residents in Tower A become the troubling party, by opposing to agree for the dream project of Shah.

In Tower 'A', he makes a generous offer to the dwellers of Vishram Society for his project. At first some of the residents of the society refuse to accept the words and offer of Dharmen Shah. Tower 'A' residents are Mr. Albert Pinto, Miss Georgina Rego, Mr. Kudwa and Mr. Yogesh A. Murthy our Masterji are not ready to leave the Tower A at first. Dharmen Shah played a trick with the help of his left hand man Shanmugham bids bribe to those who oppose to leave the building. Everyone is ready to accept the offer given by Shah through Shanmugham except the last man Masterji. He refuses to leave the building as it carries the memories of his late wife and daughter in it. He is not ready to leave his apartment for any cause. But for the builder Shah, Masterji's defiance becomes a big block. Masterji's behaviour is strange in a society where everyone cry out for money and eventually his refusal leads to a disaster. The property developer shows his hatred and contempt. This is evident in shah's narration:

In my experience, some older people oppose a redevelopment project because they are frightened of any kind of change. Some just want more money. And then there is one kind of person, the most dangerous, who says no because he is full of negative will power: because he does not enjoy life and does not want others to enjoy life. (p.114)



Masterji who clings to the memories of his wife and daughter refuse to admit shah's words. He faced lots of troubles, travails, pains and trauma from the property developers. All society members avoid Masterji for his unwillingness to accept shah's offer. They forget the good heart of the Masterji. They thought, he ruins the hopes, better homes and happy life of Vishram Society. No one understands the feelings and emotional struggles of Masterji. His pain, distress, sorrows and misery caused by globalization is incomprehensible.

His daughter's unfortunate death and his wife Purnima's recent demise have thrown him into a miserable and traumatic condition. He lives with the memories of his earlier happy days in that old apartment Tower A building. An old calendar, a portrait of his wife's favourite idol, the Lord Balaji and her bridal sari recall the happy moments of his past life. Masterji is attached to the fond memories of his daughter Sandhya and his wife Purnima. He feels a deprived with the absence of his wife and daughter. Unlike his co-habitants who dream of lush homes and cars, Masterji finds his delight in the wistful moments around the apartment. The only person in the family who upgrade his simple pleasures and with whom Masterji finds amusement is his grandson Ronak. He knows well that his son is more concerned for his property and his mother's jewellery than fulfilling his father's emotional needs. The torments, tortures and sufferings of Masterji are not noticed by anyone in Vishram society. Masterji's close friends, son and old students recognize him as rigid revolutionary. Finally, he stands alone and rebels against the property redevelopment business of Mumbai city. In his struggle Masterji is dropped by his own son and neighbours and is mercilessly killed in the end by those in chase of wealth.

Conclusion:

Aravind Adiga has dealt with the subject of Globalization and its impact in common man's life with much depth, insight and seriousness. Globalization is the phenomenon which wields its influence directly or indirectly on many spheres and areas of life. These spheres and situations of life are not free from the influence of process of globalization. It promotes the wealthy more than the poor. In Last Man in Tower Aravind Adiga explores the pathetic condition of common man and the atrocities and brutal realities of the redevelopment field in the mighty city are ruthlessly unveiled in the novel. He explores the violent and cruel methods adopted by the builders to grab the land of innocent people. At first they think that they have won the battle to enjoy the pleasures reap by money offer by Shah. But they have lost the building as well as moral values. In this way Shah gets success to own Vishram society to fulfil his dream project. Thus, Last Man in Tower focuses on the grim realities of the restless city where innocent people face different kinds of sufferings, struggles, torture and trauma from the developers. This is evident in Mr. Puri's narration; he wants to leave the civilized city Mumbai to an enlightened place like Pune. The reason behind this narration; he is sick of Mumbai city and sick of its rat race.

References:

1. Adiga, Aravind. Last Man in Tower. New Delhi: Fourth Estate, 2011. Print.
2. Nilekani, Nandan. Imagining India: Ideas for the New Century. New Delhi: Penguin Books. 2008.
3. The Economist. "New Fiction: Tower Block." The Economist 21 July. 2011.
4. White, Alan. Last Man in Tower: A Parable Built on Ambiguity. 29 July 2011.

Spi Induced Drought Condition on Nambiyar River Basin, Southern Agro Climatic Zone of Tamil Nadu, India

R. Rajee^{1*}, V. Emayavaramban², S.Vinothkanna³, R. Jagannathan⁴

¹Research Scholar, ²Professor, ³Guest Lecture, Department of Geography, Madurai Kamaraj University, Madurai, Tamil Nadu - 625 021,

⁴Adjunct Faculty, Directorate of Crop Management, Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu - 641 003

*Corresponding Mail id: rajee.14mku@gmail.com

Abstract:

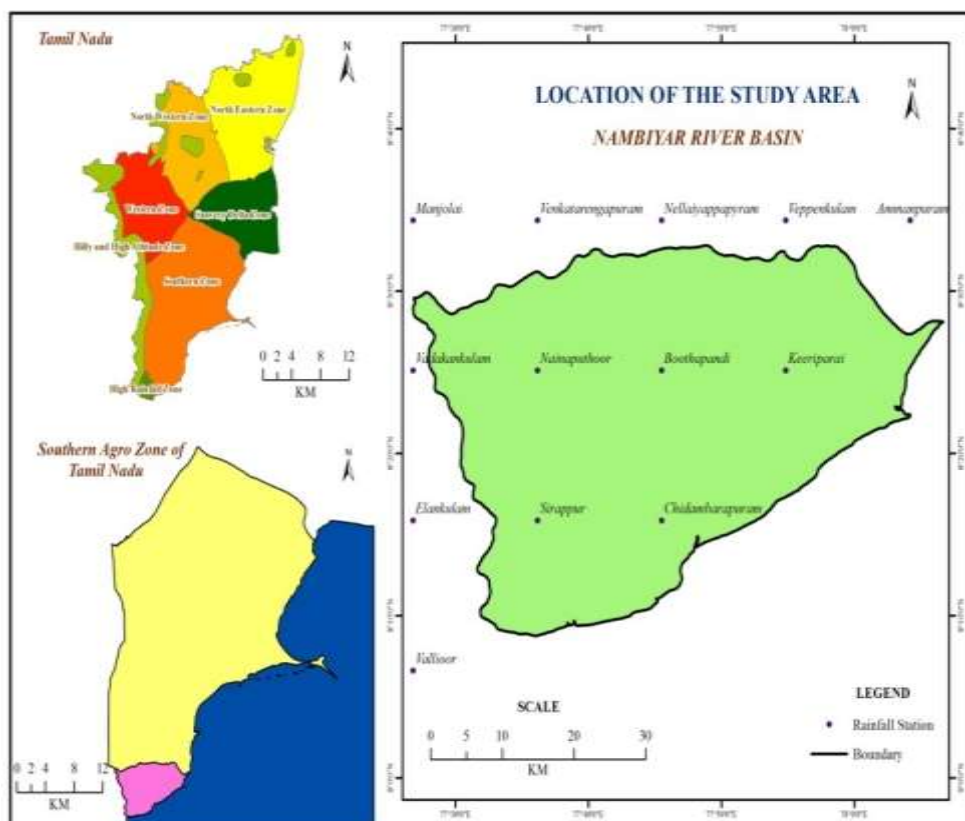
India is one the monsoon country depends mainly rainfall for agriculture. Failure of monsoon leads to drought. Drought is one of the climatic parameter induced heavy damage to crop, economy for a short term some times over a long period of time. An attempt has been made in this paper to study the drought condition over Nambiyar river basin in Tamil Nadu. Annual rainfall over the basin is 1405 mm. Nambiyar river basin receives maximum rainfall during northeast monsoon season. Both southwest and northeast monsoon seasons shows dependable rainfall condition over the basin. SPI-12 time scale shows that peak SPI value is noted in the month of January, 2002 as -1.53. Extreme drought is high before 2000 and moderate drought condition is noted in more months after the year 2000. The rainfall condition is almost similar before and after the year 2000. The relationship between SPI and rainfall are positively correlated over the basin.

Key Words: rainfall variability, SPI, drought, Nambiyar river basin, northeast monsoon season.

Introduction:

Drought is a natural, continuous feature of climate, which is found in all climatic zones. But, it has major differences from one region to another (WMO 2006). It affects agriculture, water logging, human habitats and also politically. Rainfall is the prime factor used to determine drought condition. Trends in rainfall clearly portrays the

rainfall behaviour over any area. Vinothkanna et al., (2017) studied the rainfall variability and its



trend over Namakkal district. Rainfall increases the water flow. Over the past few decades, water managers have faced serious challenges in ensuring the availability of water around the world (Moneo, M., and Iglesias, A. 2007).

The causes of drought are varying from place to place. Research shows that the lack of an accurate and objective definition is a barrier to specific situations to understand drought, which has undoubtedly led to inefficiencies on the part of managers, policy makers and others (Vuille, M. 2013). Recently, a number of research works around the world have examined the occurrence of droughts as they relate to global warming and climate change (Byun, H. R. 1999).

SPI was developed to measure rainfall deficits for several time scales. This reflects the impact of rainfall scarcity on the availability of different water supplies. SPI offers a quick and simple approach to drought analysis (McKee et.al., 1993). The standardized precipitation index (SPI) is very popular among current simple indices for estimating drought. It is also simple, spatially stable in its interpretation, and can be used in risk management and decision analysis, and can be tailored to the user's interest period (Edossa, et.al., 2010). Risk assessment is one of the key aspects of drought planning and mitigation (Hayes et al., 2004), which plays an important role in the relationship between vulnerability and risk and describes the physical nature of drought (Hayes, et.al., 2004).

Government, NGOs, regional and international organizations are very keen in preparing drought policies over the decades (Wilhite, 2000). Droughts are broadly classified into 4 types. They are metrological drought, agriculture drought, hydrological drought and socioeconomic drought. Among the droughts, meteorological drought is considered in this paper for Nambiyar river basin.

Study Area:

The Nambiyar basin is one of the river basin of Southern Agroclimatic zone of Tamil Nadu spreads in Tirunelveli, Thoothukudi and Kanyakumari districts. The latitudinal and longitudinal extent of the study area is 08° 08'00"N to 08° 33'00"N and 77° 28'00"E to 78° 15'00"E (fig.2). The administrative unit of the basin is shown in table 1. Study area is bounded by Tamiraparani basin on north and Kodaiyar basin on south and the Gulf of Mannar on the east and Kerala state on the west. The total geographical area of the basin is 2018.4 sq.km. The basin experiences a maximum temperature of 33°C and a minimum of 28°C. About 9.6 km west of Thirukkarangudi village near Nalikkal Mottai of Western Ghats, the Nambiyar river originates in the eastern slopes. The altitude is about 1060m. Major crops are growing in this basin are millet, pulse, oilseeds, coconut, banana, rubber, other crops and some amount paddy.

Table 1. Administrative Units of Nambiyar Basin

Sl. No	District	Taluk	Block	Area
1	Tirunelveli	Nanguneri	Nanguneri (P)	363.32
			Kalakadu (P)	185.68
		Radhapuram	Radhapuram (F)	458.57
			Valliyur (F)	433.42
2	Thoothukudi	Tiruchendur	Tiruchendur (P)	4.43
			Alwarthirunagari (P)	68.18
		Sattankulam	Udankudi (P)	134.41
			Sattankulam (F)	294.43
3	Kanyakumari	Thovalai	Thovalai (P)	68.19
		Agateeswaram	Agateeswaram (P)	7.79

Fig. 1. Location of Study Area

Aim and Objectives

- To study the basic rainfall characteristics of Nambiyar basin.
- To study the rainfall variability of the study area.
- To assess the drought condition with reference to Standardized Precipitation Index

Methodology

Thirty seven years of daily rainfall data from 1981 to 2017 were used over 13 metrological station in and around Nambiyar basin. European Centre for Medium Range Weather Forecast (ECMWF) reanalysis Interim (ERA-I) data set at 0.75^0 horizontal resolution were downscaled to 17 x 17 km resolution using Weather Research Forecasting (WRF) re-initialization method for this study. Daily rainfall data were collected and segregated to monthly and seasons using excel. Basic rainfall characteristics were spatially shown using Arc GIS platform. Coefficient of variation were calculated to understand the rainfall dependability. The formula to calculate SD and CV are given below,

$$\text{Standard Deviation} = \frac{\sqrt{\sum x^2 - (\sum x)^2/n}}{n-1}$$

$$\text{Coefficient variation (CV)} = \frac{\text{Standard Deviation}}{\text{Mean}} \times 100$$

The following percentage of Coefficient of Variation given in Table 2 is dependable for various time series of rainfall based on Indian Meteorological Department (IMD).

Table 2. Dependability and Non-Dependability based on Rainfall CV

Sl. No	Period	Dependable CV (%)	Non-Dependable CV (%)
1	Daily Rainfall	<250	>250
2	Weekly Rainfall	<150	>150
3	Monthly Rainfall	<100	>100
4	Seasonal Rainfall	<50	>50
5	Annual Rainfall	<25	>25

The drought assessment were studied using Standardized Precipitation Index. If the SPI values reaches to -1 or less are considered as drought and ends when it turns to positive (McKee et al. 1995). The classifications of McKee are shown in the table 3. The results are tabulated and maps are shown cartographically using Arc GIS. Finally, correlation technique has been used between SPI values and rainfall.

Table 3. SPI classification

Sl. No	Drought Classification	Description
1	≥ 2.0	Extremely Wet
2	1.50 – 1.99	Severely Wet
3	1.00 – 1.49	Moderately Wet
4	0 – 0.99	Mildly Wet
5	-0.99 - -1.0	Mild Drought
6	-1.49 - -1.0	Moderate Drought
7	-1.99 - -1.50	Severe Drought
8	≤ -2.00	Extreme Drought

Results and Discussion

Annual Rainfall Behavior:

The mean annual rainfall over the basin is 1417 mm. The maximum rainfall is observed over Ammanpuram location where it is 1907 mm and the minimum is observed over Vadakankulam location (702 mm). 6 rainfall locations in and around Nambiyar basin has above the normal values. Eastern and northern part of the study area receives maximum rainfall. The spatial distributions of rainfall are shown in the fig 2.

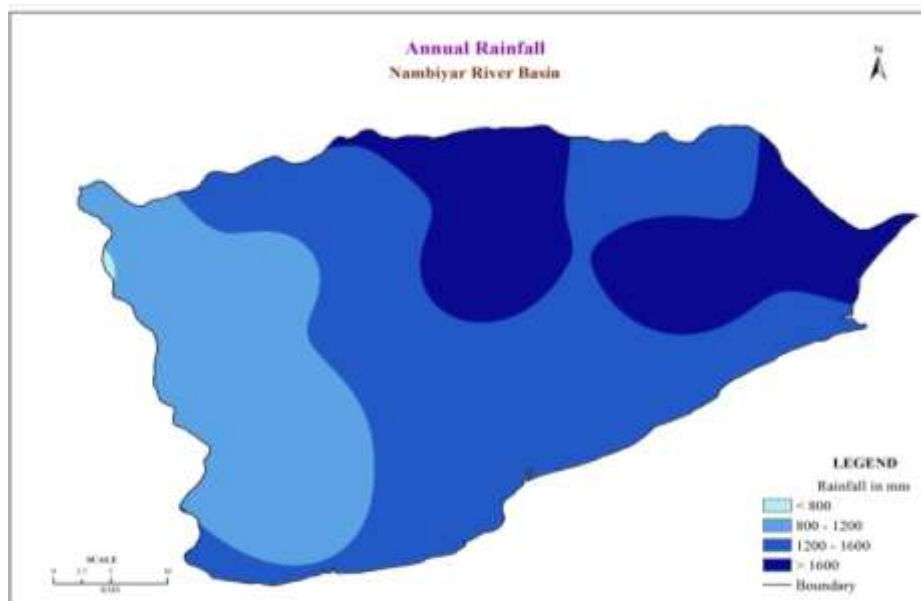


Fig. 2. Spatial distribution of annual rainfall

During winter, Sirappur location receives low rainfall of 49 mm and Venkatarnagapuram receives the maximum rainfall of 250 mm (table 4). The mean rainfall during winter is 99 mm. The mean rainfall over summer is 307 mm. Vadakankulam receives low rainfall of 196 mm and Boothapandi location receives maximum rainfall of 383 mm in this season.

Table 4. Seasonal and annual distribution of rainfall in Nambiyar basin

Sl. No	Station	Annual	Winter	Summer	SWM	NEM
1	Valliure	1756	65	314	866	510
2	Elankulam	1253	66	326	397	463
3	Sirappur	858	49	256	166	388
4	Chidambarapuram	1336	77	319	326	614
5	Vadakankulam	702	42	196	163	300
6	Nainaputhoor	1122	111	282	193	536
7	Boothapandi	1719	126	383	470	741
8	Keeriparai	1649	71	332	655	591
9	Manjolai	989	148	224	108	510
10	Venkatarnagapuram	1831	250	375	221	985
11	Nellaiyappapuram	1907	107	373	612	815
12	Veppenkulam	1351	58	275	505	513
13	Ammanpuram	1949	114	338	792	705
	Mean	1417	99	307	421	590

During southwest monsoon season Valliure location receives maximum of 866 mm rainfall and Sirappur location receives a minimum of 166 mm of rainfall. But in northeast monsoon season, the mean rainfall over the study area is 590 mm in that maximum rainfall is

noted over Venkatarngapuram location of 985 mm. Vadakankulam location noted low rainfall of 300 mm during this season. The basic rainfall characteristic implicit that this basin receives maximum rainfall over northeast monsoon season. The highest and lowest rainfall over the stations are varied from one season to another season indicates that the rainfall behaviour over the basin is varied in nature. The spatial distribution of seasonal rainfall is shown in the fig.3.

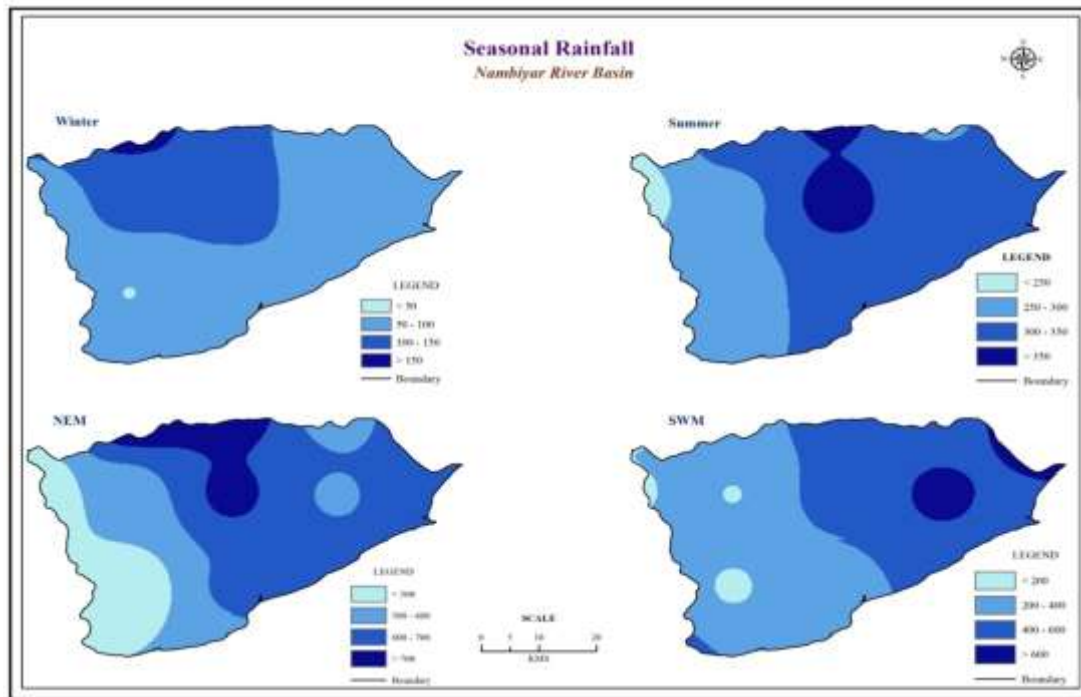


Figure 3. Seasonal rainfall distribution in Nambiyar river basin

Table 5. Seasonal and annual CV distribution in Nambiyar basin

Sl. No	Seasons	Winter	Summer	SWM	NEM	Annual
1	Vallioor	85.79	52.61	34.76	38.1	23.28
2	Elankulam	67.36	33.35	36.73	33.83	21.75
3	Sirappur	69.81	47.53	38.03	33	23.77
4	Chidambarapuram	73.97	56.71	30.93	24.16	22.29
5	Vadakankulam	68.53	37.79	32.31	39.57	23.92
6	Nainaputhoor	67.77	55.15	32.25	24.2	21.36
7	Boothapandi	78.93	58.11	22.04	22.48	21.09
8	Keeriparai	60.62	47.25	21.4	25.86	17.79
9	Manjolai	49.28	49.25	37.46	26.38	21.94
10	Venkatarengapuram	62.69	58.02	31.96	21.53	21.42
11	Nellaiyappapuram	91.91	56.44	26.57	23.16	20.93
12	Veppenkulam	70.91	50.92	25.34	26.98	21.06
13	Ammenpuram	58.71	45.94	20.05	23.9	15.98

The coefficient of variation helps to understand the dependability and non-dependability of rainfall condition. Annually, all the location experiences dependable rainfall condition (Fig.4). During winter, except Manjolai (49%) all other location in the study area are under non-dependability (table 5). The 6 locations such as Elankulam (33%), Vadakankulam (38%), Ammenpuram (46%), Keeriparai (47%), Sirappur (48%) and Manjolai (49%) are dependable

during summer and all other locations are non-dependable in this Nambiyar basin. The spatial map clearly displays that eastern and western part of the basin have dependable rainfall and central part of the basin is under non dependability (Fig.5). All the locations during southwest and northeast monsoon seasons experiences dependable rainfall conditions. Generally, if the rainfall is low the dependability value will be high and if the rainfall is high the dependability value would be low (Ramana Rao, 1988). The annual coefficient of variation clearly denotes that all the locations in the study area are dependable.

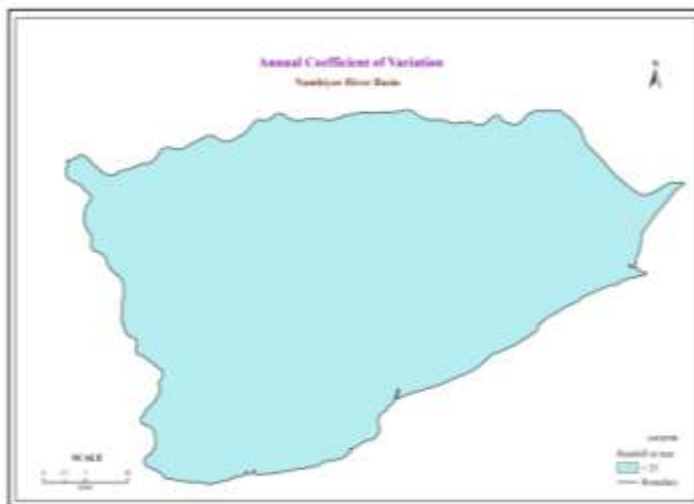


Figure 4. Spatial distribution of Annual CV

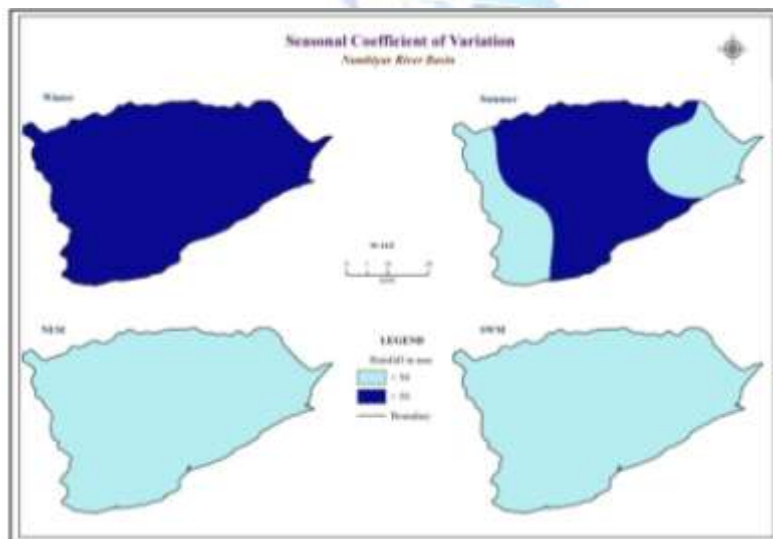


Figure 5. Spatial distribution of seasonal CV in Nambiyar river basin

Drought Conditions:

Most intense of droughts are calculated for SPI-12 time scale. In this study long-term SPI such as SPI-12 is used. The most intense of drought values for SPI-12 is noted in January in 2002 as -1.53 (table 6). The cumulative value of consecutive drought is considered as drought severity. It differs from one time scale to another based on duration of negative values. The longest duration is extended up to 58 months between the period 10/2000 to 07/2005. Drought intensity is also calculated by dividing the drought severity with the duration of drought. The

drought intensity for SPI-12 over the study area is -0.81. The trend of SPI values are shown in the figure 6. It indicates that there are variations in drought events.

Table 6. Drought characteristics in Nambiyar basin

Sl. No	Time Scale	Intense Year and Month	Most Intense	Longest Duration in Month	Period of Long Drought Duration	Drought Severity	Drought Intensity
1	SPI-12	2002 and January	-1.53	58	10/2000 - 07/2005	-47.04	-0.81



Figure 6. Trend of SPI values over rainfall

Location wise drought categorize were studied for all the 37 years to understand the drought condition in each stations. For this study, the year are sliced before and after 2000, specifies that 11 years are noted as drought but the time lapse is reduced between 2001 to 2017. Annual rainfall is comparatively similar between two time periods but the number of drought months is increased after the year 2000. It is interesting that extreme drought is maximum before 2000. After 2000, the moderate drought months is drastically increased (Table 7).

Table 7. Number of drought months before and after the year 2000.

Location	Before 2000			After 2000		
	Moderate Drought	Severe Drought	Extreme Drought	Moderate Drought	Severe Drought	Extreme Drought
Valliure	9	4	17	39	17	1
Elankulam	10	3	11	37	19	2
Sirappur	23	7	11	28	12	0
Chidambarapuram	23	5	11	26	10	0
Vadakankulam	15	1	11	19	18	10
Nainaputhoor	15	5	13	29	3	0
Boothapandi	11	2	11	28	5	0
Keeriparai	14	3	11	27	17	0
Manjolai	13	6	16	23	8	0
Venkatarngapuram	20	4	19	7	2	1
Nellaiyappapuram	18	1	11	14	11	3
Veppenkulam	20	1	11	10	11	9
Ammanpuram	14	1	11	27	11	3

Table 8. Drought categories location wise over Nambiyar basin (values in months)

Location	Moderate Drought	Severe Drought	Extreme Drought
Valliure	48	21	18
Elankulam	47	22	13
Sirappur	51	19	11
Chidambarapuram	49	15	11
Vadakankulam	34	19	21
Nainaputhoor	44	8	13
Boothapandi	39	7	11
Keeriparai	41	20	11
Manjolai	36	14	16
Venkatarngapuram	27	6	20
Nellaiyappapuram	32	12	14
Veppenkulam	30	12	20
Ammanpuram	41	12	14

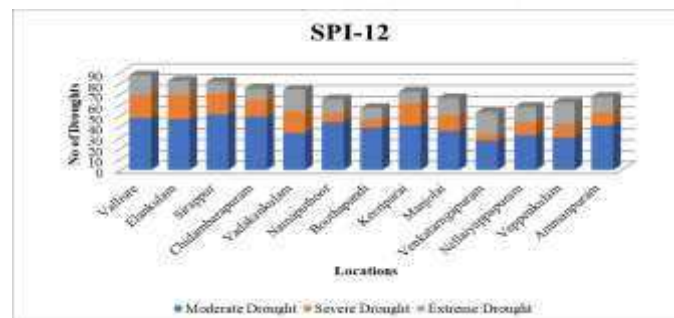


Figure 6. Village wise overall drought category over Nambiyar river basin

Table 9. Correlation between SPI values and rainfall

Categories	SPI values	Rainfall
SPI values	1	
Rainfall	0.63935	1

Overall time period indicates that moderate drought is maximum in all the locations studied (Table 8). Among the locations Sirappur has the maximum of 51 drought months followed by Chidambarapuram as 49 months. Severe drought months are maximum over Elankulam location as 22. Extreme drought is maximum over Vadakankulam as 21 months. The correlation between SPI values and rainfall is 0.6 indicates significant correlation between these parameters.

Conclusion :

Nambiyar river basin is one among the river basin in southern agroclimatic zone of Tamil Nadu. The mean annual rainfall of the study area is 1417mm. Annually Ammanpuram receives



maximum rainfall and Sirapur receives minimum rainfall. The study area receives maximum rainfall during northeast monsoon season followed by southwest monsoon season. This basin resembles the general rainfall behavior of Tamil Nadu and it was clearly validated using rainfall coefficient. Generally, SWM and NEM are high over the study area and comes in dependability of rainfall. A detailed drought analysis was made in this study using SPI. The maximum intense of drought value is noted in January, 2002 as -1.53. The number of drought months is increased after the year 2000. There is a significant positive correlation exists between SPI values and rainfall. SPI is one of the helpful index to quantify the nature of drought and obliging to compare over time and space. This kind of study is more validated to do drought management practices. Being it is a climate event, it cannot be stopped, but prevention can be made by improving irrigation practices and introducing drought resistant crop to reduce the economic loss to the farmers.

Acknowledgement

I greatly acknowledge Indian Council of Social Science Research (ICSSR) for providing fund for my research and also thank the dept. of Geography, MKU for providing space and facilities to carry out my research.

References:

- Byun, H. R. (1999). Daily quantification of the drought duration and intensity. *J. Climate*, 12, 2747-2756.
- Edossa, D. C., Babel, M. S., & Gupta, A. D. (2010). Drought analysis in the Awash river basin, Ethiopia. *Water resources management*, 24(7), 1441-1460.
- Hayes, M. J., Wilhelmi, O. V., & Knutson, C. L. (2004). Reducing drought risk: bridging theory and practice. *Natural Hazards Review*, 5(2), 106-113.
- McKee, T. B., Doesken, N. J., & Kleist, J. (1993, January). The relationship of drought frequency and duration to time scales. In *Proceedings of the 8th Conference on Applied Climatology* (Vol. 17, No. 22, pp. 179-183).
- Moneo, M., & Iglesias, A. (2007). A framework for irrigation management during drought: application in two case studies in the Tagus basin, Spain. *Options Méditerranéennes: Série B. Etudes et Recherches*, 2(56)
- Ramana Rao, B.V., Operational agricultural meteorology (problems and priorities). Indian society of Agronomy, IARI, New Delhi, 1988.
- Vinothkanna, S., Emayavaramban, V., & Kannadasan, K. (2017). Rainfall Variability Analysis in Namakkal District, Tamil Nadu. *International Journal for Research in Applied Science & Engineering Technology*. 5(6), 2281-2287.
- Vuille, M. (2013). El cambio climático y los recursos hídricos en los Andes tropicales. *Banco Interamericano de Desarrollo*, 21.
- Wilhite, D. A. (2000). Drought as a natural hazard: concepts and definitions.
- WMO. (2006). Drought monitoring and early warning: Concepts, progress, and future challenges.



Status of Dalit Women in Rural India : A Case Study of Akkalkot Taluka, Dist. Solapur

Mr. Appasaheb M. Deshmukh

Department of Political Science,
C. B. Khedgi's College Akkalkot
Mob. 9403028251

Caste, once a modal form of social organization identified with backwardness and underdevelopment, is today a vibrantly contested political category and identity. Dalit-scheduled castes in government parlance have been crucial to the elaboration of India's civil rights regime after national independence and figure in the governmental imaginary as vulnerable subjects and victims of historic discrimination. While Dalit enfranchisement through affirmative action is compelling and subversive, the affective force of Dalit identity politics derives from the myriad ways in which the Dalit body continues to be the site of recurrent stigmatization, making it a historical and a contemporary object of suffering. Rising Dalit militancy has been offset by new formations of anti dalit violence: brutality against inter caste liaisons, land grabs, and other forms of economic violence, especially against more prosperous Dalits, sexual humiliation of Dalit women, ritual murders, and the desecration of Dalit commemorative sites. The conceptual elaboration of Dalit emancipation (and the politicization of Dalit identity) returns us to an enduring question for political liberalism: to what extent can the social differentiation and inscriptive identifications of civil society avoid becoming politically salient? if the separation of private interests from public rights is impossible, under what terms and conditions are social identities politicized? The paradoxical coexistence of political militancy and the political citizen of (upper caste) violence is a crucial phase in the untouchable subjects continued struggle to become dalit. As cultural practices and social forms are redefined as civic disabilities, and as the inequities of caste are equalized through political intervention, the terms of politics itself have become politicized the social antagonisms and violence of everyday life structure the political field, even as politics heightens the agonistic character of special life. Efforts to convert the negative centrality of the Dalit into positive political content have also emphasized the Dalit's unique place in the political unconscious of Indian society. (anupama, 2009)

Dalit women are often trapped in highly patriarchal societies. The severe discrimination they face from being both a Dalit and a woman, makes them a key target of violence and systematically denies them choices and freedoms in all spheres of life. This endemic intersection of gender-and-caste discrimination is the outcome of severely imbalanced social, economic and political power equations.

"The combination of caste and gender makes millions of Dalit women extremely vulnerable to discrimination and violence, including rape" (Human Rights Watch)

So, it is very important for study of Dalit women. The Akkalkot taluka is on the border of Karnataka and Maharashtra. And this taluka was convenient for the study and researcher. The study specific Akkalkot tahsil in some village. Selective village are near akkalkot city.

The data has been collected from various sources and include both published and unpublished books, census data, socio-economic abstract and district gazetteer. Data related to

literacy, sex ratio, age structure, dependency ratio and occupational structure have been collected through District census Handbook. . The researcher has taken to 100 interviews in 15 village of Akkalkot Tahsil.

For quantitative analysis- Use survey method, taken to 100 interviews. Selective sample for interview. And the field survey analyzed with SPSS (Statistical Package for Social Science) software.

O stands for the Observed frequency. *E* stands for the Expected frequency. You subtract the expected count from the observed count to find the difference between the two (also called the "residual"). You calculate the square of that number to get rid of positive and negative values (because the squares of 5 and -5 are, of course, both 25). Then, you divide the result by the expected frequency to normalize bigger and smaller counts (because we *don't* want a

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

formula that will give us a bigger Chi- square value just because you're working with a bigger set of data). The huge sigma sitting in front of all that is asking for the sum of every *i* for which you calculate this relationship - in other words, you calculate this for each cell in the table, then add it all together.

Dalit women are socially and educationally backward. Literacy percentage of Dalit women is 46 % and 37 % below 12th class completed. Only 9% have degree holder. By comparison the rate for upper-caste women was higher (68.5 percent). Which in school completed

		18.Which in school you have completed education?			Total
		Government	Private	NA	
6.Caste	1. Count	51	9	9	69
	Mahar				
	% within 6.Caste	73.9%	13.0%	13.0%	100.0%
	% within 18.Which				
	in school you have completed education?	73.9%	69.2%	50.0%	69.0%
	% of Total	51.0%	9.0%	9.0%	69.0%
	Mang Count	14	1	6	21
	% within 6.Caste	66.7%	4.8%	28.6%	100.0%



% within 18.Which in school you have completed education?	20.3%	7.7%	33.3%	21.0%
% of Total	14.0%	1.0%	6.0%	21.0%
Chmbh Count	1	0	2	3
ar				
% within 6.Caste	33.3%	.0%	66.7%	100.0%
% within 18.Which in school you have completed education?	1.4%	.0%	11.1%	3.0%
% of Total	1.0%	.0%	2.0%	3.0%

Dhor	Count	3	3	1	7
% within 6.Caste		42.9%	42.9%	14.3%	100.0%
% within 18.Which in school you have completed education?		4.3%	23.1%	5.6%	7.0%
% of Total		3.0%	3.0%	1.0%	7.0%
Total	Count	69	13	18	100
% within 6.Caste		69.0%	13.0%	18.0%	100.0%
% within 18.Which in school you have completed education?		100.0%	100.0%	100.0%	100.0%
% of Total		69.0%	13.0%	18.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.038 ^a	6	.029



A chi-square test (See table) was performed and strong relationship was found between Dalit caste and education completed school. Nearly 69% Dalit women are completed their education in government school. Only 13% Dalit women completed their education in private school. So, privatization of Education is not suitable for Dalit women. In this chi-square table since the sig. value is .029 is less than .05 we can say that there is a significant relationship between Caste and school.

In this study there are 12% Dalit women told should change little in reservation. 10.0% Dalit women told that economic limitation on reservation and 78% Dalit women told that there is no change in present reservation. So, only one reservation is instruments of upliftment of Dalit women.

In this study we can say that there is a significant relationship between Caste and reservation. 78% Dalit women told that there is no change in present reservation. They are conscious about their reservation. In short, Reservation is social instrument of Dalit women empowerment.

Economically, Dalit women are very backward. They have not enough economic sources. According to recent available official sources such as the NSSO, most Dalit women lack access to income-earning assets and regular employment and depend mainly on wage labor of Dalit women, 3% are self employee. 7% are in service, 50 % Dalit women's depends on wages. 28% women agriculture wages and other sources are 2% and 10% Dalit women depend on their own small occupation. 56% Dalit women have not any farming. Only 40% Dalit women's have farm below 2 hectors. In short they have not enough economic sources for good life. 15% Dalit family has been changed their family income sources. 85 % Dalit family has been no any changed in their income sources. In these income sources are mainly wages and agriculture wages. Also Dalit women's is annual income very low. 90.0% Dalit family's income in below of one lakh, 7.0 Dalit's family income between one lakh to 2 lakh. 2.0% Dalits family's income between 2 lakh to 5 lakh and 1.0% Dalit family's income above 4 to 5 lakh. 96% Dalit women lives in self houses. Other sides there are only 4.0% live in rental houses. 3.0 % of Dalit live in a cottage. 52% Dalit live in house of tin. 43.0% Dalit lives in concrete's home. 1.0% Dalit is respectively live in wada and bungalow. 93% Dalits families there is no any four wheelers. 97 % have no A.C. in their houses. 16% Dalit families use fridge and 97 % have no fridge in their houses. 4% Dalit families users of Washing Machine and there is less ratio about users of the machine. Only 3% Dalit families use computer and 97 % having no computers in their houses.

Politically, Dalit women are aware about voting rights. 90.0 % Dalit women having used rights of voting. 39% Dalit women satisfy about Government of Narendra Modi. Other side 61% Dalit women do not satisfy about Narendra Modi's government. 83% Dalit women's feels that Republican Party of India is very necessary. 26% of Dalit women do not think to alliance any political parties. 17% Dalit women do not think that to alliance Congress and BJP and 40% Dalit do not think that to alliance other any parties. 63% Dalit women to get the government facilities from Grampanchyat or nagarpalika. 37% Dalit women do not get the facilities. 59% Dalit women takes better facilities from government and 41% Dalit women do not know information's about government scheme. 70% of Dalit women nerves about a taking government facility.



In short, even today Dalit women are social, economic and educationally backward. But politically they are consciousness about voting right, to cultivate their interest, about political party and government scheme.

References

1. Shah, G. (2004). *Social movements in India*, SAGE Publications India.
2. Shah, G. (2004). *Dalit Identity and Politics*, SAGE Publications India
3. Mukherjee Mala & Sabharwal Nidhi Sadana (2015), *Status of Dalit Women in India*, Indian Institute of Dalit Studies, Working Paper Series, Volume Ix Number 02, 2015, New Delhi.
4. Narayan, B. (2006). *Women heroes and Dalit assertion in north India: Culture, identity and politics*. SAGE Publications India.





Analysis of Edward Cullen's Masculinity in Stephenie Meyer's *Twilight*

Ms. Leena Chudasama

Research Scholar,
Center for Research & Development

Department of English,
School of Arts And Humanity,
Rai University, Ahmedabad. Gujarat, India

Dr. Nilam H. Gajjar

Assistant Professor,
School of Languages
Department of Linguistics
Rai University, Ahmedabad, Gujarat, India.

Abstract:

This paper talks about the feature of masculinity that explains the central protagonist in Stephenie Meyer's Twilight. Edward Cullen was born in and raised in the middle of his family as a warrior and brave human being. Being a part of an educated family he adopts qualities like braveness, self-dependent, self-analytical, eagerness, and dominant man. These features of his personality seem to long-lasting and overpowering his relationship among his friends and relatives. This paper also explores how these qualities make him a strong attractive individual who builds up his masculinity through which he leads to living as an individual domain and takes every decision of his life strong, boldly without any fear. His character, and how the seven features of masculinity have resembled his character are also explores in this paper. Twilight indeed explains the power of masculinity feature that masculine character is very well deeply engaged with Edward Cullen's personality. Edward's character which is shaping throughout his life journey, and how the seven features of masculinity have resembled his character are also explores in this paper.

Keywords: braveness, self-dependent, self-analytical, enthusiastic, and dominant man.

Fiction is closely related to men and masculinity. The idea of fiction secretly portrays an unusual phenomenon that happens in the world that is set to be real. The understanding of masculinity is both broad and narrow in scope. In other simpler words, masculinity is a concept of being a man, owned by each male besides by his self, affected very much by the perspective and beliefs of the society. Thus, the definition of masculinity is to make it clear that to have a good understanding or to do an analysis of masculinity, it cannot be treated as something general. Man, with his strong character is often compared to the women who are often considered to be weaker. But all men do not possess the nature of masculinity which is recognized as the nature of men. Not all men with male gender have a masculine nature. In masculinities R.W. Connell notes that "Masculinity is not an idea in the head or a personal identity. It is also extended in the world, merged in organized social relation" (Connell 29). Social environment may play a prominent role in forming the nature of a man who is growing, or to establish the nature of masculinity. A man educated by a woman without knowing a father can make him have a gentle nature like a woman or it could also make men lose his natural masculine and become feminine, or could be called feminine-male. Earlier it was often assumed that the division is based on underlying innate differences in traits, characteristics, and temperaments of males and females. In other words, the measure of femininity or masculinity was often used to diagnose what was understood as problems of basic gender identification, for example, feminine-males or masculine-females. A story about men who are 'different' is not just fiction in novels. Their existence that is 'different' as appears in the story came from real life



that is happening around us in this era. Now is the time when men ask about cosmetics, and women began to love football. This behavior does not seem normal. But as said above, it is not so easy to determine if a man is not masculine, or woman not feminine based on what he or she does. Men can still be considered masculine even though they ask for cosmetics and even use it. Women can also still be feminine even though they started liking football. This statement confirms that actions do not determine one's personality. The topic of masculine and feminine is still ambiguous around us is interesting for a deepened understanding. This paper focuses on a deeper understanding of the nature of masculine men. Masculine is a natural thing that should be owned by men. Men have distinct masculine traits compared to women who have the possibility of having a masculinenature.

Masculinity, as defined in *Oxford Advanced Learner's Dictionary* (2000), is the quality of being masculine, whereas the term masculine is defined as "having the qualities or appearance consider to be typical of or appropriate for men" (*Oxford Advanced Learner's Dictionary*). In general, masculine is related to Virility of men. but masculine and men are not forever united. Masculine is a feature, while the male is gender. As masculine is a feature of the human, the masculine feature may arise in men and women. Meanwhile, in masculinities R.W. Connell notes that "Masculinity is not an idea in the head or a personal identity. It is also extended in the world, merged in organized social relation" (Connell 29). In *Encyclopaedia of Sex and Gender*, Judith Roof defines gender as not only a condition of being female or male, but also includes the behavioural, cultural, or psychological traits typically associated with one sex into its meaning. Robert Brannon argues that "the male gender role or female gender role is like a script that men and women follow to fulfil their appropriate parts in acting masculine or feminine" (Brannon 168). He adds the best way to understand gender is to understand it as a process of social presentation. Because gender roles are delineated by "behavioral expectations and norms, once individuals know those expectations and norms, the individual can adopt behaviours that project the gender he/she wishes to portray" (Brannon, 169). John Money invents the term gender roles to mark a distinction between behaviours related to one's biological sex and those related to social practices and individual gender identity. "The notion that masculine roles and feminine roles, while related to biological sex, are not determined by differences in male and female genitalia had a significant impact both on the historical interpretation of social orderings and on understandings of traditional gender roles" (Maconis 618).

Seven Main Characteristic of Masculinity According To Maconis

Dominant, Dominance means that the disposition of an individual to assert control that can influence other's actions (Cambridge, Third edition). People with dominant characteristics also have great power or authority to support them (Lehman 11). They try to dominate all the activities and behave as if they are the best judge. They do not like to be counteracted or being argued with.

Brave, Bravery is the ability to confront fear, pain, risk/danger, uncertainty, or intimidation (Cambridge, third edition). It also can be defined as the ability to control fear from danger, illness, and uncomfortable circumstances and feelings (Oxford, Third edition). According to Lehman, a brave person isn't always free from fear, but he can suppress the fear until he can handle and control the fear, not as the contrary, fear controls him (Lehman 10).



Rational, Being rational can be defined as the ability for showing reason than emotion (Oxford, third edition). According to Connell, “rational people are those who can see a problem logically. He adds they will make a strong effort to determine all the significant facts necessary to make a particular decision before that decision is made into reality. They also have the capability for considering the bad effects and the good effects before deciding a decision”(Connell 46).

Intelligent, Intelligence is the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly, and learn from experience (Cambridge, third edition). It is not merely book learning, a narrow academic skill, or test-taking smarts. Rather, it reflects a broader and deeper capability for comprehending the surrounding (Lehman 19). In other words, being intelligent is being clever. It can be said that cleverness is a synonym of Intelligence.

Analytical, Being analytical is having the ability in solving problems based on good analysis (Connell 39). He adds, analytical people usually see a problem from various perspectives (Connell 40). Along with this, according to Lehman, they also examine the problem closely and thoroughly (Connell 15). The analysis is also supported by several data and factual information. So, the result of the analysis is credible and accountable.

Aggressive, Being aggressive is characterized by making an all-out effort to win or succeed (Oxford, Third edition). According to Connell, “aggressive people usually behave in a very forceful and determined way to succeed. They are also characterized by being assertive, bold, and energetic. Furthermore, they are brave to take a high risk to realize their ambition”(Connell 32).

Independent, Being independent is having the ability to not rely on others in support, care, or fund (Cambridge, Third edition). Connell argues that independent people have freedom of dependence and exemption from reliance. They are independent and self-reliant.

The similarity of Masculinity Feature that Identifies in Edward Cullen's Character in *Twilight*

Stephenie Meyer is a talented American author of *Twilight* Saga novels. Every novel she wrote has a special feature. Even though all her novels emerge from different inspirations, yet her novels always have the same special theme, the theme of heroic. The rescue action of the loved ones by the main character of the novel. The superhero in her novel both men and women have a masculine feature that supports their heroic actions. The *twilight* saga, clearly tells how Edward's heroic action saves Bella; in the host, Wanda rescues her loan body and the last human family remains from the attack of souls who wanted to dominate the earth. Masculinity is perfectly blended in her novels. Along with having a strong masculine theme that is arranged in each novel, the works of Stephenie Meyer have other advantages that make this paper chose one of her novels as the material. A novel by Stephenie Meyer has always been a New York Times Best Seller List and won the British Book Award. The series has sold over 100 million copies worldwide in 37 languages. In 2008, the four books of the series claimed the top four spots in the USA. The *Twilight* novel held the top four spots on USA Today's year-end list again in 2009. The novels have been adopted into the movie. These films made the works of Stephenie Meyer's increasingly popular. Meyer has not created a total fantasy; but has brought magic elements to reality, which makes Edward seem nearly human, and thus, creating an otherwise ordinary teenage love story. This is just another version of an impossible teenage love story which are



quite popular. Edward creates a life very similar to that of a human- living with parents and siblings, not with coffins in cellars but open large house with white walls and big windows. Edward keeps the fact of his being a masculinity feature a secret from all humans except his girlfriend, Bella. Bella's knowledge about Edward's vampirism contributes more towards Bella's integration into 'vampirism' than Edward's integrity into humanity. Edward resurrects his human powers through love and thus continuously moves closer to humanity. When Edward talks about his vampirism, he shows sadness towards what or who he is. This emphasizes the limitations of him, he mourns the loss of his soul. However, Edward's limitations do not control him. It is more like a disadvantage blocking his way towards his human self. Edward is readily absorbed into humanity due to the easily identified connection between the masculinity feature with a strong human. Edward's reasons for 'turning vegetarian' can be understood when Edward talks about his 'dark period' – a period when he was feeding on humans. When he allows the reader to take part in his feelings of shame of his monstrosity he also evokes the feeling of empathy and pity for him as a monster. Considering from a Nietzschean perspective of his term 'übermensch' (superman/overman), one could accept Edward a regression of the masculinity feature. According to Powell, Nietzsche says: "the übermensch [overman] is a model for the extension of human capabilities, the defiance of fearful mortality, and the embrace of life in its potential of becoming" (Powell 204).

By allowing Edward a conscious and a voice to describe his functioning, Meyer has made the masculinity feature shows the structures by erasing the boundaries between the positions of humans and vampires. Moreover, the 'overman' accepts "his fate wholeheartedly, opening himself to rapture, and renouncing a Christian theology stained by shame and suffering. "Enacting a boundless process of death and return he embodies the concept of eternal recurrence" (preface). Edward has "flawless lips" (37), and "a set of perfect, ultra-white teeth." (43) His perfect smile brings Edward near to human perfection; one can even call his smile angelic. It is his cold breath and the beauty or perfection of his mouth rather than the animalistic features that make him different; Edward's skin is very pale and cold which is an obvious consequence of being dead. But when he is exposed to direct sunlight his skin sparkles. "His skin, [...], literally sparkled, like thousands of tiny diamonds were embedded in the surface" (228). His ears are ordinary-looking and have no animalistic connotation and are also not capable of shifting shape while Count Dracula, besides the bat, can shift into several alter egos such as the wolf, fog, or mist. These supernatural features, the physical likeness to a Greek god; "looking more like a Greek god than anyone had a right to" (180), and the fact that Edward so frequently is referred to as "godlike" (255) adds to his attractiveness. Once again, we refer to Gordon & Hollinger's statement that the masculinity feature "appears attractive *because* he or she is a masculinity feature" (27) and not *despite* being a masculinity feature which can be applied to Edward as his characteristics make him desirable and attractive while Count Dracula makes him horrific. The transformation from being horrified by masculinity features to being attracted to them is an aspect that Powell considers in examining the relations between power, sexuality, and attraction in her psychoanalysis of the masculinity feature where a fascination portrays the masculinity feature of today as "romantically idealised" (37). This idealisation can be considered a wish for the reader to identify with the masculinity feature Edward who attracts his readers by his powers because of his godlike appearance and by mimicking the characteristics of man. As in Shakespeare's *Macbeth*, the 'murderer' grows conscious which



raises our sympathies for him. One part of Waltzes studies explores the Stephenie Meyer' in 2006, published her novel *Twilight* which was Romeo and Juliet's version of the relationship between a masculinity feature and a human. The masculinity feature protagonist is Edward Cullen, a masculinity feature with almost human characteristics living in Forks, a small town in northern America. "But you see, just because we've [the masculinity features] been...dealt a certain hand...it doesn't mean that we can't choose to rise above – to conquer the boundaries of a destiny that none of us wanted. To try to retain whatever essential humanity we can"(268).

The reader gets to know Edward from his inner struggle of concealing his monstrosity, by being referred to as acting "very human" (255) and by being loved by a human. He portrays a range of emotions that make the reader affected by him. Edward is described as a "godlike creature" (255) with "the right intentions" eg he does not survive on human blood as he is a "vegetarian" (164) feeds on animals' blood only. He restrains himself from his masculinity feature impulses and conceal his monstrosity, almost in the guise of man; being almost man but not quite. This struggle to hide his monstrosity also makes Edward untrue to his vampirism which makes him transparent; almost masculinity feature but not quite. When his actions of restraints place him close to being human his transparency also marginalizes him as a masculinity feature making him unpredictable. Edward is misguiding the reader by portraying himself as something he is not, human. Although he is generally good yet his unpredictability makes the reader wonder when and how he would reveal his strangeness and monstrosity and can he be trusted?

In Edward's transparent mimic of man, he is trying to bring forth what he has once been which is leading to confusion about his loss of identity. Gordon & Hollinger mentions this as, "The masculinity feature becomes a symbol for any member of a minority group who loses his own identity but cannot be assimilated into the dominant culture." (42) While discussing the postmodern masculinity features as a minority group losing their identity, one cannot avoid noticing that the difference of voice in the novels. Edward's voice is present and explains and overthrows features connected to masculinity features; that is: the sun is not deadly; they do not sleep in coffins etc (162) and let us recognize him through the love of Bella. Edward has a conscious and is a thinking creature with principles. This creates a level of understanding of him as Other and increases his integration through an emotional recognition of individuality. To conclude, Edward Cullen somehow resembles as a protagonist, a vampire protagonist who's matching with qualities like boldness, smart, brave, angeriness. The masculinity feature was the build-up to him in or the researcher has said that brought from family inheritance. Education makes him a more powerful creature. His relationship with Bella also proves his charismatic personality. Edward Cullen's personality retains many qualities of masculinity feature in the novel *Twilight*.

Works Cited

Bhasin Kamala. *Exploring Masculinity*. Women Unlimited, 2004.

Brannon, Linda. *Gender: Psychological Perspective* Allyn and Bacon, 1976.

Burke, Peter J. 1980. "The Self: Measurement Implications from a Symbolic Interactions Perspective." *Social Psychology Quarterly*, vol. 43, pp. 18-29, 1980.

Cambridge Dictionary 3rd edition. Cambridge U P, 2008.



- Connell, Raewyn. *Masculinities*. University of California Press, 1995.
- Halberstm, Judith. *Female Masculinity*. Duke U P, 1998.
- Lehman, Peter. *Masculinity: Bodies, Movies, Culture*. Rouledge, 2001.
- Macionis, John. *Sociology, 3rd Edition*. Prentice-Hall, Inc., 1991.
- “Masculinity.” *Oxford Advanced Learner’s Dictionary*. OUP, 2000.
- Meyer, Stephenie. *Twilight. Atom, 2007.***
- Nikki, Wedgwood. “Connell's Theory Of Masculinity – Its Origins And Influences On The Study Of Gender.” *Journal of Gender Studies*, vol.18, no. 4, pp. 329-339, 2009, DOI: [10.1080/09589230903260001](https://doi.org/10.1080/09589230903260001). Accessed 28 June 2020.
- Oxford Dictionary 3rd edition*. OUP, 2010.
- Powell, Anna. *Psychoanalysis and Sovereignty in Popular Vampire Fictions. The Edwin Mellen Press, 2003.***





Intertextuality in Graham Swift's *Last Orders*

Dr. P. B .Bhange

Associate Prof.

Head Department of English

M.H.M. Art's & Commerce College, Modnimb

Dist- Solapur. 413 301

Abstract

The present paper is devoted to the discussion of Graham Swift's Last Orders as a postmodern novel. The novel is complex in form and structure. Intertextuality is the characteristic feature. Several hypotexts are integrated into this novel. Genre mixture is the chief component of this novel. It is a long written monologue. The novel is postmodern in many aspects due to it's features like double narrative, intertextuality, hyperreality, metanarrative, pastiche, subversion of authority and so on.

Keywords: postmodernism, intertextuality, hyperreality, subversion, fragmentation, metanarrative, relationality, interconnectedness, culture, metafiction, realism, experimentation, technology, tradition, simulacra, Disney world.

Graham Swift: A Postmodern Novelist

Graham Swift the winner of 1996 Booker Prize is a prominent British novelist. All his novels reveal the graphological picture of the postmodern society in a realistic way. He has presented the origins and effects of an age in which images are replacing reality and leaving a void at the centre of our existence. He finds that absence has become the substance of our age and our liberation lies in our illusions. He appears to be true to the confusion of life through his work.

Swift has explored the family conflict, trauma and melancholy of the contemporary man, emotional and psychological disturbance in his novels. Suicide, death, madness, incest and rape make his characters unstable and imbalance. The major motives of his novels are the loss of faith, death of the nearest, the dissolution of a sense of history and of identity. Metanarrative, hyperreality, intertextuality, genre mixture, pastiche, subversion of authority, distortion are some of the techniques of his writing. His novels and short stories reveal that he is postmodern novelist. Genre mixture and intertextuality is the characteristic feature of postmodern writing and it is clearly seen that he has exploited it in his novels. Thomas Hardy, the late Victorian novelist, ancient Greek tragedians Aeschylus and Sophocles, Shakespeare, William Faulkner, T.S. Eliot, Charles Dickens, Kazuo Ishiguro, Michael Ondaatje, John Fowels, and poets like Alfred Lord Tennyson, Robert Frost, Hopkins, Philip Larkin, Ted Hughes are major influences on Swift.

Intertextuality

Intertextuality is the characteristic feature of postmodern writing. It is defined as a text within text. The term is used firstly by Julia Kristeva in the late sixties. She says that the text is constructed of a mosaic of quotations; it is the absorption and transformation of another. The readers find out the meaning built from systems, codes, traditions established by previous works of literature. Like postmodernism it is a fluid and diverse term. It is first employed by poststructuralist theorists and critics. It is also useful term as it gives rise to the notions of relationality, interconnectedness and interdependence in modern cultural life. It has its origins in



the twentieth century linguistics. Ferdinand de Saussure has employed it in his seminal works. Julia Kristeva, M.M. Bakhtin, Roland Barthes are the practitioners of intertextuality. Intertextuality is binding together several texts in one without destroying each other and without the text-being torn apart as a structural whole. However it has both merits and demerits. It helps to bring out the comparison and contrast between the present and past texts and cultures. However it can lose its aesthetic and authentic value due to its overuse.

Intertextuality in *Last Orders*

Last Orders is the most popular novel of Graham Swift. It is published in 1996 and awarded the Booker Prize in the same year. It is this novel which has given Graham Swift an international reputation as a writer. The novel has also been made into the film directed by the Australian Fred Schepisi.

Last Orders is a fine example of multiple first person narration. The plot of the novel is straight forward and the stories are told in the form of monologues. There are six narrators who are narrating and commenting on life and its meaning. The flashback technique used in the novel takes us back into the past history of each one. The total seventy five short chapters are named after the name of the speaker except the 17th chapter. The novel is highly intertextual. The life and fate of the characters are expressed through the technique of intertextuality. Swift has used many texts in the novel to bring out the inner psyche of his characters. The structure of the novel though simple has become comprehensive due to the intertextuality. The novel presents the upper-lower class life of Bermondsey and the inhabitants are a retired insurance clerk, a grocer, an undertaker, a used-car dealer and a butcher. Like in his other novels, Swift here also explores the suffering of families, the imperative of sexual desire, the warping of children by parents and the drama of personal sacrifice. The novel is a series of monologues rather than a sequence of events. The major emphasis of the novelist is on old men and their follies and regrets. Jack Dodds, a butcher dies and his friends gather in a Bermondsey pub to carry out his last wish. The novel describes the strong ties between the dead man and those who survive him- his wife, his adopted son and his friends. It is a group of working class Londoners who travels by car to Margate, a seaside town to scatter his ashes into the sea. Jack's death is the root cause of their journey. Vince Dodds, his adopted son, a dealer of used cars follow a geographical route marked out in the chapter headings- New Cross, Dratford, Chatham, Canterbury and Margate. It is physical, religious and remembrance journey. It remembers Jack, the Bermondsey butcher, the Second World War soldier, the husband and the father. The narrators are the spiritual searchers and try to find out the meaning of life. Jack died of stomach cancer at 67 but he is powerfully present in the memories of all his family members and friends. Ray Johnson is an insurance clerk and protagonist of the novel. He is the close friend of Jack, a war buddy. He narrates most sections of the novel. Vince Dodds is an adopted son of Jack and younger in the group. However he is rebellious and does not follow the family tradition. He refuses to enter the meat trade and becomes a successful businessman. Vic Tucker is an undertaker, a priest and one of the members of the crew. He is traditional and peaceful. He arranges Jack's funeral and cremation. Lenny Tate is fruit and vegetable dealer. He is poor but the angriest of the men. He is presented in the novel as a foil to Vic Tucker. He imports action into the plot of the novel. Actually not very much happens in the novel. It presents the effects of the dead on the living individuals. These men are emotional and intellectual explorers. They are compelled by a common errand, travel together



across a small part of England making discoveries about themselves, each other, their world, time and history. The novel begins in Bermondsey and ends in Margate. The five men gather regularly in a pub named The Coach and Horses.

There are women characters who have given much importance in the novel though none are included in the trip to Margate. The journey is male undertaking. Amy Dodds is a Jack's widow and major woman character in the novel. Her monologues reveal her relations with her husband telling the story of their early days, courtship and marriage, the birth of her daughter June and the adoption of Vince during World War II. It is also revealed that she was not happy with Jack and gradually develops relations with Ray Johnson. Her monologues reveal also her inner state of mind. Mandy is Vince's wife. Then there are other girls like Sally, Kath, and Susie who are the daughters of Lenny, Vince and Ray respectively. The father-daughter relations are strained and disturbed. It is marked by love-hate relationships. Amy completes the story of Jack as his ashes are delivered to the sea by those who love him.

The following hypotexts are extensively employed in the novel by the novelist.

The Sound and the Fury:

This novel is written by the American writer William Faulkner. It is published in 1929 and is notable for its multinarrative styles. The stream of consciousness technique is fully exploited to bring out the inner urge of the characters. The theme of the novel is the disturbed relations of family life. The Compson family and their dissolution, reputation is the main concern of the novel. There is no linearity in the narration but the problems and mental tortures of family life are portrayed vividly in the novel.

Last Orders by Graham Swift has utilized the theme of *The Sound and the Fury*. Broken relations, warping of children by parents, old man's follies are portrayed by the novelist in the manner and style of Faulkner's *The Sound and the Fury*.

As I Lay Dying:

Graham Swift and William Faulkner have many things in common. Both are drawn to the epic tradition of Western literature to self-divided heroes, archetypal journeys, family secrets and dynastic sagas. There is an overlap of the epic and the soap-opera, the tragedy and the melodrama in both of these author's novels. The land has been presented by them as a character, a sort of wise, old man of great antiquity and resilience. It is presented as a repository of truth and dream, of history and legend by both of them.

Swift is very close to William Faulkner and his 1930's novel *As I Lay Dying* for the composition of his *Last Orders*. He himself has described the novel as homage to *As I Lay Dying* and a reworking of an ancient narrative device. Pamela Cooper in her *Graham Swift's Last Orders* says,

The story about the pressure of the dead on the living, in the wake of death, is as old as Homer (p.17).

This statement is true as both the novels present the pressure of the dead on the living. *As I Lay Dying* is the major source for the composition of *Last Orders*. There are many similarities in the structure and subject matter of the novels including monologues given to the dead persons. Monologues in both novels have numbered points and they are made up of single sentences. The novel has many references and allusions to *As I Lay Dying* which suggests a deliberate reworking of aspects of Faulkner's text. The basic premise of Faulkner's novel, the tragic-comic journey of a bereaved family to bury its dead matriarch is fully utilized and exploited by Graham



Swift in *Last Orders*. It also signals some of the modernist techniques that Faulkner's work suggests. Both novels show the spiritual barrenness of the contemporary society.

The Waste Land:

T.S. Eliot's *The Waste Land* is an epoch making poem of alienation and spiritual bankruptcy of modern life. Appeared in 1922 the poem is an attempt of the poet to create a sense of the sordidness and vulgarity, the moral debility and spiritual desiccation of modern life. It also presents the disillusionment of modern life, the immense panorama of futility and anarchy of the society. The symbolism of the poem is taken from the legend of the Holy Grail of a Waste Land, stricken by drought, where everything has become sterile. Based upon that myth Eliot presents London as a Waste Land. The theme of alienation, spiritual barrenness, disillusionment and sterility echoes in Swift's *Waterland*, *Out of this World* and *Last Orders*. The journey in *Last Orders* is such sordid and spiritually barren. It is a tour rather than a religious journey.

The Four Quartets:

The novel also echoes Eliot's another poem *The four Quartets*. The spiritual searching, its dread of time and its images of ashes and old men and their follies, regrets strongly occur in *Last Orders*. The poem is not directly referred; it is echoed in its theme in the novel. The motion itself is action in the novel. The circular motion described in the novel directly echoes Eliot's famous lines from *The four Quartets*, In my end is my beginning, which imply a religious attitude towards time.

The Remains of the Day:

This is a 1989 novel by British writer Kazuo Eshiguro. It is awarded the Man Booker Prize for fiction. It narrates in the first person the story of Stevens, an English butler. There are allusions to the historical facts which make the novel historic and realistic. It is also a reflection on the past life affecting the present. The discussion on the policy of British Government and World War II makes the novel readable and comprehensive. The structural device of memory is used effectively in the novel. The theme is old man's follies and regrets. *Last Orders* by Graham Swift echoes *The Remains of the Day* in many respects. It refers to the history of England after its fall of empire. Jack Dodds, Ray Johnson were best friends, war buddies. Narration like *The Remains of the Day* is same as it reveals the past memories. Only the difference occurs in narrative methods. In *The Remains of the Day* Stevens is the sole narrator and *Last Orders* has multiple narrative sequence. Both novels have ageing characters reflecting on their past follies and now regret. *Last Orders* like *The Remains of the Day* is a historical novel and the effect of the past on the present is reoccurring theme in the novel. Both novels have the themes of growth and change to show human psychology in process. The theme of isolation and bewilderment caused by World War II is echoed from *The Remains of the Day*.

The English Patient:

This is Michael Ondaatje's historiographic metafictional novel published in 1992. It depicts the horrors of World War II in which America has bombed Hiroshima and Nagasaki. There are four people who are brought together at an Italian Villa during the Italian Campaign of World War II. Ondaatje has used the metaphysical aspects of body, history and nation in the novel. The treatment of memory and the effects of the past on the present occur in the novel. Graham Swift has used the same thematic terrain of *The English Patient* in the composition of his *Last Orders*. The novel is published after *The English Patient* and depicts the disturbed and broken lives of people after the World War II.



The French Lieutenant's Woman:

This novel is written by John Fowles. It is published in 1969. It is a feminist novel. The major focus of the novel is postmodern literary concerns like metafiction, historiography, metahistory, Marxist criticism and feminism. Sarah Woodruff is the main protagonist in the novel. The woman in the title refers to her and her tragedy. The novel is highly intertextual and refers to the 19th century texts and ideas. William Thackeray, George Eliot, Charles Dickens, Froude and Thomas Hardy are the direct inspirations for the composition of this novel. Swift's *Last Orders* echoes John Fowles' *The French Lieutenant's Woman* in many respects. Like Fowles, Swift has explored the contemporary world skeptically. Both novels have the idealistic portrayal of women and hence should be studied from the feministic point of views. Women characters in *Last Orders* are very important though they are not included on the trip to Margate. Much of the conflict and action in the novel is created by women characters. Sarah Woodruff, Mary Crick in *The French Lieutenant's Woman* and Amy Dodds in *Last Orders* are semi-mythic figures. Feminist and feminine desire is prevalent among them. They are depicted ambiguously and as ideals by both the novelists. However they are presented as destructive figures also. Swift like Fowles has presented the female body as the symbolic place, the point of origins and conclusions, beginnings and ends, life and death. Amy is a mythic figure who is mixture of Eve and the Virgin Mary.

The Magus:

This is another novel of John Fowles which is published in 1965 before *The French Lieutenant's Woman*. It tells the story of Nicholas Urfe, a young British graduate who is teaching English on a small Greek island. It is a metafiction and reflects the perspective of Nicholas, a teacher and poet. His inability to distinct between fact and fiction and resulting psychoanalysis of his inner urge is the main concern of the novel. He is a searcher but his search is both internal and external. He tries to understand the world that confuses him. Graham Swift's *Last Orders* echoes John Fowles' *The Magus* in its ideology and philosophy. Loneliness, depression and boredom are also the major elements in the novel. The existential and sexual crisis of an ordinary English man is woven together with recent historical events and played out in a context both concrete and mythical in both novels.

The Prologue to the Canterbury Tales:

The journey to Margate undertaken by Jack Dodd's friends to scatter his ashes into the sea directly recalls Geoffrey Chaucer's *The Prologue to the Canterbury Tales*. Chaucer has portrayed the gallery of contemporary society who perform religious journey. There are many characters and each has to tell a story to make the journey interesting and easy to ride further. It reveals the character traits and thus presents the society with all its ills and merits. The four men in *Last Orders* through their monologues reveal and comment the postmodern society and the changing approaches of men today. The visit to Cathedral reminds and recalls Chaucer's pilgrims who visited the tomb of St. Thomas Beckett, in Canterbury Cathedral. The struggle with death, grief, anger and loss all reminds Chaucer's pilgrims. It is also with desire and the seductiveness of knowledge as Lenny comments,

Stopping at the Cathedral gives the travelers a salutary 'dose of holiness' after dissension (p.195).



King Lear:

The parent-child relationship theme in the novel directly recalls William Shakespeare's *King Lear*. The rebellious nature of children and their warping by parents is the major concern of *Last Orders*. In this sense it strongly echoes the troubled relationships of the family in Shakespeare's *King Lear*. In *King Lear* the relations between father and daughters are strained and the family is in broken and bereaved state. *Last Orders* recalls King Lear's abandonment of Cordelia and attempted exploitation of her sisters, Goneril and Reagan. Except Vic Tucker all the friends of Jack such as Ray Johnson, Lenny Tate, and Vince Dodds have daughters. And they have all troublesome relations with them. Lenny Tate opines that daughters are troublesome because of Sally's rude and arrogant behavior with him. She wants to go to Australia with her boyfriend. Lenny that is why says, Daughters who'd have'em? (p.56) Ray Johnson is disconnected from his daughter Susie. Vince also has troublesome relations with her daughter Kath. So his trading of Kath to the wealthy Hussein recalls King Lear's ill treatment and abandonment of Cordelia and exploitation of her sisters.

Heart of Darkness:

This is a novel of Joseph Conrad in which Marlow; the narrator undertakes the journey into the jungles of the Belgian Congo. Pamela Cooper in her *Graham Swift's Last Orders* says, Marlow's search for the elusive Kurtz in the jungles of the Belgian Congo is not only a psychological journey into the enigmatic human heart, but an inquiry into modern history, as Conrad questions the right of European powers to colonize Africa (p.32).

The journey in *Last Orders* is physical and religious. It is in search of the truth and the world. The ashes of Jack are substitute for the man who is now no more. His absence though physical, does not occur in the novel. So it is an attempt of the novelist to penetrate into the enigmatic human heart and find out the truth.

Ulysses:

James Joyce's *Ulysses* also follows the same tradition of journey in which there is a wandering hero who searches not only to comprehend his soul and mind but to understand the destiny of his race and country. The journey here is used as a tool for making historical analysis. Swift in *Last Orders* uses the journey of four friends to Margate to bring out the emptiness of postmodern society.

Poetic Allusions:

Swift's approach in writing novels is poetic rather than prosaic. All his novels have presented the philosophy of life. Birth, death and the human struggle for spiritual consolation are the reoccurring poetic elements in his novels. The present novel recalls many poets like Tennyson, Frost, Larkin and Hughes. The image of disturbed and broken family life recalls Alfred Lord Tennyson's poems *In Memoriam* and *Crossing the Bar*. Swift is like Robert frost in his presentation of meditation and stasis. Frost's poems are reflective and meditative. G.M. Hopkins, a Victorian poet and priest, Philip Larkin's poems are reflected in Swift's novel.

Prologue:

Last Orders is a symbolic novel. Jack Dodds who is dead is a symbol of the human search for splendor and dignity in ashes. His dead body gains dignity and honor due to his friends but it has lost its materiality which is a truth. His presence out of his absence and its



effects on the lives is remarkable. He was a soldier, a butcher, a human but now he is nothing. His ashes are scattered into the sea and Ray says,

... and the ash that I carried in my hands, which was the Jack who once walked around, is carried away by the wind, is whirled away by the wind till the ash becomes wind and the wind becomes Jack what we're made of (p.295).

All these symbols used in the novel reminds Sir Thomas Browne's treatise on death and spirituality, in *Urn Burial* from which the first prologue of the novel is taken.

But man is a Nobel Animal, splendid in ashes, and pompous in the grave. (1658)

The second prologue of the novel is taken from a popular song; I do like to be beside the seaside. Here sea is symbolic which provides comfort, consolation and peace to the body in death.

Conclusion:

Graham swift's *Last Orders* is highly intertextual novel. There are many texts within text. It is the absorption of many texts without destructing the original ones. The novel has philosophical implications and the journey device is useful to bring out the psychoanalysis of characters who are representatives of the postmodern society. The echoes of both old and modern English poems, plays and novels have enhanced quest theme and created meditative mood in the novel. It also compares and contrasts the present and past cultures. The novel is realistic and though not directly referred, it is written in the tradition of English realism of Charlotte Bronte, George Eliot, Thomas Hardy and Charles Dickens.

Bibliography

- Allen, G. *Intertextuality*. London: Routledge, 2000.
- Barry, Peter. *Beginning Theory* (3rded) Manchester Uni. Press: Daryaganj New Delhi, 2011.
- Bisson, Lillian M. *Chaucer and the Late Medieval World*. New York: St. Martin's Press, 1998.
- Conrad, Joseph. *Heart of Darkness*. Blackwood's Magazine, 1899.
- Cooper, Pamela. *Swift's Last Orders: A Reader's Guide*. New York Continuum Contemporaries, 2002.
- Doshi, S.L. *Modernity, Postmodernity and Neo-Sociological Theories*. Jaipur and New Delhi: Rawat Publications, 2003.
- Eliot, T.S. *The Waste Land*. Horace Liveright, 1922.
----- *The Four Quartets*. Harcourt (US), 1943.
- Faulkner, W. *As I Lay Dying*. New York: Vintage International, 1990.
----- *The Sound and the Fury*. Jonathan Cape and Harrison Smith, 1929.
- Fowles, John. *The French Lieutenant's Woman*. Jonathan Cape, 1969.
- Malcolm, David. *Understanding Graham Swift*. Columbia: University of South Carolina Press, 2003.
- Ondaatje, Michael. *The English Patient*. McClelland and Stewart, 1992.
- Swift, Graham. *Last Orders*. Picador, 1996.
- Woods, Tim. *Beginning Postmodernism*. Manchester: Manchester University Press, 1999.



Re-Defining Edward-Bella's Relationship in *Twilight*

Ms. Leena Chudasama

Research Scholar,
Center for Research & Development
Department of English,
School of Arts And Humanity,
Rai University, Ahmedabad. Gujarat, India

Dr. Nilam H. Gajjar

Assistant Professor,
School of Languages
Department of Linguistics
Rai University, Ahmedabad, Gujarat, India.

Abstract:

The relationship is the connection between two human beings through which two persons are connected with each other. Either positive or negative relationships which have a deep impact on human life. Twilight is the maiden fiction work of Stephanie Meyer which focused on how humans turned to vampires that altered one's life and relationship. Edward the central protagonist of the Twilight is an educated person who has a charming and magnitude personality that attracts Bella. The romance between the vampire and the human being turns into a tragic situation in their life. Life for blood's sake that Edward knows very well but Bella's sacrifice and acceptance of her incarnation into vampirism gives deep impact on Edward's life. This paper explores the relationship between two different individual one Edward is a vampire and the other Bella a human being and it also talks about how Edward-Bella's relationship faced up-down in their life but their romance turns into the subterranean connection among each other's life which is unshakable.

Keywords: Relationship, Romance, vampire, human being, sacrifice

The novel is a man-made fiction, and Fiction is neither easy to understand nor is reflected. A novel incorporates complex ideas that support a reader's thoughts. A novel can show human affairs in-depth and thus it provides a piece of deeper and better knowledge about human life. The other reason is that "novels are long words with a great number of details in every page" (Peck 103). The detail is not created to confuse the reader but to help recognize how complicated the reality is that the character has to face. "Thus, it is important to take details into account before the reader makes any kind of judgments for they present all complicating facts" (Peck 103). Complications and details existing in a novel have also aroused the interest to write the thesis analyzing a novel. The last reason is related to the function of the novel, which is to provide enjoyment and understanding to the readers. This idea is by Perrine's that "to have a convincing claim on our attention fiction must yield not only enjoyment but also understanding" (Perrine 3). Besides, "Lukas sees the emergence of the novel in the major modern genre as the result of a change in the structure of human consciousness; the development of the novel reflects modification in man's way of defining himself concerning all categories of existence" (Bernstein 14). He also defines "novel as the dialectic of form-giving and dialectic of interpretation and representation" (Bernstein 18). *Twilight* is the maiden fiction work of Stephanie Meyer which focused on how humans turned to vampires that altered one's life and relationship. Edward the central protagonist of the *Twilight* is an educated person who has a charming and magnitude personality that attracts Bella. Another characteristic that sets *Twilight* apart from traditional vampire literature is the putting together of love story and fairy tale elements. It is common knowledge that books about love are about a boy and a girl meeting and falling in love. Very



often than not there is an obstacle that needs to be overcome before the main characters can reach the happily ever after. Bella and Edward are instantly drawn to each other but Edward's vampirism stands in the way of their mutual happiness. *Twilight* follows the same classical pattern, Bella and Edward meet and there is an obstacle between them, but here there is a twist to the story as the boy is a vampire. Edward being a vampire makes the story far more complicated and interesting than it had been if Edward had just been a regular boy. As Edward is not a human, their love is wrong and forbidden. The resemblance of *Twilight* to traditional love stories such as *Romeo and Juliet* is a contributing factor to its popularity. Just like Romeo and Juliet's tragic end, *Twilight* could also easily end in the same way. After all, Edward has tremendous strength, and it is clear how dangerous he is when he tells Bella that "I could kill you quite easily, Bella, simply by accident" (271). However, whatever is wrong and forbidden is also exciting.

It is the supernatural creatures' danger and passion that makes *Twilight* different from other ordinary adolescent love stories. "There are excitement and obsession between the characters, very similar to that between Catherine Earnshaw and Heathcliff in Emily Brontë's classic novel *Wuthering Heights* from 1847" (Adams 60). It is found that Meyer not only combines different genres but also associates *Twilight* to the classic gothic literature. The story of Bella and Edward is a narrative told through the viewpoint of 17-year-old Isabella "Bella" Swan, Bella describes herself as "slender" and "ivory-skinned" (9) and she considers herself to be very plain. Young women can easily relate to her character for several reasons, one of these being the fact that she represents the everyday girl in high school. Just like many teens, Bella feels like she does not fit in and she is very much a loner. Though she thinks that she is nothing special but, still, she is the only one in the small town of Forks who attracts Edward, a beautiful outsider who Bella is immediately fascinated by. When Bella moves to Forks to live with her father she is new to the territory. She has to adjust to an entirely new school and place which is also similar to what many young people experience. Her life is fairly normal with the major exception of her love interest: a vampire. Bella is somewhat old-fashioned, which is known by the fact that when she moves in with her father and instantly takes on the role as a kind of housemaid, by taking care of him and cooking and cleaning. Instead of acting like many other modern teenagers would, Bella instead takes on a caring and protective role towards her father. Therefore it is not a surprise that she falls for someone like Edward since he is, in fact, over a hundred years old and thus suits her temperament. His gentlemanlike and, at the same time, controlling manner suits her motherly and sacrificial behavior perfectly because in some way they complete each other. Her almost non-existent relationship with her father may be the reason that made her crave male attention because, to some extent, she was left on her own now that she no longer lived with her mother. This lack of a nuclear family is also important in her romance with Edward. Not only does he save her numerous times throughout the novel, starting when he saves her from being crushed to death by a car, but as Anna Silver writes, "Bella is very much drawn to Edward's entire family, because they are in many ways the family she has always wanted and needed" (Silver 126). In a way, Edward saves her not only from physical danger but also from mental distress. The absence of devoted parents is one of the factors that contribute to Bella's need to be rescued. She is unhappy with her life and there is something missing, obviously something that can be completed by Edward and his family. Meyer tries hard to describe, "the Cullens as a regular American family who play baseball and are just like any other human family" (Nayar 68). In many ways, they are better than Bella's own



parents, and almost represent a perfect family. On becoming romantically involved with Edward, Bella also gets the chance to have a family, this further enhances the appeal of Edward even more. Edward is Bella's soul mate. They are instantly drawn towards each other as if some superior power was pulling them together. From the very beginning, it is apparent that there is something different about Edward. His old-fashioned and charming manner and extremely good looks point more towards a traditional gentleman than an ordinary high school male.

Edward is frequently described as "a runway model" (221) or a "godlike creature" (224) further separating him from others. Unlike Bella, Edward comes forth as a mysterious character, mostly because readers are given unlimited access to Bella's thoughts while Edward's mind is unreachable and mysterious. This means that readers can relate to Bella and feel as though they are on her side, at the same time as the mystery that surrounds Edward is enhanced. Lauren Adams states "The books have ample mystery and suspense, as Meyer tantalizes readers with clues about Edward, his family, and the rest of their kind, some of whom prove to be incredibly dangerous to Bella" (Adams 61). Apart from being a love story, *Twilight* also contains elements of the fairy tale. *Twilight* may not be a complete fairy tale, but the elements that present are enough to draw the likeness to fairy tales. On comparing the four main characteristics of a fairy tale in Steven Swann Jones's book *The Fairy Tale: The Magic Mirror of Imagination*, clear similarities between the patterns of a fairy tale and *Twilight* can be found. "The first characteristic mentioned by Jones, and perhaps the most prominent one, is the incorporation of fantasy in fairy tales" (Swann Jones 12). Fantasy is often a great part of the story and is commonly known to include a magical world and supernatural creatures. Vampires could, therefore, be said to belong to fantasy since they are unreal and, as in the case of *twilight*, they also have supernatural powers, such as mindreading and clairvoyance, often connected to magic. The vampires in *Twilight* are also domesticated, and most of them are not even dangerous, except for a few exceptions. This dissociation from old, evil vampires also connects *Twilight* to the fairy tale because the novel is not intimidating, but exciting as a fairy tale can be perceived: thrilling but not too dangerous. An example from the novel is the fact that Edward is frequently referred to as a monster. At one point Bella is thinking about Edward as "The vampire who wanted to be good – who ran around saving people's lives so he wouldn't be a monster..." (179). The very romantic way of describing Edwards sympathetic and makes the reader think of tales such as *Beauty and the Beast*, with Bella as the beautiful human girl falling for a monster whom she sees not as a dangerous creature but instead as someone who is suffering at the hands of the cruel fate. Apart from the incorporation of fantasy, another characteristic of the fairy tale genre is, according to Jones, "the confronting and resolving of a problem, by the undertaking of a quest" (Swann Jones 14).

The aim of *Twilight* is Bella's mission to find out what Edward truly is, and this is an event that is very important and dominates most of the novel. Jones also mentions, "the interesting fact that a protagonist is often a young person searching for a mate" (Swann Jones 17). Of course, this also matches *Twilight*: as Bella's search for truth is only to get closer to Edward. After Bella moves to Forks her entire life revolves around Edward, which makes it difficult to imagine Bella existing before she moved to Forks. Besides the above mentioned two characteristics, a third attribute also exists. "When the protagonist of the novel manages to solve a problem or overcome an obstacle and reach a happy



ending”(Swann Jones 17). This happens twice in *Twilight*. The first time is that Bella has to find out what Edward is hiding from her so that they can be together. The second time is when they encounter the three evil vampires, one of whom becomes obsessed with Bella. Both times Bella succeeds in overcoming the obstacles and manages to reach a happy ending. The fourth and final characteristic is that “the main protagonist is presented in a clear-cut way and that readers are encouraged to identify with the character who is a good and ordinary person, suffering in some way”(Swann Jones 17). *Twilight* is very easy for young girls to relate to Bella as she is a normal teenage girl. She is also a good person who is willing to sacrifice herself for the people she loves, as is shown when the evil vampire James lures her into thinking he has abducted her mother and Bella decides to sacrifice herself. Many young girls can, therefore, see Bella as a good role model: young, smart, and compassionate. By comparing *Twilight* to the four main features listed by Jones, it is clear that the novel can be termed as a fairy tale because it fulfills all the main features. But why are readers attracted to fairy tales? It is generally found that fairy tales, just like fantasy fiction, are a way for readers to escape the real world. Indeed, *Twilight* presents a tempting world, filled with romance and excitement, and therefore the perfect way to escape reality for young girls. Meyer has not only skillfully combined several genres, but she has also managed to portray the characters and their language in a way that is very appealing to normal teenagers and that which readers can easily recognize. Meyer also succeeds in captivating the spirit of young lovers in a very tantalizing way. Even though Bella and Edward barely kiss at times, these moments are enough to tease the readers and make them long for more romance. When describing their first kiss it is almost as if Bella is high on drugs:

Edward hesitated to test himself, to see if this was safe, to make sure he was still in control of his need. And then his cold, marble lips pressed very softly against mine. What neither of us was prepared for was my response. Blood boiled under my skin burned in my lips. My breath came in a wild gasp. My fingers knotted in his hair, clutching him to me. My lips parted as I breathed in his heady scent.(247)

This is a very heady way of describing a kiss. However, due to Edward's never ending lust for Bella's blood, it is obvious that their happiness is under constant threat. Edward has to constantly fight his lust if he is to be with Bella. This constant oscillation between danger and romance is connected to the gothic elements in the novel. Bella's low self-esteem is most suitable for her passive part in *Twilight* and is a characteristic feature that connects her even more with the average adolescent teenage girl. At one point she criticizes her appearance. This gives Edward a chance to again step in and save Bella, this time by raising her self-esteem, telling her that she is “the opposite of ordinary”(184). This time Edward is saving Bella from herself by taking up the superior role as the strong male figure that is more knowledgeable than she is. Edward is described as a “Greek god”(180), and his behavior is many times nearly parental. At one point in the novel “he orders Bella to drink her soda, sounding more like a father than a potential boyfriend”(Silver 125). What is so interesting about this is the fact that Edward's behavior comes across as natural and appropriate because Bella is in desperate need to be saved by someone. It is her unsecured behavior that constantly allows her to be dominated. Because the novel is read by many young girls, it can, therefore, be argued that Bella's behavior is inappropriate, considering the indications that can be perceived about a young woman's manners. To conclude, *Twilight* is not a fairy tale romance, but Meyer took the novel in a way of different



love story it is not simply about human bondage but it is the tale of the love story and sacrifice among the central protagonist Edward who is vampire and Bella a simple human being who sacrificed her human life and everything for the sake of her ideal love for Edward. *Twilight* is the tale of romance beyond the bondage of two souls Edward- Bella which leads towards cavernous relationships among vampire and human beings.

Bibliography :

- Adams, Lauren. "Bitten." Horn Book Magazine, vol.86, no 1 2010, pp. 58-64. Literary Reference Center, EBSCO, doi: 26 Nov. 2010. Assessed 30 June 2020.
- Bernstein, J. *The Philosophy of the Novel: Lukacs, Marxism and the Dialectics of Form*. University of Minnesota Press, 1984.
- Meyer, Stephenie. *Twilight*. Atom, 2007.
- Nayar, Pramod. "How to Domesticate a Vampire: Gender, Blood Relations and Sexuality in Stephenie Meyer's *Twilight*." *Nebula*, vol. 7, no,3, 2010, pp. 60-76. *Nebula Press-DOAJ*, doi: 29Nov.2010. Assessed 28 June 2020.
- Peck, John and Coyle, Martin. "Novel". *Literary Terms and Criticism*. Macmillan, 1988.
- Perrine, Laurence. *Story and Structure*. Harcourt Brace and World, Inc., 1959.
- Silver, Anna. "*Twilight* is Not Good for Maidens: Gender, Sexuality, and the Family in Stephenie Meyer's *Twilight* Series." *Studies in the Novel*, vol.42, no.1/2, 2010, pp. 121-138. Literary Reference Center, EBSCO, doi: 29 Nov. 2010. Assessed 29 June 2020.
- Swann Jones, Steven. *The Fairy Tale: The Magic Mirror of Imagination*. Twayne Publishers, 1995.





Impact of COVID 19 on Agriculture Sector

Dr. Caroline David

D. T. S. S. College of Commerce Malad East

Email:- josimcaroline@yahoo.com

Abstract:

Agriculture was the backbone of Indian economy and will continue to be the backbone of Indian Economy. Before British rule agriculture was the only sector existing. The only industry which existed was handicraft, which was also included in the agricultural sector. Till today many people are dependent for their bread and butter, that is their survival on agriculture. Although it has disguised unemployment, yet we owe our respect to agriculture for various reasons, as we are rich in labour and agriculture is labour intensive. In fact we will always be indebted to agriculture no matter how much we grow in the other sectors. Hence sustainable agricultural development is a must for socio-economic development of the economy. During this corona virus spread we are all obligated to the farmers for keeping us alive. We must not forget the sacrifices of the farmers and the risk taken by them.

Key words: Agriculture, occupation, sustainable, survival, socio-economic.

Aim:

1. To study the socio-economic impact of Corona virus Pandemic on the development and growth of agriculture.
2. To make the people aware of the sacrifices made by the poor farmers and in return we must also do something for their welfare.
3. To make the government aware of the promises it has made to the farmers.
4. To make the government and the people contribute for the welfare of the farmers so that they don't end their lives due to poverty.
5. To understand that it's high time we have balanced development of all the sectors/
6. the government should see to their security and safety as they are risking their lives for us

Introduction:

Farming Sector is the mainstay of the rural Indian economy around which socio-economic privileges and deprivations revolve and any change in its structure is likely to have a corresponding impact on the existing pattern of Social equity. Sustainable Agricultural production depends on the judicious use of natural resources (soil, water, livestock, plant genetic, fisheries, forest, climate, rainfall, and topography) in an acceptable technology management under the prevailing socio-economic infrastructure. The Indian Agricultural sector faces resource constraints, infrastructure constraints, institutional constraints, technology constraints, and policy induced limitations. To achieve sustainable agricultural development, it is essential to combine natural resources, capital resources, institutional resources, and human resources (i.e. to optimally utilize the agricultural resources). As an enabling technology, Information Technology (IT) plays an important role in the rapid economic growth and social transformation in developing countries. Information Technology and Bio-Technology, which are "the drivers" of globalisation with their complementarities of liberalisation, privatisation and tighter Intellectual



Property Rights (IPR), are bound to create new risks of marginalisation and vulnerability in the Indian Agricultural sector. This paper suggests measures and policies , facilitating sustainable agricultural development, and a model for optimal utilisation of agricultural resources in India and motivation to the actual cultivators.Lack of resources is a major obstacle in the way of economic development.

COVID 19 has impacted the agricultural sector too.During these miserable times how does the agricultural sector respond to the crisis ? Will we have sufficient food to eat in the post COVID period?Our government has made big promises to protect this vulnerable section of the society .But will it keep its promises or as usual it will be on pen and paper only? For example Rs.2000 was to be credited in the account of the farmers according to the PM-Kisanscheme.The Pradhan Mantri Garib Kalyan Yojana was also announced and many other schemes to help the poor farmers and give them some relief.The migration of workers to their villages has added the risk of infection to the farmers. No restriction were put on the movement of agricultural goods during the local and proper monitoring of mask and social distancing was done. While ensuring availability of labourers for farm work the government should see to their security and safety as they are risking their lives for us.

But we all know that due to the lock down ,there was a great decrease in the demand for agricultural products like poultry, fish etc. In some place the cyclone and the Locust have also caused a great damage to the agricultural sector. We are all aware that the actual cultivators(nearly 85 percent) are not the owners of the land so if the benefits of the schemes go to the owners and not the actual cultivators as there are no proper records of them ,then the poor landless cultivators will have the hardest hit .The focus of the government is to find out who are the actual cultivators ,the actual farmers not the landlords who always benefit by cheating these vulnerable section of the society since years

Thus it is necessary that till the lock down continues these poor farmers should be provided with some cash transfers and those depending on the agricultural sector like the small and medium enterprises also need the support from the government or the rural economy will collapse dur to lack of demand from them. The grievances of the farmers should also be given a ear and immediate relief need to be given to their families too. Farmers should also be allowed to sell their produce ,if they are beaten up by the police then life will be more miserable for them. They are facing a very critical time, to add to it ,climate change is also impacting production and investments .so the Government should take up innovation and help them .Many reforms have been introduced in our country but its only on paper .The poor farmers due to debts come back to their original status as they are still cheated in many ways. Investment in agriculture should be taken up by the government as this sector is a very sensitive sector.

These poor farmers can help in sustaining the economic development by building a resilient food system in the post COVID period.

- 1.most of the poor farmers reside in the rural areas
- 2.They need work
- 3.They also employ their family members in the farm
- 4.They can do the work of harvesting,marketing etc.
- 5.If they are helped they will be stopped from taking unnecessary loans.
- 6.Set up mobile food vans so that they can sell at different places
- 7.Encourage them to invest in all type of crops and not cash crops only.



8. Ware houses should be provided by the Government

9. Prices should be fair and just

10. In spite of all the programs introduced by the government for the welfare of the small and marginal farmers yet we find them in great distress.

A lot has to be done for them and proper steps need to be taken. This sector is the only sector which is transforming slowly as most of the landlords are in town or cities and they have rented their land to the poor farmers. We need to see that the income increase of poor farmers are actually done than just spoken. Until and unless the Government gives full attention and takes up full investment in inventions and innovation, technological expenditure of this sector, the standard of living of the poor farmers will not increase. But the government officials should be honest and have empathy for the farmers.

The farmers should be encouraged to have self help groups, joint cultivation, contract farming etc. Employment in the farms should increase in order to eradicate unemployment and have inclusive growth or some alternate employment opportunities connected to agriculture has to be created to stop them from migrating.

The government should also try to help the farmers by trying to reduce all the risk factors of losses in agriculture. Yes schemes are introduced for this purpose that is National agricultural insurance schemes, but most of the poor farmers being illiterate are not able to cater to the procedures and thus not able to avail most of the schemes.

During the COVID 19 the government should see that the health of the poor farmers are also taken care of by giving them free immunity medicines like vitamin C, Zincovit etc. Hygiene and sanitation should be taught to them. Free distribution of mask and gloves should be provided time and again not only once.

Since they are poor they may not have computers to avail the virtual education from home, so computers should be distributed to them and they should be educated to use them. No child should be left without food and education from the poor to the poorest.

Their houses should be maintained by the government and toilets should be made for each home in rural areas. Water facility should also be provided. The quality of their life should be improved by giving them street lights and transport facilities too.

The social and economic infrastructure in rural areas need to be improved especially the health infrastructure to fight diseases. It is high time the scenario of the rural areas in India improve and life becomes better for the rural poor.

It is high time the government finds out where the developments have not taken place and reach out to those areas by implementing programs under one umbrella i.e. one large organisation. This will lead to proper balanced regional development. Right from food to education and health measures. This will help in reaching out the fruits of the development over the period of years to the actual poor people and make their life better.

The rapidly evolving situation with COVID-19 is raising questions throughout India, as concerns continue to grow about the virus, it is not only wreaking havoc on the stock market, it is causing a significant downturn in the general economy which includes agriculture. Our government has given the permission to farmers to work but what are the facilities and precautions taken by the government to protect the actual cultivators who are the poor farmers who live in absolute poverty. They are undernourished and this virus attacks people with poor



immunity system. What if they are infected they will not know until its too late ,God forbid if they are infected then will they be treated free of cost ?

They are the ones to supply the entire country with food grains .They are an important Human resource or asset of our country .If they die their entire family will suffer and that will add to their miseries.

It has been months since our country is experiencing lock down.The virus has killed so .many and is spreading like any thing .the aid promised by the government has yet to reach the poor The food security of India's rural population is at a threat. Infact the small and marginal farmers who are doing well have started distributing food free of cost to the poor in the villages. But many families are still facing insecurity.

Our farmers will never give up come what may.

We can help them by :

- 1.Instead of buying online we should collect the demand and buy it directly from the farmers
- 2.Ask for home delivery .
- 3.Pay a little extra for the packaging as it will go directly to the farmers.
- 4.Low rate credit should be provided to them.

Remember that because of the pandemic the farmers are bearing the society cost on their shoulders. All they need is our support and cooperation and of the government too.Lastly we should pray for them.

Conclusion:

With the virus outbreak arriving at the peak , it has had a large impact on out-of-home dining in the country that is restaurants and food malls which create a huge demand for food grains. So if the lock down continues and the dining industry is not allowed to function this will have a negative impact on agriculture.

A quick and effective containment of the virus could lead to a rapid bounce-back, the longer the virus is uncontained , the more widespread and continuous negative impact will be on the Agricultural sector. This will put our life's at risk too. Thus the government has to act without delay.

References:

1. Mane Santosh P. (2018) "Impact of Irrigation on Agriculture in Malshiras Tahsil of Solapur District (Ms): A Geographical Analysis" unpublished M.Phil. Dissertation submitted to Shivaji University, Kolhapur.
2. Dr. D. C. Kamble and Mr. Santosh P. Mane (2018), "Agriculture Productivity in Malshiras: A Geographical Analysis", Aayushi International Interdisciplinary Research Journal (ISSN 2349-638x) Impact Factor 4.574, Volume 2, Issue-9 Pp-658-662
3. Dr. S. D. Shinde & Dr. P.V. Patil (2009) "Levels of Agricultural Technology in Sangli District of Maharashtra", Bhugolshastra Sanshodhak Vol. 4 (1&2) pp 29-34.
4. Dr. A. M Kamble, A. P. Waghmode & Santosh P. Mane (2019) "A Study of Socio-Economic Status And its Impact on Wrestling Player's Performance in Solapur University (MS) India" Review of Research, ISSN: 2249-894X, Pp-1-8.



5. Dr. Banduke D. K. & Santosh P. Mane (2019) “Rice Productivity in Satara District: A Geographical Analysis.” Research Journey Impact Factor - (SJIF) – 6.261, (CIF) - 3.452(2015),(GIF)–0.676 (2013) Special Issue 144, Pp-159-165.
6. Dr. D. H. Bhojane, **Santosh P. Mane** (2020), “Satisfaction Of Irrigated And Non-Irrigated Farmers”, Research Journey, Impact Factor - (SJIF) – 6.261, (CIF) - 3.452(2015), (GIF)–0.676 (2013) Special Issue 236(C), Pp-142-147
7. Subhash Chavare, Santosh P Mane, Sudhakar Koli, Somnath Gaikwad, Atish Patil and Meena Potdar, (2020), “Watershed Prioritization for Soil Conservation using Morphometric Parameters and GIS of Bend Watershed”, Juni Khyat (UGC Care Group I Listed Journal) Vol-10 Issue-5, ISSN 2278-4632
8. <https://rabi.org.uk/farming-help-covid-19>
9. <https://www.newwestrecord.ca/news/the-new-west-farmers-market-needs> .
10. <https://insights.som.yale.edu/insights/can-mobile-cash-transfers-help>
11. <https://www.msn.com/en-za/news/other/smallholder-livestock-farmers-to>





Assessing the Domestic Groundwater Quality of Dharmapuri District, Tamil Nadu

Vinothkanna. S^{1*}, R. Rajee² and K. Senthilraja³

Guest Lecturer¹ Research Scholar² Department of Geography, Madurai Kamaraj University,
Madurai – 625 021

³Research Associate, Agro Climate Research Centre, Tamil Nadu Agricultural University,
Coimbatore – 641 003

*Corresponding E-mail: vinothkanna.gis@gmail.com

Abstract:

Groundwater is one of the potential resource need to use properly. The groundwater gets polluted in multiple number of ways by human activities. It is to be assess properly because it is the only source where surface water fails to meet the demands. The study area is Dharmapuri district of Tamil Nadu, which lies between 11°47' and 12°33'N and 77°28' and 79°45' E. This paper highly depends on secondary data to identify domestic water quality. Piper trilinear plot has been used to study the dominant water type. The relative order of cation is Na>Ca>Mg>K and for anion is SO₄>HCO₃>Cl>F. Domestic Water Quality Index (DWQI) indicates that most part of the district is under poor water quality during the study period. Correlation technique has been used to understand the relationship between the chemical parameters. MS-Excel, Grapher and ArcGIS software has been used to portray the result cartographically.

Key words: Dharmapuri, DWQI, correlation, piper plot, GIS.

Introduction

Groundwater is one of the most important resource used for various purposes across the world that needs to be examined continuously to regulate its quality (Arslan 2017). The quality of the water is determined by its nature. The polluted water is difficult to bring back to its original composition (Vinothkanna *et al.* 2020). The polluted water affects not only water quality but also causes several problems to human health and economic development (Milovanovic 2007). The natural factor such as rock water interaction, ion exchange and anthropogenic factors such as wastewater from industries, fertilizers, *etc* are some of the major factors responsible for pampering of groundwater (Subba Rao *et al.* 2019b). The utilization of groundwater is very high in developing countries. 90 % of people residing in rural areas of India depends mainly on groundwater for domestic purposes (Arya *et al.* 2019).

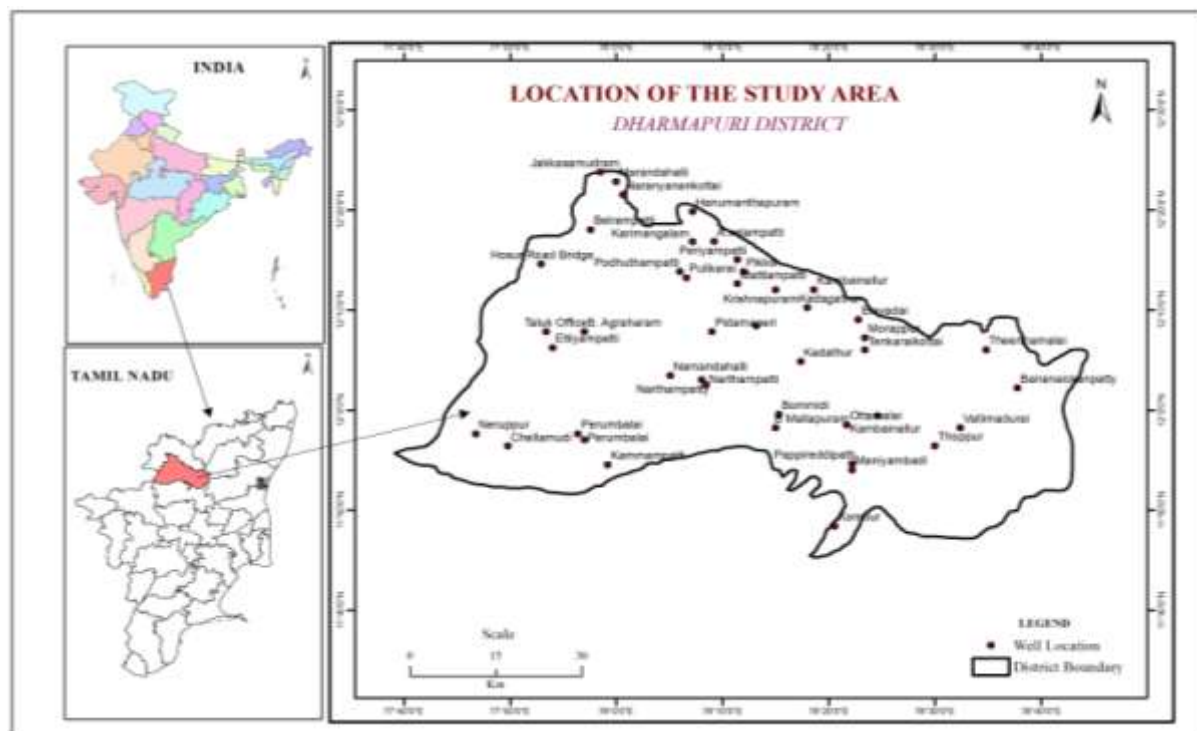
It not only used for drinking purposes, but also used widely in agriculture, industries, *etc.* Groundwater for human consumption is comparatively higher than other usages. Due to surface water scarcity in developing countries it is one of the serious problems to determine the quality of groundwater (Omran *et al.* 2014). Once the groundwater gets deteriorated, water related disease will be widely spread into the human communities. So, clean water and sanitation is one of the basic human rights, which was declared by the United Nations (UN 2006). Geographic Information System (GIS) based groundwater quality assessment is one of the useful tool to identify the groundwater quality and its vulnerability (Amanuel Gidey 2018).

Dharmapuri district lies between 11°47' and 12°33'N and 77°28' and 79°45' E of Tamil Nadu (Fig.1). Administratively the district has divided into 8 blocks and 476 villages. Total area of the district is 4452.64 sq.km. Cauvery and Ponnaiyar river and their tributaries are the major drainage systems in this district. Canals, tanks, wells and bore wells are the major irrigation systems in the study area. Climatically, the study area experiencing humid condition and it is a part of north western agro-climatic zone of Tamil Nadu. Geomorphologically, hills and undulating plains are common in the study area. Structural hill is the dominant geomorphological feature. Geologically the district is underlain by Archaean crystalline with recent alluvium deposits.

Figure 1. Location of study area – Dharmapuri district

Aim and Objective

The main aim of the study is to identify the groundwater quality using water quality parameters



and it comprises the following objectives,

1. To understand the groundwater chemistry of the study area.
2. To identify the domestic water quality index.

Methodology:

The secondary water quality data is collected from state ground and surface water resources data centre, Tharamani, Chennai for pre and post monsoon season for the year 2018. Common wells for both monsoon seasons were identified using MS-Excel. The chemical parameters such as, pH, TDS, Ca, Mg, Na, K, HCO_3 , Cl, SO_4 and F were used to find the quality of groundwater. Depending on the importance to human health, weight (W) has been given to each chemical parameters to identify relative weight (Eq. 1) (Table 1). The quality rating for

each chemical parameters has been calculated by diving the concentration of pollutants (CP) by standard value prescribed by BIS (2012) (Eq.2). Multiply the eq.1 and 2 with the eq. 3. Finally, groundwater quality index (GQI) were calculated using the eq. 4. The water quality index used in this study was put forward by Horton (1965). Correlation technique has been used to understand the relationship between the chemical parameters statistically. Vinothkanna *et al.* (2019) used the same statistical technique to determine the groundwater quality of Dindigul district.

$$RW = \frac{AW}{\sum_{i=1}^n AW} \quad - 1$$

$$QRS = (CP) / (DWQS) * 100 \quad - 2$$

$$M = W * QRS \quad - 3$$

$$GQI = \sum M \quad - 4$$

Table 1. Relative weight for water quality parameters

Water quality parameters	Domestic Water Quality Index	W	RW
pH	8.5	4	0.114
TDS (mg/l)	500	5	0.143
Calcium (mg/l)	75	2	0.057
Magnesium (mg/l)	30	2	0.057
Sodium (mg/l)	200	4	0.114
Potassium (mg/l)	12	2	0.057
Bicarbonate (mg/l)	300	1	0.029
Chloride (mg/l)	250	5	0.143
Sulphate (mg/l)	200	5	0.143
Fluoride (mg/l)	1.5	5	0.143

Results and Discussion

General Chemistry of Groundwater

It is necessary to understand the characteristics of groundwater chemistry being it is depends on so many factors such as, geology, climate, reaction between geo-chemicals, *etc.* Piper's trilinear diagram (1944) is used to identify the dominant water type for pre and post monsoon seasons (Fig. 2 a & b). Cation distribution clearly illustrates that 90 and 80% of samples during pre and post monsoon seasons Na+K type of water and 10 and 20% of samples falls in no dominant type. Anion distribution clearly indicates that most of the samples are under no dominant type in both monsoon seasons. There are few samples falls in SO₄ type in pre monsoon and some samples in carbonates and bi-carbonates in post monsoon season.

The diamond field is generally classified in to 6 geochemical characteristics, CaHCO₃, Na-Cl, Mixed Ca-Na-HCO₃, Mixed Ca-Mg-Cl, Ca-Cl type and Na-HCO₃ type. 91 and 9% of the samples in pre and post monsoon season are under the types of Na-Cl and mixed Ca-Na-HCO₃ respectively. In post monsoon season the dominant geochemical are in the order of Na-Cl>Na-HCO₃-Cl>Ca-Mg-Cl>Na-HCO₃>Ca-Mg-HCO₃ type. Chemical analysis displays that Na and HCO₃ concentration are high compared with other ions.

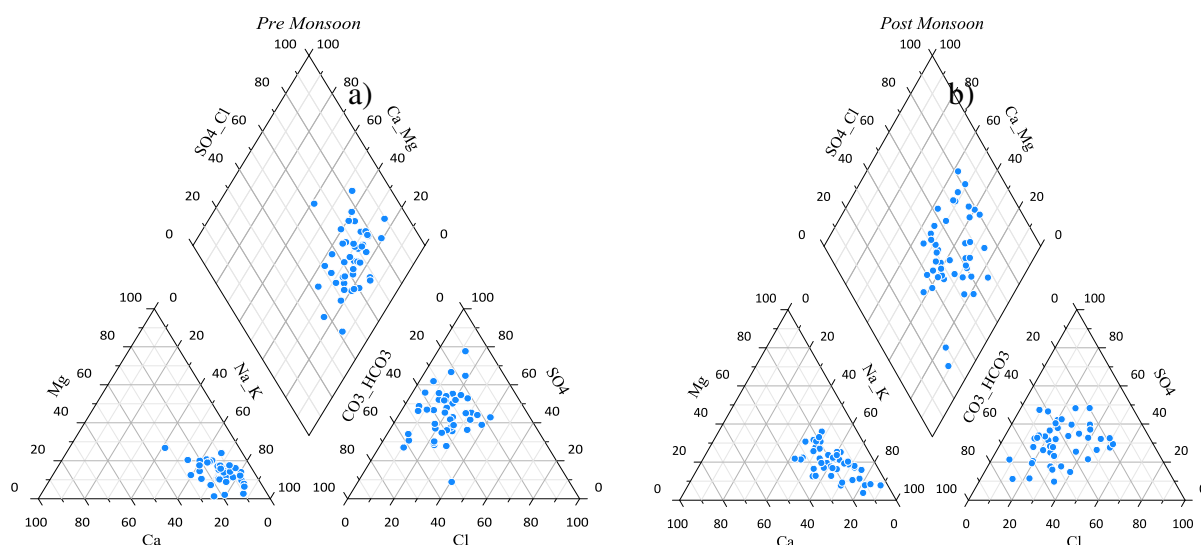


Fig. 2 (a, b) Piper diagram for pre and post monsoon season

The pH in the study area is varied from 7.5 to 8.5 with a mean of 7.9 in pre monsoon season and in post monsoon season it is between 7.3 to 8.3 with a mean of 7.9. The pH value in the study area is under permissible limit and it is alkaline in nature. The concentration of TDS is comparatively high in pre monsoon than post monsoon season. The mean TDS value in pre monsoon season is 1470 mg/l and it is varied from 809 to 2667 mg/l. But in post monsoon season, the mean value of TDS is 1187 mg/l and the value is varied between 489 to 2438 mg/l. The relative order of cation is $\text{Na} > \text{Ca} > \text{Mg} > \text{K}$ and for anion is $\text{SO}_4 > \text{HCO}_3 > \text{Cl} > \text{F}$. The mean value of cations such as Calcium, Magnesium, Sodium and Potassium are 71.2, 69.7, 334.6 and 11.4 mg/l during pre-monsoon season and in post monsoon it is 72.5, 72.5, 230.4, 10.4 mg/l respectively. The mean values of anions such as Bi-carbonate, Chloride, Sulphate and fluoride during pre-monsoon season is 366.4, 234.2, 460.4 and 0.9 mg/l and for post monsoon season is 356.4, 247.7, 256 and 0.9 mg/l respectively. The statistical summary of both cations and anions are shown in the table. 2

Table 2. Statistical summary of chemical ions for pre and post monsoon seasons.

Category	Parameters	Pre Monsoon			Post Monsoon		
		Minimum	Maximum	Mean	Minimum	Maximum	Mean
General	pH	7.5	8.5	7.9	7.3	8.3	7.9
	TDS	809.0	2667.0	1469.9	489.0	2438.0	1186.9
Cations	Calcium	22.0	180.0	71.2	14.0	184.0	72.5
	Magnesium	3.6	165.2	69.7	10.9	170.1	72.5
	Sodium	161.0	515.0	334.6	74.0	469.0	230.4
	Potassium	0.1	133.0	11.4	0.1	172.0	10.4
Anions	Bicarbonate	91.5	701.5	366.4	164.7	762.5	356.4
	Chloride	39.0	638.0	234.2	57.0	752.0	247.7
	Sulphate	98.0	733.0	460.4	76.0	640.0	256.0
	Fluoride	0.1	1.6	0.9	0.1	1.8	0.9

Table 3. Samples above permissible limit based on BIS Standards – 2018.

Water quality parameters	Desirable Limit	Permissible limit	No of samples above Permissible			
			Pre Monsoon	% of samples	Post Monsoon	% of samples
pH	6.5 - 8.5	No relaxation	0	100	0	100
TDS	500	2000	5	11.1	3	6.7
Calcium	75	200	0	100	0	100
Magnesium	30	100	6	13.3	8	17.8
Sodium	-	200	44	97.8	25	55.6
Potassium	-	12	7	15.6	6	13.3
Bicarbonate	-	300	25	56	26	58
Chloride	250	1000	0	100	0	100
Sulphate	200	400	34	75.6	8	17.8
Fluoride	1	1.5	2	4.4	2	4.4

The chemical ions such as Ca, and Cl are under permissible limit in both monsoon seasons. Na ion concentration shows that 98 and 56 % of samples in pre and post monsoon seasons are above permissible limit respectively (Table 3). 5 samples of TDS in pre monsoon and 3 samples of TDS in post monsoon seasons are above the permissible limit during the study period over the district. 13, 16, 76 and 4 % of samples belongs to Mg, K, SO₄ and F ions respectively are above the permissible limit of domestic water quality during pre-monsoon seasons. In post monsoon seasons, the percentage of samples above the permissible limit for Mg, K, SO₄ and F are 18, 13, 18 and 4 respectively. As for as HCO₃ ion is concerned 56 and 58 % of samples are above the permissible limit during pre and post monsoon seasons respectively during the study period over the district. The chemical parameter values are depicted in the box plot (Fig. 3a, 3b).

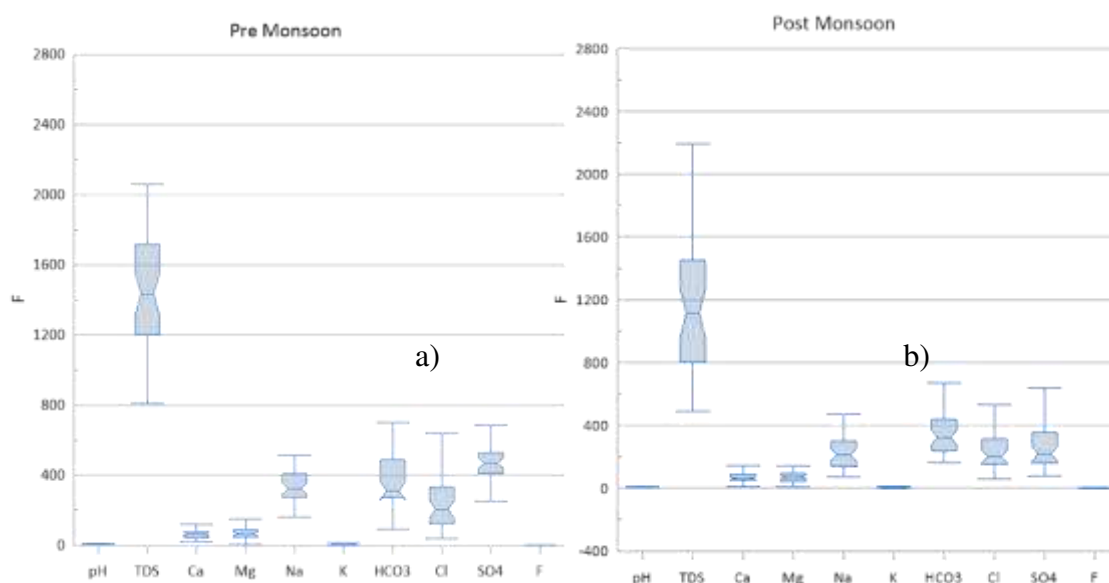


Figure 3 (a & b). Box plot representing the chemical parameters of pre and post monsoon.



Correlation analysis clearly displays that there is a strong positive correlation is exhibit between TDS with Cl, Na and Mg for pre monsoon seasons.

Table 4. Correlation analysis for pre monsoon seasons - 2018

Pre-Parameters	pH	TDS	Ca	Mg	Na	K	HCO ₃	Cl	SO ₄	F
pH	1									
TDS	0.02	1								
Ca	-0.25	0.59	1							
Mg	-0.13	0.79	0.55	1						
Na	0.20	0.78	0.05	0.40	1					
K	0.26	0.10	0.01	-0.09	-0.02	1				
HCO ₃	-0.08	0.37	-0.03	0.43	0.46	-0.09	1			
Cl	-0.19	0.90	0.63	0.79	0.64	-0.02	0.31	1		
SO ₄	0.20	0.40	0.25	0.31	0.26	-0.22	-0.35	0.23	1	
F	0.07	0.43	-0.07	0.41	0.58	-0.40	0.46	0.30	0.26	1

There is a significant strong positive correlation exists between Ca with Mg, between Mg with Cl and between Na with Cl. pH is negatively correlated with all the chemical ions except Na, K, SO₄ and F. The relationships between the chemical ions are shown for pre monsoon in the table.4. The results of correlation analysis for post monsoon season indicates that, pH is negatively correlated with all the ions except HCO₃ (Table 5). TDS is positively correlated with all the chemical ions. It has strong correlation with Na and Cl. Ca has negatively correlated with pH, K, HCO₃ and F. All other chemical ions are positively correlated with Ca. Magnesium ion is strongly correlated with Cl compared to all other ions. Fluoride is positively correlated with all the ions except Ca and K.

Table 5. Correlation analysis for post monsoon seasons – 2018

Post-Parameters	pH	TDS	Ca	Mg	Na	K	HCO ₃	Cl	SO ₄	F
pH	1									
TDS	-0.3	1								
Ca	-0.37	0.58	1							
Mg	-0.44	0.64	0.45	1						
Na	0.04	0.84	0.28	0.31	1					
K	-0.01	0.19	-0.07	0.12	0.03	1				
HCO ₃	0.47	0.31	-0.07	0.08	0.55	0.14	1			
Cl	-0.39	0.78	0.72	0.8	0.56	-0.11	0.08	1		
SO ₄	-0.24	0.69	0.24	0.22	0.66	0.32	-0.03	0.3	1	
F	0.27	0.26	-0.11	0.16	0.51	-0.31	0.47	0.18	0.03	1

Domestic Ground Water Quality Index (DWQI)

The status of groundwater quality index is broadly classified into 5 types (Table 6). The results of water quality index shows that, there is no samples in excellent water quality category during the study period. 7 and 31% of samples are under good water quality. Only Narthampatti and Krishnapuram village of Dharmapuri district has good water quality condition in both pre and post monsoon seasons.

Table 6. Classification of DWQI in Dharmapuri district - 2018

Classification	Category	Number of Samples and %			
		Pre Monsoon	%	Post Monsoon	%
< 50	Excellent	0	0	0	0
50 - 100	Good	3	6.7	14	31.1
100 - 200	Poor	38	84.4	27	60
200 - 300	Very Poor	4	8.9	4	8.9
> 300	Unsuitable	0	0	0	0

The study area is dominated by poor water quality during the study period i.e. 84 per cent of samples in pre and 60 per cent of samples in post monsoon seasons. There are samples which also falls in very poor water quality classification also. 4 samples in both pre and post monsoon season are under very poor water quality. The spatial distribution map clearly shows that north eastern and patches in the southern part of the district has good quality of water in post monsoon season but in pre monsoon season, a small patches in the central part exhibit good quality (Fig. 4). Poor quality of water is widely spread in all parts of the district both in pre and post monsoon seasons. Very poor quality is observed over western part as patches in both monsoon seasons.

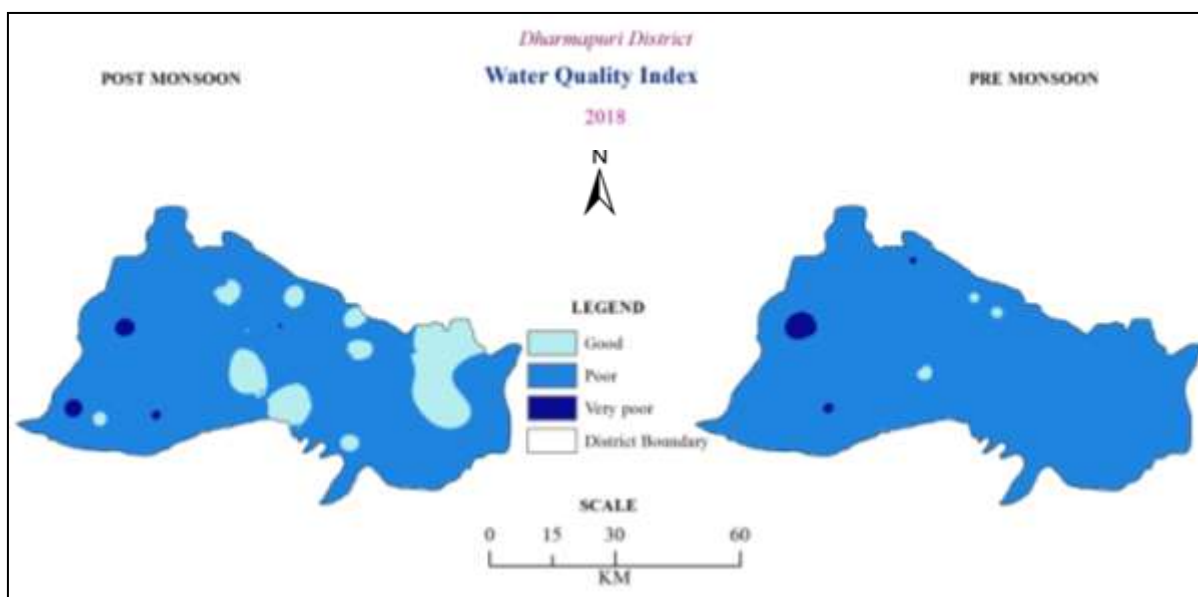


Figure 4. Domestic groundwater quality index for Dharmapuri district - 2018

Conclusion :

The results of hydrogeochemical parameters are compared BIS standards with respect to identify the domestic groundwater quality in Dharmapuri. Geologically the district is underlined by Archean Crystalline rocks. In which, the major factor determines the groundwater chemistry is the rock water intrusion and anthropogenic activities. $\text{Na} > \text{Cl}$ water type is noted in most of the area. The relative order of cation is $\text{Na} > \text{Ca} > \text{Mg} > \text{K}$ and for anion is $\text{SO}_4 > \text{HCO}_3 > \text{Cl} > \text{F}$. Correlation between chemical parameters indicates that during pre-monsoon seasons, pH is negatively correlated with all the chemical ions except TDS, Na, K, SO_4 and F but in post monsoon seasons pH is negatively correlated with all the ions except HCO_3 . Most of the groundwater samples for domestic groundwater quality is falls under poor. So, proper and suitable water treatment is essential. The methods related to purify groundwater is much required before it enters to domestic purposes.



References:

1. Arslan, H. (2017). Determination of temporal and spatial variability of groundwater irrigation quality using geostatistical techniques on the coastal aquifer of Çarşamba Plain, Turkey, from 1990 to 2012. *Environmental Earth Sciences*, 76(1), 38.
2. Arya, S., Subramani, T., Vennila, G. and Karunanidhi, D. (2019). Health risks associated with fluoride intake from rural drinking water supply and inverse mass balance modeling to decipher hydrogeochemical processes in Vattamalaikarai River basin, South India. *Environmental Geochemistry and Health*. 1-12.
3. BIS. (2012). Drinking water – specification. Bureau of Indian Standards. New Delhi IS:10500.
4. Gidey, A. (2018). Geospatial distribution modeling and determining suitability of groundwater quality for irrigation purpose using geospatial methods and water quality index (WQI) in Northern Ethiopia. *Applied Water Science*, 8(3), 82.
5. Horton, R. K. (1965). An index number system for rating water quality. *J. Water Pollut Control Fed*, 37: 300 – 305.
6. Milovanovic, M. (2007). Water quality assessment and determination of pollution sources along the Axios/Vardar River, Southeastern Europe. *Desalination*, 213(1-3), 159-173.
7. Omran, E. S. E., Ghallab, A., Selmy, S., & Gad, A. A. (2014). Evaluation and mapping water wells suitability for irrigation using GIS in Darb El-Arbaein, South Western Desert, Egypt. *International Journal of Water Resources and Arid Environments*, 3(1), 63-76.
8. Piper, A. M. (1944). A graphic procedure in geochemical interpretation of water analyses. *Trans AmGeophys Union*, 25:914-923.
9. Rao, N. S., Sunitha, B., Sun, L., Spandana, B. D., & Chaudhary, M. (2019). Mechanisms controlling groundwater chemistry and assessment of potential health risk: a case study from South India. *Geochemistry*, 125568.
10. UN (2006). African water development report-2006. UN-Water/Africa, Addis Ababa, p.370.
11. Vinothkanna, S. (2019). A Statistical Approach for Determining Ground water quality in Dindigul district, Tamil Nadu. *International Journal of Research in Social Sciences*, 9(7), 546-554.
12. Vinothkanna, S., Rajee, R., & Senthilraja, K. (2020). Assessing Ground Water Quality for the Suitability of Irrigation in Dindigul District, Tamil Nadu, India. *Indian Journal of Ecology*, 47(1), 23-29.



Impact of Shifting Cultivation on Environment with Special Reference to Disabra Village of Dima Hasao District

Dr. Dipalee Haflongber

Assistant Professor,

Department Of Education,

Nowgong College, Nagaon, Assam,

Email:- haflongberdipalee@gmail.com

Abstract:

Shifting cultivation leads to the soil erosion in the hills reducing fertility of soil and shortage of water etc. problems. In Dima Hasao district of Assam, the Barail range is facing serious threat of soil erosion leading to frequent land slides and land slips. However, it is felt necessary to study the impact of shifting cultivation on environment with special reference to Disabra village of Dima Hasao district. This paper will be going to focus on the impact of shifting cultivation and the causes of continuing shifting cultivation in Disabra village of Dima Hasao District, Assam.

Key words - Shifting cultivation and environment.

Introduction-

Dima Hasao District is one of the two hill districts of Assam, occupying an area of 6.23% of the total area of the state. The district has distinct climatic nature compare to the plain district due to its topographical position. Jhum cultivation or shifting cultivation is the main livelihood of the people of the district. Almost 80% of the total population of agriculture are engaged with traditional habit of Jhum cultivation which enhance soil erosion and disturb ecological balance. As a whole it is harmful practice of cultivation (N.C. Hills District Council, 1992)

The procedure of Jhum cultivation or shifting cultivation involves selection of an area on hill slope and clearing the jungle by cutting & burning. The cleared area is then used for growing crops like rice, Maize, sweet potato, ginger etc. for one or two years. The area is then abandoned and a new site is selected for cutting and burning. The cultivation is mostly depended on the seasonal rainfall. The land which is abandoned is allowed to lie fallow in order to enable it to regenerate for far years and then it is again cleared for cultivation. Thus a cycle cultivation of jhum continues. In the past the jhum cycle was over ten years when an abandoned area is cultivated again but now with increasing population the jhum cycle has been reduce, forcing the cultivators to move back to the old site in 2 to 3 years time leading to disastrous consequences and ecological destruction.

Area of The Study -

Dima Hasao district area is a part of Assam. Topographically, the district can be divided under three district regions, viz. the low lying areas, the high hills of Eastern and Western portions, the plateau areas. Disabra village is come under the plateau areas of Dima Hasao district. This village consists of 53 houses. In the East of this village Chotto Langper village, West Kalanala, South Dima Lanku and North Panimur village are situated. Disabra is a village consisting of Dimasa people. Majority of the villagers of the study area are illiterate. Majority of villagers involved in shifting cultivation rather than permanent cultivation. Villagers have to



come far away for marketing and medical treatment. There exist a L. P. school in the study area. The peoples of the study area are unaware about the environmental degradation or lowering down of environmental qualities.

Rationale of The Study -

Disabra is a village of Dima Hasao district of Assam. Jhum or shifting cultivation is the main livelihood of the people of this village. It is felt necessary to study the shifting cultivation in relation to environmental degradation because of the ill effects of the shifting cultivation. The present study has tried to reveal the shifting cultivation in relation to environmental degradation.

Statement of The Problem -

“Impact of shifting cultivation on environment with special reference to Disabra village of Dima Hasao district”.

Objectives of The Study -

Objectives of the present study were as follows:-

- To study about the number of households of shifting cultivators.
- To study the impact of shifting cultivation on environment in relation to social erosion, deforestation and water shortage in Disabra village.
- To study the causes of continuing shifting cultivation in Disabra village.

Delimitation of The Study -

The study has been delimited as follows:-

1. The study has delimited to the Disabra village of Dima Hasao district only.
2. The study has delimited to study the impact of shifting cultivation in relation to soil erosion, deforestation and shortage of water only.
3. The study has delimited to study the causes of continuing shifting cultivation in relation to lack of awareness, lack of finance and traditional continuation only.

Methodology -

Method of Study: - For the present study, the investigators have used Descriptive survey method of research.

Population: - The total households of the Disabra village were regarded as the population of the present study. There were 53 households in the Disabra village.

Sample: - Investigators personally visited the study area and select the sample from the cooperative households. Out of the 53 households 30 households have been selected by using purposive sampling technique as sample for the present study.

Data Collection: - In this study data were collected from both primary and secondary sources.

Tools: - Investigators prepared an interview schedule to collect the data from the sample.

Statistical Technique Used In The Study: - Investigators employed simple percentage technique for analysing and interpreting the collected data to get the result.

Analysis And Interpretation Of Data -

- **Objective 1:** - To study about the number of households of shifting cultivators.

Table No – 1

Showing simple percentage of shifting cultivator and permanent cultivator households in the study area.

Items	Yes	No	% of Yes	% of No
Shifting cultivator	29	1	96.67%	3.33%
Permanent cultivator	1	29	3.33%	96.67%

From this table it was found that in Disabra village 96.67% cultivators were continuing shifting cultivation and remaining 3.33% cultivators were permanent cultivators. It was notable that the 3.33% cultivators were also continuing shifting cultivation though they were involved in permanent cultivation.

Objective 2: - To study the impact of shifting cultivation on environment in relation to social erosion, deforestation and water shortage in Disabra village.

Table No: - 2

Showing the simple percentage of the responses on the impact of shifting cultivation in relation to soil erosion, deforestation and shortage of water.

Items	Yes	No	% of Yes	% of No
Soil erosion	5	25	16.67%	83.33%
Deforestation	30	0	100%	0%
Shortage of water	30	0	100%	0%

From this table no 2 it was found that only 16.67% households were agree with the occurring of soil erosion in Disabra village due to shifting cultivation, remaining were not agree with the same. It was also found that 100% samples were agreed with the occurring of both deforestation and shortage of water problem in the study area.

Objective 3: - To study the causes of continuing shifting cultivation in Disabra village.

Table No: - 3

Showing simple percentage of the responses on the causes of continuing shifting cultivation in relation to the lack of awareness, continuing tradition and lack of finance.

Items	Yes	No	% of Yes	% of No
Lack of awareness	30	0	100%	0%
Continuing tradition	30	0	100%	0%
Lack of finance	30	0	100%	0%

From the table no 3 it was found that 100% households of the Disabra village were continue shifting cultivation due to lack of awareness, continuing tradition and lack of finance. It was



notable that though some peoples of the study area were involved in permanent cultivation but they also continue the shifting cultivation or jhum cultivation.

Findings of The Study -

The findings of the study were as follows –

1. 96.67% households were involved in shifting cultivation rather than permanent cultivation.
2. 3.33% households were involved in permanent cultivation but they were also continuing shifting cultivation.
3. 16.67% households were agreeing with the occurring of soil erosion problem due to the shifting cultivation.
4. 100% households were given yes response in relation to the deforestation problem due to the shifting cultivation.
5. 100% households were agreeing with the existence of shortage of water problem in the study area.
6. 100% households were response that lack of awareness is the major cause of continuing shifting cultivation in the study area.
7. 100% households were response that traditional continuation is the major cause of continuing shifting cultivation in the study area.
8. 100% households were response that lack of finance is the major cause of continuing shifting cultivation in the study area.

Conclusion -

From this above discussion it is clear that there are various problems occur like deforestation and shortage of water etc. due to the shifting cultivation in the study area. It is also clear that 100% households' were continuing shifting cultivation due to the lack of awareness, lack of finance and for traditional continuation.

Recommendations -

Recommendations for controlling shifting cultivation and its impact on environment in the study area are as following: -

1. Government and Non-Government organisations should organise awareness programme on shifting cultivation in the study area.
2. More financial help should be provided to the villagers of Disabra village for doing permanent cultivation.
3. Education should be provided to the villagers to change their outlooks.

References -

1. 40th Anniversary of North Cachar Hills Autonomous District Council, Haflong 1992 (1992), N. C. Hills Autonomous District Council Haflong, The Hemkosh Printers, Guwahati.
2. Kothari, C. R. (1985) Research Methodology – Methods and Techniques, Wiley Eastern Limited, New Delhi.
3. Koul, L. (1999) Methodology of Educational Research, Vikas Publishing House Pvt. Ltd., New Delhi.



Global Dimensions in the Novel from 'The White Tiger' by Indian Author Aravind Adiga

Prof. Shelake Bhagyashri Narayan

Shriram College of Agricultural Business Management, Paniv.

Email:- bhagyashrishelake33@gmail.com

Abstract:

The researcher wants to examine reflection of the globalization themes of the Indian English literary texts and find the realities of the globalization through the literary forms. The present research paper is the analysis of the impact of globalization on Indian English literature with the reference to novel 'The White Tiger' written by Indian author Aravind Adiga. The effects of the globalization can be easily observed in the Indian fiction. Due to emerge of globalization in India, Indian culture loosened up their hold. The novel is little grasp the thread of the gap between the upper and lower classes and the poor are marginalized and humiliated. The paper sheds light on the social, cultural and economic impact of globalization through the novel 'The White Tiger'.

Objectives:

1. To search Global dimensions from the novel.
2. To study the term Globalization in the literature point of view.

Key Words: Globalization, Indian Culture, Poverty, White Tiger, Population

Introduction:

Globalization:

The word globalize relates to the emergence of an international network of economic systems. The term Globalization is the warm issue from past to till present. This is the process of integrity from local to global. It is extended from national to international. According to the 'Lechner' globalization is a one kind of process in which people connect each other with different and large distance area.

The term, particularly used in the field of economy. But it is not limited in this field. Globalization is the process of 'The whole world is united'. The interchange of ideas, culture, products, views, thoughts, opinions, etc. one kind of permission to all people for traveling, communicating, investing, and so on. In the view of literature sense, globalization can be considered as the process of connection of local to global ones. In the literature point of view, globalization is the ongoing process and it is the unity of local, regional, social, economic, political, cultural areas.

The United Nations Economic and Social Commission for Western Asia in 2002 reports that: We can define the globalization with different ways. If we concern the economical field, it will be creating huge opportunity to facilitate of the flow of goods, capital, services and labour. It reduces the barriers between two or more nations. The term globalization emerges from late nineteenth century but it's extended slowly during the first world war up to twentieth century. Friedman also asserts that: The driving idea behind globalization is free-market capitalism – the more you let market forces rule and the more you open your economy to free trade and competition, your economy will be more effective and efficient. Globalization means the



extension of capitalism to each country. In the globalization there are lot of rules which set for economic which revolve around the privatizing of your economy.

Hence it is the concept of very complicated some variables like economic development, trade, outsourcing, mass production, cultural hybridity, free market, etc. In the western countries the term globalization is the opportunities for economic development which is essential for the people's better condition. The Vedanta Philosophy asserts 'वसुधैवकुटुंबकम्' – the whole universe is our family. The Universe is our family. Love, respect, togetherness, faith, unity and thinking include in the globalization. There are some global evils like individualism, terrorism, corruption, environmental degradation, poverty, women harassment, security and health issues, forced migration.

Impact of Globalization on Indian Culture :

Due to globalization, current condition of the people has been changed. The term globalization warmly occurs in the Indian culture as well. Globalization played wide role in the area of Indian English Literature. Due to globalization so many cultural practices come together. It is becoming easy to the popularization of the cultures. The things like MacDonald's and Pizza Huts, etc., In all metropolitan cities and through the celebration of special days like Valentine's Day, Father's Day, etc.

The globalization shattered the old customs and traditions in the India. Globalization led to westernization in India, but Indian culture also spread in each corner of the world. Globalization effected on the Indian English literature in the 20th century. The consequences of globalization can be observe in the Indian English literature. The drastic change rapidly held in the economic and political field in India. Due to Indian population issues increased such as poverty, desolation, and deprivation. The impact of these changes described in the various forms of Indian English literature.

About the Novel :

'*The White Tiger*' is the novel which wins the 40th Man Booker Prize in 2008. Which is written by *Arvind Adiga* and published by *Harper Collins* in 2008. The novel is the depiction of the character Balram with his poor background and the demon of a modern global economy. The major theme of the novel is the impact of globalization on Indian people. The novel has been well-received, making to the New York Times bestseller list. *Aravind Adiga*, 33 at the time, was the second youngest writer to win the prize in 2008. The author is the fourth Indian novelist to be credited with this honor.

Global Dimensions in the novel:

The novel begins with the success story of Balram Halwai, which related to the Chinese Premiere. In this novel Balram's life divided into two parts: rich and poor. A quote by the author clears the point:

The dreams of poor and rich are not overlap. Poor have dreams of eating food for survive and looking like the rich but rich persons have the dream like weight loss and become poor.

He belongs from a poor family which was situated in the backward village. He suffered from extreme poverty and deprivation. He can't complete his education instead of that age works as child labor in a local tea stall. He runs away from the village for seeking his destiny in the city. Finally, he got the job as a servant cum driver in the household of his former landlord. He faced



exploitation and class difference that exists between the rich masters and their poor servants. After that he changed his situations killed to his owner and robbed the money by enjoying happy and most luxurious life. Finally, he finds a new successful life of entrepreneurship in the hub of India's globalization- the city of Bangalore. The novel depicts that Globalization replaces the native culture. Take for example,

When Balram says, "I should explain to you, Mr Jiabao, that in this country we have two kinds of men: Indian liquor men and English liquor men'. According to him Indian drink is for village people like him, English drink are made for rich ones. Rum, beer, whisky and gin made for expensive persons.

. In the novel, some form of America seems to pop up in a key moment. Balram observed that Ashok being transformed by the American culture due to globalization. Take for example when Balram is describing Ashok's corruption, "you've got plenty of places to drink beer, dance, pick up girls, that sort of thing. A small bit of America in India" (173).

There is another critical situation occur that is one Stout assistant of minister spoke about the drinking and elections. According to him elections can be handled in the country like India. It is not happening in the America. Everyone holds the whisky with them in city of Delhi. He confirmed it with Mr. Ashok. And finally, Balram described his murder weapon, "It's a good, strong bottle, Johnnie Walker Black- well worth its resale value." Reader can easily observe that how Indian become servant of the European and American Countries and how English language become superior from other native languages.

Globalization created American atmosphere in India. Character from the novel decided to move back in India instead of the America. Pinky want the American culture. India played important role in modern days. Ashok gives justification of this by explaining Delhi become modern city because so many American companies like Microsoft American Express open their branches there. Shopping Malls, Cinema Theaters crowded in Delhi. So Pinkey madam recalling America so she can search the place like Delhi in India.

Ashok agreed now India surpass to America, There are various things he can did in the New York. There is drastic changes occur in the money in the society, At the end of the story Balram chooses the path of corruption and murders of his owner and forms a taxi company and taxi company known as The White Tiger. Overall, it is clear that people like Balram are seen rarely in a lifetime.

At the end of the story Balram chooses the path of corruption and murders of his owner and forms a taxi company and taxi company known as The White Tiger. Overall, it is clear that people like Balram are seen rarely in a lifetime.

The author himself is of the view that:

"The White Tiger is the story of a poor man in today's India, one of the many hundreds of millions who belong to the vast Indian underclass; people who live as laborers, as servants, as chauffeurs and who by and large do not get represented in Indian entertainment, in Indian films, in Indian books'. Balram Halwaii is representative of the billions of Indians which are poor.

Conclusion:

Globalization changed the world structure, cultural hybridity, economic development, recession, oppression, suppression. The present paper cleared that how 'Globalization' is quite



harmful to the individual and the growth of humanity with the reference of Man Booker Prize Award winning novel '*The White Tiger*'.

Reference:

Primary Sources:

1. Adiga, Aravind. *The White Tiger: A Novel*. New York: Free. 2008.

Secondary Sources:

1. .Thomas L. Friedman, *The World is Flat*, London: Penguin Books, 2006.pp.51-299.
2. Ervin J, Zachary AS. *Globalization: A reference handbook*. Santa Barbara: ABC-CLIO. 2008.
3. Gupta, Suman. *Globalization and Literature*, Cambridge: Polity Press. 2009.
4. Lechner FJ. *Globalization: the making of world society*. New Jersey, John Wiley, Sons. 2009.
5. Ritzer G. *Globalization: A basic text*. New Jersey: John Wiley & Sons. 2009.
6. Sawhney, Ekta. *The Impact of Globalization on English Literature with special reference to Girish Karnad's "The Fire and the Rain*. International Journal of English Language, Literature and Humanities. 2321-7065.
7. Shihada, Isam M. *Globalization and the Question of Servitude in Aravind Adiga's the White Tiger*. SSRN Electronic Journal SSRN Journal (n.d.): n. pag. Web.
8. Thomas L. Friedman. *The Lexus and the Olive Tree*. New York: Farrar Straus Giroux.1999.p.9.
9. *United Nations Economic and Social Commission for Western Asia*, Annual Review of Developments in Globalization and Regional Integration in the Countries of the ESCWA Region, New York: United Nations, [February2002].
10. Wells GJ, Shuey R, Kiely R. *Globalization*. New York: Novinka. 2001.

Webliography:

- <http://www.escwa.un.org/information/publications/edit/upload/grid-02-2.pdf>. [9 June 2008].
- <https://ashvamegh.net/existential-struggle-in-the-white-tiger/>(7 July 2020)
- <https://www.gradesaver.com/the-white-tiger/study-guide/themes>(7 July 2020)
- <https://www.ipl.org/essay/Globalization-In-The-White-Tiger-F38R5C674SCF6>(7 July 2020)
- https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2703282(7 July 2020)
- <http://www.allsubjectjournal.com/archives/2017/vol4/issue1/4-1-26>(7 July 2020)
- <https://cpb-ap-se2.wpmucdn.com/global2.vic.edu.au/dist/5/3744/files/2016/12/A-guide-to-writing-about-the-themes-in-White-Tiger-1zzpqbl.pdf> (7 July 2020)



Globalization: A Critical Analysis With Special Reference to the Transgender Community

Shormita Bose

Research Scholar, Dept of English

GLA University, Mathura (U.P.)

Email- bose.shormita17@gmail.com

Mobile- 7270806722

Dr. Prateek Pandey

Assistant Professor, Dept. of English

GLA University, Mathura (U.P.)

Email- prateek.pandey@gla.ac.in

Mobile- 9690071469

Abstract-

This paper aims to critically analyse the present condition of the transgender community in the light of the impact of globalization on them. The globalization and the transgender community are not directly interrelated with each other, but they are indirectly proportionate to each other. With the emergence of globalization in the 20th century, the theory of feminism, queer studies and diaspora studies also emerged. The community of transgenders are considered as a vulnerable and marginalised group of people in the world. But with the advent of globalization, a new ray of ideas and thoughts emerged, as a result of this, new writers, theorists and activists came forward to raise awareness and consciousness about the miserable condition of this community. In this paper, we will witness the idea of migration in the literary work of Living Smile Vidya, after the emergence of globalization across the world. Also, it will explore the importance of translation in the global world.

Keywords- Globalization, Transgender, Rights, Migration, Queer, Feminism and Transfeminism.

Introduction-

As rightly said by Branko Milanovic, "Globalisation means free movement of capitals, goods, technology, ideas and people. Any globalisation that omits the last one is partial and not sustainable" (Sundharam,272). Globalization is a process of uniting various economies of the world for the free flow of goods and services, capital, resources, technology, ideas and thoughts to create a better world for the human beings. It enables faster transmission of knowledge and thus developing countries can raise their standard of knowledge productivity to reach international standards. Therefore, globalization promotes growth in capital, technical advancement, reduction in poverty, modernized thoughts and ideas and increase in employment. However, during the emergence of globalization in the world, so many new ideas and theories came into existence at the end of the 20th century. Some of them are theory of feminism, post-colonialism, post-modernism, queer theory, transfeminism, eco-criticism, etc. the ideas of these theories are spreading worldwide after the arrival of globalization in the world. Globalization helps in broadening the idea of new writers and theorists to reach out to the global audience. But still some countries which are traditional and have conservative mindset, they do not support the idea of globalization. We will going to analyse the development of globalization through the lens of literature, as literature depicts the society and its people. The emergence of globalization has



changed the scenario of the transgender community in the whole world. For instance, when the Stonewall Riots took place in New York in 1969, it gave birth to the Gay liberation movement and we can state that it was the starting point of the LGBT movement across the world. Additionally, it got spread out to the whole world and the people of the LGBT community came forward for the recognition of their rights and identity. They want acceptance of their gender identity, as they are not accepted as a part of the mainstream society and considered as 'unnatural'. Theorists like Eve Sedgwick and Judith Butler questions the notion of unnatural and marginalization of homosexuality, they stressed upon the fact of normality of homosexuals. Butler in her book *Gender Trouble: Feminism and the Subversion of Identity*(1990), explains the category of gender and sexuality as performative.

A major development, was to recognize the works of writers who presented homoerotic subject in their literary works, some prominent writers like William Shakespeare, Virginia Woolf, Adrienne Rich, Mahesh Dattani, Arundhati Roy, Christina Rossetti, A.Revathi, Devdutt Pattanaik, R.Raj.Rao, etc. Literature uses language to connect to the global world, globalization helps in bridging the gap between the borders and it reaches out to the audience internationally and widen the idea of queerness. "In the words of a scholar, Nihar Ranjan Ray, literature is absolutely language-based, and language itself is shaped by its locale and the socio-historical forces that have operated on it through the years"(Deshpande, 5). The novel *I Am Vidya* written by Living Smile Vidya and translated by V. Ramnarayan, this novel was originally written in Tamil, but later it got translated into 7 languages including English, Malayalam, Marathi, Kannada, and three more languages. Translation is a major characteristics of globalization as it promotes the idea and thought of a person to a large number of people, it does not confined to a limited number of people, as a result, language cannot be a barrier in the mode of development. The novel *I Am Vidya* traces the journey of a transgender Vidya, who has a bachelor's degree in Computer Science and master's degree in Linguistics but at a certain point in her life she decided to become a 'tiranangai' or a transgender, to get rid of the double life as she wanted to embrace her womanliness.

An Indian - American anthropologists, Arjun Appadurai, who is a major theorist of globalization studies, gave a theory of Disjuncture. The theory is composed of five interrelated components – ethnoscapas, mediascapas, technoscapas, finanscapas and ideoscapas. We can apply the component of ethnoscapas and ideoscapas to the novel *I Am Vidya*, as ethnoscape means migration of people from one place to another in search of a better livelihood and ideoscape means flow of ideas and thoughts globally without any barrier. Therefore, the protagonists of the novel Vidya starts her journey by moving to Chennai in search of a job from her hometown and try to earn a decent livelihood as she wanted to enjoy her femininity and does not want to conceal it from the society. As Vidya (earlier Saravanan) was not satisfied with the dual life which she was living, so she moved to Pune to give recognition to her gender identity which she was concealing from the society for so long. In Pune, she finally became a 'tiranangai' to enjoy her femaleness which lies within her. She asserts, "Some go to Mumbai, and some to Delhi or Kolkata. I went to Pune, because Arunamma, who adopted me, had connections there. Her 'amma' lived there. Following that tradition, I went to Pune to be nurtured by my 'grandmother'." This shows that the transgenders has to move from one place to other in search of job opportunity, so as to earn their livelihood they had to do begging or sex work or they opt to do traditional *badhai* system in different cities, which is not possible if they live in their native



place. The transgenders had to do begging in trains, markets, roads and traffic signals, begging is the only source of income for the transgenders, otherwise they have to be involved in sex-work.

Transgender's like Vidya tried to opt different occupation to earn a livelihood with self-respect, so she went to Surat for following her idea of becoming an entrepreneur. She plans to bought saris from Surat and sell them on the train. She tried her best to sell her material but it did not work for her. Later, she had moved to Madurai and started working in a self-help group bank as an EDP assistant. She simply quoted in the text, "The managing director, Mr Udayakumar, interviewed me. He was a very simple man, and treated me not as a tirunangai, but as a fellow human. To his question about my education, habits, typing speed and related matters, I answered truthfully." This shows that the perception of the people are evolving slowly but steadily towards the transgender people, they are started accepting their gender identity and treated them with respect. We are now witnessing dramatic shift in the perception of the society, with ideas moving across the borders, the people has started understanding the social issues and gender issues due to the process of globalization. Vidya writes, "I was not overly enthused by magazine articles on me, but I was happy that a women's magazine was interested in me as a woman. It was an acknowledgment of my womanhood."

Globalization empowered people to be authentic in their ideas and thoughts. Many feminists and theorists from across the world came forward to raise their voice for a trans-inclusive society. In 2015, radical feminist Catherine MacKinnon says, "male dominant society has defined women as a discrete biological group forever. If this was going to produce liberation, we'd be free ... To me, women is a political group. I never had much occasion to say that, or work with it, until the last few years when there has been a lot of discussion about whether trans women are women ... I always thought I don't care how someone becomes a woman or a man; it does not matter to me. It is just part of their specificity, their uniqueness, like everyone else's. Anybody who identifies as a woman, wants to be a woman, is going around being a woman, as far as I'm concerned, is a woman." Also Krista Scott Dixon, a feminist scholar, in her important work *Trans/Forming Feminism: Trans-Feminist Voices Speak Out* shows how the transgender community and feminisms have grown and evolved in the past few decades and her wish to express that both the movements work together to fight against gender discrimination.

In 2012, Argentina passed 'Gender Identity Law' to make sex-change operation a legal right of every transgender and made sure that the public and private health care services would cover the cost of surgery. In 2014, Denmark allowed every individual above 18 to express their gender identity and to legally change their sex in government document. In 2015, U.S. has legalized same-sex marriage and gave recognition to the LGBT persons. Likewise, in 2018, the Supreme Court of India decriminalized homosexuality by declaring Section 377 of the Indian Penal Code unconstitutional in respect to consensual homosexual sex between adults. In 2014, the Supreme Court of India gave recognition to transgenders as a 'third gender' legally in the government documents. The transgenders of India are also allowed to undergo Sex Reassignment Surgery and they have a constitutional right to register themselves under a third gender category. Recently, the Transgender Persons (Protection of Rights) Act 2019 was passed by both the houses of the Parliament. This Act bans unjust discrimination against transgenders in educational and employment services, healthcare services, right to own, purchase or rent any property, etc. Also, Article 15 of the Indian Constitution prohibits discrimination on the grounds of religion, caste, class, creed, sex, race or place of birth. Thus, globalization includes diffusion



of thoughts and knowledge to people associated with collective intellectual identities. Hence, globalization is defined as the process of free movement of goods and services, ideas, technology, and information with no barrier in between borders worldwide.

Conclusion –

The process of globalization has significantly influenced the acceptance of transgenders and other queer persons in the society. This paper has explained the significance of translation and migration as one of the major characteristics of globalization. It explores the plight of a transwoman, Vidya to earn her livelihood in this modern society and simultaneously, it throws light on the laws and policies framed by different nations for the recognition of transgender community. It gives an insight to the miserable working opportunity of the transgenders by giving special reference of a transwoman, Vidya. She is currently working for an organization, which is engaged in serving impoverished people in Chennai, India. Thus, the advent of globalization has facilitated the LGBT movement all over the world. Also, the Internet has provided a helpful channel of communication, so that it could reach to a greater number of people. Also, the UN Human Rights Council in 2011 has passed a resolution for the universal rights for lesbian, gay, bisexual and trans people, which focuses specifically on sexual orientation and gender identity. The resolution also commissions a study on anti-gay discrimination and violence and establishes a panel to look after these issues. To express sexual preference freely and proudly, Article 19 of the Universal Declaration of Human Rights has been set to protect every individual's right to express themselves freely without any fear of harassment and violence.

Work Cited

- Abrams, M.H. & G.G. Harpham. *A Glossary of Literary Terms*. Cengage Learning : Delhi, 2015.
- Appadurai, Arjun. "Disjuncture and Difference in the Global Cultural Economy". *Theory, Culture & Society*, 1990;7;295, Sage Publications : London, 1990.
- Butler, Judith. *Gender Trouble : Feminism and the Subversion of Identity*. Routledge : New York & London, 1990.
- Colebrook, Claire. *Gender*. Palgrave Macmillan : New York, 2004.
- Deshpande, Shashi. "The Globalisation of Literature". *National Institute of Advanced Studies* : Bangalore, 2001.
- Dixon, Krista Scott. *Trans/Forming Feminism: Transfeminist Voices Speak Out*. Sumach Press : Toronto, 2006.
- Habib, M. "Globalization and Literature". *Language in India*, Vol.15:9, September, 2015.
- ILO(2004). "A Fair Globalization: Creating Opportunities for All". *Report of the World Commission on the Social Dimension of Globalization* : Geneva, 2004.
- Reid, Graeme. "A Globalized LGBT Rights Fight". *Human Rights Watch* ; 2nd November, 2011. www.hrw.org/news/2011/11/02/globalized-lgbt-rights-fight
- Sandberg, Shannon. "Globalization's Influence on Global LGBT Communities". *Medium* ; 21st February, 2018. medium.com/globalizations-influence-on-global-lgbt-communities/globalizations-influence-on-global-lgbt-communities-daa8a120ea3d
- Sundharam & Datt. *Indian Economy*. S. Chand & Company Ltd : New Delhi, 2011.
- Vidya, Living Smile. *I Am Vidya : A Transgender's Journey*. Translated by V. Ramnarayan. Rupa Publications India Pvt. Ltd : New Delhi, 2013.
- en.wikipedia.org/wiki/Transfeminism#:~:text=Transfeminism%2C%20also%20written%20trans%20ofeminism,%2C%20trans%20men%2C%20non-trans.
- [en.wikipedia.org/wiki/LGBT_rights_at_the_United_Nations.](https://en.wikipedia.org/wiki/LGBT_rights_at_the_United_Nations)



Judicial Contribution in the Development of Environmental Jurisprudence in India

Dr. Bharat G. Kaurani

Assistant Professor

N.B. Thakur Law College, Nashik – 5

Affiliated to Savitribai Phule Pune University, Pune

bharatkaurani@yahoo.co.in

Abstract:

Environmental law has seen considerable development in the last two decades in India. Most of the principles under which environmental law works in India come within this period. The development of the laws in this area is due to initiative taken by the Indian judiciary, particularly the Supreme Court and High Courts.¹ No doubt that legislature of India has enacted number of laws for the protection and preservation of natural environment. But due to lack of application and effective implementation of Constitutional as well as legislative provisions, problems of environmental pollution could not be controlled. Therefore it became necessary for judiciary to adopt some effective remedial measures to protect environmental pollution. It has brought about remarkable changes in Indian legal system by promoting public interest litigation as a useful tool for redressal of public grievances arising out of environmental pollution. In this paper the researcher has analysed the role of Indian judiciary in protecting environment and promoting sustainable development. The paper covers judicial contribution in the development of Environmental Jurisprudence in India.

Key words: Environmental Protection, Sustainable Development, Role of Judiciary, Environmental Jurisprudence.

Introduction:

In India, like any other developing country, there has been environmental degradation due to industrialisation, urbanization, population explosion, poverty, over exploitation of resources, depletion of traditional resources of energy and raw materials and the research for new sources of energy and raw materials.²

Though, India has enacted various laws at almost regular intervals to deal with the problems of environmental degradation. However, neither the law nor the environment can remain static as both are dynamic in nature and are constantly changing. So, in order to keep the law on the same wave-length either laws have to be amended quite frequently to meet the new challenges or it has to be given new direction by the judicial interpretation. This becomes all the more important in view of the ever increasing scientific and technological development and advancement which man has made. To overcome this challenge the judiciary in India has played a pivotal role in interpreting the laws in such a manner which not only helped in protecting environment but also in promoting sustainable development. In fact, the judiciary in India has created a new

¹ Mr. Arvind Kumar Singh, “Role of Judiciary in Environmental Protection”, available at legaldesire.com

² Dr. Paramjit S. Jaswal, “Environmental Law” Allahabad Law Agency, Faridabad Haryana, Fourth Edn. 2019



“environmental jurisprudence.”³ However, the courts are required to balance development needs with the protection of the environment and ecology so that both can co-exist without affecting the other.⁴

Constitutional Perspective of Environmental Protection

Indian Constitution is perhaps one of the rare constitutions of the world which contains specific provisions relating to environment protection. It puts duty on the “State” as well as “Citizens” to protect and improve the environment.⁵ The judicial grammar of interpretation has made the right to live in healthy environment as *sanctum sanctorum* of human rights. Now it is considered as an integral part of right to life under Article 21 of the Constitution. Article 32 and 226 of the Constitution empowers the Supreme Court and the High Courts, respectively to issue directions, orders or writs for environmental Protection.

The Indian judiciary has made an extensive use of these constitutional provisions and developed a new “environmental jurisprudence” of India. It is worthwhile to note that, most of the environmental matters have been brought before the judiciary through “Public Interest Litigation” The Supreme Court while developing a new environmental jurisprudence has held that the powers of the Supreme Court under Article 32 are not restricted and it could award damages in public interest litigation in cases where there has been any damage to the environment due to pollution. The said approach of the Supreme Court is based on “Polluter Pays Principle”⁶ and has imposed exemplary damages on multinational companies such as Coca Cola and Pepsi for damaging the ecology in the States of Himachal Pradesh and Jammu & Kashmir by painting advertisements on the rocks and also directed them to remove these advertisements without further polluting the environment.

International Perspectives of Environmental Protection & Sustainable Development

The U.N. Conference on Human Environment and Development at Stockholm in 1972 is considered to be the *Magna Carta* of international concern for environment protection and sustainable development. It was for the first time that the world community got together to deliberate seriously on an important issue of environment protection and sustainable development.

Again in 1987 the report of the World Commission on Environment and Development not only provided impetus to sustainable development but also brought into focus the common concerns of the people, common challenges which we face the world over and the common endeavours which we need for peace, security development and environment. Earth Summit of 1992 at Rio de Janeiro, through Rio Declaration and Agenda 21, has further concretised the concept of environment protection and sustainable development. In 1997, the World Climate Conference was held at Kyoto (Japan) where a historic accord was signed by the participating countries for mandatory cuts in emission of green house gases particularly by the industrialized nations to help in saving the planets from global warming.

³ Paramjit S Jaswal, “Directive Principles Jurisprudence and Socio-Economic Justice in India”, 543 (1996).

⁴ *People United for Better Living in Calcutta v. State of W.B.*, AIR 1993 Cal. 215 at 217.

⁵ See Article 48-A & Article 51-A (g) of the Constitution of India.

⁶ See *M.C. Mehta v. Kamal Nath*, (2000) 3 SCC 745.



Again in 2002 the World Summit on Sustainable Development was held in Johannesburg, South Africa and reaffirmed their commitment to sustainable development and to build a humane, equitable and caring global society cognizant of the need for human dignity for all. The United Nations Conference on Sustainable Development (UNCSD), also called as Rio 2012 or Earth Summit 2012, was the third international conference on sustainable development aimed at reconciling the economic and environmental goals of the global community.

Judicial Contribution in the Development of Environmental Jurisprudence in India

No doubt that legislature of India has enacted number of laws for the protection and preservation of natural environment. But due to lack of application and effective implementation of Constitutional as well as legislative provisions, problems of environmental pollution could not be controlled. Therefore it became necessary for judiciary to adopt some effective remedial measures to protect environmental pollution. It has brought about remarkable changes in Indian legal system by promoting public interest litigation as a useful tool for redressal of public grievances arising out of environmental pollution.⁷

The Hon'ble Supreme Court and also various High Courts have taken innumerable measures in a series of their landmark judgments. Over the year the Supreme Court has been paying special attention for the protection of environment by giving effective directions to all the persons concerned with the matter by invoking its powers under the Article 32. Following are some of the major contributions of judiciary in the development of environmental jurisprudence in India

Judicial Interpretation of Doctrine of Sustainable Development

The concept of sustainable development is one of the international principle on which the judiciary has relied upon to sustain the growth of environmental jurisprudence. Many environmental principles and remedies not covered by existing environmental legislations have been called from the concept of sustainable development.⁸ The World Commission on Environment and Development, established by a UN General Assembly resolution, in its Report called for the global adoption of a strategy of sustainable development. It seeks to meet the needs and aspirations of the people of the present without compromising the ability to meet those of the future.⁹ The concept demands that all nations must aim at a type of development that integrates production with resource conservation and enhancement, and that links both to the provision for all of an adequate livelihood base and equitable access to resources.

⁷ Dr. Priti Saxena & Dr. Sudarshan Verma, "*Judicial Sensitivity Towards Environmental Issues And Public Interest*

Litigation", Chapter I Edited Book by Dr. Rathin Bandopadhyay & Dr. Rajendra Dhar Dubey, "*An Introduction to Environmental Rights*" Central Law Publications. Allahabad, First Edn. 2010.

⁸ Kohinoor Roy, "*Meandering Development of Environment Protection Laws*", Central Law publications,

Allahabad, First Edn. 2010, at p-76.

⁹ Report of the World Commission on Environment and Development, "*Our Common Future*", Oxford University

Press, New Delhi, 1987, p 40. The Brundtland Report.



In India, Public interest litigation has played a significant role in the judicial implementation of sustainable development which insists on the balanced synthesis of developmental and environmental imperative.¹⁰ While hearing public interest litigations filed with a view to protect the environment, the Supreme Court of India embraced judicial activism and has consistently held that sustainable development is a part of the environmental law in India.¹¹

In *Vellore Citizen's Welfare Forum v. Union of India*¹², the Supreme Court emphatically held that sustainable development as a balancing concept between ecology and development has been accepted as a part of customary international law. The Supreme Court further held that the "precautionary principle" and "polluter pays principle" constituted fundamental principles of the international environmental law and stated that these principles have merged and govern the law of our country as is clear from Articles 47, 48-A and 51-A(g) of the Constitution and that, in fact, in various environmental statutes, such a Water (Prevention and Control of Pollution) Act, 1974, the Environment (Protection) Act, 1986 and other statutes, these concepts are implied.

The above cases demonstrate that the Supreme Court became so active in public interest litigation that the fundamental principles of international environmental jurisprudence, namely "sustainable development", "polluter pays principle" & "precautionary principle", inter generational equity, environment protection, conservation of natural resources, etc have been treated by the Supreme Court as part of the Constitution of India as well as the environmental statutes and were applied to make the development process ecologically sound and sustainable.

Judicial Approach towards Polluter Pays Principle

The polluter pays principle basically means that the producer of goods or other items should be responsible for the cost of preventing or dealing with any pollution that the process causes. The principle does not mean that the polluter can pollute and pay for it. The nature and extent of cost and the circumstances in which the principle will apply may differ from case to case.¹³

In *Vellore Citizens Welfare Forum v. Union of India and others*¹⁴ the court laid emphasis on the principle of Polluter-pays and said that, "pollution is a civil wrong. It is a tort committed against the community as a whole. A person, therefore, who is guilty of causing pollution, has to pay damages or compensation for restoration of the environment and ecology". The Compensation so collected to be kept under a separate Environment Protection Fund to be utilized to compensate the affected persons.

Judicial Response to Precautionary Principle

¹⁰ Gurdip Singh, "Legal Status of Sustainable Development" (1996) I National Capital Law Journal 93.

¹¹ Gurdip Singh, "Environmental Law", Eastern Book Company, Lucknow, Second Edn., 2016..

¹² (1996) 5 SCC 647.

¹³ P Leelakrishnan, "Environmental Law in India", Lexis Nexis, Haryana, Fifth Edn. 2019,.

¹⁴ (1996) 5 SCC 647. See also *Indian Council for Enviro Legal Action v. Union of India* (1996) 5 SCC 281.



The precautionary principle emphasised by the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in the year 1992, signifies a preventive approach.¹⁵

In *Vellore Citizens Welfare Forum v. UOI*¹⁶ case, the Supreme Court accepted that the Precautionary Principle is part of the environmental law of the country and shifted the burden of proof on the developer or industrialist who is proposing to alter the status. In this case petition was filed against the pollution caused by tanneries and other industries in the State of Tamil Nadu. The Court held that though the leather industry is important for economy of the country as it generates foreign exchange and provides employment avenues it has no right to destroy the ecology, degrade the environment and pose as a health hazard. The Court recognized that a balance must be struck between the economy and the environment.¹⁷

Relaxation of Rule of *Locus Standi*

The traditional concept of *Locus Standi* is no longer a bar for the community oriented Public Interest Litigations and now any individual or NGOs can file PIL in order to protect environment though not an aggrieved party. The Courts have also relaxed the requirement of a formal writ to seek redressal before the Court. Any citizen can invoke the jurisdiction of the Court, especially in human rights and environmental matters even by writing a simple postcard.¹⁸ Though the judicial contribution in environmental protection through PIL is appreciable, however, the present legal system and administration is not well equipped to meet the challenge.¹⁹ The judiciary will fail until and unless the people's vision would be changed. Therefore, necessary action should be taken by the government in mitigating environment pollution.

Judicial Recognition of Right to Environmental Protection

Judicial activism in India is playing leading role in interpreting various un-enumerated rights in Part III of the Constitution. It may be pointed out that though specific provisions for the protection of environment have been made in Part IV dealing with Directive Principles and Part VIA dealing with fundamental duties, even then right to live in a healthy environment has been interpreted by the judiciary in several provisions of Part III relating to Fundamental Rights. In this way judiciary in India played leading role in providing impetus to the human rights approach for the protection of environment.²⁰

¹⁵ See United Nations Conference on Environment and Development: Principle 15.

¹⁶ AIR 1996 SC 2715.

¹⁷ https://thefactfactor.com/facts/law/civil_law/environmental_laws/precautionary-principle/1498/

¹⁸ Dr. Anand Kumar Tripathi, "*Environmental Protection Under Indian Constitutional Framework: A Critique*"

Edited Book by Dr. Rathin Bandopadhyay & Dr. Rajendra Dhar Dubey, "*An Introduction to Environmental*

Rights" Central Law Publications. Allahabad First Edn. 2010.

¹⁹ Dr. J.N. Pandey, "*Constitutional Law of India*", 44th ed. CLA, Allahabad, p. 245.

²⁰ Dr. Rajendra Dhar Dubey, "*Right to live in healthy environment: an Analysis in Constitutional Perspective*".

Central Law Publications, Allahabad, First Edn. 2010.



One of the major premises of sustainable development is that all human beings have a fundamental right to an environment adequate for their health and well being. The Indian judiciary has expanded the scope of the fundamental right to life and personal liberty guaranteed in Article 21 of the Constitution to include environmental protection.

In *Subhash Kumar v. State of Bihar*²¹ the Supreme Court held that right to life is a fundamental right guaranteed in Article 21 of the Constitution and it includes the right to enjoyment of pollution free water and air for full enjoyment of life. Thus, the judiciary being aware that the right to environment is a basic principle of sustainable development has recognised the right to environment and environment protection. As the right to environment is a fundamental right under Article 21, it has become easier to enlarge the scope and boundaries of environment protection helping in the development of environmental jurisprudence in India. Environmental PIL has emerged because of the court's interpretation of Article 21 and 32 along with Directive Principles of the State in the Constitution.

Inter-generational Equity and Public Trust Doctrine

Inter-generational equity emanating from the principle of sustainable development imposes a duty on the present generation not to use the natural environment in a manner degrading the environment. We hold the earth in trust for future generations. This theory of trust under inter-generational equity and sustainable development to certain extent can be equated with the 'public trust doctrine' that exists within the municipal systems which is another judicial innovation for the protection of natural resources.

Public trust doctrine has been read into our environmental jurisprudence in *M.C. Mehta v. Kamal Nath*.²² In this case, the Supreme Court referred to the 'Public Trust' doctrine and stated that it extends to natural resources such as rivers, forests, seashores, air, etc. for the purpose of protecting the ecosystem. It held that by granting a lease to a motel located at the bank of the river Beas which resulted in interference by the Motel, of the natural flow of the water, the State Government had breached the above doctrine. The Court held that the State as a trustee of all natural resources has a legal obligation and duty to protect them as the resources were of public good and for the benefit of the general public, the same cannot transfer to private parties. In this case the government sanction to the deviation of the river was held to be violating the trust conferred on the state to protect natural resources.

Principle of Absolute Liability

In *M.C. Mehta v. Union of India*,²³ the Apex Court was of the view that the rule laid down in *Ryland v. Fletcher*,²⁴ has become obsolete in the context of environmental jurisprudence. The Court evolved new principle of Absolute liability for the industries engaged in hazardous or inherently dangerous activities. The principle of absolute liability is not subjected to any exceptions which operate in the tort principle of strict liability under the rule of *Ryland v. Fletcher*. The Supreme Court by upholding the principle of absolute liability has

²¹ AIR 1991 SC 420. See also *Murli S. Deora v. Union of India & Others*, AIR 2002, SC. 40

²² (1997) 1 SCC 413.

²³ AIR 1987 SC 1086. See also The Bhopal Case: *M.C. Mehta v. Union of India* AIR 1987 SC 965..

²⁴ (1886) LR & HL 330.



significantly contributed to the jurisprudence of compensation regarding the quantification of damages.

Promoting Environmental Awareness and Education

The directives of the Supreme Court went to the extent of spreading environmental awareness and literacy, as well as launching environmental education. In *M.C. Mehta v. UOI*,²⁵ the Supreme Court stressed the need for introducing such schemes in the following words:

“In order for the human conduct to be in accordance with the presentation of law it is necessary that there should be appropriate awareness about what the law requires. This should be possible only when steps are taken in the adequate measure to make people aware of the indispensable necessity of their conduct being oriented in accordance with the requirements of law.”

The directions of the Court to All India Radio and Doordarshan, to focus their programmes on various aspects of the environment, have been immediately complied with. The Court also required every state government and education board to take steps for environmental education. Further, tune with these directions, various authorities have taken up meaningful schemes of environmental education.²⁶

Judicial efforts for an Alternative Forum

The inherent limitations of the judicial system to review substantive questions relating to the environment make it desirable to establish an alternative forum, with an alternative strategy. Conferring environmental decisions-making power entirely on scientists and administrators is untenable in a rule of law society. Fusion of diverse expertise in planning, science, technology, environment, law and public policy into a new institution for environmental decision-making is essential for integrating environmental values with development issues.²⁷

The Supreme Court in *M.C. Mehta v. UOI*²⁸ said that as the cases of environmental pollution are increasing and involve assessment and evaluation of scientific and technical data, there is need to set up Environment Courts on the regional basis with professional staff drawn from the Ecological Science Research Group keeping in view the nature of the case and the expertise required for its adjudication. Again in *Andhra Pradesh Pollution Control Board v. M.V. Nayudu*,²⁹ the Apex Court suggested amendments to the existing laws and constitution of environment courts consisting of judicial and technical personnel.

This led the Law Commission of India to seriously consider the matter and make a proposal to constitute environment courts.³⁰ The alternate strategy would develop the law independently and

²⁵ AIR 1992 SC 382.

²⁶ The fact that Bar Council of India decided to introduce environmental law as a compulsory paper for legal

education at graduate level, is one of the most notable steps in recent times.

²⁷ Patrick Auslan, “*The Role of Courts and other Judicial Bodies in Environmental Management*” in Journal of

Environmental Law, 1991, pp 195, 206.

²⁸ *MC Mehta v. UOI* AIR 1987 SC 965.

²⁹ AIR 1999 SC 812.

³⁰ The Law Commission of India, 186th Report on Proposal to Constitute Environment Courts 2003’.



help reducing the burden on the High Courts and the Supreme Court. Finally the National Green Tribunal (NGT) Act 2010 had repealed the NEAA Act 1997 and is designed to be a potent and efficacious alternative forum to decide all questions of protection and improvement of environment.

Conclusion:

Thus we can conclude that environmental jurisprudence in India has been enormously enriched by the courts while hearing public interest litigations. The Indian judiciary has realised that the failure to give effect to the constitutional mandate of environmental protection would result in breach of its constitutional duty. In order to comply with the constitutional duty, the judiciary has demonstrated exemplary activism and has further liberalised the concept of “*locus standi*” in the public interest litigation filed with the objective of environmental protection. The Supreme Court has also laid down innovative principles of environmental jurisprudence which have introduced new dimensions in it.³¹ For instance, under Article 21, the court has created new rights including the right to health and pollution free environment. Of course the initiative for the protection of environment came from the legislature but the failure of the executive to implement the environmental laws in India created the ground for the intervention of the judiciary. The wide range of cases on various issues related to environment decided by the Supreme Court to bring environ-justice is worth appreciating.³²

However, in spite of the high ideals put forth by the judiciary and the legislature, in actual practice Indian pollution control laws are crammed with flaws. There is no flexibility in the standards as they are more prescriptive and define uniform standards without taking into account the type or size of the industry or the cost of pollution abatement. The current method of environment regulation has failed to monitor industrial pollution in India. In spite of various provision in the constitution, legislative enactments, decisions and court’s monitoring, the situation is not encouraging and conducive for the protection and the preservation of the environment because many provisions in the air, water and Environment Protection Act as well as other laws are not being applied and implemented in a true spirit, to regulate pollution disseminated by industries and to fix individual and collective liberty.³³

Therefore, there is need to protect the mankind against the growing menace of environmental pollution and to secure clean and unpolluted environment which can be achieved through public awareness, regular inspection and environmental education. The problem of environmental degradation is a social problem and considering its impact on the society, law courts should also rise up to the occasion to deal with the situation as it demands in the present

³¹ Gurdip Singh, “*Environmental Law*”, Eastern Book Company, Luckow, Second Edn. 2016.

³² Some of these cases are Taj Pollution case, Ganga Pollution case, Vehicular Pollution case in Delhi, Pollution by

Industries in Delhi, Pollution in River Yamuna, Noise Pollution, Protection to Wild Life, Preservation of Forests,

Environment Impact Assessment, Rehabilitation of Displaced Person, etc.

³³ Dr. Rajendra Dhar Dubey, “*Right to live in healthy environment: an Analysis in Constitutional Perspective*”

Central Law Publications, Allahabad, First Edn. 2010.



day context. However, it is suggested that, law courts ought not to put an embargo to any development project which may be in the offing.³⁴ The courts are required to strike a balance between the development and ecology and there should be no compromise with each other.³⁵ In other words, the courts, while dealing with the problem of environmental degradation, must apply the principles of sustainable development.



³⁴ Dr. Paramjit S. Jaswal, “*Environmental Law*” Allahabad Law Agency, Faridabad, Haryana, Fourth Edn. 2019

³⁵ See *People United for Better Living in Calcutta v. State of W.B.* AIR 1993 Cal. 215 at p 228.



Law, Globalization and Higher Educational Environment in India in Current Crisis Situation

Dr. Sunny S Hasani

Assistant Professor

NTVS College of Law, Nandurbar

Abstract:

Education is at its core a process of socialization. Whenever the nature of society changed, there was talk of change in the nature of education as well. Today, in the era of Corona crisis, the proposal for change in the form of education through online education is being strongly proposed by the policy makers. In such a situation, it is necessary to see that what is such a fundamental change in the structure and purpose of society that it is being described as inevitable. To improve and promote online education, Union Ministry of Human Resource and Development has launched 'Bharat Padhe Online' campaign. The objective of this campaign is how online learning can be improved. With online education, the new education policy which the government is moving towards, which socialization of education is the future objective? This article is an attempt to find how challenges has been for Higher educational institutions in India as a part of the system in era of Covid 19.

Introduction:

Online education is not just technology but a new process of socialization through which the policy and intentions of the government and policy makers can be understood and it needs to be seen in the same way. It is one thing to use technology for education by maintaining physical distance in corona crisis. Anyway, with the development of technology, it has also been used in education. It also has to be. Changing technology from blackboard to smartboard was used to make classroom teaching strong and interesting. Digitalization of the library is a form of the same process. Recording lectures of professors and making them available online is also the use of technology. The process of socialization was enhanced by education using these techniques.

It is natural that there was a difference in outlook as well. For the first time, the education sector was recognized as a multi-billion dollar global market. It was suggested that this sector should be declared a business or profit making business. Online learning is a system that many institutes are considering, but do Indian students have a strong network for online education? The availability of internet in Indian homes is pathetic, especially the access of internet to the homes of students living in rural India is even more vulnerable.

Challenges and Advantages before Indian Educational Institutions of Digital Learning:

If seen, the challenges related to online education in urban areas in India are less, while a lot more needs to be done to connect rural areas with online education. Rural India will be able to take advantage of online education only when its digital infrastructure is very strong. And this is where the biggest challenge arises. Rural India still lacks electricity, broadband network connectivity, banking facilities. All these things are related to each other.

Schools and universities in India have been closed due to the outbreak of Covid-19. Online learning is a system that many institutes are considering, but do Indian students have a strong network for online education? Preliminary data analysis indicates that online learning is a



fruitless task for most students and institutions in India. 'Don't worry, zoom into your life with online classes' - Many universities have made it their slogan during the current lockdown. The heads of most institutes hope that the problem of unexpected arrival of Covid-19 can be solved by online learning. The problem with this is that it will be easy to connect with only a few students through the Internet and it will be very difficult to reach a large number of students. In doing so, not only will the discipline be compromised, but inequality can also increase in what can be taught to students. The digital divide can be clearly seen in their access to the learning resources that students are getting. Many public institutions have not even tried to try online options for problems that are causing real concern for administrators. This matter is not so simple. Inequality of access to anything in India is ubiquitous, but the majority of students studying in tertiary level institutions in India are those who are most privileged in their social groups. It is a challenge to maintain the continuity of higher education in the current context of disaster like Covid-19. To maintain the continuity of higher education, online education has emerged as the only option. How to reach such students, whose education does not have a laptop like feature. The Covid-19 has changed the way of disseminating higher education, which will result in rapid change of universities. The students and teachers have to bring changes in communication and operation. It is believed that we are living in extraordinary times. The world around us has changed radically in the last few weeks and months.

Benefits of digital education

- Lively: Through digital learning, classroom teaching has become more fun and interactive. Children are paying more attention to it. He is not only listening to it, but also watching it on screen, which is greatly increasing his learning ability. Children are learning easily through sounds and visuals.
- Practical: Through interactive online presentations or interactive screens, the educational content in practical sessions helps students to pay more attention to details, enabling them to complete their activities on their own.
- Prompt: Children can complete their tasks in less time with the help of using tabs, laptops or notepads instead of pens and pencils.
- Vocabulary: With the help of active online screens, students improve their language skills. They learn new words from the e-book or through online study material and expand their vocabulary.
- Increase learning ability: At times, a student hesitates to ask his teacher questions during classroom training. But even though he does not understand anything at once through digital education, he can attend a recording session to clear his dilemma. Technology helps a student to learn to the best of their ability.
- Easy access: The best thing about digital education is that it is user friendly. Wherever you are, you can read your syllabus very easily. You can also learn while traveling. Even if for some reason you have not been able to attend the class for a few days, you can still download the class material and file from the school website.
- Self learning: Apart from this, online study material is easily available nowadays. Even if the entire education system is not in digital form, students can still avail digital content based on their abilities. So students can use special online study modules of different subjects to increase their knowledge even without teacher.



- Beneficial guidance: Along with online education, students can seek help from distant advisors and faculty to seek guidance or solve questions.

Conclusion

The "Covid-19" disaster can be seen as a learning opportunity in the field of higher education. The problem does not end by just starting online teaching, but the universities will also have to ensure that how they can continue the power-free electricity and internet supply and at least cost to the students. How will the internet data be available. It is time to think and be prepared how the university will be able to admit the students who were studying abroad either till now or were preparing to go abroad, the university will also have to give admission to all those students who would like to come to India from various parts of the World.

However, all experts agree that online education can prove to be very effective and effective in spreading education in rural India and remote areas. In rural India, shortage of teachers, lack of interest in the education of people, poverty, gender discrimination, lack of infrastructure, common curriculum, etc. are the main reasons why there is no progress in the field of rural education. But this situation can be changed with the use of online education.

If online education is to be made successful in the villages, then the use of digital mediums operating in local languages will have to be encouraged. In this way the hesitation towards digital mediums in rural India will also be broken. It has been revealed in many studies that India's rural population is digitally illiterate. Ignorance of reading, writing, understanding and communicating the language used in digital practice, and ignorance of new technologies is an obstacle in the path of online.

In the past years, the attraction of online education has increased all over the world. Many analysts are very excited about this, while some still consider its utility to be limited. To some extent, it is also true that till now even in developed countries of the world, no exact form of online learning method has been determined.

References

1. E. Allen & J. Seaman ; Course Stability: Online Education in the United States, Needham MA: Sloan Consortium
2. Nagi, A. ; Impact of e-education, p. a . Brooke, A. Buchholz, Z. Carson, A. In Zervas (ed.). E-Content: Technologies and perspectives of the European market. Berlin: Springer - Verlag, pp. 79–96
3. Means, B.; Toyama, Y.; Murphy, R.; Bakia, M.; Jones, K; Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies.
4. Government.economictimes.indiatimes.com>education
5. unesdoc.unesco.org



Right to Wholesome Environment

Bhawana D. Valvi

Assistant Prof.

NTVS's College of Law, Nandurbar

Email:- bhawanavalvi@gmail.com

Abstract:

We are living in the era of Globalization and Information Communication Technology. Though, we are still facing the problem of environment. It is our fundamental right to have clean environment. Our Constitution have made number of provisions regarding environment, it is upon citizen to maintain the surrounding.

Introduction-

The right to live clean and healthy environment is not a recent invention of the higher judiciary in India. This right has been recognized by the by the legal system and by the judiciary in particular for over a century or so. The only difference within the enjoyment of the proper to measure during a clean and healthy environment today is that it's attained the status of a fundamental right the violation of which, the Constitution of India will not permit. It was only from the late eighties and thereafter various High Courts and the Supreme Court of India have designated this right as fundamental right. Prior to this period, as pointed out earlier the people of this country has enjoyed this right. Not as a constitutionally guaranteed fundamental right but a right recognized and enforced by the courts of law under different laws, like Law of Torts, Indian Penal Code, Civil Procedure Code, etc.

In today's emerging jurisprudence, environmental rights, which encompass a gaggle of collective rights, are described as "third generation" rights. The first generation rights are generally political rights like those found within the International Covenant on Civil and Political rights while "second generation" rights are social and economic rights as found within the International Covenant on Economic, Social and Cultural Rights.

Right to a Healthy Environment :

Universal Acceptance around the turn of the twentieth century, the right to healthy environment got enshrined in art 21 of the Constitution of India. Courts in large measure relied on this right addressing variety of aspects relating to protection and improvement of environment. In *Ivory Traders v Union of India* the Delhi High court held that the rights of an ivory dealer are subject to the paramount rights of other people to have healthy balanced ecology .It also held that killing of elephants for procuring ivory should be stopped for balanced environment. Allahabad High Court observed in *S.K.Garg v State of UP* that right to water is part of the right of life guaranteed by the art 21.The use of agriculture causes pollution of underground water neighbouring properties. In *M P Rambabu v Divisional Forest officer* the Andhra Pradesh High Court observed under art 21 of constitution the right to live a decent life, a good environment and maintenance of ecology must held to have

primacy over the statutory right to hold and enjoy the property. Pollution is consequence of abusing the environment and natural resources

Though Part III of the Constitution does not contain any provision to provide right to Pollution free environment as a fundamental right.



If the word environment has wider dimensions, hygienic atmosphere and ecological balance can be brought within its ambit. Theoretically, it would be the duty of the State and citizens, to maintain hygienic environment, though the State has particular duty to forge its policies to maintain ecological balance and hygienic environment. Courts laid stress on the duties of the State and citizens combined in art, 48-A 47 and 51-A (g) of the Constitution. Environment Protection has now become a matter of grave concern for human existence. Therefore, the Central Govt., State Govts and the local bodies have an imperative duty to ensure and safeguard the environment in a proper manner, as well as to choose adequate measures to promote, protect and improve the natural and man-made environment.

Right to measure during a Healthy Environment As A Constitutional Right

Immediately after the Stockhome Declaration there was a growing trend in National Legal Systems to give constitutional status to environmental protection for example, Art 24 of the Swis Constitution adopted on June 6, 1976 provides that "the federal Legislature shall enact laws concerning the protection of man and his natural Environment against burdensome influences..." Art.-24 of the Greek Constitution, 1975 provides that "the protection of the natural and cultural environment constitutes a requirement of the State". The 1976 Constitution of Portugal (as revised in 1982) contains both a fundamental right and a press release of public policy concerning the environment. Article 45 of the Spanish Constitution (1978) provides that "everyone has the right to enjoy an environment suitable for the development of the person as well as the duty preserve it." Netherlands amended its Constitution in 1983 to incorporate Art 21, which provides that "it shall be the priority of the authorities to stay the country habitable and to protect and improve the environment". Article 225 of the Constitution of the Federal Republic of Brazil (1988) declares that "everyone is entitled to an ecologically balanced environment."

Even in India the Constitution was amended in the year 1976 by the Constitution of India Forty Second (Amendment) Act. This Amendment Act amended the Constitution to add among other articles Article 48A and 51A. Article 48A provides that "the State shall Endeavour to guard and improve the environment to safeguard the forest and wildlife of the country". Article 51A(g) provides that it's the elemental duty of each citizen of India "to guard and improve the natural environment including forest, lakes, rivers and wild life and to possess compassion for living creatures.

Citizen's Fundamental Duty to Protect and Improve Natural Environment-

The Constitution (Forty-Second Amendment) Act, 1976, added a new Part IV (A) dealing with fundamental duties to the Indian Constitution. Art-51-A enlists ten fundamental duties of which one is duty bound to protect and improve natural environment. It is notable that this part was added on the recommendations of Swarn Singh Committee bringing the Indian Constitution in line with Article 29 (1) of the Universal Declaration of Human Rights Article 51 (A) (g) deals with the fundamental duty with respect to environment. It provides as follows:
It shall be the duty of each citizen of India to guard and improve the natural environment including forests, lakes, rivers and therefore the wild life and to possess compassion for living creatures.

Fundamental duty with respect to environment is intended to promise people's participation in the protection of environment. Further it is important to note that the protection



of environment is a matter of constitutional priority Environmental problem is the concern of every citizen. Neglect of it is an invitation of disaster.

Constitution and Environment: The Supreme Court repeatedly made it clear that the right to life under article 21 of the constitution includes right to pollution free air and water. The Supreme court has held that right live is fundamental right under the article 21 of the constitution and it includes the right to enjoyment of pollution free water and air full and full and complete enjoyment of life . Thus right to pollution free enjoyment is justifiable and enforceable. The Supreme Court observed that where anything endangers or impairs that quality of life in violation of law, a citizen has right to have recourse to article 32; constitutional remedy before the Supreme Court for removing the pollution of air or water which may be determined to the quality of life . Therefore, under article 226 of constitution a writ would be maintainable if violation of environmental right in respect pf pollution frees air or water.

Conclusion-

It is true that to protect environment is the prime duty of all citizen .thus judiciary has tried a lot to control pollution and many scheme has been carried out to control environmental pollution. As per the development and environment mankind has to maintain both .So to protect environment is a fundamental right but along with it is also necessary to have clean environment, so the Supreme and High court had tried a lot to save and to protect the environment through different cases. Not only environment must be protected but all living being should get pure air, water, pollution free environment.

Reference-

1. S Shantakumar Introduction to Environmental Law, second edition pg. no. 91
2. P. Leelakrishnan Environmental Law in India pg.no. 235
3. Dr.Prem Nath Environmental Study pg.no.153
4. Dr. J.J.R. Upadha Environmental Law Second Edition, pg. no. 42.

Study of Agricultural Land Use Efficiency of Sangli District A Geographical Review

Dayanand S. Kamble^a & Omprakash V. Shahapurkar^{b,*}

^aAssistant Professor, Department of Geography, Jawahar Arts, Science & Commerce College, Andur, Dist. Osmanabad, Maharashtra, India.

^bHead, Professor. & Research Guide, Department of Geography, Rajarshi Shahu College (Autonomous) Latur, Maharashtra, India.

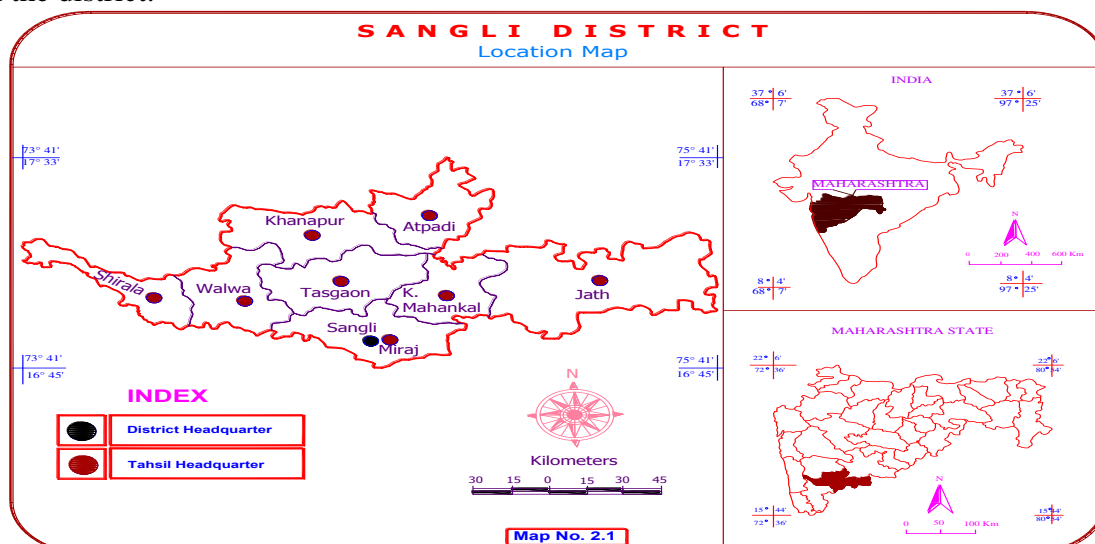
*Corresponding author Email: drovish2009@gmail.com

Introduction:

Land is our great heritage-a neglected, exploited and robbed heritage. The appalling part of the story is that inheritress are themselves plunders and yet the land continues to supply the lifeblood of our civilization and national existence (Ali S.M.1949), Land use efficiency may be defined as the extent to which the net sown area is cropped or-sown. The gross cropped area as the percentage of net sown area gives the measure of land use efficiency, which in other words, is the intensity of cropping and referred to the number of crops grown on the same area in any one agricultural year (Singh Jasbir,1975) The efficiency, which in a region is determined by the interaction of physical, socio-economic and technological factors, Several attempts have been made for computing agricultural efficiency, The agricultural efficiency was first measured by Kendall (1968) on the basis of ranking coefficient . The same technique was used by several geographers like L.D.Stamp (1960) and Shafi (1960).

Study Area:

The Sangli district is one of the district of Maharashtra States. It is located in the western part of Maharashtra. Sangli District lies between the 16°45' N to 17°22' N latitude and 73°42' E to 75°40' E longitudes. And it covers 8572 Sq.km. area. Sangli city is the district headquarters. It is bounded by Satara & Solapur districts, to the north, Bijapur District (Karnataka) to the east, Kolhapur and Belgaum (Karnataka) districts to South and Ratnagiri district to the west. Sangli district is situated in the river basins of the Warna and Krishna rivers. Other small rivers, such as the Warna and the Panchganga flow into the River Krishna. The average annual rainfall of the district is 620.20 mm. in year 2015. The district headquarter is Sangli, 728 villages and 7 towns are in the district.



Objectives:

The main objective of the present study is to analyse agricultural land use efficiency in the Sangli District.

Data Collection & Methodology:

The present study is based on secondary data source. To fulfill the objective data regarding net sown area, Gross cropped area is collected from socio-economic abstract of Sangli District. Agricultural epitomes published by state Government for the period of 1990-95 to 2010-15.

After data collection, the data is processed. To avoid fluctuation & to get reliable result the five years average is taken into consideration. Tahsil is taken as the basic unit of investigation. To determine agricultural land use efficiency Jasbir Sing's Index of land use efficiency is obtained by using the following formula.

$$\text{Index of Land use efficiency} = \frac{\text{Gross Cropped Area}}{\text{Net Sown Area}} \times 100$$

On the basis of Jasbir singh's Index value, the result and conclusions are drawn. Higher the index value the higher the land use efficiency. To analyse agricultural efficiency the tahsils of Sangli District.

Table No. 1: Landuse Efficiency in Sangli District (1990-95 to 2010-15)

(Area in Hectare)

Name of the Tahsil	1990-95			2010-15			Vol. of Change in Land use Efficiency
	Gross Cropped area	Net Sown area	Index of Land Efficiency	Gross Cropped area	Net Sown area	Index of Land Efficiency	
Shirala	247006	215036	114.86	271735	165320	139.12	24.26
Walva	369738	301390	122.67	378020	289510	130.57	7.90
Khanapur	482654	441038	109.43	579920	436710	132.79	23.36
Atpadi	270222	228761	118.12	404495	306370	132.02	13.9
Tasgaon	474258	424490	111.74	512865	398930	128.56	16.82
Miraj	456278	368313	123.88	459165	363685	126.25	2.37
K.Mahankal	253531	193879	130.76	345400	257110	134.33	3.57
Jat	817689	729764	112.04	1062965	940900	112.97	0.93
Total	3361376	2930886	114.68	4014565	3188535	125.90	11.22

Source: Computed by the researcher on the basis of Socio-Economic Review and Statistical Abstract of Sangli District 1994-95 to 2014-15.

Agricultural Land Use Efficiency (1990-95):-

The Tahsil which has above mean land use efficiency is included in this category

1. The very high agricultural land use efficiency is found in K.Mahankal, Miraj and Walva tahsil in 1990-96 due to Development of irrigation facilities, Transport and fertilizer material, rainfall facilities
2. The medium agricultural land use efficiency is observed in Shirala and Atpadi tahsil.



3. The Tahsil which have below agricultural Landuse efficiency is registered Tasgaon, Khanapur and Jat Tahsil due to most of the cultivated land is devoted to yearly crop i.e Sugarcane

Agricultural Land Use Efficiency (2010-15) :-

1. The very high agricultural land use efficiency is found only in Shirala tahsil in 2010-15 due to high rainfall, Development of irrigation facilities and fertilizer material, rainfall facilities.
2. The medium agricultural land use efficiency is observed in K.Mahankal,Khanapur ,Atpadi and Walva tahsil.
3. The Tahsil which have below agricultural Landuse efficiency is registered Tasgaon, Miraj and Jat Tahsil Drought prone area high rainfall floods and low in agricultural facilities. Due to most of the cultivated land is devoted to yearly crop i.e. Sugarcane and Fruits.

Changes in Agricultural Land Use Efficiency:-

During the period of investigation District as a whole has 11.22% positive change in land efficiency. Indices of landuse efficiency were increased in every tahsil due to increase in surface irrigation. Land use efficiency of total district was found 114.68in 1990-95 and it was found 125.90 in 2010-15.A clear view of the movements of index of land use efficiency in Sangli district.

Conclusions:

The study reveals that there is great influence of Geographical factors on agricultural land use efficiency in Sangli District. The degree of intensity of cropping and its spatio-temporal variation is influenced by the intensity of irrigation, rainfall distribution, soil fertility, physiographic etc.

References:

1. Ali S.M. (1979):“Land utilization Survey in India” The Geographer, M.U. Geographical Society, Vol.2No.1.PP.4
2. Jasbir Singh (1975): “An Agricultural Atlas of India – A Geographical Analysis”, Vishal Publication, Kurushetra, India PP.139
3. V.J. Patil (2003): “Geographical perspective on some aspects of Agriculture in Jalgaon district (Maharashtra)”. Ph.D. Thesis submitted to North Maharashtra University, Jalgaon pp. 235-40.
4. V.Nath, Land utilization in Indai, Journal of social and water conservation in India, Vol. I. No.2, 1953, p.4.
5. Singh Jasbir and Dhillon S.S. (2000): “Agricultural Geography (Second Edition)” Tata McGraw Hill publishing company limited, New Delhi, p.375.



Impact of ICT in Academic Libraries

Prof. Mohan D. Mahadik
(Librarian)

M.H. Mahadik Arts & Commerce College, Modnimb
Tal- Madha, Dist- Solapur.

Email ID : mohanmahadik@gmail.com

Abstract :

ICT has Impact every on sphere of academic library actively especially in the form of the Library collection development strategies library buildings and consortia ITC present an opportunity to provide value added Information services and access to a wide variety of digital bases information resources to their clients furthermore academic libraries are also using modern ICT's to automate their core function. Implement efficient and effective library cooperation and resource sharing network, Implement information system, develop institutional repositories of digital local content's and digital libraries and initiate ITC based capacity building programme.

Keynote : ICT, Society, Academic Libraries, Information centers

What are ICT's

ICT's are the hardware and software that enable society to create, collect, consolidate and communicate Information in Multimedia format and for various purpose.

Impact of ICT on Society

Development in ICT's have brought about the merger of the computing information communication entertainment and mass media industries providing a means of Exchanging information in the digital format used by computer.

What is the response of industry and government to the information society

- To in creased production and availability of more power full ICT hardware and software
- Provision of more efficient national and global information infrastructure for more efficient access and delivery of information
- To increased production and publication of multimedia in digital information.

What is the Impact of ICT's on Libraries and information center

- ICT made information creation in the digital format possible
- ICT made online access and file transfer possible
- ICT made Networking and sharing of information resource possible

The shift from print to digital

Books —————> Internet

ICT's have made the transfer of digital information, from romot sites possible

Impact of digital information mater in Libraries

Digital information can be self in multiple copies simultaneously over information network infrastructure minute a even a second there is no need for users with PCS attached to the network to physicaly go the library they can access information via there PCS.

- Digital information can be out an posted for document into another
- Digital information may be free or cheap then print equivalents



- Digital information often modifies libraries role in various ways

What are the effect of these development on the user community

- Increased level of technology literature
- Increased demand for better and faster access to information
- Agriviation of discrepancies between the information rich and information poor.

What as the Impact of ICT on libraries and library education

- 1) Need of ICT knowledge
 - 2) Need for ICT skills
 - 3) Need for ICT tools
 - 4) Need for continuous learning in the content of rapidly changing ICT's
- Library schools must integrate ICT's into their curricula and short courses to produce graduets who can use with the changing work environment

What are the personal Role of libraries in an information society

Creators - developers and producess of information produced and service

Collectors- Library, archivistes and record managers

Communicators - Information works extention worker subject specialist

Consloidators- reference libraries information broker, analysis

What will be the Trends in the development of libraries

- The library will be networks
- The library will be stokers with a core
- Have a access to global information
- Its become digital
- Its become virtual



Challenges of Academic libraries

- Collection development
- Resources sharing through network
- Faster direct communication amoung scientist and researchers
- Virtual us onsite reference service push and pull technology
- Better document delivery system
- Better document and delivery system
- Avelibety of full text matarials

Conclusion:

The inevitable conclusion that the ret has fulfilled its promise in academic library there is remarkable rise in the use of ICT many of the libraries activites are now ICT driven. This has led to the speed on acquisition processing storage, retrival and disssmination operations ICT has also help to curh on problem of information explosion in this information era.

References:

- 1) Nworked V.C(2007): Inpact of information us in teaching and resend activites of the academic staff of the faculty of medical science. University of Jos: A case study. Gateway library Journal 10(1)/23-33



- 2) Odion, F and Adfon, C. O(2009)/ Information and communication technology as tool for effective performance by Academic Librarian in Edo state Nigeria communicate, journal of library and information science 11(1)27-31
- 3) Pillow, A (2003): Deta Base electronic Resources
- 4) Ubogu, F.N(2000): The paperless Society: Realty African journal of library and archives and information science 10(1) 13-21



Category

[INDEXED JOURNAL](#)
[SUGGEST JOURNAL](#)
[JOURNAL IF](#)
[REQUEST FOR IF](#)
[DOWNLOAD LOGO](#)
[CONTACT US](#)
[SAMPLE CERTIFICATE](#)
[SAMPLE EVALUATION SHEET](#)

Journal Detail

Journal Name	RESEARCH JOURNEY
ISSN/EISSN	2348-7143
Country	IN
Frequency	Quarterly
Journal Discipline	General Science
Year of First Publication	2014
Web Site	www.researchjourney.net
Editor	Prof. Dhanraj Dhangar & Prof. Gajanan Wankhede
Indexed	Yes
Email	researchjourney2014@gmail.com
Phone No.	+91 7709752380
Cosmos Impact Factor	<u>2015 : 3.452</u>



News Updates Due to large number of application please allow us time to update your journal

Research Journey

Ins

SJIF 2019:

6.625

Area: Multidisciplinary

Evaluated version: online

Previous evaluation SJIF

2018: 6.428

2017: 6.261

2016: 6.087

2015: 3.986

The journal is indexed in:

SJIFactor.com

Basic information

Main title	Research Journey
Other title (English)	Research Journey
Abbreviated title	
ISSN	2348-7143 (E)
URL	http://WWW.RESEARCHJOURNEY.NET
Country	 India
Journal's character	Scientific
Frequency	Quarterly
License	Free for educational use
Texts availability	Free

Contact Details

Editor-in-chief	Prof. Dhanraj Dhangar M.G.V.'S ARTS & COMMERCE COLLEGE, YEOLA, DIST NASHIK
	 India
Publisher	MRS. SWATI SONAWANE

Get Involved

[Home](#)
[Evaluation Method](#)
[Journal List](#)
[Apply for Evaluation/Free Service](#)
[Journal Search](#)

Recently Added Journals

Research Journey

ISSN	2348-7143
Country	India
Frequency	Quarterly
Year publication	2014-2015
Website	researchjourney.net
Global Impact and Quality Factor	
2014	0.565
2015	0.676