ISSN No 2347-7075
Impact Factor- 7.328
Volume-3 Issue-1

INTERNATIONAL JOURNAL of ADVANCE and APPLIED RESEARCH

Publisher: P. R. Talekar
Secretary,
Young Researcher Association
Kolhapur(M.S), India

Young Researcher Association

International Journal of Advance and Applied Research (IJAAR)
Peer Reviewed Bi-Monthly

ISSN – 2347-7075
Impact Factor –7.328
Vol.3 Issue-1 Sept-Oct- 2022

International journal of advance and applied research (IJAAR)

A Multidisciplinary International Level Referred and Peer Reviewed Journal

Volume-3 ***Issue-1***

Published by: Young Researcher Association, Kolhapur, Maharashtra, India

International Journal of Advance and Applied Research (IJAAR)
Peer Reviewed Bi-Monthly
ISSN – 2347-7075
Impact Factor –7.328
Vol.3 Issue-1 Sept-Oct-2022

CONTENTS

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 **Impact Factor – 7.328**
Peer Reviewed **Bi-Monthly**
Vol.3 No.1 **Sept – Oct 2022**

FIELD OBSERVATION ON THE COURTSHIP AND NESTING BEHAVIOR OF SPOTTED DOVE, STREPTOPELIA CHINENSIS IN MANIPUR

Dr.Lalhmuoklien[1] Lalrengliani[2]
[1,2]Assistant Professor Department of Zoology Churachandpur Government. College
***Corresponding Author-* Dr.Lalhmuoklien**
Email : Email id: hmuoka2020@gmail.com
DOI- 10.5281/zenodo.7266930

Abstracts:
The spotted dove, Streptopelia chinensis is more or less a continuous breeder, which breeds almost throughout the year, excepting December and January. During December and January, only few individuals were observed pairing and showing their courtship display. But majority of them show their full courtship activities during the summer months when the temperature is high, day length is long and there is maximum food supply in nature..

Key words : Environmental factors, Pair-formation **,** Sexual behavior, Courtship display, Egg-laying and Incubation

Introduction

Spotted dove, Streptopelia chinensis is a sedentary columbid in which nesting occurs practically almost thoughout the year depending upon local environmental conditions. Sexes are alike and both male and female take part in incubation and parental duties.(Ali, 1983) The spotted dove, It is a successful species of dove which is abundantly found in all areas of Manipur (Manipur: 24. °N Latitude and 93. 3°E Longitude). While there exists considerable information on the reproductive physiology and behavior of a related species, i.e. Ring dove, Streptopelia risoria, very little is known on the breeding biology of spotted dove (Lerhman 1979; Goodwin 1983). Since the knowledge of the biological roots of behavior is rapidly increasing and there is lack of information on field studies, observation on the courtship and nesting behavior of Spotted dove, Streptopelia chinensis was thought to be worthwhile.

Fig.1. Spotted Dove, Streptopelia Chinensis

Materials and Method

The present work is an outcome of field investigation. The information included in this work are based on studies for a relatively short period, that is approximately one year only (January ,2019 to January, 2020). Beginning from January, 2019 to January, 2020, regular observation on Courtship and nesting behavior of Spotted doves were made with the help of binocular in feral population . Observation on sexual behavior, pair formation, territory establishment, nest building, copulation , egg- laying, incubation, hatching and parental care had also been observed in field condition.

Courtship Display

The courtship display is common to all the species of doves. It is primarily a sexual display and is shown at fullest intensity by a male towards a female to whom he is strongly attracted. For this purpose, five to ten pairs of Spotted doves were observed in field condition for a period of one month. At the beginning of the breeding cycle, the male occupies a definite territory which he defends and which forms the area in which the bird carries out its activity. Once the male has established a selected territory he usually looks for a female with which to mate. The male begins its courtship display and the female choose the partner. The bowing display of the male can be characterized by lowering of head and uttering a characteristic cooing calls. .During the courtship , the bird bill may face straightway the ground. Besides, inflatation of the neck and spreading of the tail occurs during the courtship or bowing display. In certain species of doves, after the birds have selected their partners they indulge in billing and regurgitating milk to one another. However, such an observation was not made in the present study

Pair formation

Pair formation starts with the nest calling and the female being attracted by the male.The female usually first become interested in the male through seeing him giving his display flight or through his flying to her and directing the bowing display at her. If the female is sexually aroused, she responds to the bowing display by nodding and parading. Soon the male begins to display preen behind his wing and to offer his open beak. If the female response, they bill, copulate and indulge in post copulatory display. Sometimes, the female refuse to accept a male who does not possess a nest site.

Nest-building

After the bird has selected their partner, both male and female dove start building the nest. The nesting place choosen by spotted dove vary from one another and according to the environment and opportunities of the individual pairs. Normally they choose a place that is well screened by vegetation. The time taken to build the nest varies from three to six days. Both male and female participated in building the nest.There is no any particular materials for building the nest. The male usually gathering materials nearby and hand over it to the female. Then the female construct the nest.

Egg-Laying

After a week or more of nest building, the female laid the eggs. Two white eggs are normally laid by Spotted dove. Eggs are white, elliptical with a smooth texture. The size of the egg is 27 X 23 mm and its weight is 5.3 gms . Sometimes, if one of the eggs is removed, it is possible to get the female to continue laying until two eggs are laid

Incubation

After the female laid the second egg, both of them participated in incubating the eggs. The male sit for about 6 hours and the female for the remaining 18 hours a day. Eggs are incubated at about 33°C to 36°C. The incubation period lasts for about 13 days or more depending on the environmental factors like light, temperature, humidity and so on.

Hatching and Parental Care

After 13 days of incubation, the shell of the egg is thinner and is broken by the squab, with a sort of growth on the upper mandible called 'egg- tooth' which tends to disappear as the squab grows.When the eggs hatched out, the parents begin to feed their young one with crop milk, (a milk secreted from crop sac) for few days after which they also received morsels of soft foods and small seeds that the parents had eaten When the hatchlings are fully grown and can fend for themselves (13 to 16 days after hatching), nestlings left the nest and live in a flock with their parents.

Fig.2: Eggs of Spotted Dove

Conclusion

The breeding season of Spotted dove, Streptopelia chinensis is not well defined and birds have been observed breeding practically all the year round (Ali, 1979) However, during December and January, only few pairs of spotted dove were observed nesting. Pair formation starts from February onwards and most of them show their full sexual activities during May to July. This indicates that the environmental factors like day length, temperature, rainfall and food availability may be the proximate and ultimate factors for the courtship and nesting behavior of this species.

Acknowledgement: I am gratefully acknowledge to all my colleagues who accompanied me during my field investigations.

References

1. Ali, S (1979) : Field guide to the birds of the Eastern Himalayas. Oxford University Press, New York and London
2. Ali,S and Ripley (1983): Handbook of birds of India and Pakistan. Oxford University Press, Delhi
3. Goodwin,D.(1983: " In pigeons and doves of the world" edited by D.Goodwin, British Museum (Natural History), Cornell University Press, New York, 1983
4. Lerhman , D .S. (1979) : The reproductive behavior of Ring dove, Reading from Scientific American , edited by R.Silver and H.H. Fedar, W.H. Freeman and Company, San Francisco.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

HOLISTIC DEVELOPMENT AND 21TH CENTURY SKILL A SHIFT TOWARDS MULTIDISCIPLINARY EDUCATION

Vijayalaxmi M. Swami
Swami Ramanand Marathwada University, Nanded.
Corresponding Author- **Vijayalaxmi M. Swami**
Email : Email id: Vijayaswami13@gmail.com
DOI- 10.5281/zenodo.7266942

Abstract:-
Today teachers and all over world are trying to incorporate Holistic development in education it is important to the pupils to think about a shift towards multidisciplinary education. In this paper discusses online learning environment and support for student as per the future of the student it is very necessary to develop this internal capacity to handle all the challenges. To help with vocational education and multicultural education and update their knowledge.

Key words :- NEP-2022, Vocational education, online & digital learning. Optimum learning, and teachers transforming their vision and action.

Introduction:-
How does a multicultural educational process and how important is its role in modern society? Reality shows that it is difficult to multidisciplinary education and holistic development mostly applied all over the world because discipline in process education and updating the knowledge. The basic Structure of education. Because the education defines that Progressive changes in behaviour and to admire the global knowledge in brain.

Materials and Methods :-
Let's discuss some reasons explaining the existence of the related subject.
First, multidisciplinary and holiest education aims diverse captains of human being indicating intellectual aesthetic, social, physical, emotional, interpersonal, humanistic and moral cupcakes in an integrated manner. It also includes Vocational education. Now we discuss the vocational education what B meant by Vocational education. Vocational education is education that prepares people to work as a technician or to take up employment in a skilled credit or trade as a tradesperson or actions. Factually Vocational education and Training (VET), also called career and Technical Education (CTE), Prepares learners for jobs that are bussed in manual or practical activities, traditionally non-academic and totally related to specific trade, occupation, hence the term in which the learner. For example In India, make up and beautician training, medhendi (Henna) designing, Cooking and baking classes. The main part of vocational education provides skill based learning and focuses on how to teach practical skills. This means that upon completion of the program a student has gained the necessary knowledge and hands- on Skills needed to perform specific tasks of an occupation Secondly. Educational researches have argued that optimal learning environments best students positive emotions and engagement and show that a combination of challenging and meaningful class work, student autonomy, and high teacher support plays an important role in this process. Most important scenario is A appropriate existing e-learning platforms such as SWAYAM, DIKSHA, will be extended to provide teachers with a Structured, friendly user set of assistive tools, such as two-way video and two way-audio interface for holding online classes are not necessary as the present pandemic

has shown. Every child is unique. He or she has unique personality traits, interests, preference, value, altitudes, strengths, and weakness, the educational curriculum must be able to help every child final his or her unique place. In the world in alignment with the uniqueness that he or she has. In order to achieve this, holistic development of a child of utmost importance. The holistic approach and skill of 21th century develops students to be critical, confident and independent: aims to make learning process of self-improvement that explicitly recognizes the self and the social context of learning and teaching and recognizing the needs of the individual learner in the interaction. Multidisciplinary education and holistic approach both are the equal role in education field. Holistic development through education from the early stage of a Childs life has become more important today and that the best century. Virtual learning process is one of the best way to learn difficult concept for student that why online and digital platform all available in this department same international Journal wrote about education field and the importance about the multidisciplinary education and A shift towards multidisciplinary education. It includes renewed impetus to inclusion and equitable education and also the re-imagining Vocational education for developing Indian student.

International Journal of advance and applied Research (JAAR) is a multidisciplinary research journal.

Now we have to think about multidisciplinary or interdisciplinary learning is a "whole" or "Comprehensive" method that covers an idea, topic, or text by integrating multiple knowledge domains. It is a very powerful method of teaching that crosses the boundaries of a discipline or curriculum in order to enhance the scope and depth of learning.

Teacher and student interaction is very needful or an important scenario of the teaching and learning process because of multidisciplinary approach, a student gains an arsenal of skills- problem-solving, critical thinking, time management, communication and writing, analysis and research methodologies, team work, and much more - that are easily transferable across work environment.

The advantage of multidisciplinary education-

1) Learn multiple education at a time It is most important that, various type of knowledge resources are very useful for students brain.

In SCERT provides unique facility to students that it is E-learning material for the standards I to XII it is available in Marathi and English medium also it consists ebalbharti for Students convenients If you look at the top most universities worldwide, learning happens quite differently, consciously breaking down boundaries between disciplines, students can take up course from different schools. This means the breadth and depth of university education are tremendously enhanced. The most effective universities are always multidisciplinary.

2) **Critical thinking and skills:** At the end of the thing, the real world is complex. Phenomena are complex you simply can not understand them through one lens. A rounded holistic perception is key. An inevitable outcome of looking at life and learning through a multidisciplinary lens is the ability to approach problems with a broader perspective.

3) **Unique classroom expenses.**

At the end of the day, the flavour of maths is greatly spiked, thanks to this inventive method and the cake, of care!

Tools and techniques like this are not uncommon at JGU. The classroom came alive with role plays, case studies, presentations, audio-visual aids, field, work, texts, hands-on learning, guest lectures, seminars and much more.

The main objective of this study is to assess the 21st century learning skills of the students and the teaching practices in the 21st century classroom. Specifically, the study sought answers to the following questions:

1) How may the 21st century learning skills of the students be described in terms of eight (8) components of the 21st century learning skills?
2) How may the teaching practices be described in terms of 21st century learning skills?
3) Is there a significant relationship between the perception of the students on their acquired 21st century learning skills and the teaching of 21st century learning skills in the classroom based on the perception of the teachers?

4) What is the implication of this study to the teachers, students and administrators of BuISU-CoEd? This study used a descriptive method of research. Data were gathered and analyzed. Student-t and Pearson r product moment were used to test the hypothesis between the difference in the perceptions of the two groups of respondents and the relationship between them. Mean was also used to describe the summary of the questionnaire. The topmost skills of the students are; using technology as a tool for learning, self-direction skills, and collaboration. The topmost teaching practices are; local connections, creativity and innovation skills, and using technology as a tool for learning. The results indicated that the students' perception on the 21st Century skills that they acquired are not the same as what the teachers perceived to be what they transferred. This research could serve as a basis for the seminars and workshops that may be provided to staff in-house or external.

Conclusion :-

"Education can not be effective unless it helps a child open up himself to life."- Maria Montessori.

According to all the multidisciplinary and holistic education it is based on 2tth century skill. Education depends upon all these things perhaps optimum leaving and support for students. It is also effective for renewing impetus to inclusion and suitable education. It must be an allocation of educational resources for equity and equality. A the end of the day it also is strategic learning instilling creatively and entrepreneurship. Maybe it has friendly learning environment Appear. The most important thing is that it must be recognize for its efficient resourcing and effective governance. In multidisciplinary education, It B most important thing is discipline and it took the standard seating and accreditation. And the final step of multidisciplinary education is carrier management and progression and a spark leading to professional growth. During all the discussions it is almost an impact on Institutional Restructuring and consolidation for the pupil's great future.

Reference :-

1) *Aamodt, M.G. & Keller, R.S. (1981), using the self consciousness scale to predict student discussion group participation Teaching of Psychology, 8,176-177. (ES)*
2) *Auster, C.J. & Mac Rone, m (1994). The classroom as a negotiated social setting; An empirical Study of the effects of faculty members behaviours on students participation teaching sociology, 22, 289-300 (ES).*
3) *Bean J.C. & Peterson D. (1998) Grading Classroom Participation. New Directions for Teaching Sociology, 22, 289-300 (ES)*
4) *Bowers, J.W.1986. Classroom Communication apprehension : A survey communication Education, 35, 372, 378 (ES)*
5) *Cayanus, J.L. Martion, M-M., & Goodboy, A.K.2009. The relation between teacher self – disclosure and student motives to Communicate. Communication Research Reports, 26, 105, 113. (ES)*
6) *Melvin, K.B.-1988. Rating class. Participation : The prof. / peer method. Teaching of psychology, 15,137, 139 (ES)*
7) *Rocca, K.A.2009. Participation in the college classroom: The impact of instructor immediacy and verbal aggression, journal of classroom Interaction, 43, 22, 33 (ES)*
8) *Tatar, S 2005, why keep silent ? the classroom participation experiences of non native-English-speaking students language and intercultural communication, 5,284,293.*

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

EFFECTS OF ASSISTED AND RESISTED SPRINT TRAINING ON SPEED OF GOVERNMENT SCHOOL MALE FOOTBALL PLAYERS

Dr.P. GANESH KUMAR[1] Dr. K. TAMILARASI[2]
[1]Assistant Director of Physical Education, Veterinary College and Research Institute Salem, (A Constituent College of Tamil Nadu Veterinary and Animal Sciences University) Tamil Nadu
[2]Director of Physical Education, KPR College of Arts Science and Research, Coimbatore, Tamil Nadu
Corresponding Author- **Dr. P. GANESH KUMAR**
Email : gkpd82@yahoo.co.in
DOI- 10.5281/zenodo.7266953

Introduction

Sports Training includes physiological changes in most every system of the body particularly with the muscular system which leads to raise in physical performance of the individual who involves in that particular sports training. Football has become a very popular game in the world. Almost all the nations play the game for the enjoyment and competition. Modern Football is very fast by its nature. Playing Football is a form of intermittent exercise consisting of repeated short bouts it high intensity exercise interspersed with periods of running at different speeds, walking and standing still, almost each player only performs high-intensity exercise for a relatively small percentage of the total game time. Sports training also Sprinting at full speed are to maintain, for long as possible, this speed. Speed can be developed only by sprints of three to five seconds in duration. This means covering 20 to 40 meters as the ATP reserves do not last any longer in maximum effort. Sports training also enable the athletes to produce outstanding and record breaking athletic performance.

Methodology

The purpose of the study was to find out the speed performance of two-sprint training on government school male Football players. To achieve the purpose of the study 45 government school male football players from Namakkal district, Tamilnadu were selected as subjects at random. The age of the subjects ranged from 15 to 17 years. The selected subjects were divided into two experimental groups and a control group. Group -1 underwent Assisted Sprint Training (AST); Group - 2 underwent resisted sprint training (RST); Group - 3 served as control group In this study the speed was select as dependent variable. The data was collect for all the groups on speed by using the 50mtr run test, the units of the measurements were recorded in second The control group was not exposing to any specific Training. However, they were participating in their regular Physical activities. The experimental groups I, and II were subjected to 8weeks of Assisted and resisted training respectively. Then training was given for five days per week. Every training session lasted for 60 to 90 minutes. The training program was scheduled for the morning between 6.30 am and 8.00 am. For measuring speed, 50yards' test used and the unit of measurement recorded in seconds. ANOVA was use to find out significant adjusted posttest mean difference of three groups with respect to speed. scheffe's post hoc test was use to find out pair-wise comparisons between groups with respect speed.

Table I
Analysis Of Covariance Of Pre-Test, Post Test And Adjusted Post Test On Speed Of Experimental Group I, Experimental Group Ii And Control Group (Scores in Seconds)

Test	Exp. Group I	Exp. Group II	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	OF Value
Pretest								
Mean	7.53	7.53	7.55	Between	0.0040	2	0.0020	0.10
S.D.	0.14	0.14	0.13	Within	0.8440	42	0.0201	
Post test								
Mean	7.25	7.33	7.52	Between	0.5924	2	0.2962	13.09
S.D.	0.12	0.14	0.17	Within	0.9507	42	0.0226	
Adjusted Post test								
Mean	7.25	7.33	7.51	Between	0.5016	2	0.2508	85.73
				Within	0.1199	41	0.0029	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 42 and 2 and 41 are 3.222 and 3.226 respectively).

The Table-I shows the analyzed data on speed. The pre-test means of speed were 7.53 for both experimental group I, 7.53 for experimental group II and 7.55 for control group. The obtained "F" ratio of 0.10 was lesser than the table F-ratio 3.222. Hence, the pre-test was not significant at 0.05 level of confidence for the degrees of freedom 2 and 42. The post-test means of speed were 7.25 for experimental group I, 7.33 for experimental group II and 7.52 for control group. The obtained "F" ratio of 13.09 was higher than the table F-ratio 3.222. Hence, the post-test was significant at 0.05 level of confidence for the degrees of freedom 2 and 42. The adjusted post-test means of speed were 7.25 for experimental group I, 7.33 for and experimental group II and 7.51 for control group. The obtained "F" ratio of 85.73 was higher than the table F-ratio 3.222. Hence, the adjusted post-test was significant at 0.05 level of confidence for the degrees of freedom 2 and 41. Since, three groups were compared, whenever the obtained 'F' ratio for adjusted posttest was found to be significant, the Scheffe's test to find out the paired mean differences and it was presented in below table.

Scheffe's Post Hoctest Mean Differences On Speed Among Three Groups (Scores in Seconds)

Experimental Group I	Experimental Group II	Control Group	Mean Differences	Confidence Interval Value
7.25	7.33	-	0.08*	0.049
7.25	-	7.51	0.26*	0.049
-	7.33	7.51	0.18*	0.049

* Significant at .05 level of confidence.

The above table shows the scheffe's post-hoc test results. The ordered adjusted final mean difference for speed of experimental groups I, II and control group were tested for significance at 0.05 level of confidence against confidential interval value. The mean differences between experimental group I and experimental group II, experimental group I and control group and experimental group II and control group were 7.25, 7.33 and 7.51 respectively and it was seen to be greater than the confidential interval value of 0.049. Hence the above comparisons were significant.

Conclusion

Within the limitations of the present study, the following conclusions were drawn: The skill performance variable of Speed can be improved through both Assisted Sprint Training (AST) and Resisted Sprint Training (RST) as compared to Control groups. Provided Assisted Sprint Training (AST) has greater influence on speed, on the sample population while comparing with the other two groups like Resisted Sprint Training and Control Group.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

WILLA CATHER: AN ECO-CRITICAL CONSCIOUSNESS IN O PIONEERS! AND MY ANTONIA

Dr. G. N. Khamankar
Head, Dept. Of English, Vivekanand Mahavidhyalaya,Bhadrawati.
Corresponding Author- **Dr. G. N. Khamankar**
Email : j.khamankar@gmail.com
DOI- 10.5281/zenodo.7266967

Abstract:

Today, Willa Cather is studied for her exploration of eco-critical and ecofeminist writings. O Pioneers! is known as Cather's "second first novel" of the frontiers that celebrates the immigrant farmers and their quest to cultivate the prairies, and My Antonia as her masterpiece. In both these novels Cather portrays her deep attachment for nature and her concern for the relation between human beings and nature. The aim of eco-criticism is to revitalize literary study and highlights the vibrant issues concerning our global and local ecology. The paper aims to explore Willa Cather's O pioneers! and My Antonia from eco-critical perspectives. Much of Willa Cather's writings shows her concern for nature and provides an ample opportunity for eco-critical reading. Many critics like Mary Ryder, Susan Rosowski and Glen Love identify Willa Cather as an early ecological writer who portrays the complex connection between people and place through the delineation of her characters. As an ecological conscious writer, Cather explores the value of nature, the influence of nature on humanity, and man's philosophical and ideological views of nature. The "green reading" of her text offers an opportunity to the readers to examine the relationship between man and nature, as it presents a complete picture of sustainable community. In both the novels, O Pioneers! And in My Antonia, we have characters loving the ecosystem and protecting it.

Key-words: O Pioneers!, My Antonia, Nebraska prairie, frontier, ecology, nature, identity, eco-criticism, consciousness etc.

Inroduction:

Born in 1873 in Virginia, Willa Cather is a prolific American writer of the twentieth century. Her works explores the tensions of American existence in the nineteenth and twentieth centuries. Her genius as a writer largely rests on her novels about immigrants on Nebraska prairie and the American Southwest. Cather moved with her family from Virginia to frontier Nebraska at the early age of nine and there she grew up among the immigrants from Europe -Swedes, Bohemians, Russian, and German. Thus, her novels are popular for her brilliant portrayals of the settlers and frontier life on the American plains. Her Nebraska pioneering novels established her unique position in American literary tradition. Her early life in the mountainous ridge of Virginia for the wide open prairies of the Plains had a formative effect on her life. Cather herself admitted in an interview that: "I was little and homesick and lonely… So the country and I had it out together and by the end of the first autumn the shaggy grass country had gripped me with a passion that I have never been able to shake. It has been the happiness and curse of my life." (Bennett 140) Cather works have been interpreted from various point of view. Today, Cather is studied for her exploration of eco-critical and ecofeminist writings. O Pioneers! is known as Cather's "second first novel" of the frontiers that celebrates the immigrant farmers and their quest to cultivate the prairies, and My Antonia as her masterpiece. In both these novels Cather portrays her deep attachment for nature and her concern for the relation between human beings and nature. Concern for ecology and the continuous misuse of our natural resources has recently caught the attention of scholars and writers around the globe. Ecological concern and its reflection in literature has given rise to a new branch of critical discourse called Ecocriticism. As a newly emerged critical discipline, the aim of eco-criticism is to revitalize literary study and highlights the vibrant issues concerning our global and local ecology. The term 'Ecocriticism' first appeared in 1978 in William Rueckert's essay "Literature and Ecology: An Experiment in Ecocriticism." However, it was in the 1990s the term 'Ecocriticism' emerged as separate discipline of literary theory. The paper aims to explore Willa Cather's O pioneers! and My Antonia from eco-critical perspectives. Much of Willa Cather's writings shows her concern for nature and provides an ample opportunity for eco-critical reading. Many critics like Mary Ryder, Susan Rosowski and Glen Love identify Willa Cather as an early ecological writer who portrays the complex connection between people and place through the delineation of her characters who are "responsive and sympathetic to ecological issues." (Ryder) In the process of finding her literary voice, Cather shows the ambivalent role of nature. She creates an environment where nature exists as a benefactor with culture. As an ecological conscious writer, Cather explores the value of nature, the influence of nature on humanity, and man's philosophical and ideological views of nature. She places her character in the ecological environment by describing the experiences of everyday life. Breanne Grover remarks that the writings of Willa Cather "grows out of her experiences with landscape" (41-42), which reflects the ecological aesthetics of understanding and preserving one of the greatest biological regions of the world- the virgin soil of Nebraska. Therefore, most of the novels of Willa Cather are set in Nebraska, with its vivid description of the prairie landscape, the joy and sufferings of the life of immigrants and the environmental changes and its impact on various characters. Her characters who have been transformed by the environment shows unique selves who struggle through their lives in search of their true self and goes through the process of resistance, revolt, and reconciliation. A strong interaction between human being and nature runs throughout her writings. Published in 1913, as a regional novel of Willa Cather, O Pioneers! is known for its vivid re-creation of the struggle and hardship of prairie life. The title of the novel is taken from Walt Whitman's poem "O Pioneers! O Pioneers!" which like the novel celebrated the hardships, virtues, and inner spirit of prairie life. Based on Cather's Nebraska childhood and her belief in the primacy of spiritual and moral values over the purely material, the novel depicts the story of the Bergson, a family of Swedish immigrants in the farm country near the town of Hanover, Nebraska. Cather skillfully uses the Nebraska material in the novel to presents the conflict between the land and civilization and the dangers of destructive materialism as its major concerns. Its heroine, Alexandra Bergson, a strong willed woman inherits the family farmland after the death of her father, John Bergson. She is something of an earth mother who turns the wilderness farmland into a very fertile and prosperous one. David Stouck says, that "The epic vision of the land and its first people in O Pioneers! gives way to the personal quest of pastoral in My Antonia." (Stouck)The novel has five parts, each of which consists numerous chapters. "The Wild Land", "Neighboring Fields", "Winter Memories". "The White Mulberry Tree", and "Alexandra." As the head of the Bergson family, Alexandra is more interested in taming the wild farm and keeping the animals. The narrator shows how Alexandra become a part of the landscape, and how she is enmeshed with the soil, as she felt that her heart was hiding somewhere in the land. After visiting the low-land Alexandra's feeling towards the land was that, "She had never known before how much the country meant to her. The chirping of the insects down in the land grass had been like the sweetest music. She had felt as if her heart were hiding down there, somewhere, with the quail and the plover and all the little wild things that crooned or buzzed in the sun. Under the long shaggy ridges, she felt the future stirring. (O Pioneers! 71.) The narrator describes the deep attachment of Alexandra with the land. When Alexandra and her brother Emil are returning from their trip down to examine the low-lands, "Emil wondered why his sister looked so happy. Her face was so radiant that he felt shy about asking her. For the first time, perhaps, since that land emerged from the waters of geologic ages, a human face was set toward it with love and yearning. It seemed beautiful to her, rich, and strong and glorious. Her eyes drank in the breadth of it, until her tears blinded her. Then the Genius of the Divide, the great, free spirit which breathes across it, must have bent lower than it ever bent to human will before. (O Pioneers!65)

Throughout the novel, Cather outline the developing relationship between Alexandra and the land. She seems to become an integral part of the land. During the prosperous years when the narrator describes Alexandra's farm, the text reads, "When you go out of the house into the flower garden, there you feel again the order and fine arrangement manifest all over the great farm; in the fencing and the hedging; in the windbreaks and sheds, in the symmetrical pasture ponds, planted with scrub willows to give shade to the cattle in fly-time. There is even a white row of beehives in the orchard, under the walnut trees. You feel that, properly, Alexandra's house is the big out of doors, and that it is in the soil that she expresses herself best. (O Pioneers!84) Thus, it is difficult to imagine Alexandra away from the land. The source of her happiness is the soil. For her it is a "joyous germination" in her own body. When she sees the prosperous farm and look back on what on what her hard work has achieved, the narrator states; "There were certain days in her life, outwardly uneventful, which Alexandra remembered as peculiarly happy; days when she was close to the flat, fallow world about her, and felt, as it were, in her own body the joyous germination in the soil. (O Pioneers! 203-204) Though Alexandra has to suffer in the wild land with her irresponsible brothers, her love for the land makes her adopt new technology of farming which itself is the deep attachment of the writer towards the Nebraska prairie. In this context professor Chris Cuomo's notion of relationship between woman and nature seems appropriate and suggestive that "women have special links with the environment and nature…" (Cuomo) Like Alexandra, Mrs. Bergson, wife of Mr. Bergson whose love for the land is so strong that she wishes to be buried near her husband's grave instead of selling the land. For her nature is something that protect us and that we are always in the grip of nature. Thus, Cather, throughout the narrative portrays her characters' deep attachment with nature. Her perspectives and attitude reflects many of the features of deep ecological thinking. In this respect, we can say that literature and literary criticism can play an important role in strengthening greater environmental consciousness in an age of modernization and globalization. Glean Love once remarks that, "The most important function of literature today is to redirect human consciousness to a full consideration of its place in a threatened natural world…Paradoxically, recognizing the primacy of nature, and the necessity for a new ethic and aesthetic embracing the human and natural – these many provide us with our best hope of recovering the lost social role of literary criticism." (Love, P.237-38) Alexandra, the protagonist in O Pioneers! approaches this process in an intuitive way. Her relationship to the land is spiritual as well as economic and she recognizes the fact that her destiny and the land are inseparable parts of her life. She considers herself merely a benefactress of the land. The novel states; "We come and go, but the land is always there. And the people who own it- For a little while." (O Pioneers! 308)

Another important environmentally conscious character in the novel is Crazy Ivar who is shown to depict his faithful affection towards the wilderness. Cather portrays Ivar as a Swedish hermit completely integrated into the lay of the land. He lives remote from the human dwelling, preaches non-violence, ecological responsibility and maintains a wild life refuge on the Divide. His love for the animal and birds is an important aspect of this wilderness. The narrative states: "You could have walked over the roof of Ivar's dwelling without dreaming that you were near a human habitation. Ivar had lived for three years in the clay bank, without defiling the face of nature any more than the coyote that had lived there before him had done." (O Pioneers! 14) Ivar is depicted as the most obvious spokesperson for Cather's ecological ideas who protect life by banning guns, "no guns, no guns!" (O Pioneers! p. 30), and caring for animals.

Cather's works emerge as ecologically conscious texts when they are read against the background of ecocriticism. She asserts that the conservation of natural resources is imperative for sustainable development. In an account, Cather skilfully shows the importance of trees. The white mulberry tree is shown to be the only character in the play that knows the suffering of Marie, and also about her love to Emil. Once Marie tells Emil that the Bohemians used to worship trees as they believed that trees bring luck to them- good as well as bad. Though Emil discards her views, Marie considers trees as true friends which ultimately comforts us. She says, "I like trees because they seem more resigned to the way they have to live than other things do. I feel as if this trees knows everything I ever think of when I sit here. When I come back to it, I never have to remind it of anything; I begin just where I left off. (O Pioneers! 59)

My Antonia (1918) is one of the most appreciated novels and considered to be the finest literary work of Willa Cather. Last in the sequence of Cather's 'prairie trilogy', the novel explore the hardship and struggle of immigrant families face upon their arrival on a new land and the relatedness between human and environment. Set against Cather's own familiar pastoral setting of Red Cloud, Nebraska, the novel is an autobiographical, "there occurs a majestic, mysterious image that suggest, in another way, the timeless aspect of the subject matter which seems most naturally her own." (Ghent) The novel is a coming of an age story in the form of a memoir narrated by the Jim Burden about his childhood friend Antonia. Jim memories of Antonia, as collected in his diary given to the narrator constitute the entire story. He recalls many experience with Antonia in nature and portrays himself and others with consistency and sympathy. Edward Piacentino remarks that Jim Burden is "the controlling character through whom the event are filtered." (Piacentino 107) Moreover, his strong attachment to the Nebraska landscape create a sense of deep commitment, longing and nostalgic quality to the story. He acknowledges that the story of Antonia is the product of his mind and heart. Jim remains a constant character who assume the role of the detached observer. The word 'I' appeared in the novel shows the fact that the novel is a first-person memoir. The novel begins with the migration of newly orphaned Jim Burden and the Bohemian Shimerda family into the Nebraska plains. Antonia, the heroine of the novel is the eldest daughter of the Shimerda family who overcome hardship in her life and triumphs in the American frontier. We see her amid her struggle with cultural survival, domestic misfortune and agriculture toil which ultimately find contentment with the land. The novel explores the symbolic bonding between land and human life which functions as a repository of human thought, action and happiness and which gives a sense of completeness. Antonia's deep attachment to the land shapes her personality and gives her a true sense of happiness. On the other hand, Jim's separation from his land leaves him insecure and alienated. Thus, nature appears to be the real source of human identity and happiness. Antonia

Shimerda, the protagonist of the novel is in indispensable and life-long proximity with the land of the Nebraska. She remains alive and energetic and never loses her hope for future. Her deep association and connectedness with land of Nebraska is clearly evident in her expression; "I like to be where I know every stalk and tree, and where all the ground is friendly. I want to live and die here." (My Antonia 320) To be specific, it is the land of Nebraska which determines Antonia's happiness, pride and a sense of placidness. As an adult, Jim and Antonia recall their childhood days while walking about the prairie, the sight of the wide, rolling prairie frightens Jim at first, but soon he enjoys the sights of his grandmother's garden. In the well preserved garden full of flowers and vegetables Jim feels a joy of heaven as if he assures that he become a part of nature. Similarly, for Antonia nature appears to be a guide, guardian and soul which brings harmony and blessedness in her life. After the death of her father in winter, the summer lifts her depressed and saddened spirit. We find Antonia working in the land blissfully. Jim and his grandmother become happy to see Antonia. Eventually, when Jim returns Black Hawk, the place of his childhood, the landscape again makes him to recall his past prairie life. He realizes that the land will always connect him to Antonia, though they lead different lives. Such belonging to land gives Jim a sense of wholeness. He responds powerfully to the natural surroundings and develop a strong attachment with it. The sight of the beautiful river makes Jim to feel free, the setting sun captures his isolation, and wide-open Nebraska plains overcome his melancholy. Thus, the characters in the novel often develop an intense rapport with natural surrounding which breads happiness in their life. Cather asserts that the land is a vital force that enrich and sustain all living things, if we work hard to cultivate it. It symbolises the spirit of freedom, permanence, timelessness, happiness and endurance. In term of eco-critical paradigm, the novel exemplifies the symbolic bonding between the land and human life and the existence of human life is largely co-related to the existence of the land; the nature. Antonia's personality is the product of her childhood experiences and her strong attachment with the prairie. Cather writes about Antonia's deep attachment to her motherland; "if I was put down there in the middle of the night, I could find my way all over that little town; and along the river to the next town, where my grandmother lived. My feet remember all the little paths through the woods, and where the big roots stick out to trip you. I ain's never forget my own country. (My Antonia 237-38) Jim Burden, the narrator of the novel accepts the bonding between the land and human life. He expresses his attachment with land as: "The changes seemed beautiful and harmonious to me; it was like watching the growth of a great man or of great idea. I recognized every tree and sandbank and the rugged draw. I found that I remembered the confrontation of the land as one remembers the modelling of human faces. (My Antonia 306) At the close of the novel, when Jim visits Antonia after a period of twenty years, he finds her as a strong, mature woman caring her large family. According to William Thorp, My Antonia is a story of an affectionate protagonist who struggles throughout her life to achieve success. Thorp writes: "The story belong to Antonia, the affectionate Shimerda girl who becomes in the end a strong, the most completely realized of Willa Cather's true Pioneers. (Thorp 58)

Ecologist views Willa Cather as a lover of nature. The "green reading" of her text offers an opportunity to the readers to examine the relationship between man and nature, as it presents a complete picture of sustainable community. She uses her character as mouthpiece for expressing her love for nature, and a strong interaction between her characters and environment runs throughout her writings. She depicts her characters' longing to live with nature. In both the novels, O Pioneers! and in My Antonia, we have characters loving the ecosystem and protecting it. In O Pioneers! Alexandra Bergson, the heroine of the novel love and yearns for the land and in turn the land showers her with wealth. The presence of natural environment is evident throughout the narrative as it shapes the fate and fortune of Alexandra. In My Antonia, Antonia, the central character and protagonist of the novel with her love and pioneer spirit towards the landscape climbs up the ladder of fortune and becomes a successful owner of a fertile land. Frederick J. Hoffman remarks that both the novels of Willa Cather deals with "a land myth and a land goddess to rule it; a noble creature, strong, patient, robust, sensitive, and enduring, who undergoes a symbolic courtship with the land." (182) Male characters are also depicted as a lover of nature and wild life. In O Pioneers! Ivar is shown as a lover of nature practicing egalitarianism. Jim Burden in My Antonia also loves nature and find himself overjoyed when he is in the lap of nature. Thus, both the novels are environmentally conscious text which can be read through the lens of eco-critical perspectives.

Works Cited

1. Cather, Willa. *My Antonia (1918).* Boston: Houghton Miffim Company,, 1998 Print.
2. —. *O Pioneers!* Introd. Blance H. Gelfant. New Yorl: Penguin Books, 1990, 1913.
3. Cuomo, J. Chris. *Feminism and Ecological Communities.* . New York: Routledge,, 1998. Print.
4. Fredricj J. Hoffman, and Ezra Pound. *The Twenties: American Writing in the Postwar Decade.* Collier Book, , 1962. P.182.
5. Love, Glen A. *"Revaluating Nature: Toward An Ecological Criticism." The Ecocritical Reader: Landmarks in Literary Ecology.* Eds. Cheryll Glotfelty and Harold Frromm. Athens: U of Georgia, 1996.
6. Mildred R, Bennet. *The World of Willa Cather. New York: Dodd, Mead, 1951. Bohlke, L. Brent, ed. Willa Cather In Person: Inrerview, Speeches, and Letters.* Lincoln and London: U of Nebraska P, 1986.
7. Piacentino, Edward. *"Impressionistic Character Portraiture in My Antonia." Major Literary Characters: Antonia.* Bloom, Harold. ed. New York: Chelsea House Publishers,, 1991.
8. Ryder, Mary. *"Willa Cather as Nature Writer: A Cry in the Wilderness" in Such News, from the Land:U. S. Women Nature Writers.* Hanover:UniversityPress of New England, 2001.
9. Stouck, David. *"O Pioneers! : Willa Cather and the Epic Imagination.".* Prairie Schooner, Volume 46, Issue I, 1972. pp. 23-34.
10. Thorp, William. *American Writing in the Twentieth Century.* Cambridge: Harvard University Press, 1960 Print.
11. Van, Ghent. Dorathy. *Willa Cather.* Minneapolis: Minnesota, 1964 Print.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

APPLICATION OF SCIENTIFIC FISH CULTURE PRACTICES AMONG KOLLAM DISTRICT'S MARINE HUMAN CAPITAL

Santhakumar V S[1] V Ambilikumar[2]
[1]Research Scholar Faculty of Fisheries Management (FFM) Kerala University of Fisheries and Ocean Studies (KUFOS)
Email: santhakumar.personal@gmail.com
[2]Professor Faculty of Fisheries Management Kerala University of Fisheries and Ocean Studies
***Corresponding Author*- Santhakumar V S**
Email: ambilikumar@gmail.com
DOI- 10.5281/zenodo.7266976

Abstract

Fish culture is a major economic activity in Assam, providing money and employment to a segment of the people (Shrivastava, 1994). Due to the state's scarcity of fish production, the middle and lower classes spend a large portion of their income on purchasing fish at excessive costs. Because the man-to-land ratio is decreasing, agriculture cannot bear the whole load of feeding the region's population. In this sense, fish cultivation in underutilised water resources will be the greatest alternative for meeting India's protein requirements. Fish farming is an economic activity since fish farmers produce and sell fish. Others buy and consume the fish. The present research aims to examine the issues of fish farming techniques, social engagement, and training of Kollam district's marine human resource. 260 maritime fishermen in the Kollam district were surveyed for this purpose. The fish farmer is referred to as a producer because he raises and cares for the fish in the same way that he would any other crop or animal. People are drawn to fish farming for a variety of reasons, including higher wages than agriculture, use of inherited water regions, and increased demand for fish, as well as the possibility to generate money from other activities in the area where the farmer resides. If the primary motive is to make money, he would most likely grow as many fish as he can via fish farming. If his aim is just to continue on the family legacy of fish farming, he may be more concerned with producing enough fish for his family than with making money.

Introduction

In Asian countries, population increase has led in over-utilization of land and, as a result, declining returns on current and prospective agricultural output. India's population has surpassed one billion people, reducing per capita land availability, which was estimated to be 0.14 hectares around the turn of the century. Food and other fundamental needs for such a large population will have to be met by making the best use of available resources in a sustainable manner. Despite enormous technical breakthroughs in diverse land-based farming methods, a large portion of the population remains malnourished. In this scenario, it is past time to mobilise potential resources to boost sustainable fish production in order to fulfil the expanding population's nutritional needs.

The fishing industry is important in both emerging and established nations because it supplies nutritious food as well as foreign revenue. By incorporating diverse fishing operations, the fishing sector has the potential to employ 7 million people in India. The volume of seafood exported in 2003-04 was 41,171 tonnes worth Rs. 6092 crores (MPEDA). Despite a tremendous growth in fish output over the previous decade, India's current per capita availability of fish is just approximately 10 kg per year, compared to a global average of 12.1 kg every year. To meet the World Health Organization's (WHO) minimum nutritional requirement of 11 kg per capita, and with the assumption that

56% of the population in India consumes fish, 12.0 million tonnes of fish would be required by 2020 A.D. for the country's estimated population.

The fishermen's socioeconomic situation may not allow them to do scientific fishing or fish farming. They are the least aware of existing fish farming techniques. Propagation and popularisation of fish culture methods, as well as proper legal and governmental intervention and infrastructural assistance, are required to close the gap between actual and prospective levels of fish output. Fish farming is an economic activity since fish farmers produce and sell fish. Others buy and consume the fish. The fish farmer is referred to as a producer because he raises and cares for the fish in the same way that he would any other crop or animal. Reasons such as higher profits from fish farming than agriculture, use of inherited water resources, and increased demand for fish, in addition to the chance to make money from other occupations near the farmer's home, have inspired individuals to enter the fish farming industry (Williams, 1983). If the primary motive is to make money, he would most likely grow as many fish as he can via fish farming.

Objectives Of The Study

1. To access technical problems of fish farming practices. .
2. To study on social participation and training of fisherman in Kollam district.

Scope Of The Study

The current study is a pioneering and one-of-a-kind endeavour in the realm of challenges associated with the adoption of scientific fish production practises in the Kollam region. Because there is no fundamental data on the aforementioned factors, the current study will fill this gap and address the restrictions to challenges experienced by fish farmers. Furthermore, with regard to the current study, social engagement, training, and challenges of fish farming practise would provide useful insights.

Review Of Related Literature

The economic sustainability of cage fish farming was examined using primary data obtained from 60 farm units in the state of Kerala. The principal species grown in the research region were Asian seabass, pearlspot, tilpaia, redsnappers, and caranx. A farm unit's normal number was 115 m^3, with a stocking density of 32 fish per m^3 (Aswathy & Joseph, 2019). A different study, the level of implementation of cage culture technique in the state of Kerala is low. After stocking, the majority of the groups abandoned the cages. There is scepticism about technology and its ability to generate economic returns. Farmers' motivation must be increased through demonstrations in order to better popularise the culture practise (Baiju et al., 2012). Before stocking water sources, water samples should be tested for physicochemical and bacteriological criteria. Increases or decreases in these parameters might operate as risk factors for infection in fish. Microbes can infiltrate fish ponds inadvertently via rainfall, weeds, and wind (Krupa et al., 2020). Another research was carried out in the Pattanchery panchayat in Kerala's Palakkat district, where the usage and upkeep of agricultural ponds (for fisheries and livestock operations) raised the water level in the wells, thereby raising the groundwater level. Integrated farming reduces the usage of synthetic fertilisers, allowing for significant cost savings. Planting trees, fruits, and vegetables can be done in the area around farm ponds (GS et al., 2018).

A study of the socioeconomic difficulties of fishermen in Tamil Nadu and Orissa looked at their caste and language, age distribution, marriage status, household size, literacy rate, location, livelihood, insurance, source of finance, marketing facilities, expenditure, and debts. According to studies, the traditional fishermen's socioeconomic situation is far from good due to a lack of infrastructure and communication services. Efforts are necessary to provide basic infrastructural amenities such as pucca roads, drinking water supply, sanitation facilities, transit, schools, medical facilities, and so on (Siddiqui, 1996). Another research revealed that the country's geography, urbanisation, the occupation of the head of the family, the presence of children, race, and season all had a substantial influence on spending on particular types of fish or shellfish (Cheng and Capps,1988).

Some socio-demographic changes are taking place in the United States, which may impact future demand for fisheries goods and, in particular, aquaculture products. The socio-demographic changes ongoing in the United

States include an apparent increase in understanding of the nutritional composition of alternative foods, the ageing of the US population, and an increase in female labour force participation (Easley,1992). The present degree of fish culture development in Assam may be influenced by the status of fish culture development as well as the socioeconomic situations of fish farming households. According to the study, 75% of the individuals in fish farming households were literate, and agriculture was their major activity for 80% of them. The average yearly household income of fish farming households was estimated to be Rs. 10,020.00, with agricultural, livestock, fisheries, and horticulture crops accounting for 44%, 19%, 17%, and 12% of total revenue, respectively (Dutta, 1998). The socioeconomic implications of significant shrimp farming in Orissa's Ganjam region indicated a lack of money in rural areas. As a result, villagers' human capital should be replaced by knowledge and abilities in brackish water prawn farming (Rout and Das,1992).

Research Methodology

Research Design

Research design is the blueprint of organizing a research study. It is the framework that has been designed to seek answers to research questions. Research design involves empirical testing of hypotheses through different data analysis tools. Based on the objectives of the present study, the research design is exploratory and descriptive in nature.

Data Collection

Both Primary and Secondary sources are applied for data collection. The Primary Sources of data are collected through Questionnaire. The Secondary Sources of Information are from Annual Reports from the Business Manuals, flyers, editorials, Internet resources, books, magazines, guides, and Journals.

Respondents

Respondents of this proposed research study are the fisherman in Kollam district.

Universe Of The Study

The universe of the study is the fisherman in Kollam district.

Sample Design

Keeping in sight the basis of the study, simple random sampling was used to achieve representativeness in the selection of respondents.

Sample Size

It refers to the number of items to be selected from the universe constitute a sample. The mean method was used to determine the size by using sample size determination. The variables in the study were measured using a 5-point measurement scale by the mean method. The formula used to determine the accurate sample size by the mean method is presented below.

$N = z^2 * s^2 / e^2$

n = Sample size,

z = Standard score associated 95% of level of confidence

d = Suitable margin of error for mean

s- Estimated acceptable margin of error = 0.016

As the thumb rule is larger the sample size, the greater the accuracy; even though the minimum statistically accepted sample size should be 260, the researcher has taken 260 as a sample for this study.

Method Of Sampling

The convenience sampling method was mainly carried out to select the samples from the population of fisherman in Kollam district.

Hypothesis Of The Study

Hypothesis-1

a) Null Hypothesis: There is no association between knowledge of fish culture and the extent of adoption of fish culture in the Kollam district.
b) Alternate Hypothesis: There is close association between knowledge of fish culture and the extent of adoption of fish culture in the Kollam district.

Hypothesis-2

a) Null Hypothesis: There is no association between relation between problem for adopting scientific fish culture practices on social participation and training.
b) Alternate Hypothesis: There is an association between relation between problem for adopting scientific fish culture practices on social participation and training.

Tools For Data Analysis

- Linear multiple regression analysis
- Correlation analysis

Results and Discussion

c) **Null Hypothesis: There is no association between knowledge of fish culture and the extent of adoption of fish culture in the Kollam district.**

Table-I

Correlations Matrix

		knowledge of fish culture	Extent of-adoption of fish culture
knowledge of fish culture	Pearson Correlation	1	0.567(**)
	Sig. (2-tailed)		0.000
	N	260	260
Extent of-adoption of fish culture	Pearson Correlation	0.567(**)	1
	Sig. (2-tailed)	0.000	
	N	260	260

** Correlation is significant at the 0.01 level (2-tailed).

Table I depicts the relationship between fish culture knowledge and the extent to which fish culture has been adopted. There is a negative connection between awareness of fish culture and the extent to which fish culture is adopted (r = 0.567(**)). In this case, the sig (2-tailed) value is less than 0.01. (0.000). The null hypothesis is rejected since the Sig (2-tailed) value is less than 0.01. (There is a link between understanding of fish culture and the extent to which fish culture is practised in the Kollam area.) As a result, there is a statistically significant connection between two variables. That is, an increase or reduction in understanding of fish culture is substantially connected to an increase or decrease in the extent to which fish culture is adopted.

d) **Null Hypothesis: There is no significant impact relation between problem for adopting scientific fish culture practices on social participation and training.**

Table-II

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.567(a)	0.322	0.319	0.35878

a Predictors: (Constant), social participation and training

The multiple R for the association between the problem and implementing scientific fish culture practises on social involvement and training for fishermen in the Kollam district is 0.567, indicating a moderate link. According to the model summary, R2 explained 0.322 of the variation, implying that 32.2% of the variance is in social involvement and training issues for adopting scientific fish farming techniques. The R square, also known as the coefficient of determination, of 0.319 implies that the model can explain 31.9% of variations in service quality for TQM Implementation, whereas other factors may explain 67.8% of variations in service quality for implementing scientific fish production practises.

Table-III

ANOVA(b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	15.752	1	15.752	122.366	0.000(a)
	Residual	33.211	258	0.129		
	Total	48.962	259			

a Predictors: (Constant), social participation and training

b Dependent Variable: problem for adopting scientific fish culture

Table-III demonstrates that the model can explain 15.752 variations in the issue of adopting scientific fish culture out of 48.962 or 32.17%, whereas other factors not incorporated by this model can explain 67.83% of the variability in the problem of adopting scientific fish culture. The model's F value yields a p-value of 0.0001, which is nearly identical to zero. For normally distributed data, a p-value of 0.000 is less than the predefined threshold of significance of 0.05. This suggests that the model is useful in discussing the issue of implementing scientific fish farming.

Table -IV

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.587	0.114		5.141	0.000
	TQM	0.685	0.062	0.567	11.062	0.000

Dependent Variable: problem for adopting scientific fish culture

The outcome demonstrates that, for the independent variable problem of adopting scientific fish culture, the likelihood of the t statistic is high (0.000 which is lower than the level of significance of 0.05). We reject the null hypothesis and conclude that there is a link between the difficulty of adopting scientific fish husbandry approaches and social engagement and training.

Conclusion

For Kollam district fishermen, the key challenge is financing, which has become a barrier to community growth, as has fish productivity. The government must supply cash for this through different programmes. These monies should be used to build farmer's ponds, community tanks, various culture techniques such as composite fish culture, air-breathing fish culture, and integrated fish farming, fishing extension, teaching and training, and ultimately, the district's research facilities should be upgraded. Although efforts have been made in the national programme for the development of fish farming to meet demand, progress has not been as satisfactory as anticipated, and it is critical to identify the socioeconomic, technical, organisational, or other factors that are impeding the scheme's ability to present a satisfactory picture. At the same time, it is critical to implement appropriate remedial steps. Information on the techno-socialo-economic framework of fish farmers provides a solid foundation for planning and development of this economically underdeveloped industry. One of the major challenges to the successful execution of development programmes is a lack of comprehensive and genuine data about the socioeconomic situations of the target population. There is enormous potential for promoting fish farming technology in the district by leveraging available resources to achieve sustainable production. Despite the fact that the technology is used in both traditional and scientific systems, there is no information available on the extent of a farmer's knowledge and adoption of this technology, as well as its economic feasibility.

References

1. Aswathy, N., & Joseph, I. (2019). Economic feasibility and resource use efficiency of coastal cage fish farming in Kerala. Economic Affairs, 64(1), 151-155.
2. Abdullah, N.M.R., Viswanathan, K.P. and Pomeroy, R.S. (1998) : Fisheries Co-management and transaction costs, NAGA, The ICLARM quarterly, 21 (3): 40-42.
3. Ahmed, M. (1992): Status and potential of aquaculture in small water bodies (ponds and ditches) in Bangladesh, ICLARM Technical Reports, 37:1-36.
4. Ahmed, M. and Rab, M.A. (1992): Feasibility of adopting aquaculture to increase resource productivity in existing Bangladesh farming systems. NAGA, The ICLARM Quarterly, 15(4): 21 -22.
5. Ali, A. (1997): Present status and future scope of fisheries in Assam. PG.D.F.Sc. Dissertation, Central Institute of Fisheries Education, Mumbai-61, 10-21 pp.
6. Baiju, A., David, N. S., Shyam, S. S., Sukumaran, K., & Pramod Kiran, R. B. (2012). Effects and consequences of small-scale cage culture technology adoption in Kerala.

7. Bhaumik, U. and Saha, S,K. (1998): Need for modification of composite fish culture technology in West Bengal as perceived by the fish farmers. In: P.C. Thomas (Ed.). Current and Emerging Trends in Aquaculture Daya publishing House, Delhi, 348-354 pp.
8. Bloom, B.S., Enoclhardt, M., Furst, S., Hill, W. and Krathwhol, D.R. (1956)*: Taxonomy of Educational Objectives: The Cognitive Domain. Longmans, Green and Company, New York.
9. Corvert, S. (1988)*: The shrimp culture in Ecuador, PECHEMARIT, 67(1319): 256-262. Dalai, S.K. and Das, S.K. (1992): Economic analysis of fish production under extensive aquaculture practice in Ganjam district of Orissa. Sea Food Export Journal, XXI V(8): 21 -23.
10. Das, P., Bhaumik, U„ Pandit, P.K. Roy, B., Banerjee, B.K. and Mondal, S.K. (1988): Some variables contributing to the adoption of composite fish culture innovations. In: M. Mohan Joseph (Ed.). Proceedings of The First Indian Fisheries Forum, Asian Fisheries Society, Indian Branchy Mangalore 467-470 pp
11. GS, L., Saravanan, E., & Shaji, P. K. Evaluation of Farm Ponds on Agriculture in Pattanchery Panchayat of Palakkad District, Kerala, India. IOSR Journal Of Humanities And Social Science (IOSR-JHSS), 23(9), 18-20
12. Krupa, T. L., Prasanna, K. S., Prejit, A. R., & Ajith, J. G. (2020). Physico-chemical and bacteriological analysis of water quality of fresh water fish ponds in Wayanad district, Kerala, India. The Pharama Innovation Journal, 9(1), 284-289.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

DOMESTIC STATUS OF WOMEN IN RELATION TO EDUCATION AND OFFENCE

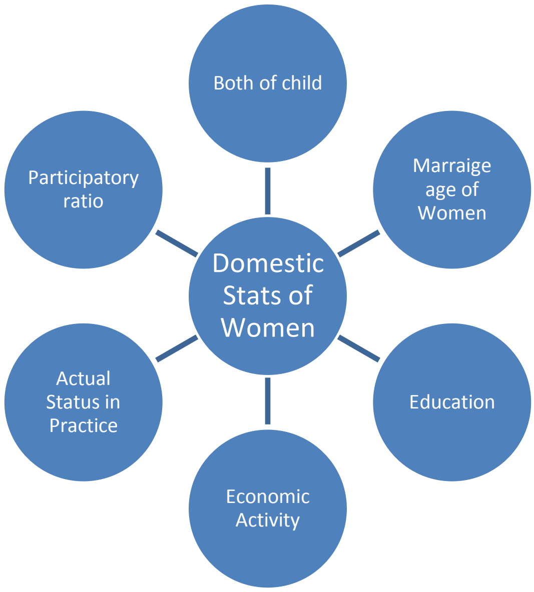
Miss. DARSHANA R. CHAVDA[1] **Dr. RAVI DHANANI**[2]
[1]Research Scholar, Department of Social work, Saurashtra University, Rajkot.
[2]Associate Professor, Shree Matruandir BSW College, Saurashtra University, Rajkot.
Corresponding Author- **Miss. DARSHANA R. CHAVDA**
Email id: chavdadarshana1993@gmail.com
DOI- 10.5281/zenodo.7266995

Introduction:

Evolutionary history of mankind clearly demonstrates the fact that women in general appear to be understood in the society. Society in general appears to have not given due weightage to women in respect to human development quantitatively and qualitatively it is found that women have met illtreatment at large. There is of course considerable degree of variation found across the countries of the world with respect to domestic status of women. Historically looking back at the classical cultural history of India we find plenty of apprecinting examples where in women were considered as most instrumental one for sociocultural upgradation of the society. Even today ancient India's characteristict in the form of revenue for women to quote from Sanskrit verse, There are also leading women found in Pre Independence period who have through their valour and vibrancy contributed richly to Indian Society. To name such as Chandbibi, Viranga Laxmibai or In 20th Century toll independence. We have illustrious examples of Annie Bessent, Kas Turbal Sanrojini Naydu whose works are inspirational for women even today. Despite all these it is of crucial significance to note that maximum ailment, torture, dis respect women suffered in medieval age globally John Sturt Mill is considered as pioneer in respect of Women's lib. Late Maithilisharan Gupta a legendary nationalist Hindi poet very critically wrote that. True it is that there is found considerable degree of improvement in the domestic of women under Post Independent India. India is an exceptional nation to have credited women with right to franchise right from 1951's first general election. Under Article 14 of constitution of India "Equality before the law without any sirt of discrimination is assured to all citizens. There is also made Women's respresentation mandatory one in all type of local Govt. bodies. With many other legal provisions and gender related wel fare mechanism being applied "Domestic Status" of women is still considered "Below to Average"

Components of Domestic States

"Domestic status of Women" is broadly considered as subjection one. There is no universal standardized norms framed to measure and or evaluate status of women. However social scientists in general have arrived at a concensus which at large indicate "Domestic Status" of women. Generally accepted and recognized criterions for "Domestic Status of Women can be pointed as under.



All these clearly suggest that "women" if treated at par equal to Man in all such respects only than Woman can be considered recognized equal to man. Coming to enquire into "domestic status" of women in this respect we have to agree to the fact that as per "Global gender parity" report India among 110 nations stands at 94. Within India across the states we find large variations with respect to these eriterions. H.R.S. Marri a known sociologist of 1965 and 1975's had to those days status that "Women are no longer found confined within the four walls of home. They are found entering into legislatures, representing various bodies. Despite this broad observation statistical mapping of Indian Women in broadened perspective between dismal picture. This can be illustrated, examined and analyzed through the following 2 major tables. Data covers picture with reference to selected Indicators and selected major states of India.

Indicators mainly included (A) Mean age of marriage (B) Sex ratio (C) Gross enrollment ratio of girls to boys. (D) Dropout rate of girls to boys (E) Total fertility rate (F) Female work participation rate (G) Infant mortality rate (H) Maternal Mortality Rate (I) Crime against wome. The states are major states having relatively higher per capita Income. Staes represent broadly Eastern Part, Wester Part, Northern Part, Central India and north east states.

Women by selected Indicators

State	Mean age of Marriage	Fertility Rate (2017)	Sex Ratio	Per Capita Income (2018-19)
Andhra	22.0	1.6	993	164025
Aasam	22.3	2.3	938	81841
Bihar	21.8	3.2	918	43822
Jharkhand	21.9	2.5	949	76019
Delhi	21.7	1.5	868	365529
Goa	NA	NA	973	467998
Gujarat	22.5	2.2	919	216000
Haryana	22.9	2.2	879	226649
Karnataka	22.3	1.7	973	210887
Kerala	22.3	1.7	973	210887
MP	21.4	2.7	931	90998
Chattisgadh	21.8	2.4	991	96887
Maharashtra	22.1	1.7	929	191736
Manipur	NA	NA	985	NA

Meghalaya	NA	NA	989	89024
Mizoram	NA	NA	976	68026
Nagaland	NA	NA	931	113977
Odissa	21.9	1.9	979	93352
Rajasthan	21.5	2.6	928	109105
Tamilnadu	23.0	1.6	996	193750
Uttarpradesh	22.2	3.0	912	61351
W. Bengal	21.2	1.6	950	109491
India	22.1	2.2	943	126522

Source: Economic survey of Maharashtra 2019-20

Selected Socio Economic Indicators of States in India

As shown in above table, mean age of marraige is common age including of male-female. It is clearly found that in many states mean age of marriage of women is significantly much less than that of men. Though Govt. of India is planning to improve child marriage restriction act, accordingly for women minimum age for marriage is to be increased from 18 to 21. However currently in several backward, poor states considerable number of percentage of women get married at about 17 years of age. Bihar, Rajasthan, Madhyapradesh have relatively much less percapita income and these states have much higher fertility rate. States with relative higher per capita income such as Delhi, Tamilnadu, Karnataka, Kerala have significantly controlled less total fertility rate. It is also important to note that states even with relative much less per capita income have such as, Aandhra, Odissa and West Bengal also have relatively less fertility rate. Gujarat even with significantly high per capita income is also found with relative higher fertility rate. Secondly contradiction is found in respect of sex ratio. i.e. Number of women 1000 more as per census report 2011 and estimation of NSS (2017) it is found that states reported as progressive in terms of income i.e. Delhi, Punjab, Haryana, Gujarat have relatively much less sex ratio. Southern States like Tamilnadu, Kerala and Maharashtra from west have relatively much better sex ratio with relatively much per capita income. The states such as UP, MP represent poor income and relative poor sex ratio. In contradiction to that states back ward by social groups and by income such as Bihar, Jharkhand, Chhatisgadh, Odissa have reported significantly very high sex ratio. In this second table there is literacy rate made female, enrollment ratio, dropput ratio. An attempt is made in the following table to understand and examine correlationship among the states beteween size of income, female literacy female dropout.

Phase-2, Selected Indicators of States

States	Parcapita Income 2018-19	Literacy		Gross Enrollment	
				Boys	Girls
Andhra	164025	74.88	59.15	86.71	83.10
Aasam	81841	77.05	66.27	98.27	104.69
Bihar	43822	71.20	51.50	92.49	103.08
Jharkhand	76019	76.84	56.42	100.42	103.36
Delhi	385529	90.94	80.76	108.45	120.41
Goa	467918	92.65	84.66	96.41	100.97
Gujarat	266000	85.75	69.68	92.68	96.92
Haryana	228644	84.06	65.94	94.72	101.05
Karnataka	210887	82.47	68.08	100.45	100.83
Kerala	204195	96.11	92.07	94.58	94.54
MP	90998	78.73	59.24	90.22	89.06
Chattisgadh	96887	80.27	67.29	98.34	97.87

Maharashtra	191736	88.38	75.87	98.58	97.65
Manipur	na	82.27	72.37	121.57	127.48
Meghalaya	89024	75.95	72.88	150.03	146.39
Mizoram	168626	93.35	59.27	121.39	122.31
Nagaland	113977	52.75	75.11	91.60	89.70
Odissa	93362	81.59	64.81	95.21	95.94
Punjab	154598	80.44	70.73	100.07	95.74
Rajasthan	104106	78.79	52.52	97.85	97.36
Tamilnadu	357643	86.77	73.99	91.96	93.05
Uttarpradesh	61359	77.27	57.18	76.27	85.67
W.Bengal	109911	81.67	70.54	98.02	103.59
India	126522	80.88	64.63	90.78	95.58

Source: Economic Survey of Maharashtra – 2019-20, Selected Socio Economic Indicators of Staes of India

As presented in the table, there is reported considerable gap in male female literacy. National level this gap is of 16.05 percentage point. But this gap is found significantly very high in the state like Rajasthan 26.27 percengage point. M.P. 19.49 percentage point. Bihar 19.70 percentage point. Uttarpradesh 17.99 percentage point, Odisha 16.78 percentage point. All these states having much less female litarcy have reported to their credit much less per capita income. Among the states having relatively very high percapita income literacy rate among farmer's reported less in Haryana, Karnataka and Gujarat among north eastern states, all states have reported significantly much less gap between male, female literacy rate. Manipur, Meghalaya and Mizoram are the states having relatively less percapita income but despite this literacy performance is propoentely better earch in among female in comparison with staes with states with higher progressive income. Southern states in comparison with over region states are found well placed in respect of female literacy.

However it is reported male as per 2017-18 gross enrollment ratio at elementary level among firls is found much better. Enrollment gap between boys and girls is insignificant at large. This shows that states with relative less female literacy in 2011 have in follow up initiated appropriately resultant to which enrollment ratio among girls is found improved. In 14 states covered under the table have reported enrollment of girls more than enrollment of boys. However states like MP, Andhra, Punjab are reported significantly less enrollment in girls in comparison with boys.

The most crucial eliment to be understood and examined with respect to status of women in relation to prevelance of poverty parcapita income, literacy among female and rate of crimes against women. In the following table an attempt is made to enquire into preparation of violence against women(crime) in relation level of percapita income, work participation rate of female matural
maturity rate

State	Below Poverty line	Per Capita income	Female literacy	Maternal mortality	Crime against women
Andhra	9.20	164025	59.15	74	2672
Asam	31.98	81841	66.27	229	5447
Bihar	33.74	43822	51.50	165	7340
Jharkhand	36.96	76029	56.42	76	1479
Delhi	9.41	385062	80.76	na	8246
Goa	5.09	467998	84.66	na	182
Gujarat	16.03	2.16000	69.68	67	4929

Haryana	11.16	228644	65.94	98	4869
Karnataka	20.91	2010897	68.08	97	6131
MP	31.65	90998	59.29	188	18942
Chatigarch	39.93	96887	67.29	141	6924
Maharashtra	17.35	191736	75.87	55	18892
Manipur	36.89	na	72.37	na	128
Meghalaya	11.87	89024	71.88	na	385
Mizoram	20.46	168626	89.27	na	198
Nagaland	18.88	133977	78.31	na	709
Odisha	32.59	93382	64.81	168	5217
Punjab	8.26	154578	70.73	122	2308
Rajasthan	14.71	104166	52.52	196	5150
Tamilnadu	11.28	357643	73.42	83	4155
UP	29.43	61351	59.29	216	19936
West.B.	19.98	109491	70.54	94	6296
India	21.92	126829	64.63	122	141761

Source: Economic Survey of Maharashtra selected Socio Economic Indicators for states of India

Looking at above table following major inserences can be stated.

(A) Crime against women as per 2018's reported as maximum in numbers in UP in 19936 followed by 18892 in Maharashtra and Madhyapradesh. North east states such as Nagaland, Manipur, Mizoram and Meghalaya are at the lowest in numbers. Crimes against women broadly reveal the status that prevails in the society.General perception that women are considered as second category citizen at large holds true in respect of soceital ill treatment. This table provides curcory look at the performance of states in relation to broad parameters like percentage below poverty line. Percapita income and women litaracy.

In this context there is not found clear positive stability relation with percentage of population living below poverty line and number of crimes against women. Percentage of population living below poverty line is very high. (almost maximum) in MP 39.93 as per last official data of 2012. It is significantly much less 17.35% in Maharashtra but crime rate against women is found second highest in India and equal in numbers. Percentage of population below poverty line is 29.43 there is 8th from bottom. But number of crimes against women is reported highest. Kerala is reported to have insignificant 7.05% of population below poverty line against which number of crimes against women is 4253. Goa in respect of per capita income and population below poverty line performs best highest percapita income, lowest percentage of population and secon best with minimum number 128 crimes registered against women. Tamilnadu also appears to be performing good with relative better economic performance and significanly less crimes against women. Madhya pradesh and Maharashtra also provide a countradictory picture with significantly very high women literacy in Maharashtra 75.81 and poor women literacy in MP 59.29 but reporting equal number of crimes against women.Looking broadly at the table it is also found that relative good economic states- i.e. Gujarat, Haryana economic states i.e. Gujarat, Haryana, Karnataka and significantly better women literacy also report significantly more number of crimes against women. Maternal mortality in this respect provides a distinct picture between the states. Uttar pradesh is one of the worst performing states in respect of maternal mortality and the worst for crimes against women Bihar. Rajasthan MP is also having much higher mortality rate but in respect of crimes against women MP is second worst while this ratio is found much less in Bihar and Rajasthan.

Aggregate Picture

Domestic status of women even after 73 years of Independence can not be considered satisfactory. All broadned findings based on global gender gap report, global human development report, national family health survey report and vital health indicators in general do not provide much healthier picture with respect to domestic status. It is of crucial significance to understand that women partnership in economic activity is also not satisfactory. Looking at the aggregate domestic status of women in relation to income, education and health parameters it is clear that the problem needs multidimentional redressal mechanism. Economic status alone on level of education alone would not solve the problem. This necessiates condierable degree of social institutional correction work along with legislative follow up to make women of India free from clutches of social slavery and rigidity.

Reference:

(1) Swamin Vivekananda, Address to Women.

(2) Economic Survey of Mahrashtra, 2011-12

(3) National Family Health Survey, IV and V

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

PERFORMANCE EVALUATION OF PMFBY IN MAHARASHTRA STATE

Dr. N. B. Kale[1] Asst. Prof. B. K. Nagare[2]
[1]HOD, Dept. of Commerce, Tuljabhani Mahavidylaya, Tuljapur
[2]HOD, Dept. of Commerce, R. P. College, Osmanabad
Email: balajinagare@gmail.com
***Corresponding Author-* Dr. N. B. Kale**
Email id: balajinagare@gmail.com
DOI- 10.5281/zenodo.7267018

Introduction:

`Maharashtra is a 15th rank India in agricultural output. In 2019, agriculture and allied sectors like forestry, logging and fishing represented 13.12% of the GDP. Maharashtra took 3rd rank in population as a compare to other states. At the time of independence, more than one-half of the national income was contributed by agricultural. At the same time, more than 70% of total population was depended on agriculture. The agriculture secures faces the lot of challenges due to uncertainties in agriculture i.e. natural and artificial hazards especially Maharashtra state. Still, more people in India make money for their livelihood from this sector, than from all other economic sectors. In rural India, households that depend upon income from agriculture (either self-employed or as agricultural workforce) accounted from nearly 70% of the population. According to the World Bank collection of development indicator, employment in agriculture in India was reported 41. 49 percent in 2020. All this facts & figures show that, the need for the development of agricultural sector in India. Maharashtra has reached the stage of self-sufficiency but it is still cursed by nature. This poses a great risk to state farmers in agricultural production and on their way. It has been observed that fluctuations in crop production in the Indian also in Maharashtra subcontinent are mainly due to natural uncertainties such as droughts, floods, cyclones, storms, landslides, earthquakes etc. The government of India was introduced crop Insurance scheme to face these challenges.

Pradhan Mantri Fasal Bima Yojana (PMFBY) is the one of the largest crop insurance scheme, which was introduced in Feb. 2016. In this study, main focused on performance of PMFBY in Maharashtra state from last five years.

Objectives of the study

The objectives of concern study are as follows.

1. To study about crop insurance schemes in Maharashtra
2. To measure the performance of crop insurance scheme in Maharashtra
3. To analyzed the farmers participation, area insured and gross premium of crop insurance scheme
4. To suggest to upgrade the performance of crop insurance scheme in Maharashtra

Research methodology

Data Collection: This is an analytical study; hence, Secondary data is an impetrate and powerful tool for the research. Researcher as complete research work is carried out on the basis of secondary data. The secondary data is collected through newspapers, magazine, government reports and internet. For accomplishing the objectives of the study, three years data is collected and analyzed it.

Research area: The present study deals with the Performance evaluation of PMFBY. For justify the subject & detailed study proposes, PMFBY are selected in Maharashtra.

Limitations of the study: In this study, only PMFBY was selected and only five years performance was measured of the agriculture insurance scheme. Other crop insurance schemes are not taken into account.

Pradhan Mantri Fasal Bima Yojana (PMFBY)

Pradhan Mantri Fasal Bima Yojana (PMFBY) is one of the world's largest and important crop insurance programs. It's aimed to providing risk cover to Indian farmers. It was launched in early 2016 with the key feature being a highly subsidized and affordable premium to farmers. Under the scheme, only 2% premium of maximum to pay farmers during Kharif sowing, 1.5% during Rabi sowing for food and oilseed crops, whereas for annual commercial crops they have to pay a maximum of 5%. As a same, the Government of India and state government shared equally pay the subsidy on farmer's premium of actuarial premium rate. The National Agricultural Insurance Scheme (NAIS) as well as the modified NAIS has combined into PMFBY.

Performance evaluation of PMFBY in Maharashtra

The performance of crop insurance scheme especially PMFBY measured with the help of indicates. From last five years, performance was evaluated from 2018 to 2022. It includes farmer's participation, Area insured, Premium paid and Sum insured by farmers as well as government subsidy.

Farmer's participation:

From Kharif 2018-2022 and Rabi 2018-2021, total of 2.59 crore farmer applications have been approved under the scheme of PMFBY. In the Kharif Season 2018 to 2022, total of 2.56 crore and in Rabi season 42.86 lac farmers were participated from last five years. During 2018 to 2022, the participation of farmers was increased by 2.06 per cent only. Also, as a compare 2019 to 2018, farmer's participation was decline by -22.91 per cent, in the year 2019 to 2020, farmer's participation was decline by -10.17 per cent. The number of insured farmers has declined in a last five years regularly. Table no 01 shows the detailed performance in farmer's participation under PMFBY in Maharashtra from 2018 to 2022.

Table No 01: Performance indicators in Farmers participation in PMFBY from 2018 to 2022

Year	Farmers coved in Kharif Season	Farmers coved in Rabi Season	Total	% Increase/ decries
2018	4593623	2401852	6995475	
2019	4736089	656565	5392654	-22.91
2020	4277749	566532	4844281	-10.17
2021	3607307	661615	4268922	-11.89
2022	4356649	-	4356649	2.06
Total	**21571417**	**4286564**	**25857981**	**-42.91**

Source: PMFBY Report 2018 to 2022

Area covered:

The total area insured in kharif and Rabi taken together has 34411.22 thousand hectors from 2018 to 2022. The area under PMFBY has decline by 39.85 per cent from 2018 to 2022. As a compared to Rabi season, in Kharif season 2018 to 2022, the area covered under PMFBY has more. Following table 02 indicates the performance in Area Covered in PMFBY in Maharashtra state from 2018 to 2022.

Table No 02: Performance indicators in Area covered in PMFBY from 2018 to 2022

Year	Area covered in Kharif Season (Thousand Hect.)	Area covered in Rabi Season (Thousand Hect.)	Total	% Increase/ decries
2018	5675.5	3177.38	8852.88	
2019	6748.29	805.17	7553.46	-14.68

2020	5784.23	735.88	6520.11	-13.68
2021	4875.38	845.84	5721.22	-12.25
2022	5763.55		5763.55	0.74
Total	**28846.95**	**5564.27**	**34411.22**	**-39.87**

Source: PMFBY Report 2018 to 2022

Premium and Government Subsidy:

The premium paid by the farmers from 2018 to 2022 had 271494.43 lac and state and central government had paid 375848.25 lac in that period. The gross premium has increased from year to year. During 2018 to 2020 but after 2020 the gross premium has decline During 2018 to 2022, the state and central government commonly paid the subsidy under these schemes. The subsidy paid by the state and central government on PMFBY had 88.06 per cent, 87.18 per cent, 90.21 per cent, 90.21 per cent and 85.14 per cent in the year 2018 to 2022 respectively. The following table 03 shows the performance in Premium and Govt. subsidy in PMFBY in Maharashtra state from 2018 to 2022.

Table No 03: Performance indicators in Premium and Govt. subsidy in PMFBY from 2018 to 2020

Year	State/Central Govt. Subsidy (in Lac.)	Farmers Premium (in Lac.)	Gross Premium (In Lac.)	Subsidy Paid In percent by Govt.
2018	371228.22	50357.99	421586.21	88.06
2019	395192.18	58103.16	453295.34	87.18
2020	490201.68	53226.08	543427.76	90.21
2021	407158.99	**44203.38**	451362.37	90.21
2022	375848.25	65603.82	441452.07	85.14
Total	**2039629.32**	**271494.43**	**2311123.75**	**88.25**

Source: PMFBY Report 2018 to 2020

Sum Insured:

As compared to 2018, the total sum insured all over the Maharshtra has decline from Rs 2769711.03 lac to Rs 2537512.06 lac in 2019, a decline of about -8.38 per cent. Similarly, it has decline during 2019 to 2020, 2020 to 2021 but it was increased in 2021 to 2022 up to 27.06 per cent. The total value of sum insured under PMFBY in Maharashtra was Rs. 12751100.28 lac, a increased average rate has 4.71 per cent during 2018 to 2022. Table no. 03 indicates the performance of PMFBY in Sum Insured.

Table No 03: Performance indicators in Sum Insured in PMFBY from 2018 to 2022

Year	Sum Insured in Kharif Season	Sum Insured in Rabi Season	Total	% Increase /Decries
2018	1980272.67	789438.36	2769711.03	
2019	2314747.44	222764.62	2537512.06	-8.38
2020	2217942.99	251619.1	2469562.09	-2.68
2021	1895414.99	295314.51	2190729.5	-11.29
2022	2783585.6	-	2783585.6	27.06
Total	**11191963.69**	**1559136.59**	**12751100.28**	**4.71**

Source: PMFBY Report 2018 to 2022

Conclusion:

As per the performance evaluate of PMFBY during 2018 to 2021 in Maharashtra state, it is clearly indicates that, the number of farmers participation, area covered under PMFBY and sum insured had decline from last four year but in 2021-2022 was increased. Apart from Premium and government subsidy had increased. There is need to motivate the farmers towards crop insurance scheme. It is possible when the ground level motivation camp will be organized to door to door in every village.

Bibliography

1. Ashok Gulati, (Feb. 2018), Crop Insurance in India: Key Issues and Way Forward, Working paper NO. 352
2. Singh, G. (2010), "Crop Insurance in India", IIM Ahmedabad, Working Paper. No. 2010-06- 01
3. Ministry of Agriculture & farmers welfare Govt. of India; PMFBY Progress and achievement 2016 to 2021 report
4. https://pmfby.gov.in/adminStatistics/dashboard
5. https://pmfby.gov.in/pdf/New%20Schemes-english_.pdf
6. https://pmfby.gov.in/ext/rpt/ssfr_17
7. Hazell, P., Pomareda, C., and Valdes, A. (1986), "Crop Insurance for Agricultural Development", John Hopkins University Press, Baltimore, USA Harms, S.C, "History of Crop Insurance in the United States", Retrieved from

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

CUSTOMER EMPOWERMENT THROUGH DIGITAL MARKETING: REVIEW OF LITERATURE

Dr.B.Nagaraju[1] Padmashree G[2]
1. Professor, DoS in Commerce, University of Mysore, Manasagangothri Campus, Mysore 570006
2. Senior Research Fellow, DoS in Commerce, University of Mysore, Manasagangothri Campus, Mysore 570006
Corresponding Author- **Dr.B.Nagaraju**
Email id: naga2747@gmail.com
DOI-10.5281/zenodo.7267034

Abstract

The report revolves around the topic of digital marketing and customer empowerment and the various concepts associated with it. For the better understanding purpose many concepts has been discussed in detail. Furthermore it has been observed that digital marketing can also be used as a marketing tool,that can empower the customer. The relationship between the digital marketing and customer empowerment has been studying by discussing the earlier works in these areas. Based on this trying to know the works that have been covered in these two concepts and make the entire discussion more authentic and informative.

Keywords: Digital Marketing, Customer Empowerment, Internet, Tools and Techniques

Introduction

Digital marketing is the component of marketing that utilizes internet and online based digital technologies such as desktop computers, mobile phones and other digital media and platforms to promote products and services. Its development during the 1990s and 2000s changed the way brands and businesses use technology for marketing. As digital platforms became increasingly incorporated into marketing plans and everyday life, and as people increasingly use digital devices instead of visiting physical shops. Digital marketing encompasses all marketing efforts that use an electronic device or the internet. Businesses leverage digital channels such as search engines, social media, email and their websites to connect with current and prospective customers. This can also be referred as 'online marketing', 'internet marketing' or 'web marketing'. In simple terms, any form of marketing that exists online is called as Digital Marketing. In the marketing literature, customer empowerment is defined primarily in two ways. First, customer empowerment can be defined as giving customers power through resources such as greater information or greater understanding. Second, customer empowerment is defined as a subjective state, caused by perceptions of increasing control. from the above statements we define Customer Empowerment as customer's subjective experience that they have greater ability than before to intentionally produce desired outcomes and prevent undesired ones and that they are benefiting from the increased ability. As such it is only the perception of increasing control which evokes empowerment and empowerment may be experienced whether control actually increases or not.

Purpose of the Study

The purpose of the study is to review the articles in the area of Digital Marketing and Customer Empowerment. Through this study to gain the knowledge and information regarding the digital marketing and customer empowerment and also to know what other authors have proved in these areas and what they have left. Through this study try to find out the research gap and also this study will help the prospective researchers to know the research gap in these areas.

Pproaches to Digital Marketing and Customer Empowerment

1. CustomerEmpowerment Strategies

Here the authors studied the customer empowerment in the point of Brand. When they are positively involved in the creation of product, then they will consider as empowered. Here the authors also explained the customer empowerment strategies i.e. create engagement and select engagement. In this article they have studied only customer empowerment strategies. There is no empirical study to know how customers are empowered, and also they failed to explain clearly the concept of customer empowerment and digital age. They have seen the customer empowerment in the view point of Brand only. They did not consider any other factors.

2. Customer Satisfaction, Percieved Value And Loyalty – Consumer Empowerment

This article concerns the evaluation of the effectiveness of information system that support the electronic commerce in the B2C environment. Then the authors argue that EC success can be considered as the extent to which customer satisfaction, perceived value, and loyalty are positively affected. The authors considered the customer empowerment as a key factor in determining satisfaction, perceived value and loyalty. They have studied the background of information system effectiveness measures and also they studied customer satisfaction, perceived value and loyalty as a consequence of EC success. The authors also explain the concept of customer empowerment and the internet. Conceptual Model also explained in the view of EC success. There is no empirical study.

3. Privacy And Consumer Empowerment

Here the authors studied the privacy preservation in two views. 1. Privacy as a protection against undesirable access of personal information i.e. securely storing data collected from the consumers. 2. Privacy and Control over collection and usage of consumer data i.e. Whether or not to obtain the consumer data and how to use it. The authors have studied only privacy of the consumers as a main factor. There is no explanation for consumer empowerment in online advertising. They did not explain the concept of consumer empowerment and online advertising.

4. Digital Advertising And Consumer Empowerment

In this article the authors explained that the internet is everywhere, giving people the opportunity to be online from the moment they wake up until they go to sleep. As a consequence, advertisers are now able to reach consumers throughout the day with a wide range of advertising formats. They explained growth and success of the digital advertising industry. They also explain the concept of Specifics of digital advertising; digital advertising can be tailored to the customer, involvement of consumers, reaching the young target groups, ethical consideration in digital advertising and content in the digital advertising. Here the authors not specifically explain the concept of consumer empowerment and there is no empirical study to know how they empowered in digital advertising.

5. Issues And Challenges In Consumer Empowerment

Here the author studied that online shopping is a form of electronic commerce which allows consumers to directly buy goods or services from a seller over internet using a web browser. And also explained consumer empowerment is a positive subjective state evoked by consumer perceptions of increasing control. In marketing empowerment is providing consumers with options, tools and resources to facilitate decision-making, allowing consumers to tailor a product or brand experience to suit their own specific needs and desires. The authors had the objective of knowing demographic profile of consumers, to

analyse the consumer empowerment on online purchase, to identify the issues and challenges prevailing in online purchase and give suggestions.
The author conducted the empirical study to know the consumer empowerment.

6. The Internet,Consumer Empowerment And Marketing Strategies.

Here the authors arguing that increasing use of information and communication technologies (ICT) is shifting market power from suppliers to consumers, the ensuing consumer empowerment is presented as an unintended consequence of marketing. Marketing implications arising from this consumer empowerment are examined in terms of a process where control and management by suppliers over consumer access and enablement are increasingly difficult. Authors are also explained history of consumer empowerment, consumer power and quality gap, Strategies approaches to consumer empowerment i.e. CRM and CSS. They have considered only marketing strategies to know the consumer empowerment. The authors failed to explain the concepts of internet, consumer empowerment, marketing strategies clearly. The results are based on the historical data. There is lack of empirical data to know how consumers are empowered.

7. The Customer Advocacy And Digital Myopia.

Various developments in the marketing terrain in combination with the emergence of a new breed of Information and Communication Technologies have been transforming market dynamics and customer behavior over the last two decades. One of the most noticeable changes, recently attracting a growing attention of the media and academia, is the apparent transfer of market power from the traditional domineering marketplace masters (corporations - producers) towards the previously weaker party namely the consumer / customer. Customer empowerment brings about a number of important changes in consumer behavior and in relationships between buyers and sellers. This event has also significant consequences for various aspects of the marketing practice like the market needs, the demand for products, services and information, the communication models, the role of the mass media and the nature of competition. Strategists and Marketers failing to understand the impact of the new technologies and the importance of customer empowerment on their business suffer from Digital Myopia, a condition that could threaten the growth if not the survival of their business in the future. The authors also explained the main dimensions of the problem and identify the consequences for the marketing practice, proposing possible ways to deal with it. The author only explained the concepts of internet, customer advocacy and digital myopia but he failed to explain that how these concepts are interrelated. It is completely a conceptual study.

8. Consumer Empowement Model

The author explained that the consumer empowerment is an influential phenomenon that is transforming today's web 2.0 world, He also has opinion of that there is no study which aims to understand how consumer empowerment works and functions on the internet. The main aim of this study is to discussing the changing consumer power with a newly proposed conceptual model, consumer empowerment model (CEM), on the internet. The author discussed the each component of CEM in detail in order to illustrate how this new form of consumer empowerment is actualized. The author explained Consumer Empowerment Model. He considered the economic self-efficacy, social self-efficacy and legal self-efficacy and perceived consumer power and trust and consumer trust in the website and Internet Company and attitudinal and behavioural consumer power. There is no empirical study to check the CE model The concepts explained here is difficult to understand.

9. Trends And Challenges In E-Consumer's Protection

Here the authors explained the Electronic Commerce and Trends in e-consumer protection in India, like Consumer Protection Act 1986 and Challenges in e-commerce, like filing complaints against an electronic retailer based on overseas can be challenging, expensive, time consuming, jurisdiction complex. The authors did not clearly explain the concepts of e-consumer protection in India. They did not use the simple terms to understand. It is conceptual study.

10. **The Relationship Between Consumer Empowerment And Social Interaction**

The author explored the interaction between consumer empowerment and social interactions as fundamental social media elements. They have studied their relationship in both experiential and informative social media setting where social media complements an offline consumer activity. They also explained three experimental designs that manipulate the empowering and socializing elements of complementary activities to show their effects on both the complementary online and the complemented offline activities.

The words used in the article are difficult to understand

They failed to explain the concepts clearly.

Conceptual study

11. **Digital Marketing In Indian Context**

The author explained the Digital Marketing, facts about Indian Digital marketing industry, reason for Digital Marketing in India. They have also explained Indian companies using digital marketing for competitive advantage. The author studied impact of technology growth on traditional marketing, reasons for failure of digital marketing in startups and commandments of digital marketing.

The author did not study the techniques of digital marketing.

They have explained the concept of impact of technology growth but no empirical study.

12. The Pitre Model

The authors had explained the concepts of interactive advertising and e-wom consequences.

They have developed the PITRE model, which includes variables such as Product development, Intrusiveness, Time watching the ad, Brand recall. have collected the data from 338 sample. They have used Mean, SD, Alpha, CR, AVE. They introduced the PITRE model to clarify the challenging phenomenon of consumer empowerment by focusing on the central role of consumers in controlling communication in modern interactive advertising formats.

The authors have taken only few variables to know the Consumer Empowerment.

They have considered only young customers

13. Impacts Of Digital Marketing

The author had explained that the world is shifting from analog to digital and marketing is no exception. As technology development is increasing, the use of digital marketing, social media marketing, search engine marketing is also increasing. Internet users are increasing rapidly and digital marketing has profited the most because it mainly depends on the internet. Consumer's buying behavior is changing and they are more inclined towards digital marketing rather than traditional marketing. The author also explained the various channels of digital marketing and importance and its advantages and disadvantages. he world is shifting from analog to digital and marketing is no exception. As technology development is increasing, the use of digital marketing, social media marketing, search engine marketing is also increasing. Internet users are increasing rapidly and digital marketing has profited the most because it mainly depends on the internet. Consumer's buying behavior is changing and they are more inclined towards digital marketing rather than traditional marketing. he world is shifting from analog to digital and marketing is no exception. As technology development is increasing, the use of digital marketing, social media marketing, search engine marketing is also increasing. Internet users are increasing rapidly and digital marketing has profited the most because it mainly depends on the internet. Consumer's buying behavior is changing and they are more inclined towards digital marketing rather than traditional marketing. The world is shifting from analog to digital and marketing is no exception. As technology development is increasing, the use of digital marketing, social media marketing, search engine marketing is also increasing. Internet users are increasing rapidly and digital marketing has profited the most because it mainly depends on the internet. Consumer's buying behavior is changing and they are more inclined towards digital marketing rather than traditional marketing. The author explained the concepts only The author failed to explain how digital marketing is impacting on customer

14. Empowerment By The Internet

The author focused on the concept of empowerment and the ways in which the Internet is being utilized as an empowering tool. This analysis ranges from the personal to the global levels and the consequences of that empowerment are also discussed. They proposed a four-level model that serves to explain what we term E-empowerment and the effects that can be observed at each of the four levels, ranging from (1) the personal; (2) the interpersonal; (3) group; and (4) citizenship. The potential for future development of E-empowerment is also discussed.

The concepts are difficult to understand

Only theoretical in nature

15. E Mail Marketing In The Era Of The Empowered Consumers

In this article the author clarified why, when and how e-mail marketing can be used to empower and to give ideas for future scholarly research. E-mail allows an active, interactive and personalized communication fulfilling the preference of an empowered consumer. E-Mail marketing can be used to empower consumer by sending e-mails based on permission, by making consumer active participants in the communication process and by making e-mails relevant for the recipients. however , current e-mail marketing strategies need to be updated to get the maximum benefit out of the channel.

The author had narrowed down the study, which means that they should cover more data to explain the concepts.

It is a conceptual study.

Discussions

- The authors should clearly define the concept of customer empowerment and digital age
- Apart from the brand they should also consider the other factors for customer empowerment.
- The authors should conduct the empirical research to see the degree of Electronic Commerce success.
- The authors can also explain the other factors to know the customer empowerment.
- The authors should clearly explain the concept of online advertising
- The authors should conduct the empirical research to know the Privacy and Consumer Empowerment in online advertising.
- The authors should clearly explain the concept of consumer empowerment and digital advertising
- The authors should conduct the empirical research to know the Consumer Empowerment in digital advertising.
- The author can briefly explain the consumer empowerment and online purchase
- The authors can use simple statistical tools to explain the difference between the issues and challenges in online purchase and consumer empowerment in online purchase.
- The authors can clearly explain the concepts of internet, consumer empowerment and marketing strategies
- Empirical study can be conducted to know the consumer empowerment
- Model also needs to be tested empirically to observe major deviations from theoretical discussions in order to reach a robust model infrastructure that reveals the paths to transforming consumer power for the benefit of all in tomorrow's digital markets.
- The authors should use the simple terms to understand the concepts

- ❖ They should give the full information regarding the consumer protection act.
- ❖ The authors should clearly explain the concepts of social media, consumer empowerment, social interaction.
- ❖ The can use the simple words to understand the concepts easily.
- ❖ They can conduct the empirical research to know the relationship between the consumer empowerment and social interaction.
- ❖ The author can explain the entire concepts of Digital Marketing. Many concepts were not explained.
- ❖ The authors can consider the other variables to know the consumer empowerment.
- ❖ Along with young customers, they can also consider the other age group customers.
- ❖ The author can conduct the empirical research to know how customers are impacted
- ❖ The authors can use simple words to understanding the concept.
- ❖ The author can conduct the empirical study to know the empowerment of consumers through the e-mail marketing.

Summery and Conclusion

In this study tried to collect the articles relating to Digital marketing and Customer Empowerment. Many concepts like impact of digital marketing, trends and challenges in e consumers protection, Consumer Empowerment model, Empowerment by the Internet, e mail marketing, the relationship between consumer empowerment and social interaction**,** digital marketing in Indian Context, Digital advertising were studied. Many articles were explained the theoretical concepts but there is no empirical study to know the customer empowerment.

From the overall evaluation of the collected data, it can be observed that digital marketing can be used as a viable tool towards marketing. There are various tools and techniques associated with it. By implementing these tools and techniques will ensure that giving proper choices and selection for the customers. Customer Empowerment can be achieved through the digital marketing over the traditional marketing. Because digital marketing has the various advantages of buying online, like anywhere anytime and everywhere.

Reference

1. Haitham Al Shibly, Janet Aisbett And Guilherme Pires(2003) "Customer Empowerment And Electornic Commerce" published in Information Technology and Organization in the 21st Century Challenges and Solution at Amman Jordan
2. Guilherme Pires, John Stanton, Paulo Rita (2006) "The Internet,Consumer Empowerment And Marketing Strategies" published in European Journal Marketing 40(9/10): 936-949
3. Efthymios Constantinides (2008) "The Empowered Customer, The Customer Advocacy And Digital Myopia." published in Business Strategy Series9(5): 215:223
4. Yair Amichai- Hamburger, Katelyn Y.A., McKenna, Samuel-Azran Tal (2008) "E-Empowerment: Empowerment By The Internet" published in Computers in Human Behavior Umit kucuk (2009) "Consumer Empowement Model" published in Direct Marketing : An International Journal
5. Andrew T. Stephen (2015) "The role of digital and social media marketing in consumer behavior" , published in IJRESM
6. Mujde Yuksal, George R Milne, Elizabeth G Miller(2016) " Social Media As Complementary Consumption: The Relationship Between Consumer Empowerment And Social Interaction In Experiential And Informative Context." published in Journal of Consumer MarketingMari Hartemo(2016) "E Mail Marketing In The Era Of The Empowered Consumers" published in Journal of Research Interactive Marketing Vol.10 issue 3
7. Ahmad Bin Yamin (2017) "Impact of digital marketing as a tool of marketing communication: A behavioral perspective on consumers of Bangladesh" in Ameriacn Journal of Trade and Policy

8. Dumirescu luigi, Oana, Mihai and Simona "Disclosing the promising power of social media – an important digital marketing tool" available at Studies in Business and Economics.
9. Guilherme D. Pires, John Stanton and Paulo Rita (2017) "The internet, consumer empowerment and marketing strategies" (2017) published in European Journal of Marketing
10. Ishaq Ahmad Dar and Reena Lakha (2018) "Digital Marketing in India: An overview" published at Interantional Journal of Social Science.
11. Dr. Kaneez Fatima Sadriwala and Dr.said Eid Youner (2018) Consumer Protection in Digital Age published at Pacific Business Review International
12. Louis K.Falk, Sockel and Chen (2005) "E-Commerce and Consumer's Expectation" published in Journal of Website Promotion
13. Lauren I.Labrecque, Esche, Mathwick, Novak, and Hofacker (2013) "Consumer Power: Evolution in the Digital Age" published at Journal of Interactive Marketing.
14. Lubna Riz V (2013) "Online marketing through consumers: A study of effectiveness of various tools and techniques across Industries" published in British Journal of Management.
15. Liselot Hudders, Eva A. van Reijmersdal & Karolien Poels (2019) "Digital Advertising and Consumer Empowerment" published in Journal of Psychological Research on Cyberspace.
16. Noraini saait, Kanyan and Nazrin (2016) "The Effect of E-WOM on Customer Purchase Intention" published in International Academic Research Journal of Social Science
17. Oguz Ali Acar and Stefano Puntoni (2016) "Customer Empowerment in the Digital Age" published in Journal of advertising Research.
18. Rajiv Kaushik (2016) "Digital Marketing in Indian Context" published in International Journal of Computational Engineering and Management
19. Dr. Shashi Nath Mandal (2016) "E-Consumer's Protection in India" published in Global Journal of Management and Business Research: E Marketing.
20. OgusAlicar, Stefano Puntoni (2016) Consumer Empowerment in the Digital Age published in Journal of Advertising Research 56(1): 4:8
21. P. Sathya (2017) "A Study on Digital Marketing and its Impact" published in International Journal of Science and Research
22. M.Shirisha (2018) "Digital Marketing Importance in the New Era" published in International Journal of Engineering Technology Science and Research.
23. Dr.A.Irin sutha (2018) "An Study On Consumer Empowerment In Online Purchase: Its Issues And Challenges" published in IRJMST Vol.9 issue 3
24. Sarah Silvia (2019) "The importance of Social media and digital marketing to attract milennial's behavior as a Consumer" published in Journal of International Business Research and Marketing.
25. Liselot Hudders, Eva A Van Reigmersdal and Karolien Poels.(2019) "Digital Advertising And Consumer Empowerment" published in Journal of Psychosocial Research on Cyberspace 13(20)
26. Daniel Belanche, Carlos Flavián & Alfredo Pérez-Rueda(2020) "Consumer Empowerment In Interactive Advertising And Ewom Consequences: The Pitre Model" published in Journal of Marketing Communication
27. Kishan Prajapat (2020) "A Study On Digital Marketing And It's Impacts" published in A study on Research and its Impacts.
28. W.Jason Choai, Kinshuk Jerath(2022) "Privacy And Consumer Empowerment In Online Advertising". published in Foundations and Trends in Marketing Vol.15: NO 3, pp153-212

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

EDUCATION IS THE ANSWER TO SUSTAINABLE DEVELOPMENT

DR. Manju Garg[1] Mrs. Tamanna[2]
Assistant professor, KLP College, Rewari,
Research Scholar, IGU Meerpur, Rewari,
***Corresponding Author*- Dr.Lalhmuoklien**
Email id: rubygupta5474@gmail.com

DOI- 10.5281/zenodo.7267052

Abstract: -

Education is a valuable resource of knowledge. It facilitates quality of learning all throughout our lives. It is in fact a complete holistic sustainable education system that lays the foundation of our wisdom, character and ethics. These also play a vital role in our overall development and the progress of our society as a whole. Education for sustainable development (ESD) promotes the development of the knowledge, skills, understanding, values and actions required to create a sustainable world, which ensures environmental protection and conservation, promotes social equity and encourages economic sustainability. Education for sustainable development is a vision of education that seeks to balance human and economic well-being with cultural traditions and respect for the Earth's natural resources. It emphasizes aspects of learning that enhance the transition towards sustainability including future education; citizenship education; education for a culture of peace; gender equality and respect for human rights; health education; population education; education for protecting and managing natural resources; and education for sustainable consumption. Educational approaches must take into account the experiences of indigenous cultures and minorities, acknowledging and facilitating their original and important contributions to the process of sustainable development.

Keywords: - Development, Education, Sustainable

Introduction: -

The development of information, skills, values, and behavior necessary to build a sustainable world is usually defined as education for sustainable development. It's vital to highlight that this isn't sustainable development education, but rather Education for Sustainable Development. To put it another way is education that empowers one to claim and respect equality, peace, and social justice; develops the knowledge and skills necessary to create a world that is sustainable for all; instills the attitude of leaving no one behind; constantly reminds us that we only have one planet, that it belongs to all of its inhabitants equally, and that we have oversubscribed the planet's resources. Educates on responsible consumption and production and ensures long-term economic growth. a proponent of global citizenship. Encourages creativity and abundance in the pursuit of a more sustainable world. UNESCO's recognition of Education for Sustainable Development as an inherent component of quality education and a critical enabler for sustainable development demonstrates an increasing international recognition of the subject. The SDG-aligned ESD for 2030 framework, which is slated to be launched this year, will be coordinated by UNESCO. SDG 4 is about quality education, and SDG 4 goal 4.7 is about ESD. Mission 4.7 is a collaborative UNESCO endeavor that began in December 2020 to speed up the implementation of SDG objective 4.7. India's National Education Policy (NEP

2020), the first education policy of the twenty-first century, is timely in its introduction and response to global goals and momentum on SDG 4. By providing comprehensive and egalitarian education and ensuring lifelong learning opportunities for all, the NEP 2020 is intended to put India on pace to achieve SDG 4 of the 2030 Agenda for Sustainable Development. The NEP 2020 recognizes that meeting SDG 4 will necessitate a complete reorganization of the educational system to meet all important targets and SDGs. The primary responsibility for education for sustainable development falls on the shoulders of institutions that are committed to creating a better India. The domain of education is the best strategic way to bring about any change in society. Providing quality primary education is our core value. The Group through its venture SAGE International School is committed to giving basic education. We have been the pioneer in imparting industry-centric programs and outcome-based learning in our curriculum, enabling the students to engage in practical education. The school is a forerunner in providing quality education to the next generation. To provide the groundwork for a brighter future, the curriculum is meant to inspire pupils' creativity and curiosity. Sage International School in the city of lakes promotes the holistic development of kids and is a place for creating a better tomorrow. We are the first schools in the city of lakes to have centralized air conditioning, smart classrooms, excellent laboratories, fun extracurricular activities, and an ERP App for parents to keep a digital check on their children and receive real-time academic data.

What is Education for Sustainable Development?

Education for Sustainable Development is commonly defined as the development of knowledge, skills, values and behavior required to create a sustainable world. It is important to note that it is not the education about sustainable development, but the education for sustainable development.

National Education Policy lays out vision on ESD fundamentals

India's National Education Policy (NEP 2020), the first education policy of the 21st century, aiming to transform India's education system is timely in its release and response to the global goals and momentum on SDG 4. The NEP is expected to put India on track to attain SDG 4 of the 2030 agenda for sustainable development by offering inclusive and equitable education and assuring lifelong learning opportunities for everyone. NEP acknowledges that achieving SDG 4 will require the entire education system to be reconfigured to achieve all critical targets and SDGs. Therefore, it is extremely important to keep improving our education system and curriculum with the constantly changing times. In total, 193 countries have committed to achieving the SDGs as humanity's aspirations. Achieving the SDGs is critical to humanity, international organizations, governments, corporations, communities, and individuals must all work together. As a result, "Education for Sustainable Development" (ESD) has become a critical component of global human resource development

Problem Faced in Growth of Education for Sustainable Development

A lack of funding for education: - According to the Global Partnership for Education (GPE), less than 20% of educational aid goes to low-income countries, whereas it costs an average of $1.25 a day per child in developing countries to provide 13 years of education. If each developing country invested just 15 cents more per child, it could make all the difference. There is currently a $39 billion shortage for providing quality education to all children by 2030. GPE encourages developing countries to contribute 20% of their national budget to education, and allocate 45% of it to primary education. Developing countries rely on foreign aid and overseas funding for the education of their people as they cannot rely solely on their own financing.

Non-availability of teachers and a shortage of trained teachers: -

In certain countries, there are simply not enough teachers and many of the teachers that are currently teaching are not trained or qualified. As a result, children aren't receiving a proper education. There are 130 million children in school who are not learning basic skills like reading, writing, and math. Globally, the UN estimates that 69 million new teachers are required to achieve universal primary and secondary education by 2030. Meanwhile, in 1 out of every 3 countries, less than three-quarters of teachers are trained to national standards.

Shortage of classroom: -A child cannot learn without the right environment. Children in many countries in sub-Saharan Africa are often squeezed into overcrowded classrooms, classrooms that are falling apart, or are learning outside. In Malawi, for example, there is an average of 130 children per classroom in grade 1. It's not just a lack of classrooms that's the problem, but also all the basic facilities you would expect a school to have — like running water and toilets. In Chad, only 1 in 7 schools have potable water, and just 1 in 4 has a toilet; moreover, only one-third of the toilets that do exist are for girls only — a real disincentive and barrier for girls to come to school.

Lack of learning materials: -

In many parts of the world, children are forced to share outdated and worn-out textbooks due to lack of funds and learning resources. In Cameroon for instance, 1 reading book is shared between 11 primary school pupils and the mathematics textbook is shared between 13 students in grade 2.

In Tanzania, only 3.5% of grade 6 students had access to a reading textbook. Learning resources such as textbooks, worksheets, exercise books and, readers are in short supply across poorer countries and teachers are also in need of teaching material to help prepare the lesson plans for teaching effectively within the classroom.

Challenges faced by children with disabilities: -

Education — despite being recognized as a universal human right, over 93 million children with disabilities in the world are denied access to schools. It is more common in the world's poorest countries where up to 95% of children with disabilities are out of school, however, the rate at which children with disabilities that are out of school in developed countries is not much lower at 90%. A combination of discrimination, lack of training in inclusive teaching methods among teachers, and a lack of accessible schools leave this group uniquely vulnerable to being denied their right to education.

Disadvantaged by gender: -

Over 132 million young girls around the world are left disadvantaged for being born a female and are left out of school. In the developing world, one in 3 girls are forced to marry before they are 18 and as a result, are removed from schools. Despite recent campaigns and educational awareness in the world's poorest and developing countries, a generation of young women is feeling left behind due to their gender. They are denied access to education and are forced to help out in household chores and look after their siblings due to poverty and false belief that educating a boy is more fruitful than educating a girl child.

Children living in conflict or war-torn countries: -

Any war produces numerous casualties and education is almost always the first to be destroyed when there is a conflict. Its impact cannot be overstated with nearly 250 million children living in areas that are currently designated as conflict and disaster zones. Over 61 million children do not have access to education due to wars and conflicts that have destroyed their schools and forced teachers and students to flee their homes. UNESCO states that girls are 90% more likely to be out of school within conflict-affected zones than anywhere else in the world. The UN Refugee Agency has stated that less than half of the world's refugee children are enrolled in school, with less than 3% of global humanitarian aid being allocated towards education.

Long and dangerous walks to and from schools: -

It is common for many children living in the world's poorest countries to walk to school for more than 3 hours in each direction. At times, they have to make this tedious journey in dangerous circumstances in areas prone to conflict or wild animals. Imagine having to leave for school early in the morning on an empty stomach and walk for over 3 hours to reach the school in hazardous conditions. It is just too much for any child, particularly the ones that have disabilities and the ones who are suffering from malnutrition and other illnesses.

Starvation and Malnutrition: -

Lack of food has a direct influence on education in several of the world's poorest countries, where children are suffering from starvation and malnutrition. As many as 151 million children under the age of 5 are estimated to have been prevented from growing or developing properly. Malnourishment can affect a child's cognitive abilities and brain development which results in a lack of focus and concentration in the classroom. Malnourished children are less likely to be able to even read by the age of eight!

The financial burden of education: -

The Universal Declaration of Human Rights makes clear that every child has the right to free basic education so that poverty and lack of money should not be a barrier to schooling. In many developing countries, over the last several, decades, governments have announced the abolition of school fees and as a result, they have seen impressive increases in the number of children going to school. But for many of the poorest families, the school remains too expensive and children are forced to stay at home doing chores or work themselves. Families remain locked in a cycle of poverty that goes on for generations. In many countries throughout Africa, while education is theoretically free, in practice "informal fees" see parents forced to pay for "compulsory items" like uniforms, books, pens, extra lessons, exam fees, or funds to support the school buildings. In other places, the lack of functioning public (government-supported) schools means that parents have no choice but to send their children to private schools that, even if they are "low-fee," are unaffordable for the poorest families who risk making themselves destitute in their efforts to get their children better lives through education.

How can we overcome these barriers?

There are several ways in which we can contribute to overcome these barriers to education faced by the world's poorest children. There are several charities and non-profit organizations that are working tirelessly in tackling this epidemic and have achieved some success.

Educational Institutions, start your ESD journey today: -

It seems overwhelming to mobilize ourselves and our society to take on the greatest obstacles to global well-being. Tools and systems must be designed to help learners and educators get involved at the local, national and international level. Educational institutions can nurture teachers' and students' curiosity and provide them with the tools and resources to inquire, understand, engage and communicate the importance of sustainability. Educational institutions must proactively start their preparations to embrace Education for Sustainable Development, while NEP prepares to roll out. Educators must leverage this interval to:

Prepare: -

- Build Awareness among management, teachers and students. Host a documentary screening.
- Start an awareness campaign.
- Conduct interdisciplinary seminars overlapping with the sustainability concepts. Discuss various indicators with students for example, how would our lives change if we do not achieve "Net Zero" emission by 2050?
- Engage students and establish the culture of sustainability, enable them to see sustainability in everything they do; Develop creative games, thought-provoking idea build-up through shark-tank like concepts, , comics, of indicators and its key

elements, ask students to make short videos and share vlogs.

Practice

- Take an ESG (Environmental, Social and Governance) audit.
- Define what it takes to become a "Sustainable School". Define projects and milestones and engage ALL students to deliver them. Every stakeholder of the school has its responsibility to deliver.
- Define and practice a "Sustainability Index" and let the student groups compete to improve their index.
- Conduct Sustainability Day.
- Formulate an integrative conceptual learning framework, include concepts in interdisciplinary content and define your education methods.
- Conduct programs for upgrading teachers' skills and transition assistance programs

Collaborate / Network

- Conduct interschool events on the sustainability theme.
- Continue to develop greater synergies between ESD and every other education attribute.
- Build greater collaboration between the department of education and other key stakeholders.
- Leverage the role and potential of regional and national networks and third-party players.
- Take up ongoing community projects targeting to deliver a specific SDG.
- Join hands with corporates in community projects.

Conclusion

Sustainability is significantly influencing the way we conduct ourselves, be it governments, international organizations, corporates, communities, investors or individuals. Purpose, vision, strategy, products, services, lifestyles and behaviour are being revisited for sustainability like never before. Education is the superpower and our most impactful lever that seeds concepts as a culture at one's core and brings the change we need at a scale we need. Sustainable development is the need to integrate social, environmental, and economic concerns so as to arrive at development paths which meet the needs of present generations, without compromising the ability of future generations to meet their own needs. Education for sustainable development has come to be seen as a process of learning how to make decisions that consider the long-term future of the economy, ecology and social well-being of all communities. Building the capacity for such futures-oriented thinking is a key task of education. Education for sustainable development must explore the economic, political and social implications of sustainability by encouraging learners to reflect critically on their own areas of the world, to identify non-viable elements in their own lives and to explore the tensions among conflicting aims. Development strategies suited to the particular circumstances of various cultures in the pursuit of shared development goals will be crucial.

References: -

- https://www.policycircle.org/life/education-for-sustainable-development/
- https://kalaharijournals.com/resources/Spe2%20Jan_Feb_11.pdf
- http://www.esdtoolkit.org/discussion/challenges.htm
- https://learningonline.xyz/something-good/10-barriers-to-education-and-how-to-overcome-them
- https://en.unesco.org/sites/default/files/issues_0.pdf
- https://eduzaurus.com/free-essay-samples/barriers-to-education-in-india/

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

BIO-MEDICAL WASTE DISPOSAL AND MANAGEMENT OF DHARWAD CIVIL HOSPITAL: A CASE STUDY

Dr. I. A. Mulla
Associate professor, HOD Dept of Geography Anjuman Arts, Sci. Com. College & P. G. Studies, Dharwad.
Corresponding Author - Dr. I. A. Mulla
Email id: mullaia22@gmail.com

DOI- 10.5281/zenodo.7267065

Abstract:

Solid waste generation has proven to be a major concern to people, especially in urban areas. It has made living difficult and brought about several serious issues in the cities. Waste management and disposal have become challenging tasks for any government, its agencies, and enterprises. The public, governments, and other organizations have focused attention on the disposal of hazardous wastes and the release of toxic substances in the environment as a result of the discovery of toxic chemicals in the water supply, fruits and vegetables, and water tables and the risk they pose to human health. The Hazardous Waste (Management and Handling Rules) were published by the Ministry of Environment and Forests (India) in 1989 and were updated in 2000. It is a comprehensive act dealing with all facets of environmental protection. Municipal solid trash generation and increased industrial production have posed a significant issue and necessitated skilled administrative measures. Therefore, the researcher has chosen the current issue to understand the multiple implications of waste.

Introduction:

The Dharwad Civil Hospital is one of the large institutions that draws people from all facets of society, regardless of their age, sex, race, or religion. This is in addition to the standard hospital inmates, such as patients and employees. They all generate trash, which is changing in quantity and variety as a result of technological advancements and is having an effect. In addition to posing a risk to patients and staff who manage these wastes, hospital waste also poses a risk to the environment and public health. The Ministry of Environment and Forests promulgated the "Biomedical Waste (management and handling) Rules, 1998" in July 1998 in consideration of improper biomedical waste management. With reference to these Rules (Rule 4). Every "occupier," or anyone who has responsibility over the institution or its premises, is required to take all reasonable precautions to ensure that waste created is managed in a manner that doesn't harm the environment or human health. The biological waste treatment facilities must be installed in hospitals, nursing homes, clinics, dispensaries, animal houses, pathological labs, and other facilities. The regulations also allow for the use of any other facilities, including common ones, for the treatment of waste. However, it is the occupier's responsibility to make sure the garbage is treated within 48 hours.

Study Area:

The district headquarters, Dharwad Civil Hospital, is situated in the Belgaum division. It is located on 4 Acres of land. Through the incorporation of new regions within municipal limits, the city's area has also increased. As a result, the Dharwad Civil Hospital has been chosen as the study area.

Objectives:

The following objectives are covered by the current study;

- To determine how much garbage is generated at Dharwad Civil Hospital.
- To assess the different types of waste produced at Dharwad Civil Hospital.
- To make some recommendations for practical waste management techniques.

Hypothesis:

The following hypotheses are presented in relation to the current study; As the city's population grows, so does the amount of solid garbage produced. There is a positive correlation between the amount of solid trash produced and the density of people in a certain location. There is a good correlation between systematic waste management practices and urban residents' awareness of the issues with garbage generation.

Methodology:

The current work is primarily supported by the fieldwork-based primary data collection that was done in accordance with the questionnaire created in this context. In May 2021, the researcher started the survey and fieldwork. As a result, secondary data is added to the primary information and data. The data has been examined using computer programs, maps, charts, and diagrams, as well as basic statistical techniques.

Dharwad - The Attitude Survey of Study Area: To prepare the groundwork for the project, a survey of 176 hospitals in Hubli-Dharwad was done, including 72 facilities that solely treat outpatients, 10 of which are administered by HDMC, along with 5 private hospitals, 1 municipal hospital, and KIMS medical college. The respondents were split equally between doctors and nurses. The results of the attitude survey were encouraging. Seventy percent of respondents believed that waste management is an essential activity that is not only the duty of the government. Fewer than half of the respondents believed it would be a financial hardship, and all agreed that it is a team effort. In addition, the results provided an overview of the knowledge, awareness, and practices regarding biomedical waste management in the twin city region. This will serve as a baseline against which the research will measure changes; it will also show any potential issue areas that require specific attention.

Material and Methods: A study was undertaken in Dharwad's Civil Hospital, which has 282 beds. BMW management's total cost in terms of capital cost and operating cost (per month) was calculated taking into account the infrastructure requirements and BMW Rules 1998. One hospital's methods of storage and segregation at the ward/department level, internal transportation, curbside storage, external transportation, and on-site final disposal/off-site disposal, as well as its infrastructure, were evaluated. Various hospital personnel were approached informally for conversation. Also investigated was a regional facility for the final disposal of infectious trash.

Discussion of the text

According to Schedule II of the Biomedical Waste (Management and Handling) Rules 1998, waste generated at the Civil Hospital of Dharwad, which was analyzed in terms of bed strength, waste generation, and mode of final disposal, must be divided into containers/bags at the point of generation. General waste such as garbage, garden garbage, etc. should be included to the home waste stream. Sharps should be disposed away in puncture-resistant containers. The Biohazard symbol should be placed on infectious waste bags and containers. Autoclaving should be used to sanitize extremely infectious trash. Cytotoxic waste must be collected in containers that prevent leakage and are clearly labeled as cytotoxic waste [3]. Needles and syringes should be disposed of using a needle destroyer and syringe cutters available at the point of production. Cut infusion sets, bottles, and gloves with curved scissors. Sharps, soiled linen, plastic, and rubber items must be disinfected at the point of generation using sodium hypochlorite with a minimum contact time of one hour. Each shift should generate a new solution. When waste bags are three-quarters full, collection personnel must either tie the bag's neck or seal it. Transporting biomedical waste within the hospital requires the use of wheeled trolleys, containers, or carts that are not utilized for any other reason. The carts must be cleaned every day. The name and address of the carrier must be shown on all off-site transport vehicles. The emblem for biohazard should be painted. A suitable technique for securing the load during transport must be guaranteed. This vehicle should have rounded corners for easy cleaning. Before being sent to the vendor for disposal, all disposable plastic should be shredded. Biomedical waste can be treated with technologies such as Biomedical waste management 381, etc., as tabulated.

1. Civil Hospital depicts the total cost of BMW management at the hospital in terms of capital expenditures and recurring expenses. High capital expenditures have been incurred as a result of the hospital's strict adherence to BMW's rules. Due to non-compliance with BMW Rules, the Civil Hospital was determined to have lower recurring expenses relative to its waste output.
2. It was observed that Govt. service hospital where BMW management was implemented as per BMW 1998 rules had process of segregation of waste at generation level into various color coded bags and plastic drums, internal transportation of waste through trolleys to kerb site, storage at kerb site in various color coded metallic drums, movement of plastic disposable waste to plastic shredders and transportation of infectious waste to on site incinerator was found to be completely in place. Safai karmacharis were using complete protective equipment like gloves, masks, shoes etc while handling waste and also sodium hypochlorite was available in each and every sharp generating site in wards as well as departments. The capital and recurring cost worked out for complete process thus was found to be high as compared to other hospitals as other hospitals had some shortcomings at every step of BMW management.
3. A small number of safai karamcharis wore latex gloves. In hospitals, waste destined for incineration is physically inspected by laying out the waste and manually segregated, which might result in injury to hospital staff and should be avoided at all costs. Sodium hypochlorite is used sparingly, and fresh solutions were unavailable at the majority of hospitals.
4. This city has implemented a regional facility for the final disposal of biomedical waste from health care facilities. With the aid of two adapted Tata 407 pickups, around 100 kilograms of garbage are collected daily. Each of the three twin-chamber incinerators with acceptable chimney sizes and a total capacity of 40 kg/hr is operational. They charge Rs. 20 per kilogram of garbage. Municipal bodies handle billing, and the facility is routinely checked by the municipal or state pollution control board.

Ward Wise Distribution Of Various Details Of Waste Disposal In Civil Hospital Dharwad In January-2021

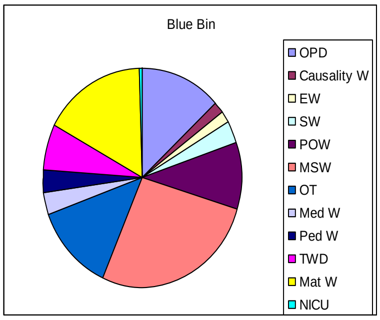
01/01/2021

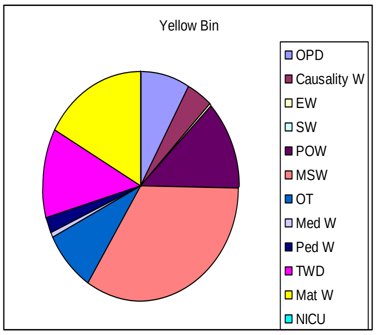
Per Day Bio-Medical Waste Disposal In Civil Hospital, Dharwad

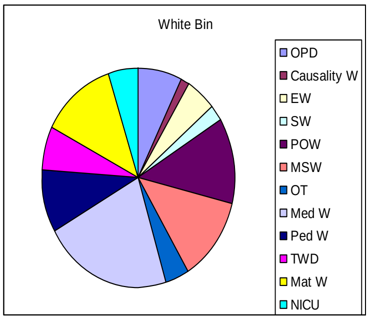
Sl No	Wards	Blue +	Yellow Bin	White Bin
1	OPD	4 Kg	2 Kg	6 Kg
2	Causality W	1/2 Kg	1 Kg	1 Kg
3	EW	1/2 Kg	15 Gram	4 Kg
4	SW	1 Kg	---	2 Kg
5	POW	3 Kg	3 Kg	10 Kg
6	MSW	8 Kg	8 Kg	10 Kg
7	OT	4 Kg	2 Kg	3 Kg
8	Med W	1 Kg	200 Gram	17 Kg

9	Ped W	1 Kg	550 Gram	7.5 Kg
10	TWD	2 Kg	3 Kg	5 Kg
11	Mat W	5 Kg	4 Kg	10 Kg
12	NICU	200 Gram	1.50 Gram	4 Kg
			23.95 Kg	

Per Day Bio-Medical Waste Disposal in Civil Hospital, Dharwad 01-01-2021







Conclusion:

After reviewing the study's findings, it was determined that there is an urgent need to standardize the infrastructure need so that hospitals that strictly adhere to BMW hand guidelines do not incur additional expenses. Hospitals with defunct or damaged incinerators should be required to utilize a central incineration facility, since the government is working to reduce the number of incinerators in urban areas to prevent an increase in air pollution. Government hospitals that are currently left entirely on their own should be subjected to rigorous BMW management auditing, and a corpus grant should be granted to help them meet their infrastructure needs, as stipulated in the Government of India Rules. Utilizing hospital services, the community must contribute to the development of infrastructure for Bio Medical Waste disposal (BMW mgt). This contribution can be made in the form of support in sharing the cost of consumables and capital costs of BMW management by Municipality, State Government, and Nonprofit organizations such as Rotary Club.

References

1) Rao S.K.M., Garg R.K. A study of Hospital Waste Disposal System in Service Hospital. Journal of Academy of Hospital Administration July 1994; 6(2):27-31.
2) Singh I.B., Sarma R.K. Hospital Waste Disposal System and Technology. Journal of Academy of Hospital Administration, July 1996; 8(2):44-8.
3) Srivastava J.N. Hospital Waste Management project at Command Hospital, Air Force, Bangalore. National Seminar on Hospital waste Management : A Report, 27 May 2000.
4) A study of Hospital Waste Management System in Command Hospital (Southern Command), Pune. A Dissertation submitted to University of Pune. Wg Cdr RK Ranyal Dec 2001; p. 37.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

THE ROLE OF DIGITAL TECHNOLOGY AGAINST COVID-19 IN INDIA: A REVIEW

Dr. Nitin W. Jaswante
Department of Commerce, Late Madangopal Mundhada Arts, Commerce & Science College Chandur Rly
Corresponding Author **Dr. Nitin W. Jaswante**
Email id: hmuoka2020@gmail.com
DOI-10.5281/zenodo.7267079

Abstract: -

Digital technology is not the ultimate solution, but it is a tool that provides an immediate and effective response to a pandemic. Therefore, the focus is on mobile applications, robots and drones, social media platforms. Television and the relevant technologies deployed in the fight against the outbreak of COVID-19 have been sufficiently discussed. Current state of the art. Reported materials, press releases and organizational claims are discussed together. This review explores and highlights how these effective modern technology solutions can help in healthcare, communications, logistics support, tourism and hospitality. The study discusses the advantages of this digital technology in managing the pandemic and how different sectors have "adapted" to this technology in a short period of time. The role of social media and television has been summarized to ensure global connectivity and serve as a common platform for sharing honest information among the general public. The global role of the World Health Organization and governments in preventing the spread of fake news, spreading awareness and reducing the severity of COVID-19 was discussed. In addition, this summary is useful for investigators, health ministries, government agencies, and policy makers to respond quickly and effectively to the pandemic.

Key Words: - Digital Technology, Covid-19, Healthcare, Pandemic.

Introduction: -

In December 2019, coronavirus disease 2019 (COVID-19) was detected in Wuhan, China. In a short time, the virus spread all over the world. As of March 2022, records show that almost more than 520 million people have been infected with COVID-19 and more than 4 million have died from the disease. COVID-19 was defined as an acute respiratory syndrome with persistent cough, high fever, and shortness of breath. Due to the rapid spread of COVID 19, the World Health Organization (WHO) has declared it a pandemic. Worldwide, the large number of cases requiring health services has affected and challenged many health systems. In general, the COVID-19 pandemic presents several challenges for both individuals and the health care system. At the population level, public authorities and governments have implemented lockdowns and quarantines to prevent the spread of the virus, as the virus has been found to be more active in social areas. Quarantine, stay at home and social distancing policies were put in place to prevent the spread of infection. Research has shown that many health care systems were vulnerable in the face of such a pandemic, exacerbating existing problems such as staff shortages, shortages of personal protective equipment (PPE), intensive care units (ICUs), and hospital bed capacity. This extraordinary situation presents additional challenges for existing health care systems. The use of digital technologies to provide assistance, medical consultation, delivery of health services and monitoring the spread of the virus is known as an important measure to prevent the spread of the virus. Although digital technology was introduced to healthcare as telehealth or remote health service decades ago, the presence of the pandemic has dramatically enhanced its application and development as an important factor in reducing disease and breaking the cycle of disease transmission. Digital health solutions have both hard and soft innovations. Health innovations include the remote use of medical equipment and soft health innovations are defined as the knowledge of operating and monitoring these devices as well as for patients.

Review Of Literatures: -

Mervin Joe Thomas, et.al., (2021), In this research, he discusses the benefits of digital technology to curb the pandemic and how various sectors have "adapted" to this technology in a short period of time. The role of social media and television has been summarized to ensure global connectivity and serve as a common platform for sharing honest information among the general public. The role of the World Health Organization and governments around the world in preventing the spread of fake news, spreading awareness and reducing the severity of COVID-19 was discussed. Additionally, this summary is useful for investigators, health ministries, government agencies, and policy makers to respond to the pandemic quickly and effectively.

SaileeBhambere, et.al, (2021), This research found that there are several patient-related factors that have prevented the common man from adopting digital technology in the past. And while many factors still apply, the change in social and physical infrastructure has forced and partly conditioned people to adopt digital health technologies on a large scale. Hospitals and healthcare workers, who have been hit harder than many other professionals, have accelerated the adoption of digital health technologies faster than ever before, helping to restore resources and maintain social distancing for patients who needed care in the doctor's office, preventing further spread of the infection. The review also summarizes what is needed to sustain this new adoption and growth of digital health technologies to allow for continued incentives.

Davide Golinelli, (2020), The aim of this study is to describe what digital solutions have been described in the scientific literature and to explore their potential impact in the fight against the Covid-19 pandemic. This research report mainly proposes digital solutions and innovative technologies for the diagnosis of Kovid-19. The research identified a number of proposals for using AI-based tools for Covid-19 diagnosis and screening. Digital technology is also useful for preventive and surveillance measures. For example, through contact tracking apps or by tracking internet searches and social media usage.

Qiang Wang, et.al, (2021), This research covers a research overview of the basics of information and digital healthcare, summarizes its applications and challenges in the COVID 19 pandemic, and finally presents the possibilities of digital healthcare. The research found that the COVID-19 pandemic has given a huge boost to research on the integration of digital technologies and healthcare. Among these digital technologies, big data, artificial intelligence, cloud computing and 5G are the most effective weapons in the fight against the COVID-19 pandemic. The application cases show that these technologies play an irreplaceable role in controlling the spread of COVID-19. And the application challenges of digital technologies in the public health sector are summarized. These challenges mainly come from four aspects: data delay, data fragmentation, privacy security and data security vulnerability. Finally, this study provides future prospects for the use of digital health care. In addition, we also offer policy recommendations for other countries using digital technologies to combat COVID-19.

Anas Khan, et.al, 2021, Saudi authorities have used various technical tools to help manage and fight the

COVID-19 pandemic. In the case of Al Madina Al Maunwar, after the implementation of several technologies, the most significant of which is Tawakkalna, the number of active daily cases decreased by 61%. Using the Tawakalana app has proven to be a successful method in the fight against the COVID-19 pandemic in SA. This important and necessary experience warrants the use of various digital technologies that offer a personal profile that displays the status of the individual (afflicted, vaccinated or any infection in the anamnesis). This application has and will continue to play an important and influential role in controlling the pandemic in Saudi Arabia.

Alessandro Gabbiadini, (2020), Research investigated whether the use of digital communication technology for virtual meetings (i.e. watching voice and video calls, online board and multiplayer video games or movies in party mode) during lockdown increased perceptions of social support in which the psychological effects of the lockdown in Italy have decreased. The results suggest that digital technology use reduces feelings of loneliness, anger/irritability, and boredom and increases affection through the notion of social support. This study supports the positive role of digital technologies in maintaining meaningful social relationships even in the most critical situations such as lockdowns. Implications such as the need to reduce the digital divide and the possible consequences of the ongoing pandemic are discussed.

Digital Tools: -

Mobile Devices: -

Mobile devices have entered our lives as an important tool for digital medical care. Mobile devices are considered as computing devices that can access various information anytime and anywhere and can provide many benefits in eHealth processes. The portability of mobile devices makes it possible to provide medical services anytime and anywhere without the limitations of geographical location and time, and has high practicality. The role of mobile devices in the medical field mainly depends on the applications. The rapid development of digital medical care has led to a rapid increase in the number of different healthcare applications. Mobile applications contain sensors that are primarily used to identify and collect user health data. For example, mobile devices can collect the user's parameters during exercise and detect the user's sleeping and eating status to prevent diseases.

More and more patients and caregivers are using mobile devices to share medical information and practice experiences online. Users learn healthcare knowledge and self-care management through medical apps on mobile devices. Governments and medical institutions transfer medical knowledge to citizens through apps. In the midst of the Covid-19 outbreak, a large number of mobile apps are promoting the latest news about the pandemic and the latest government measures to ensure that residents understand the evolution of the pandemic in real time. In addition, these apps also support healthcare professionals in monitoring patients' health. Many hospitals have introduced online outpatient appointments, online diagnostics and other services. Patients can make an appointment for diagnosis in advance through an application on their mobile device, which not only saves time for patients and doctors, but also increases the efficiency of treatment.

Surveillance Cameras: -

Digital technology has increased the potential for remote monitoring, and surveillance cameras play a vital role in telemedicine. Supporting the construction of an intelligent monitoring system for medical services can solve the problem of uneven distribution of medical resources. Remote monitoring helps to monitor the health of patients outside the normal clinical environment, improves the efficiency and quality of the doctor, and saves the patients time and cost of treatment. Using camera equipment, healthcare institutions and medical personnel can digitally process and reconstruct medical images for remote acquisition, storage, transmission and disease analysis.

In the case of nursing care, monitoring devices can enhance the nursing function. Continuous and accurate remote monitoring contributes to improving the quality of care and allows patients to be more independent outside the hospital. The monitoring device has the ability to analyze and process the patient's respiratory rate, pulse, blood pressure and other physiological information, and then transmit the results of the analysis to doctors and other systems. Medical personnel diagnose the disease and prescribe treatment plans based on the obtained physical parameters, thereby further improving the level of medical care.

Digital Technologies During Covid-19: -

Artificial Intelligence: - Artificial intelligence can be used to predict the spread of the virus and develop early warning systems by extracting information from social media platforms, conversations and news websites that provide useful information about vulnerable regions and predict morbidity and mortality. Bluedot identified a cluster of pneumonia cases and used machine learning to predict the outbreak and geographic location of Covid-19 based on available data. HealthMap collects publicly available data on Covid-19 and makes it available to facilitate effective tracking of its spread. Recently, the role of artificial intelligence in identifying and predicting the outbreak of Covid-19 using multitudinal and multimodal data has been highlighted.

AI techniques are used in clinical settings to monitor patients and predict the course of treatment. Based on data derived from vital statistics and clinical parameters, AI can provide critical information for resource allocation and decision-making, prioritizing the need for ventilators and respiratory support in the intensive care unit. Artificial intelligence can also be used to predict the likelihood of recovery or death from Covid-19, and provides daily updates, storage and trend analysis, and charts treatment progress.

Blockchain Technology: -

Blockchain technology is widely used in electronic medical record management, drug and pharmaceutical supply chain management, health data analysis, etc. Blockchain technology is the underlying technology of Bitcoin, which is essentially a decentralized database technology. Blockchain is characterized by decentralization, openness, anonymity and the ability to not forge. Due to the continuous development of e-health technologies, health data has grown rapidly and issues such as difficulties in sharing data between medical-related organizations and easy leakage of privacy data have emerged. Blockchain stores data in medical systems and adds smart contracts to manage patient data, ensuring secure storage and data sharing of medical data.

The decentralization of the blockchain makes the powers and obligations of any node the same, and it is impossible to manipulate data through illegal means of central node control. Blockchain's tamper-proof feature improves medical data security. Blockchain's tamper-proof and decentralized features ensure the security of electronic medical and health records and protect patient privacy. The anonymity and openness of the blockchain makes obtaining medical data more transparent, without the need for real names to gain trust. Blockchain's smart contract mechanism ensures users' privacy and data control rights, and provides users with efficient access mechanisms and services for storing and accessing data on the blockchain. In the blockchain system, only authorized parties have the right to access a patient's private data, which gives users a high degree of control over personal medical data and greatly guarantees the authenticity and integrity of medical data. In addition, payment transactions between the medical facility and the patient are implemented through smart agreements. Smart contracts reduce claims fraud and can create a trust mechanism without relying on third-party intermediaries.

5G Communication Network: -
Future 5G networks will use the mmWave spectrum to deploy ultra-dense small cell networks with network connectivity to indoor environments. Technologies such as MIMO combined with beamforming will help deliver extremely high data rates to a large number of users. Together, these technologies provide better localization for indoor environments. They are aware of the eMBB class of service, which facilitates the transmission of 4K/8K video between healthcare professionals and patients, regardless of the point of access. The new radio access technology developed for 5G networks, also known as 5G New Radio (NR), supports URLLC. The URLLC class of service helps to address ultra-low latency requirements of telesurgery applications. The local operator's 5G core and access network is locally deployed on campus, providing healthcare facilities with multiple base stations deployed outside the home and at home to provide connectivity for specific needs. This deployment is advantageous when telesurgery is used to achieve ultra-low latency, as a pandemic situation requires the surgeon and patient to be in a separate room.
A MEC server deployed on a 5G base station can be used to deploy control functions for UAVs for appropriate delivery of medical payloads. Fundamental design changes in the 5G network will enable the communication of a large number of IoT devices, which generally transmit less data compared to human activities such as streams. These mMTC services provide support for 5G-enabled Medical IoT (MIoT) that can be used to monitor and treat inaccessible patients. MMTC will connect and enable interaction between heterogeneous devices in a 5G network to operate synchronously. A sensor in the patient's wearable device can send a signal to a remote nurse instantly via a 5G network so that the nurse can use a mobile device to activate a special device in the patient's room.
Research Methodology:-
Meaning:
A research technique is the shape of how a given area of exploration is achieved/executed. It alludes to the precise arrangement of exploration work. It demonstrates insights concerning the exploration work.
Data Collection Techniques:
Data collection is the most important technique to collect relevant information. There are two sources of data collection. The first one is primary data and another one is secondary data. Primary data refers to new or fresh data, which is collected by the researcher's efforts.
Secondary data is collected from a secondary source of data collection and it is the second technique of data gathering. It is not fresh data. It is already available in the forms of articles, newspapers, books, a thesis, libraries, etc.
Conclusions: -
In order to improve this digital health application during and after the pandemic, stakeholders need to consider the following recommendations. First, the sustainability of digital health technologies in routine care to address future pandemics. Second, analyzing the combined experiences gained from the use of digital health technologies will enable access to health care and control of future epidemics. Third, develop digital health solutions that are more affordable and easier to use. Fourth, consider innovation and digital health technologies in training and routine care. Fifth, user-led innovation should be incorporated into the design and development of telehealth solutions. Sixth, clinical research should be supported with adequate resources and funding to explore the long-term benefits of using telehealth to reduce health service costs. Seventh, patient concerns and needs should be taken into account when designing and distributing digital health technologies. Eighth, privacy and patient privacy must be ensured during data transformation and telemonitoring. Finally, standard guidelines should guide the implementation of digital health platforms in new healthcare systems.
Finally, digital health has been identified as an essential tool to slow the spread of the virus during the COVID-19 pandemic.

Digital technologies provided different applications and played different roles in containing the pandemic. Stronger health systems adopted digital technologies faster than poor and vulnerable health systems during the pandemic. Several facilitators and barriers to digital health implementation during the COVID-19 pandemic have been identified in the literature.

Reference: -

1) Alghamdi, N. S. (2022). The Role of Digital Technology in Curbing COVID-19. *International Journal of Environmental Research and Public Health* .

2) Bhambere1, S. (2021). Rapid Digitization of Healthcare - A Review of COVID-19. *International Journal of All Research Education and Scientific Methods (IJARESM)* .

3) Gabbiadini1, A. (2020). Together Apart: The Mitigating Role of Digital Communication Technologies on Negative Affect During the COVID-19 Outbreak in Italy. *frontiers in psychology* .

4) Qiang Wang *, M. S. (2021). Integrating Digital Technologies and Public Health to Fight. *International Journal of Environmental Research and Public Health* .

5) Sera Whitelaw, M. A. (2020). Applications of digital technology in COVID-19 pandemic. *Lancet Digital Health* .

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

THE ROLE OF ICT IN AGRICULTURE IN INDIA: A REVIEW

Dr. Sandip Manoharrao Khanzode
Department of Economics Late Madangopal Mundhada Arts, Commerce & Science College Chandur (Rly)
Corresponding Author- **Dr. Sandip Manoharrao Khanzode**
Email id: njaswante98123@gmail.com
DOI-10.5281/zenodo.7267098

Abstract:

Agriculture is the broadest term by which crop plants and domestication are used to refer to the many ways in which they sustain the global human population by providing food and other products. The English word agriculture comes from the Latin agar (field) and kolo (agriculture), which, when combined, refers to Latin agriculture: farm or land cultivation. Agriculture is the practice of planting crops and livestock for the benefit of the people. In this study it is studied that how the ICT plays an important role towards the development of Indian agriculture. In study Importance & Role of ICT in Agriculture, History of Indian Agriculture, Present ICT scenario in Agriculture, most useful websites for Agriculture, Governments initiatives towards ICT applications, its benefits, and its challenges.

Key-Words: Information & Communication Technology, Agriculture, Government Initiative.

Introduction:

Information and Communication Technology (ICT) is used as a broad term that covers all modes of transmission, such as electronic devices, networks, mobiles, services, and applications that help disseminate information with the help of technology. In recent years, the ICT has been extremely beneficial for farmers, including smallholders, and poor farmers, and has helped them in marketing, accurate farming, and achieving improved profits. Through ICT, farmers have been empowered to share their views, experiences, and ideas. This has given farmers more information and allowed them to use the science that looks at agriculture from an integrated perspective. Also, e-agriculture is one of the action lines identified in the Declaration and Action Plan of the Information Organization's World Summit. Agriculture has the potential to take India to the highest peak of the 'Second Green Revolution' by making the Indian agriculture sector self-reliant. The timely availability of information and technology in areas such as disease outbreaks and drought management has been of paramount importance, enabling farmers not only to avoid crop loss but also to prevent economic losses, which has increased the demand for the formulation of schemes and policies that can equip farmers with various information. Rights from sowing to harvesting of seeds. And, ICT has now become a reliable tool to improve the quantity and quality of agricultural production. The government's efforts in the ICT sector have raised the standard of living of Indian farmers and made them ICT-friendly, thereby increasing access to useful information about crops, soil, climate, and cultivation processes. Several measures have been taken to encourage Indian farmers to become more ICT-friendly, including e-choupal, e-agriculture, e-aid and more. And the Government of India has also launched several mobile applications for this purpose including Mandi Trade, MPower Social, Kisan Suvidha, Crop Insurance, Agricultural Market, and M-Kisan Application. The need to market agricultural produce at competitive prices will change the way farmers look at ICT.

Objectives:

1) To Study the Role & Importance of ICT in Development of Agriculture.
2) To Study Current Situation of ICT in the Agriculture Sector.
3) TO Study the Websites which used for Agricultural Knowledge.
4) To Study the Benefits of use ICT in Agriculture.
5) To Study the Challenges for use of ICT in Agriculture.

Research Methodology

For the purpose of the research descriptive method is used. For secondary data collection we used different types of sources such as journals, articles, magazines, websites.

Data Collection Techniques

Present research is carried out through secondary method of data collection from different resources.

Secondary Data:

Secondary data is those data, which is already available in the form of Newspaper, Magazines, Research Papers & Journals, websites and Books etc. For this research work secondary data has collected from internet and different articles.

History of Indian Agriculture

In 9000 BC wheat, barley and jujube were grown on the Indian subcontinent. From 8000-6000 BCE, it saw cultivation of barley and wheat - rearing of cattle, mainly sheep and goats. Agricultural animal husbandry in India involves mulching, planting crops in one of the two or six rows, and storing grains in granaries. BCE By the 5th millennium, the agricultural community was widespread in Kashmir. The first evidence of cotton cultivation was already developed. Cotton cultivation takes place up to the 5th millennium BCE- 4th millennium BCE. The Indus cotton industry flourished by 9000 BC wheat, barley and jujube were grown on the Indian subcontinent. The variety of tropical fruits like mango and musk is native to the Indian subcontinent. The area of dryland cultivation may have decreased due to the increase in the individual nature of agricultural property. The Cholas also had bureaucrats who were supervising the distribution of water distribution of water through tanks and channel networks, especially in dry areas.

Information & Communication Technology

Information and Communication Technology (ICT) consists of three technologies. These are computer technology, communication technology, and information management technology. This technology is used to process, exchange and to manage data, and information. Any system applied to obtain information and knowledge to make decisions in any industry should be delivered accurately, complete, concise information in a timely or timely manner. The information provided by the system must be, in user-friendly form, easy to access, cost-effective and safe from unauthorized access. ICT can play an important role in maintaining the above-mentioned properties of information as it has three main technologies.

ICT is a technology that supports tasks such as collecting, processing, storing, and presenting the information. Increasingly, these activities involve collaboration and interaction. So, IT has become ICT: information and communication technology. ICT is a workplace and learning environment that includes "desktop and laptop computers, software, hardware, and online technologies intended to complete communication processing tasks" (Statistics Canada, 2008). Explaining the importance of ICT in the Indian economy, CSO (2010) "ICT is not a personal thing like internet or computer or 3 communications but is a combination of information processing and communication, transmission and demonstration".

Importance of ICT in Agriculture

ICT is used to increase the rate of food growth to perform tasks such as weather forecasting using technology, identifying the latest methods to improve agricultural productivity, and measuring demand/supply levels based on economic data. New approaches and new technologies are needed to maintain quality and service delivery, address these challenges, and improve the quality of life of rural people.

ICT can play three key roles: increasing agricultural productivity, improving market access, and capacity building and empowerment.

- Use of ICT to increase agricultural production Farmers (especially small ones) often face threats due to a variety of factors such as bad soil, drought, erosion and pests. ICT can help improve this by providing up-to-date information on pest and disease control, early warning systems, new varieties, new ways to optimize production, and regulations for quality control.
- Improving market access Providing up-to-date information on market prices, inputs, and consumer trends in commodities. This can improve farmers' negotiating conditions and their living standards, enable farmers to make better decisions about future crops and commodities, as well as the best time and place to sell and buy goods.
- Capacity-building and empowerment ICT technology can be used to strengthen communities and strengthen farmer unions' own capabilities and to better represent their constituencies while negotiating input and output prices, land claims, resource rights, and infrastructure projects. Rural communities are able to interact with others through the use of ICTs which reduces the social alienation that they otherwise face. Besides, ICT technologies are able to make processes such as legislation creation and land-title approvals more transparent.

ICT in Agriculture

ICT can act as an accelerating force behind the productivity of the Indian agricultural market. Knowledge is a useful resource and based on adequate technical infrastructure and appropriate policies, it can become a transformative factor for the overall development of the agricultural market. According to Jones (1997), "Extension of agriculture is an important means of conveying knowledge and advice as a contribution to modern agriculture. There is a need to shift the focus from technology delivery to knowledge and information distribution." This has been made possible by the use of information and communication technologies that allow agricultural expansion to become a more diverse, knowledge-based system to meet farmers' information needs. The ICT can continuously introduce new sets of information services in agricultural markets where farmers can exercise good control. Access to such new information sources is an important requirement for the sustainable development of the agricultural system. The main center of ICT in the agriculture sector is to meet the information needs of the farmers. Following are some of the important needs of the farmers for the growth and development of agriculture:

- Market Information Market information daily with updates on prices of agricultural commodities in the surrounding districts. For farmers, price updates from markets outside their villages have a higher priority so that they can compare prices and choose to sell at the right place.
- Information on the latest techniques and technologies Continuous advancements in technology are also improving agricultural machinery and techniques. Up-to-date information on the latest technologies in agriculture and animal husbandry is very important for growth.
- Information on grants and rural development programs Provision of detailed information on government initiatives for rural development for the programs addressed. Areas that face drought, floods, or other natural calamities receive frequent grants from the government. Information related to these programs is particularly important for small and marginal farmers.
- Weather forecast Updates related to weather forecasts such as temperature, rainfall, humidity, wind forecast, etc.

- The latest (best) package of practices Knowledge of the best practices of farming is an important need of the farmers. Information related to non-precipitation-resistant varieties of some crops may be important for farmers to cope with long-lasting droughts in some areas.
- Post-extraction technology information Post-harvest technology and storage are important before harvesting. There is an awareness among farmers about the value addition of food processing.
- General agricultural news and information regarding several agricultural developments in villages and districts.
- Detailed information on the insurance/claim process Crop insurance scheme, type of damage covered and premium to be paid, etc.
- Input Costs and Availability Information and prices related to the availability of agricultural inputs such as seeds, fertilizers, pesticides, etc.
- Early warning and management of diseases and pests in areas of continuous drought, insects and diseases are not usually at great risk. However, this information is useful in other areas. Also, early warning is a must in the case of some crops like sugarcane.
- Soil testing and soil sample information related to soil quality or nature testing is extremely important for farmers as the soil is directly related to the productivity of crops. If this information is easily accessible to farmers, it prepares farmers to take the best yield according to the resources.

Current Situation of ICT in the Agriculture Sector

1) AICCs Agricultural Information and Communication Centres (AICCs) were established as a common entry point in society for the exchange of information and services. There are 245 AICCs across the country which include all AEZs (AgroEcological Zones). The center is managed by registered farmer cooperatives. Each AICC has a desktop computer, laptop computer, digital camera, internet facility, modem, multimedia projector, scanner, and other digital devices. DAE and AIS (Agricultural Information Services) officers serve as facilitators for providing livelihood-based information (ICT, print, and audio-visual material) on agriculture, fisheries, poultry and livestock, education, nonfarm activities, appropriate technology, human rights, employment, disaster management, etc.

2) GIS-based service The Geographic Information System (GIS) was introduced in Bangladesh in the early 90s as a computer-aided local information system. There are around 30 GIS establishments in the country so far but the researchers use GIS and RS (remote sensing) tools for research on agriculture (SRDI, BRRI, BARI), fisheries (FRI), and livestock (BLRI) as per the institutional mandate. At present, there is very little scope for agricultural farmers to use GIS (Geographical Information System) and related services. The use of GIS and RS in Bangladesh is still at an early stage as compared to the agriculturally advanced countries. BARC (Bangladesh Council of Agricultural Research) has developed a database of soil and land resources (land productivity), crop zoning (crop adaptability), weather information management, and hydrology through the use of GIS and RS. SRDI's customized Solaris (soil and land resource information system) - GIS-based database classification (soil data maps based on soil texture, soil type, landform, drainage, slope, surface water recession) and condition (crop adaptability, land area, nutrient status and Fertilizer recommendation). This GIS system can analyze data at the sub-district, district, and finally at the national level. Bangladesh Space Research and Remote Sensing Organization (SPARRSO) has also been using these tools for major crop area monitoring for the past two decades.

3) Apps and Websites in Smartphones, There are a large number of Android apps for technology and other services related to agriculture. These apps have gained popularity among the grassroots in the crop, livestock, and fisheries sectors of Bangladesh. It has opened a new era of agricultural communication and feedback; which is crucial for technology transfer and adoption. Today manufacturers can easily share their knowledge, information, and field-related issues through these apps.

Top websites for Agricultural Knowledge:

Agricoop.nic.in - The Government of India maintains the site to keep vigil in the agriculture and horticulture sector under the ministry of agriculture. Site related to: Agricultural Census, Agricultural Marketing, Loans to Farmers, Crop and Drought Management, Horticulture, Integrated Nutrient Management, Macro Management, Natural Resources Management, Plant Conservation and Rearing of National Agricultural Development Plan.

agriwatch.com - Is a private site managed by Indian Agribusiness Systems Private Limited. Ltd. It is a group formed by young trade professionals who have a long-standing involvement in the Indian agribusiness sector. The company aims to bridge the communication gap between various agricultural commodities by providing the latest and accurate information to farmers, traders, agricultural produce processers, suppliers of agricultural inputs, etc.

farmer.gov.in - This portal is primarily designed by the government for the farmers. in India, so that the farmer can get all agriculture related information on specific topics around his village, block, district or state. The other purpose of this site is to provide information in the form of text, SMS, email and audio/video in a language that the farmer can understand. Through this site farmers can ask specific questions as well as provide valuable feedback.

rmlglobal.com – RML (Reuters Market Light) is an award-winning private business solutions firm that helps farmers make the most out of their crops. With over 450 crop varieties and coverage of 1300 markets, RML is the preferred choice for 1.4 million farmers in 50,000 villages across 18 states in India. RML India on 1st October 2007, It was launched in the state of Maharashtra by The Union Minister of Agriculture of India Shri. Sharad Pawar.

krishijagran.com – To provide a platform with a view to emancipate farmers from their financial condition, where they can get all the knowledge and wisdom about the progress of agriculture. KJ acts as an interface between industry, government, research institutes, farming communities and NGOs. Through Krishi Jagran's portal, you can get information on agri-events, farm mechanization, product launches, commodities, etc. in Hindi, English and Malayalam.

ICT Initiatives for Agriculture in India

Approximately 45 percent of the world's ICT projects have been implemented in India and rural India has the highest number of information kiosks operating. Nevertheless, it was found that the vast majority of ICT projects in the agricultural sector were implemented in the socio-economically developed states of the south and north India, while the disadvantaged states did not receive the benefits of ICT activities. Some of the e-agricultural initiatives in India are indicated below.

The Benefits of ICT:

The actual economic value is added to the savings or increase in revenue or profits due to the use of ICTs.

The language and medium used to interact with farmers were the key contributors to the farmers' response to the event.

A good conception and implementation are achieved by including multiple agencies in the Win-Win partnership.

The trust is built with a stockiest, a support center operator, and even together government using local champions. This is an essential factor for success in any system.

Planning is enhanced by integrating many services with basic or basic amenities and making them truly inclusive.

Additional confidence is built in the system when measures are developed at the local level.

Other community members find it particularly appropriate if other farmers participate directly in the training and are able to show solutions.

For example, where farmers are capable of identifying themselves personally.

Technology will be more prone to accepting them and continuing to use them.

Developing solutions locally creates additional trust in the system.

Other community members find it particularly useful if other farmers are directly involved in the training and can show solutions.

For example, where farmers will be able to identify individually with the solution of technology, they will be more motivated to accept it and continue to use it.

ICT And Its Challenges in Agriculture:

An important role could be played by ICT in maintaining the above-mentioned properties of information. An authentic agricultural database based on climate condition and soil, crop cultivation history, demand of raw material, farmers interest, pest and disease management technologies, marketing system, storage facilities, etc. have to be developed with the help of ICT and Geographic Information System.

The major challenges to "Agriculture Sector in India" are following:

Insufficient use of ICT for agricultural purposes, etc.,

Lack of "Common Platforms" for the farmers in India.

Agricultural content up-gradations and its development.

Insufficient agricultural support facilities and infrastructure.

Ownership issues of the public and government generated data.

Inadequate use of Public-Private Partnerships in India.

Shortage of awareness regarding suitable agricultural methods among the farmers.

Absence of an "Agricultural Think-Tank" in India.

Insufficient institutional capacity to deliver farmers specific services.

The common ICT services for Agriculture:

ICT helps in improving agricultural resources

Provides information about input supply services

Services for monitoring agricultural production

Agricultural Produce Management Services

Agricultural Marketing and Sales Management

Knowledge Management Services

Risk Management Services

Agri-consultants and services on agricultural extension

Farmer's Help Desk

Information on the monitoring of the scheme and

Enterprise Resource Management

Conclusion:

Agriculture is a critical sector in the Indian economy. Efficient and effective use of Information and communication technologies can transform the agricultural extension system a more diversified, knowledge driven system for meeting farmers' information needs. This "study on the application of ICT in the Agricultural Extension Management" has brought out the existing deficiencies and inadequacies and also has identified the gap between Agricultural Extension System and the needs of farmers as mentioned in the foregoing pages. The highly positive attitude that was expressed by the Extension Officials as well as the Farmers towards the electronic media, needs to be utilized for further expansion of application of ICT in Agricultural Extension in the State. While it is essential to tap the potential of ICT for strengthening the agricultural extension using modern computer gadgets, broad band connectivity, smart phones etc., focus should also continue on the traditional mass media particularly the radio, television and local language newspapers, which play significant role in this regard. Similarly while taking steps to promote ICT enabled agricultural extension, the Extension Agencies should continue to emphasize on basic extension activities like field visits, field demonstrations and direct contacts with the farmers. As aptly stated by former

Prime Minister of India, Pandit Jawaharlal Nehru, “Everything else can wait but not Agriculture”.

With new possibilities offered by information and communications technology (ICT), an abundance of products, services, and projects has emerged with the promise of revitalizing agricultural extension in developing countries. However, a growing body of evidence suggests that not all ICT-enabled extension approaches are equally effective in improving adoption, productivity, income, or welfare outcomes.

References:

1) Ali, S., Jabeen, U. A., & Nikhitha, M. (2016). Impact of ICTs on Agricultural Productivity. European Journal of Business, Economics and Accountancy, 82-92.

2) Chowhan, S., & Ghosh, S. R. (2020). Role of ICT on Agriculture and Its Future Scope in Bangladesh. Journal of Scientific Research & Reports, 20-35.

3) Darekar, A., Datarkar, S. B., Hile, R. B., & Parshuramkar, K. H. (2014). Trends in agricultural growth in Amravati division of Maharashtra. Agri Update: Hind Agricultural Research and Traning Institute, 435-438.

4) Gupta, A., Ponticelli, J., & Tesei, A. (2020). Information, Technology adoption and Productivity: The Role of Mobile Phones in Agriculture. Nber Working Paper Series, 1-53.

5) Lokeshwari, K. (2016). A Study of the Use of ICT Among Rural Farmers. International Journal of Communication Research, 232-238. Madhuri, K., Prasad, S. V., Sailaja, V., Reddy , P. K., & Naidu, G. (2020).

6) A Study on the Profile Characteristics of the Farmers using Information and Communication Technologies (ICTs). International Journal of Current Microbiology and Applied Sciences, 3676-3682.

7) Cropin. (2020). The Role of ICT: Revamping Modern Agricultural Technology. ICT in agriculture.

8) Mathur, N. (2018, January 23). How ICT Innovations can Helps Farmers. Business Line.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

THE ROLE OF ICT IN DEVELOPMENT OF BANKING SECTOR OF INDIA: A REVIEW

Prof. Kishor N. Tayade
Department of Commerce , Late Madangopal Mundhada Arts, Commerce & Science College Chandur (Rly)
Corresponding Author **Prof. Kishor N. Tayade**
Email id: njaswante98123@gmail.com

DOI-10.5281/zenodo.7267112

Abstract:
A bank is a business. In any case, similar to certain organizations, banks don't create items or concentrate normal assets from the earth. Banks sell monetary administrations, for example, vehicle advances, home loan advances, business advances, financial records, charge card administrations, store authentications and individual retirement accounts. Banking assumes an essential part in giving financing to borrowers useful speculation open doors, which is critical to guarantee that the monetary framework and economy run as expected and proficiently. Because of the assortment of banks that exist today, it would be troublesome, or if nothing else irksome, to make a meaning of banking that alludes to the various exercises of a wide range of banks. In this study it studied that History of Bank, Evolution of Banking Services, Meaning & Tools of Information & Communication Technology (ICT), Benefits of ICT in Banking Services and Government initiatives towards application of ICT in Bank.

Key-Words: Information & Communication Technology, Banking Services, Evolution of Banking Services.

Introduction:
Certain individuals go to the banks looking for a protected spot to keep their cash. Others are attempting to acquire cash to purchase a house or a vehicle, to begin a business, to extend a homestead, to pay for school or to do different things for which they should get cash. Where does the cash come from to loan to banks? They get it from individuals who open and keep up with accounts. Banks go about as a go-between for the individuals who save and the people who need to get. In the event that the savers don't keep their cash in the banks, the banks will have pretty much cash to loan. Your investment funds, alongside the investment funds of others, collect a lot of cash and the bank involves that cash for advances. The cash doesn't have a place with the bank's executive, governing body, or investors. It has a place with you and different investors. For that, brokers have a unique commitment not to face big challenges when it comes to lending.

Information Technology assists with making and develop the trade and business area and boost efficiency. Propels in Information Technology have diminished the time expected for different areas to assemble a business. It gives electronic security, stockpiling and productive communication. For applications to work, Information Technology requires PC applications. PCs interface IT with different associations all over the planet. It assists workers with monitoring their various clients of various organizations. It assists patients with reaching specialists on the web and look for exhortation on their medical problems. Likewise, patient records can be appropriately overseen through the framework. The quality of data innovation is seen in practically all regions including work, schooling, relaxation and wellbeing. From services to homerooms, each area involves IT for best outcomes

The banking industry is the backbone of the Indian economy and is plagued by many challenging forces. One such power is the data innovation upset. In today's world, technology is crucial for the successful operation of the banking sector. Without IT and communication, we cannot think of the success of the banking industry, which has increased the role of the banking sector in the Indian economy. Technology has an important role to play in creating an efficient banking system that adequately responds to the needs of the growing economy. Over the last 10 years, banks in India have invested heavily in technologies such as telebanking, mobile banking, net banking, ATMs, credit cards, debit cards, electronic payment systems and data warehousing and data mining solutions, leading to improved quality. Faster processing of customer service and banking operations. Large investments have been made in the IT sector in anticipation of improving the performance of banks. But the key to performance depends on the differences between the deployment, use and effectiveness of IT.

Software packages for banking applications in India began in the mid-80s, when banks began to computerize branches in a limited way. Hardware prices plummeted in the early '90s, and cheaper and cheaper but higher power PCs and services and banks used Total Branch Automation (TBA) packages. The mid-90s and late 1980s saw a flurry of economic reforms, uncontrolled globalization and so on. Technology has also consistently played an important role in the rapid revolution in communication technology and the evolution of innovative concepts of convergence of communication technologies like internet, mobile / cell phones etc. In the operation of banking institutions and in the services provided by them. Securing public money, transferring money, issuing drafts, looking for investment opportunities and loan drafts, looking for investments to be provided.

Objectives:

1) To Study the History of Banks in India.
2) To Study the ICT Tools & Digital Services which used by Banks.
3) To Study the Benefits of Implication of ICT in Banking Services
4) To Study the Government initiatives towards application of ICT tools in Banking Services.

Research Methodology

For the purpose of the research descriptive method is used. For secondary data collection we used different types of sources such as journals, articles, magazines.

Data Collection Techniques

Present research is carried out through secondary method of data collection from different resources.

Secondary Data:

Secondary data is those data, which is already available in the form of Newspaper, Magazines, Research Journals and Books etc. For this research work secondary data has collected from internet and different articles.

History of Bank

The history of banking begins with the earliest prototypes of merchant banks in antiquity, lending grain loan to farmers and merchants who shipped products to urban areas It is supposed to be around 2000 BC in the space of Assyria and Jabylonia. Later, in Ancient Greece and during the Roman Empire, temple-based moneylenders lent two major innovations: accepting deposits and exchanging money. The antiquarianism of this period in antiquated China and India likewise shows the presence of cash loaning exercises. The Bardi and Peruzzi families overwhelmed banking in fourteenth-century Florence and laid out branches in numerous different pieces of Europe.4 The improvement of banking spread through Europe likewise and various significant developments look place in Amsterdam during the Dutch Republic in the sixteenth century and in London in the seventeenth century. During the twentieth century, advancements in broadcast communications and processing bringing about significant changes to the manner in which banks worked and permitted them to drastically increment in size and geographic spread. The Late-2000 money related crisis saw basic number of bank nonsuccess, including a piece of the world's greatest banks, and many conversations about bank rule.

The historical backdrop of banking is firmly connected with the historical backdrop of cash yet banking exchanges likely originate before the development of cash. In the times before the founding of Christianity, the economic life of the people circulated about the family homes were the feasts and their priests, where protection was mainly provided for the storage and distribution of crops. The buildings, thus primarily used by this elite, palaces and temples, became places of social exchange with some resemblance to the banking practices of contemporary culture, where the security of society's wealth was assured. Temples and palaces were also the safest places to store gold, as they were constantly looked after and well built. The first banks were "vendor banks" which were first concocted in medieval times by Italian grain vendors. As the Lombardy vendors and financiers filled in height in view of the strength of the Lombard fields grain crops, many dislodged Jews escaping Spanish mistreatment were drawn to the exchange. They brought with them the ancient methods of the Middle and Far East Silk Road. Originally intended to finance long distance trade trips, these methods were applied to finance grain production and trade.

Evolution of Banking Services

After independence, great changes took place in India. In the hour of freedom in 1947, the banking framework in India was well created with a north of 600 Commercial banks working in the country. However, soon after independence, the idea that the colonial-backed banks were biased in favor of trade and working capital loans for large corporations and against lending to small businesses, agriculture and the general public gained importance. To ensure better banking coverage of large segments of the economy and better coverage of rural segments, the Government of India nationalized the Imperial Bank established in 1921 and transformed it into the State Bank of India from 1955. Despite progress in the 1950s and the 1960s, it was realized that the creation of SBI did not reach much because the banking needs of small businesses and agricultural infrastructure were not yet adequately covered. This is partly due to the existing close relationship with the established commercial banks, which helps them in gaining credit. In addition, there was a perception that banks should play a more important role in India's development policy by mobilizing resources for areas considered important for economic expansion. Thus, an approach of social command over banks was declared. Its motivation was to achieve change in credit conveyance and the executives of commercial banks.

Meaning of Information & Communication Technology (ICT)

Information technology (IT) refers to all the organizations for which PCs are used. For an information technology company, building a communication network, protecting data and information, creating and managing databases, helping employees troubleshoot issues with their computer or mobile devices, or performing many other tasks to ensure business information system functionality and security. Interest for experts in this field is high and developing, and individuals entering the field have a scope of vocation ways to browse.

ICT Tools & Services used by Banks

1) Automated Teller Machine (ATM): ATM is an innovation utilized from one side of the planet to the other. ATMs empower clients to trade out whenever when they need cash, subsequently supplanting the human teller.

2) Mobile Banking: Mobile financial application is the innovations utilized in the financial area that is proposed to the clients to move their cash and make installments.

3) Video Teller Machine (VTM): A new and creative assistance is accessible through banks. A client is somewhat associated with a client care agent through VTM for all branch banking administrations to the client.

4) Secure Short Messaging service (SSMS): SSMS banking is utilized to send and get instant messages to clients on their cell phones. Banks track the client's portable number, empowering the client to look through his financial balance.

5) SMS Banking: SMS grants you to do some financial hunt on your portable from anyplace in under versatile organization inclusion in a country.

6) RFID Technology: is a bank card inserted with a chip made for cash installment. Installment is made by putting the card before a RFID peruser, and the installment is handled suddenly.

7) Wireless Application Protocol (WAP): It is an innovation utilized in versatile financial where the client right to passage to the bank's site through the web utilizing a program on the cell phone.

8) Unstructured Supplementary Service Data (USSD): It is a SMS administration with a menu and time meeting. This is a standard that is utilized in all handset mobiles.

9) Mobile Money: Also alluded to as Mobile Wallet, Mobile Payment, and Mobile Money Transfer. Versatile cash administrations are utilized around the world, primarily in Africa for the people who do or don't have a ledger.

10) Phone Banking or Interactive Voice Response (IVR): A client can interface by choosing various choices from the voice brief framework or converse with select choices. Phone banking is a help given by a monetary foundation, which permits its clients to perform exchanges via phone.

Benefits of ICT in Banking Services

1) Increase in efficiency: With the help of modern technology efficient and fast service can be provided to the customers.

2) Handling of information: Up-to-date monitoring and information systems are created and internal controls are strengthened and housing and reporting functions are provided. The classification of information was simple.

3) Reduction in cost: Due to the use of modern technology there is reduction in cost including floor space.

4) Accuracy: Check clearing, pass book entry, inter-branch and inter-bank reconciliation and other such tasks can now be carried out quickly, accurately and legibly by modern technology.

5) Customer Service: Customers do not have to go to the bank office due to internet facility. Updating all banking transactions and accounts can be done while at home or on the go. Networking is about exchanging information, messaging and being face to face even when you are away from each other. There is a meeting without moving.

6) Easy Communication: The Internet connects thousands of computers that can operate 24 hours a day throughout the year. The tyranny of working hours is no more. The business of the banks including the customers, head office, other banks, branches are being fully computerized in the western countries and India will have to move in that direction in the international competition.

Government initiatives towards application of ICT tools in Banking Services

In November 2021, RBI sent off the 'RBI Retail Direct Scheme' for retail financial backers to increment retail cooperation in government protections. The RBI presented new auto charge rules with a required extra variable of verification (AFA), powerful from October 01, 2021, to work on the wellbeing and security of card exchanges, as a component of its gamble alleviation measures. In September 2021, Central Banks of India and Singapore declared to connect their advanced installment frameworks by July 2022 to start moment and minimal expense reserve moves. In August 2021, Prime Minister Mr. Narendra Modi sent off e-RUPI, an individual and reason explicit advanced installment arrangement. e-RUPI is a QR code or SMS string-based e-voucher that is shipped off the recipient's wireless. Clients of this one-time installment system will actually want to recover the voucher at the specialist co-op without the utilization of a card, computerized installments application, or web banking access.

According to Union Budget 2021-22, the public authority will disinvest IDBI Bank and privatize two public area banks. Government easily did combination, lessening the quantity of Public Sector Banks by eight.

Conclusion:

The concern of this study is the IT implementation in Banking Services and the customer satisfaction. The results showed that there is a strong satisfaction about internet banking among all customers. Study has also shown that the overall customers' satisfaction regarding BOI's online banking services were found high due to cost effectiveness and user-friendliness. However, it was found that the BOI online baking users are not completely satisfied with accessibility, system design and problem solving.

Banking basics have undergone radical shifts, thanks to the advent of modern technology, increasing pace of globalization and the need for stronger fundamentals to operate in the fiercely competitive environment. The digital divide among Indian banks that was quite discernible before the millennium las considerably narrowed down with many banks taking to technology not merely as a frill, but as a dire necessity. Technology today catalysis many care and diversified functions in hunks, including issues like traction automation and multiple delivery channels, product innovation, data. Sustained profits and profitability have been major and sticks for assessing the true health of banks in a in a fiercely competitive and compelling business environment.

However, technology had a favorable effect in terms of reducing the operating cost and improving the burden is a considerable extent Technology also enable commissioning of new products like Net banking, mobile banking and other forms of 24X7 banking like ATMs and Networked services across branches.

References:

1) Aggarwal, S., Chowdhury, K., & Raj, T. (2021). Effect of Technology in Shaping the Indian Banking Sector. International Journal of SSRN, 56- 78.

2) Arora, S., & Singh, P. (2020). Role of Technology in Banking Industry - A Comparative Study of Public and Private Banks-Post Demonetization. International Journal of Banking & Management, 44-67.

3) Haralayya, B. (2021). Study of Banking Services Provided by Banks in India. International Research Journal of Humanities and Interdisciplinary Studies, 6-12.

4) Jain, M., & Popli, G. (2012). Role of Information Technology in the Development of Banking Sector in India. International Journal of Business & Management, 96-102.

5) Laustsik, O. (2004). Can E-Banking Services Be Profitable? University of Tartu Economics and Business Administration Working Papers, 678-696.

6) Madurese L. M., R. R. (2018). Impact of Information Technology (IT) on Banking Sector. MERGING AREAS OF IT APPLICATIONS IN MANAGEMENT, EDUCATION AND SOCIAL, 142-149.

7) Anbalagan. (2017). New Technological Changes In Indian Banking Sector. International Journal of Scientific Research and Management (IJSRM).

8) Badrinath, S. (2021). How Emerging Technologies Are Enabling the Banking Industry,. Inc42.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 **Impact Factor – 7.328**
Peer Reviewed **Bi-Monthly**
Vol.3 No.1 **Sept – Oct 2022**

A NEW NORMAL PHASE OF DIGITALIZATION FOR FINANCIAL SERVICES: A STUDY OF CUSTOMER'S PERCEPTION TOWARDS CRYPTOCURRENCIES

Dr. Ruma Pal[1] Dr. Pulkit Trivedi[2]
[1] Assistant Professor, Indukaka Ipcowala Institute of Management, Charusat University
[2]Assistant Professor, Graduate School of Management Studies, Gujarat Technological University
Corresponding Author- **Dr. Ruma Pal**
Email id: ruma.dsms@gmail.com
DOI- 10.5281/zenodo.7267122

Abstract

Crypto currencies are a sort of digital currency that is comprised of and designed to function as a string of binary data. The term "crypt currency" refers to any digital or virtual currency that uses cryptography for transaction security. When it comes to cryptocurrency, a decentralised system keeps track of transactions and issues new units rather than a centralised issuing or regulatory authority. The use of centralised institutions such as banks to verify financial transactions is rendered obsolete by the cryptocurrency's use of a decentralised digital currency known as cryptocurrency. Users located in any part of the world are able to send and receive monetary transactions thanks to the decentralised nature of the network. Transactions made with a cryptocurrency only exist as digital records in a public ledger. The transaction is recorded in a public archive when buying or selling cryptocurrency. Cryptocurrency is kept in digital wallets. The key impartial of this study is to inspect how people view cryptocurrencies and whether or not they view them as a consecration or an expletive. So for conducting the research project sample size of 200 respondents was selected. The vital information regarding the research was collected through a questionnaire. SPSS has been used to run some analyses, giving us a better grasp of the data.

Keywords: Cryptocurrency, Ethereum (ETH), Digitalization, Bitcoin (BTC), Binance Coin (BNB)**,** Tether (USDT)

Introduction

Cryptocurrencies are a form of digital currency or tradable digital assets based on blockchain technology that exists only in the virtual world. Cryptocurrencies are so-called because their transactions are authenticated and protected by means of encryption. Bitcoin, the first digital currency, was created in 2009 and is still widely used today.

How do Cryptocurrencies function?

All cryptocurrency transactions are recorded in a distributed public ledger called the block chain. Mining is the process of creating a new cryptocurrency by applying computational power to solve complex mathematical problems. Users can trade for the currencies, keep them in digital wallets, and use them to make purchases.

Is cryptocurrency a form of money?

Cryptocurrency, short for "cryptographic digital currency," is a digital currency decentralized by design and built on the blockchain. Although Bitcoin and Ethereum are two of the most well-known, over 5,000 distinct cryptocurrencies are available today. Bitcoin and Ethereum are the two most widely used implementations.

First introduced in 2009 under the alias Satoshi Nakamoto, Bitcoin is widely regarded as the pioneering decentralised digital currency. As part of its proof-of-work design, the protocol made use of the SHA-256 cryptographic hash function. Namecoin was first introduced in April 2011 with the goal of creating a decentralised domain name system that would make it harder to censor content online (DNS). Litecoin was released to the general public not long after that, in October of 2011. Scrypt, a different hashing algorithm, was used instead of SHA-256. Cuba officially acknowledged and regulated cryptocurrencies like bitcoin in August 2021 with the passage of Resolution 215. This followed on the heels of similar moves by Cuba. China, the largest cryptocurrency market, announced in September 2021 that all cryptocurrency transactions were illegal. In doing so, China lifted its ban on cryptocurrency exchanges and miners.

Recent Cryptocurrency Scenario in India

The Indian government has taken no official stance on the legality of investing in the cryptocurrency market as of yet. The 2020 cryptocurrency ban imposed by the Reserve Bank of India was overturned by India's highest court. Since then, Bitcoin investment has become more acceptable, though it is unclear how much taxation may be owed on Bitcoin profits. A special bill to restrict or control the cryptocurrency industry in India is being considered for passage in the Indian Parliament.

In the most recent General Budget, Indian Finance Minister Nirmala Sitaraman imposed a 30% tax on digital currency transactions and a 1% tax deduction at source.

Ranking the Largest Cryptocurrencies by Market Cap

Bitcoin (BTC)

Bitcoin, the first cryptocurrency, is still commonly mentioned whenever digital money is discussed. Its enigmatic creator, Satoshi Nakamoto, released the coinage into circulation in 2009, and since then, it has experienced a wild ride. But then, cryptocurrency only became widely known in 2017.

Ethereum (ETH)

The name Ethereum, which refers to the cryptocurrency platform, is the second most common name in the crypto industry. While ether (the currency) can be used for various purposes in the system, it is the smart contract functionality of Ethereum that has contributed to its widespread adoption.

Tether (USDT)

The value of a Tether is pegged to the dollar. This is because it is a "stablecoin," a type of cryptocurrency designed to maintain its value over time. Tether is a stablecoin pegged to the US dollar's value. Tether is frequently used as a bridge by investors transitioning between different cryptocurrencies. They use Tether instead of going back to dollars. There is apprehension that dollars don't reliably back Tether in reserve but rather a form of short-term unsecured debt, which has led to the currency's depreciation.

Binance Coin (BNB)

Binance, one of the largest cryptocurrency exchanges in the world, has issued its own cryptocurrency called Binance Coin. Binance Coin was initially designed as a demonstration to emolument for cut-rate trades, but it is nowadays accepted as payment aimed at various services and goods.

XRP (XRP)

XRP (Ripple) is a digital currency that can be used to transact in a wide variety of fiat currencies. It was launched in 2012 under the name Ripple. Ripple is a useful tool for making international payments because it operates on a trustless mechanism.

Cardano (ADA)

Ada, the currency, is based on the Cardano blockchain platform. Ethereum's original creator developed Cardano, and like Ethereum, it relies on smart contracts to facilitate identity management.

Solana (SOL)

Solana is a more recent cryptocurrency that launched in March 2020. It boasts fast transaction times and a secure "web-scale" platform. The total number of SOL coins that can ever be created is 480,000,000.

Terra (LUNA)

Terra is a platform that supports various stablecoins pegged to fiat currencies like the dollar or the euro by means of its native currency, Luna. Through several different technical mechanisms, Terra aids in maintaining the value of stablecoins and facilitates the use of smart contracts.

Avalanche (AVAX)

Avalanche is a cheap and quick blockchain platform that uses smart contracts to create decentralized apps and allows for individual blockchains' development. The AVAX token, which is built in, can be used for transactions by its users.

Binance USD (BUSD)

Together with Paxos, leading cryptocurrency exchange Binance has created a dollar-backed stablecoin called Binance USD. The Department of Financial Services in New York State is in charge of Binance USD, which came out in 2019. The Ethereum network is the foundation of BUSD.

Dogecoin (DOGE)

Dogecoin, named after a popular Shiba Inu dog meme, was initially created as a joke following Bitcoin's price surge. Dogecoin is unique among cryptocurrencies because there is no limit to how many can ever be created. It can be used to buy things and send money overseas.

Literature Review

John G. Keogh, in February 2021, in his study of the role of Cryptocurrencies in Contemporary Finance, the author has explored the potential of cryptocurrencies in contemporary finance. Based on these findings, it's clear that cryptocurrencies present numerous advantages for businesses and individuals, including cheaper transactions, better efficiency, more privacy and security, greater diversification, cheaper financing options, and greater access to credit.

Gans and Halaburda (2013) claim that the vast majority of corporate-issued cryptocurrencies serve primarily as subsidies for buyers to join the network. Unbound digital currencies like Bitcoin, Gans, and Halaburda point out they can have an effect on price stability, financial stability, and payment stability. This suggests that there may be a need for additional rules and regulations.

April 2018 3. Shailak Jani, A Look at the Problems and Possible Effects of Cryptocurrency on Indian Law, in this paper author has cited that looks into what people think will happen to

Data Analysis

cryptocurrencies in the future. It also delves into the trust that cryptocurrency users have in the system when the use of cryptocurrencies is not entirely governed. Furthermore, the paper aims to quantify the adoption rate of cryptocurrencies to get a realistic picture.

Mohammed Jasim, Ayub Khan Dawood, and Dr. Afzalur Rahman, in India, the crypto currency's legal status has been the subject of a recent critical review; in this paper, authors have explored cryptocurrency as a new idea that advocates to replace of traditional currencies. The growing popularity of cryptocurrency has attracted the attention of governments around the world. In an effort to define cryptocurrency and determine its legal status, this study discovered that, according to Indian law, cryptocurrencies are neither currencies nor legal tender, but they may be classified as goods.

Research Methodology

Research Objective

1. To apprehend the current state of the cryptocurrency market and its value;
2. To learn about crypto and how it works conceptually and practically;
3. To discern the legitimacy of crypto trading and whether or not it is permitted in India.
4. To understand the perils associated with cryptocurrency investments.

Sample Size

Knowing the impact of cryptocurrency investment decisions, taken a sample of 200 customers from Gujarat, Maharashtra, Karnataka, and West Bengal. Also, the authors have used the convenience sampling method to determine the effects of digitalization on financial services in the context of cryptocurrencies.

Sources of Data

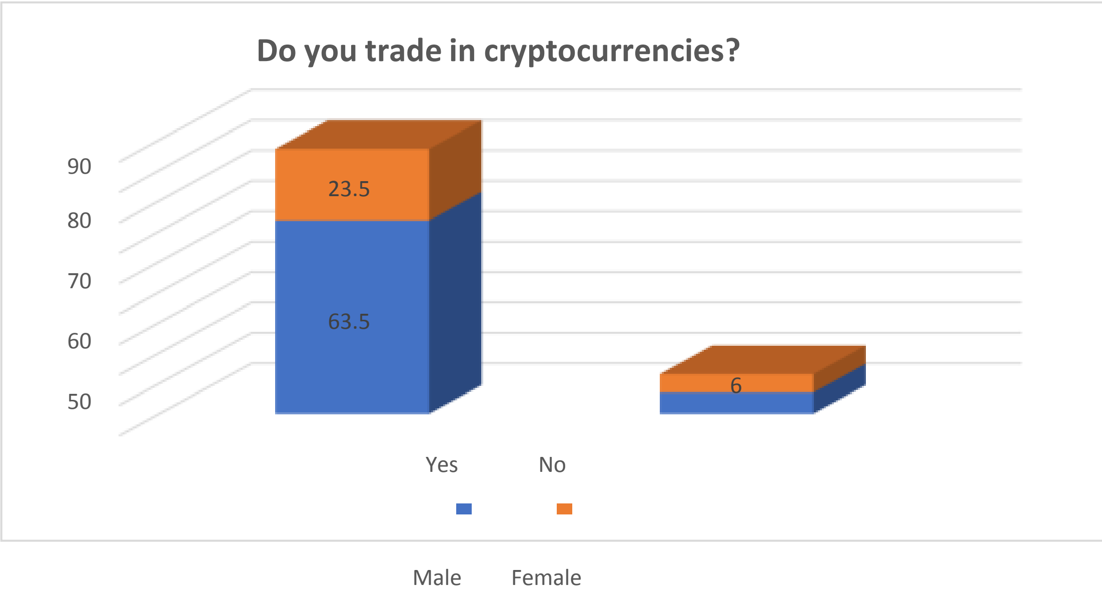
This study's primary data came from a questionnaire designed to elicit responses about the factors influencing consumers' decisions to purchase cryptocurrencies. Secondary sources such as company annual reports, articles, published reports, etc., have been mined for this information.

Bivariate analysis of:(In Percentage)

Variable 1: Gender
Variable 2: Do you Trade in Cryptocurrencies

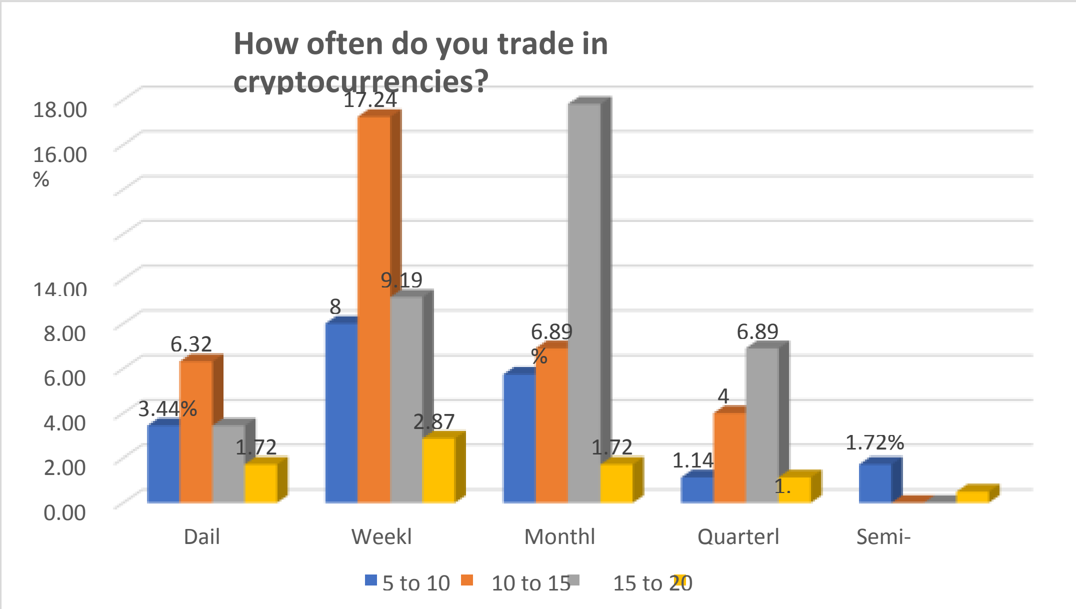
Gender	Do you trade in cryptocurrencies?		Total
	Yes (%)	No (%)	
Male	127 (63.5)	14 (7)	141
Female	47 (23.5)	12 (6)	59
Total	174	26	200

Interpretation:
From the above data, we can say that 63.5% and 23.5% of males and females trade in Cryptocurrencies, respectively, and 7% and 6% of males and females don't trade in Cryptocurrencies.



Variable 1 - Annual Family Income
Variable 2 - How often do you trade in Cryptocurrencies

Annual family income (in lakhs)	How often do you trade in cryptocurrencies?					Total
	Daily	Weekly	Monthly	Quarterly	Semi-annually	
5 to 10	6 (3.44)	14 (8)	10 (5.74)	2 (1.14)	3 (1.72)	35
10 to 15	11 (6.32)	30 (17.24)	12 (6.89)	7 (4)	0 (0)	60
15 to 20	6 (3.44)	16 (9.19)	31(17.81)	12(6.89)	0(0)	65
>20	3(1.72)	5(2.87)	3(1.72)	2(1.14)	1(0.57)	14
Total	26	65	56	23	4	174

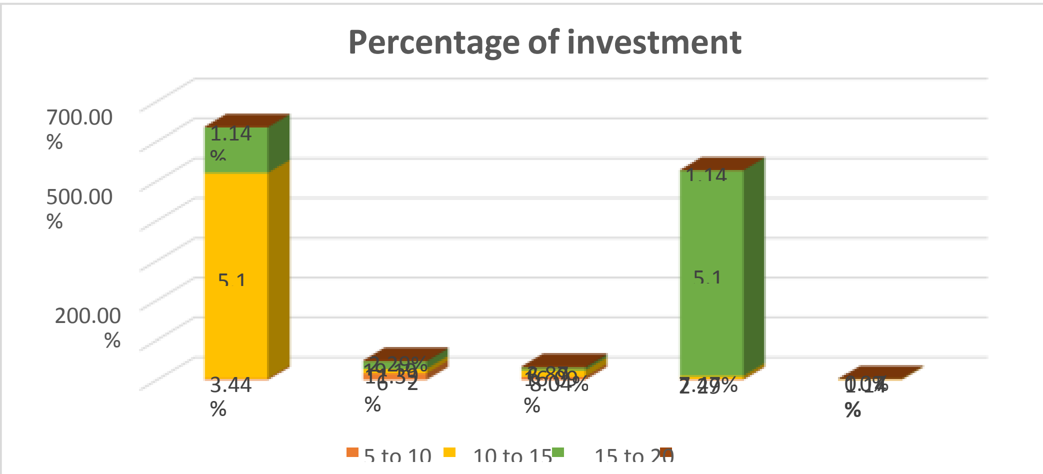


Interpretation:
From the above chart, we can say that most of the respondents whose annual family income was between 10 to 15 lakhs and 15 to 20 lakhs were traded in Cryptocurrencies weekly and monthly that is 17.24% and 17.81%, respectively, and all family income groups were traded very less in quarterly and semi-annually period.

Variable 1 - Annual Family Income

Variable 2 - What Percentage of income do you invest

Annual family income (in lakhs)	Percentage of investment					Total
	<5	5 to 10	10 to 15	15 to 20	>20	
5 to 10	6 (3.44)	11(6.32)	14(8.04)	4(2.29)	2(1.14)	37
10 to 15	9 (5.17)	32(11.39)	28(16.09)	13(7.47)	2(1.14)	84
15 to 20	2(1.14)	16(9.19)	12(6.89)	9(5.17)	1(0.57)	40
>20	2(1.14)	4(2.29)	5(2.87)	2(1.14)	0(0)	13
Total	19	63	59	28	5	174



Interpretation:

From the above table, we can say that most respondents whose annual family income between 10 to 15 lakhs was traded their income of 5 to 10% and 10 to 15% in Cryptocurrencies, is 11.39% and 16.09%, respectively, to get a higher return on their investment and lower income group people are investing less income in Cryptocurrencies and higher income group investing very less income in Cryptocurrencies.

Independent sample Chi-Square Test

Hypothesis testing:

Ho: there is no significant association between gender and trading.

H1: there is a significant association between gender and trading.

gender * trade Crosstabulation

			trade		Total
			yes	no	
gender	Male	Count	127	14	141
		Expected Count	122.7	18.3	141.0
	Female	Count	47	12	59
		Expected Count	51.3	7.7	59.0
Total		Count	174	26	200
		Expected Count	174.0	26.0	200.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.985[a]	1	.046		
Continuity Correction	3.118	1	.077		
Likelihood Ratio	3.724	1	.054		
Fisher's Exact Test				.064	.042
Linear-by-Linear Association	3.965	1	.046		
N of Valid Cases	200				
a. 0 cells (0.0%) have an expected count of less than 5. The minimum expected count is 7.67.					
b. Computed only for a 2x2 table					

Interpretation:

From the table, we conclude that Chi-square test statistics (p=0.456) is less than the alpha level of Significance of 0.05. this means there is statistical evidence to reject the null hypothesis (Ho). Hence, there is an association between marital status and usage.

Ho: there is no significant association between occupation and analytical method

H1: there is a significant association between occupation and analytical method

occupation * analysis Crosstabulation Count

			analysis				Total
			.00	Technical Analysis	Fundamental Analysis	Both	
occupation	Student	Count	2	13	11	6	32
		Expected Count	1.3	10.9	15.4	4.4	32.0
	Employee	Count	2	23	28	7	60
		Expected Count	2.4	20.3	29.0	8.3	60.0
	Professionals	Count	2	16	31	8	57
		Expected Count	2.3	19.3	27.5	7.9	57.0
	Self Employed	Count	0	7	13	1	21
		Expected Count	.8	7.1	10.1	2.9	21.0
	others	Count	1	0	1	2	4
		Expected Count	.2	1.4	1.9	.6	4.0
Total		Count	7	59	84	24	174
		Expected Count	7.0	59.0	84.0	24.0	174.0

Chi-Square Tests

	Value	DF	Asymptotic Significance (2-sided)
Pearson Chi-Square	17.250a	12	0.140
Likelihood Ratio	15.984	12	0.192
Linear by linear association	.879	1	.348
N of Valid Cases	174		

Interpretation:

From the table, we conclude that Chi-square test statistics (p=0.140) is less than the alpha level of Significance of 0.05. this means there is statistical evidence to reject the null hypothesis (Ho). Hence, there is an association between marital status and usage.

Finding

As this research shows, most respondents are men because they are in a better position to make financial decisions; people in their twenties and thirties have higher median incomes than those in older age brackets; More and more college graduates and professionals are putting their money into cryptocurrency; Respondents in the 10-20 lacs income bracket are the most likely to put money into cryptocurrencies; The majority of the general public has heard of cryptocurrency either from friends or on TV; Bitcoin, Ethereum, and Dogecoin are the three most widely used and traded cryptocurrencies today; Most people trade cryptocurrencies on popular exchanges like Binance and Coindcx once every week or once every month; Most people believe that investing in cryptocurrency will increase their financial wealth; Before putting their money into cryptocurrencies, most people conduct fundamental research; People typically put between five and fifteen percent of their annual salary into cryptocurrencies; There is little difference in risk factors between the crypto market and the stock market, according to the majority of people who have invested in cryptocurrencies for between one and three years; People generally agree that cryptocurrency's potential is greater going forward.

Conclusion

If we ban cryptocurrencies, we'll be left out of a growing industry as other countries forge ahead. On the contrary, India could advance its interests and shape the new global order by regulating and taking advantage of this new technology. Scams and illegal activities involving cryptocurrency could be avoided with proper regulation. Gain a deeper understanding of how the government taxes profit and TDS in cryptocurrencies.

Cryptocurrencies are a more controversial point in the international monetary community. The rates of exchange for cryptocurrencies are very hard to predict. Because of this, trading in these cryptocurrencies comes with a lot of risk. Their fast growth has brought them to the attention of more and more investors.

They can be picked up and taken wherever you go. Trust in cryptocurrencies is essential before their widespread adoption can occur. There is a risk that the cryptocurrency market will cool if it cannot win over the necessary level of public confidence. Their growth is still in its infancy, and it is unknown when they will be fully traded on exchanges all over the world. A wide range of cryptocurrencies have received the adequate amount of attention that was required.It's possible that bitcoins will find a sustainable growth path in the near future. Bitcoins, despite their problems, are celebrated as a technological achievement in the realm of digital currency. It has given developing nations access to a new form of currency, paving the way for economic reform. This way, people have more leeway in handling their money. Whether bitcoins achieve lofty transformations, cryptocurrencies are widely believed to be entering the financial stage and forever altering the global financial landscape.

References

1. Bearman, J. (2015, May). The Untold Story of Silk Road, Pt. 1. Retrieved from Wired.com Website: https://www.wired.com/2015/04/silk-road-1/
2. Bitcoin: A New Global Economy. (2015, August 4). Retrieved July 2016, from BitPay, Inc. Website: https://blog.bitpay.com/bitcoin-a-new-global-economy/
3. Bovaird, C. (2016, June 24). Bitcoin Rollercoaster Rides Brexit As Ether Price Holds Amid DAO Debacle. Retrieved June 2016, from CoinDesk Website: http://www.coindesk.com/bitcoin-brexit-ether-price-rollercoaster/
4. Christian Beer, B. W. (2015, January 28). Bitcoin – The Promise and Limits of Private Innovation in Monetary and Payment Systems. Retrieved from Research Gate: https://www.researchgate.net/publication/271473884
5. Consumers of Cryptocurrency. (2018, February). Retrieved from www.pwc.com.
6. Cryptocurrency Laws & Countries. (2018, March). Retrieved from www.astrslcrypto.com.
7. Desjardins, J. (2016, January 5). It "s Official: Bitcoin was the Top Performing Currency of 2015. Retrieved from The Money Project Website: http://money.visualcapitalist.com/its-official-bitcoin-was-the-top-performing-currency-of-2015/
8. Gerber, R. (2015, January 29). Why Apple Pay And Dollars Are Killing Bitcoin. Retrieved from Forbes Investing Website: http://www.forbes.com/sites/greatspeculations/2015/01/29/why-apple-pay-and-dollars-are-killing-bitcoin/#23ac58a0b4b6
9. Hileman, G. (2016, January 28). State of Bitcoin and Blockchain 2016: Blockchain Hits Critical Mass. Retrieved from Coindesk Website: http://www.coindesk.com/state-of-bitcoin-blockchain-2016/
10. Hofman, A. (2014, March 6). The Dawn of the National Currency – An Exploration of Country-Based Cryptocurrencies. Retrieved from Bitcoin Magazine Website: https://bitcoinmagazine.com/articles/dawn-national-currency-exploration-country-based-cryptocurrencies-1394146138
11. Indians see brighter Crypto Future than Americans. (2018, March 21). Retrieved from news.bitcoin.com.
12. Information Technology (Reasonable security practices, procedures, and sensitive personal data or information) Rules. (2011, April 11). Ministry of Electronics and Information Technology (MEITY). New Delhi: The Official Gazette of India.
13. Reuters. (2016, July 6). Two-Year High on Gold Prices Fueled by Brexit-Spooked Investors.
14. Retrieved from Fortune.com Website: http://fortune.com/2016/07/06/brexit-gold-prices/
15. Saito, M. (2016, February 18). Exclusive: Amazon expanding deliveries by its 'on-demand' drivers. Retrieved from Reuters Website: http://www.reuters.com/article/us-amazon-com-logistics-flex-idUSKCN0VR00O
16. The team, B. (2016, January 20). Understanding Bitcoin's Growth in 2015. Retrieved from
17. Wadhawa, N. (2018, January 4). Taxing cryptocurrencies in India. Retrieved from www.thehindubusinessline.com:https://www.thehindubusinessline.com/opinion/taxing-cryptocurrencies-in-india/article10012267.ece
18. World of Cryptocurrencies. (2018, February). Retrieved from blogs.thomsonreuters.com.
19. https://www.slideshare.net/NsvRaghavendra/a-comprehensive-project-on-bitcoin

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

REJUVENATION THROUGH INNOVATIVE AND QUALITY EDUCATION

Dr. Sharvan Kumar
Assistant Professor Dept. Of Political Science Nalanda College ,Bihars
Corresponding Author- **Dr. Sharvan Kumar**
Email id: sharvankashi2013@gmail.com
DOI-10.5281/zenodo.7267138

Abstract

India has been an important centre of education since ancient times .Even at that time there were institutions like Nalanda and Takshashila . It is a privilege of our country that we have a large youth population today. This can be put to better use by providing right opportunity and skills in the field of education to this population . Education has an important role in ending gender inequality, reducing poverty, establishing peace in the world and preventing diseases and death.Through the process of learning in an innovative manner , innovation in the existing structure of education . It is also helpful in increasing employment prospects and laying the foundation for a better future.Talk has now reached the modern digital system with learning blackboards and conversational models. Today the classroom has totally transformed from the normal one room school house to a completely virtual classroom. The advent of Electronics learning and distance learning has changed teaching and the function of a teacher from disseminator of information to that of facilitator of education. An electronics technology has progressively transformed the interaction between the teacher and the student .The incorporation of computers in the learning and education system is evidently the greatest change in education. When we take a look at the new technology accessible to all teachers today and how they educate , them everyone will agree that the accepted way to teach in education has changed. Today technology is heavily integrated into the curriculum. With the creation of internet opening of a global world , the information accessible to students is tremendous.Education is an ever - changing process. Teachers must understand the past educational process to connect it to the present scenario. Government schools and Universities are required to provide good quality education for all .These institutions need to prepare themselves according to new ways of learning. lastly it can be said that as for as India is concerned innovation paves the way for significant change in education ,it is possible.This is the challenge before our education system which must produce empowered youths.

Key Words *:- Innovation ,Teamwork, ICT , Virtual classroom, Empowered youths, Knowledge Society, Knowledge Economy*

Introduction

Education is a route of enlightment and a tool for empowerment. If carried out effective education can transform our youth into huge human capital and make India one of the most powerful nations of the world. This is the challenge before our education system.

Higher education is the backbone of any country because growth and development of science and technology, management, agriculture, Medical (Health care) Economy etc one depend on it. The development of any country depends above depicted sector . Education and technical education in particular is the cornerstone of the development of a country. The foundation of the 21st century rests on three pillars of innovation, teamwork and technology. The rapidly changing global environment has created both an opportunity and challenges for India. India is the country with the most youth. It is a competitive advantage that gives India an edge in the era of global competition.The Indian economy, which is preparing new ground for socio-economic development, today requires skilled and competent professionals on a large scale. India's economy is skill based and if India wants to become an advanced country, it has to make developed its higher education and also there is need to develop knowledge based society. Knowledge based society is the key to knowledge economy. Knowledge economy makes India an advanced country. Here it is relevant *to* put focus on Knowledge Society and Knowledge Economy. Knowledge Society is that society where their people has ability to create and maintain the knowledge infiastructure, develop knowledge workers and enhance their productivity through, creation, growth and exploitation of new knowledge. In this type of society knowledge is the primary production resource instead of capital and labour. Efficient utilization of available knowledge can create comprehensive wealth for the nation and also improve the quality of life in the form of better health, education, infrastructure and other Social indicators. Knowledge Economy, which revolves around creating, sharing and using knowledge and information to create wealth and improve quality of life. In the contemporary competitive environment with the economic activity getting very strongly dependent on higher level of knowledge base, there is a greater need than ever before for institution of higher learning with established excellence in imparting, knowledge and relevant skills and in creating solutions to problems before the society. Such institution expose the students to the challenges that exist in the country and prepare them to work on their solutions. Technology has made world to come together. Technology is the nonlinear tool for accelerated economic growth. The information technology and communication technology have already converged leading to information and communication Technology (ICT), It is important to ensure that quality higher education, "Reach the unreached "through virtual classrooms. India has also need to develop its vocational education and its infrastructure in some sector like Banking, Insurance, Tourism and Retail trade etc. to build its knowledge economy. Knowledge Society can be creating through these processes. There are three components for education: Lecturers, Practical or Laboratory and Library. The content includes all the above. Content can be generated in so many ways. The first one in the assimilation of the subjects by an expert through research study of many books and articles leading to the generation of quality and creative content in a presentable format. The teacher presents in a unique and innovative way to make the content appealing and easily absorbable to the students. The second form of content could be on a self-learning method by breaking down the content into a series of question answer formats. The Third may be from different books, which can be extracted by a digital library and presented just-in time to all the students who were living in remote area of the country. The Fourth source is Internet where there is lot of information and knowledge is available on different websites. Teacher has to search the information on the internet and present the content through different medium of channels, electronic media and personally also. The form of content should have supportive animations, which may even bring virtual laboratories and virtual immersion effects to the Collage, University and remote area students. When the content in generated, it should be in sharable learning object all over the nation and at every platform in the country.

Conclusion

Education is perhaps the most vital equipment for inclusive growth, empowering individual and Society opening up opportunities and promoting true public participation in the development process .It is an important factor that fuels both social change and economic growth.The development of the country is possible through educational upgradation. The biggest challenge is to ensure that the benefits of innovation and quality education provide educational opportunities to all those who play a constructive role in society building nation. To remain in global competition today and it is very important for best performance.

Reference :

1. Aggarwal, J.C. (2007) : Development and planning of modern Education; Eighth Edition, New Delhi, Vikas Publication House Private Limited.
2. Bezborah, Pranjal (2006) : Knowledge Economy and India; Yojana, February 2006, Monthly Magazine, New Delhi
3. Chidambaram, P. (2008) : Poll Budgets Uncorks Bubbly for India Inc. (Budget speech of finance minister P. Chidambaram) : The Economic Times 1st March, 2008 Kolkata Edition.
4. Dutta, B. (2007) : Bring In Pring in Private Players, The Times of India 7th November, 2007, Patna Edition.
5. Kakodar, Anil (2009) - Science and Technology, Development Needs Involvement of Sociologist, Economists and communicators University News 47 (23) June 8-14, 2009
6. Kalam, A. (2006) : Parameters of knowledge Society : Yojana, February 2006, New Delhi.
7. Kalam, Dr A.P.J. (2010) :- Technology it the foundation for the subtitled Development for the nation, University News 48 (02), January 11-17, 2010.
8. Kumar, A. (2007) : Effect of Socio-Economic status on Vocational Preferences of students in Bihar at 10th level, M. Phil. Dissertation Unpublished, PRIDE, Periyar University Salem Tamil Nadu
9. Kumar C. Raj (2007) : Academic Freedom And Higher Education : The Hindu, 13th November 2007, New Delhi Edition.
10. Kumar K. (2007) : Where there is No Learning : The Times of India, 2nd November, 2007, Patna Edition
11. Kurukshetra, September 2010 / page 2, Monthly Magazine
12. Pawar, S.R. (2007) : Educate the masses; The Times of India, 9th November, 2007, Patna Edition
13. Tilak, B.G. Jandhayala (2007) : inclusive Growth and Education : On the Approach to the Eleventh Plan : Economic and Political weekly, September 22-28, 2007, Vol.-XLII, No.-38 A Sameeksha Trust Publication, Mumbai.
14. Venkataiah S. (Ed. 2000) : Vocational Education : First Edition, New Delhi, Anmol Publications Pvt. Ltd.
15. Education Sector Gets 34,400 Crore, Page – 11, Yojana, March, 2008, New Delhi.
16. https://hindi.theprint.in › opinion

Dr. Sharvan Kumar

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

CYBER SPACE AS A LIBERATIVE SPACE OFFERING COUNTER HEGEMONIC STRUCTURES

Dr.M.S.Gayathri Devi
Assistant Professor, Department of English, Mahatma Gandhi College, Trivandrum.
Corresponding Author- **Dr.M.S.Gayathri Devi**
Email : Email id: gayu_ms@yahoo.com
DOI- 10.5281/zenodo.7267192

Abstract
There is always a mystery that surrounds the term 'Cyber Space'. This paper gives insight into the multiple nuances of online technologies that has encroached and monopolised our day to day life. It analyses how they are used extensively by the community and how the user tacking facility of websites brings enormous profit. The paper highlights that, keeping this in mind, it's the women who has used the internet platform widely to express themselves., leading to the fact that social media has become one of the most powerful tools for women to start new businesses, ventures, or start-ups. They have started to explore the area that allows them to directly contact and converse both with the customers and the consumers.

Keywords: Gender, Hegemony, Behavioural pattern, Repression, Social construction, Cyber violence.

Introduction-

Advancements in Technology is one of the most promising and futuristic attempts ever made by man. We have brainstormed ideas that are far-reaching and have accomplished them in a flash of a second. The Internet is one such idea that lit up millions of lives every day. This far-reaching invention touched many lives and changed many more. But there is always a catch. For the business of the internet to work, there should be monetary benefits which are acquired through the user. Websites and Online shopping sites work with the information that the users provide. Most of the time, the user activity and the possible browser history have a stronghold on what each user sees on the internet. User behaviour includes all of the actions that visitors take on a website, such as where and what they click, how they scroll down a page, where they stumble, and where they eventually drop off the page and leave. Tracking user activity provides one with an inside look at how people interact with the site and what obstacles or hooks they encounter as the customers. User behaviour is entirely determined by psychology; people act in response to what drives and draws them. This difference is evident between men and women. How a man perceives and uses something on the internet and how a woman does is entirely different. The user tracking enables the website to customise its work according to each client. This unknowingly leads to a more profitable manner for the website itself. Studies have proven that women are more rule-abiding tech-savvy whereas men are least bothered about the same. Studies have shown that online technologies can be divided into four categories: seeking information help, providing information help, technical exchange, and making friends and advertising. When male users prefer to provide information assistance, female users prefer to participate in the topics of making friends and advertising. While communicating in the technology community, the majority of male and female users express positive emotions, with female users uses these emotions more frequently. The emotion of male and female users in the community has a significant impact on their activity, but the impact is different. Positive sentiment can boost a user's activity in each topic, whereas negative sentiment can stifle it. It is noticed that a female users' activity is more susceptible to sentiments than male users. The user tracking technology of the websites uses these pointers to customise the sites according to the customer. Hence each browser content is like a psychological study of each user. Ones browser history leads the doorway to his mind and desires. this history is used as a tool by the websites to penetrate users without knowing. Each human is different. Men and women are different. The same internet provider is used for different reasons by each gender. But the interesting part is the man-woman psychology is monetised by the sites with the help of user tracking. For example, websites will not provide advertisements for sanitary pads for a user whose internet activity has masculine elements. By collecting these data, the companies can determine how to approach each gender group, age group and financial group accordingly. The user is oblivious to it and the monetary benefits for the companies are immense. This lends support to the gender role theory, which states that how people perceive events, differs depending on their gender (Tamres et al., 2002). Gender roles, in other words, can be used by both men and women to self-regulate their behaviour. The emotions played by men and women can provide feedback and reinforce behavioural change in more gender-typical ways. Women are more likely than men to rate an event as stressful. Because of their common gender tendencies, women may be especially sensitive to environmental cues and emotions, making them more likely than men to change their behaviour in an environmentally appropriate manner (Wood and Eagly, 2012). As a result, women are more vulnerable to emotions in their daily lives.

When considering this information in the light of gender theories, men are taken as beings with lesser empathy and emotion. Men are not necessarily more aggressive by nature. Instead, a gender theory critic might argue that if the majority of men in a given group are aggressive, this aggression is learned as part of their "gender identity" as a man. It differs from one society to the next and can be altered. When reviewing a major individual difference variable, such as gender, it is useful to identify some underlying principles that can generate predictions and unite an otherwise disparate collection of individual findings (Loftus et al., 1987)

Gender roles are usually understood as behavioural codes that society expects from one gender or the other. These codes are taught to children at a young age. According to this theory, children observe adults modelling gender-appropriate behaviour, and their desire to be a part of that society leads them to accept the modelled behaviour as the best and most appropriate for themselves and others. Adopting and performing a gender role" is thus what aids an individual in developing a "gender identity" of who they are. According to Bellman et al. (1993), women on an anonymous online bulletin board were more likely to be aggressive and assertive online than in face-to-face interactions. Witmer and Katzman (1997) discovered that women have more posts and challenges in their posts than men in an analysis of 3,000 news support group postings. Wolf (2000) discovered that, while females appear to prefer support groups that focus on emotional issues, males appear to prefer information-oriented support groups.

These observations show the repressions that are involuntary for women. The validation and acceptance that society denies are being provided by the anonymity of the internet. Women tend to find more empowerment and compassion as more and more women-centred communities all around the world are available for access and acceptance. Women's historical association with the body has resulted in her being judged and valued more than men, often above all else, and has also engendered fear and dread of otherness. Femaleness is still disturbing enough in this ostensibly equal, liberated, and progressive society to necessitate supervision and containment through forms of discipline that men are not subjected to. The story of women's emancipation and increasing self-determination is muddled by the persistence of restrictive ideals of womanhood that, according to Myra Macdonald, "defensively reinvent" themselves in response to cultural and social changes in women's lives (MacDonald 1995, p.220). This bodily association is completely irrelevant when it comes to the anonymous security that the internet provides. This anonymity has its demarcations as well.

Thus, by exposing themselves to the freedom of technology, women have come forward even on exposing the extreme violations that they have been through via online communities. The submissive genders that are muted in physicality find themselves a voice in the virtual world. These can be reflected in many cases of abuse that have been filed in recent years. Most of the time women tend to be voiceless subjects in the patriarchal society, accepting violence, abuse, inequality and submission.it is due to the age-old construct of the society that forces men to 'man up' and women to 'voice down'. In its broadest sense, patriarchy refers to the manifestation and institutionalisation of male dominance over women and children in the family, as well as the extension of male dominance over women in society as a whole. It implies that "men hold power in all of society's important institutions" and that "women are denied access to such power." It does not, however, imply that "women are either completely powerless or completely deprived of rights, influence, and resources" (Lerner 1989:239).

Women in the Indian social structure tend to seek approval from the authority body, which is a man. With more women becoming educated, the power struggle grew. As women became more and more aware of what is right and what is pictured right, demand for women's rights also grew. From this perspective, the world wide web helped women. As the internet and virtual or online social circles began to form, more and more women from different parts of the world started to come together for the commonality of their issues. Thus, social circles and online social activities have helped women to get more creative and empowered them into gaining the necessary strength to stand up for themselves. We could even consider that it is the main reason for online campaigns such as #metoo, and justice for victims. The anonymous security that the technology provides them adds to the strength that they gain to face the world and reform taboos. Movements to end violence and discrimination against women have used the hashtag #endviolenceanddiscrimination. Social media is a powerful platform for discussing and sharing ideas and experiences, as well as channelling hashtag movements to end sexual violence and discrimination against women. It is a new frontier for women's rights activists to organise a campaign or rally to fight for gender equality. Women all over the world are connecting and supporting one another on social media, including lawmakers, politicians, and business owners who are advocating for gender equality. The following are hashtag movements for gender equality and the abolition of violence against girls and women from around the country and the world.

Social media is becoming one of the most powerful tools for women to start new businesses, ventures, or start-ups because it allows them to directly contact and converse with customers and consumers. Female entrepreneurs can use social media to market themselves, which is very cost-effective and easily channelized. Entrepreneurs can use social media to directly communicate with customers and solicit feedback and suggestions about their online products or services in a short period. According to a recent Google report, the Internet is empowering Indian women by providing easy access to information and allowing them to make more informed decisions in their daily lives. According to a June 2013 survey titled "Women and Web Study," more than 60 million Indian women use the Internet to manage their daily lives, out of the country's 150 million Internet users. The covid 19 situations that the world got trenched in created a spur of opportunities for women. Staying indoors and gaining monetary benefits became a more and more successful aspect for women compared to men. This social media impact was not demeaned or unapproved by the Indian norms because the subjugated minority population in India is provided with monetary gains without actually going out to do the same. This draws us back to an early observation that we made. Women are using online platforms to create social networks whereas men use them to buy assets and activities. This analysis points to an indirect mode of the circle in which the earner of the physical world becomes the consumer in the virtual world and vice versa. This changes the power structure and tension of dynamics between the genders. For Foucault, twentieth-century power mechanisms are associated with the growth of disciplinary society, in which the juridico-political form of power has been interpenetrated by a technical and individuated form of power. Power is exercised in its disciplinary form through mechanisms of surveillance, reporting, and classification, all of which construct subjectivity. It is not a simple equation of repression and dominance, as it appears in its legal form. The latter, on the other hand, has not been rendered obsolete. Foucault advises concentrating on positive, productive, and local points of power. Feminist theorists have argued against a reductionist view of power as solely economic. They have also insisted over the years on an examination of women's oppression, including those encountered in the family, medical institutions, and the workplace. Furthermore, feminists have argued that dominant discourses such as science and law have marginalised and silenced women under the guise of universal truth claims. When it provides women with the pleasures of freedom, it also provides insecure, obscene violations as well. It is an open fact that the severity of criminal cyber-related cases has increased dramatically in India, especially through social media platforms. Cyber violence is defined as online behaviour that constitutes or leads to an assault on an individual's or group's well-being (physical, psychological, or emotional). What distinguishes cyberviolence from traditional off-line forms of violence is that in the former, some portion of the behaviour occurs online, though it may then carry over into offline contexts. Thus, cyber violence may or may not have a physical component, and much of the harm caused by cyber violence—as well as offline violence—is psychological and/or emotional (which is not to say less real or destructive). It is structural in origin and is one of the primary social processes that disadvantage women in the home and society. Domestic violence, sexual violence, and any other sort of physical, psychological, or financial violence are all manifestations of patriarchy. And now, there's also internet violence. Cyberviolence does not exist in a vacuum; it is inextricably linked to the offline world. Women were the victims in 84% of online harassment cases, while men were the perpetrators in 64% of cases all around the world. Online harassment is a reality for many female Internet users. Males are also victims of violence (particularly violence perpetrated by other males), and females, both online and offline, commit acts of violence. To ignore the larger gender pattern associated with violence, on the other hand, is to miss a fundamental insight into the social reality of violence as a means of control and intimidation. That is, it is more likely to be perpetrated at the bottom of a power hierarchy, reinforcing societal gender inequalities. According to statistics, there are approximately 250 million active users in India in 2019 and some of the most popular social networking sites are WhatsApp, Facebook, Instagram, LinkedIn, and Snapchat. However, according to one study, the ratio of male internet users to female internet users in urban areas is 60:40. In contrast, data collected for a survey shows a strong bias toward males in rural areas. This reflects the stark gender disparity. This can be analysed physiologically as well.

The human subject, according to Freud, has always been sexed, and despite biological differences, males and females have become distinct social subjects. The biological individual can be thought of as a blank canvas onto which gendered identities are projected and performed through socialisation. As a result, the supposed differences between men and women are exaggerated by the legitimization of social stereotypes. As a result, most, if not all, psychological differences between men and women are socially constructed. However, hegemonic masculinity is not a fixed position and holding it is debatable. Masculinity can be viewed as a social order that can be analysed and structured using Gramsci's concept of class relations. As a result, hegemonic masculinity continues to dominate social life, while other masculinities, such as homosexual masculinity, and women are marginalised. So when entering into the virtual world of technology where the subordinate becomes empowered it is unintentionally disrupting the age-old construction of masculinity.

Internet is a tool that helps us to create, nourish and flourish ourselves. Just like every road, there is always an obstacle or error in it too. But the difference is that any form of a mistake made by a person on the internet is being watched by millions every single minute. Be that on a social media platform or a shopping site, the consequences are always bigger. The fast-growing world is ready to accept the ever-changing technology called the internet, but strongly hesitate to acknowledge the growing nature of genders.

Works Cited

1. "Decision Making in Fuzzy Environment." *Uncertain Computation-Based Decision Theory*, WORLD SCIENTIFIC, 2017, pp. 273–354, http://dx.doi.org/10.1142/9789813228948_0010.
2. "IMPACT OF SOCIAL MEDIA IN ONLINE SHOPPING." *ICTACT Journals | Online Journal Websites*, http://ictactjournals.in/html/IJMS/Volume_3/V3I3/IMPACT_OF_SOCIAL_MEDIA_IN_ONLINE_SHOPPING.html . Accessed 20 Mar. 2022.
3. Lerner, Richard M. "A Life-Span Developmental View of Childhood Predictors of Later Psychopathology: Commentary." *Life-Span Research on the Prediction of Psychopathology*, Routledge, 2021, pp. 169–74, http://dx.doi.org/10.4324/9781003165187-12.
4. Loftus, Geoffrey R., and Norman H. Mackworth. "Cognitive Determinants of Fixation Location during Picture Viewing." *Journal of Experimental Psychology: Human Perception and Performance*, no. 4, American Psychological Association (APA), 1978, pp. 565–72. *Crossref*, doi:10.1037/0096-1523.4.4.565.
5. MacDonald, Myra. "Representing Women: Myths of Femininity in the Popular Media." *Choice Reviews Online*, no. 05, American Library Association, Jan. 1996, pp. 33-2806-33–2806. *Crossref*, doi:10.5860/choice.33-2806.
6. Steinerová, Jela Steinerová, and Jaroslav Šušol Šušol. *Users' Information Behaviour - a Gender Perspective*. Comenius University Bratislava, Faculty of Philosophy, Gondova 2, 818 01 Bratislava, Slovakia, https://files.eric.ed.gov/fulltext/EJ1104701.pdf. Accessed 20 Mar. 2022.
7. Tamres, Lisa K., et al. "Sex Differences in Coping Behavior: A Meta-Analytic Review and an Examination of Relative Coping." *Personality and Social Psychology Review*, no. 1, SAGE Publications, Feb. 2002, pp. 2–30. *Crossref*, doi:10.1207/s15327957pspr0601_1.

8. Witmer, Diane F., and Sandra Lee Katzman. "On-Line Smiles: Does Gender Make a Difference in the Use of Graphic Accents?" *Journal of Computer-Mediated Communication*, no. 4, Oxford University Press (OUP), June 2006, pp. 0–0. *Crossref*, doi:10.1111/j.1083-6101.1997.tb00192.x.
9. Wolf, Alecia. "Emotional Expression Online: Gender Differences in Emoticon Use." *CyberPsychology & Behavior*, no. 5, Mary Ann Liebert Inc, Oct. 2000, pp. 827–33. *Crossref*, doi:10.1089/10949310050191809.
10. Wood, Wendy, and Alice H. Eagly. "Biosocial Construction of Sex Differences and Similarities in Behavior." *Advances in Experimental Social Psychology*, Elsevier, 2012, pp. 55–123, http://dx.doi.org/10.1016/b978-0-12-394281-4.00002-7

.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

RIGHT TO PRIVACY - THE FUNDAMENTAL RIGHT

Tarannum Jahan
Lecturer In Commerce, Indira Priyadarshini Govt. Degree College For Women, Nampally, Hyderabad
Corresponding Author- **Tarannum Jahan**
Email id: tarannumjahan.tj@gmail.com

DOI- 10.5281/zenodo.7267213

Abstract:

The right to privacy in India has been contested in court, but it was finally codified into their constitution in 2017. However, it failed as many thought it would pose a problem for the investigations and powers of the states if the right to privacy meant "it would elevate every private/ civil communication to that of State papers." In the two mentioned cases, the right to privacy was brought up by the defendants but was struck down by the Supreme Court, which denied that the right to privacy itself existed in the constitution, so it was not applicable for the defendants to use in Court. It was not until the case involving Justice K.S. Puttuswamy which brought about a change and a decision by the 9 Supreme Court justices to add the right to privacy in Part III of the Indian Constitution. In the year 2000, an effort has been made by our legislature to embrace privacy issues relating to a computer system under the purview of the IT Act, 2000. After the Supreme Court's landmark judgment on the right to privacy in the Justice KS Puttaswamy case which suggested that the government should legislate a data privacy law to ensure that the fundamental right to privacy is adequately protected to protect interrelationships. A noteworthy change is in the form of exemptions extended to government agencies concerning data processing. This exemption may be examined in light of the recent Supreme Court judgment in the Pegasus spyware case.

Data privacy

India is relatively new to the data protection and privacy legislation regime and, like the U.S., only has specific legislation for sectors. India is also a BRIC country, joining Brazil, Russia, and China, which are seen as emerging economic powerhouses, currently dominating the goods and services industry. India has the largest democracy. Also noteworthy is that the EU is also India's third-biggest trading partner, just behind the U.S. and China. As an emerging country, Indians are also increasingly using the World Wide Web and accessing social media platforms, shopping, or buying more smartphones. According to the World Bank, internet penetration in India was 41% in 2019, meaning that under half of the population has access to the internet. Ten years ago, this was only seven percent. About 50% of the Indian population has access to a social media account in terms of social media. India's economic growth is mainly powered by domestic demand, but foreign trade is critical to India's increasing role in the international community The right to privacy in India has been contested in court, but it was finally codified into their constitution in 2017. When India became independent from Britain in 1947, there were calls to establish the right to privacy in its constitution. However, it failed as many thought it would pose a problem for the investigations and powers of the states if the right to privacy meant "it would elevate every private/ civil communication to that of State papers."

Case Study:

In 1954, the case of **M.P Sharma and Ors. Vs. Satish Chandra and Ors**, the Indian Supreme Court ruled that the right to privacy was not in the constitution and that the original authors of India's constitution did not see it fit to have such a right which they compared to the U.S. Fourth Amendment. The case dealt with the right to property, a right that was removed from India's constitution in 1978, and the right to which the Government had to "search and seizure" documents on the defendants' property. The

Defendant claimed that their right against self-incrimination, as stated in article 20 and the right to privacy had been violated as the searches had self-incriminating documents. The Court deemed that the state was above and within its power to do so and take away the items and that such activities were only temporary and did not infringe upon their property right completely.

Another earlier case that presented the right to privacy in terms of surveillance was **the Kharak Sigh v The State of UP** in 1962, which involved the defendant, Kharak Sigh, who had been released from jail due to a lack of evidence after being accused of bank robbery. The police department that had arrested him started surveilling the defendant, creating a so-called 'History Sheet' which enables the police department to track his movements. The department also had visits to the defendants' home at odd hours throughout the day and night and which Kharak claimed was in violation of his right to privacy which was constituted in the right to life and liberty in Article 21 of the constitution. Like the earlier case, the Court ruled that the right to privacy was irrelevant since it was not a right guaranteed in the Indian Constitution. Kharak's right to life and liberty was hindered by the police who came to the defendant's home. The police department provisions were deemed unconstitutional and restricted Kharak's right to life and his right to movement as directed in Article 19.

In the court case of **Justice K.S. Puttaswamy (Retd) vs. Union of India**, the Court upheld that article 21 of the Indian Constitution by saying that "The right to privacy is protected as an intrinsic part of the right to life and personal liberty under Article 21 and as a part of the freedoms guaranteed by Part III of the Constitution."

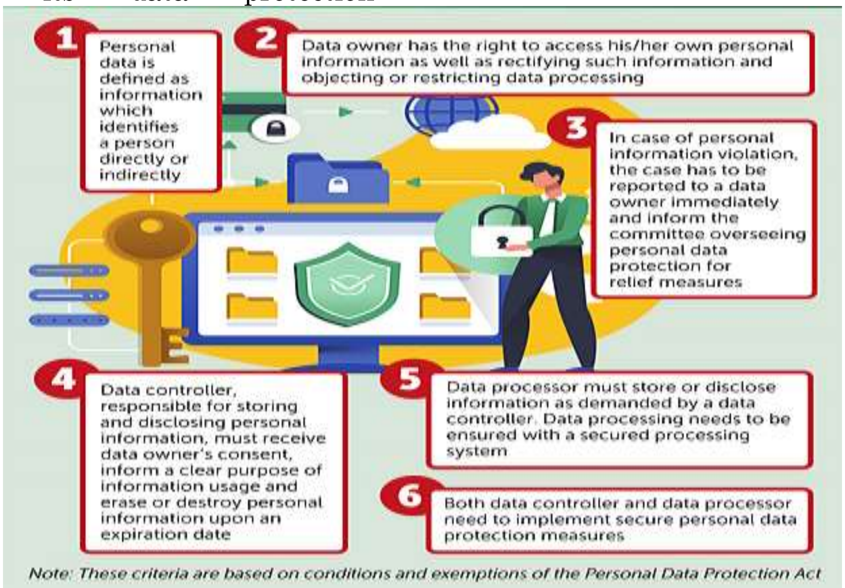
In the two mentioned cases, the right to privacy was brought up by the defendants but was struck down by the Supreme Court, which denied that the right to privacy itself existed in the constitution, so it was not applicable for the defendants to use in Court. In the cases following 1975, the Court determined that to some degree the right to privacy did exist but that it would almost follow a common law approach in which courts decide on a case-by-case basis from previous cases since there is no official written or codified law that applies. It was not until the case involving Justice K.S. Puttaswamy which brought about a change and a decision by the 9 Supreme Court justices to add the right to privacy in Part III of the Indian Constitution.

2.2. Formation Of Data Protection:

In the year 2000, an effort has been made by our legislature to embrace privacy issues relating to a computer system under the purview of the IT Act, 2000. In the Internet age, information is so centralized and so easily accessible that one tap on a button could throw up startling amounts of information about an individual. This enables public authorities to keep a closer watch over the individual. When committed to paper and trapped within the confines of a manual file, the utility of information is markedly limited. The convergence of technology with communication has blurred the boundaries between activities and technologies. Communication has undergone a sea change in the last three decades with the new Information and Communication technologies fast outpacing the legal protection afforded to a person's right to be left alone.

Increasingly we see people trading and communicating with the help of computers and the Internet. The ability to communicate and exchange information instantaneously and seamlessly has given rise to privacy concerns i.e., control over the information transmitted and stored over the Internet, and the control over who can access that information. It is an increasing security concern to protect the privacy of data on networked servers connected to the Internet. This leads to a paradoxical situation where the computer and the Internet have accorded privacy and, at the same time, it has allowed eavesdroppers to intrude into our privacy. Despite the best efforts of software security professionals to protect the privacy of information from unwarranted leaks or unauthorized intruders or inadvertent leaks, privacy is always at risk.

Regulators, legislators, the judiciary, and industry can expect 2022 to be a busy year. It's been more than three years since the EU General Data Protection Regulation went into effect, and India is on the verge of following the EU's lead and streamlining its data protection regulations, even though there are reports on a possible re-draft of the bill. The interplay of sector-specific regulations and a general law on data protection would possibly trigger deliberations and actions on a wide array of privacy concerns. Moreover, with the rapid adoption of cutting-edge technologies such as block chain and AI, it would be a worthy endeavor to track and study how the current bunch of regulations would be applied to frameworks based on decentralization. Meanwhile, organizations should consider conducting periodic audits and assessments of their privacy procedures to better visualize the types of data they collect, its flow within the company, storage timelines, and locations, and initiate remediation steps to close any gaps they observe.



Digital And Internet Challenges To The Concept Of Privacy:

Privacy is a valuable aspect of personality. A person's right to privacy entails that such a person should have control over his or her personal information and should be able to conduct his or her personal affairs relatively free from unwanted intrusions. Privacy is also at the core of our democratic values. An individual has an interest in the protection of his or her privacy as preserving privacy encourages dignity, self-determination, and individual autonomy and ultimately promotes a more robust and participatory citizenry. Among all the human rights in the international catalog, privacy is perhaps the most difficult to define. Despite attempts of jurists, scholars, and theorists to define privacy, there remains confusion over the true meaning and scope of privacy

Social computing (SoC) challenges

It is known that this technology permits the organization of a dialog between individual computer users through the Internet by using different environments united under the term Social Networking Sites – SNS (Social Media, Social Networks, Social Bookmarking, Blogs & Microblogs, Wikis, Multiplayer games, etc.). Practically the SoC is a useful instrument for connection between users and information sharing, but there is a possible risk to personal data protection because it might happen if the information is shared with an unauthorized person.

Cloud computing (CC) challenges

CC (cloud computing) is a distributed environment based on connected virtual computers with dynamic communications between them, which provides cloud services to the clients (users). The basic cloud services, defined by NIST (National Institute of Standards and Technology) are Infrastructure as a service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). These services could be provided by different types of cloud – public, community, private, and hybrid, including using the technology of the Mobile.

Internet of things (IoT) challenges

The term is used to describe a set of objects and devices that are connected to the Internet to send and receive data obtained by using sensors for monitoring selected parameters and to capture and analyze values obtained to control processes in different spaces such as home, and city, health, etc. Connected devices may disturb privacy and security and could undermine consumer confidence.

Big data (BD) and Big data analytics (BDA) challenges

The term “big data” relates to a set of collected and stored information in a very large volume received from different sources in different places for further processing for any purpose. This information could exist in different forms. The main idea is “the more data will be better”, but it creates negatives for privacy and is against the GDPR principle of minimizing personal data in processing.

The Personal Data Protection Bill, 2019

After the Supreme Court’s landmark judgment on the right to privacy in the Justice KS Puttaswamy case which suggested that the government should legislate a data privacy law to ensure that the fundamental right to privacy is adequately protected to protect interrelationships between private legal entities, the Ministry of Electronics and Information Technology (MEITY) set up a 10 member committee under the leadership of retired Supreme Court judge B.N. Sri Krishna, mandated to develop a Framework for Data Protection Law for protection of online personal data.

The committee submitted its report titled *“A Free and Fair Digital Economy: Protecting Privacy, Empowering Indians”* along with the draft of a bill on personal data protection. The revised draft of the Personal Data Protection Bill, 2019 (Bill), was introduced by Mr. Ravi Shankar Prasad, Minister for Electronics and Information Technology, in the Lok Sabha on December 11, 2019, which is being thoroughly examined by a 30-member team of the Joint Parliamentary Committee (JPC).

Data Breach In India 2021:

A data breach can be defined as an incident in which one’s information is accessed without their consent. Therefore, a data breach can be said as the release of sensitive, confidential, or protected data. A report indicates that India ranked third in the whole world in terms of the number of breaches of data till November 2021 with total data breaches of 86.63 million Indian users. It is of serious concern in light of the financial and security damage the data breach can cause. Criminals can use the leaked information for numerous illegal activities such as fake ID cards, fraudulent bank calls, and so on.

Smartphones, laptops, tabs, etc. have become indispensable products in the 21st century. It is very easy for anyone to gather details after a consumer downloads an app. The details often submitted are age, qualification, gender, interests, and Aadhaar number. This is quite often sold for hefty amounts. Therefore, there must be stringent laws and their implementation to prevent such data breaches and transmission without consent

1. Air India

In March 2021, Air India announced that it had suffered a data breach in the last week of February. According to the company, the data of around 45 lakh users was leaked which included their name, date of birth, mobile number/email address, passport information, ticket information, frequent flyer data, and credit card information. This was of the most serious data leaks of all time as it included passport details as well, which are one of the most important identity documents of a person.

2. Domino's India

On 22nd May 2021, Rajshekhar Rajaharia, an internet security researcher, uncovered that data of 18 crores of Domino's orders was leaked online. The data breach included the name, email, mobile number, and even the GPS location of the user. Alon Gal, CTO of a cyber security firm called Hudson Rock, claimed that the credit card details of 10 lakh people who ordered pizza from Domino's had also been compromised. However, Jubilant Food works, which owns Domino's, claimed that no financial data had been leaked.

3. Facebook

Now, who doesn't know about data breaches on Facebook? The social media platform is quite notorious for its data leaks. In a security attack that took place in April 2021, data of around 60 lakh Indian users was leaked from Facebook. The data breach includes Facebook ID, email ID, phone number, date of birth, past locations, and the relationship status of the users. Facebook says that hackers misused the company's contact import tool, which people can use to find friends, to obtain data illegally. While the company claims that it has fixed the issue, the data set has reportedly been posted on an online forum and is accessible to anyone.

4. Mobikwik

Mobikwik, as you might know, is one of the most popular digital wallet services in India. Reportedly, the data of 110 million Mobikwik users was leaked. The data breach, according to various reports, includes details regarding KYC documents, Aadhaar cards, credit cards, and mobile phone numbers. The data breach was reported by Rajshekhar Rajaharia in March 2021. Mobikwik, however, discarded the data breach report and claimed that there has been no such incident. Eventually, many other cyber security researchers, including Robert Baptist and Troy Hunt backed Rajshekhar saying that there has been such a data breach. However, Mobikwik, to date, claims that it has not suffered a data leak.

5. Upstox

Upstox is India's second-largest brokerage firm. In April this year, Upstox had a data breach, where the contact and KYC details of 25 lakh Upstox customers were leaked. According to Upstox CEO, Ravi Kumar, the data was compromised from a third-party data warehouse. The company announced that it had implemented new measures to enhance security. Data leaks at platforms like Domino's are one thing but a data breach at a company that has information about users' stocks in the share market is very serious. Upstox, however, says that information related to funds and securities is safe.

Below, eight members of the Forbes Technology Council explain the distinction between data privacy and data protection, as well as the importance of having the needed systems to protect digital assets.

1. Having One Doesn't Ensure The Other:

Data protection is focused on protecting assets from unauthorized use, while data privacy defines who has authorized access. One can say that data protection is mostly a technical control, while data privacy is more of a process or legal matter. One doesn't ensure the other, and we need both to work together as a proper control mechanism. - Sameer Shelke, aujas.com

2. One Addresses Regulations, And The Other Mechanisms:

I like to think of data privacy as the regulations, or policies, that govern the use of my data when shared with any entity. On the other hand, data protection is the mechanism — that is, the tools and procedures — to enforce the policy and regulation, including the prevention of unauthorized access or misuse of the data that I agreed to share. – Mohamad Zaher Uddin, trial assures

3. The User Controls Privacy; Companies Ensure Protection:

The important distinction people should know about data privacy and data protection is who controls which part. Data privacy controls are mostly given to users. Users can usually control which data is shared with whom. Data protection is mostly a company's responsibility. Companies need to make sure that the level of privacy their users have set is implemented and data is protected. - Vikram Joshi, pulsed

4. Safety From Sales Vs. Safety From Hacks:

Data privacy is about keeping your information from being sold or shared, while data protection focuses on keeping that information from hackers. It's important to explain this difference to people and have a policy as to what your company does for each type of data intrusion. - Chalmers Brown, Due

5. Ensuring Your Data Is Only Accessed As Intended:

The difference between privacy and protection bills is down to who we intend to share your data with versus how we plan to protect your data from everyone else. At the data access level, they mean the same thing. But in reality, protecting data from unauthorized access requires going beyond a simple ACL scheme and defending against all the vulnerabilities of the underlying systems. - Chris Kirby, Retired

6. You Can't Have Privacy Without Security:

Data privacy is about what people who have collected your data lawfully can and should do with it and what control you have over that retention and use of data. Data protection ensures that your data is safeguarded from unlawful access by unauthorized parties. It is hard to have true data privacy without data security, because why would anyone safeguard the data they stole? - Matthew Wallace, Faction, Inc.

7. Privacy Questions Should Be Answered First

Data protection is the act of safeguarding the data already obtained, no matter what it is (PII, payment, or proprietary). Thus we often overlook and ignore the fact that a private practice precedes the question of protection. The first step of risk avoidance is questioning if submitting your data is necessary at all; this makes the question of its protection moot. - Kyle Pretsch, Lucky Brand Jeans

2.3. Present Status Of Data Privacy Laws In The Indian Judicial System.

India in the present scenario does not have any express legislation governing the laws relating to data protection or privacy and unfortunately, such laws are equivalent to negligible in India. However, there is some legislation in India dealing with Data Protection, which are the Information Technology Act, 2000, and the (Indian) Contract Act, 1872. With constantly increasing cyber crimes, the government of India is coming up with its data protection laws, based on the European Union's General Data Protection Regulations.

The Data Privacy Bill is primarily for the protection of an individual's data which specifies the flow and usage of personal data on the internet, creating a trusting relationship between users and entities processing the personal data by protecting the rights of individuals whose personal data are processed while creating a framework of organizational and technical measures in data processing, laying down norms for social media intermediary, cross-border transfer, accountability of entities processing such personal data of the users. The basic principles of the newly introduced Bill are widely similar to those in the General Data Protection Regulation.

On 2nd September 2020, the Ministry of Electronics and Information Technology (MEITY), evoking its power under Section 69A of the Information Technology Act,2000 read the relevant provisions of the Information Technology (Procedure and Safeguards for Blocking of Access of Information by Public) Rules 2009, because of the emerging concern over cyber security, blocked 118 mobile apps. As per the notification issued by MEITY, these apps were engaged in activities that were possessed to be a threat to the sovereignty and integrity, defense, public order, and security of India.

This decision by the MEITY is a targeted move to ensure the safety, security, and sovereignty of Indian cyberspace which has yet again opened up the discussion on the paramount importance to have strong and legit Data Privacy Protection Laws in the country.

2.4. Evolution Of Data Protection In India:

In 2017, the Supreme Court of India pronounced a landmark judgment declaring the right to privacy as a fundamental right under the framework of the right to life (Article 21) as per our Constitution. However, a standalone and comprehensive privacy law does not exist in India. Currently, the Information Technology Act 2000 read with supplementary Rules, acts as the legal cornerstone to ensure the protection of personal information. Lawmakers and regulators progressively recognize the importance of data for economic and technological growth. Hence, 2021 witnessed key developments in the data privacy and personal data protection space across various sectors. In terms of legislation, the Joint Parliamentary Committee's report on the proposed data protection law has given the Data Protection Bill of 2021 a new tone and tenure. The Reserve Bank of India developed restrictions for payment aggregators and lending applications, while the Bureau of Indian Guidelines formulated data privacy standards as an assurance framework for enterprises. The central government also pushed out due-diligence rules for internet intermediaries to regulate. These developments result from the meteoric adoption of technology, powered by enormous data sharing networks created by private and public entities. These networks depend on the personal data of individuals. In the absence of adequate privacy safeguards, there is a risk that personal data may be subjected to unauthorized access.

Data Protection Bill 2021:

The JPC's report paved the way for India's data privacy and protection legal regime. The bill is yet to be tabled in Parliament. However, a key point of discussion is that the bill in its current form proposes deviations from its earlier two predecessors (2018 and 2019 drafts).

A noteworthy change is in the form of exemptions extended to government agencies concerning data processing. This exemption may be examined in light of the recent Supreme Court judgment in the Pegasus spyware case, which involves allegations against the central government for conducting surveillance on Indian citizens. The Hon'ble Court constituted a committee to assess the violation of the right to privacy and make recommendations on the current surveillance laws to boost data protection practices. Hence, a prudent approach would be to consider bringing government agencies under the umbrella of DPB to ensure individual privacy and enhance cyber security. Under the latest draft, the DPB seeks to regulate the collection, storage, transfer, and use of personal data. In addition, it extends the provision to foreign-based entities in case Indians are subjected to their data processing activities.

The bill's main tenets include Individual consent, data breach notification, transparency (prior notice and privacy policy describing data processing practices), purpose-based processing, technical security, and rights of individuals who part away with personal data such as name and email ID, or sensitive personal data such as a social security number. Individuals would have more control over the processing of their data with these rights, as they would be able to remove, correct and access their data easily. In August 2021, jurisprudence in privacy rights management was formulated. The Madras High Court dismissed a petitioner's right to be forgotten, seeking to have his criminal and court records expunged following his acquittal from the case. The court issued the dismissal because the fulfillment of a task in public interest trumped the individual's right to privacy. The court further stated that these rights would be more effectively implemented after India passed a data privacy law. Several requirements set forth by the JPC's report and revised DPB are worth ruminating over. Take, for instance, the data localization norms applicable to sensitive personal data and critical personal data (yet to be defined by the central government). The flow of data from India to a country abroad would be restricted.

These norms are perhaps a manifestation of India's economic, national security, and data protection concerns. Data of Indians is to be stored primarily in India and may be transferred if the individual provides consent, a contract duly approved by the DPA is in place, or the receiving entity can demonstrate compliance with applicable data protection laws. The receiving entity could also implement adequate technical and administrative safeguards for validating such data transfers. The glaring concerns with localization norms are the costs and technical capabilities required to segregate data and create a single point of failure, as data would have to be stored only in a server based in India, as opposed to the conventional practice of utilizing distributed servers across various jurisdictions. The bill relies heavily on consent as a parameter for processing data, mandating organizations to enable individuals to put in place a consent manager platform to gain, withdraw, review, and manage consent in an accessible, transparent, and interoperable manner. Though the idea seems novel, it falls in uncharted waters. As we await the passage of this bill in Parliament, we can deduce that it requires organizations to revamp their operational practices concerning data-related processes and embed privacy within their business procedures.

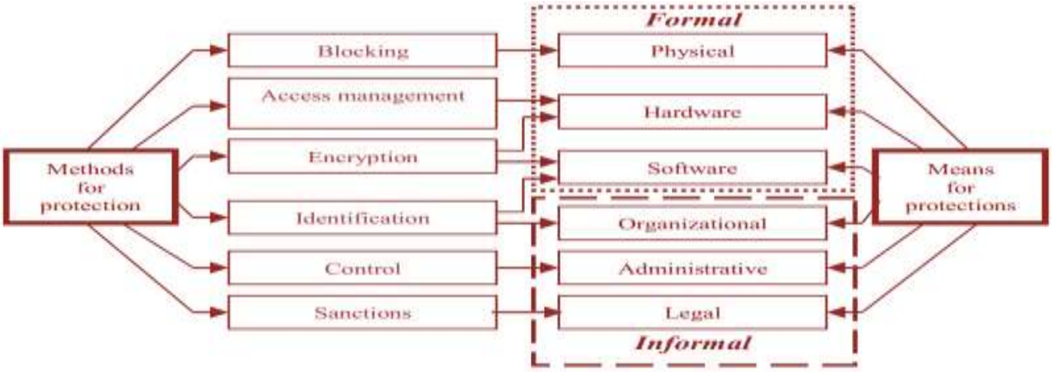
Methods For Data Protection:

When it comes to protecting your data, there are many storage and management options you can choose from. Solutions can help you restrict access, monitor activity, and respond to threats. Here are some of the most commonly used practices and technologies:

Blocking – prevents unauthorized users' access to the rooms where the data are stored.

Access Management – provides secure use of all information resources and using all system resources by verifying the access rights, preliminary defined for each user.

Encryption – provides using of cryptographic algorithms to encrypt data making them incomprehensible to an illegitimate user.



1. **IDENTIFICATION** – identification of staff and individual components of the system that are registered as legitimate users and for which access right has been defined.
2. **CONTROL** – methods, which protect data from unauthorized activities of legitimate users.
3. **SANCTIONS** – the protection program describes the internal rules for processing and using the information, and the responsibility of the consumers according to the legal norms and laws.

2.5. Rules And Regulations:

Data Protection Under Indian Law:

Our constitution has provided the law relating to privacy under the scope of Article 21. Its interpretation is found sufficient to provide adequate protection to the data. In the year 2000, an effort has been made by our legislature to embrace privacy issues relating to a computer system under the purview of the IT Act, 2000. This Act contains certain provisions which protect stored data. In the year 2006, our legislature also introduced a bill known as „The Personal Data Protection Bill‟ to protect the personal information of the person.

Data Protection Under It Act, 2000

Section 43

This section protects against unauthorized access to the computer system by imposing a heavy penalty of up to one crore. The unauthorized downloading, extraction and copying of data are also covered under the same penalty. Clause c ‟ of this section imposes a penalty for the unauthorized introduction of computer viruses of contaminants". Clause g ‟ provides penalties for assisting the unauthorized access".

Section 65

This section provides for computer source code. If anyone knowingly or intentionally conceals, destroys, alters, or causes another to do as such shall have to suffer a penalty of imprisonment or fine up to 2 lac rupees. Thus protection has been provided against tampering with computer source documents.

Section 66

Protection against hacking has been provided in this section. As per this section, hacking is defined as any act to cause wrongful loss or damage to any person or with the knowledge that wrongful loss or damage will because to any person, and information residing in a computer resource must be either destroyed, deleted, altered or its value and utility get diminished. This section imposes the penalty of imprisonment of three years or a fine of up to two lac rupees or both on the hacker.

Section 72

This section protects against breach of confidentiality and privacy of the data. As per this, any person upon whom powers have been conferred under the IT Act and allied rules to secure access to any electronic record, book, register, correspondence, information document, or other material discloses it to any other person, shall be punished with imprisonment which may extend to two years or with fine which may extend to one lac rupees or both.

Law Of Contract

These days‟ companies are relying on the contract law as a useful means to protect their information. The corporate houses enter into several agreements with other companies, clients, agencies, or partners to keep their information secured to the extent they want to secure it.

Indian Penal Code

It punishes the wrongs which were expected to occur till the last decade. But it failed to incorporate within itself the punishment for crimes related to data which has become the order of the day.

The Personal Data Protection Bill, 2006

Upon the footprints of the foreign laws, this bill has been introduced in the Rajya Sabha on December 8th, 2006. The purpose of this bill is to protect personal data and information of an individual collected for a particular purpose by one organization, to prevent its usage by other organizations for commercial or other purposes, and to entitle the individual to claim compensation or damages due to disclosure of personal data or information of any individual without his consent and for matters connected with the Act or incidental to the Act.

To examine any data security breach and issue directives to protect the security interests of individuals whose personal data has been compromised or is likely to be compromised as a result of the breach.

General Data Protection Regulations (Regulation (Eu) 2016/679) ("GDPR")

GDPR was approved and adopted by European Parliament ("EU") in April 2016 and will come into force on May 25, 2018, without the need for implementing national legislation. GDPR will replace the EU Directive 95/46/EC adopted by the European Parliament and Council on October 24, 1995.

The GDPR extends its geographical reach and will not only apply to organizations located within the EU but will also apply to organizations located outside of the EU if they (a) process personal data in the context of the activities of an establishment of a 'controller' or a 'processor' in the EU, or (b) process personal data of EU data subjects, where the processing activities relate to the offering of goods or services (including for free); or (c) monitor the behavior if the behavior takes place within EU.

However, mere website accessibility of service in the EU is not sufficient to trigger the application of the GDPR. However, Factors such as offering a service in the languages or currencies used in a Member State (if not also used in the third country), or mentioning customers or users in a Member State may trigger the application of the GDPR.

Further, the conditions for consent have been strengthened. The request for consent must be given in an intelligible and easily accessible form, with the purpose for data processing attached to that consent - meaning it must be unambiguous. Consent must be clear and distinguishable from other matters and provided in an intelligible and easily accessible form, using clear and plain language.

It must be as easy to withdraw consent as it is to give it. When assessing whether consent is freely given, utmost account shall be taken of whether, inter alia, the performance of a contract, including the provision of a service, is conditional on consent to the processing of personal data that is not necessary for the performance of that contract. In case of breach under GDPR, an entity can be fined up to the higher of 4% of annual worldwide turnover and EUR20 million. GDPR implements a tiered approach. Other specified infringements would attract a fine of up to the higher of 2% of annual worldwide turnover and EUR 10 million.

2.6. The Whatsapp Privacy Policy:

WhatsApp was launched in 2010 and was subsequently taken over by Facebook in the year 2014.WhatsApp updated its privacy policy for users that made three-fold changes unilaterally – data processing, data sharing with Facebook, and integration of Facebook's other products with WhatsApp. According to which: –

1. Users have to mandatorily permit the app to share the user data with Facebook
2. Whats App will collect the hardware information of the device such as

Application version, device operations, battery level, and mobile network.

3. The app will collect the location-related information from the user despite the user opting not to use the application's location feature.
4. The new feature of the app for the payments would help the app retain all the payment, transactions, and bank accounts-related information
5. If the user opts for 3rd party services, these third-party services may receive the personal information that the user shared with others
6. Lastly, even if the user deletes their WhatsApp account, the app reserves the right to retain their previously stored data.

Previously, WhatsApp did not have the ownership of the user data but as per the new policy, the app now has become the owner of the user's data, if they accept the new policy. The Indian Data Protection Bill, 2019 prohibits collecting personal data and processing such data by 'data fiduciaries' without the user's consent or prior notification. It lays down data principles for the users i.e., the right to confirmation and access, the right to data portability, right to be forgotten. Lastly, the bill also provides for compensatory damage in case of a breach of data protection to the user. However, WhatsApp claims to protect its user's messages with end-to-end encryption, ensuring that only the user can access the data and that not even WhatsApp can access it.

Various petitions were being filed in the Supreme Court of India to challenge the unjust updated terms of the app and restrain WhatsApp from implementing the controversial updated terms of services as it is deemed to be against the right to privacy, thereby violating the fundamental rights of the citizens and also threatening the state's security. Owing to this massive negative publicity, the implementation of the new policy or the updated terms has been finally put on hold in India.

The latest privacy policy set out by the popular messaging app 'WhatsApp' was challenged. The High Court of Delhi rejected this petition on September 23, 2016, and ordered to deletion of personal data collected up to September 25, 2016, while directing the Telecom Regulatory Authority of India to consider bringing similar Smartphone apps under the umbrella of its regulatory ambit. Aggrieved by this judgment, a Special Leave Petition was filed in the Supreme Court of India seeking an alternative and putting out various issues:-

FIRSTLY, whether the WhatsApp Privacy Policy violated the right to privacy of the users,

SECONDLY, whether the omission of the option given to the user of the app of not sharing their data with the parent company Facebook is contrary to law and,

THIRDLY, check whether this manner of obtaining the consent of the user by WhatsApp is deceitful.

In its order on September 6, 2017, The Supreme Court explicitly ordered the parent company Facebook and WhatsApp to file affidavits explaining the exact nature of data that is being shared by them. The Court further emphasized the need for laws like data privacy and security and highlighted the efforts earlier made by the Sri Krishna Committee.

The Committee headed by Justice BN Sri Krishna advocated for data localization, restricting users' data to move out of the country for commercial exploitation clearly explaining that India needs data localization laws that will enable data storage of Indian users in India itself, rather than at data centers owned by huge multinational companies like Facebook or Google headed in the United States.

The Tussle Between Government And Whatsapp- End-To-End Encryption:

The Data Protection laws or cases in the country are presently governed and regulated by the Information Technology Rules, 2011, which mandates that corporate entities provide a privacy policy for personal user data. Furthermore, the (WhatsApp) policy violates the Guidelines issued by the Ministry of Electronics and Information Technology according to which, disclosing sensitive information to a third party is prohibited.

Lastly, despite ratification from NPCI (National Payments Corporation) regarding the payment feature of the app in India, the policy violates the Notification issued by the Reserve Bank of India related to the storage of Payment Data. The IT Act, of 2000 in India mandates the country's largest social media platforms to develop a solution to enable the government to track all user messages. This means that these social media platforms need to essentially affix a digital fingerprint to each message which the government can trace back to the 'first originator of the information to enable the government to track the original creator of any message which is found to be violent or suspicious or as opposed to public policy. The rationale behind this rule is to track the cyber offenders wherein the reason behind introducing such rules has been clarified by the government as 'curbing of fake news i.e. misinformation.

Many activists and political viewers fear that it is a step taken by the government for the main purpose of political crackdowns; however, this is a never-ending debate with absolutely no concrete conclusion. Yet, one thing which has been pointed out prominently is that the enforcement of such strict IT rules and cyber laws would lead to the fulfillment of the Right to Privacy of the users. The new WhatsApp policy is not only disproportional but is also strictly against the values of the Indian Constitution. Further, while it is true that the government agencies could easily trace someone who is putting out sensitive misinformation or trying to disturb public peace, at the same time, they shall also have the power to follow how politically sensitive content transfers between individual users or to even track activists and political opponents.

2.7. Amendments:

Bureau Of Indian Standards On Data Privacy:

IS 17428 is the latest standard issued by BIS to govern data privacy assurance practices of organizations. This standard will provide a framework to establish, implement, maintain and update data privacy management practices. The standard has two parts to it. The first provides for technical and administrative requirements to protect the privacy of personal and sensitive data rights when designing a product or service that would involve the collection of an individual's data. The second part enumerates certain guidelines to augment the implementation of the requirements in the first part of the standard.

While the first part is mandatory to ensure compliance with the standard, the second part is merely a suggestion. Since India does not have a comprehensive data privacy law, it would be noteworthy to read this standard in conjunction with the compliance requirements under the Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011, to develop secure data privacy practices as per standards such as IS0 27001.

The grey area here is the lack of guidance on whether implementing the latest standard would be sufficient to comply with SPDI Rules. Therefore, organizations would be obligated to implement IS 17428 and treat it as a reference point to comply with SPDI Rules and the upcoming data protection law.

Domestic Laws Related To Privacy:

The Constitution of India does not specifically guarantee a right to privacy, however, through various judgments' over the years, the Courts of the country have interpreted the other rights in the Constitution to be giving rise to a (limited) right to privacy – primarily through Article 21 – the right to life and liberty. In 2015, this interpretation was challenged and referred to a larger Bench of the Supreme Court (the highest Court in the country) in the writ petition Justice K.S Puttaswamy & Another vs. Union of India and Others, the case is currently pending in the Supreme Court.

The constitutional right to privacy in India is subject to several restrictions. These restrictions have been culled out through the interpretation of various provisions and judgments of the Supreme Court of India:

The right to privacy can be restricted by the procedure established by law which procedure would have to be just, fair and reasonable (Maneka Gandhi v. Union of India);

Reasonable restrictions can be imposed on the right to privacy in the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality, or about contempt of court, defamation, or incitement to an offense; (Article 19(2) of the Constitution of India, 1950).

The right to privacy can be restricted if there is an important countervailing interest that is superior (Gobind v. the State of M.P.),The right to privacy can be restricted if there is a compelling state interest to be served (Gobind v. State of M.P.);

The protection available under the right to privacy may not be available to a person who voluntarily thrusts her/himself into controversy (R. Rajagopal v. Union of India).

Like most fundamental rights in the Indian Constitution, the right to privacy has been mostly interpreted as a vertical right applicable only against the State, as defined under Article 12 of the Constitution, and not against private citizens.

Right To Privacy Being Finally Recognised As A Fundamental Right In India:

The Constitution of India does not explicitly grant the fundamental right to privacy, however, the courts have interpreted this right with other existing fundamental rights, like the freedom of speech and expression under Art 19 (a) and the right to life and personal liberty under Art 21 of the Constitution of India, subject to reasonable restrictions imposed by the state as provided in Article 19(2) of the Constitution. The right to privacy is recognized as a fundamental right under Article 21 of the Constitution of India, which lays down the right to life and personal liberty.

This was held by a nine-judge bench of the Supreme Court of India in the landmark judgment of *Justice K.S. Puttaswamy v. Union of India* on 24th August 2017 wherein the bench declared the *'Right to Privacy* as an integral part of Part III of the Constitution of India, subject to certain reasonable restrictions. The Attorney General in the Aadhaar case had then argued that although several Supreme Court judgments had recognized the Right to Privacy, still refused to accept that the right to privacy could be a fundamental right as held in the Kharak Singh judgment passed by a six-judge bench in 1960 and M P Sharma judgment held by an eight-judge Constitutional bench in 1954. The biggest setback one may face is the possibility that an individual's information may be illegally and improperly disclosed on an online public platform which can have numerous hazardous consequences including identity fraud, reputational damage, discrimination, or even financial loss. Such broad interpretations of the privacy laws by the apex court and its standpoint in the judiciary of India led to a stream of initiatives by the government towards implementing Personal Data Protection laws.

References:

1. file:///C:/Users/admin/Downloads/Data-Protection-26-Privacy-Issues-in-India%20(1).pdf
2. file:///C:/Users/admin/Downloads/A_STUDY_OF_DATA_PROTECTION_AND_IMPLICATIONS_FOR__E_COMMERCE_1456.pdf
3. https://www.legalserviceindia.com/legal/article-2705-a-critical-analysis-on-data-protection-and-privacy-issues-in-india.html
4. https://en.wikipedia.org/wiki/Right_to_privacy
5. https://egyankosh.ac.in/bitstream/123456789/7682/1/Unit-1.pdf
6. https://academicworks.cuny.edu/cgi/viewcontent.cgi?article=2024&context=cc_etds_theses

7. https://iapp.org/news/a/the-evolution-of-indias-data-privacy-regime-in-2021/
8. https://www.aimspress.com/article/doi/10.3934/mbe.2020286?viewType=HTML
9. Dalal. P (2006) Data Exclusivity-an Indian Perspective Magazine of Intellectual Property &Technology [Online].
10. Available at (http://www.ipfrontline.com/printtemplate.asp?id=12300)
11. THE PERSONAL DATA PROTECTION BILL, 2018 (India) https://www.meity.gov.in/writereaddata/files/Personal_Data_Protection_Bill,2018.pdf>
12. https://blog.ipleaders.in/all-about-data-privacy-breach-in-india/#:~:text=A%20violation%20of%20privacy%20is,rupees%20two%20lakhs%20or%20both.
13. https://www.91mobiles.com/hub/5-major-data-breaches-india-2021/
14. file:///C:/Users/admin/Downloads/6.Data%20Protection%20in%20India.pdf\

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

"GLOBAL WARMING: EFFECTS AND CAUSES"

Mr. Kailas Satyawan Shelar
Assistant Professor& Head, Department of Economics Smt. Kasturbai Walchand college, Sangli (Arts-Science)
Corresponding Author- **Mr. Kailas Satyawan Shelar**
Email id: ksshelar019@gmail.com
DOI- 10.5281/zenodo.7267217

Abstract

Global warming is the unusually rapid increase in Earth's average surface temperature over the past century primarily due to the greenhouse gases released by people burning fossil fuels. The scientific and environmental community is on the same page regarding the bitter reality of global warming and the involvement of human factor in it. Global warming is a big hazard and appropriate measures must be taken to tackle this serious problem. This problem is not only causing trouble to the human beings but also to animals and plants. Melting of polar ice caps will lead to floods which can cause mayhem everywhere. Rise of sea levels will devastate agricultural and fishing activities. To embark upon these problems, some remedial steps must be timely taken which include but are not limited to the use of renewable sources of energy and stopping deforestation. Innovative solutions must be brought forward to end this hazard once and forever.

Introduction:

Global warming is the phenomenon of a gradual increase in the temperature near the earth's surface. This phenomenon has been observed over the past one or two centuries. This change has disturbed the climatic pattern of the earth. However, the concept of global warming is quite controversial but the scientists have provided relevant data in support of the fact that the temperature of the earth is rising constantly. There are several causes of global warming, which have a negative effect on humans, plants and animals. These causes may be natural or might be the outcome of human activities. In order to curb the issues, it is very important to understand the negative impacts of global warming. Global warming is the long-term warming of the planet's overall temperature. Though this warming trend has been going on for a long time, its pace has significantly increased in the last hundred years due to the burning of fossil fuels. As the human population has increased, so has the volume of fossil fuels burned. Fossil fuels include coal, oil, and natural gas, and burning them causes what is known as the "greenhouse effect" in Earth's atmosphere. The greenhouse effect is when the Sun's rays penetrate the atmosphere, but when that heat is reflected off the surface cannot escape back into space. Gases produced by the burning of fossil fuels prevent the heat from leaving the atmosphere. These greenhouse gasses are carbon dioxide, chlorofluorocarbons,
water vapor, methane, and nitrous oxide. The excess heat in the atmosphere has caused the average global temperature to rise overtime, otherwise known as global warming. Global warming has presented another issue called climate change. Sometimes these phrases are used interchangeably, however, they are different. Climate change refers to changes in weather patterns and growing seasons around the world. It also refers to sea level rise caused by the expansion of warmer seas and melting ice sheets

and glaciers. Global warming causes climate change, which poses a serious threat to life on earth in the forms of widespread flooding and extreme weather. Scientists continue to study global warming and its impact on Earth.

Causes of Global Warming

Following are the major causes of global warming

Man-made Causes of Global Warming

Deforestation

Plants are the main source of oxygen. They take in carbon dioxide and release oxygen thereby maintaining environmental balance. Forests are being depleted for many domestic and commercial purposes. This has led to an environmental imbalance, thereby giving rise to global warming.

Use of Vehicles

The use of vehicles, even for a very short distance results in various gaseous emissions. Vehicles burn fossil fuels which emit a large amount of carbon dioxide and other toxins into the atmosphere resulting in a temperature increase.

Chlorofluorocarbon

With the excessive use of air conditioners and refrigerators, humans have been adding CFCs into the environment which affects the atmospheric ozone layer. The ozone layer protects the earth surface from the harmful ultraviolet rays emitted by the sun. The CFCs have led to ozone layer depletion making way for the ultraviolet rays, thereby increasing the temperature of the earth.

Industrial Development

With the advent of industrialization, the temperature of the earth has been increasing rapidly. The harmful emissions from the factories add to the increasing temperature of the earth. In 2013, the Intergovernmental Panel for Climate Change reported that the increase in the global temperature between 1880 and 2012 has been 0.9 degrees Celsius. The increase is 1.1 degrees Celsius when compared to the pre-industrial mean temperature.

Agriculture

Various farming activities produce carbon dioxide and methane gas. These add to the greenhouse gases in the atmosphere and increase the temperature of the earth.

Overpopulation

An increase in population means more people breathing. This leads to an increase in the level of carbon dioxide, the primary gas causing global warming, in the atmosphere.

Natural Causes of Global Warming

Volcanoes

Volcanoes are one of the largest natural contributors to global warming. The ash and smoke emitted during volcanic eruptions goes out into the atmosphere and affects the climate.

Water Vapour

Water vapour is a kind of greenhouse gas. Due to the increase in the earth's temperature, more water gets evaporated from the water bodies and stays in the atmosphere adding to global warming.

Melting Permafrost

Permafrost is frozen soil that has environmental gases trapped in it for several years and is present below Earth's surface. It is present in glaciers. As the permafrost melts, it releases the gases back into the atmosphere, increasing Earth's temperature.

Forest Blazes

Forest blazes or forest fires emit a large amount of carbon-containing smoke. These gases are released into the atmosphere and increase the earth's temperature resulting in global warming.

Effects of Global Warming

Following are the major effects of global warming:

Rise in Temperature

Global warming has led to an incredible increase in earth's temperature. Since 1880, the earth's temperature has increased by ~1 degrees. This has resulted in an increase in the melting of glaciers, which have led to an increase in the sea level. This could have devastating effects on coastal regions.

Threats to the Ecosystem

Global warming has affected the coral reefs that can lead to the loss of plant and animal lives. Increase in global temperatures has made the fragility of coral reefs even worse.

Climate Change

Global warming has led to a change in climatic conditions. There are droughts at some places and floods at some. This climatic imbalance is the result of global warming.

Spread of Diseases

Global warming leads to a change in the patterns of heat and humidity. This has led to the movement of mosquitoes that carry and spread diseases.

High Mortality Rates

Due to an increase in floods, tsunamis and other natural calamities, the average death toll usually increases. Also, such events can bring about the spread of diseases that can hamper human life.

Loss of Natural Habitat

A global shift in the climate leads to the loss of habitats of several plants and animals. In this case, the animals need to migrate from their natural habitat and many of them even become extinct. This is yet another major impact of global warming on biodiversity.

Conclusion:

Global warming is a growing concern of scientists and researchers who believe that it is a serious problem for our planet. Natural systems around the world are being affected by regional climate changes, particularly temperature increases, and that these temperature increases are very likely to be the result of anthropogenic emissions of greenhouse gases. While we cannot stop global warming overnight, we can slow the rate and limit the amount of global warming by reducing human emissions of black carbon. Keep fossil fuels in the ground, Invest in renewable energy. Switch to sustainable transport Improve farming and encourage vegan diets, Restore nature to absorb more carbon, protect forests like the Amazon, Protect the oceans these are the best solutions for Global Warming.

References:

1. https://en.wikipedia.org
2. https://www.northwestern.edu
3. https://www.nature.org
4. https://www.earthreminder.com

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

ROLE OF HOMOEOPATHY IN TONSILLITIS

Dr. Mahesh Kumar Samrite[1] **Dr. Anagha Beedkar**[2]
Guru Mishri Homoeopathic College and Hospital, Shelgaon, Jalna, Maharashtra-431202
Corresponding Author- **Dr. Mahesh Kumar Samrite**
Email: samrite26@gmail.com
DOI-10.5281/zenodo.7267231

Abstract:-

Acute viral tonsillitis is an upper respiratory tract infection prevalent in school-aged children. Because this condition is self-limiting, conventional treatment options are usually palliative. Homeopathic remedies are a useful alternative to conventional medications in acute uncomplicated upper respiratory tract infections in children, offering earlier symptom resolution, cost-effectiveness, and fewer adverse effects. This study aimed to determine the efficacy of a homeopathic medicine on the symptoms of acute viral tonsillitis.

Keywords:-.Role of Homoeopathy in Tonsillitis.

Introduction:-

The tonsils are areas of lymphoid tissue on either side of the throat. Most commonly, the term "tonsils" refers to the palatine tonsils /faucial tonsils that can be seen in the back of the throat. These lymphoid tissue forms a complete ring of tonsilar tissue and lines entire throat – **Waldeyer's tonsillar ring**. The tonsils act as part of the immune system to help protect against infection – upper respiratory tract infections.

Types Of Tonsils:-

Tonsils in humans include, from superior (top) to inferior (bottom):

1. "Pharyngeal tonsils" / Adenoids-Roof of pharynx
2. Tubal tonsils -Roof of pharynx
3. Lingual tonsils -Behind terminal sulcus (tongue)
4. Palatine tonsils / faucial tonsils-Sides of oropharynx

1.Pharyngeal / nasopharyngeal tonsil / Adenoids:

They are a mass of lymphoid tissue situated at the very back of the nose, in the roof of the nasopharynx, where the nose blends into the mouth.In children, they make a soft mound in the roof and posterior wall of the nasopharynx, just above and behind the uvula.

Adenoid hypertrophy;-

Can obstruct airflow, so that breathing through the nose requires an uncomfortable amount of work, and inhalation occurs instead through an open mouth.Adenoids can also obstruct the nasal airway enough to affect the voice without actually stopping nasal airflow altogether.

1. Adenoid facies: Enlargement of adenoids, especially in children, causes an atypical appearance of the face, often referred to as adenoid facies.

2. Tubal tonsil:- It is located posterior to the opening of the pharyngotympanic tube into the nasopharynx.

3. Lingual tonsils:- The lingual tonsils extend to the top (dorsal) surface of the tongue further back down throat.

4.Palatine tonsils:- Palatine tonsils/ faucial tonsils, are the tonsils that can be seen on the left and right sides at the back of the throat, at the entrance to the upper respiratory and gastrointestinal tracts

Functions of palatine tonsils

It is one of the mucosa-associated lymphoid tissues (MALT), and protect the body from the entry of exogenous material through mucosal sites. Tonsillar (relating to palatine tonsil) B cells can mature to produce all the five major Ig classes.

In addition to humoral immunity elicited by B cells, there is considerable T-cell response in palatine tonsils

Cerebellar tonsil:

The **cerebellar tonsil** (**amygdaline nucleus**) is a rounded mass, situated in the hemispheres of the cerebellum. Arnold-Chiari malformation / tonsillar herniation is a congenital anomaly of the brain in which the cerebellar tonsils are elongated and pushed down through the foramen magnum

Tonsilloliths (tonsil stones):

A tonsillolith is material that accumulates on the tonsil, they can range up to the size of a peppercorn and are white/ cream colour. They have a strong unpleasant odour and are composed of hydrogen sulfide and methyl mercaptan People with chronic sinusitis and post nasal drip may develop **tonsiloliths**,

Acute tonsillitis:

In children, the tonsils are common sites of infections that may give rise to acute tonsillitis. The tonsils may appear normal sized or enlarged but are usually erythematous.

Recurrent tonsillitis

Recurrent infection has been variably defined as from four to seven episodes of acute tonsillitis in one year, five episodes for two consecutive years or three episodes per year for 3 consecutive years.

Causes:-

Bacterial or viral infection – beta-hemolytic streptococci

It also occurs as an allergic reaction to allergens, for example pollens, cold things, food preservatives, drugs, mechanical injury, etc.

In patients with auto-immune disorders, who suffer from immunodeficiency, tonsillitis may occur due to multiple infections. For example HIV, psoriasis, SLE, etc.

The source of infection: –

may be food or water or droplet infection from coughing or mucous secretions of an infected person.

Symptoms:-

- It is associated with sore throat, fever, and difficulty swallowing.
- Excess salivation and dribbling of saliva
- Painful or painless lymph node enlargement below the angle of lower jaw
- Constitutional disturbances like fever with chill and tiredness
- Recurrent or repeated attack of cold and cough.
- Ear ache and bad breath (halitosis)

Complications:-

CSOM 2. Quinsy 3. Sinusitis 4. Septicemia 5. Obstruction causing choking

6. Rheumatism and heart strain in case of infection with hemolytic streptococci bacteria.

General treatment:-

Rest

Warm saltwater gargling for soothing effect Plenty of liquids to avoid painful swallowing of solid food

Avoid

Acidic drinks like cold beverages

Tin packed foods with preservatives

Spicy and chilly foods

Smoking

Alcoholic drinks

Homoeopathic Management:-

Bell -Congested' red, hot face and skin, Strawberry tongue, Right side is worse

ARS-IOD - Scrofulous affectionsTonsils swollen,
burning, Persistently irritating,corrosive discharges, Bre-ath fetid and glandular involvement

CAPS - Tonsillitis, burning and smarting sensation as from cayenne pepper, not > by heat, Constriction of throat. Intense soreness, Inflamed, dark red, swollen

CANTH - Inflammation of throat with severe burning and rawness, Great constriction of throat and larynx, with suffocation on any attempt to swallow water

FER- PHOS - Chronic enlarged hyperaemic tonsils, smooth swelling,Right sided,The typical ferr-phos subject is nervous, sensitive, anaemic with the false plethora and easy flushing,Prostration marked < Night,4-6pm,touch,jar,motion > Cold application

KALI-IOD- Suited to pale, delicate, subjects with glandular swellings,Extreme sensitiveness of parts affected,Nocturnal aggravation,Discharges are ichorous, corrosive and green

Lachesis- Left tonsils affected, tendency to go to right,Throat purplish,Sense of constriction, as if something was swollen which must be swallowed,External throat extremely sensitive to touch,Liquids more painful,Pain radiates to ear < Hot drinks <after sleep

Lycopodium- Chronic enlargement of tonsils, which are covered with small ulcersAffects right side, right to left,Children weak, emaciated, with well developed head, but puny, sickly bodies < 4-8 pm, cold drinks, > warm drinks

Mercurius- More advanced stage When pus has formed, great swelling, whole fauces deep red tonsils darker than any other parts,ulcers form Profuse sweating without relief,Profuse salivation, breath offensive, Tongue large flabby with imprint of teeth,Moist tongue with thirst < at night, damp, cold rainy weather

Mercurius Iodatus Flavus- Right sided,Throat affections with greatly swollen glands,Tongue coated thickly yellow at the base Constant inclination to swallow Better cold drinks

Barya Carb-Suppurating tonsils from every cold, stitching and smarting pain, < empty swallowing.Can swallow only liquids.Tonsils inflamed with swollen veins.

Hep. Sulp- Sensation as if a plug and of a splinter in throat.,Quinsy with impending suppuration.

Nitric Acid- Suited to thin persons of rigid fibre, dark complexions, black hair and eyes,Catch cold easily,Sensation of splinter in throat, worse from touch,Extreme fetidity and corrosiveness of all discharges,Chilly, loves salt and fat, Depressed and anxious < Evening and night, cold climate > Riding in a carriage

Kali Muriaticum- Valuable remedy in a/c or c/c tonsillitis with much swelling,Almost a specific in follicular tonsillitis,Throat has a gray look, spotted with white

Natrum Muriaticum- Especially for the anemic and cachetic,Great emaciation, losing flesh while eating well,Great liability to take cold,Craving for salt, aversion to bread,Consolation aggravates < Heat of sun, < sea shore > Open air, >cold bathing

Iodum- Persons of a scrofulous diathesis, dark complexioned with enlarged lymphatic glands,Great emaciation, ravernous appetite,Acute exacerbation of c/c inflammation,Hot patient,< Warm room > walking in open air

Phosphorous- Adapted to tall slender persons of sanguine temperament,Great susceptibility to external impression,Thirst for very cold water,Burning sensation in throat,Hoarseness and aphonia, worse evening,Worse lying on left side< Evening < thunder storm < warm to cold air

Phytolacca- Pre-eminently a glandular remedy,Right sided tonsillitis, dark red colour, uvula large dropsical, almost translucent,Burning as from a coal, of fire or red hot iron, dryness,Sensation of lump in the throat,Pain shoots from throat into ears on swallowing,Quinsy,< Hot drinks

Psorinum- Especially adapted to psoric constitution,In chronic cases when well selected remedies fails to relieve or permanently improve,Great sensitiveness to cold,Tonsils greatly swollen, difficult painful swallowing,Profuse offensive saliva,Tough mucus in throat, must hawk continually,Eradicates tendency to quinsy,< Change of weather,Better by heat

Pulsatilla- Mild, gentle, yielding disposition,Symptoms ever changing,Discharges are thick, bland and yellowish green,Aversion to fatty, warm food and drinks,Thirstlessness with dry mouth,Desires open air< Warm close room <evening> Open air, cold air and room

Sepia Officinalis- Left side inflamed, much swelling with little redness,Sensation of lump in throat,Waked with sensation as if had swallowed something which has struck in the throat,Contraction of throat when swallowing, Sepia is chilly, indifferent White or gray coating at the base of tongue,Intolerant to cold and closed places.

Silicea- Cold, chilly, hugs the fire, Wants plenty of warm clothing, hates drafts, hands and feel cold,Worse in winter,Scrofulous rachitic children, much sweating about the head,Ailments, caused by suppressed foot sweat, Periodical quinsy, pricking as of a pin in tonsil,Colds settle in throat,Bad effects of vaccination

Sulphur- When carefully selected remedies fail to produce a favourable effect, especially in acute cases,Chronic sore throat,Burning and dryness in throat,Complaints that are continually relapsing,Scrofulous, psoric, chronic diseases that result from suppressed eruption,Ragged philosopher,For lean, stoop shouldered persons, standing is the worst position, Children dislike washing< When standing< Warmth of bed.

References:

1. Allen, H.C. (2005) Keynotes ,MD Published by B.Jain
2. Golwalla ,ASPIF, Golwalla, SharukhA (2011) Golwalla's Medicine.
3. Harrison's (2018) Principles of Internal Medicine,
4. Robin Murphy (2002) Lotus MateriaMedica
5. William Boericke (2002) MD Pocket Manual of Homoeopathic MateriaMedica and Repertory.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

AN EMPIRICAL STUDY OF SUPPLY CHAIN OF AGRICULTURAL COMMODITIES

Dr. Samadhan K. Patil
Associate Professor Department of Economics T.C. College, Baramati. Maharashtra.
Corresponding Author- Dr. Samadhan K. Patil
Email id: SK.Patil@tccollege.org
DOI-10.5281/zenodo.7267238

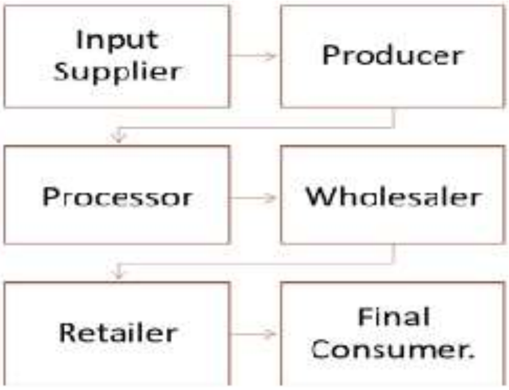
Abstract:

The developing countries have been increasing their contribution of agriculture sector in global trade year by year. The global agriculture commodities market is increasing among the developing countries rapidly. The study on agriculture sector has undertaken by different scholars and researchers. However, supply chain of agricultural commodities falls short in undertaking a complete analysis of developing countries in perspectives of COVID-19 pandemic. This paper seeks to evaluate the present and prospects of supply chain of agricultural commodities of a developing country in India particular. To find answers to the queries and objectives the present study used the secondary database research methodology. The present study constructs arguments and attempts to bring out the issues related to the management of supply chain of agricultural commodities. The present study points out an overview of participation of agriculture sector in the market integration. To explicate supply chain management of agriculture commodities The present paper divided into four major parts. Objectives: 1. To understand the importance of agriculture in agriculture sector. 2. To analysis the supply chain of agriculture sector. 3. To examine the measurements for effective supply chain. 4. To make constructive conclusions on the backdrop of pandemic. Research Methodology: The data and information collected from various types of existing research - books, journals, magazines, periodicals, FAO, UNCTAD, IMF, WTO, RBI and Ministry of Agriculture GOI would use to support arguments or to examine objectives. The first part will clear the story of supply chain of agricultural commodities and objectives. Second part indicates the experience of major developing countries under the influence of COVID 19. Third part emphasis the consequences on Indian economy and adopted measurements by the government. The fourth part concluded the paper with some constrictive notion on the backdrop of global pandemic.

Keywords: *COVID-19, Supply chain, Agricultural commodities, Developing Economies, Indian Economy and Market Integration.*

Introduction:

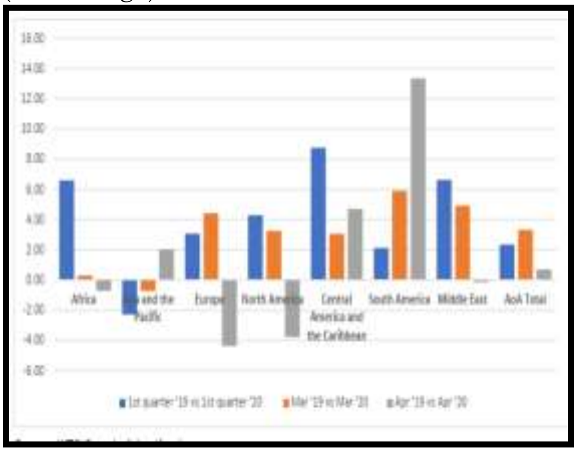
Since ancient era disasters are major hurdles for the world economy. In Indian lockdown was announced by India's prime minister on March 23, 2020. Then, the economic activities have stopped in the country and affected each sector of the economy. The participation of a sectors depends upon its internal and external factors. In the process of globalization, a nation can gain and loss. The Covid-19 badly affect every part of the economy. As a result of this the gross domestic product (GDP) for the first quarter affects negative economic growth of 23 %. Except the agriculture sector all the sectors are in negative. Agriculture and allied sector show a growth of 3 %. India ranks second in fruits and vegetables production in the world after China. However, its share in the global market is still nearly one percent only. On the backdrop of Covid-19 that, it was realized, that there is a great potential for undertaking research in the trade of agricultural commodities. This paper seeks to evaluate the present and prospects of agriculture products of a developing country and India in particular. The trades of certain primary products have a capacity of employment generation, growth in national income and obtain foreign reserves. Developing countries have considerable potential in the agricultural products. The supply chain for agricultural commodities is very crucial for the producer. It affects each phase of the product between the producer and consumer. An input suppler to final consumer a supply chain plays an important role. Naturally during the phase pandemic supply chain Worsley affected. The structure of input suppler to final consumer discussed below.



An Experience of Developing Countries:

In current times service sector is a dominant sector for the world economy in GDP perspective. However, agriculture sector is a most important sector for the developing economies. Agriculture continues to be prominent sector for the Indian economy as it is the primary source of livelihood for over 58 per cent of the nation's population and generates employment 44 per cent of the workforce. The sector contributes approximately 17.2 per cent to India's GDP and witnessed a steady Compounded Annual Growth Rate (CAGR) of 2.1 per cent between 2014 and 2018. Impact of the lockdown on the Indian agriculture sector has been complex and varied across diverse segments that constitute the agricultural value chain. As far as impact of on agriculture is concerned it affects price, production, supply, demand, and policy also. The lockdown resulted in a drop in the demand for many agricultural products due to changes in consumptions patterns. Partly as a response to the reduction in demand, private investment has also gone down. In the agriculture subsector, most of the sates have decline in production. Horticulture, a perishable commodity adversely affected due to restrictions in sale. Fruit's vegetables flowers have a great potential but, in this tragedy, such commodities vulnerably affected. Poultry sector was most strongly impacted in all states declining by a significant amount. During the lockdown dairy sector was least affected after the crop production. As far as demand is concerned, it was stable during the lockdown. Supply chain also did not disturb during this ruin. Ship and pig sector had also been affected in such phase but in some regions, demand creates slow impact on this sector. Trade in food and agricultural products has been more tough than trade in other products. There is serious distraction to the supply of perishable fruits and vegetables, dairy products, fish, etc. having mobilized to meet the increasing demand from expanding urban and rural consumers may create severe damage to all performers in the supply chain. The migration of workers from few parts to their resident caused panic. Workers are very important during the phase of both harvesting operations and post-harvesting. After the harvesting handling of produce in storage and marketing centers. Migrant workers problem raised during the phase of pandemic. There are massive seasonal migrant workers in India. global media have broadcast images of hundreds of thousands of migrant workers from several states. Many workers walked thousands of kilometres to return to their home villages. They should be given both cash transfers and nutritious food. In short, it was a great problem of migrant workers during the phase of pandemic. The supply chain of agriculture commodities in Developing countries badly suffers due to such pandemic. However, as compared to other sectors growth agriculture sector maintain its pace.

Figure 1. Agriculture exports by Region
(% Change)



Source : WTO secretariat estimates.

Measurements for Improvement in Supply Chain

The measurements taken by the government are very important during the phase of pandemic. Cash and food assistance to persons engaged in the informal sector, mostly migrant laborers, have also been announced for which a separate PM-CARES (Prime Minister Citizen Assistance and Relief in Emergency Situations) fund has been created. It was announced that through the scheme of PM-Kisan Rs. 2000 will be paid to farmers. Between the period of April to July 2020 instalment was paid to 8.12 crores beneficiaries. During the lockdown ICAR has issued guidelines to farmers about measures. The advisory mentions specific practices during harvest and threshing of various *rabi* (winter sown) crops as well as post-harvest, storage, and marketing of the farm produce. The announcement, among a slew of benefits, contained advance release of INR 2000 to bank accounts of farmers as income support under PM-KISAN scheme. The small and medium enterprises are very crucial in the agriculture sector. To save rural economy, there is a need of special attention on the agriculture and allied sector. It is very clear that rural economy is one of the important sources for raw materials. MGNRGES (Mahatma Gandhi National Rural Employment Guarantee Scheme) is an important instrument of employment generation. It is become a source of making a wage. Naturally, under this scheme the wages were raised form Rs. 182 to 202 per day. During the phase of post-harvesting transportation plays an important role. Hence, there was a launch of mobile app "Kisan Rath" for the mobilization of agriculture production. The correction in supply chain is very essential in agriculture sector. Because it suffers a lot. Hence, an announcement of Kisan Rail supports to correction in supply chain.

Conclusion

During the phase of pandemic governments action is very important. It has an essential part not only in the world agriculture but in another sector also. Due to Covid-19 it has been become a though task for any economy. There is a need to change approach after the pandemic. Not only India but other economies also have some potential in agriculture sector for reaping more benefits from the market integration. Despite all these measures and in view of continuing restrictions on movements of people it restricts economic growth. Post-harvest phase is very important for agriculture commodities. So, there is a need to special attention on such situation to reduce crop loss. Government incentives are important to promote purchasing power of society. The general price level and inflation expectation of food is big challenge for agricultural policy makers. There is a need to control or hold rising inflation. A decisive policy by the government and its implementation in proper way is a key to overcome the problems like Covid-19. Agricultural commodity or food market should be improvised through the economic and political integrity. The Covid-19 is an example of tragedy so, there is a need to be ready in future.

Reference

1. Ahuja, A. (2006). *Agriculture and rural development in India: Post liberalization initiatives.* New Delhi: New Centaury.

2. Chand, R. (2002). *Trade liberalization WTO and Indian agriculture* experience *and prospects.* New Delhi : Mittal Publications.
3. Diop, N. & Jaffee, S. M. (2005). Fruits and vegetables: Global trade and competition in fresh and processed product markets. In Aksoy, Ataman M., and John C. Bhghin. (Eds.), *Global agricultural tread and developing countries* (p.237). Washington D.C.: The International Bank for Reconstruction and Development and The World Bank.
4. Jharwal, S.M,. (2008). *Glimpses of Indian agriculture : Micro and macro aspects.* New Delhi: Academic Foundation and Ministry of Agriculture and Government of India.
5. Patel, D. D., & Dube, P. (2006). Challenges and opportunities of Indian agriculture with special reference to export in view of Globalization. In Choubey S. K., Pnedse N.G., & Shukla Narendra. (Eds.), *Globalization and its impact on Indian economy (pp. 131-134).* Delhi: Adhayan Publishers and Distributors
6. Covid 19: Impacts on the Indian Agriculture by Chetan. K1 and Dr. S. N. Yogish,
   International Journal of Science and Research (IJSR), August 2020.

7. Covid 19: Impacts on the Indian Agriculture by Chetan. K1 and Dr. S. N. Yogish,
   International Journal of Science and Research (IJSR), August 2020.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

A STUDY ON "THE ROLE OF E- COMMERCE IN CREATION OF WOMEN ENTREPRENEURS - OPPORTUNITIES AND CHALLENGES AHEAD"

Arfath Jahan
Lecturer in Commerce, Indira Priyadarshini Govt Degree College For Women, Nampally, Hyderabad, Telangana.
Corresponding Author- **Arfath Jahan**
Email id: a4arfathjahan@gmail.com

DOI- 10.5281/zenodo.7267258

Abstract

Entrepreneurship provides the most powerful and economically empowering pathway for women in our nation. Women enter into this entrepreneurship although they face financial, economic, socio-cultural, managerial and technical hindrances. Unlocking the command of female entrepreneurship will definitely have a dramatic effect on the country's economy. The biggest confront they face is, our society doubt them badly about their notions. For past few years, women entrepreneurs are promising as dynamic and smart entrepreneur. The Indian women performs two different roles in our developing economy, on one side she has to build up her carrier and on other hand take care of her household responsibilities as well. In E-commerce sector, women are experiencing comfort and freedom to execute both the role remarkably from home. There is incredible development of women entrepreneurs in the E-commerce sector like Vidya Venkatraman, Founder & CEO of Meraki & Co., and many others. E-Commerce has simplified women entrepreneurs to save time in each step of the business cycle like analyzing the business opportunities and searching for the sales leads online. The objective of the study is to know about the opportunities and challenges faced by women entrepreneurs, to study in detail the role of E-commerce in developing women Entrepreneurship, to know about various online businesses a woman can start from home and also the best small business apps, to study about e-commerce entrepreneurship and women entrepreneurship through social media and to know the success stories of few middle class Entrepreneurs and also highlight the top business ideas that have worked well in 2021 The research methodology adopted for the study is a set of two questionnaires as primary data. One was addressed to the women entrepreneurs to analyze the problems face by the E-Commerce, the extent of awareness and the level of satisfaction of the women entrepreneurs of India and the second questionnaire addressed to the benefits and what strategies implemented by women entrepreneurs to achieve the success because of E-Commerce**.** A part from above various Journals, Bulletins, reports and research papers published PhDs chamber of commerce and official records of various financial institutions, Furthers news papers and books were also used during the research work as secondary data. The number of sampling units selected from the Hyderabad city for investigation. The total sample size that is taken for this study is 100. For this study Period of time duration is 45 days.

Keywords:- Entrepreneurship, Economically empowering, E-Commerce, Women entrepreneurship, Sustainable development.

1.1 Introduction

Though women from half of the society but the pressure of domestic work such as home-making, child care and health care makes it efficient. It is not impossible, for Indian women to engage in the entrepreneurial activities. But the remarkable success of wide-spread E-commerce helps many women in marketing their long-cherished of becoming entrepreneurs in the reality. Offers women much needed freedom to adopt the information technology recently emerged but well established concept of 'work-from-home'. The growth of E-commerce enables women entrepreneurs to generate new ideas and work by setting their own schedule. It is pertinent to make a microscopic analysis of the available opportunities and constraints in E-commerce for women entrepreneurs. Hence an attempt is made in this paper to examine the various challenges faced by women entrepreneurs who use online platforms to start, grow and sustain their business and enlighten them are the availability of more opportunities to encourage them to make a diffuse of online platform to reap in rich harvest in their vision. The much advanced Information Technology (IT) offers women the much needed freedom to work from the comfort of their home. The E-commerce is sweets the business world throughout the country with the help of telecommunication networks. The manufacturer, marketers, mediatory and customers are involved in interaction through electronic devices to fulfil their needs without the necessity to have a direct personal enrich

The entire world is witnessing a marvellous evolution in electronic commerce, and India is no exception. Women have made significant contributions to these evolutions, and those contributions have shifted to empowerment. E-commerce trading and marketing of goods and services through the internet additionally referred to as electronic commerce. Since the early 2000s, when India sought wide spread access to a secure online transaction system, the country's E-commerce sector has expanded dramatically. Nisha and Sangeeta (2012) delineate E- commerce via the use of digital communications and information systems engineering in business networks to develop, redirect, and re - engineer value formation connections between among organizations, as well as amongst businesses and groups. There are 2000 E-commerce websites and 100,000 Social media E-commerce communities, according to the (E-Commerce Association of India's E-Cab, 2020) study. India's largest software service association has around 300,000 members, roughly half of whom are women, who run their businesses with the help of Facebook. These are signs of a promising future for women's empowerment in India. Women can now contribute to their families while also reducing poverty (Hyderabad, 2020). India, as a developing country, stands to benefit greatly from women's inclusion in the business world. Women now use social media to run a variety of businesses such as fashion apparel, home furnishings, jewelry, handicrafts, clothing, food, and blogging. Women currently use social media to run a spread of companies like fashion attire, clothing, food, blogging etc. Cyber-crime and security have recently become key concerns for E-business in India. On the guise of an E- business platform, some fraudulent pages defraud clients and commit crimes. To make some theoretical and practical contributions to the existing body of literature in India context several recommendations are made.

1.2 Statement Of The Problem:-

E-commerce business is based on the concept of 'minimum investment, maximum profit' more than that, the facility of working at anytime from anywhere is a great boom to women entrepreneurs who were hit her to kept out of the business sector under the pretext of home making. Thousands of women have entered into E-commerce platform to sell in different categories like jewellery, home furnishing, handicrafts, home utility products, fashion apparel accessories etc. Moreover, the possibility of the contracts of the buyers and sellers through electronic media with that the necessity of demands meeting makes the wall still smaller. Its elasticity and technology let women entrepreneurs conduct their business entirely on the internet. The high penetration of internet and the exponential growth in internet users in India makes the E-commerce sector a lives vibrant. In India, where the recognized economic contribution of women is approximately 17% of the GDP, the growth of women-run businesses could play a crucial role in the national economy in the long run

1.3 Scope Of The Study:-

E-Commerce creates new opportunities for women entrepreneurship also creates new opportunities for business and society. Further researcher can consider carrying out studies for those women who are less educated, living in rural area and belongs to weaker section of the society. Further awareness programmes may be conducted on large scale with intention of creating a suitable E-Commerce environment to them. Jammu is going to convert "Women Business Centre", where assuring all help to MSME (Micro, Small and Medium Enterprises) sector in the state and special focus on entrepreneurial opportunities for women.

1.4 Objectives Of The Study:-

- To study in detail the role of E-commerce in developing women Entrepreneurship
- To study the opportunities and challenges faced by women Entrepreneurs.
- To know about various online businesses women can start from home and also the best small business apps.
- To study about e-commerce entrepreneurship and women entrepreneurship through social media.
- To know about the various apps facilitating women Entrepreneurship.
- To study the success stories of few middle class Entrepreneurs and also highlight the top business ideas that has worked well in 2021.

1.5 Research Methodology:-

1.6 ***Exploratory Research:*** These is conducted for a problem that has not been studied more clearly, establishes priorities, develops operational definitions and improve the final research design. Exploratory research helps determine the best research, data collection method and selection of subject of Hyderabad City.

Descriptive Research: Descriptive Research is used to describe characteristics of a population or phenomenon being studies. It works with a certain group of the women entrepreneurs. The research will help to predict the specific scenario of women entrepreneurs of Hyderabad City.

1.6 Source of Data:-

Data is collected from both primary and secondary sources.

Primary Sources:- The primary data has been collected by means of questionnaire/schedule, like scale, surveys and interviews. A set of two questionnaires have been used. One was addressed to the women entrepreneurs to analyze the problems face by the E-Commerce, the extent of awareness and the level of satisfaction of the women entrepreneurs of India. The second questionnaire addressed to the benefits and what strategies implemented by women entrepreneurs to achieve the success because of E-Commerce.

Secondary Sources:- Secondary data has been collected through various Journals, Bulletins, reports and research papers published PhDs chamber of commerce and official records of various financial institutions, Furthers news papers and books were also used during the research work, during the research survey various library for collect related data for my research work. To examine the above objectives the study first analysis, in brief, the growth and performance of women entrepreneurs at all India level based on data derived from the related publications.

Sample Size:-Sample size means the number of sampling units selected from the Hyderabad city for investigation. The total sample size that is taken for this study is 100.

Sampling Unit:-The design adopted for this study is descriptive research design. This design was chosen as it hence chooses accurately the characteristics of a particular system helped to study the availability of the system as well as the constant that might restrict as effectiveness

Sampling Method:-A sampling Method is a technique in which a sample is selected on the basis of convenience.

Research Instrument:-Structured questionnaire is used here as the instrument to collect the data, both open ended and closed ended questions were used to possible.

Tools used:-Percentage Analysis

1.7 Limitations Of Study:-

The following are the limitations of the study:

The study highlights only women entrepreneur who are operating their business only in urban area, and are well educated and professionally qualified.

Those women who are less educated, living in rural area and belongs to weaker section of the society are not considered for the study

Further awareness programmes may be conducted on large scale with intention of creating a suitable E-commerce environment to them.

Every research has some limitations such as data constraints, money constraints & time constraints.

A limitation of the study is that it related only to women entrepreneurs

2.Literature Review:-

2.1 Traditional Challenges For Women

Family Resistance: The biggest constraint in putting ideas into practice.

Undesirable Constant Pressure: Women entrepreneurs are constantly under pressure.

– Double burden of taking care of family and business – hostile of criticism for failure results in discouragement.

Mental Block: The traditional male dominated society tries directly and indirectly to nullify women's efforts which to upsets he mentally that women suffer from an irrecoverable and incurable mental block.

More of push than pull factor: Women are faced into business for two reasons namely economic factor to Support their family by supplementing family income and unforeseen and inevitable factor earned by Family hardship because of insanitation or death of the breadwinner of the family.

Lack of female mentors and role models: Mentors are important for both personal and business growth. In 2016, out of 1021 funded start-ups, only 25 were female led business

Lack of resources: To start and run business women need financial assistance regularly. Lack of rising funds at right time is the biggest hurdles in starting or expanding an existing business

With time the demand and popularity of E-commerce reaches new heights. There are quite a few women entrepreneurs making their mark in the industry, thanks to their E-commerce business ideas. Transacting over internet is new but not storage and its life good innovative as well. In the recent/ past years several E-commerce businesses came up in the market which clearly shows that it's attracts the attention of many aspirant particularly among women .but, there are lots of problems and obstacles coming their way one who successfully outcome the problems proudly march ahead towards their goal.

2.2 The Top Five Challenges

Though this particular sector gains all attention there are some really big challenges that every entrepreneur has to face. The top five of challenges which are listed below:

A. Finding Suitable

Market: Many entrepreneurs believe E-commerce business is all about niche people all willing to transact over internet for any of their desired product. Finding suitable Niche is quite an important task that every ecommerce entrepreneur faces.

B. Retaining Customer: Not only customer retention batch Customer acquisition are great challenges that every E-commerce business. E-commerce business requires necessary amount of attention from customers and in order to get that every firm needs to invest huge amount on marketing or other promotional activities, which necessities a regular timely flow of huge fund and that is survive and succeeding. Unless there are reliable investors or fund raising processes it is tough for entrepreneurs to survive and succeed in the business. This is one business that requires heavy investment on marketing as well as advertising to attract customers. Market experts rank this on the biggest challenge that most start-up companies need to face.

Lack of Trust: Reliable logistics as well as supply chain is another important aspect for E-commerce business of women entrepreneurs. Failure in this particular area leads to detriment and adversely affects the future reputation of the company.

Inadequacy of Funds: Every E-commerce entrepreneur faces lot of trouble in raising sufficient fund.

Good and effective customer service: It's important for ecommerce entrepreneur to maintain the good reputation through constant good services. There are times when goods delivered are not satisfactory. Customer satisfaction is utmost priority in this business which all entrepreneurs' have to ensure. In short it is team effort that needs proper dedication to meet the need of every customer to as to wins and sustain the satisfaction of the customers.

2.3 E-Commerce Entrepreneurship:

E-business, according to Turban et al. (2000), entails the purchasing and selling of commodities, commodities, and info through computer networks via the internet. Due to the eventual expansion of the E-business sector, investors and investors are coming to this industry to invest their money. Vladimir (1996) defines e-commerce as "the exchange of business information, the maintenance of business connections, and the performance of commercial transactions through the use of telecommunication networks." Other academics concur, stating that E-commerce encompasses both purchasing and selling operations.

E-commerce allows the individual computer owner to engage with a global audience of customers and conduct business with them. The notion has a broader reach, encompassing not just tiny E-businesses or organizations, but also large-scale company's entrepreneurship (Burgelman 1983). In contrast, in other industrialized nations, such as Germany, women who use government support for their businesses perform just as well as males. Women acclimatize better to the innovative service society than the old industrial society, owing to the belief that women contribute fresh energy and ideas to their professional job. Mellita and Cholil (2012) highlighted many elements as beneficial success motivators for females in developing-country e-commerce entrepreneurship.

According to Meenakshi (2015), the government plays a critical role in encouraging women to become entrepreneurs. The government's assistance is supporting women to start businesses by cultivating entrepreneurial purpose in them. Mat and Razak (2011) reinforce these viewpoints by arguing that government policies are critical in promoting women to become entrepreneurs. Several elements according to them, influence women's entrepreneurial activity, including education, outlook, and level of experience. Education has been discovered to be the most important element influencing women's entrepreneurial growth (Mat and Razak, 2011).

3. Women's Entrepreneurial Activity In India

3.1 India's Role In Women's Entrepreneurial Activities

India's government has launched a variety of programs and policy that encourage the women entrepreneurship. Every year government announced the budget for entrepreneurship which is almost 1 billion with including other necessary facilities. (Huq&Moyeen,2002). The government has adopted a few steps, including a distinct tax policy, a tax incentive, and a gift tax, all of which are part of the National Action Plan (NAP) for the advancement of women leaders. India Bank however has developed massive measures to strengthen women, like authorizing a loan with a 9% rate of interest. Several commercial and government sectors, as well as multiple Nongovernmental organizations such as Micro Industries Development Assistance and Services (MIDAS), different small Enterprise development support and advice agency, Basic Bank, commonly known as special bank, was established with the sole purpose of providing finance to small and cottage businesses, role of People's Republic of India tiny and cottage industries corporation (BSCIC), and others, have been recognized for encouraging entrepreneurship development . Different government banks lunched various efforts to boost women's equality .

3.2 Sectors Of Women Entrepreneurs In India

Women entrepreneurs began their journey in India and have achieved success. Women contribute to the economy of India in a variety of ways, according to Roy (2016) and Hossain et al. (2009), which include 16.1 percent in textile, 69.4 percent in handicraft, 1.6 percent in printing, 3.2 percent in agriculture product, 3.2 percent in food, 4.8 percent in parlor, and 1.6 percent in others. In today's society, women are very interested in various types of online business. According to Haque (2013), women establish over 12,000 pages on the social networking website 'Facebook.' These statistics are steadily increasing.

3.3 Female Entrepreneur On The Internet And On Facebook

Facebook, which started in 2004, has gained a global presence and popularity. Facebook has been one of the most effective sites for promoting female entrepreneurs. It is easier to access and spread information than the other medium of business site. It is classified as a social site because it allows users to create personal profiles, which speeds up the process of sharing information and forming bonds effectively with other people (Haque, 2013). Tufekci and Lewis et al. (2008) claimed that, Women use Facebook more widely than men. When it comes tolearning about the business environment, women face numerous obstacles that prevent them from entering the market. Regrettably, Facebook completely changes picture in digital advertising by forming a power dynamic, face-to-face interaction, financial strength, political and social status, time and cost constraints, lack of experience, and so on. In India, there is a lack of cyber security legislation, which is why Indians are having difficulty with E-commerce.

3.4 Today's Women And E-Commerce

New information and communication technologies can be powerful tools for increasing the competitiveness of countries and contributing towards economic growth and development. However, in many parts of the world, women, especially those living in rural areas, are still excluded from accessing the Internet or do not have the skills to use it in a profitable way. On the other hand, examples from developing countries demonstrate that, if given access and knowledge-how, women entrepreneurs have benefited from using the new technologies in a large number of areas, such as getting access to valuable business information, finding new (export) markets, marketing their products and services over the Internet, securing large orders through networking with community members, and generally cutting costs through more efficient business practices. Thus, in many respects, women-owned businesses may be in the process of overcoming obstacles in many of the areas crucial for internationalization. The extent to which women entrepreneurs seize the opportunities offered by networking and new technologies is critical for their ability to grow and internationalize, and fulfil their potential as major players in the global economy

3.5 Women Entrepreneurship And The E-Commerce Opportunity

In the wake of the Covid-19 pandemic, with lockdowns and persistent social distancing norms that led to a decline in aggregate demand and in business for physical retailers, E-commerce emerged as a viable alternative for some small business owners. Among them were women creative entrepreneurs. Often home-based, some women skilled in crafts, design, and other creative endeavors were able to leverage their creativity, talent, and intellectual property to avail opportunities brought about by the growing dema nd for products sold online. They fulfilled the need for products ranging from masks and other wearable's to household and packaged food items. The geographically un tethered nature of this kind of E-commerce enables women entrepreneurs to balance income generation with domestic responsibilities in a way that geographically tethered work may not allowed.

4. Case Studies Of Successful Entrepreneurs Trained Under Ati Scheme

4.1 Case Study of Mrs. Nirmala Patagar From House wife to Entrepreneur.

Nirmala Patagar is from Sirisi in Uttar Kannada. She is handicapped and has studied up to PUC. Her husband works in the sericulture department. They are blessed with a daughter and a son. Her husband's salary was not sufficient to meet the needs of the family. She was very unhappy as the children were not sent to a good school. Mrs. Nirmala, though handicapped, is a very dynamic and confident lady and was keen to take up some business on her own to supplement the family income. As she was handicapped, she could not take up a job but, this deficiency has not affected her self-confidence. One day Mrs. Patagar saw a newspaper advertisement given by CEDOK, Dharwa d regarding training in entrepreneurship skill development. She was thrilled and approached the Training Officer, CEDOK at the District more details. She had requested the training officer to visitPrashanti Foundation Sirsi to explain the details of the programme. After listening to them she has decided to undergo training in paper products as it requires less investment. Finally she has took her husband's permission and joined the five-week ESDP in paper products at Chetana Industrial Estate, Sirsi conducted by ni-msme with CEDOK as a Partner Institution.

ESD Pin paper products:

As Mrs. Patagar had a strong desire for self-employment, she had actively participated in the programme. She took keen interest in learning the art of making of paper products, and had worked hard to rach perfection. The training programme helped her to develop leadership skill, team building and other managerial skills. She gained technical knowledge about gift items like greeting cards, photo stands, pen stands, calendars, files, and envelopes. This training programme enhanced her self-confidence and helped her to become mentally ready to take-up self-employment. During this training programme she was guided in the preparation of Business Plan.

Enterprise set up*:*

After one month of completing the programme, the first follow-up meeting was arranged. During the meeting she expressed her desire to start the enterprise and also shared the problems of starting up with the Training Officer, CEDOK, Karwar. Seeing the enthusiasm of Mrs. Nirmala, he motivated, counselled and guided her in solving problems connected with starting the enterprise.

Present status:

Initially, Nirmala Patgar started the unit with her own investment of `. 15,000/-. She started with the manufacture of handmade paper products. Marketing Mrs.Patagar is personally selling the product and is covering the markets nearby Sirsi and getting good profit for her products.

Income:

At present she is earning `.3,000/- per month as profit. She is collecting feedback from the customers for improving her products .This way she is supporting her family and is also able to put her children in good school. Now, her family members are also assisting in the manufacturing and marketing of paper products. She expresses her sincere gratitude to the Ministry of MSME, to ni-msme and to CEDOK for giving her an opportunity to undergo ESDP and Skill Training on Handmade Paper Products. This training programme gave new direction to her life and became the major turning point in her life.

4.2 Case Study of Sucharita Devi From Hobby to Enterprise

The theory that entrepreneurs are born and not made was proved wrong through several experiments and research conducted world wide. On the other hand there are a few cases which support this theory. The case of Mrs. Suchitra Devi supports the theory that those born in a business family would be more successful. Ms. Suchitra Devi hails from Vijayawada and comes from a family with business background. Her father is a contractor in roads and building. Her brother works as a manager in a jewellery shop. Her mother is also an entrepreneur and running successfully a famous sweet shop at Hyderabd. Before marriage Ms. Suchitra was assisting her mother in the preparation of sweets and also used to manage the shop. She studied up to graduation and is married to a business man. Her husband is into CC camera business and is a contractor for Tirumala Tirupati Devasthanam. Mrs. Suchitra is 40 years old and is a mother of two children. Since business is in her blood, she always wanted to get into business and was looking for an appropriate time and product. Through friends she came to know about the advertisement on training programme in food processing being organised by the Training Centre of CED at Vijayawada. She contacted the coordinator to get more information. After attending the counselling sessions, she has decided to attend the programme. She has the support of her husband and she says that her mother and husband are the inspiration for her to go for self employment.

Entrepreneurship and skill development programme in food processing:

She participated in the ESDP conducted from 12 November to 20 December2011. She said that the programme has given her ample opportunity to gain knowledge on self employment opportunities in food processing, enterprise start up, support services and other aspectsrelating to starting a self-employment venturein food processing.The programme has also helped herin developing entrepreneurialcompetencieslikerisk taking ability, building up confidence level, and communication skills. She could, to some extent, develop the skill in managing money and marketing products.

Business Idea:

During her training period and also after completion of the training programme, she was in a dilemma about the product selection. Since her husband is into business, she decided to consult him. Her husband frequently visits different places within India and also foreign countries to explore business opportunities. During one of his visits to china, he came across a machinery to manufacture tea power and Vermicelli. He shared the information with his wife and suggested her to take up distribution of tea power. Ms. Suchitra readily accepted as her husband promised to support and extend cooperation in running the unit.

Income:

Mrs. Suchitra proudly says that she could earn `. 2,00,000 (` Two lakhs) from Tea packing unit and `.2,80,000/-.(Rupees two lakhs eighty thousand only) from her vermicelli unit. She says that she is saving some amount from both the units for expansion.

5. Data Analysis Of The Study

Table :1 E-business enables the women to develop leadership in the society

Response	No. of respondents	Percentage
Strongly agree	32	32
Somewhat agree	14	14
Neither agree nor disagree	12	12
Somewhat disagree	22	22
Strongly disagree	20	20
Total	**100**	**100**

Data Interpretation:

Majority of respondents i.e. 32 % of the respondents strongly agree that E-business enables the women to develop leadership in the society followed by 14% of respondents somewhat agreed. 12% of respondent's feel neutral about the E-business enables the women to develop leadership in the society. Additionally 22% somewhat disagree and 20% respondents strongly disagree that the E-business enables the women to develop leadership in the society

Table 2: Entrepreneurship through E-business enables women to get a sense of gender equality

Response	No.of respondents	Percentage
Strongly agree	25	25
Somewhat agree	30	30
Neither agree nor disagree	25	25
Somewhat disagree	15	15
Strongly disagree	5	5
Total	**100**	**100**

Data Interpretation

Majority of respondents i.e. 25 % of the respondents strongly agree that Entrepreneurship through E-business enables women to get a sense of gender equalityfollowed by 30% of respondents somewhat agreed followed by 25% of respondent's feeling neutral about Entrepreneurship through E-business enables women to get a sense of gender equality. Additionally 15% somewhat disagree and 5% respondents strongly disagree that the Entrepreneurship through E-business enables women to get a sense of gender equality.

Table 3: Women entrepreneurship through E-business enhances women employability

Response	No. of respondents	Percentage
Strongly agree	20	20
Somewhat agree	20	20
Neither agree nor disagree	10	10
Somewhat disagree	40	40
Strongly disagree	10	10
Total	**100**	**100**

Data Interpretation:

Majority of respondents i.e. 20 % of the respondents strongly agree that Women entrepreneurship through E-business enhances women employability followed by 20% of respondents somewhat agreed neither followed by 10% of respondents' neither agreeing nor disagreeing that Women entrepreneurship through E-business enhances women employability. Additionally majority i.e. 40% somewhat disagree and 10% respondents strongly disagree that Women entrepreneurship through E-business enhances women employability

Conclusion

Women's empowerment in cases of social status, economic security, self-actualization, etc. is an inevitable part of country's overall development. Without women the mainstream development program, sustainable development process is just nearly impossible. Not only that, this development would always be a dream without active and meaningful participation of the country's women in it. After completing the analysis and finding part the study found that e- business is the most convenient and easiest option to run business for the women entrepreneurs. Women Entrepreneurship through e-business has enhanced their economic status and decision- making power. Economic status, self-worth, self-confidence, control over own life-related issues, control over resources, and social status of women entrepreneurs are the variables that define empowerment of women. If women gain economic freedom, social recognition, they gain visibility and a voice at home, workplace and community. This has an impact on their social status regarding increase in their leadership ability, gender equality and so on. According to the study, women are becoming more interested in establishing their own online business as it is easier than any other form of business. So, governance and policy formation should support the women entrepreneurs so that they can develop and empower themselves. It will lead to the development of our country's sustainable economic growth, creates employment opportunities as well as make a contribution towards the women entrepreneurs' family and community.

References:

1. Sonia Justin Raj et.al, (2018) "E-Commerce Vs Women Entrepreneurs", International Journal of Advanced Research, Vol. 6(6), PP. 729-732.
2. Tanjela Hossain, (2014), "Empowering Women through E-Business: A Study on Women Entrepreneurs in Dhaka City "Asian Business Consortium, PP.153-160.
3. Mehnaz Akhter, (2017), "Empowering Women through E-commerce- Conduit for Women Entrepreneurs in Bangladesh", Vol. 19, Issue 8, PP. 37-47.
4. MeetaJethwa and Chhaya Mishra, (2016), A Study on Status of Women Entrepreneur in E-commerce Environment in India, Review of Research Journal, Vol. 5 Issue 8, PP. 1-7.
5. T.Charulakshmi, and M.Thaiyalnayaki, (2019) "A Study on Problems Faced by The women Entrepreneur in Kancheepuran District", International Journal of Recent Technology and Engineering Vol. 7, Issue-6S5, PP. 1191-1194.
6. Alzubi KN, Aldhmour FM, Ali HB (2015) An investigation of factors influencing the adoption of electronic management based on the theory of reasoned action (TRA): a case study in the University of Technology/IRAQ. Int J ComputAppl 123(18):1 –9
7. Applegate LM (1999) Electronic commerce. In: Dorf RC (ed) The technology management handbook. CRC Press, Boca Raton, pp 1122–1130
8. Buda R, Elsayed-Elkhouly SM (1998) Cultural differences between Arabs and Americans: individualism-collectivism revisited. J Cross Cult Psychol 29(3):487– 492
9. Burgelman RA (1983) corporate entrepreneurship and strategic management: insights from a process study. ManagSci 29(12):1349–1364
10. David W, Benamati J (2002) E-commerce basics. Prentice Hall, Upper Saddle River
11. Edvinsson L, Stenfelt C (1999) Intellectual capital of nations—for future wealth creation. J Hum Res Cost Account 4(1):21–33
12. Fellenstein C, Wood R (2000) Exploring e-commerce, global e-business and e- societies. Prentice Hall, Upper Saddle River
13. Frost D, Goode S, Hart D (2010) Individualist and collectivist factors affecting online repurchase intentions. Internet Res 20(1):6–28

14. FryadHenari T, Mahboob R (2008) E-commerce in Bahrain: the non-technical limitations. Educ Bus SocContemp Middle East Issues 1(3):213–220
15. Gibbs J, Kraemer KL, Dedrick J (2003) Environment and policy factors shaping global e-commerce diffusion: a cross-country comparison. InfSoc 19(1):5–18
16. Grandon EE, Pearson JM (2004) Electronic commerce adoption: an empirical study of small and medium US businesses. InfManag 42:197–216

WEBSITES

1. https://www.theweekendleader.com/Success/3002/its-women-empowerment.html
2. https://www.theweekendleader.com/Success/2861/leading-kindly.html

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 **Impact Factor – 7.328**
Peer Reviewed **Bi-Monthly**
Vol.3 No.1 **Sept – Oct 2022**

PHYSICAL DISABLED CHILDREN PROBLEMS

S. Kalpana
Assistant Professor School of Law Veltech Rangarajan Dr.Sagunthala R & D Institute Of Science And Technology
Corresponding Author- **S. Kalpana**
Email id: kalpanakavismk@gmail.com
DOI- 10.5281/zenodo.7267266

Abstract:

Significantly, this research only focuses upon physical disability of children. Physical disabilities are different from mental disabilities. Physical disabilities is blindness or visual impairment, hearing loss or dumb and deafness, locomotors disability, polio attack, mobility or movement impairment etc.., they are vulnerable people. The most of the physical disabilities children's are neglected by parents or join in institution. The physical disabilities children's are easily victimized or abused by others. The physical disabilities children's are not freely participate into the society and not get proper education and they are always faced number of discrimination. Physical disabilities children's are cross so many barriers in day to day life. They have no special disability legislation like mental health Act 1987. They have only general disabilities legislation of people with disabilities Act 1995. This legislation may be inadequate to deals with physical disabilities. So, they must be protected against discrimination, secure from violence and also rehabilitate. Physical disabled children have lack of care by the parents

There is inadequate implementation of protective rights towards disabled children's whereby they are abused and exploited in various means and measures.

Key words: physical, disability, children, people.

Introduction:

Children who live with a physical, sensory, intellectual or mental health disability are among the most stigmatized and marginalized of all the world's children. While all children are at risk of being victims of violence, disabled children find themselves at significantly increased risk because of stigma, negative traditional beliefs and ignorance. Lack of social support, limited opportunities for education, employment or participation in the community further isolates disabled children and their families, leading to increased levels of stress and hardship. Disabled children are also often targeted by abusers, who see them as easy victims.

a) Definition Of Disabled Children:

Art1. The united nation Convention on the Rights of Persons with Disabilities to define term of 'children with disabilities' in this document is used to refer to children up to the age of 18 who have 'long-term physical, mental, intellectual, or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.[1]

Personwithdisabilities(equalopportunities,protection of life and fill participation) Act, 1995 of sec 2 (t) says disabled person means "Person with disability" means a person suffering from not less than forty per cent, of any disability as certified by a medical authority;[2]

Types of Physical Disabiled Children:

Blindness:

Low vision:

Speaking and Hearing impairment:

Leprosy cured person:

[1] Art-1 the united nation convention on the rights of persons with disabilities

[2] Sec -2(t) person with disabilities (equal opportunities, protection of life and fill participation) act, 1995

Loco motor Disability:

Multiple Disabilities:

A combination of two or more disabilities as defined in clause (i) of section 2 of the Person with disabilities (Equal Opportunities, Protection of Rights and Full Participation)
Act 1995 namely Blindness/low vision Speech and Hearing impairment Loco motor disability including leprosy cured Mental retardation and Mental illness.[3]
The report of UNICEF says children with physical disabilities are used for begging. E.g. blind, leprosy cured and loco motor disabled children's.

Difference Between Physical And Mental Disabilities:

Mental and physical illness is not the same thing. A mental illness is a disease of the mind. It's psychological. A physical illness is something wrong with your physical body, such as an injury, disease, sickness. A mental illness can be caused by many things. One thing it can be caused by is heredity. A lot of times mental illnesses are passed down from generation to generation throughout the family. Examples of this are stress, hyper active disorders, and abusive behavior. Mental illness can also be caused by brain injuries or defects, infections, and substance abuse. Physical illnesses are usually caused by bacteria or a disease.[4]

Physical Disabled Children And Education:

Access to education:

Children with disabilities have the right to education without discrimination and on the basis of equality of opportunity. But they are, excluded from equal access to education. The WHO and UN general assembly estimate only 10% of the disabled children get and education. In particularly children with disability in rural areas is not received education than urban in disabled children.

Schools For Disabled Children's:

1) Special school for disabled children's and
2) Inclusive education school

Special School:

Special schools created specifically for the education of students with disabilities, or in completely separate classrooms for students with disabilities. These students will often receive a completely different curriculum and different methods of testing, rather than being taught the same curriculum as their peers. The first special school for people with disabilities in India was a school for the blind, which was opened in 1869 by Jane Leupot, with support of the Church Missionary Society. Fourteen years later, in 1883, a school for the deaf was opened in Bombay. These are examples of special schools.

Inclusive Education:

Inclusive education school means disabled children joined in the ordinary school or regular school. Inclusive education entails providing meaningful learning opportunities to all students within the regular school system. In school, creating an inclusive and enabling learning environment for children with disabilities depends in large part on teachers having a clear understanding of inclusive education and a commitment to teaching all children. When teachers and personnel are trained to consider disability-related issues, they look upon inclusion of children with disabilities more positively. Inclusive education can make the curriculum flexible and accessible for all students. Providing vocational education for disabled children. Building structure for inclusive education is favor of disabled children. The inclusive education system is followed in India.

Violence against Physical Disabilities Children's:

Violence In The Home And Family:

In societies where there is stigma against those with disability some parents respond with violence because of the shame the child had brought on the family or respond with violence because a lack of social support leads to intense stress within the family. Among the violent manifestations of this are:

Infanticide And Mercy Killings:

Disabled children may be killed either immediately at birth or at some point after birth; and sometimes years after birth. The rational for such killings is either 1) the belief that the child is evil or will bring misfortunate to the family or the community or 2) the belief that the child is suffer or will be suffering and is better off dead. Lack of

[3] Sec -2(i) person with disabilities (equal opportunities, protection of life and fill participation) act, 1995

[4] http://npattersonamericanliterature.blogspot.in/2011/02/difference-between-physical-illness-and.html

social support and economic necessity is the main reasons for mercy killing of physical disabled childeren by the parents. In cases where parents decide to end the life of a disabled child because they themselves are ill or aging and fear their child will be subjected to abuse or neglect after their own deaths are particularly heartrending. This was often done against female disabled children.

Physical violence, sexual, emotional and/or verbal abuse of the disabled child in a Violent Household:

While many parents are violent towards children where no disability exists, when a disabled child lives in a violent setting his or her disability often serves to compound and intensify the nature and extent of the abuse. For example, a mobility impaired child may be less able to flee when physically or sexually assaulted. A child who is deaf may be unable to communicate about the abuse he or she faces to anyone outside his or her household, unless these outsiders speak sign language or understand the home signs the child uses. (And when the abuser is the one interpreting the child's statement to someone outside the household, this further limits the child's ability to report abuse or ask for help). Girls with disabilities more suffer than the boys.[i]

Violence In The Educational Institution:-

Sadly, victimization of disabled children in school can begin even before the child enters the schoolhouse door:

1. Violence in non-residential school:

a. **Traveling to and from school**:

Educational facilities for disabled children are rare, many children travel long distances to school. Reports of physical and sexual abuse by those responsible for transportation to and from school are common.

b.Violence in the class room:

Disabled children's are often beaten, abused or bullied by untrained teachers who do not understand the limitations of disabled children's. Further they are teased and bullied by classmates. The physical disabled students are physically and sexually abused by the teachers and classmates.

c.Violence in the residential school:

Children's with specific types of disabilities (particularly children who are deaf and blind are educated in residential school, where they may live awau from their families for months or years. These children's are physically violence and sexually abused in during the residential period.

Violence In The Institution:

a.Victims of violence:

Disabled infants, children and adolescents in institutions around the world are routinely subjected to physical violence and sexual, verbal and emotional abuse by staff, visitors and fellow patients.

b.Dangers facilities in the institution:

In many institutions, infants, children with disability are kept in overcrowded wards. They are often kept in environments that can only be described as inhumane. Institutions for disabled children are often at the bottom of government priority lists and lack adequate funding, consistent support or oversight from government or civil society. The overcrowded and unsanitary for both reasons, lack of staff and resource which leads directly to avoidable suffering and death. One of the world report says that the death rate of disabled children's are kept in the institution is twice than home care children.[5]

Protection Of Disabled Children Under Legal Aspects:

Constitution:

Article 14:

Equality before law.

Article 15:

Prohibition of discrimination on grounds of religion, race, caste, sex or place of

Article 21:

Protection of life and personal liberty

Article 47:

Duty of the state to raise the level of nutrition and the standard of living and to improve public health. [6]

The Persons With Disabilities (Equal Opportunities, Protection Of Rights And Full Participation) Act, 1995:

The main aim of this Act disabled persons may have full right for participate into the society and given equal opportunity at any place and protection against discrimination.

Salient Features Of The Person With Disabilities Act 1995:

In this Act sec 25 of CHAPTER IV deals with: PREVENTATION AND EARLY

---

[5] http://www.unicef.org/videoaudio/PDFs/UNICEF_Violence_Against_Disabled_Children_Report_Distributed_Version.pdf

[6] Art- 14,15,21 ,47 indian constitutional law.

DETECTION OF DISABILITIES it says that" Within the limits of their economic capacity and development, the appropriate Governments and the local authorities, with a view to preventing the occurrence of disabilities, (a) Undertake or cause to be undertaken surveys, investigations and research concerning the cause of occurrence of disabilities. (b) Promote various methods of preventing disabilities; (c) Screen all the children at least once in a year for the purpose of identifying "at-risk" cases; (d) Provide facilities for training to the staff at the primary health centers;(e) Sponsor or cause to be sponsored awareness campaigns and is disseminated or cause to be disseminated information for general hygiene. Health and sanitation, (f) Take measures for pre-natal, parental and post-natal care of mother and child; (g) Educate the public through the pre-schools, schools, primary health Centers, village level workers and anganwadi workers; (h) Create awareness amongst the masses through television, radio and other mass media on the causes of disabilities and the preventive measures to be adopted; occurrence of disabilities;[7]

In this Act CHAPTER V deals with EDUCATION according to **sec26** says The appropriate Governments and the local authorities shall- (a) Ensure that every child with a disability has access to free education in an appropriate environment till he attains the age of eighteen years; (b) Endeavor to promote the integration of students with disabilities in the normal schools; (c) Promote setting up of special schools in Government and private sector for those in need of special education, in such a manner that child with disabilities living in any part of the country have access to such schools; (d) Endeavor to equip the special schools for children with disabilities with vocational training facilities.[8]

Sec27. The appropriate Governments and the local authorities shall by notification make schemes for- (a) Conducting part-time classes in respect of children with disabilities who having completed education up to class fifth and could not continue their studies on a whole-time basis; (b) Conducting special part-time classes for providing functional literacy for children in the age group of sixteen and above; (c) Imparting non-formal education by utilizing the available manpower in rural areas after giving them appropriate orientation; (d) Imparting education through open schools or open universities; (e) Conducting class and discussions through interactive electronic or other media; (f) Providing every child with disability free of cost special books and equipments needed for his education.[9]

Sec28. The appropriate Governments shall initiate or cause to be initiated research by official and nongovernmental agencies for the purpose of designing and developing new assistive devices, teaching aids, special teaching materials or such other items as are necessary to give a child with disability equal opportunities in education.[10]

Sec29. The appropriate Governments shall set up adequate number of teachers' training institutions and assist the national institutes and other voluntary organizations to develop teachers' training programmes specializing in disabilities so that requisite trained manpower is available for special schools and integrated schools for children with disabilities.[11]

Sec30. Without prejudice to the foregoing provisions, (be appropriate Governments shall by notification prepare a comprehensive education scheme which shall make Provision for-

(a) Transport facilities to the children with disabilities or in the alternative financial incentives to parents or guardians to enable their children with disabilities to attend schools. (b) The removal of architectural barriers from schools. Colleges or other institution, imparting vocational and professional training; (c) The supply of books, uniforms and other materials to children with disabilities attending school. (d) The grant of scholarship to students with disabilities..

---

[7] Sec 25 person with disabilities act 1995**:**

[8] Sec 26person with disabilities act 1995**:**

[9] Sec 27person with disabilities act 1995**:**

[10] Sec 28person with disabilities act 1995**:**

[11] Sec 29person with disabilities act 1995**:**

(e) Setting up of appropriate forum for the redressal of grievances of parent, regarding the placement of their children with disabilities; (f) Suitable modification in the examination system to eliminate purely mathematical questions for the benefit of blind students and students with low vision;
(g) Restructuring of curriculum for the benefit of children with disabilities;
(h) Restructuring the curriculum for benefit of students with hearing impairment to facilitate them to take only one language as part of their curriculum.[12]

In this Act CHAPTER VI deals with EMPLOYMENT, **Sec39** says" All Government educational institutions and other educational institutions receiving aid from the Government shall reserve not less than three per cent seat for persons with disabilities."

In this Act CHAPTER VII deals with AFFIRMATIVE ACTION, **Sec43** says" The appropriate Governments and local authorities shall by notification frame schemes in favor of persons with disabilities, for the preferential allotment of land at concession] rates for- Sub- clause (d) Establishment of special schools;

In this Act CHAPTER VIII deals with NON-DISCRIMINATION, **SECTIONS 44 TO 46** to deals with establishment in the transport sector and public buildings within the economic capacity of the appropriate government and the local authorities to development for the benefit of person with disabilities.

In this Act CHAPTER IX deals with RESEARCH AND MANPOWER DEVELOPMENT, **Sec48** says**,** the appropriate Governments and local authorities shall promote and sponsor research, inter alia, in the following areas-
(a) Prevention of disability;
(b) Rehabilitation including community based rehabilitation;

Sec49. The appropriate Governments shall provide financial assistance to universities, other institutions of higher learning, professional bodies and non-governmental research units or institutions, for undertaking research for special education rehabilitation and manpower development.

In this Act CHAPTERS X and XI deals with institution for disabled persons.[13]

The Rehabilitation Council Of India Act, 1992:

The main aim of this Act standardization of training courses for professionals dealing with persons with disabilities. So, the rehabilitation professionals are to educate disabled children. The professionals are do practice at any place (within or outside India). [14]

Motor Vehicles Act, 1988:

Chapter x of the motor vehicle Act 1988 deals with LIABILITY WITHOUT FAULT IN CERTAIN CASES According to sec 140 of this Act says "Liability to pay compensation in certain cases on the principle of no fault.- (1) Where death or permanent disablement of any person has resulted from an accident arising out of the use of a motor vehicle or motor vehicles, the owner of the vehicle shall, or, as the case may be, the owners of the vehicles shall, jointly and severally, be liable to pay compensation in respect of such death or disablement in accordance with the provisions of this section. (2) The amount of compensation which shall be payable under sub-section (1) in respect of the death of any person shall be fixed sum of twenty five thousand rupees and the amount of compensation payable under that sub-section in respect of the permanent disablement of any person shall be a fixed sum of twelve thousand rupees.

But change the compensation amount by the motor vehicle (amendment) Act 1994. The amount of compensation has been increased from 25000 to 50000 in case of death, and from 12000 to 2500 thousand in case of permanent disablement.[15]

Contributory Negligence Of Children:

It covers under the law of torts. Contributory negligence means the plaintiff himself guilty of negligence as regards his own safety and his own lack of care contributes to the harm suffered himself. But children are exempted from the contributory negligence. This was discussed under the following case law.

Alka Vs Union Of India A.I.R. 1993 Delhi 267

The defendant was negligently in allowing the door of a room in which an electric pump

[12] Sec 30person with disabilities act 1995:

[13] http://meghpol.nic.in/acts/central/PWD_Act.pdf

[14] http://socialjustice .nic.in/disabled

[15] http://www.tn.gov.in/sta/Mvact1988.pdf

was installed to remain open and unattended. The plaintiff, a trespassing child of about 6 years, living in that locality, could have access to that room. She could not appreciate the danger involved in putting her hand in the running motor, and as a result of coming in contact with the same, she suffered physical injuries including loss of two fingers of her right hand. The defendants were held liable for gross negligence, and were required to pay compensation of Rs. 1,50,000 to the plaintiff.[16]

Conclusion:

The physical disabled children must be protected against violence and discrimination. The government should take measure for prevention of disabilities. To enhance the community based service for disabled children. Disabled children must get proper education and remove the barriers of education. Person with disability Act should reach to the disabled persons.

[16] R.K. Bangia ,law of torts twenty first edi 2008 Allahabad law agency

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

LAND ACQUISITION AND RIGHTS OF INDIGENOUS PEOPLE: SPECIAL REFERENCE TO DAM PROJECTS IN ODISHA

Dr. Abhimanyu sethy
Faculty Madhusudan Law University,Odisha
Corresponding Author- **Dr. Abhimanyu sethy**
Email id: abhimanyu.law@gmail.com
DOI- 10.5281/zenodo.7267282

Abstract

Land acquisition is a process of purchase of land belonging to the citizens by the Government for the purpose of various infrastructure and development projects. Tribal people's rights are broad human rights in recent times. The development projects forced them to losing their land means a loss of contact with their mother land and loss of identity. Protections of indigenous land rights continue to be a major challenge, with the gap between development-induced displacement and rehabilitation in India. In India the development projects displaced so many indigenous peoples from their lands. Many of these projects are opposed for their human rights and environmental impacts. The rights of Indigenous Peoples are guaranteed in the Indian Constitution. Part IV of the Constitution lays down the Directive Principles of State Policy. Several laws and constitutional provisions in India recognize indigenous peoples' rights to land and self-governance. The laws aimed at protecting indigenous people's right The Indian government voted in favour of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP). The DPSP lay down the fundamental principles for the governance of the country and the state is directed to secure the ownership and control of the material resources of the tribal community are so distributed as best to the common good.

Key words: *Rights, acquisition, development, land & indigenous.*

Introduction

Land Acquisition and development induce-displacement of Population is the single largest category among all Internally Displaced Populations (IDPs). Majority of districts of Odisha have forests and tribal populations. Needless to say, there exists a symbiotic relation between the two. The tribal populations still consider forests to be their natural habitation. But due to various development projects vast tracts of forest land were alienated under Land Acquisition and similar laws. In India the main legislation pertaining to land acquisition is the Land Acquisition Act, 1894. The legislation was enacted by the British to suit the colonial need of exploiting the resources to the benefit of the British Industrial Revolution. In order to achieve the industrial growth, the colonial regime required monopoly over land for coal mine, coffee and tea plantation, roads, railways and other schemes. During colonialism, India's traditional land use and land ownership patterns were changed to ease the acquisition of land by British entrepreneurs. The introduction of institution of private property had made the community ownership system illegal[1]. Land acquisition in India may be defined as the action of the government whereby it acquires land from its owner in order to pursue certain public purpose or for company. The Act authorizes

[1] Mridula Dhekial Phukan, „*Internally Displaced Persons In North-East India With Special Peference To Assam-A Socio-Legal Study*", Ph.D Thesis, Gauhati University, 2012. P.147-149

governments to acquire land for public purposes such as planned development, provisions for town or rural planning, provision for residential purpose to the poor or landless and for carrying out any education, housing or health scheme of the Government[2].

The definition of the term public purpose in the Act is inclusive, and is often interpreted very liberally to include variety of uses such as roads, play grounds, offices and factories, benefiting only a portion of the society. Under the Act the Government is required to make a public notification of the intention to take over the land. The notification has to be published in the official gazette and in two daily news papers circulation in that locality of which at least one shall be in the regional language[3]. After the notification the government is also required to make an enquiry into objection that may be filed by the people interested in the land or property[4].

The tribal's who live in the forest or land adjacent to it's, are the most affected people due to the acquisition of land for public purpose. Large-scale development projects in tribal areas have physically evicted significant numbers of the tribal community. About 40% of the total tribal populations have been displaced by development projects. Tribal communities lack other skills to survive in varied environments.

The United Nations Environment Programme (UNEP) Report, 2003 cites the examples of the *Karjan* and *Sukhi* reservoirs in the State of Gujarat that displaced only tribals. The Balimela Hydro Project in the State of Orissa displaced a large number of people, 98% of whom were tribals. Similarly, In Upper Kolab Dam project, 96% of the evacuated people belong to tribal community[5].

There has been very significant increase in open unemployment rates; people are unable to find any kind of job like it part time, a subsidiary job, or even very small low-paying jobs. Irrigation projects have been the largest source of displacement and destruction of habitat. Apart from the fact that people displaced on account of big dams are usually not the beneficiaries of the same. There is also a debate as to whether big dams are strictly required and whether small dams and watershed projects with much lower human costs can provide the same benefit[6].

Objective: The objective of the study is to present the land acquisition status in Odisha and two project areas. To study the constitutional and legal provisions in India

Methodology: The present study on land acquisition and tribal people's rights sought to construct, through the analysis of primary and secondary data, constitutional provision and law in India.

International Instruments for the Protection of Indigenous People

The Universal Declaration of Human Rights (1948)[7], International Covenant on Civil and Political Rights (1966)[8], International Covenant on Social, Economic and Cultural Rights (1966), the U.N Declaration against Racism and Racial Discrimination (1978)[9] etc. Bear upon the situation of tribal people though not explicitly. The United Nations Declaration on Racism and Racial Discrimination (1978) endorses the right of tribal people to maintain their traditional structure of economy and culture and stresses that

[2] *Section 3 (f), The Land Acquisition Act, 1894.*

[3] Ibid, *Sec. 4 (1).*

[4] Ibid, *Sec. 5 A (1).*

[5] www,Sodhaganga.inflibnet.ac.in.

[6] Asit Das, '*displacement: Indian State war on Its Own People'*, <http://sanhati.com> (accessed 20 December 2019).

[7] Adopted and proclaimed by the United Nations General Assembly Resolution 217 (III) of 10th December 1948.

[8] Adopted and opened for signature, ratification and accession by the General Assembly Resolution 2200 A (XXI) of 16th December 1966.

[9] Adopted and proclaimed on 27th November by the General Conference of UNESCO, 1978.

their land, land rights and natural resources should not be taken away from them[10].

Constitutional Developments

The object of the Constitution as revealed by the preamble pledge is to promote justice: social, political and economic; and to preserve the liberty, equality and freedom of individuals. The modus operandi to achieve these objectives is set out in Part III[11] and Part IV[12] of the Constitution dealing with fundamental rights and directive principles of State policy respectively. Constitutional Government in India[13] discusses the main factors responsible for the incorporation of fundamental rights in the Indian Constitution. However, the work mechanically enumerates the fundamental rights, paying no particular attention to the social, legal and economical implications of land acquisitions. Indian Constitutional Law[14] has taken great pains in exploring the legal interpretation of various Constitutional provisions. This treatise gives guidelines for systematising the judicial decisions on land acquisitions.

Prior to Forty Fourth Constitutional (Amendment) Act, 1978, the Constitution guaranteed a fundamental right to all citizens to acquire, hold and dispose of property. In case of *Hindu Religious Endowments* v. *Lakshmindra[15]*, Supreme Court enquired why the word 'property' as used in Article19 (1) (f) should not be extended to those well recognized types of interests which have the characteristics of proprietary rights; and further held that Article19 (1) (f) applies equally to concrete as well as abstract rights of property; and that the administration of property by a religious denomination is a fundamental right which no legislature can take away. In *Kesavananda Bharati* v. *State of Kerala[16]*, the apex Court upheld the power of the government to acquire land for implementing the directive principles of Constitution. In *Gwalior Rayons Silk Mfg.* v. *Government of Kerala[17]*, it was held that acquisition shall be made only in accordance with the principles laid down in Article 31-A of the Constitution. Provision to the said article prescribes that the consent of President of India is a pre-requisite for the validity of any law which provides for acquisition of land.

Land Acquisition Laws

The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013, enacted by Parliament to provide just and fair compensation to the affected persons due to development projects, which had come into force from January 1, replacing the 120-year-old legislation. Prior to 2013, land acquisitions by the States and the Central government were done in accordance with the Land Acquisition Act of 1894; this act allows the Government to acquisition of private lands for development purposes[18].

According the new Act, the consent of landowners was made the must for acquisition unlike the older act. The Social Impact Assessment study should take place to find out whether the proposed acquisition serves public purpose, estimation of affected and likely to be displaced families, the nature and costs of addressing them, and the impact of these costs on the overall costs of the

---

[10] Article 7, United Nations Declaration on Racism and Racial Discrimination (1978).

[11] Article 12 to 35

[12] Articles 36 to 51.

[13] M.V Pylee, *Constitutional Government in India*, (6th edn., S. Chand and Co. Pvt. Ltd., 2007).

[14] M.P Jain, *Indian Constitutional Law*, (4th edn. 1978).

[15][1954] SCR (1) 1005.

[16]AIR 1973 SC 1461.

17. AIR 1979 Ker.56

[18] R. S, Land Acquisition Laws in India and the Duplicitous Deals, Nov. 5, 2014 https://www.mapsofindia.com/my-india/society/land-acquisition-laws-in-india-and-the-duplicitous-deals Retrived on 30th September 2022

project and the law provides for payment of compensation up to four times the market value in rural areas and up to twice the market value in urban areas to ensures fair payment to the landowners. It also provides for Resettlement and Rehabilitation ("R&R") of all project affected persons.

Land Acquisition and Displacement Scenario in Odisha

In Odisha the irrigation projects are mostly constructed in tribal and forest hill areas where the tribal's live in. Tables Below represents the human displacement from multipurpose, major and medium projects in Odisha.

Table 1. Number of Displaced Families due to multipurpose dam projects in Odisha

Name of the project	Number of Displaced Families			
Multipurpose	General	SC	ST	Total
(i)Hirakud	Na	Na	1,636	22,144
(ii)Balimela	Na	Na	Na	1,200
(iii)Salandi	32	5	352	569
(iv)Rengali	8,015	1,710	1,172	10,897
(v)Upper Indravati	1,557	338	1,630	3,725
(vi)Upper kolab	1,308	442	1,421	3,371
Total	10,912	2,495	6,211	41,706

Source: Government of Odishaa, 2019

The table shows the status of tribal displacement due to the dam projects. In the project areas of Salandi, Upper Indravati and Upper Kolab, the tribal's are mostly affected than others. In these areas the tribal's are mostly living in remote areas till today having lack of basic facilities.

Table -2: Number of displaced families due to major dam projects in Odisha

Major Irrigation Projects	General	SC	ST	Total
Subarnrekha	2,246	416	6,382	9,044
Rengali	918	81	10	1,009
Total	3,164	497	6,392	10,053

Source: Government of Odishaa, 201

The table shows the equal situation in Subarnarekha Irrigation Project. The tribal's are highly affected than other categories in these Project areas. Where the status of displacement affected more nos. of tribal's, there the condition of the tribal's are highly affected in their economic and social life.

Table 3: Number of displaced families due to medium irrigation projects in Odisha

Name of the Project	Number of Displaced Families			
Medium irrigation Projects	General	SC	ST	Total
(i) Dadarghati	228	66	133	427
(ii) Derjang	327	29	-	356
(iii) Baghua	406	8	96	510
(iv)Ghodahad	3	-	65	68
(v)Baghlati	17	15	91	123
(vi) Demerbahal	74	23	156	253
(vii) Pilasalki	57	24	104	185
(viii)Kuanria	49	54	48	151
(ix) Daha	3	10	7	20
(x) Remal	1	2	1	4

(xi) Sarafgarh	26	3	0	29
(xii) Jharbandh	120	2	4	126
(xiii) Talasara	1	3	19	23
(xiv) Gohira	51	18	74	143
(xv) Ramiala	166	159	89	414
(xvi) Sunet	84	2	267	353
(xvii) Kanjhari	113	4	80	197
(xviii) Bankabahal	98	35	149	282
(xix) Kansbahal	10	29	172	211
(xx) Hariharjore	140	41	213	394
(xxi) Harbhangi	17	8	128	153
(xxii) Badnala	4	2	163	169
(xxiii) Upper Jonk	46	30	225	301
Total	2,041	567	2,284	4,892
Grand Total	16,117	3,829	14,887	57,386

Source; Government of Odishaa, 2019

Out of the total 41,706 families displaced by multipurpose dam projects, 6211 families are scheduled tribes i.e., around 15% of the total families displaced are tribal. In koraput district, where tribal population is 58% have 18 large schemes, occupying5, 00,000 acres or, 7.42% of their area. According to one estimate, the schemes have deprived 6% population of the district, mostly tribal, of their livelihood. Thus at least 10% of the tribal in these districts have been affected. The land taken over includes 4,00,000 acres of forest on which the tribal have depended for their sustenance though they didn't have a legal to it[19].

Table-4: Area acquired and villages affected by development and conservation projects in Odisha.

Sl. No	Projects	Area acquired or affected (ha.)	No of villages affected
1	Irrigation- Dam projects (Major) Completed	200423	900
2	Irrigation- Dam projects (Medium) Completed	14403	118
3	Irrigation- Dam projects (Medium) Ongoing	12160	92
4	Irrigation- Dam projects (Major) Proposed	30233	113
5	Industries (All types of Industries)	45358	176
6	Mines (All types of mine leases given out)	101947	NA
7	Wild life Sanctuaries and National Parks	811155	771
	Total	**1215679** acres	**2170**

The table shows the nos. Of villages and land acquired for the development projects in Odisha.The highest land acquired in irrigation and dam projects, Which mostly affected to the tribal Indigenous peoples in Odisha.

Table-5: Displacement due to various development projects in Orissa

Sl. No	Type of Project	No of villages displaced/ affected	No of families displaced/ affected	Total land acquired (in hectare)
1	Mines	79	3143	2427.03

19 Orissa Development Policies and Rural Poverty in Orissa: Macro Analysis and Case Studies, A Study,by Vasundhara, Bhubaneswar Support from Planning Commission, March, 2005, Sricharan Behera, Vasundhara, Bhubaneswar, 2005.

2	Industries	113	10704	21963
3	Thermal Power	73	2426	3155.31
4	**Dams (Irrigation/Hydro)**	**1181**	**64903**	**595918.6**
	Total	**1446**	**81176**	**623463.94**

Source: Irrigation Department, Govt. Of Odisha 2019

The table shows the displaced/affected villages and acquired land for the purpose of various development projects in Odisha, which are basically situated in tribal areas of Odisha.

Case Study on Subarnarekha Irrigation Project in Odisha

The narrow area of this study is on tribal displacement in Odisha with specific response to Subarnarekha Irrigation Project (SIP).

Subarnarekha Irrigation Project

The Subarnarekha Irrigation Project is the outcome of a tripartite agreement among the co-basin states of erstwhile Bihar (present state of Jharkhand), Odisha and West Bengal in the year 1978 to utilize the Odisha's share of Subarnarekha water to the extent of 1409 Mcum allocated under the agreement to irrigate 1,09,627 Ha. Of agricultural land in the district of Mayurbhanj and Balasore, a total of 109 numbers of villages gets affected with submergence area of 8596 Ha. On account of construction of 3 command Area Reservoir in Orissa and one reservoir in Jharkhand state. For resettlement of Displaced Families of 3 reservoirs namely Haladia, Jambhira and Baura, Rehabilitation Advisory committee (R.A.C) had been constituted by Irrigation and Power Department in 1987.

Table 6: Details of villages affected by the projects.

Features	Haladia	Jambhara	Baura	Ischa	Total
Fully	1	14	6	3	24
Partly	9	11	16	4	40
Agricultural Land only	6	10	-	29	45
Total	16	35	22	36	109

Source: RPDAC, PD, R/R SIP,

Jambhira Reservoir

Out of three Command Area Reservoirs, Jambhira reservoirs have highest submerged villages and population displacement. For construction up to the ultimate height of the Jambhira Reservoir, 35 villages will be affected and out of which 14 nos. villages are fully, 11 nos. are partly and 10 nos. of villages affected with loss of agricultural land only. 25 villages are coming within the F.R.L (Full Reservoir Level) line of the ultimate Jambhira Earth Dam for rehabilitation. Out of total 25 villages, rehabilitation and resettlement of 21 villages, presently submerged had been taken up 3and R and R assistance has been paid to 2884 DFs. Out of this 1466 families are belongs to scheduled tribes. The project work has started from 1986 and till today it have not completed. The R/R package has not completed to the affected tribal's in Jambhira project areas. Till now the survey is continuing to provide the r/r assistance to the affected persons. According the displacement figure of table nos.2.7 the total displace persons are 9,044.

Table: 7: List of affected villages under Jambhira reservoir

SL.NO	Name of the village	submergence
1	Badabadatalia	partly
2	Bhaguasole	partly
3	Betanta	partly
4	Daradiasole	partly
5	Dhadipada	partly
6	Dhobanisole	partly

7	Ketuanimari	partly
8	Nagasole	partly
9	Sunaposi	Partly
10	Tadaki	partly
11	Tubulubhadu	partly
12	Andharijoda	fully
13	Badapalasia	fully
14	Dhemanasole	fully
15	Kaladam	fully
16	Khandarapara	fully
17	Naubedi	fully
18	Pathuri	fully
19	Phuljhar	fully
20	Ramakadali	fully
21	Rangamatia	fully
22	Sampura	fully
23	Sanajogibandha	fully
24	Sarasposi	fully
25	Tamidisole	fully
26	B.K.C pur	affected
27	Bholabela	affected
28	Chahalapada	affected
29	Chalunia	affected
30	Gadargodi	affected
31	Jhaliamara	affected
32	Khuabuda	affected
33	Rathasole	affected
34	Saragchhida	affected
35	Tungasole	affected

Source: RPDAC, Mayurbhanj District,

Haladia reservoir

Haladia Reservoir is the first command area Reservoir of Subarnarekha Irrigation Project to store the first discharge of Orissa share of water from Galudihi barrage and provide irrigation to its ayacut in Kharif and Rabi seasons. The Dam existing at the site over the river Chipat built by the progressive and benevolent Maharaja of the princely state of Mayurbhanj, Sriram Chandra Bhanj Deo.The construction of the dam started in the year 1887 and completed in 1912. The new dam is constructing on the downstream of the existing dam. Construction of the dam to the new height will affected 16 villages out of which only one village:Hatimada is fully submersible and 9 villages are partly submersible whereas only agricultural land is going to be submerged in rest 6 villages.

Table 8: Details Of villages affected by the project (Haladia reservoir)

Sl. No.	Name of the Village	No. of Families Surveyed				
		DF Identified	DF finalised	>75%	<75%	Encroached
1	Dadara	18	8	139	173	1
2	Pandasole	0	0	0	97	0
3	Baidpur	0	0	1	42	0
4	Rangisole	0	0	2	8	0
5	Kalikasple	0	0	0	7	0
6	Khairbani	166	117	167	120	0
7	Ambupunja	23	27	21	215	0

8	Kanjia	0	0	0	42	0
9	Nodhabani	11	11	137	10	8
10	Dudhiasole	0	0	0	7	0
11	Hatimada	117	98	4	39	0
12	Haladia	6	6	21	166	0
13	Balarampur	3	3	23	89	1
14	Mundakata	20	12	72	204	0
15	Rangibeda	145	145	137	56	18
16	Karkachia	0	0	85	253	0
	Total	509	427	809	1528	28

Source: RPDAC, Mayurbhanj District

As concluded in several studies, displacement is a major factor of marginalization and impoverishment. Tribal groups living in the two project areas are all Below Poverty Line (BPL) listed families and prior to displacement they were basically dependent on agriculture, nature and community resource for livelihood. Therefore, the specific conditions of these two areas call for serious academic interest, especially on the issues like constitutional and human rights and the reshaping of public policies with response to them.

Land Acquisition and Judicial Trends

The socio-economic consequences of the Land Acquisition Act, 1894 has been comparatively less focus on the judicial burden imposed by this legislation. The wide interpretation of 'public purpose' and inadequate compensation filled courts across India with litigation under this legislation. On *Pune Municipal Corporation vs Harakchand Solanki*[20] *case* a three judge bench of the Supreme Court of India pronounced the very first judgment on the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.

A three judge bench of the Supreme Court held that compensation would only be deemed to have been deposited with the Court and after having been offered to the individual concerned. In this case, the compensation had only been deposited in the treasury but compensation could not be deemed to have been paid and the acquisition was considered to have lapsed in consistency with Section 24 of the "Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013".

In case of *Bharat Kumar vs State of Haryana*[21] on 2 February 2014, a two judge bench of the Supreme Court, pronounced a similar judgment on the new law. This judgment also associated to the operation and interpretation of Section 24(2) the retrospective clause. The bench overturned a 2004 judgment of the Punjab and Haryana High Court and quashed the acquisition, returning the land to the original owners.

On 14 March 2014 a two judge bench of the Supreme Court in *Bimla Devi vs State of Haryana*[22] again went into the question of retrospective operation. In this case, the award had been passed in 1995 and the parties had still not accepted compensation. O n this case, the Supreme Court, relying on the retrospective clause, ordered the return of the land to the original owners.

Findings

The Indian Constitution, judicial decisions and different statutes like Land Acquisition Act, 1894 and The Right to

[20] *Pune Municipal Corporation us Harakcbana Misirimal SoLiuki* , Civil Appeal No. 877 OF 2014 (Arising out of SLP(C) No. 30283 of 2008). Reported as (2014) 3 SCC 183.

[21] (2014) 3 SCALE 393

[22] Civil Appeal No. 3871-3876 of 2014 decided on 14 March 2014.

Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013, relating to land acquisition in India remains scattered. The Indian Constitution just supports the concept of *eminent domain*; the procedure and other aspects of the land acquisition are left to the prudence of various administrative authorities.

The status of land acquisition and displacement scenario presents that the tribal's are most affected oustees due to dam projects in Odisha. The Constitutional as well the statutory provisions attempt to bring together the inconsistent interests of the State and the individuals in the dominion of land acquisitions, the present law is subjected to constant and passionate denigration from various quarters; especially on the land of failure to address properly the private interest; or more specifically, on the ground of failure to struck a proper balance between conflicting interests of the community and the private persons.

Land acquisition and displacement due to development projects brought about the uprooting of socio-economic, cultural and moral ethos of the tribal people's life built over generation. It has caused a great damage to the tribal people and marginalised the displaced persons to push them to the periphery of the society with losing their resource base subsistence.

Conclusion and suggestion

The international initiatives are directly or indirectly ensure the "right to land"; especially that of the indigenous peoples. Evidently, far more than any other section of humanity, and deprived tribal people legitimately look forward to the UN protection. When the international system addresses indigenous peoples' rights in a better way, the tribal people in India who form one third of the total indigenous peoples of the world, are denied the benefits of the aforesaid international norms; especially in the realm of land acquisition. The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013, creates the impression that the Act protects the rights of all displaced persons irrespective of the statutes under which the land was acquired.

- The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 which is intended to repeal the Land Acquisition Act, 1894 must necessarily be changed.
- Prior to acquisition, consultation of inhabitants shall be made compulsory.
- The entire acquisition process shall be monitored by a committee comprising higher officials, experts and sufficient number of representatives of the displaced persons.
- Instead of the Collector, a new quasi-judicial authority with sufficient powers to award compensation may be constituted.
- The market value of the property has to be calculated on the basis of the value prevalent at the time when the government gets actual possession of the property.
- Pension schemes must be introduced for displaced persons, whose property has been completely taken for public purpose.
- Complaints, irregularities and omissions in lay out and plan, including classification of property, must be properly rectified by an independent authority.
- Consent of the majority of inhabitants should be sought for the acquisition of property for Government and private companies.
- In the case of purchase of land for private companies, governmental interference shall be the minimum and confined to monitoring the process.
- While undertaking resettlement measures, 'priority rule' has to be adopted: priority shall be given to those persons whose land has been acquired completely; and that too, on the basis of income levels.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

A COMPARATIVE STUDY OF COPING STYLES AND MENTAL HEALTH OF DIVORCED AND REMARRIED WOMEN

Dr. Shashikant Hari Khalane
Head, Department of Psychology, Zulal Bhilajirao Patil Collge, Dhule
Corresponding Author- **Dr. Shashikant Hari Khalane**
Email id: khalane73shashi@gmail.com
DOI-10.5281/zenodo.7267296

Abstract
Marriages, Divorces and Remarriages have become common practices in today's world. Despite advances in standard of living of the population, the condition of widows and divorced women remains lamentable in our society. Basic human rights of this vulnerable section of society have long been rejected. Previous research in this field has highlighted widow & divorced women as 'At risk population'. Mental health issues and financial adversities post-divorce or death of spouses have compromised their life expectancies. This study is aimed at reevaluating the claims of previous research in this field, with special focus on severity of the mental health problems among this risk group and coping style used by them.

Keywords: *Mental Health, Coping Styles, Remarriage, Divorce*

Introduction

Marriage and divorce are both common experiences. Healthy marriages are good for couple's mental and physical health. They are also good for children, growing up in a happy home protects children from mental, physical, educational and social problems. Some marital relationships are not successful. In a society, few marriages end in divorce. There are many reasons for it. Divorce may be due to physical or sexual abuse, harmful addictions, or criminal acts. In criminal cases, divorce may be needed to defend the spouse and children. Some of divorces are by preference. The husband, the wife or both are discontented. One of the partners finds someone outside the marriage they feel might make them happier. Remarriage is a marriage that takes place after a previous marital union has ended, as through divorce or widowhood. Some individuals are more likely to remarry than others; the likelihood can differ based on previous relationship status (e.g. Divorced vs. Widowed), level of interest in establishing a new romantic relationship, gender, race, and age among other factors. Those who choose not to remarry may prefer alternative arrangements like cohabitation or living apart together. Remarriage also provides mental and physical health benefits. However, although remarried individuals tend to have better health than individuals who do not re-partner, they still generally have worse health than individuals who have remained continuously married. Someone who repeatedly remarries is referred to as a serial wedder. Coping Styles: The Interest on the process by which people cope with stress has grown dramatically (Moos, 1986). Lazarus (1984) noted that stress consists of the three processes, primary appraisal is the process of perceiving a threat to oneself, secondary appraisal is the process of bringing to mind a potential response to the threat, and coping is the process of executing the response. The coping strategies refers to the specific efforts, both behavioral and psychological that people employ to master, tolerate, reduce or minimize stressful events (John &MacArther, 2008). People use certain strategies i.e. problem solving strategies and emotion focused strategies (Folkman& Lazarus, 1980) to cope with stress. Adaptive and maladaptive ways of coping interact to predict negative outcomes associated with stress, such as depression (e.g.,
Brown & Harris, 1989; Monroe, Slavich, & Georgiades, 2009). Investigators differ in how they categorize various forms of coping (e.g.,

emotion-focused vs. problem focused coping; approach vs. avoidance; see Skinner, Edge, Altman, & Sherwood, 2003). Brennon & Fiest (2009) reported two basic types of the coping techniques, first is Positive techniques (adaptive or constructive coping). Positive coping strategy, anticipating a problem, is known as proactive coping. Second is Negative techniques (maladaptive coping or non-coping).While adaptive coping methods improve functioning, a maladaptive coping technique will just reduce symptoms while maintaining and strengthening the disorder. Maladaptive techniques are more effective in the short term rather than long term coping process. The brief cope scale was developed by Carver, 1997; Mental Health: Since 1990, the first full week of October has been designated National Mental Illness Awareness Week. It reminds us all that our mental health is vitally important to our overall health. Mental health strengthens and supports our ability to have healthy relationships, make good life choices, maintain physical health and well-being as well as handle the natural ups and downs of life and discover and grow toward our potential. Mental health largely contributes to the functioning of human relationships. Mental illness can hamper even basic interactions with family, friends, and colleagues. Most people suffering from mental illness find it difficult to nurture relationships, have problems with commitment or intimacy, and frequently encounter sexual health issues. The positive dimension of mental health is stressed in WHO's definition of health as contained in its constitution: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."Objectives Of The Study

1. To study the mental health of women with adaptive and maladaptive coping styles.
2. To examine the mental health of divorced and re-married women.

Hypothesis

1. Women with adaptive coping styles would have better mental health than women with maladaptive coping styles.
2. Re-married women would have better mental health than divorced women.

Methodology

A) Sample

The simple random sampling technique was used for this study. 300 women (150 Adaptive coping style and 150 Maladaptive coping style, N= 300) whose age group ranged from 25 to 50 years have been selected for present study. The samples were taken from Khandesh Division of North Maharashtra Region. Out of the 300 participants- 100 were from Jalgaon District, 100 from Dhule District and 100 from Nandurbar District respectively.

Table 1: Sample Datasheet

District	Jalgaon		Dhule		Nandurbar		Total
Marital Status / Coping Style	Divorced	Re-married	Divorced	Re-married	Divorced	Re-married	
Adaptive	25	25	25	25	25	25	150
Maladaptive	25	25	25	25	25	25	150
Total	50	50	50	50	50	50	300

B) Variables

1. Independent Variable:

A) Marital Status - A1- Divorced, A2- Re-married

B) Coping Style - B1- Adaptive, B-2 Maladaptive

2. Dependent Variable: Mental Health

C) Research Tools

A booklet in Marathi having various psychological questionnaires along with detailed demographic information was used.

1. **Brief COPE:** The Brief Cope Scale was originally developed by Carver (1997). It has 28 items with 14 dimensions (namely self-distraction, active coping, denial, substance use, use of emotional support, use of instrumental support, behavioral disengagement, venting, positive reframing, planning, humor, acceptance, religion, and self-blame.,) every dimension includes two items rated on a 4-point Likert scale.
2. **Mithila Mental Health Status Inventory (MMHSI):** This test (Anand Kumar and Giridhar Thakur, 1984) has five scales viz. Egocentrism, Alienation, Expression, Emotional Un-stability as well as Social Non-conformity.

Analysis And Interpretation

Hypothesis 1- Women with adaptive coping styles would have better mental health than women with maladaptive coping styles.

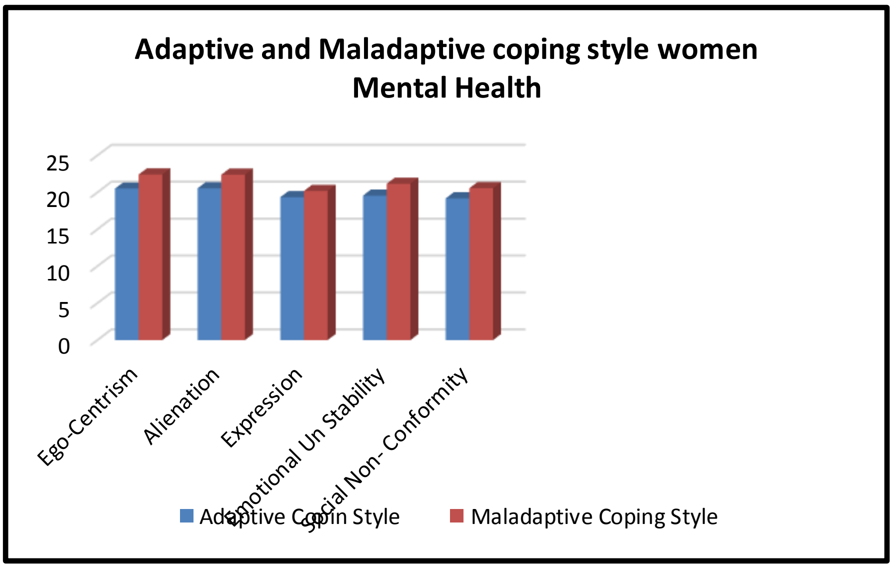
Table no. 2 – Table showing difference between adaptive and maladaptive coping style in various areas of mental health

AREA OF MENTAL HEALTH	TYPES OF COPING STYLE	N	MEAN	SD	T VALUE
EGO-CENTRISM	ADAPTIVE	150	20.53	2.71	5.12**
	MALADAPTIVE	150	22.43	3.64	
ALIENATION	ADAPTIVE	150	20.57	3.05	5.50**
	MALADAPTIVE	150	22.41	2.73	
EXPRESSION	ADAPTIVE	150	19.37	2.87	2.30*
	MALADAPTIVE	150	20.21	3.41	
EMOTIONAL UN STABILITY	ADAPTIVE	150	19.58	2.33	4.79**
	MALADAPTIVE	150	21.18	2.36	
SOCIAL NON-CONFORMITY	ADAPTIVE	150	19.21	2.61	4.63**
	MALADAPTIVE	150	20.58	2.51	
TOTAL MENTAL HEALTH	ADAPTIVE	150	99.26	8.27	6.16**
	MALADAPTIVE	150	106.81	12.52	

df=298, 0.01=2.59, 0.05=1.97 **P < 0.01, *P< 0.05 significant

Table No.2 shows the difference between the groups of adaptive and maladaptive coping style women in the various areas of mental health. It indicates that the 't scores' of all areas are showing significant differences between two groups at the 0.01 and 0.05 levels on 298 df grade respectively. It is concluded that women with maladaptive coping style are more alienated, expressive, emotionally unstable and socially non-conforming than women with adaptive coping style. The obtained 't value' of the egocentrism is 5.12, alienation is 5.50, expression is 2.30, emotional un-stability is 4.79and social non-conformity is 4.63. In order to be significant at 0.05 level, the minimum required value of 't' is 1.97. The computed value of 't' is greater than what is required to be significant 0.05 and 0.01 levels. Though, on the overall mental health domain there is a significant difference between the groups of women with adaptive and maladaptive coping styles. The obtained 't value' of these groups is 6.16 (t (298) = 6.16, p<0.01). In order to be significant at 0.01, the minimum required value of 't' is 2.59. Thus the obtained value is larger than what is required to be significant at 0.01 levels; it is proved as significant at 0.01 levels. A high score on MMHSI is indicative of poor mental health. This means women with adaptive coping styles have better mental health than women with maladaptive coping styles. The results have supported hypothesis no. 1 stating that Hy. No.1. Women with adaptive coping styles would have better mental health than women with maladaptive coping styles.

Graph No.1 -Showing the mean difference of mental health with reference to coping style.



Hypothesis 2- Re-married women would have better mental health than divorced women.

Table no. 3- Table showing difference between re-married and divorced women in various areas of mental health.

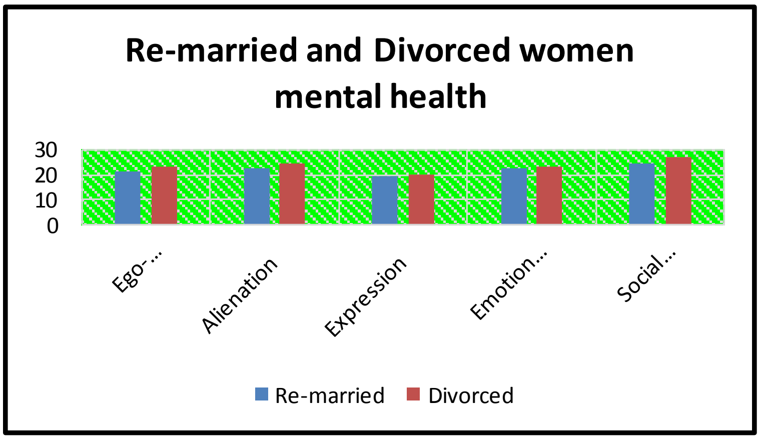
Area of Mental Health	Marital Status	N	Mean	SD	t value
Ego-Centrism	Re-married Women	150	21.53	3.71	4.61**
	Divorced Women	150	23.23	2.56	
Alienation	Re-married Women	150	22.57	3.05	4.67**
	Divorced Women	150	24.41	3.73	
Expression	Re-married Women	150	19.37	2.87	2.30*
	Divorced Women	150	20.21	3.41	
Emotional Un Stability	Re-married Women	150	22.58	2.33	1.79
	Divorced Women	150	23.18	3.36	
Social Non-Conformity	Re-married Women	150	24.21	3.61	6.60**
	Divorced Women	150	26.58	2.51	
Total Mental Health	Re-married Women	150	110.26	11.27	5.23**
	Divorced Women	150	117.61	12.98	

df=298, 0.01=2.59, 0.05=1.97 **P < 0.01, *P< 0.05 significant

The above table shows the difference between the groups of re-married and divorced women in the various areas of mental health. It indicates that the 't scores' of all areas except emotional un-stability are showing significant differences between two groups at the 0.01 and 0.05 levels on 298 df grade respectively. It can be concluded that the divorced women are more alienated, expressive, and socially non-conforming than re-married women. The obtained 't value' of the egocentrism is 4.61, alienation is 4.67, expression is 2.30, and social non-conformity is 6.60. In order to be significant at 0.05 level; the minimum required value of 't' is 1.97. Since the computed value of 't' is greater than what is required to be significant 0.05 and 0.01 levels; Though, a significant difference was found between the groups of re-married and divorced women on overall mental health domain. The obtained 't value' of these groups is 5.23 (t (298) = 5.23, p<0.01). In order to be significant at 0.01, the minimum required value of 't' is 2.59. Thus the obtained value is larger than what is required to be significant at 0.01 levels; it is proved as significant at 0.01 levels.

Findings indicate that re-married women have better mental health than divorced women. The results have supported hypothesis no. 1 stating that Hy. No. 2. Re-married women would have better mental health than divorced women.

sGraph No.2 - Showing mean difference of mental health with reference to marital status.



Conclusions

1. Women who use adaptive coping styles have better mental health as compared to those who adopt maladaptive coping. Women who use maladaptive coping style are more alienated, less expressive, emotionally unstable, and socially non-conforming.
2. Divorced women are more alienated, less expressive, and socially non-conformists than remarried. In some communities remarriage is forbidden practice in our country. As a society we need to promote remarriages so that divorced women can lead a quality life.

References

1. Al-Khathami AD and Ogbeide DO. "Prevalence of mental illness among Saudi adult primary-care patients in Central Saudi Arabia". Saudi Med J. **(2002);**23(6):721-4. PMID: 12070556.
2. Barrett, Anne E. "Marital Trajectories and Mental Health." *Journal of Health and Social Behavior* 41, no. 4 **(2000)**: 451–64. https://doi.org/10.2307/2676297.
3. Carr, Deborah. "Mental health of older widows and widowers: Which coping strategies are most protective?." *Aging & Mental Health* 24, no. 2 **(2020):** 291-299.*Cherlin A. J. Cambridge, "Marriage, divorce, remarriage", MA: Harvard University Press,* ***(1992).***
4. Trivedi, J. K., Himanshu Sareen, and Mohan Dhyani. "Psychological aspects of widowhood and divorce." *Mens sana monographs* 7, no. 1 **(2009)**: 37.
5. *Holmes T. H. and Rahe R. H., "The social readjustment scale. Journal of Psychosomatic Research",* ***(1967);****17:213–218.*
6. *Niaz U. and Hassan S.,"Culture and mental health of women in South-East Asia", World Psychiatry.****(2006)****;5.*
7. Li, Xiaomin, Quanbao Jiang, Xinfeng Cheng, and Tingshuai Ge. "Remarriage After Divorce and Health in Later Life: Findings From CHARLS in China." *Journal of Family Issues* **(2021):** 0192513X211054464.
8. *Women in Indian society: A reader (44-68). Sage Publication, New Delhi,****(1988).***
9. Gähler, Michael. ""To divorce is to die a bit...": A longitudinal study of marital disruption and psychological distress among Swedish women and men." *The Family Journal* 14, no. 4 **(2006)**: 372-382.
10. Kendler, Kenneth S., John M. Hettema, Frank Butera, Charles O. Gardner, and Carol A. Prescott. "Life event dimensions of loss, humiliation, entrapment, and

danger in the prediction of onsets of major depression and generalized anxiety." *Archives of general psychiatry* 60, no. 8 **(2003):** 789-796.

11. Shapiro, Adam D. "Explaining psychological distress in a sample of remarried and divorced persons: The influence of economic distress." *Journal of Family Issues* 17, no. 2 **(1996):** 186-203.
12. Luhmann, Maike, and Michael Eid. "Does it really feel the same? Changes in life satisfaction following repeated life events." *Journal of personality and social psychology* 97, no. 2 **(2009)**: 363.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

BANKING SECTOR REFORM IN INDIA BEFORE AND AFTER GLOBALIZATION

Kavita Muttappa
Assistant Professor Dept of Commerce Govt First Grade College for Women Bagalkote Karnataka
***Corresponding Author*- Kavita Muttappa**
Email : kavitabagalkot@gmail.com
DOI-10.5281/zenodo.7267306

Introduction

The Indian banking sector has witnessed a sea change over the years. There is a tremendous change in the banking operations during the pre and post nationalization era. several committees were appointed to examine the productivity of the banking operations and to suggest the measures for improving the bank performance. Among them, the era of globalization has witnessed significant changes in the various functional areas of the banks and some of the policy measures adopted by the banking industry has changed the contours of the structures of the banks and improved the bottom lines of the banks. Hence it is needed to examine the various banking sector reforms initiated in Indian banking.

Banking Sector Reforms in India

The financial development was given impetus with the adoption of social control over banks in1967 and subsequently nationalization of 14 major scheduled banks in July 1969. Since then, the banking system has formed the core of the Indian financial system. In the three decades following the first round of nationalization (the second round consisted of 6 commercial banks in April, 1980), aggregate deposits of scheduled commercial banks have increased at a compound annual average growth rate of 17.8 per cent during this period (1969 to1999), while bank credit expanded at the rate of 16.3 per cent per annum. With branches of more than 67,000 of which 48.7 percent being rural, touching the lives of millions of people every day, the Indian banking sector constitutes the most significant segment of the financial system of India.

The financial sector reforms started in 1991 had provided the necessary platform for the banking sector to operate based on operational flexibility and functional autonomy enhancing productivity, efficiency and profitability. While several committees have gone into the problems of commercial banking in India, the two most important of them are:

Narasimhan Committee I (1991)

Narasimhan Committee II (1998): These committees proposed various reforms in order to improve the profitability and efficiency of the banking system.

Indian Banking Sector in Pre-Reform Period

Banking is an ancient business in India. Initially, the growth of Indian banks was very slow and also experienced periodic failures between 1913 and 1948. To streamline the functioning and activities of commercial banks, the Government of India came up with The Banking Companies Act, 1949 which was later changed to Banking Regulation Act, 1949 as per amending Act of 1965 (Act No. 23 of 1965).

First phase

During the pre-nationalization era the process of deposit mobilization was very slow due to lack of confidence of the public on the banks. After independence Government of India has initiated several measures to improve the productivity and profitability of banks. On 19th July 1969, major process of nationalization was carried out, it was the effort of the then Prime Minister of India, Mrs. Indira Gandhi. Fourteen major commercial banks were nationalized.

Second phase

Nationalization of Indian banking sector reform was carried out in 1980 with seven more banks having deposits over 200 crores. This step brought 80 percent of the banking segment in India under Government ownership. After the nationalization, the branches of the public sector bank in India rose to approximately 800 percent and deposits and advances took a huge jump by 11,000 percent. Thus, the Indian banking system became predominantly government owned by the early 1990s. Therefore, during pre-reform period the banking sector performance was very poor due to excessive loans in comparison to total deposits exceeding up to 90% of deposits. In addition, continuous escalation in non-performing assets (NPAs) in the portfolio of banks also posed a significant threat to the very stability of the financial system.

Indian Banking Sector in Post Reform Period

As the Indian banking system had become predominantly government owned by the early 1990s, banking sector reforms essentially took a two-pronged approach. The approaches are as follows

The level of competition was gradually increased within the banking system while simultaneously introducing international best practices in prudential regulation and supervision tailored to Indian requirements. In particular, special emphasis was placed on building up the risk management capabilities of Indian banks while measures were initiated to ensure flexibility, operational autonomy and competition in the banking sector. Active steps were taken to improve the institutional arrangements including the legal framework and technological system. The supervisory system was revamped in view of the crucial role of supervision in the creation of an efficient banking system. Measures to improve the health of the banking system had included: Restoration of public sector banks net worth through recapitalization where needed Streamlining of the supervision process with combination of on-site and off-site surveillance along with external auditing

During the 1990's quite a few new private sector banks made their appearance, predominantly floated by public sector or quasi-public sector financial institutions. Several foreign banks also made their entry into the Indian banking scenario while the existing foreign banks expanded their operations. Meanwhile, the performance of public sector banks continued to be saddled with operational and lending inefficiencies. The Verma Committee, in 2000 identified Indian Bank, UCO Bank and United Bank of India as the weakest of the twenty-seven public sector banks, in terms of NPAs and accumulated losses. In March 2002, the gross NPAs of scheduled commercial banks amounted to Rs. 71,000 crores out of which Rs. 57,000

Indian Banking Sector Reforms In 1991

In 1991, the country was caught into a deep crisis. The government at this juncture decided to introduce comprehensive economic reforms. The banking sector reforms were part of this package. The main objective of Indian banking sector reforms was to promote a diversified, efficient and competitive financial system with the ultimate goal of improving the efficiency of resources through operational flexibility, improved financial viability and institutional strengthening.

In August 1991, the Government appointed a committee under the chairmanship of M. Narasimhan, which worked for the liberalization of banking practices. The aim of this Committee was to bring about operational flexibility and functional autonomy to enhance efficiency, productivity and profitability of banks.

The Committee submitted its report in November 1991 and recommended;

1. Reduction in CRR to 8.5 percent and SLR to 25 percent over a period of about five years.
2. Deregulation of interest rate structure and decreasing the emphasis laid on directed credit and phasing out the concessional rates of interest to priority sector.
3. To raise fresh capital through public issue by the profit-making banks.
4. Transparency in Balance sheets.
5. Establishment of Special Tribunals to speed up the process of debts recovery.

The Government also appointed another committee on banking sector reforms under the Chairmanship of M. Narasimhan which submitted its report in April 1998. The committee focused on bringing about structural changes to strengthen the foundations of the banking system to make it more stable.

Narasimhan Committee on Banking Sector Reform 1&2

Since 1991, the Indian financial system has undergone radical transformation. Reforms have altered the organizational structure, ownership pattern and domain of operations of banks, financial institutions and non-banking Financial Companies (NBFCs). The main thrust of reforms in the financial sector was the creation of efficient and stable financial institutions and markets. Reforms in the banking and nonbanking sectors focused on creating a deregulated environment, strengthening ensuring the prudential norms and the supervisory system, changing the ownership pattern and increasing competition.

During the 1991 where India was facing economic crisis and emerged as third largest economy in the world by 2011, India has grown significantly in terms of economic development. During this period, recognizing the evolving needs of the sector, the Finance Ministry of Government of India (GOI) set up various committees with the task of analyzing India's banking sector and recommending legislation and regulations to make it more effective, competitive and efficient. Two such expert Committees were set up under the chairmanship of M. Narasimhan. They submitted their recommendations in the 1990s in reports widely known as the Narasimhan Committee-I (1991) report and the Narasimhan Committee-II (1998) Report. These recommendations not only helped unleash the potential of banking in India, they are also recognized as a factor towards minimizing the impact of global financial crisis starting in 2007. Unlike the socialist-democratic era of the 1960s to 1980s, India is no longer insulated from the global economy and yet its banks survived the 2008 financial crisis relatively unscathed, a feat due in part to these Narasimhan Committees.

Recommendations of the Committee

Autonomy in Banking

Greater autonomy was proposed for the public sector banks in order to function with equivalent professionalism as their international counter parts. For this the panel recommended that recruitment procedures, training and remuneration policies of public sector banks be brought in line with the best-market-practices of professional banking Going ahead with bank mergers. It also recommended the RBI relinquish its seats on the board of directors of these banks. The committee further added that given that the government nominees to the board of banks are often members of parliament, politicians, bureaucrats, etc., they often interfere in the day-to-day operations of the bank in the form of the behest lending.

Reform suggested in the role of RBI

First, the committee recommended that the RBI withdraw from the 91-day treasury bills market and that interbank call money and term money markets be restricted to banks and primary dealers. Second, the Committee proposed a segregation of the roles of RBI as a regulator of banks and owner of bank. It observed that the Reserve Bank as a regulator of the monetary system should not be the owner of a bank in view of a possible conflict of interest. As such, it highlighted that RBI's role of effective supervision was not adequate and wanted it to divest its holdings in banks and financial institutions.

Stronger Banking System

The Committee recommended for merger of large Indian banks to make them strong enough for supporting international trade. It recommended a three-tier banking structure in India through establishment of three large banks with international presence, eight to ten national banks and a large number of regional and local banks.

Capital Adequacy and Tightening of Provisioning Norms

To improve the inherent strength of the Indian banking system the committee recommended that the Government should raise the prescribed capital adequacy norms. This would also improve their risk-taking ability. The committee targeted raising the capital adequacy ratio to 9% by 2000 and 10% by 2002 and have penal provisions for banks that fail to meet these requirements. For asset classification, the Committee recommended a mandatory 1% in case of standard assets and for the accrual of interest income to be done every 90 days instead of 180 days.

Features of Banking Sector Reform in India

The reforms were not driven by any banking crisis nor were they an outcome of any external support package. They were undertaken much before the implementation of the financial sector to prevent crisis was recognized by international agencies and other countries in early 1990s before the Asian financial crisis. Financial sector reform was undertaken early in the reform-cycle in India.

The reforms were carefully sequenced in terms of instruments and objectives. Thus, prudential norms and supervisory strengthening were introduced early in the reform cycle, followed by interest rate deregulation and gradually lowering of statutory preemptions. The more complex aspects of legal and accounting measures were ushered in subsequently when the basic tenets of the reforms were already in place. More recently, the regulatory framework has also focused on ensuring good governance through "fit and proper" owners, directors and senior managers of the banks. The preference has been for diversified ownership.

While the focus of first generation of reforms was to create an efficient, productive and profitable financial services industry, the second phase of financial sector reforms, beginning from the second-half of the 1990s, was aimed at strengthening of the financial system and introduction of structural improvements

Major Banking Sector Reforms of 21st Century

Below given major financial sector reforms in the recent years in India. All of them are aimed at creating efficient and stable financial sector, which contributes in a major way to stimulate growth.

Major reforms are

The passage of Banking Laws (Amendment) Bill, 2011 has paved way for the entry of more banks and foreign investments. The entry of new banks is expected to create competition, which will enable banks to improve their operational efficiency.

FDI ceiling for the banking sector got increased from 49% to 74%.

Liberal branch licensing policy has been adopted.

RBI has issued guidelines for priority sector lending certificates (PSLCs) to meet the priority sector lending targets.

The most prominent aftermath of the reforms is the increase in competition and impact on profitability of banks. The challenge for banks now is to manage the narrowing down of the profit margins while at the same time improving the productivity. Other challenges include reinforcing and adapting better technology to meet the customer needs, sharpening of management skills, greater customer orientation, sharpening of risk management skills etc. With ever-increasing competition, banks have to address the above issues if they need to survive in the changing millennium.

References

1. Singh S. (2007). “Banking sector reforms:” essay, kanishka publication.
2. Tomar M. S., & Yadav B. S. (2010). “Banking sector reforms in India: problems and prospects”, shree publishers & distributors.
3. Uppal R. K. & Kaur R. (2006). “Banking sector reforms in India: A review of post 1991 developments”, essay, new century publications.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

AGGRESSION OF THE INTER COLLEGE LEVEL PLAYERS OF SAMBALPUR UNIVERSITY: A STUDY

Mr. Abinash Kar[1] ***Dr. Devendra Nath Behera***[2]
[1]*PhD Research Scholar, Utkal University, Bhubaneswar, Odisha*
[2]*Principal, Government College of Physical Education, Bhubaneswar, Odisha*
Corresponding Author- **Mr. Abinash Kar**
Email id: abinashsports@gmail.com

DOI- 10.5281/zenodo.7267325

Abstract:
Aggression is one of the most common factors the sports persons experience during the game. It is both positive and negative. When it becomes excessive leads to be out of the game or some physical injury. But within a limit the aggression may improve the game or conquering the opponent. The researcher's main objective of this study is to find out the aggression in terms of physical aggression, verbal aggression and hostility of the college level players of the Sambalpur University. In the current study the researcher has selected different colleges under Sambalpur University. Out of the selected colleges 309 sports players have been selected as the sample of the study. Descriptive statistics (such as Mean, Standard deviation, Skewness and Kurtosis) were used for understanding the characteristics of the data. Chi Square effective value has also been used data analysis. All the statistical analysis was done by using SPSSV24. The level of significance was fixed at 0.05 levels.

Keywords: *Aggressiveness, Ability to Discriminate. Part of the Game. Physical Harm or Mental Distress.*

Introduction:

Aggression is any interpersonal habits supposed to motive bodily damage or intellectual distress to a man or female or persons. In the sports things to do activities matters to do things to do matters to do context, aggression can be described as an unprovoked bodily or verbal assault, and aggressiveness as the intent to commit such an assault. Aggression has in addition been described as 'an overt verbal or bodily act that can psychologically or bodily injure any notable persona or oneself'. Aggression in modern-day day stipulations is regional and parcel of any cutting-edge sport. Over the previous twenty years, most sports activities things to do things to do matters to do matters to do matters to do things to do matters to do have been present day day approach drastic changes, and a fluctuate of bother areas have been placed and addressed that form the core of sports activities matters to do matters to do matters to do matters to do things to do research. Aggression has prolonged been a nearby of the mission domain. Indeed, Russell (1993, p. 191) precipitated that outside of wartime, sports activities things to do things to do matters to do is perchance the barring a doubt inserting in which acts of interpersonal aggression are no longer certainly tolerated then as shortly as more enthusiastically applauded with the really helpful aid of the use of way of large segments of society. In contemporary day years, however, violence in sport, every on and off the field, has come to be perceived as a social problem. For instance, commissions have been appointed in Canada, United Kingdom, and Australia to showcase off up at violence in the athletic inserting (National Committee on Violence, 1989; Pipe, 1993). In the United States, Canada, Germany, United Kingdom, and Australia, courtroom docket stipulations have been heard associated to the sport-related victims or perpetrators of aggressive acts.

Terry and Jackson (1985) described aggression in pastime as: 'harm-inducing habits bearing no direct relationship to the aggressive wishes of sport, and relates, therefore, to incidents of uncontrolled aggression outdoor the insurance plan layout format insurance policies of sport, as a wish than especially aggressive habits indoors the rule boundaries.' Aggressive and violent strikes which would per threat be illegal out of doorways sport, or in supposedly non-contact sports activities things to do things to do things to do things to do things to do like Basketball, Football, Cricket, etc. are penal frustrating and allowed in the context of combat sports things to do things to do things to do matters to do like Judo, Karate and Wrestling, or crew contact sports activities things to do matters to do things to do matters to do matters to do things to do things to do like Rugby, American soccer and Ice hockey. All these sports activities things to do matters to do things to do matters to do are characterised with the useful advisable beneficial resource of immoderate tiers of aggression and in many conditions violent bodily contact which can moreover in addition be inside the insurance policies of the undertaking and now no longer supposed to injure. The equal structure of behaviour outside the sports things to do matters to do matters to do things to do things to do context can also moreover additionally in addition then as unexpectedly as greater be described as criminal. Participants in these sports activities matters to do things to do have in addition every day the inevitability of tough contact and viable injury in these sports. A excessive diploma of aggression that is no longer in line with aggressive spirit is illegitimate and every now and then even illegal. In some sports, however, there seems to be a grey close with the aid of the neighborhood aggression is each and each day with the truly beneficial aid of 'victims' as a reliable neighborhood of the game.

Aggressive habits can be categorized in accordance to the quintessential reinforcement sought by means of capacity of the act. Hostile aggression is where the quintessential reward, or intent, is to inflict upon some other for its very own sake. Instrumental aggression, on the exceptional hand, is the place the primary reinforcement is the success of a subsequent goal. In this case, an athlete can also additionally intend to injure the opponent, on the other hand the most essential aim to be carried out by using the usage of the aggression act is to win the competition, to be recounted with the aid of the coach, and the like.

Physical factors, such as heat, noise, and crowding have been espoused as reasons of aggression in sport, in particular amongst spectators. What emerges from the research, however, is that these elements appear to be facilitators of aggression (i.e., they interact with specific variables to produce aggression in prerequisites in which the propensity for aggression already exists). Other elements that have consistently been linked with acts of spectator vandalism and hooliganism world encompass alcohol abuse, the presence of rival followers who are contributors of corporations that are at odds in the giant society, and preceding occurrences of athlete aggression in the competition itself. Coalter (1985) informed that seating, the segregation of rival fans, and ban of alcohol are excellent in decreasing spectator violence only when provided in aggregate rather than separately. Behavior that inflicts harm upon another, either bodily or psychological, and bears no direct relationship to the competitive dreams of endeavor is unacceptable. Whether categorised as adverse or instrumental, if these deliberately risky acts lead to accidents that transcend the aggressive event per se, then such behaviors have to be deemed inappropriate as well. In contrast, an assertive habit that falls within the guidelines needs to be considered "part of sport."

Review Of Literature

K Krishnaveni,2014 Aggression and violence have emerge as frequent in existing day sporting events, in the main these that have excessive emotional content. Whatever the diploma of aggression, it can be minimized with the useful resource of adopting a systematic method at the psychological and sociological levels. Tolerance and empathy on the segment of the organizers and the coach, observed with the aid of means of ideal teaching to the athlete may be the solution.

Nezabravka Gencheva, 2015 The Competitive Aggressiveness and Anger Scale (CAAS) seems to be a useful measure of athletic anger and aggressiveness. Its ability to discriminate aggressive from non-aggressive athletes ought to exhibit useful for future lookup concerning aggressive behaviour in aggressive athletes. Our study viewed serious questions for reflection. The aggressive inclinations in some sports activities and some carrying stipulations are a decent section of the game, due to the fact they lead to high degree typical overall performance in undertaking competition, alternatively which is the most essential indicator for the accumulation of anger and aggression in opposition to the opponent`s players, the referee and the spectaculars in the direction of the competition? Whether this indicator is the sturdy frustration or the lack of forming a mind-set for restraining aggressiveness and abilities for willpower and overcoming their own thoughts or the internalization of position models? In the find out about there is now not the relation between some private traits and aggressive behavior. In our opinion extra crucial is that the children be conscious of how to manage and to overcome the anger and the aggressive attitudes out of the sport areas which is the simple project of undertaking pedagogy.

Dehghani mahrokh, 2012 Aggression is a bad personality trait that has been associated with endeavor participation. From a psychological perspective, aggression has been described in accordance to Baron's (1977) conceptualization of aggression as any physical, intellectual or verbal conduct driven via the usage of the intent to harm each person who is inspired to keep away from such treatment. Because of the have an effect on of aggressive behavior on athletic performance, the motive of this examine about used to be the assessment of aggression of soccer gamers in fantastic positions.

Rui Sofia et al, 2017 furnish a preliminary, on the one-of-a-kind hand in addition an quintessential empirical and conceptual contribution to the comprehension of anger and aggression in sport. It looks that athletes from sports activities matters to do activities with larger bodily contact, and these from limit aggressive instructions (also youthful and/or a lot a lot a lot much less experienced), have a tendency to be greater aggressive. However, the go sectional characteristics of the study, as suitable as the truth that it relied on self-report measures signify quintessential boundaries that have to be accounted for. For instance, the inclusion of huge gender balanced samples or groups, the use observational and precise informant-reported measures, as proper as the use of mixed-research designs or diary search for can provide new insights on this phenomenon. Finally, the discover out about elements out the pick out out for giant precision and massive distinction on what is considered, in magnificent sports, unlawful or socially legitimized aggressive behaviour or bodily contact. These penalties in addition show up to suggest the core attribute of anger rumination and provocation in anger and aggression in sport, which are truely central techniques that pick out to be elevated deeply studied.

Joseph Kwame Mintah, 2017 On the whole, of us in this find out about do now no longer assume about any shape of contact that takes neighborhood in the game of soccer as adversarial or instrumental aggression. They see every contact that takes vicinity in soccer as each and each and every day phase of the activity with no intent to harm or hurt, and for this reason do now no longer see the select out to justify it as horrible or instrumental. In effect, they do no longer choose out out it quintessential to have one-of-a-kind morality in undertaking and in life. The implication is that soccer as a excessive university exercising is a fertile ground for inserting up persona as it does now not perpetuate acts of aggression. Therefore, massive immoderate university college university college students in Ghana have to be inspired to take section in it. In addition, senior immoderate faculties in the United States have to proceed to put in stress the moral and moral values that have modified these youthful adults to discover out any shape of aggression as unacceptable in soccer.

Statement of the Problem: Aggression is one of the most common factors the sports persons experience during the game. It is both positive and negative. When it becomes excessive leads to be out of the game or some physical injury. But within a limit the aggression may improve the game or conquering the opponent. Therefore the researcher has selected his study entitled "Aggression of the College level players of Sambalpur University: A Study"

Objective: The researcher's main objective of this study is to find out the aggression in terms of physical aggression, verbal aggression and hostility of the college level players of the Sambalpur university.

Hypothesis: The researcher in the present study hypothesized that the college level player of Sambalpur University experience aggression.

Methodology

Selection of Variables : Considering the demand of the objective of the study and On the basis of review of literature, expert's opinion, facilities & instruments availability the main variable in the present study is the Aggression.

The Research Tool : Present investigation is related to find out the sports competition anxiety among college level players. So for fulfilling the objectives of the study 'Sports Aggression Inventory' have been used for collecting the required data.

Sampling : In the current study the researcher has selected different colleges under Sambalpur University. Out of the selected colleges 309 sports players have been selected as the sample of the study. For this random sampling method has been used.

Statistical Technique: Descriptive statistics (such as Mean, Standard deviation, Skewness and Kurtosis) were used for understanding the characteristics of the data. Chi Square effective value has also been used data analysis. All the statistical analysis was done by using SPSSV24. The level of significance was fixed at 0.05 levels.

Data Analysis And Interpretation

Table 1: Descriptive Statistics for Aggression

	Anger	**Hostility**	**Physical Aggression**	**Verbal Aggression**	**Overall Aggression**
Mean	19.323	22.2621	24.6214	13.6084	79.8155
Std. Deviation	4.6373	6.34449	5.59415	4.24938	17.76638
Skewness	0.081	-0.108	0.084	0.090	-0.003
Std. Error of Skewness	0.139	0.139	0.139	0.139	0.139
Kurtosis	-0.095	0.134	0.335	-0.253	0.545
Std. Error of Kurtosis	0.276	0.276	0.276	0.276	0.276
Minimum	7.00	8.00	9.00	5.00	37.00
Maximum	31.00	40.00	41.00	25.00	137.00

From the above table (Table 1) it can be seen that the data follows a normal distribution as the skewness and kurtosis value is less than twice its standard error value (Raizada&Bagchi, 2017; Verma, 2012).

Table 2: Percentile Score for Aggression

Percentile	Anger	Hostility	Physical Aggression	Verbal Aggression	Overall Aggression
10	13	14	17	8	56
20	15	17	20	10	67
30	17	19	22	11	72
40	18	21	23	12	78
50	20	23	25	13	81
60	21	24	26	15	85
70	22	25	27	16	88
80	23	27	29	17	92
90	25	30	32	19	101

Table 2 shows the Percentile Score for Sports Competition Anxiety Test (SCAT), Sports Achievement Motivation (SAM) and Aggression, where it can be seen that all the sub-factors for aggression such as Anger, Hostility, Physical Aggression and Verbal Aggression is also reported in the table. This was done to provide a better understanding of the data set. It would not be advisable to compare the data for each of the selected variables as the maximum value for measurement is different. To compare between the variables, the data set needs to be transformed.

Table 3: Aggression Overall Frequency Summary

Score	Frequency	Percentage
Greater Than Equal to 50% (73)	216	69.90
Greater Than Equal to 60% (87)	104	33.66
Greater Than Equal to 70% (102)	30	9.71
Greater Than Equal to 80% (116)	6	1.94
Greater Than Equal to 90% (131)	4	1.29

Table 3 shows the summary of participants frequency and percentage with participants overall scores in Aggression. It is found that 69.90% of the participants have scored more than 50% in Aggression. This means that overall all the male athletes are found to have above-average aggression.

Table 4: Aggression Chi-Square and Effect Size values

Sr. No.	Questions		Parameter	Chi square value	Sig. value	Effect size (phi)
1.	Some of my friends think I am a hothead		Anger	36.03	0.000	0.34
2.	If I have to resort to violence to protect my rights, I will.		Physical Aggression	7.88	0.096	0.16
3.	When people are especially nice to me, I wonder what they want.		Hostility	4.09	0.394	0.12
4.	I tell my friends openly when I disagree with them.		Verbal Aggression	13.28	0.010	0.21
5.	I have become so mad that I have broken things.		Physical Aggression	57.10	0.000	0.43
6.	I can't help getting into arguments when people disagree with me.		Verbal Aggression	31.34	0.000	0.32
7.	I wonder why sometimes I feel so bitter about things.		Hostility	12.54	0.014	0.20
8.	Once in a while, I can't control the urge to strike another person.		Physical Aggression	41.34	0.000	0.37
9.*	I am an even-tempered person.		Anger	25.87	0.000	0.29
10.	I am suspicious of overly friendly strangers.		Hostility	7.13	0.129	0.15

11.	I have threatened people I know.		Physical Aggression	76.62	0.000	0.50
12.	I flare up quickly but get over it quickly.		Anger	9.82	0.440	0.18
13.	Given enough provocation, I may hit another person.		Physical Aggression	93.31	0.000	0.55
14.	When people annoy me, I may tell them what I think of them.		Verbal Aggression	21.21	0.000	0.26
15.	I am sometimes eaten up with jealousy.		Hostility	57.39	0.000	0.43
16.*	I can think of no good reason for ever hitting a person.		Physical Aggression	50.56	0.000	0.40
17.	At times I feel I have gotten a raw deal out of life.		Hostility	33.06	0.000	0.33
18.	I have trouble controlling my temper.		Anger	40.76	0.000	0.36
19.	When frustrated, I let my irritation show.		Anger	27.13	0.000	0.30
20.	I sometimes feel that people are laughing at me behind my back.		Hostility	11.70	0.020	0.19
21.	I often find myself disagreeing with people.		Verbal Aggression	26.91	0.000	0.30
22.	If somebody hits me, I hit back.		Physical Aggression	11.11	0.025	0.19
23.	I sometimes feel like a powder keg ready to explode.		Anger	39.07	0.000	0.36
24.	Other people always seem to get the breaks.		Hostility	41.41	0.000	0.37
25.	There are people who pushed me so far that we came to blows.		Physical Aggression	16.52	0.002	0.23
26.	I know that “friends” talk about me behind my back.		Hostility	23.18	0.000	0.27
27.	My friends say that I’m somewhat argumentative.		Verbal Aggression	38.49	0.000	0.35
28.	Sometimes I fly off the handle for no good reason.		Anger	30.30	0.000	0.31
29.	I get into fights a little more than the average person.		Physical Aggression	65.09	0.000	0.46

Note: Effect size value of Phi ≥ 0.5 is considered to be a large magnitude, Phi ≥ 0.3 is considered to be a medium magnitude and Phi ≥ 0.1 is considered to be a small magnitude.

The above table (Table 4) consists of Chi-Square and effect size values for each question. All the questions were found to be significant, as the p-value is less than 0.05. The effect size shows the magnitude of the association. It can be seen from the above table that the effect size for all the questions is between medium to a large magnitude.

Conclusion: In general, common aggression seems to have and have an effect on the motivation of players. Performance used to be quite influenced with the aid of ability of the use of aggression, fulfillment motivation, and anxiety, whereas the former had a horrific effect. Anger and Hostility are two essential factors of performance. They are generally viewed in each and every athlete at some point in time, regardless of any video games or sports, may additionally moreover in addition it is persona workout or crew sport. Various researches are carried out to hit upon out they have an effect on of Anger

References:

1) Ali, A. (2011). Measuring soccer skill performance: a review. *Scandinavian journal of medicine & science in sports*, *21*(2), 170-183.
2) Ajmer Singh, Jagdish Bains, Jagtar Singh Gill, R.S.Brar and NimaljitKaurRathee, (2003) Essentials of Physical Education, New Delhi, Kalyani Publishers.
3) *Abraham, Sanju M (2000). “The Comparative Effect Of KapalbhatiSuryabhedna, their Combination on Cardio-Respiratory*

Endurance and Selected Physiological Variables', (Unpublished Master's Thesis, LNIPE, 2000).
4) Bangsbo J. (1994). The Physiology of Soccer. Acta PhysiolScand: 151(Suppl.): 1–155.
5) Bangsbo, J. (1997). The physiology of intermittent activity in football. In: *Science and Football III*, 43-53.
6) *Chattopadhyay,T.K(1982).“Acomparativestudyofphysicalfitnessofsoccerand Hockey Players” (unpublished master's thesis, Jiwaji University,1982).*
7) *Chakraborti, Gopal (1979). “Comparative Effects of Endurance Running and Vigorous Free Hand Exercises on Selected Physiological Variables,” (Unpublished Master's Thesis, Jiwaji University,1979).*
8) Dorge, H., Bull-Andersen, T., Sorensen, H. and Simonsen, E. (2002). Biomechanical differences in soccer kicking with the preferred and the non-preferred leg. *Journal of Sports Sciences* 20, 293-299.
9) Eisenmann, J.C. and Malina, R.M. (2003) Age- and sex-associated variation in neuromuscular capacities of adolescent distance runners. *Journal of Sports Sciences* 21(7), 551-557.
10) Hadi, N., &Hadi, N. (2007). Effects of hatha yoga on well-being in healthy adults in Shiraz, Islamic Republic of Iran. *Eastern Mediterranean Health Journal*, *13*(4), 829-837.
11) Krishnamurtety, N., & Pal, G. (2002). Modulation of cold pressor-induced stress by shavasan in normal, adult volunteers. *Indian J PhysiolPharmacol*, *46*(3), 307- 312.
12) Morya, E., Ranvaud, R. and Pinheiro, W.M. (2003) Dynamics of visual feedback in a laboratory simulation of a penalty kick. *Journal of Sports Sciences* 21, 87-95.
13) Peter, R., Sood, S., & Dhawan, A. (2015). Spectral parameters of HRV in yoga practitioners, athletes and sedentary males. *Indian J PhysiolPharmacol*, *59*(4), 380-387.
14) Reese, L. M. S., Pittsinger, R., & Yang, J. (2012). Effectiveness of psychological intervention following sport injury. *Journal of Sport and Health Science*, *1*(2), 71- 79.

International Journal of Advance and Applied Research

www.ijaar.co.in

ISSN – 2347-7075 Impact Factor – 7.328

Peer Reviewed Bi-Monthly

Vol.3 No.1 Sept – Oct 2022

IMPACT OF SCHOOL TYPE ON THE PERSONALITY OF GOVERNMENT AND PRIVATE SCHOOL STUDENTS OF MEERUT DISTRICT

Prof. (Dr.) Munendra Kumar

Professor & Head Education Department Kishan Institute of Teachers Education, (Affiliated By CCS University, Meerut) Near Amar Ujala Delhi Road Meerut, U.P. India

***Corresponding Author*- Prof. (Dr.) Munendra Kumar**

Email id: drmunendra2013@gmail.com

DOI-10.5281/zenodo.7267364

Abstract:-

Personality is the integration of all of a Person's traits, abilities and motives as well as his temperament, attitudes, opinions beliefs, emotional responses, cognitive styles, character and morals. So the term personality encompasses all aspects of human behavior. The aim of this study is to identify the impact of this Study type on the Personality of Government and Private School Students of Meerut District of Uttar Pradesh. A Sample of 440 School Students was selected from Meerut District in this study Personality was dependent variable and school type was independent variable. The 16 (sixteen personality factor Questionnaire (16PF) by R.B. Cattell was used to analyze the personality.Mean; SD and t-test are used for calculation, Analyzes and interpretation of Data. Result revalid that there was significant difference in the personality of Government and private school Students.

Keywords: Personality, School Type Government School, Private School, Students.

Introduction:-

Personality is organized and dynamic set of characteristics possessed by an individual that uniquely influences their motivation, cognition, environment, motion and behavioral Science in various situation.The word Personality which comes from the Latin word persona meaning of persona is mask. It also refers to the pattern of the feeling, Social adjustment, thought and behavior which consistently exhibited over the period that completely affects one's attitude, self-perception, expectation and value. Personality is the dynamic organization within the individual of those psychological systems that determine his characteristic behavior and thought. Personality represents a unique integration of trait. So as to differentiate one person from another on the vasis of introversion-extroversion and Neuroticism-Stability. Personality is the sum total of the behavioral and mental characteristics that are distinctive of an individual. Personality is the characteristic patterns of thoughts, feelings and behaviors that make a person unique it is believeal that personality arises from within the individual and remains fairly consistent throughout life.

Definitions of Intelligence:

Personality is the individual's total behavior. Woodworth & Marquis (1947) Personality psychology "analyzing the nature of human nature." (Hogan, 1998) Personality is generally defined as a consistent pattern of behaviors across time (Heirs of Kurch, 2003) "Personality is that which permits a prediction of what a person will do in a given situation."-Cattel (1970)

Nature of Personality

It is dynamic.

It is something unique and specific.

It includes everything about a person. It is a product of heredity and Environment. It can be measured and apprised. It always striving for certain ends. It is continually adjusting itself to Environment.

It exhibits Self-Consciousness.

It is a end product of learning.

It is a unique organization of behavior that functions as a unified whole.

Personality Characteristics

What exactly makes up a personality?

Traits and Patterns of thought and Emotion play important roles, and So do these fundamental

Characteristics of Personality:

1. **Consistency**-There is generally a recognizable order and regularity to behaviors.
2. **Both psychological and Physiological**: Personality is a psychological construct, but research suggest that it is also influenced by biological processes and needs.
3. **Affects behaviors and Actions**: Personality not only influences how we move and respond in our Environment, but it also causes us to act in certain ways.
4. **Multiple Expressions**: Personality is displayed in more than just behavior, it can also be seen in our thoughts feelings, close relationships and other social interactions.

Personality Development

Research suggests that you are not Simply born with certain patterns and traits, rather they develop over time.

Types of Personality:-

Four types of Personality:-

Type A: Perfectionist, impatient, competitive, aggressive, stressed.

Type B: Low Stress, even-tempered, flexible, creative, adaptable to change, patient.

Type C: Highly Conscientious, Perfectionist, Struggles to reveal emotions (Positive and Negative).

Type D: Worrying, Sad, lack of Self-Confidence, fear of rejection, hopeless.

Significance of the Study:

Personality is a dynamic organization within the individual of those pyscho-physical systems that determine his unique adjustment to his Environment. The main objective of the present Study was to compare the impact of School type on the Personality of Government and Private School Students.

Review of Related Literature:

Elizabeth C Hair and William. G. Graziano, (2003) child trends Purdue university, conducted "Study on self-esteem, personality and achievement in High School." A prospective longitudinal study in Texas. This research explored for the general hypothesis that personality, self-esteem and teaches of adjustment doing the middle school years predict later life outcomes during high school. Agreeableness and openness assessed in middle school are related to later scholastic competence and behavioral conduct academic success and admin high school.

Arthur E. Poropat (2008) conducted this article reports a meta-analysis of personality academic performance relationships, based on the Five Factor Model (FPM). With cumulative sample sizes ranging to over 70,000. Most analyzed studies came from the tertiary level of education, but there were similar aggregate samples from secondary and tertiary education. There was a comparatively smaller sample derived from studies at primary level. Academic performance was found to significantly correlate with Shanlax International Journal of Education.

Dr. Normala Devi (2001) investigated was a sincere attempt to understand the problems of adjustment faced by adolescents in areas Emotional, Social, Educational and Generate Total sphere. Educational personnel can review and plan for reforms in school educational programmes accordingly it would help in developing social and emotional maturity among the learning youth. The sample consisted of 699 students studying in high school classes in the state of Haryana. To study student's adjustment in the educational, social and emotional areas in relation to their personality and achievement motivation three tests. Adjustment inventory for school students A.K.P. Sinha and R.P. Singh, Agra, Eyserick's Personality Questionnaire (Junior) for E and N. Hindi adaptation by Dagar and Achievement Motivation Test- P. Mehta, Delhi were applied. It was found that achievement motivation has no effect on the adjustment and Neuroticism has negative effect on the emotional, social, educational and general adjustments. Effect of other secondary aspects on adjustment like sex and school location are also analyzed and found that rural students proved better than the urban students on social Education and General/Total adjustment.

Kavitha Raman (2013) this study is based on a questionnaire survey and the results indicate that there is a significant difference in environmental, personality and motivational factors among women entrepreneurs and non-entrepreneurs. The environmental factors found psychological support, benefit from environment, and previous work condition as significant personality differences observed in this study are that the entrepreneurs portray more reasoning skills, educational stability, vigilance and abstractness. Apart from that, entrepreneurs are also found to have more privateness, high openness to change, perfectionism, more tension and less liveliness. Finally for motivation factors, results revealed that individual cure is not a significant predictor of women entrepreneurship.

Ongore (**2014**) states neuroticism incorporates characteristics like apprehension, till humor, and gum-based paint mindset, nervousness, moodiness, and tempera mentality. Onyekuru and lbegbunam (2015) express that neuroticism is a condition in which people are inclined to opposing reflection like crime, jealousy, uneasiness, blame, and so forth. Such people are frequently in a condition of melancholy. They generally look at the negative sides of life. Musili(2015) states that emotionally stable individuals show that they are peaceful, protected, stress-free, self-righteous and robust. According to Arbabisarjou, et al. (2016), emotional stability means the degree to which the people are warm and pleasing as against violent, unfriendly and unpleasant behaviors. Abdul Ghani,(2016) explain the kindness has positive critical indicators with working connections. It is a feeling of being charitable, available, constant, attentive and warm. According to Leephaijaroen(2016) agreeable people personality is more willing to be helpful, loving and trustworthy.

Ongore (**2013**) stated that openness incorporates characteristics, like creative energy, interest and innovativeness. Ma'amor, Yunus, Hashim, and Haque (2016) added that openness among people is liable to acknowledge change, learn and increase innovative experience that results in a constructive relationship with employment fulfillment Individuals with solid openness quality are biased toward experimenting with new encounters and ready to acknowledge new difficulties and achieving better job performance. Duong. Et. Al. (2016) show that academic performance is based on students' scores and standardized test scores. The purpose of marks and test scores are intended to assess students' knowledge and academic abilities and to validate the correlation between moderate and high in all assessments. The marks vary according to the grades that they predict from the students' behavior, attitude, and personality factors, and show academic efforts, educational standards, objectives and consciousness of individuals.

According to **Ozden,** and **Eryilmaz** (**2011**)**,** positive attitude of tutors regarding students' performance and teachers' high-quality methods can improve students' performance. Awan (2011) states that teacher is the mirror of an educational system. Teachers' mood and behavior influence the student's success. Slater (2013) states that teachers' personality has a direct influence on students' way of thinking, inspiration, attitudes and their academic achievement. Guner(2012) mentions that achievements of students are influenced by teacher's behavior Eryilmaz's (2014) study determines that positive attitude of teachers regarding student performance, teacher's high-quality method, can improve student success.

Mkpanang (**2015**) recognized teachers as the most critical part of the learning process. The competent teacher surely influences the educational progress of his/her students in several manners. Demir (2016) views that competency incorporates the states of mind, knowledge and attitudes and teacher must have these skills. Teachers' competency depends upon the points mentioned above. They also mention various common features of teachers' quality with respect to students' individual identifies. Equality, social collaboration, appreciate of students, professional enthusiasm, motivation positive state of mind and reflective connection are some of them.

Statement of the Problem

Impact of School Type on the Personality of Government and Private School Students of Meerut District.

Objectives of the Study:

1. To Study the Impact of School Type on the Personality of Government and Private School Students.
2. To compare the Impact of School Type on the Personality of Government and Private School Students.
3. To compare the impact of School Type on the Personality of Government Boys and Private Boys School Students.
4. To compare the impact of School Type on the Personality of Government Girls and Private Girls School Students.
5. To compare the impact of School type on the Personality of Government Boys and Private Girls School Students.
6. To compare the impact of School type on the Personality of Government Girls and Private Boys School Students.

Operational Definitions of the term used

1. **Personality**:
   Personality is a dynamic organization within the individual of these psycho-physical systems that determine his unique adjustment to his Environment.
2. **Government School**:
   Government School means a school established under section 5 of the act, for the purpose of Providing courses of instructions in Pre-school, Primary or Secondary education. Government school means a school runs by the Department of Education of the State Government.
3. **Private School**:
   An Independent School is independent in its finances and governance. Also known as Private Schools. They are not administered by local, State or national governments.

Hypothesis of the study:

1. There is no significant difference between the Impact of School type on the Personality of Government and Private school students.
2. There is no significant difference between the impact of school type on the personality of Government Boys and Private boys school students.
3. There is no significant difference between the impact of school type on the personality of Government Girls and Private Girls school students.

4. There is no significant difference between the impact of school type on the personality of Government Boys and Private Girls school students.
5. There is no significant difference between the impact of school type on the personality of Government Girls and Private Boys school students.

Delimitation of the Study :-

1. The study was delimited to 440 students only.
2. The study was restricted only to Government and Private Schools Students
3. The Sample is delimited only 18 Schools of Meerut District.
4. The Study is delimited only to the Co-educational Schools.

Plan and Procedure

Research Methodology

A good study depends on a goal oriented research design to produce better resluts. Many research methadologies may be employed to conduct the study in an efficient way. Research Methodology includes collection, purification, compilation, classification and tabulation, Statistical analysis and drawing meaningful conclusions form analysis. The present Study in descriptive in nature. So Survey method was used to collected data.

Population of the Study:-

The population of the present study constitutes all the Government and Private School. Students studying in class IX and X who are the district of Meerut U.P.

Sample of the Study:-

The sample is small number of representative individuals from the population. This study is conducted on sample of 440 students, 220 boys and 220 girls selected randomly form 6 Government and 6 Private schools of Meerut district. The final sample is selected randomly.

Tool used:-

The sixteen Personality factor Questionnaire (16PF) by R.B. Cattell was used to analyze the Personality.

Statistical Techniques used :-

In this study various statistical measures such as mean, Standard Deviation and t-test are used.

Analysis and Interpretation :-

Data were further interpreted in five groups as there were five objectives of the study. All interpretation and discussions are made below as per the objectives of the study:

For Hypothesis No. 1

There is no significant difference between the impact of school type on the Personality of Government and Private school students

Table 1. Mean, Standard deviation and t-value of the Government and Private school students.

	Group	N	Mean	S.D.	t-value	Remarks
Personality	Government School Students	220	13.39	6.01	2.81	Significant at 0.01 level of significance
	Private School Students	220	15.73	5.59		

It if found that the mean, scores of Both Government School Students and Private School Students are

13.39 and 15.73 respectively. When the t-test was applied to compare the mean scores of both the groups it was found that the calculative t-value (2.81) is greater than the table values 0.01 percent level of significance. This mean that the mean difference is significant. Hence, hypothesis 1 is rejected. This mean that Government School Students and Private School Students have difference in Personality.

For Hypothesis No. 2 :

There is no significant difference between the impact of school type on the personality of Government Boys and Private Boys school students.

Table 2. Mean, Standard deviation and t-value of the Government Boys and Private Boys school students.

	Group	N	Mean	S.D.	t-value	Remarks
Personality	Government School Boys	110	6.19	2.49	9.51	Significant at 0.01 level of significance
	Private School Boys	110	9.76	2.63		

It if found that the mean, scores of Both Government School Boys and Private School Boys are 6.19 and 9.76 respectively. When the t-test was applied to compare the mean scores of both the groups it was found that the calculative t-value (9.51) is greater than the table values 0.01 percent level of significance. This mean that the mean difference is significant. Hence, Hypothesis 2 is rejected. This mean that Government School Boys and Private School Boys have difference in Personality.

For Hypothesis No. 3 :

There is no significant difference between the impact of school type on the personality of Government Girls and Private Girls school students.

Table 3. Mean, Standard deviation and t-value of the Government Girls and Private Girls school students.

	Group	N	Mean	S.D.	t-value	Remarks
Personality	Government School Girls	110	9.58	2.37	8.11	Significant at 0.01 level of significance
	Private School Girls	110	6.39	3.04		

It if found that the mean, scores of Both Government School Girls and Private School Girls are 9.58 and 6.39 respectively. When the t-test was applied to compare the mean scores of both the groups it was found that the calculative t-value (8.11) is greater than the table values 0.01 percent level of significance. This mean that the mean difference is significant. Hence, Hypothesis 3 is rejected. This mean that Government School Girls and Private School Girls have difference in Personality.

For Hypothesis No. 4 :

There is no significant difference between the impact of school type on the personality of Government Boys and Private Girls school students.

Table 4. Mean, Standard deviation and t-value of the Government Boys and Private Girls school students.

	Group	N	Mean	S.D.	t-value	Remarks
Personality	Government School Boys	110	8.13	4.71	6.89	Significant at 0.01 level of significance
	Private School Girls	110	12.57	4.17		

It if found that the mean, scores of Both Government School Girls and Private School Girls are 8.13 and 12.57 respectively. When the t-test was applied to compare the mean scores of both the groups it was found that the calculative t-value (6.89) is greater than the table values 0.01 percent level of significance. This mean that the mean difference is significant. Hence, Hypothesis 3 is rejected. This mean that Government School Boys and Private School Girls have difference in Personality.

For Hypothesis No. 5 :

There is no significant difference between the impact of school type on the personality of Government Girls and Private Boys school students.

Table 5. Mean, Standard deviation and t-value of the Government Girls and Private Boys school students.

	Group	N	Mean	S.D.	t-value	Remarks
Personality	Government School Girls	110	10.49	4.91	0.161	Not Significant
	Private School Boys	110	9.89	5.01		

It if found that the mean, scores of Both Government School Girls and Private School Boys are 10.49 and 9.89 respectively. When the t-test was applied to compare the mean scores of both the groups it was found that the calculative t-value (0.161) is smaller than the table values 0.01 percent level of significance. This mean that the mean difference is not significant. Hence, Hypothesis 3 is accepted. This mean that Government School Girls and Private School Boys have no difference in Personality.

Conclusion :-

On the basis of the findings of the Study the following Conclusion were drawn:

1. From the result of the Study, it was clear that the private school students were found to be good Personality compared to Government School Students.
2. From the result of the Study, it was clear that the Private School Boys Students were found to be good personality compared to Government School Boys Students.
3. From the result of the Study, it was clear that the Government School Girls Students were found to be

good Personality compared to Private School Girls Students.

4. From the result of the study, it was clear that the Private School Girls students were found to be good Personality compared to Government School Boys Students.

5. From the result of the study, it was clear that the Government School Girls Students were found to be good Personality compared to Private School Boys Students.

Educational implication of the study

1. The study will help other Scholars, researchers to know the present research status. So far done in field of Personality.
2. Workshop, training, programs for University, College and School Students should be organized for developing their personality.
3. Guides and counselors should be appointed in the school for the help of students in facing Personality related Problems.
4. Curriculum should be framed as it can be proved helpful in the Personality of School Students.
5. The present study show the impact of School type on the Personality of Government and Private School Students. Here, comes the role a teacher, family as well as education which guides them how to control the Personality related Problems and their personality.

Reference:

1. Aggarwal, J.C. (1997), *Development and Planning of modern education,* Delhi: Vikas Publishing House.
2. Baron, Robert, A. (1995), Psychology, (3rd ed.), New Delhi Asimon & Schuster Company.
3. Best, John W & Kahn James, V. (2006), *Research in Education*, New Delhi: Prentice Hall of India.
4. Buch, M.B. (1991) Survey of Research in Education, New Delhi, NCERT.
5. Cattel. R.B. (1946). The Description and Measurement of Personality, New York, NY: Harcourt, Brace and World.
6. Cattel. R.B. (1979). Handbook for The Children Personality Questionnaire (CPQ). Published by The Institute for Personality and ability Testing. Chapaigan.
7. Cattell, H.E.P. and Mead, A.D. (2008). The Sixteenth Personality Questionnaire (16PF). In G.J. Bovele. G.
8. Ciecarelii, S.K. and White, J.N. (2017). Psychology, Fourth Edition, Pearson Education Ltd.
9. Garrett. Henry, E. (2005), Statistics in Psychology and Education, New Delhi: Paragon International Publishers.
10. Mangal, S.K (1999), Advanced Educational Psychology, New Delhi: Prentice Hall of India.
11. Mathlnews and D.H. Sakbfske (Eds.) The Sage Handbook of Personality Theory and Assessment: Vol. 2, Personality Measurement and Testing, Los Angeles, CA: Sage.
12. Dr. Nirmala Devi, (20011). A Study of Adjustment of Students

in Relation to Personality and Achievement Motivation. Bhartiyam International Journal of Education & Research. 1(1), 1-21.

13. Sheraz, A. (2007) A Study of Personality of Rural and Urban Students.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

Paradigm of Tribal Population With Reference To Maharashtra State

Dr. Mahendra R. Agale[1] Umesh Bharatiya[2]
[1] Research Guide, Head, Department of Business Economics, Ness Wadia College of Commerce, Savtribai Phule Pune University, Pune.and,
[2]Research Student, Ness Wadia College of Commerce, Savtribai Phule Pune University, Pune
Corresponding Author- Dr. Mahendra R. Agale
Email id: usbharatiya@gmail.com
DOI-10.5281/zenodo.7267381

Abstract:

This Paper attempts to throw light on the situation of tribal people domiciled in Maharashtra state by elucidating and addressing to the issue in context of its demographic, cultural, educational, social and economic aspects. Remarkably, the tribal people are not only getting marginalized in socio-economic issues but they are also undergoing a gradual dilution of their social distinct identities.

Key words; Tribal, Social Group, Discrimination, Population, Demography, Culture, Census, BPL, Health, Poverty, Sex Ratio, Employment, Community Health

Introduction:

The tribal people in India have great inheritance and a rich culture from their ancestors and having unique styles of music, dance and dramas. The tribal have characteristics of their own. Unity in diversity is one of the most spectacular features amongst the tribal population of India. Tribal culture, traditions and practices interpenetrate almost in all the aspects of Indian culture and civilization. Therefore. They differ from the common Indian population both in character and composition. The Dictionary of Anthropology which states that, "Tribe is a social group, usually with a definite are, dialect, cultural homogeneity, and unifying social organization". It may include several sub - groups, such as sibs or villages. It may and may have common ancestor as well as presiding deities. The families or small communities making up a tribe, are linked through economic, social, religious, or blood ties i.e. kingship bondage. Some of the Anthropologists have explained tribes as "a social group with a territorial affiliation, endogamous in nature, with no specialization of functions, ruled by tribal chiefs, hereditary or otherwise, united in language or dialect, recognizing social distance with other tribes or castes, following tribal traditions, beliefs and customs, conscious of their ethnic and territorial homogeneity". A tribal society is not complex in nature but simple in character. Hunting, fishing and collection of roots, fruits, nuts, berries, and honey and forest products are their prime source of subsistence. Now a days some tribal people have started cultivating the land as well. Due to the increase in their population and changed economic conditions, their self-sufficiency has changed in to deteriorate conditions.

The Constitution of India has also recognized tribal communities in India under 'Schedule 5' and under Article 342 by listing out almost 700 nomenclature of Scheduled Tribe living in all State/Union Territory. Hence they are known as 'Scheduled Tribes (ST)'. The Sixth

Schedule of the Constitution of India under Article 244 makes provisions for the administration of tribal areas through Autonomous District / Regional Councils in the States of Assam, Meghalaya, Mizoram and Tripura. The term “tribal areas” generally means areas with a preponderance of tribal population.

Tribal community in India are at different stages of their educational, social and economic development. The government of India formed Ministry of Tribal Affairs (MOTA) in the year 1999 after the bifurcation of the Ministry of Social Justice and Empowerment with the objective of providing a more focused approach on the integrated socio-economic development of the Scheduled Tribes (STs), the most underprivileged of the Indian Society, in a coordinated and planned manner. MOTA is mainly implementing and sponsoring various schemes for the overall development of the ST in India. The Tribal Sub Plan (TSP) also known as tribal sub component strategy is a Government of India initiative aimed for the rapid socio-economic development of tribal people. The funds provided under the Tribal Sub Plan of the State have to be at least equal in proportion to the ST population of each State or UTs.

Population:

As per the Census 2011,the total population of Scheduled Tribes counts for 10.43 crore which is 8.6% of the total population of the country, and it lives in about 15% of the country’s areas, comprised of various ecological and geo-climatic conditions ranging from plains and forests to hills. The share of the Scheduled Tribe population in urban areas is a meagre 2.8%. Many tribes are present in more than one State. The states of Madhya Pradesh, Orissa, Bihar, Maharastra, Gujarat, Andhra Pradesh, West Bengal and the Northeastern Region have a larger concentration of tribal population. The major tribes in India are the Gonds, the Bhils, the Santals, the Oraons and the Minas, and mostly they are speaking their own languages. The Andaman and Nicobar Islands are also inhabited by several tribes such as the Great Andamanese, Sentenelese, Onges, Jarwas, Sompens, and so on. The largest number of communities listed as Scheduled Tribes are in the State of Odisha, i.e. 62.

There is high variation in the spatial distribution of tribe population in India. Almost 82 percent of the tribes live in western and central states where only 11 percent of them are located in southern states. It seems that the tribal population has been growing over the years nevertheless the rate of growth of tribe population has been less noted than that of the general population. According to the 2001 Census, the population of Scheduled Tribes in the country is 8.43 crore, which is 8.2% of the total population of the country. Similarly during census year 1991 to 2001 it has been 24.45% against the growth rate of 22.66% for the entire population.

India Demographic Statistics: 2001 Census

Total Population		Decadal Growth in %	ST Population		Decadal Growth in %	% age of STs in the State to total State population in 2001
1991	2001		1991	2001		
838,583,988	1,028,610,328	22.66	67,758,380	84,326,240	24.45	8.2

Source: Census 2001 and Annual Report 2011-12 Published by MOTA

Maharashtra has occupied a tribal population of 1.05 crore who constitute over nine per cent of its population. There are 45 Scheduled Tribe communities listed in Maharashtra. Over 85 per cent of these tribe stay in rural areas and the rest, 15 per cent, in urban areas. While urban poverty in Maharashtra is pegged at 9.1 per cent that of STs staying in cities is 23.3 per cent. At district level Nandurbar has the highest proportion of ST population with 69.3 percent followed by Gadchiroli (38.7 percent), Dhule (31.6 percent) and Nashik (25.6 percent).

Scheduled Tribe Population Maharashtra: 2011

Population	2001	2011	Difference	Growth rate
Total Population	8577276	10510213	1932937	22.5
Males	4347754	5315025	967271	22.2
Females	4229522	5195188	965666	22.8

There are 1,05,10,213 people are reported as Scheduled Tribe, out of which 53,15,025 are males and 51,95,188 are females showing an addition of 19,32,937 during the census year 2001 and 2011. The growth rate for ST population during 2001-11 stands to be 22.5 percent.

Sex Ratio: The sex ratio is the ratio of females to males in a population.

Sex ratio of Scheduled Tribe Population

Particulars	Sex Ratio 2001			Sex Ratio 2011		
	Total	Rural	Urban	Total	Rural	Urban
India	978	981	944	990	991	980
Maharashtra	973	979	931	977	984	942

Source: Census 2001 and 2011, Office of the Registrar General, India and Annual Reports of MOTA

Sex ratio in respect of STs is 990, which is higher than national average Sex ratio of 943. Also, ST sex ratio has improved from 978 females per 1000 males in 2001 to 990 in 2011. In case of state of Maharashtra, Sex ratio in respect of STs is 977, which is lesser than national average Sex ratio and ST Sex ratio at national level which is 990. ST sex ratio in Maharashtra has improved from 973 females per 1000 males in 2001 to 977 in 2011.

Child Sex Ratio: In India, the child sex ratio is defined as the number of females per thousand males in the age group 0–6 years in a human population.

The Child sex ratio in respect of ST population in India has been declined from 972 in the year 2001 to 957 in the year 2011. However, Child sex ratio in the ST Population is higher as compared to child sex ratio for general population at 914 girls to 1000 boys.

Literacy Rate: The literacy rate is defined by the percentage of the population of a given age group that can read and write.

Literacy Rates among General Population and ST Population

Census Year	General population (ALL) in %			Scheduled Tribes (ST) in %		
	Persons	Males	Females	Persons	Males	Females
1961	28.30	40.40	15.35	8.53	13.83	3.16
1971	34.45	45.96	21.97	11.30	17.63	4.85
1981	43.57	56.38	29.76	16.35	24.52	8.04
1991	52.21	64.13	39.29	29.60	40.65	18.19
2001	64.84	75.26	53.67	47.10	59.17	34.76
2011	73.00	80.90	64.60	59.00	68.50	49.40

Source: Census 2011, Office of the Registrar General, India

According to census data shown above, the literacy rate for STs in India improved from 47.1% in 2001 to 59% in 2011. Whereas the Literacy rate for the total population has increased from 64.8% in 2001 to 73% in 2011. There is a gap of about 14 percentage points in literacy rate of STs as compared to the all India literacy rate. The Gaps in literacy rates of ST Population as compared to the all India Population in respect of persons, males and females for the years 1991, 2001 & 2011, show progressive decline.

Transition Rates:

Definition of Transition Rates: The percentage of enrollees/graduates in a level of education in a given school year who moved on to the next higher level the following year. Transition rates indicate the proportion of students who are able to advance to a higher class. A transition rate below 100% indicates that the students are held back or have dropped out of school.

Transition Rates from Secondary to Higher Secondary (X to XI) During 2016-17 to 2019-20

Secondary to Higher Secondary (X to XI)						
Year	All Categories			Scheduled Tribe		
	Girls	Boys	Overall	Girls	Boys	Overall
2016-17	62.37	63.23	62.82	54.04	55.25	54.65
2017-18	63.38	62.05	62.70	61.71	61.64	61.68
2018-19	70.21	67.53	68.80	63.38	62.05	62.70
2019-20	73.09	70.23	71.60	63.6	61.97	62.78

Source: UDISE (Unified District Information System for Education) +, M/o Education

During the year of 2019-20, 62.78 % ST students (71.60 % for All) are able to transition from class 10 to class 11 as compared to 54.65% ST students (62.82 % for All) in 2016-17, which shows that there are still gaps in transition rates for ST students as compared to All categories.

Indicators of Backwardness:

Percentage of Population (Social Group Wise) below poverty line by states-2004-05								
Particulars	Rural				Urban			
	ST	SC	OBC	Others	ST	SC	OBC	Others
All India	47.2	36.8	26.7	16.1	33.3	39.9	31.4	16.0
Maharashtra	56.6	44.8	23.9	18.9	40.4	43.2	35.6	26.8

Abbreviation: SC=Scheduled Castes, ST=Scheduled Tribes, OBC=other backward classes Source: Planning Commission.

As per the data released by the Planning Commission, The percentage of ST population living below the poverty line has decreased to 47.2% in the rural areas and 33.3% in the urban areas as per poverty line estimates in the year 2004-05. As per the statement provided by the Planning Commission, it is observed that ST people living below the poverty line in 1993-94 was 51.94% in the rural areas and 41.14% in the urban areas respectively. There is a decrease of STs Living below the poverty line by about 4.7% in the rural areas and 7.84 % in urban areas since 1993-94 to 2004-05.

As far as state of Maharashtra is concerned, the percentage of ST population living below the poverty line has decreased to 56.6 % in the rural areas and 40.4 % in the urban areas as per poverty line estimates in the year 2004-05. The percentage of Population living below poverty line in Maharashtra is higher than national level.

According to the 2001 Census figures, almost 44.70% of the ST population were cultivators, 36.9% ST Population were agricultural labourers, 2.1% of ST Population engaged in house hold industry workers and 16.3% were other occupation workers. Thus, about 81.6% of the main workers from these ST communities were engaged in primary sector activities. These factors and disparities lead to increase in the dropout rates in formal education, which resulted in low representation in higher education. Therefore cumulative effect caused vicious circle of poverty increased and the proportion of STs below the poverty line became substantially increased than the national average BPL

Poverty Estimates:

Percentage of ST Population below Poverty Line during 2009 - 10 and 2011 (Tendulkar Methodology)				
Particulars	Rural		Urban	
	2009-10	2011-12	2009-10	2011-12
All India	47.4	45.3	30.4	24.1
Maharashtra	51.7	61.6	32.4	23.3

As per the estimates based on Tendulkar Methodology for poverty ratios for the years for which large Sample Surveys on Household Consumer Expenditure have been conducted by the National Sample Survey Office (NSSO) of the Ministry of Statistics and Programme Implementation, ST people living below the poverty line in 2011-12 were 45.3% in the rural areas and 24.1% in the urban areas as compared to state of Maharashtra ST people living below the poverty line in 2011-12 were 61.6% in the rural areas and 23.3% in the urban areas, it seems that the percentage of people living Below Poverty Line in the year 2011-12 among the Urban areas are decreasing whereas it is increasing in Rural Areas.

Land Holdings:

Table 4.14: Distribution of Holdings and Operated Area as per Agriculture Census 2015-16 – All & Scheduled Tribes (STs)

Size Group	Number of Holdings (in '000)		Area Operated (in '000 ha.)		Percentage of holdings to total holdings		Percentage of area operated to total area		Average Operated area per Holding (ha.)	
	ALL	ST	ALL	ST	ALL	ST	ALL	ST	ALL	ST
Marginal (below 1.00ha.)	100251	7127	37923	3413	68.45	56.26	24.03	19.19	0.38	0.48
Small (1.00 – 2.00 ha.)	25809	2972	36151	4202	17.62	23.46	22.91	23.63	1.40	1.41
Semi-medium (2.00 – 4.00 ha.)	13993	1771	37619	4752	9.55	13.98	23.84	26.72	2.69	2.68
Medium (4.00 – 10.00 ha.)	5561	704	31810	3984	3.80	5.56	20.16	22.40	5.72	5.66
Large (10.00 ha & above)	838	95	14314	1434	0.57	0.75	9.07	8.06	17.07	15.11
Total*	146454	12669	157817	17784	100.00	100.00	100.00	100.00	1.08	1.40

Source: Agriculture Census, 2015-16 *Total may not tally due to rounding off.

Based on the Agriculture Census, 2015-16 conducted by Department of Agriculture& Farmers Welfare reveals that the total number of holdings in respect of all sizes is 146,454 thousand. Among them 12,669 thousand (8.7%) belongs to Scheduled Tribes. Percentage of area operated to total area is highest for Scheduled Tribes in semi medium category (26.72%). Average operated area per holdings for large category in respect of STs is 15.11% and for marginal category it is 0.48%. The highest proportion of households belong to the marginal category of land holdings (68.45% for all, 56.26% for ST) and lowest proportion of households belong to the large holdings (0.57% for all, 0.75% for ST). This pattern is seen across all the household social groups.

Health Infrastructure:

Status of Health Infrastructure (SCs, PHCs & CHCs) in Tribal Areas

(As on 31st March 2020)

Particulars	Estimated mid-year Tribal Population on 1st July 2020 in Rural Areas	Sub Centers (SCs)			PHCs			CHCs		
		R	P	S	R	P	S	R	P	S
All India/Total	100579297	33507	29745	6602	5015	4203	1371	1245	1035	375
Maharashtra	9444840	3148	2562	586	472	397	75	118	64	54

Source: Rural Health Statistics 2019-20, Ministry of Health & Family Welfare
Notes: Mid-year Tribal population for the year 2020 calculated based on the percentages of Tribal population in the Rural areas in Census 2011 R: Required; P: In Position; S: Shortfall; **: Surplus, *: State / UT has no separate Tribal Area / Population; #:States are predominantly tribal areas (1) The population is less than the norm (CHC) of 80,000.

As per Rural Health Statistics (RHS) 2019- 20, published by Department of Health & Family Welfare, there were 29745 Sub Centers (SCs), 4203 Primary Health Centers (PHCs) and 1035 Community Health Centers (CHCs) in Tribal Areas as on 31st March, 2020. The number of Sub Centers has increased by 1063, CHCs by 13 in 2020 over 2019, whereas number of PHCs has decreased by 8 in 2020 over 2019. At all India level, there is a shortfall of 6602 SCs, 1371 PHCs and 375 CHCs in tribal areas as on 31st March 2020 as compared to requirement. It is observed from the State wise figures that there is a huge shortfall in number of Sub-Centers in state of Maharashtra (586). Further, there is a shortfall of 54 PHCs in Maharashtra.

Conclusion:

The Directive Principles of State Policy (DPSP) (Part IV of the Constitution of India) recommends 'the State shall promote, with special care the educational and economic interests of the weaker sections of the people, and in particular of the Scheduled Caste and the Scheduled Tribes and shall protect them from social injustice and all forms of exploitation. The National Social Assistance Programme (NSAP) introduced by the Indian Government from 15th August, 1995 was a golden step in the direction of fulfilment of the DPSP. The programme intends to ensure basic national standard for social assistance to the households living below poverty line.

A realistic and holistic approach to tribal development alone can produce good results. The tribals are generally considered as mere beneficiaries and are not been involved either in the decision-making procedure or in the implementation. Planned economic development was adopted as the national policy in India soon after Independence. Efforts were taken to advance the Scheduled Tribes socially, economically and culturally.

The Education Division of the Ministry of Tribal Affairs makes all efforts to enhance education level through infrastructure like running and building of hostels, formation of Ashram Schools, Vocational Training Centre, and issuing economic incentives in terms of scholarships like Pre-Matric Scholarship, Rajiv Gandhi National Fellowship and National Overseas Scholarship for ST students.

The health standard of tribal People can be improved by spreading information among them about the Primary health care facilities imparted by the government at little or no cost. The rate of infant mortality among the tribal People is high. A health care system providing basic precautionary and remedial services can significantly improve health outcomes within tribal communities.

Bibliography:

1. Annual Reports of 2021-2022 Published by Ministry of Tribal Affairs, Government of India.
2. Annual Reports of 2011-2012 Published by Ministry of Tribal Affairs, Government of India.
3. The Evaluation Reports Published by Tribal Research and Training Institute, Pune, Government of Maharashtra
4. Annual Reports and Blue book Published by Department of Tribal Development , Government of Maharashtra
5. Development Challenges in Extremist Affected Areas Report of An Expert Group To Planning Commission, Government Of India New Delhi, April, 2008
6. Name of The Paper: Tribes in India (208) Semester: II , Department of Social Work, Indira Gandhi National

Tribal University Regional Campus Manipur

7. Compiled reading of Department of Social Work, Alagappa University, Karaikudi, Tamil Nadu, India
8. A book on Indian Social System, Indira Gandhi open university (IGNOU)
9. Development Monthly Magazine Yojana (January, 2014 Issue)
10. Development Monthly Magazine Yojana (July, 2022 Issue)
11. Monthly magazine " Kurukshetra"
12. Monthly magazine " Lokrajya " published by Government of Maharashtra.
13. Twelfth Five Year Plan (2012–2017) Social Sectors ,Volume III, Planning Commission Government of India
14. A Research Study Report ," A Research Study On Migrant Tribal Women Girls in Ten Cities : A Study of Their Socio-Cultural and Economic Reference to Social Intervention " Submitted to Planning Commission Govt. of India, by Tirupude College of Social Work , Civil Lines, Sadar.
15. Census 2011, Office of the Registrar General & Census Commissioner, India Ministry Of Home Affairs

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

A COMPARATIVE STUDY BETWEEN FEMALE YOGA PRACTITIONERS AND FEMALE NON YOGA PRACTITIONERS ON STRESS LEVEL

Dr. M.G Vagh [1] Durgesh Gautam[2]
[1]Assoc. Prof. of Physical Education (Shri C.P Degree College of Physical Education)
[2] (PhD Scholar in Swarnim Gujarat Sports university, Gandhi Nagar)
***Corresponding Author-* Dr. M.G Vagh**
Email id: durgeshgautam996@gmail.com
DOI- 10.5281/zenodo.7267390

Abstract

'Yoga' is a Sanskrit term meaning 'to join, unite or yoke together', and the essential purpose of yoga is to bring together body, mind and spirit into a harmonious whole.
The central methods of yoga are physical postures or 'asana' and movement, breathing techniques or 'pranayama' and meditation. Yoga includes guidance on healthy lifestyle, eating habits, mental attitude, and Ayurveda medicine is also part of the Yogic path to health and balance.

Perceived stress scale

It is a 10-item scale widely used to assess the perception of stress. It is a measure of the degree to which situations in one's life are appraised as stressful. Items were designed to tap how unpredictable, uncontrollable, and overloaded respondents find their lives

Key Words-: Stress, Attitude, Harmonious

Introduction

The origins of yoga originating in the ancient East, yoga has gained massive popularity in the modern western world. Its image has evolved from those photos we may have seen of the extraordinary practice of unbelievably flexible cotton-clad ascetics in India, or the seventies hobby of hippy types! Yoga has become part of the chosen lifestyle of thousands of westerners seeking some real balance, health and well-being in their lives. The yoga view of the human body the body is yoga and the vehicle for the development of wisdom, of spiritual awakening, and as such the body is held to be sacred and mastery of our body is considered the foundation for spiritual progress. In yoga we learn a discipline of the body which comes out of awareness and attentiveness, tuning in to our body's subtle energy flows and the life-giving rhythm of our breathing. The scale also includes a number of direct queries about current levels of experienced stress. The questions are of a general nature and hence are relatively free of content specific to any subpopulation group. The questions in the perceived stress scale (PSS) ask about feelings and thoughts during the last month. It has adequate psychometric properties.

The link was circulated by the Exponential Non-Discriminative snowballing method, people receiving the message were requested to complete the survey and then forward the link to their close contacts in various WhatsApp group, Facebook, and Twitter platforms.

Methodology

Selection of the Subect-: 50 female from Pitambra Apartment Kampoo the subject was divided into two groups (each group consist of 25 subject) all female subjects are related to working field. The age of the subjects ranged between 22 to 28 years.

Selection of Variables-: By reviewed the available literature pertaining to Covid-19 and mental states of people during pandemic, from journals, periodicals, magazines and research papers. Taking into consideration feasibility criteria, availability of instrument and the relevance of the variables of the present study the following variables were selected.

Criterion measures-: The criterion measures chosen with the help of questionnaire perceived stress scale questionnaire.

To find out effect of yoga practitioners on stress tolerance level of female.

Stress level was measured by score obtained from determination test of perceived stress scale questionnaire.

Procedure For Collection of Data-: For the collection of data, researcher was done group administration for filling up the questionnaire. For collection of data on selected Psychological Variable (Stress) Coping Strategy and Happiness from the subjects for the present study, the researcher had telephonic conversation with both female from Pitambra Apartment Kampoo the subject were divided into two groups (each group consist of 25 subject) all female subjects were related to working field . The researchers first explained the objective of study to each subject through mail and then sent the questionnaires through Google form for the collection of data and informed consent was taken from all the subjects. The data pertaining to PSS Questionnaires were collected and enough time was given to each subject for filling up the questionnaires. The researcher tried her level best to motivate each subject to get honest response.

Analysis And Interpretation Of Data

The statistical analysis of the data obtained on50 female from Pitambra Apartment Kampoo the subject will be divided into two groups (each group consist of 25 subjects) of yoga effect on psychological variable (Stress).

FINDINGS

The statistical analysis of data collected with help of survey and used perceived stress scale given by Sheldon Cohen on 50 female subjects of Pitambra Apartment Kampoo. This data was analysed by applying Independent t test to find the significance difference on psychological variable (Stress).

TABLE 1,
Descriptive Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Stress	Yoga practitioner	25	17.9200	5.36128	1.07226
	Non yoga	25	26.2400	3.78902	.75780

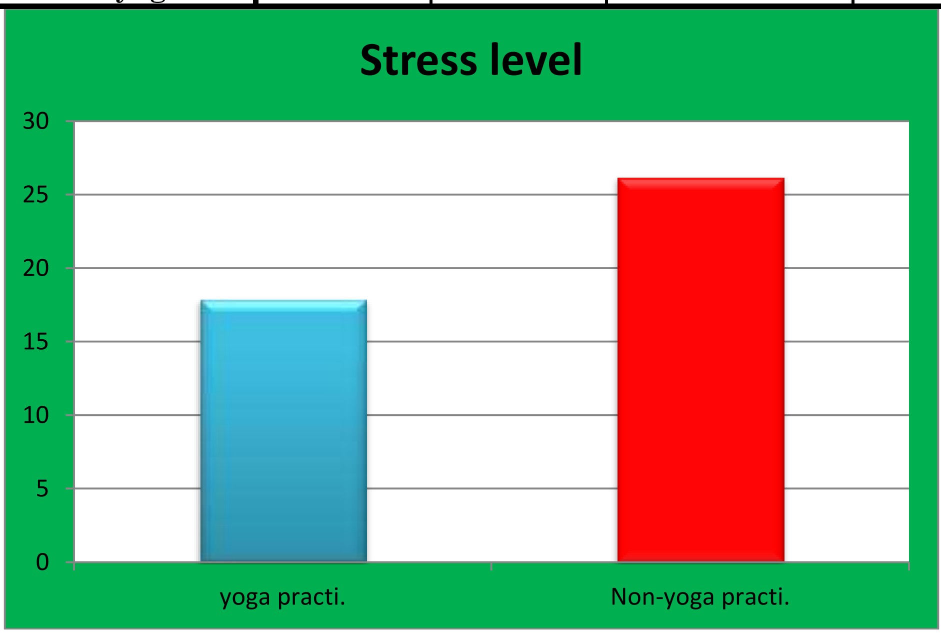


Table 1 shows the descriptive statistics of the variable of yoga practitioner and non-yoga practitioner. It is clearly visible from the data that mean of yoga practitioner is found to be 17.92000 + 5.36128 and mean of female non-yoga practitioner is found to be 26.2400 + 3.78902. The shows that stress level of female non-yoga practitioner is found to be high as compare to the yoga practitioner.

Table 2, Independent Samples Test

	t- test for Equality of Means				
	T	**Df**	**Sig. (2-tailed)**	**Mean Difference**	**Std. Error Difference**
Equal variances assumed	-6.337	48	0.000	-8.32000	1.31301

Table2 shows the comparative results of stress level of yoga and non-yoga practitioner. The t-value is found to be -6.337 at 48 degree of freedom. It is clearly visible from the table that the difference between both groups is significant at 0.05 levels of significances.

Discssion Of Hypothesis

Hypothesized that there was a significant difference between the female yoga practitioners and female non yoga practitioners on stress level there is a significant difference. It was found in the t-test that the t value is 9.80 ($P \le 0.05$) between two groups which is significant and thus we can reject the null hypothesis and say that there was a difference between the female yoga practitioners and female non-yoga practitioners.

Summary And Conclusions

Summary

The purpose of the study was to check whether there is any difference in female yoga practitioners and female non yoga practitioners. 50 female from Pitambra Apartment Kampoo the subject will be divided into two groups (each group consist of 25 subjects). As per the researcher. These subjects were tested for yoga practitioners and female non-yoga practitioners we use perceived stress scale questionnaire. The subject was instructed to fill the questionnaire.

Mean and standard deviation will be used as a Descriptive Statistic of study, In order to ascertain the significance difference among 2 groups independent t-test is used to compare means at the 0.05 % level of significance.

The finding showed significant difference in female yoga practitioners and female non-yoga practitioners at 0.05 level of significance between both the groups, the findings also shows significant difference female yoga practitioners and female non-yoga practitioners. One can understand this result well by observing the data pattern.

Conclusion

On the basis of above findings of present study, the following conclusions were drawn by the researcher-: The stress level of female yoga practitioners is less than the female non yoga practitioners.

References

1. **Vaghela, K. J. (2015).** Conducted a study to investigate the difference of mental health status and stress among yoga- doer and yoga – non doer older adults.
2. **Singh, S. ,& Singh, H. (2019).** Compared the level of stress among players of different colleges of Chandigarh in relation to gender.
3. **Kumari, S.,et al., (2020)** Conducted a Comparative study of Sportsmen ship, Competitive Mental Stress among Players and Non players.
4. **Kristen E Riley, Crystal L Park (2015).** Yoga is increasingly used in clinical settings for a variety of mental and physical health issues, particularly stress- related illnesses and concerns, and has demonstrated promising efficacy.
5. **Chander, M. S.,et al., (2014)** The main purpose of the study was to compare self-concept, stress and social adjustment between physical education and non physical education students.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

HOW CAN WE MANAGE WATER RESOURCES IN INDIA

Hitendra R. Aher
K.R.A.Arts, Science & Comm. College, Deola 423102, Dist: Nashik (M.S.)
***Corresponding Author-* Hitendra R. Aher**
Email id: jaywantrekha@gmail.com

DOI- 10.5281/zenodo.7267401

Introduction:

India with an area of 3287263 km^2 is the seventh largest country in world and by population it ranks at number two after China. Since Independence, India has made significant progress in developing its water resources and supporting infrastructure. Water is a key driver of social and economic development while it also has a basic function in maintaining the integrity of the natural environment. However, water is only one of a number of vital natural resources and it is imperative that water issues are not considering isolation. Water is fundamental to life, livelihood, food security and sustainable development. India has more that 17% of world's population, 2.4% of world's land area but has only 4% of world's renewable water resources. Water is essential for sustaining all forms of life, food production, and economic development and for general wellbeing. It is impossible to substitute for most of its uses, difficult to de-pollute, expensive to transport and it is truly a unique gift to humanity from nature. Water is also one of the most manageable of the natural resources as it is capable of diversion, transport, and storage and recycling. All these properties impart to water its great utility for human being.

Strategies of Water Resources Management:

Rainwater Harvesting, Comprehensive Water Policy Reform and Demand Management., Appropriate Technology, Environment protection, secure water rights, Reformed Price Incentives, User Management of Irrigation Systems, Tradable water Rights & International Co-operation.

Water Resources in India:

The amount of water available for use in India is estimated at 1900 billion cubic meters per year. The concept of water resources is multi dimensional. It is not limited only to its physical measure, i.e. hydrological and hydro ecological, the flows and stocks but encompasses other more qualitative, environmental and socio-economic dimensions. India occupies 3.29 million km^2 geographical areas, which forms 2.4% of the world's land area; it supports over 15% of the world's population. The population of India in 2001 stood at 102.7 crores persons, Thus, India supports about 1/6th of the world's population, 1/50th of the world's land and 1/25th of the world's water resources. India also has a livestock population of 500 million, which is about 20% of world's total livestock population, More than 50% of these cattle are forming the backbone of Indian agriculture, and the total utilizable water resources of the country are assessed as 1086 km^3.

Estimates of Water Resources in India

Name of the Agency	Estimate in Billion Cubic Meter	Deviation from 1869 Billion Cubic Meter
First Irrigation Commission (1902)	1443	-23%
Dr. A. N. Khosla (1949)	1673	-10%
Central Water and Power Commission (1954)	1881	+0.6%
National Commission on Agriculture	1850	-1%
Central Water Commission (1988)	1880	+0.6%

Central Water Commission (1993)	1869	-

Source: Planning Commission, Govt. of India 2007

Since 1954, the estimates have stabilized and are within the proximity of the currently accepted estimate of 1869 billion cubic meters, which includes replenish able groundwater which gets charged on annual basis.

Surface Water Resources:

The total run-off in the stream channel includes the snowmelt, the surface runoff, the sub surface run-off, the ground water run-off and the channel precipitation, i.e. the precipitation falling directly on the water surface of streams, lakes, etc. It constitutes, known as the surface water resources. The computation of the actual surface water resources of a country takes into account of possible reductions in flow resulting from the abstraction of water in upstream countries.

The precipitation that falls upon land and is the ultimate source of both the categories of water resources dispersed in several ways. A sizable portion is intercept by the vegetal cover or temporarily detained in surface depressions. Most of it is, later, lost through evaporation. When the available interception or the depression storage is completely exhausted and when the rainfall intensity at the soil surface exceeds, the infiltration capacity of the soils, the overland flow begins. Once the overland flow reaches a stream channel, it is call surface run-off, which together with other components of flow, forms the total run-off.

A part of the water that infiltrates into the surface soil may continue to more laterally at shallow depth as interflow owing to the presence of relatively imperious tenses just below the soil surface and may eventually reach the stream channel when it is called the sub surface run off. A second part of the precipitation that infiltrates is lost through evapo-transpiration, via plant roots and thermal gradients just below the soil surface and third part may remain above the water table in the zone of unsaturated flow. The past several organizations and individuals have estimated water availability for the nation. Recently, the National Commission for Integrated Water Resources Development estimated for basin wise average annual flow in Indian River system as 1953 km^3.

Utilizable water resource is the quantum of withdrawable water from its place of natural occurrence. Within the limitations of physiographic conditions and socio-political environment, legal and constitutional constraints and the technology of development available at present, various authorities have assessed utilizable quantity of water from the surface flow differently. The utilizable annual surface water of the country is 690 km^3.

Ground water Resources:

Ground water is the water captured in underground reservoirs. Ground water resources are ground water bodies (deep aquifers) that have a negligible rate of recharge on the human time scale and thus can be considered as non-renewable water resources.

The portion of the precipitation, which after infiltration reaches the ground water table together with the contribution made to ground water from a neighboring basin, influent rivers, natural lakes, ponds, artificial storage reservoirs, canals, irrigation etc. constitutes the ground water resources. The annual potential of natural ground water recharge from rainfall in India is about 342.43 km^3, which is 87.56% of total annual rainfall of the country. The annual potential groundwater recharge augmentation form canal irrigation system is about 89.46 km^3. Thus, total replenish able ground water resource of the country is assessed as 431.89 km^3. After allotting 15% of this quantity for drinking and 6 km^3 for the industrial purposes the remaining can be utilized for irrigation purposes. Thus, the available ground water resource for irrigation is 361 km^3, of which utilizable quantity is 325 km^3. i. e. 90%. The estimates of Central Ground Water Board of total replenish able ground water resource; provision for domestic, industrial, irrigation uses, and utilizable groundwater resources for future use is describe above. The basin wise per capita water availability varies between 13393 m^3. Per Annum for Brahmaputra- Barak basin to about 300 m^3 per annum for Sabarmati basin.

Water Requirements of India:

India is an agricultural based economy. Therefore, development of irrigation to increase agricultural production for making the country self-sustainable and for poverty alleviation has been of crucial importance for the planners. Accordingly, the irrigation sector was assigning a very high priority in the 5-year plans. Giant schemes like the Bhakra Nangal, Hirakud, Domoder Vlley, Nagarjunsagar, Sardar Sarover, Rajasthan Cannel Project etc. were taken up to increase the irrigation potential and maximize agriculture production. A number of individuals and agencies have estimated the likely population of India by the year 2025 and 2050. According to estimates adopted by National Commission on Integrated Water Resources Development (NCIWRD), by the year 2025, the population is expecting to be 150 Crores in high growth scenario. Keeping in view the level of consumption, losses in storage and transport, seed requirement and buffer stock the prospected food grain and feed demand for 2025 would be 400 millions tons in high demand scenario. For projected population of India for 2025 per capita water availability will be 421 m^3 and utilizable surface water per capita will be 1451 m^3. However, the general situation of availability of per capita is much more alarming.

The irrigated area in the country was only 22.6 million hectares in 1950-51. Since the food production was much below the requirement of the country, due attention paid for expansion of irrigation. The estimates indicate that by the year 2025 the water requirement for irrigation would be 561 km^3 for low demand and 611 km^3 for high demand scenario.

It is observe that, the present water use in Industry is about 15 km^3. If the present rate of water use continues the water requirement of the industries in 2050 would be 103 km^3, this is likely to be nearly 81 km^3,

Community Water Supply is the most important requirement and it is about 5% of the total water use. About 7 km^3 of surface water and 18 km^3 of groundwater are being use for community water supply in urban and rural areas. Along with the increase in population another important change from the point of view of water supply to higher rate of urbanization. Accordingly, to the projections, the higher is the economic growth, the higher would be urbanization. It expected that nearly 61 % of the population would be living in urban areas by the year 2050 in high growth scenario as against 48% in low growth scenario.

The hydropower potential of India has estimated at 84044 MW @ 60% load factor. At the time of independence, the installed capacity of hydropower projects was 508 MW. By the end of 1998, the installed hydropower capacity was about 22000 MW. The status of hydropower development is the major baring is highly uneven. According to an estimate, India plans to develop 60000 MW additional hydropower by the 12th five-year plan. Nine includes 14393 MW during the 10th five-year plan i.e. (2002-2007), 20000 MW during 11th FYP (2007-2012) and 26000 MW during 12th (2012-2017) FYP.

Water Resources Management:

Water Resources Management is a very important issue with regard to the conservation and the protection of water. Water demand management meant to manage the available water resources wisely and to deliver the necessary amount for sustainable development. The recent estimates on water demand made by standing sub committee of the Ministry of water Resources and the National Commission for Integrated Water Resources Development their estimates made until the year 2050. Both of them have triggered warning bells on the intensity of the problem. The Union Ministry of Water Resources has estimated the countries water requirements to be around 1093 BCM for the year 2025 and 1447 BCM foe the year 2050.

Water Requirement for Various Sectors
(Water Demand in km3 or (BCM)

Sector	Standing Sub Committee of Ministry of Water Resources			National Commission for Integrated Water Resources Development		
	2010	2025	2050	2010	2025	2050
Irrigation	688 (84.62)	910 (83.26)	1072 (74.08)	557 (74.08)	611 (78.45)	807 (72.48)
Drinking Water	56 (6.89)	73 (6.68)	102 (7.05)	43 (7.05)	62 (6.06)	111 (7.35)
Industry	12 (1.48)	23 (2.10)	63 (4.35)	37 (4.35)	67 (5.21)	81 (7.95)
Energy	5 (0.62)	15 (1.37)	130 (8.98)	19 (8.98)	33 (2.68)	70 (3.91)
Other	52 (6.40)	72 (6.59)	80 (5.53)	54 (5.53)	70 (7.61)	111 (8.30)
Total	688	1093	1447	710	843	1180

Source: 11th five-year plan voll- III Planning Commission GOI 2008 P-46

The In view of the existing status of water resources and increasing demands of water for meeting the requirements of the rapidly growing population of the country, as well as the problems that are likely to arise in future, a holistic, well-planned long-term strategy is needed for sustainable water resources management in India. Some important aspects are as follows:

1. A large fold storage space in reservoirs is required for successful flood management program. It also calls for community participation.
2. An integrated basin development approach is required to be developed and implemented for preparing the drought management plan before, during the after the occurrence of drought.
3. To protect the aquifers from over exploitation, an effective groundwater management policy oriented towards promotion of efficiency, equity and sustainability is required.
4. Rainwater is the primary source of fresh water. It is the process to capture and store the rainfall for its efficient utilization and conservation to control its run-off evaporation and seepage.

Strategies of Water Management:

One of the active strategies could include provisions of legal restrictions on use of water, mainly during the period of scarcity. In India a National Water Policy has adopted, which includes policy directions for development and management of water resources. Demand management for urban areas and industries is another strategy, which could adopt to reduce the demands in urban water supply or households and industries. Sound water budgeting in industry can reduce the water demand to considerable extent. The water conservation and reuse strategies should be plan at the time of setting of new industry to build in the conservation and reuse requirements from the beginning. Another strategy, which needs consideration, is changes in water pricing structures. Mostly water rates based only on a portion of what it costs to obtain, develop, transport, treat and deliver water to the consumer. The differential pricing systems are need separately for residential, commercial and industrial sectors.

Summary & Conclusion:

To conclude, Water is one of the most invaluable and essential natural resources for sustaining life and it is likely to become critically scarce in the coming decades, due to continuous increase in its demands, rapid increase in population and expanding economy of the country. We may say that without education in true sense, honesty could not ensure and without honesty, safe and clean drinking water cannot be supply to one to all houses in rural areas. Approach towards water, management should be interdisciplinary and peoples participatory. Water Management requires a set of empirical knowledge concerning hydrological, economical, social, ecological and institutional issues. To match the requirements of the huge and growing population water management is essential. It is true for all the areas. Water resource management not only provides challenges, but opportunities as well. Wise water management offers improved livelihoods, including through job creation, a safer environment for people and economic activity and better overall health and well-being. Other potential sources for drinking water and economic uses are increasingly being explored through reuse, recycling and use of alternative resources.

References:

1. Integrated water resources development- plan for action, Report of the National Commission for Integrated Water Resources Development, Ministry of Water Resources, New Delhi.
2. The Indian Economic Journal Special Issue, December 2011 on Sustainable growth and transformation.
3. National Water Policy, Ministry of Water Resources, New Delhi
4. Shah,T, Groundwater and human development, Challenges and opportunities in livelihoods creation and environment, Lecture delivered during the workshop on creating synergy between groundwater research and management in South Asia.
5. Lal, M Climate Change, Implications for India's water resources.
6. R.D.Deshpande and S.K.Gupta Water for India 2050.
7. Watershed Management, Dr.Archana Mishra.
8. Bundo ki sanskriti, Anil Agrawal, Sunita Narayan, Center for Science and Environment
9. Water resources of India, Rakesh Kumar, R.D.singh and K.D.Sharma, National Institute of Hydrology, Roorkee, India.
10. International Water Resources Association
11. Bose, and Saxena. Mansoon, Employment News, 2001.
12. Porous cities, new directions in urban water usage.
13. World water supply and demand. 1995 to 2025 for the IWMI.
14. Krishiworld, The pulse of Indian Agriculture
15. FAO corporate document Repository, Natural Resources Management & Environment Deptt.
16. K. L. Rao, India's Water Wealth, Orient Longman, New Delhi.
17. V.M.Dandekar, Transforming Traditional Agriculture: A Critique of Prof Schultz, Economic and political Weekly, 20 August.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

VOTING BEHAVIOUR IN INDIA: A SPECIAL CASE STUDY OF DISTRICT PITHORAGARH (FROM 2000 TO 2020)

Dr. Roop Kishore Dwivedi[1] Ravi Shankar[2]
[1]Assistant Professor, Department of Political Science, L.S.M Govt. P.G College, Pithoragarh, Uttarakhand, India *Kumaun University, Nainital,* Uttarakhand, India
[2]Ph.D. Student, Department of Political Science, L.S.M Govt. P.G College, Pithoragarh, Uttarakhand, India *Kumaun University, Nainital,* Uttarakhand, India
***Corresponding Author-* Dr. Roop Kishore Dwivedi**
Email id: drroopdwivedi@gmail.com
DOI- 10.5281/zenodo.7267407

Abstract
The study of voting behaviourur is of profound significance in democratic countries. It is a study that hovers around how people vote and how they decide to vote for a candidate. The present research work attempts to study the determinants of the voting behaviour of the people of the Pithoragarh district. For this purpose, an empirical investigation was conducted. An adequate sample size was drawn from the electorates of the Pithoragarh district. The study makes a modest effort to understand the socioeconomic profile of the electorates, their voting tendency, their voting practice as well as their political participation, and most importantly their voting behaviour in the Lok Sabha election and the Assembly election. In addition, the study consulted various secondary sources to trace the evolution of electoral politics in the Pithoragarh district. After the statistical analysis of the data, a qualitative analysis was done and the significant findings of the present study have been presented in this research paper.

Keywords: Electoral behaviour, Political awareness, Pithoragarh, Caste System and Politics.

Introduction

Voting is the simplest form of political participation in the democratic system. It provides a peaceful mechanism for the participation of people in the political and administrative processes and institutions of a democratic nation. And the study of voting behaviour is a highly specialized sub-field within political science that constitute a very significant area of empirical investigation. Voting has become virtually a universal means by which individuals make collective decisions. Even if people are not aware of personal involvement in the electoral decision, they may still be induced to vote by social pressures and inner feelings of social obligation.

Voting Behaviour is more than the examination of voting records, a compilation of voting statistics, and computation of electoral shifts. It also involves the identification of the determinants that affects voting behaviour. The study of voting behaviour is premised on the idea that the social characteristics of voters explain the way they vote. The important characteristics are religion, nationalism, caste, age, language & location, money power, political ideology, education, political wave or slogans during elections, or by other irrational factors. The main purpose of the present study is to highlight the factors that determine the electoral behaviour of the electorates of the Pithoragarh district.

The study of electoral behaviour started around the 18th century, this early attempts made use of aggregate data analysis that is, using actual election returns by geopolitical units e.g., wards, districts, etc. Of late, voting behaviour has been used to describe, as Samuel S. Eldersveld in his article 'Theory and

Method in Voting Behaviour Research' writes: 'The term voting behaviour is not new. But it has been used of late to describe certain areas of study and types of political phenomena which previously had either not been conceived or were considered relevant". In the words of Plano and Riggs, "Voting Behaviour is a field of study concerned with the ways in which people tend to vote in the public election and the reasons why they vote as they do."

The study of voting behaviour started in India in 1967 on a small scale in six institutions and on a bigger scale since 1971. Iqbal Narain, Rajni Kothari, Rameshray Roy and D.L. Seth etc made seminal contribution. But much before that, the first book on voting behaviour was produced in the USA in 1944 and entitled The People's Choice (written by Lazersfeld, Berelson, and Gaudet). This was followed by Voting (1954) and The Vote Decides (1954). The most sophisticated study has been The American Voter (1960) by Campbell, Converse, and Stokes.

The big question then is what makes voters of Pithoragarh district decide? Is it rationales or non-evaluative factors such as political awareness, political maturity, candidate character, religious affiliation, ethnic or family ties, or a social media trend? Touching upon, another classic distinction in studies of voting behaviour, the question is whether voters vote retrospectively to throw the unqualified candidates out or vote prospectively, on the basis of promises. There has been virtually no long-term study of these issues. Therefore this study will be dedicated to collecting data about the voting behaviour of voters of the Pithoragarh district and to know the reasons that respondents will give for voting for one party or the other or to an individual candidate. The analysis of these factors has been presented under three categories such as positive, negative, and miscellaneous factors.

Positive Factors

This category identifies those factors which positively influence the voting behaviour and the study of these factors plays an important role for increasing the political awareness and participation among the peoples. These factors are as follows:

1) **Charismatic leadership**: We have seen that in Indian politics charisma of the leader plays an important role. If the leader has a good personality, speaking skills, vision, and approachable attitude, then the leader can earn the good faith of the public. During the study of the Pithoragarh district, it was found that more voters prefer to vote for a candidate with a clean and honest personality.
2) **Political awareness**: The data collected from the Pithoragarh district showed a lack of interest and information about the present occupations of ministers and their cabinets. Lack of awareness was also seen during the voting time, some of them voted not under any pressure but due to lack of information, some did not vote while some of them voted under the influence of others as they voted as per their family members voted or in the impact of their friends. Thus political awareness and maturity are the major psychological determinants of voting behaviour.
3) **Local political issues:** Vidhan Sabha elections are always contested on local issues and Lok Sabha on national issues but we saw that here in Pithoraragh district, the voters voted for both national affairs as well as on local issues. In the last assembly election issues like migration, unemployment, supply of water, roads, and hospitals in remote areas were the main issues that emerged during the election time and voters also voted on these issues. But during the Lok Sabha election, it was seen that voters are leaner toward national affairs.
4) **Development and existing government performance**: It is practiced in developed democracies and it is a symbol of the strong democratic system. The data showed that this is the main and desirable

factor that plays a big role in determining voting behaviour. Educated voters evaluate the work of the existing government and decide their vote. Good performance of the government appeals to voters and voting patterns can be changed.

Negative Factors

This category identifies those factors that affect the voting behaviour of voters negatively and makes voters politically immature by increasing factors like caste, religion, and other factors that create discrimination among the citizens.

1) **Caste Politics** - Caste is another influencing factor in voting behaviour. It plays a vital role in Indian politics and this is the biggest determinant of voting behaviour. Parties give tickets to the candidate of a caste which has the majority in the constituencies and it is also seen in the Pithoragarh constituency. Political parties whether they are national or local parties sets vote banks on the basis of caste. Some people also like to vote for a candidate who belongs to their caste. Political parties know that caste politics is the easiest way of influencing voters, so they gave tickets to those candidates whose caste has a higher vote bank in the district.
2) **Religion** - The Constitution of India establishes Secular State and provides freedom of religion as the fundamental right. But the surprising fact is that most of the political parties are linked with a particular religion. In the name of religion, voters are attracted and votes are demanded and Indian voter makes their opinion on religious grounds. On one hand, religion is the biggest weakness of Indian voters and on the other hand, it is the biggest strength of political parties. It is a fact that religion plays an important role, especially where both the followers of Hindus and Muslims are situated in a constituency. This gave support to Religion based parties. Though in a secular state like India, it must not be used because reality is far away.
3) **Political dynasty -** An important aspect of Indian politics is the dominance of the dynasty in electoral politics. This is a fact from which even the voters of the Pithoragarh district are not untouched, Most of the voters in the survey put more trust in the candidates who belonged to a reputed political family or well-established leaders. Thus it plays a significant role in the voting behaviour of the voter.

Miscellaneous Factors

In this category, such factors have been identified that can affect the voting behaviour of voters both positively and negatively. And the effectiveness of these factors depends upon the time that how political behaviour is displayed by the elected representatives. These factors are as follows:

1) **Gender and age of the candidates** - Age and gender create psychological impacts on voters' behaviour. The attraction of opposite sex works and different age group voters change their preferences. Political parties use this tactic of attraction and allocate tickets to people with glamour and huge fan fallowing. Our study found that young voters of the Pithoragarh district voted for a young and educated candidates, while the elder voters looked for the experiences of the candidate.
2) **Regionalism** - In politics, regionalism is a political ideology that focuses on the interests of a particular region or group of regions, whether traditional or formal Regional Political parties promote the issues of regional problems and provoke voters. Voter behaviour is easily molded on the regional interest. They find regional interest more urgent rather than national.
3) **Traditional voters -** It was found that there were some traditional voters who regularly voted for the same party or a candidate over and over again due to their party or religious affiliation. Some of the voters are emotionally attached to the political parties and political leaders and they vote in the name of the party and leader only. This type of voting pattern does not change with

time and situations. Each political party has its own cadre. Change in a political party does not change the voting behaviour of this cadre.

4) **Election campaigning strategies** - During elections, political parties try to organize huge election campaigns to attract voters and it is seen that sometimes voters vote for those candidates whose winning percentage is high and was more popular than another candidate during the campaigning. Nowadays social media has become the biggest platform where opinions are made to attract voters which results in a change in voting behaviour.
5) **Political parties -** The voters of the Pithoragarh district while casting their vote also look for the candidate party. They also see who is the face of the chief minister and the ideology of the party, the party manifesto, and the promises made by the party during the election campaign. Political ideology can be based on any historical event, sect, religion, movement, or ideology. So it was seen that the party of the candidate plays an important role that influencing voting behaviour.

It was also seen that the voters of the Pithoragarh district like to give opportunities to new candidates in assembly elections for change. And some voters like to exercise their franchise on the basis of party choice. While there are local parties but the voters of the Pithoragarh district like to vote for the national parties. This shows that the voters here prefer to national party as compared to the local party. Thus the party orientation of the voters is also one of the major factors influencing voting behaviour.

Conclusion

Voters are influenced by sociological factors such as income, occupation, education, gender, age, religion, ethnic background, geography, and family. – Voters are also influenced by psychological factors such as political party identification, specific candidates, and critical issues. Indian voting behaviour has many dimensions. There is a different graph of the rural and urban voters. In rural and urban areas again voting pattern is different on the ground of education. An educated voter acts differently in comparison to an uneducated voter. Caste-based equations, reservation, and religion change the mindset of voters. Media houses are continually generating different types of opinions. It is complicated to say that voting behaviour will reflect a certain pattern because Indian voters are more confused than aware. It is clear from the above contention that many factors together affect voting behaviour in the Pithoragarh district. All the factors are important in their own place, however, political awareness and maturity, and development are the factors that affect positively influence the voting behaviour of the voters. Apart from these factors like caste and religion also influence voting patterns in the Pithoragarh district. At the same time, many other factors were also identified by the researcher that affects voter turnout.

References

1) J. Eldersveld, Samuel. Theory and Method in Voting Behaviour Research. The Journal of Politics, Feb. 1951, Vol. 13, no. 1, pp. 70-87.
2) Arzheimer, Kai & Evans, Jocelyn and Beck- Lewis, S. Michael. Electoral Behaviour, Sage Publications India Pvt Ltd, 2017.
3) Johari, J.C. Comparative Politics, (New Delhi: Sterling Publishers Private Ltd.), 2019, pp 30-32.
4) Magstadt, M. Thomas, M. & Peter, M. Schotten, Understanding Politic: Ideas, Institutions, and Issues, Tenth Edition, 2013, pp. 12-15.
5) Usman, Ahmed & Hussain, Shabbir & Usman, Muhammad. Caste and Character of Candidates, Political Patronage and Voting Behaviour in India, Journal of Indian Studies Vol. 3, No. 2, July – December 2017, pp. 89 – 94
6) Kumar, Sanjay & Rai, Praveen. Measuring Voting Behaviour in India. Sage Pub. India Pvt. Ltd. 2018.

7) Kumar, Mohanachandran Dileep and S. Govindarajo, Normala. Theory of Reasoned Action and Citizen's Voting Behaviour, (2020), Pertanika J. Soc. Sci. & Hum. 28 (1): 695 - 715
8) Negi Singh, Man Mohan. Theoretic Aspects of Electoral Behaviour, The Indian Journal of Political Science, Jan.-March, 2005, Vol. 66, No. 1 (Jan.March, 2005), pp. 95-104
9) Hazarika, Biraj. Voting Behaviour in India and Its Determinants. IOSR Journal Of Humanities And Social Science (IOSR-JHSS) Volume 20, Issue 10, Ver. IV (Oct. 2015), PP 22-25
10) Banerjee, Mukulika. Why India Votes? New Delhi and Oxon: Routledge, , 2014, pp. 286.
11) Srisikar, V.M. Political Behaviour in India, Manakralas Bombay, 1965
12) Mohanachandran, Kumar Dileep & Govindarajo, Normala S. Theory of Reasoned Action and Citizen's Voting Behaviour.
13) Sharma, Alpana. Voting behaviour in India: An Analysis.
14) Iyer, Sriya & Shrivastava, Anand. Religious riots and electoral politics in India. September 8, 2017
15) Norris, Pippa. Electoral Engineering "Voting Rules and Political Behaviour", Cambridge University Press, 2004
16) Kumar, Ashutosh. Electoral Politics in Punjab Study of Akali Dal, Economic and Political Weekl, April 3-10, 2004
17) Ahmed, Bashiruddin. Caste and Electoral Politics.
18) Yadav, Yogendra. Electoral Politics in the Time of Change: India's Third Electoral System, Economic and Political Weekly, Vol. 34, No. 34/35 (Aug. 21 - Sep. 3, 1999), pp. 2393-2399.
19) Deininger, Klaus & Jin Songqing & K. Nagarajan, Hari & Fang, Xia. Does Female Reservation Affect Long-Term Political Outcomes? Policy Research Working Paper 5708, 2011.
20) Negi, M.M.S. Voting Attitude of Women in Uttarakhand With Special Reference to Garhwal, The Indian Journal of Political Science, July-Sept, 2011, Vol. 72, No. 3, pp. 803-818.
21) Visser, Max. Voting: A Behavioral Analysis, Behaviour and Social Issues, Volume 6, No. 1, Spring 1996
22) Majeed, Ahtar. Relative Deprivation and Political Behaviour. The Indian Journal of Political Science, June, 1979, Vol. 40, No. 2 (June, 1979), pp. 140-155.
23) Grofman, Bernard & Blais, Andre & Bowler Shaun. Duverger's Law of Plurality Voting. Springer Science Business Media, LLC 2009, pp. 97-114
24) Heath, Oliver & Verniers, Gilles, and Kumar, Sanjay. Do Muslim voters prefer Muslim candidates? Co-religiosity and voting behaviour in India.
25) Jones, Morris W. H. Indian Voting Behaviour. Pacific Affairs, Sep., 1957, Vol. 30, No. 3 (Sep., 1957), pp. 265-268
26) Akhter, Zahida and Sheikh, Ah. Younis. Determinants of Voting Behaviour in India: Theoretical Perspective. Public Policy and Administration Research, Vol.4, No.8, 2014.
27) Agomor, Kingsley & Adams, Samuel. Determinants of Voting Behaviour in Ghana. Montego Bay Jamaica, May 2014
28) Campbell, Rosie and Heath, O. (2017) Do women vote for women candidates? Attitudes towards descriptive representation and voting behaviour in the 2010 British election. Politics and Gender 13 (2), pp. 209-231.
29) Sharma, Kavita. Political Advertising and Voting Behaviour in India: The Mediating Role of Voting Decision Involvement, GSTF International Journal of Law and Social Sciences (JLSS) Vol.1 No.1, Jan 2012.
30) Haokip, Thongkholal. Voting behaviour in deeply divided societies: partisanship and ethnic voting in the hills of Manipur, (2020) Asian Ethnicity.
31) Dogra, Choudhary, Deepak. Electoral Behaviour in India - A Study of Voting Behaviour in the State of Himachal Pradesh. 1998
32) Virmani, Arvind (2004) : Economic growth, governance and voting

behaviour: an application to Indian elections, Indian Council for Research on International Economic Relations (ICRIER), New Delhi, Working Paper, No. 138.

33) UKEssays. (November 2018). Meaning Of Voting Behaviour Politics Essay. Retrieved from https://www.ukessays.com/essays/politics/meaning-of-votingbehaviour-politics-essay.php?vref=1
34) Verma, Rahul and Sardesai, Sreyas. Does Media Exposure Affect Voting Behaviour and Political Preferences in India? Economic and Political Weekly Sep 2, 2014, Vol. 49, No. 39, pp. 82-88
35) Goodin, Robert E. The Oxford Handbook of Comparative Politics. Oxford University Press Inc., New York 2007, pp 555-627. 36) Chandra, Kanchan. Why Ethnic Parties Succeed: Patronage and Ethnic Headcounts in India. 2003
36) https://www.coursehero.com/file/36416927/chapter-6pdf/

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

KHAP PANCHAYAT AND HONOUR KILLING

Miss. Anupama Pralhad Chavhan
Assit. Prof. Shri. SNG Law College, Akola
Corresponding Author- **Miss. Anupama Pralhad Chavhan**
Email id: anupama.chavhan2804@gmail.com
DOI-10.5281/zenodo.7267422

Abstract-

India is a democratic country and its citizens have various freedom and .rights guaranteed under Indian constitution .The persons residing in India have right to peaceful assembly and right to form an association except violating the rights of another .Article 21 of the Constitution of India guarantees life and personal liberty of to its citizens. But today the across the globe of honour crimes cuts across racial, religious and cultural and religious divides. Today violence involved in honour crimes and killings under the guise of protecting the honour of the family and community varies in different forms but the use of the family and community varies in different form. The role of khap panchayat needs to be analyzed in a proper context so that the democratic choice of the people at large specially the women and weaker section in particular. Khap panchayts need to be questioned in terms of their legal status and the authority by which they punish people brutally or carry out killings in the name of honour. The present research paper gives details the various aspects of honour killing and explores honour crimes with special reference to honour killings along with broad understanding of modern trends followed by present generation as the main cause of honour crimes. This paper also discusses the various provisions of Indian Penal code, 1860 under which honour crimes are punished and other legislative provision which prohibit such killings.

Key-words: Khap Panchayat, Gotra, Honor crimes, Honour killing, Fundamental Rights, Indian Penal Code ,Constitution of India .

Introduction:-

The origin of the word khap is disreputable. Some scholars believe that Khap in Sanskrit is short form of the word Kharpur meaning sky kingdom. The origin of the word khap is derived from faank, which means an offshoot or fraction. Historically the word khap was used first time in Rajasthan during the medieval time. This word has come into existence in the senses report of the year 1890-91.the first report based on religion and caste and was prepared in Jodhpur. Some traces its origin in Hindi Khappar and Chappar meaning roof. But the meaning of these words does not reflect the functioning of the present day Khaps. The word khap is probably originated from a word Khap means deep thinking or discussion and the word Khap may be a broader word of khap means an assembly of peoples of a particular caste or community or area resolving disputes amicably by discussion. Khap is therefore an endogamous institution of a clan. It is a goatra centric panchayat and covers a cluster of villages dominated by a particular gotra. Khaps mostly exist around Delhi, Haryana, Western Uttar Pradesh, Punjab and Adjoining areas. A khap panchayat is a community or assembly of khap elders and a sarv khap is an assembly of many khap panchayat. Khap is represented by community or caste. Community which is also known as as biradari , refers to not just one concrete structural unit at the village level but rather to patrilineal connection, real, putative or fictional and includes the agnates and cognates. It sometimes refers to the entire village, irrespective of the differences in caste, class or creed. Each caste has its own Biradari to enforce its rules but when the matter is not settled by the caste Panchayat of a particular caste group due to few households of that caste in a village, it is usually referred to the dominant caste of region which then assumes the power of enforcing the internal behavior of the endogamous group. Observing the norms of Biradari is must for the Izzat honour of the caste, group or village.

Honour Killing: Analogue-

According to Cambridge advanced learners Dictionary the English word " Honor" stands for a quality that combine respect pride and pride . Honor is about a right to respect. The community has a duty to respect is followed Honor Killings may be dealt with as a human rights violation or also a crime of passion.

'Honor Killing' is defined as the murder or forced suicide of a person by a family or clan member or a hired killer upon suspicion or insinuation that a person has compromised his or her virtue and thus stained the family's. Honor or in other words, upon the suspicion or insinuation that one has been involved in something immoral and thus disgraced his/her family.

Honor crimes are the acts of violence. Commonly murder mostly committed by family members predominantly against female relatives, who are perceived to have brought dishonor upon the family or community. The perceived dishonor may becomes the outcome of following behavior or suspicion of such behavior-

a) Desiring to marry by owns choice.
b) Prohibits arranged marriage.
c) Engaging in heterosexual acts outside marriage.
d) Engaging in homosexual acts.
e) Dressing in such a manner which is unacceptable or unapproved by family or community.

So Honor killings are deeply rooted in antiquated traditions and social values. Honor killing comes from the traditions of ancient desert tribes who believed that sexual alliance without the consent of the father is a sign of betrayal. Sometimes inter caste or inter community sexual alliances by women are seen as dilution of family pedigree. In several traditional societies alliance beyond the religion and community is seen as a theft or a challenge to the authority man. According to tribal's beliefs, dishonor is erased only with blood.[1] Most of the [i]Honor killings are committed in Muslim community. Now it is also practiced by Sikhism. However some of the northern Indian Hindu Communities like Jats and Rajputs also favor such killings

Honor Killings and Khap Panchayat :-

Khap Panchayats due to their seniority and authoritative diktat over the upper caste, the Jats assumed themselves to be the ruler and wiser humankind to settle on cases related to inter-caste marriages, kinship and so on. They take cognizance of the offence against the caste related social taboos and other similar incidents. Nobody ventures to question their self imposed diktats though all the decisions are subjected to variety of disabilities and dictatorship. The very intervention of these Khap Panchayats is beyond law and legal acknowledgement. They don't even support the supreme law of the land, our Indian Constitution, not even personal law and Hindu Marriage Act, 1955. The position and function of these Khap Panchayats are simply due to traditional patriarchal notion which they firmly injected into ordinary people to believe that they are the only principal authority to decide cases related to ‗Honour Killing' and whatever dictums they are providing, parties involved in the case are bound to observe otherwise, death is the ultimate penalty for disrespecting their judgment. Not only that, their judgments are sometimes so atrocious and brutal and so convincing that the family members of the spouses don't even think twice to implement the same with their own sons and daughters. Evidence of cases or killing is wiped away before it reaches to the police station before it gets registered as a case. And all these are supported by the family members to obey the orders imposed by the Khap Panchayat. So the dark consequence of these self-created courts by Khap Panchayats are immensely shocking and dreadful and are simply having sinister effects on society in the name of so-called caste. Gradually, it is increasing and becoming powerful as a society and civic people surviving in society and the family members of the victims are allowing them to become influential and commanding by remaining silent and unvoiced.

Honour Killings are reported in various newspapers whereas in our country women are playing a major roles in all aspects of life and performing their duties with great keenness and Honour as being President of the country, Administrative Officers, Lawyers ,Judges ,Police Officers, Doctors ,Engineers, Pilots, Astronauts, Bank Officers ,Businesswomen, Sports persons, film Industry and so on . In this 21stcentury when Judiciary is playing a vital role in controlling Indian legal system where it is mentioned clearly under Article 141 of the Constitution that the decisions given by Supreme Court are binding on all Courts, the role of unconstitutional Khap Panchayat is something improbable and outrageous .Khap Panchayat is the union of few villages, mainly in North India though it exists in similar forms in the rest of the country.

Conclusion:-

Khap panhayats in India and abroad commonly known for Killings the girls and couples on the issues of sagotra, intre-caste and inter- religious marriages. They are against the modern way of living giving priority to personal liberty and choice. They do not want the young girls to mix up or communicate with boys khaps are strict on marriages issues due to low sex ratio in region. Although media, judiciary, civil society members are continuously putting pressure to ban such type of organization but lack of will power and intention of government , political leaders and police such institutions are surviving and imposing their illegal dictates on common man by creating fear in their mind. A collective effort is badly needed to have control on khap panchayats,ultimately none of such institutions can be allowed to encroach in personal space and life of individual. Apart from this awaring the people against khaps can also play a decisive role because without public support khaps will lose their relevance .

References:-

1. Saini Manveer, (21APRIL 2014),"Harayanas biggest Khap Panchyat script history, allows inter-caste marriages "times of India.
2. Honour killing in India- a crime against humanity, Manpreet kaur and Mandeep Kaur, anamika publishers and distributors (p) Ltd, New Delhi. P-64.
3. Pradhan ,M.c. (18 December 1965) "the jats of Northen India, their traditional political system-II, economic and political weekly.
4. Chowdhary, P, Contentious Marriages, Eloping Couples, Caste and Patriarchy in Northen India, New Delhi, Oxford University Press, 2007, Pp.95-96.
5. Ibid.
6. Cambridge Advanced Learners Dictionary (with CD) 3rd edition by Cambridge dictionary ISBN NO 05211732123, 9780521732123978-0521732123
7. Vithoshka Diana Y,"the Modern face of Honor killing: factors, legal Issues and policy recommendation".22(2) Berkeley Undergraduate Journal (2010) university of California Berkeley.
8. The ministers of home affairs (Shri. P. Chidambaram): calling Attention (Rule-197) shri gurudas Dasgupta called the on 05 August 2010 http://www.Indiankanoon.org\docfrag

ment\566355?forma Input = honor% 20 Killing.
9. Madek, Christina," killing Dishonor: Effective, Eradication of honour killing," Suffolk Transnational Law Review. VOL29, winter (2005):53.
10. Husain, Manza," Take my Riches , Give me justice:"A contextual Analysis of Pakistan's Honor crime Legislation , Harvard journal of Law and Gender , vol.20 winter(2006):223Gonzalez , Wendy, :Kari- Kari :Honor killing," Buffalo women Law journal, vol.9 2000/2001 (2000)

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

"A STUDY ON THE IMPACT OF PRADHAN MANNTRI FASAL BIMA YOJANA IN DEVELOPMENT SOCIO-ECONOMIC STATUS OF FARMERS IN NANDE DISTRICT"

Mr. Balaji Arjun Kamble[1] **Dr. Ranjeet V. Tehra**[2]
[1]Research scholar
[2]Assistant Professor School of Commerce & Management Science SRTMU Nanded
***Corresponding Author*- Mr. Balaji Arjun Kamble**
Email id: balajiarjunkamble@gmail.com
DOI- 10.5281/zenodo.7267437

Abstract
Presently the farmers of Nanded district have been become a victim of crop loss due to crop failure because heavy rain in monsoon season of 2022, so economic condition of farmers has been weaker, so farmers are facing different challenging situation and leading to extremely hopeless and committing suicide. The present research article showing an overview of the impact of Pradhan Mantri Fasal Bima Yojana in development of socio-economic status of farmers in Nanded district. The Pradhan Mantri Fasal Bima Yojana (PMFBY) was launched in Kharif 2016 Supporting agriculture by providing affordable crops Insurance production ensures comprehensive risk protection for farmers' crops All natural hazards that can be prevented from pre-sowing to post-harvest stage and process of crop loss assessment coverage of crops etc.

Introduction

The Pradhan Mantri Fasal Bima Yojana (PMFBY) was launched in Kharif 2016. Supporting agriculture by providing affordable crops Insurance production ensures comprehensive risk protection for farmers' crops All natural hazards that can be prevented from pre-sowing to post-harvest stage. The Scheme has completed 8 crop seasons and is being implemented across States/Union Territories After the commencement of the Scheme, The Ministry of Agriculture and Farmers Welfare Government of India has endeavored to make the Scheme more effective, transparent and auto-administration driven with the intention to minimize manual interventions and eliminate usage of variable methodologies for implementation and execution on the ground level. This was facilitated by a detailed set of Operational Guidelines by leveraging efficient and cutting-edge technological solutions.

The objective of Pradhan Mantri Fasal Bima Yojana is to provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests & diseases, to stabilize the income of farmers to ensure their continuance in farming, to encourage farmers to adopt innovative and modern agricultural practices, to ensure flow of credit to the agriculture sector. and the Implementation of this scheme through various multi-agency framework by selected insurance companies under the overall guidance & control of the Department of Agriculture, Cooperation & Farmers Welfare Ministry of Agriculture & Farmers Welfare Government of India and the concerned State in co-ordination with various other agencies; viz Financial Institutions like Commercial Banks, Co-operative Banks, Regional Rural Banks and their regulatory bodies, Government Departments viz. Agriculture, Co-operation, Horticulture, Statistics, Revenue, Information Science & Technology, Panchayati Raj etc.

The Coverage is available to all farmers, including subsistence farmers and tenant farmers, who grow the reported crops in the notified areas, Farmers must have an insurance cover in the crops that have been registered and insured and in the case of sharecroppers/tenant farmers, non-loanee farmers must send required documentary evidence of land records prevailing in the State, such as Records of Right Land Possession Certificate and/or applicable contract or agreement details other documents notified as allowed by the concerned State Government.

Define Crop Insurance

"Crop insurance protects farmers from financial losses resulting from crop failures or losses caused by identified or unidentified risks beyond their control"

Objectives of Pradhan Mantri Fasal Bima Yojana

- Pradhan Mantri Fasal Bima Yojana (PMFBY) aims at supporting sustainable production in agriculture sector in the following way.
- Providing financial support to farmers suffering crop loss/damage arising out of unforeseen events
- Stabilizing the income of farmers to ensure their continuance in farming
- Encouraging farmers to adopt innovative and modern agricultural practices
- Ensuring flow of credit to the agriculture sector, which will contribute to food security, crop diversification and enhancing growth and competitiveness of agriculture sector besides protecting farmers from production risks.

Coverage of farmers

Coverage is available to all farmers, including sharecroppers and lease farmers, who grow the notified crops in the notified areas. Farmers should have an insurable interest in the crops that have been registered and insured and non-loanee farmers must provide documentary evidence of land records in the state, such as Records of Right, Land Possession Certificate or applicable contract or agreement details/other documents notified as permitted by the concerned State Government (in the case of sharecroppers or tenant farmers).

Coverage of Crops:

Food crops (Cereals, Millets and Pulses, Oilseeds, Annual Commercial or Annual Horticultural crops varying crops have different levels of indemnity. all crops will be covered by three levels of indemnity: 70%, 80%, and 90%, respectively, corresponding to high, moderate, and low-risk locations.

Premium Subsidies and Premium Rates:

The Actuarial Premium Rate (APR) would be imposed by the Insurance Company under PMFBY. The rate of premium payable by the farmer is shown in the table below:

Kharif: All food grain and Oilseeds crops (all Cereals, Millets, Pulses and Oilseeds crops), 2.0% of SI or Actuarial rate, whichever is less

Rabi: All food grain and Oilseeds crops (all Cereals, Millets, Pulses, and oilseeds), 1.5% of SI or Actuarial rate, whichever is less

Kharif and Rabi: Annual Commercial or Annual Horticultural crops 5% of SI or Actuarial rate, whichever is less, Perennial Horticultural crops (pilot basis), 5% of SI or Actuarial rate, whichever is less

Process for Making a Claim:

Farmers should contact our company and inform us of any losses resulting from a post-harvest or localized calamity within 72 hours of the event occurring, along with survey number-wise insured crop and acreage affected, and Premium payment verification details as given to the Bank or Intermediary or CSC centers.

If applicable, a local newspaper cutting and other accessible documentation to substantiate the occurrence of the loss event and the severity of the loss, if any, should be provided.

The following companies provide crop insurance in different district in Maharashtra

- Agriculture insurance company
- Cholamandalam MS General Insurance Company
- Reliance General Insurance Co. Ltd.

- Bajaj Allianz Future Generali India Insurance Co. Ltd.
- HDFC ERGO General Insurance Co. Ltd.
- IFFCO Tokiyo General Insurance Co. Ltd.
- Universal Sompo General Insurance Company
- ICICI Lombard General Insurance Co. Ltd.
- Tata AIG General Insurance Co. Ltd.
- SBI General Insurance United India Insurance Co.

Research Methodology

Secondary analysis is a type of research that involves assessing data that has already been acquired by someone else. the nature of the Research Paper is descriptive. Generally, this Research paper based on primary and secondary data. Researcher has used secondary data Through various sources such as annual reports government web-site books newspaper etc. and primary data collected through visited farmers, interview, etc. analysis of about Pradhan Mantra Fasal Bima Yojana and to understand the present status of PMFBY.

Secondary Data: Secondary information means those which are already created someone in the form of books, research articles, newspaper, internet, reports, etc.

Objectives of Study

- To understand the performance of PMFBY in Nanded district
- To ascertained the actual beneficiaries of PMFBY
- To know the socio-economic status of farmers availing benefits of PMFBY

Following table showing the performance and actual beneficiaries of PMFBY in Nanded district from 2016 to 2022

PMFBY Kharif Season Report of Nanded district Year wise

Table no. 01

Sr.no	**Years**	**Participant farmers (In Lakh)**	**Area insured (In Lakh)**	**Area Insured Amount (Cr.)**	**Farmers Premium (Cr.)**	**Approved**	
						Beneficiary number	Amount (Cr.)
1	2016-17	5.56	2.92	898.22	17.96	444074	502.04
2	2017-18	10.41	5.56	1813.61	36.14	743595	542.75
3	2018-19	10.93	5.79	2182.99	610.65	652045	20.89
4	2019-20	11.92	5.78	2207.61	48.99	630957	313.61
5	2020-21	9.53	5.03	2098.10	611.88	121602	97.91
6	2021-22	9.11	5.17	2162.86	44.95	715051	330.56
Total		**57.25**	**30.25**	**11363.39**	**3515.47**	**2865413**	**3468.58**

(Source: Agriculture office Nanded)

PMFBY Rabi Season Report of Nanded district Year wise

Table no. 02

Sr.no	**Years**	**Participant farmers (In Lakh)**	**Area insured (In Lakh)**	**Area Insured Amount (Cr.)**	**Farmers Premium (Cr.)**	**Approved**	
						Beneficiary Number	Amount (Cr.)
1	2016-17	0.09	0.08	19.87	13.11	--	--
2	2017-18	0.73	0.62	149.49	2.24	02	0.0034
3	2018-19	2.83	2.15	539.04	8.08	--	--
4	2019-20	1.38	0.87	220.39	3.30	--	--
5	2020-21	0.89	--	211.36	60.75	--	--
6	2021-22	--	--	--	--	--	--
Total		**5.92**	**4.61**	**1140.15**	**87.48**	**02**	**0.0034**

(Source: Agriculture office Nanded)

Conclusion

Pradhan Mantri Fasal Bima Yojana is crop insurance schemes which is useful for farmers those who are facing failure of crop loses, PMFBY are plying vital role in Nanded district to reduce crop risk and also it provided the financial assistance to farmers get relief from financial losses due to crop failure. Through this study there is no impact on social status of farmers in Nanded district through this schemes farmer get temporarily financially assistance which means that there is impact on economic status improve as temporary.

After analysis of above table from 2016-2022 kharif and rabi 2065413, and 02 have actual beneficiaries respectively. In kharif season have taking more benefit by farmers comparatively rabi season from 2016 – 2022.

References

1. https://www.iffcotokio.co.in/pradhan-mantri-fasal-bima-yojana/coverage-of-farmers
2. https://pmfby.gov.in/faq#:~:text=Ans%3A%20Pradhan%20Mantri%20Fasal%20Bima,continuance%20in%20farming%20c)%20encouraging
3. Agriculture office Nanded district reports
4. https://pmfby.gov.in/

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

THE PROBLEMS IN USAGE OF SOCIAL MEDIA ESPECIALLY FOR CHILDREN AND SOLUTION

Shaik Farooq Hussain [1], Dr. G.N.R. Prasad [2]
[1] MCA IV Semester, Department of MCA, Chaitanya Bharathi Institute of Technology (A), Hyderabad
[2] Sr. Asst. professor, Department of MCA, Chaitanya Bharathi Institute of Technology (A), Hyderabad.
Corresponding Author- Shaik Farooq Hussain
Email id: farookhusain3@gmail.com
DOI- 10.5281/zenodo.7267443

Abstract

The usage of social media is increased for last 3 years especially in the covid – 19 time. The usage is very high in the teenagers. In this paper, we are presenting the outcome of the project detection of child predators on social media and also child predator detection system on social media is a web based application. This project aims to detect child predator comments and post on social media like face book, Instagram etc., and send report to cyber cell admin. To develop a well-designed database to store all comments and post of social online contact of children in pedophiles is a rapidly growing problem on social media. The detection of kids cyber sexual-offenders is so a crucial issue that must be addressed. Kids in their teens have begun to use social media as their main means that of communication. Online predators frequently invest a lot of time, money, and effort into slowly seducing their prey by giving them attention, compassion, kindness, and even presents. They are informed on the newest music and pastimes that youngsters are likely to enjoy. They pay attention to children's concerns and provide sympathy. By progressively adding sexual content into their interactions or by displaying them sexually explicit material, they also attempt to lower young people's inhibitions. The ideal solution will identify suspect accounts based on followers of child grooming behaviour patterns, hate speech instigators, stalking and bullying mentality profiles, and users of explicit material who post or leave comments on social media platforms and other websites.

INTRODUCTION

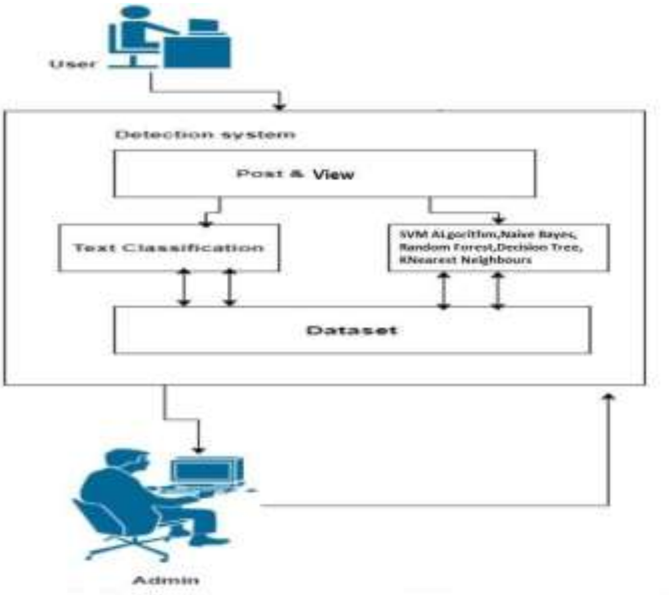
Web-based solution for social media child predator detection. The goal of this project is to find comments and posts made by child predators on social media sites like Facebook, Instagram, and others. A constantly expanding issue on social media is the need to create a well-designed database to preserve all comments and posts of social online contact of minors with paedophiles. The identification of young sexual offenders online is an urgent problem that demands attention. Teenage children are starting to utilise social media as their primary form of communication. In addition, a recent research on cognition, adolescents, and mobile phones (scamp) found that by the time they reach the age of 14, 90% of UK children between the ages of 11 and 12 own a cell phone. So-called online kid grooming, in which adults eventually communicate sexually explicit information over social media platforms, is a typical tactic used by paedophiles. Building a trusting connection with a youngster is the first step in this grooming process, which ultimately involves persuading the child to meet the person in person. Previous investigations on finding cyber-pedophilia online, included the first international competition to identify sexual predators.

Our project's main objective is to locate predators' social media profiles and provide a record of them to the cyber cell administrator. This research report gives a summary of our most recent system-building initiatives. Therefore, with an improved system, the supervisor can continue acting even after giving the sexual assault victim any reports.

2.0 RELATED WORK

They pay attention to children's concerns and provide sympathy. By progressively adding sexual content into their interactions or by displaying them sexually explicit material, they also attempt to lower young people's inhibitions. Some predators move more quickly than others, starting talks that are sexually explicit right away. This more overt strategy can involve stalking or harassment. Additionally, predators may assess children they encounter online before meeting them in person. The potential for online sexual activity is one of the internet's most harmful characteristics, however it also have certain positive qualities, which are the major drawbacks of the current system.

The proposed system uses a number of machine learning techniques, including SVM, Random Forest, Naive Bayes, K Nearest Neighbors, and Decision Tree, to anticipate postings made by child harassers on social media. Using all available algorithms, we will create a train model containing typical and harasser-specific words and phrases. This train model will then be applied to new user postings to determine if they are typical or contain harasser-specific material. Online dating dangers are taken seriously because of the large costs to youth and the sex industry, which is one of the benefits of the new system. In terms of grooming, it is customary for the elder son-in-law to behave as if he were a young person with similar interests in order to build a connection on the basis of trust and confidence.



3.0 PROJECT ARCHITECTURE

There is online tools for finding predators on social media. This project's objective is to compile predators' views, publish them on social media platforms like Facebook and Instagram, and then submit a report to the cyber cell manager. The necessity for a well-designed website to monitor all comments and online posts for children that are sexually explicit is a problem that is rapidly growing on social media.

4.0 RESULTS

To run this project install DJANGO and then deploy 'Cyber' folder in DJANGO and start server and run in browser by entering URL as 'http://127.0.1.1:8000/index.html'. This URL shows the below screen

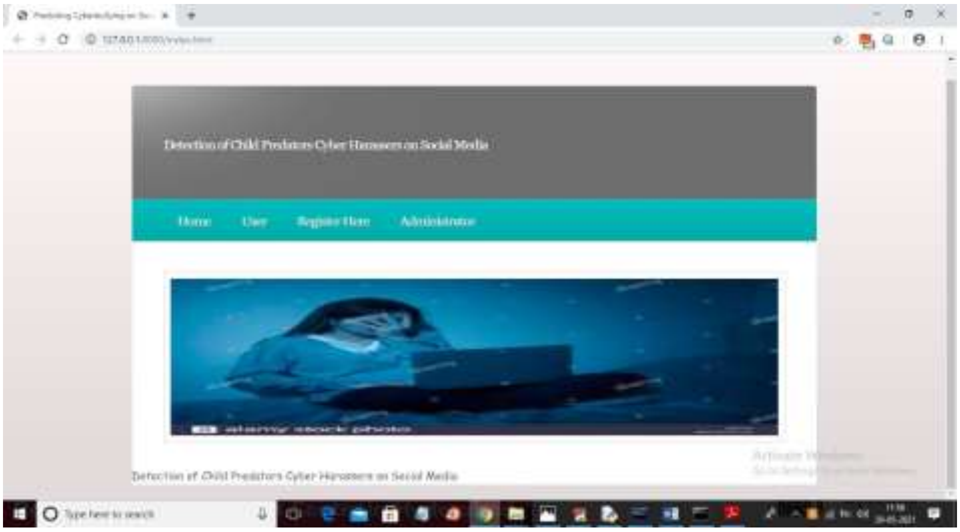


Figure : The above screen click on 'Register Here' link and add new user to create account

Figure : New User Registration Screen

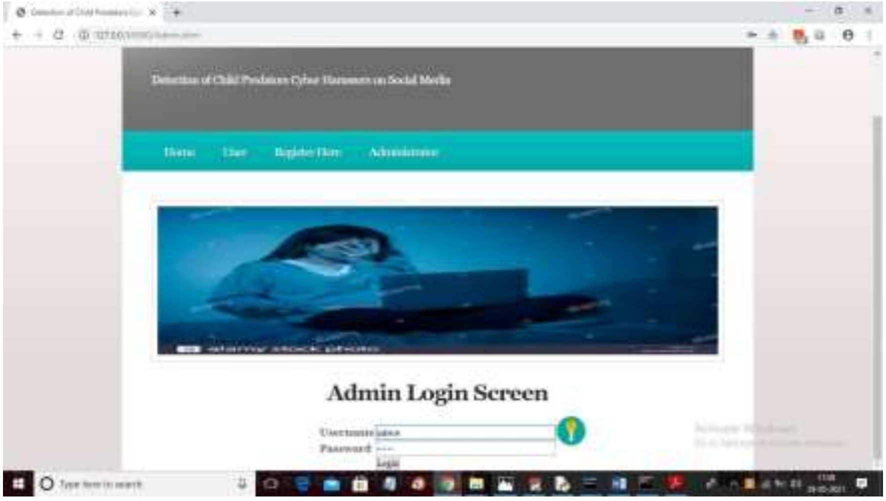


Figure : Admin Login Screen

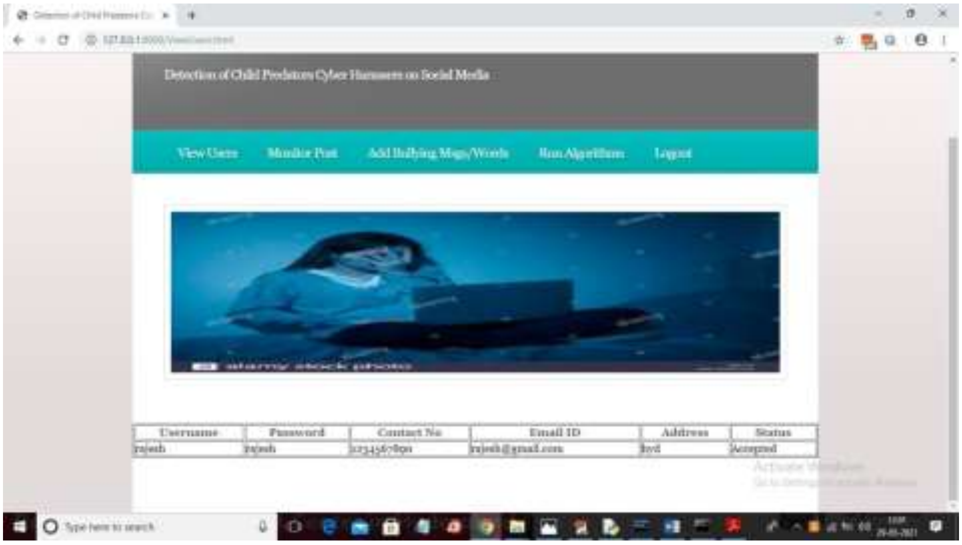


Figure : The Account for a user created screen

Figure : In above screen admin adding one word as 'Cyber Bullying' and similarly he can

add all possible bullying and non-bullying messages. After adding messages will get below screen

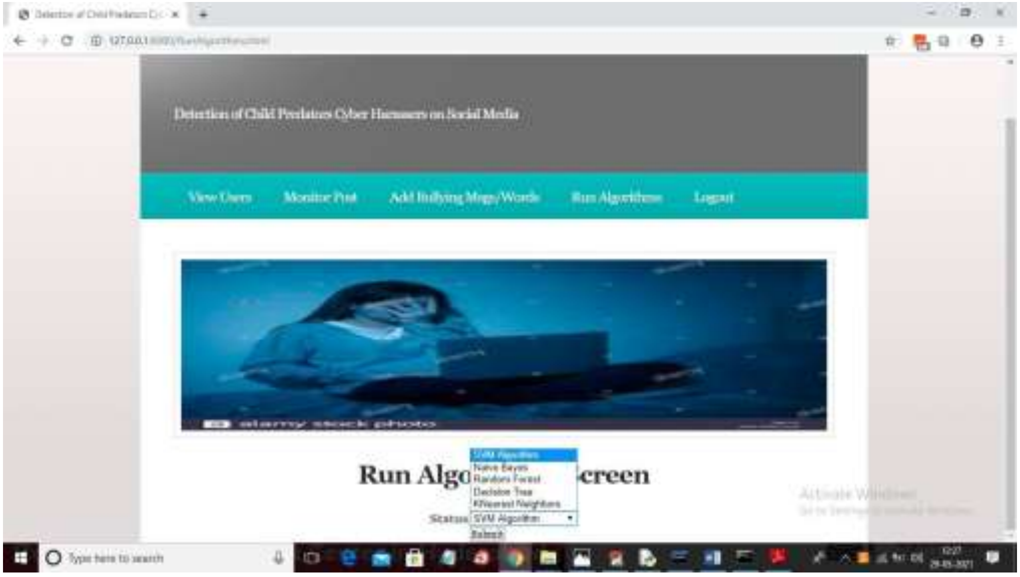


Figure : Admin has to repeat this step whenever first time he starts the server or upon adding new bulling messages. Admin has to run at least SVM algorithm to perform automatic detection of harasser's or non-harasser's.

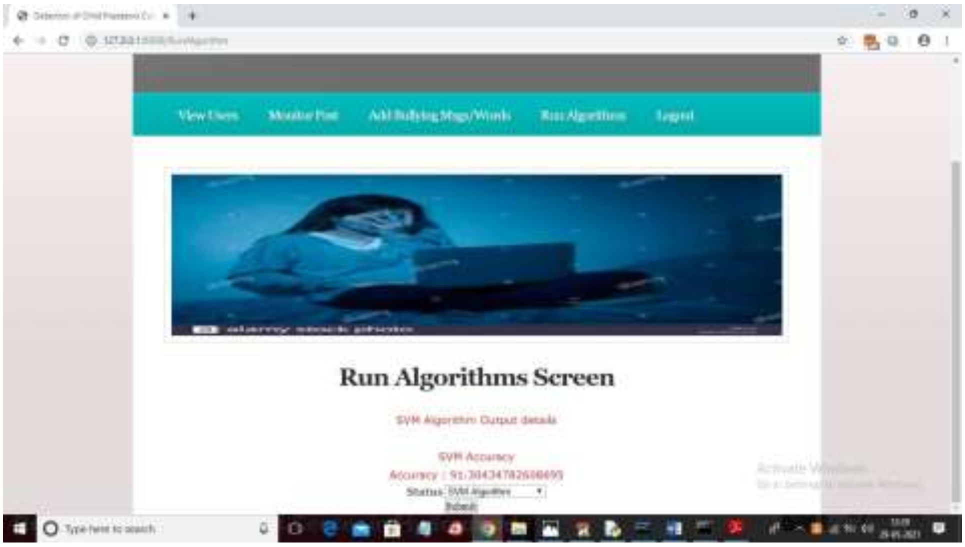


Figure : In above screen SVM algorithm is implemented and got accuracy as 91. Other algorithms can also be run.

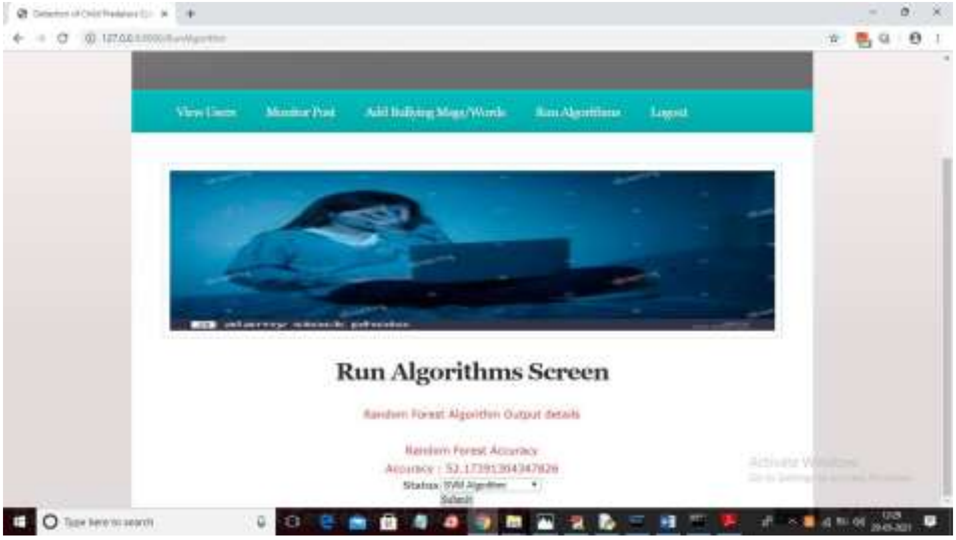


Figure : The Run Algorithm screen

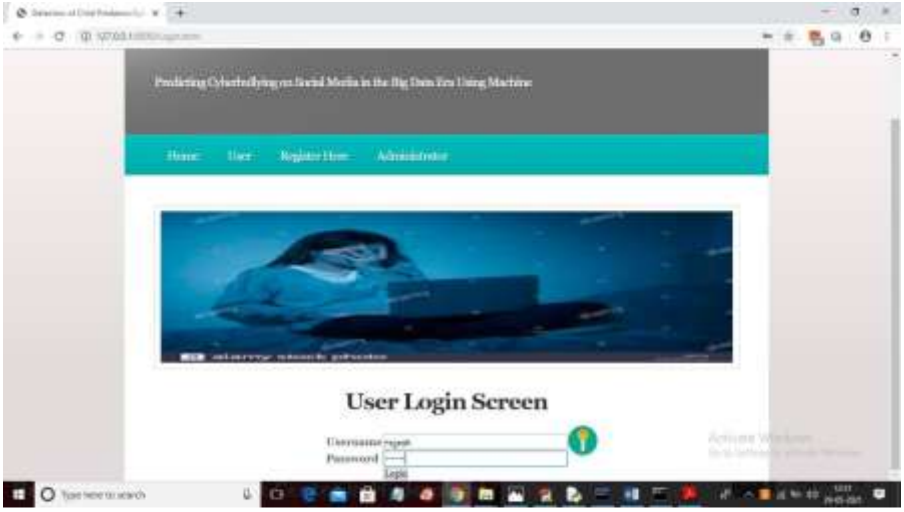


Figure : In above screen rajesh user is login and after login will get below screen

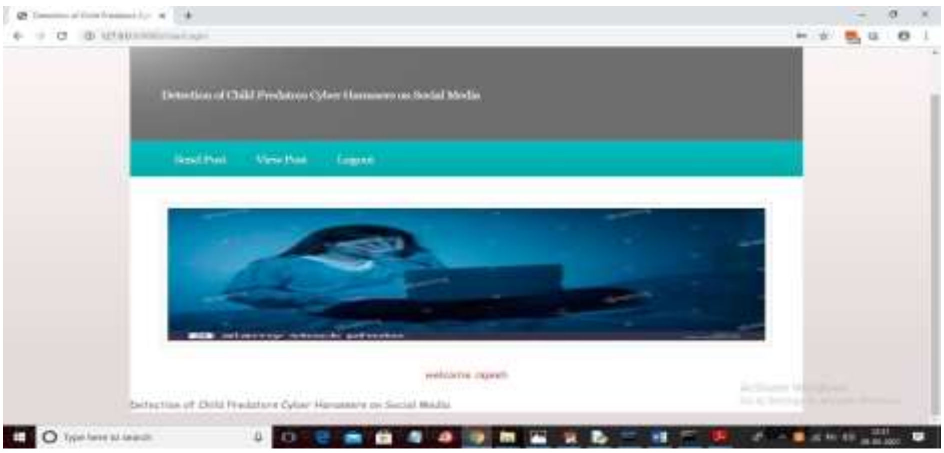


Figure : In above screen click on 'Send Post' link to get below screen

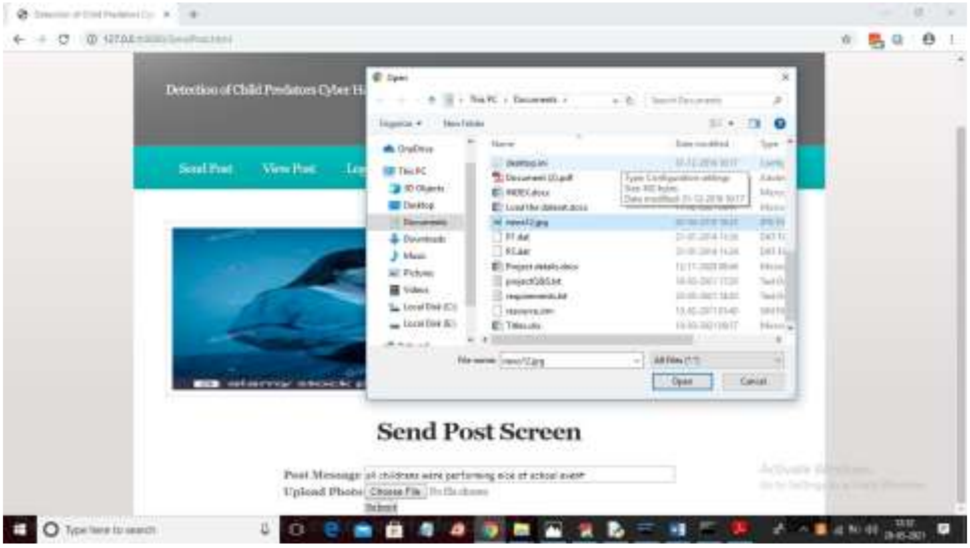


Figure : In above screen as post I added some messages and uploaded a photo also. After postingmessage will get below screen.

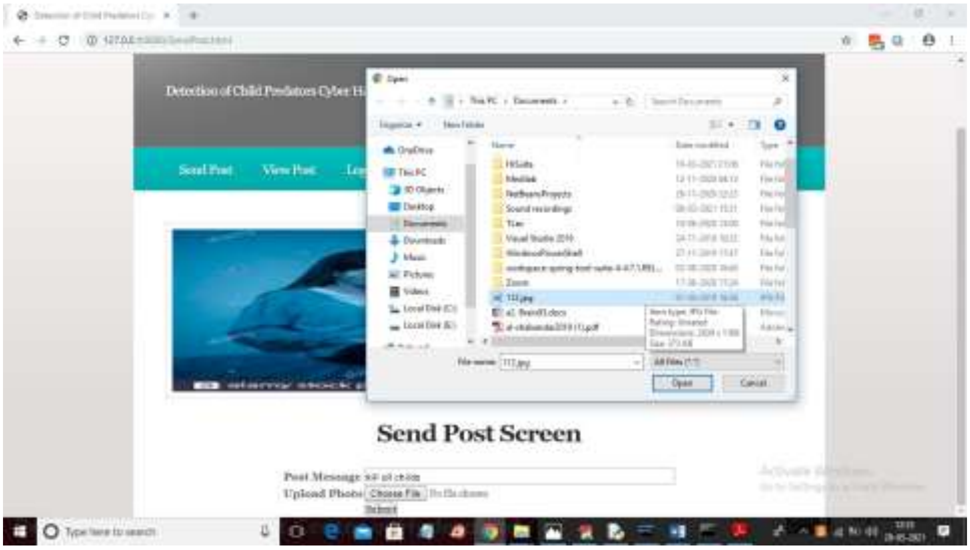


Figure : In above screen added another message and now click on 'View Post' link to get all posts sent byusers

Figure: In above screen we are seeing posts from all users and we can see with the help of machine learning SVM algorithms we are automatically able predict message as cyber or non-cyber harasser's. Similarly you can sign up new users and then post new messages. Machine learning will predict harasser or non-harasser word based on dataset records so you add all possible harasser and non-harasser words to dataset by using 'add words' module from admin. After adding words then run algorithms link to train model and then you can seeapplication will predict harasser or non-harasser automatically.

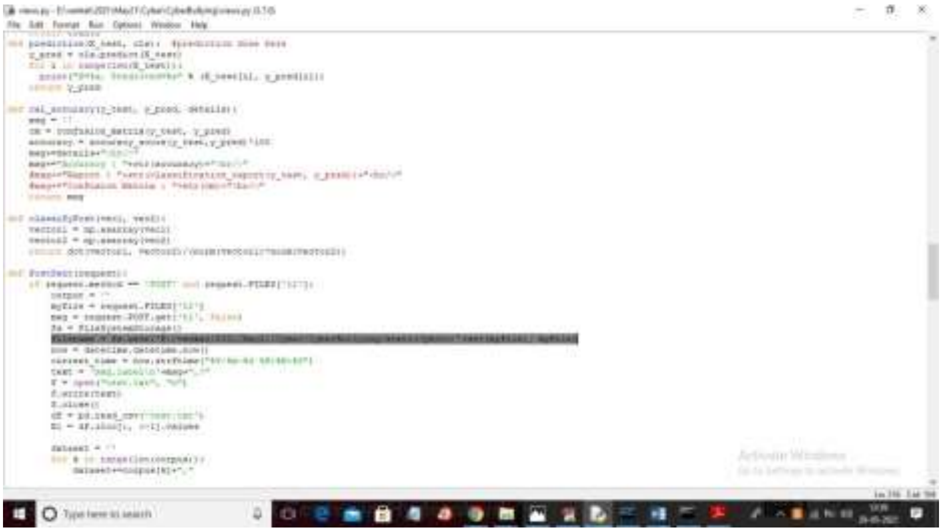


Figure : Change above selected line with your system directory

CONCLUSION

To ignore the dangers of online solicitation would be to ignore the cost of sexual commission to children and society. The groomer's goal is to get close to a youngster in order to have access to that child. In order to establish a connection with the kid that involves trust, it is customary for an adult groomer to pose as a youngster with similar interests or pastimes while grooming. In this effort, we look for child predators to protect children. Afterward, forward the report to the cyber admin for action. By using correctly calibrated distributed stream and parallel processing engines, we hope to expand our methodologies by enabling real-time detection of harmful behaviours. In order to do this, numerous computer. With the aid of appropriately calibrated distributed stream and parallel processing engines, we want to develop our methodologies by offering real-time abuse behaviour detection. Numerous computer platforms and modelling techniques might be employed in this.

REFERENCES

[1] Kowsalya Devi.V, "Detecting Cyber Defamation in Social Network Using Machine Learning", March 2021| IJIRT | Volume 7 Issue 10 | ISSN: 2349-6002.

[2] John Ibanez Rodriguez, Santiago Rocha Duran, Diaz-Lopez, Javier Pastor-Galindo, "A Conversational Agent to Detect Online Sex Offenders" Electronics 2020,9, 1779

[3] John Hani , Mohamed Nashaat , Mostafa Ahmed , Zeyad Emad , Eslam Amer, Amar Mohammed, "Social Media Cyberbullying Detection using Machine Learning", (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 10, No. 5, 2019".

[4] Dr. Shane Murnion, Prof William J

Buchanan, Adrian Smales, and Dr Gordon Russell, “Machine Learning and Semantic Analysis of In game Chat for Cyber Bullying”, Article in Computers & Security · March 2018 DOI: 10.1016/j.cose.2018.02.016.
[5] C.H Ngejane, J.H.P Eloff, G Mabuza-Hocquet, S Lefophane, “978-1-5386-3060-0/18/$31.00 ©2018 IEEE 1–6. doi:10.1109/ICABCD.2018.8465413.
[6] Kelly Reynolds, April Kontostathis, Lynne Edwards, “Using Machine Learning to Detect Cyberbullying” 978-0- 7695-4607-0/11 $26.00 © 2011 IEEE DOI 10.1109/ICMLA.2011.152.
[7] Jossie Murcia Trivino, Sebasti ˜ an Moreno Rodr ´ ´ıguez, Daniel D´ıaz Lopez, Felix G ´ omez M ´ armol, “C3 - Sex: a Chatbot to Chase Cyber perverts” 978-1-7281-3024-8/19/$31.00 ©2019 IEEE DOI 10.1109/DASC/PiCom/CBDCom/CyberSciTech.2019.00024.
[8] I-Hsien Ting, Wun Sheng Liou, Dario Liberona, Shyue-Liang Wang, Giovanny Mauricio Tarazona Bermudez, “Towards the Detection of Cyberbullying Based on Social Network Mining Techniques”, 978-1-5386-2366-4/17/$31.00©2017 IEEE doi:10.1109/BESC.2017.8256403
[9] Batou; Haidar, Ahmed Serhrounchni, Chamoun Maroun, “A Multilingual System for Cyberbullying Detection: Arabic Content Detection using Machine Learning”, Advances in Science, Technology and Engineering Systems Journal Vol. 2, No. 6, 275-284 (2017)
[10] Hugo Jair Escalantea,∗ , Esaú Villatoro-Tello b , Sara E. Garzac , A. Pastor López-Monroy d, Manuel Montes-yGómez a , Luis Villaseñor-Pinedaa ,”Early detection of deception and aggressiveness using profile-based representations”, http://dx.doi.org/10.1016/j.eswa.2017.07.040 0957-4174/© 2017 Elsevier Ltd. All rights reserved.
[11] C. H. Ngejane, G. Mabuza-Hocquet, J. H. P. Eloff, and S. Lefophane, “Mitigating online sexual grooming cybercrime on social media using machine learning: A desktop survey,” in 2018 International Conference on Advances in Big Data, Computing and Data Communication Systems (icABCD), Aug 2018, pp. 1–6.
[12] N. Pendar, “Toward spotting the pedophile telling victim from predator in text chats,” in International Conference on Semantic Computing (ICSC 2007), Sep. 2007, pp. 235–241.
[13] I. McGhee, J. Bayzick, A. Kontostathis, L. Edwards, A. McBride, and E. Jakubowski, “Learning to identify internet sexual predation,” International Journal of Electronic Commerce, vol. 15, no. 3, pp. 103– 122, 2011.
[14] G. Inches and F. Crestani, “Overview of the international sexual predator identification competition at PAN-2012,” in CLEF 2012 Evaluation Labs and Workshop, Online Working Notes, Rome, Italy, September 17-20, 2012, 2012.
[15] E. Villatoro-Tello, A. Juarez-Gonz ´ alez, H. J. Escalante, M. Montes-y- ´ Gomez, and L. V. Pineda, “A two-step approach for effective detection ´ of misbehaving users in chats,” in CLEF 2012 Evaluation Labs and Workshop, Online Working Notes, Rome, Italy, September 17-20, 2012, 2012.
[16] G. Eriksson and J. Karlgren, “Features for modelling characteristics of conversations,” in CLEF 2012 Evaluation Labs and Workshop, Online Working Notes, Rome, Italy, September 17-20, 2012, 2012
[17] Muhammad Ali Fauzi, Patric Bours, “Ensemble Method for Sexual Predator Identification”. IEEE, 2020, 25 June 2020
[18] Michael Ashcroft, Lisa Katti, Maxime Meyer “A Step Towards Detecting Online Grooming-Identifying

Adults Pretending to be Children”. European Intelligence and Security Informatics Conference, 2019
[19] Elif Varol Altay, Bilal Altas “Detection of Cyber Grooming in Online Conversation”. International Conference on Big Data Deep Learning and Fighting cyber–Terrorism Ankara, Turkey IEEE 03/12/2018
[20] Amparo Elizabeth Cano, Miriam Fernandes, Harith Alani “Detecting Child Grooming Behavior Patterns on Social Media” IEEE 2014.
[21] Batoul Haipar, Maroun Phamoun, Fadi yamout, “Cyber Bullying detection-A Multilingual Technique,” IEEE, DOI 10.1109/EMS 2016. [12] John Ibanez Rodriguez, Santiago Rocha Duran, Daniel Diaz-Lopez, Javie Pastor-Galindo, Felix Gomez Marmol, “A Conversational Agent to Detect Online Sex Offenders.” IEEE 27 October 2020.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

"A CONTEMPORARY DRIFT OF MERCHANT BANKING IN INDIA"

Smt. MANASA C.T.
Assistant Professor of Commerce, CSI College of Commerce, Dharwad
Corresponding Author- **Smt. MANASA C.T.**
Email id: luckyakash06@gmail.com
DOI- 10.5281/zenodo.7267464

Abstract:

A merchant bank is a money related establishment giving subsidizing to associations as deal ownership as opposed to propels. A merchant bank similarly gives cautioning on corporate issue to the associations in which they contribute. In the Assembled Realm, the chronicled term "merchant bank" suggests a bank. A merchant Bank can be generally depicted as a money related organizations association with a confidential worth theory arm offering adventure banking and subordinate organizations as well. Since a merchant bank goes about as a specialist and delegate as well as a head, a shipper bank has a more broadened term approach than a typical theory bank and is astoundingly stressed over the reasonableness of each and every endeavor a valuable open door and giving the right insight to a strong association with each client association. In banking, a merchant bank is a standard term for a Speculation Bank. It can moreover be used to depict the confidential worth activities of banking. This article is about the authentic setting of banking as developed by merchants, from the Medieval times onwards. Merchant banking is a critical help given by different financial foundations those helpers in the improvement of the corporate region which finally reflects into the by and large headway of the country. Merchant banks were expected to play out a couple of limits like issue the board, ensuring, portfolio the leaders, advance organization, subject matter expert, guide and host of various activities. Dealer banking is a mix of banking and consultancy organizations.

Keywords: *Merchant banking, Securities management, Financial Institutions.*

Introduction:

Merchant banking was at first started in India in 1967 by Grindlays Bank. It has acquired quick progress since 1970.Merchant Banking is a blend of Banking and consultancy organizations. It gives consultancy to its clients to money related, publicizing, managerial and authentic issue. They give consultancy on issue relating the records, exhibiting, the leaders, and regulation. Such consultancy organizations help start of associations, fund-raise, modernize, develop or modify a business, reclamation of cleared out units similarly as give assistance to associations in enlisting, buying and selling shares. It goes probably as Monetary Designer for a business. Dealer banking expects a huge part in the high level monetary activities. The merchant banks in India essentially have zeroed in their activities on the going with organizations:

- Corporate coordinating.
- Project coordinating and pre-adventure considers.
- Credit association and adventure cash.
- Capital issues the executives.
- Underwriting of capital issues.

Merchant banking organizations invigorate the monetary headway of a country as they goes about as wellsprings of resources and information for endeavors. Taking into account how the Indian economy is creating, the occupation of shipper banking organizations in India is key. These money related associations moreover go probably as corporate advance notice bodies to help organizations with taking part in various financial activities.

Merchant banks serve a twofold work inside the financial region. Through stores or arrangements of securities they procure resources for crediting to their clients (SEBI) blocks crediting by them): a limit like most foundations. Their other occupation is to go about as experts as a compromise for charge. SEBI imagines a mandatory occupation for dealer banks in rehearsing due resourcefulness isolated from issue the board, in buy backs and public proposition in takeover offers. Their ensuring and corporate financial organizations are to a great extent charges rather than finance based and their significance isn't reflected in their total assets of the business. SEBI has been pressing for shipper banks to be essentially charge based foundations.

Objectives:

- To interpret the concept of merchant banking.
- To study the elements and advancements of merchant banking.
- To know the challenges faced by the merchant banking.

Research Methodology:

The examination system which is applied during the evaluation study is making sense of in nature. The information course of action of information is finished on optional explanation and the evaluation is completely finished to meet the targets set at this point for the continuous examination. Different reports and journals are focused on gathering of concept of merchant banking which have been refereed in the continuous evaluation. Research papers on related centers have been taken for the wellsprings of information. This paper is absolutely founded on optional information.

Merchant Banking:

The term 'merchant banking' has been used unmistakably in different bits of the world. While in U.K. merchant banking suggests the 'open minded and giving houses', in U.S.A. it is known as 'adventure banking'. The word merchant banking has been so comprehensively used that incidentally it is applied to banks who are not merchants, occasionally to traders who are not banks and a portion of the time to those agents who are neither merchants not banks.

Mantle of Merchant Banking:

Basically, merchant banks are money related associations. They partake in business acknowledges similarly as ensuring. They by and large oblige colossal undertakings and individuals of high complete resources. They play out a mix of consultancy and banking organizations. The fact that National Grindlays Bank makes it in 1967 introduced the possibility of merchant banks in India. In 1972, the State Bank of India transformed into the fundamental Indian Business Bank to set up an alternate Merchant Banking Division. Till date, be that as it may, merchant banks in India have been working generally as issue houses and not irrefutable shipper banks like in various countries.

Kinds of Merchant Banking Association in India:

In India an ordinary definitive set up of dealer financiers to work is as divisions of Indian and Unfamiliar banks and monetary associations, assistant associations set up by financiers like SBI, Canada Bank, Punjab Public Bank, Bank of India, etc a couple of firms are moreover composed by financial and specific specialists and specialists. Securities and exchanges Leading group of India (SEBI) has secluded the trader brokers into four orders subject to their capital plentifulness. Each class is supported to play out unambiguous limits. From the spot of Hierarchical set up India's dealer banking affiliations can be arranged into 4 social affairs in view of their linkage with parent activity. They are:

a) ***Institutional Base:*** - Where dealer banks function as a free wing or as helper of various Private/Focal Legislatures/State States Monetary establishments. By far most of the money related foundations in India are in open region and likewise such set up expects to be a part on the lines of authoritative necessities and plans.
b) ***Banker Base:*** - These merchant financiers fill in as division/helper of

banking affiliation. The merchant banks are either nationalized business banks or the new banks working in India. These affiliations have gotten self evident expertise merchant banking region and they help their parent relationship to make a presence in capital market.

c) ***Broker Base:*** - In the new past there has been an inflow of Qualified and masterfully gifted middle people in various Stock Trades of India. These specialists embrace merchant banking related working furthermore like giving hypothesis and portfolio the leader's organizations.

d) ***Private Base:*** - These merchant banking firms are started in confidential regions. These affiliations are the consequence of possibilities and degree in merchant banking business and they are giving mastery arranged specific organizations to their clients. Some new trader investors are in like manner entering either independently or through some planned exertion with their Indian accomplices. Confidential Areas merchant banking firms have come up either as sole possession, affiliation, confidential limited or public confined associations. An extensive part of these associations were in presence for a significant length of time before they added a new development as shipper banking organizations by opening new division on the lines of business banks and All India Financial Institution (AIFI).

Elements of Merchant Banking Organizations:

- Dispersion of securities like worth offers, normal resources, assurance things, and so on. Giving assistance to the dares to raise resources from the market.
- Advance association for the clients is one more huge limit performed by these affiliations.
- Corporate admonition and undertaking cautioning organizations are other critical merchant banking organizations presented by these affiliations.

Advancements in Merchant Banking:

The new upgrades in Merchant banking are a direct result of specific contributory parts in
India. They are :

- The Merchant Banking was at its best during 1985-1992 being when there were various new issues. Ordinary in approaching money related years 2012-13 and in future will be party time for merchant banks, as various new issue are coming up.
- The new monetary sponsor both as portfolio hypothesis and through foreign direct hypotheses are meandering in Indian Economy. It is extending the degree of merchant financiers according to various perspectives.
- Disinvestment in the public power region in the country gives a significant degree to the merchant banks to function as subject matter experts.
- New financial instruments are introduced in the market reliably. This generally gives progressively more opportunity to the merchant banks.

Obstacles Faced by Merchant Bankers in India:

- SEBI rule has restricted their assignments to Issue The board and Portfolio The executives to some degree. In this manner, the degree of work is limited.
- In adequacy of the customers are consistently blamed on to the merchant banks, so they are into burden without any issue of their own.
- The absolute resources need is high in classes I and II remarkably, so various skillfully experienced individual/affiliations can't come into the picture.
- Poor New issues market in India is vanishing the question of the merchant financiers. Along these lines the merchant investors are those money related delegate related with the development of moving capital

resources for those borrowers who are excited about procuring.

Conclusion:

The merchant banking in India has colossal degree to make because of package of local similarly as new business impacting here and moreover progressing enhancements strong to impacting of Indian economy. Indian economy gives a cordial environment to these associations to game plan flourish and develop here. Merchant banking in India expects to be a huge part in the monetary progression of the nation and it has huge degree to mushroom because of heaps of local similarly as new associations impacting here. It fills in as a supporting hand to the associations to be dynamic in the new business areas. It upholds the money managers with its funding and non-financing activities to develop new plans and moreover help mechanical region. Merchant banking bases on working on the capital market, make account actually open what's more, support the endeavor climate of the country. This examination helped me with understanding nuances of shipper banking. The organizations given by dealer brokers to their client, for instance, credit organization, portfolio the leaders, supporting, counseling, etc They moreover capability as a go-between to share issue. All merchant banks are selected under security exchange driving group of India (SEBI). Trader banking helps with creating Indian economy. Hence merchant banking is principal body in Indian financial system.

References:

1. Dr Santosh Kumar Tripathi, New Trends In Merchant Banking In India, International Journal Of Management, It & Engineering, Vol. 10 Issue 07, July 2020, Issn: 2249-0558
2. Mr. Limbore nilesh v, a literature review of merchant banking in india (2019), issn-2349-5162
3. T. Sanjeev Kumar, Merchant banking India: Recent development in merchant banking

a. (2016),ISSN-2455-6602

4. Dr.Jyoti Lahoti, Recent development in merchant banking and challenges ahead in India,(2016), E-ISSN:2455-295X.
5. Alexander, Cindy R. & Cohen Mark A. Why do Corporations Become Criminals? Ownership, Hidden Actions, and Crime as an Agency Cost. Journal of Corporate Finance, Vol. 5,no.1
6. Dr. Waghmare Shivaji, Performance evaluation of merchant banking in India-A study of SBI capital market limited (2015), ISSN-2347-9671.
7. Lorie james, Brealey Richard. Modern Developments in Investment Management (ed), llliois: Dryden press, Hinsdale, 1978.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

"IMPACT OF COVID-19 ECONOMIC GROWTH ON MANUFACTURING SECTOR IN INDIA"

Krupa A[1] Dr. R. SELVI [2] Divya Parameshappa Kundagol [3]
[1]*Research scholar, Department of Studies in Economics, Davanagere University, Shivagangotri, Davanagere 577007 Karnataka,*
[2]*Associate professor, Department of Studies in Economics, Davanagere University, Shivagangotri, Davanagere 577007 Karnataka, India.*
[3]*Research scholar Department of Economics Davangere University Davangere*
Corresponding Author- **Krupa A**
Email id: krupaas@yahoo.com
DOI- 10.5281/zenodo.7269201

Abstract:

The COVID-19 pandemic has probably given the biggest blow to the world economy after the great depression of 1930s. Around 60 per cent of the world population is either under severe or partial lockdown without having medical solution to the corona virus and economic activity across countries, and significantly taken away millions of livelihoods. A year ago, it seemed certain that the shifting global dynamics due to COVID had the potential to pave India's way into the manufacturing sector. Come 2021, India is in wouhhhhuhhrst grip of a variant of the novel corona virus. Manufacturing in India has come to a near standstill. As the sector with the maximum amount of backward and forward linkages, manufacturing crucially sustains and propel economic recovery. World economy is heading for a recession and India is no exception. The situation is working its way through a highly globalized world with interconnected production networks and financial markets. India being densely populated country with inadequate medical facilities was left with no option but to follow the policy of lockdown. As a result of the pandemic, the global economy is projected to contract sharply by −4.9 per cent in 2020, much worse than 2008–2009 financial crisis (International Monetary Fund [IMF],2020). The fall out of the COVID-19 on Indian economy is going to be huge, because of its own lockdown, which was necessary to contain the spread of corona virus, and also because of India's integration with the rest of the world.

Key Words: Covid-19 pandemic, Manufacturing Sector, Economic Growth.

Introduction:

Manufacturing has emerged as one of the high growth sectors in India. Prime Minister of India, Mr. Narendra Modi, launched the 'Make in India' Program to place India on the world map as a manufacturing hub and give global recognition to the Indian economy. Government aims to create 100 million new jobs in the sector by 2022. According to the Ministry of Statistics and Programme implementation, according to the history of status texting program implementation, India's industrial output that is measured by the index of industrial production to type 1 11.6 in May 2021. In May 2021 the industrial output indices for mining, manufacturing and electricity sectors stood at 108.01, 113.5 and 161.9 respectively. March 2021 the IHS (Information handling services) market India manufacturing purchasing manager index slipped to a seven- month low to 55.4 from 57.5 in February 2021. Data for April indicates a slight improvement to 55.5 after declining to a seven- month low in march at 55.4. This marginal increase doesn't hide the fact that the headwinds facing manufacturers cannot be ignored. The surge in Covid- 19 cases could dampen demand further when firms

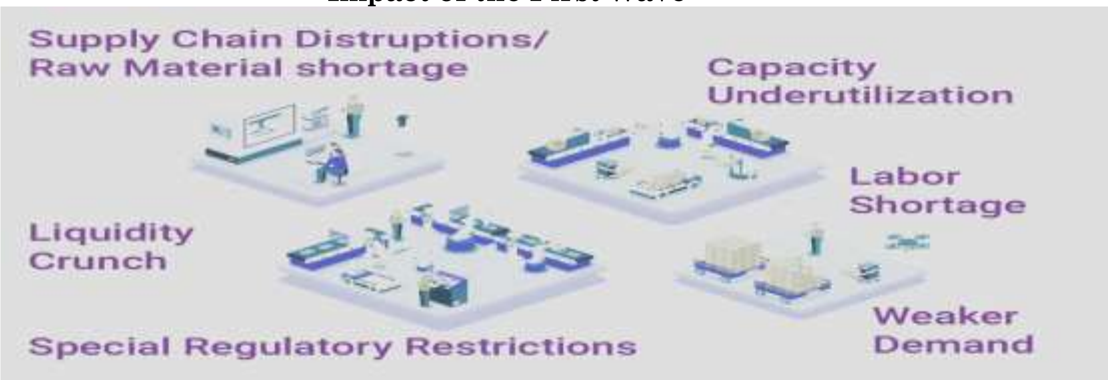
financials are already susceptible the hurdle of rising global prices.
According to a survey conducted by United Nations Industrial Development Organisation (UNIDO) after lockdown was imposed last year, manufacturing India had stopped, except for the rice milling sector where production reportedly dropped by half. In manufacturing, some of the most affected industries have been metals and chemical products, motor vehicles, machinery and equipment, textiles etc. Most psychology and human resource research focused in finding out how office workers attempting to have work-life balance in regular daily basis, while others focused on evaluating how occasional work from home can improve work-life balance, as work-life-balance and flexible working hours are two most factors that can increase employee engagement (Setyo dan Lukertina, 2019; Setiyani dan Setyo, 2019)

Methodology:

The study is empirical in nature and relies completely on secondary data regarding the indigenous healthcare system in India. The current information has been taken from various online portals, Website, Journals and Newspaper.

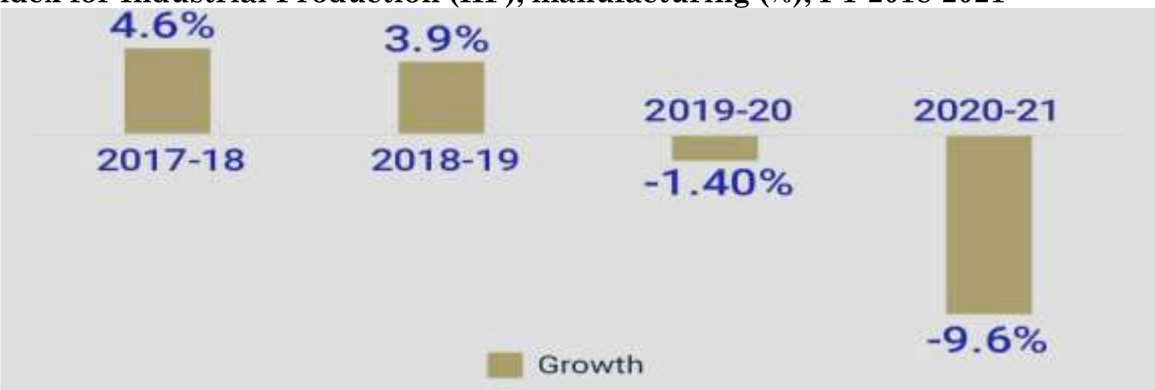
Result and Discussion

Impact of the First Wave



In terms of the global economic scenario, several companies were seeking alternative sources of Supply (Apple, Samsung, LG Electronics, Kia Motors, Hyundai Motor, Zoom, Hasbro etc.) They waited to see the impact of the recent steps taken by the Indian Government on the performance of the sector in the short-medium- and Long-term. By observing the pictures which is mentioned in the above we can understand that's, how the manufacturing sector is impacted on Indian economy. The IIP (Index of industrial production) also fell to a negative growth of 9.6% indicating that core manufacturing activity also suffered setbacks resulting from the first and the second wave.

Index for Industrial Production (IIP), manufacturing (%), FY 2018-2021

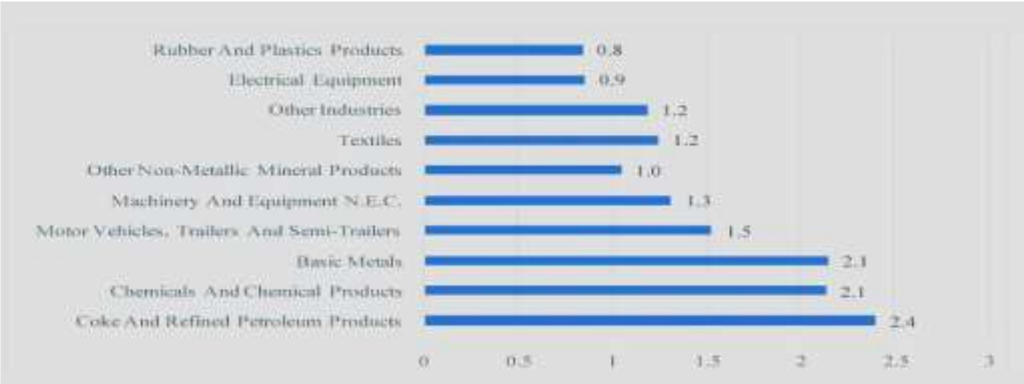


The complete lockdown and partial lockdowns had both demand side and supply-side impacts on the manufacturing sector. On the supply side, the limited movement of goods, services, and personnel affected the production network. The downturn in economic activity and the overall slowdown in production caused employment loss. These supply impacts were further compounded due to the demand-side facing issues such as reduced disposable income, savings and increased uncertainties.

Second Wave:

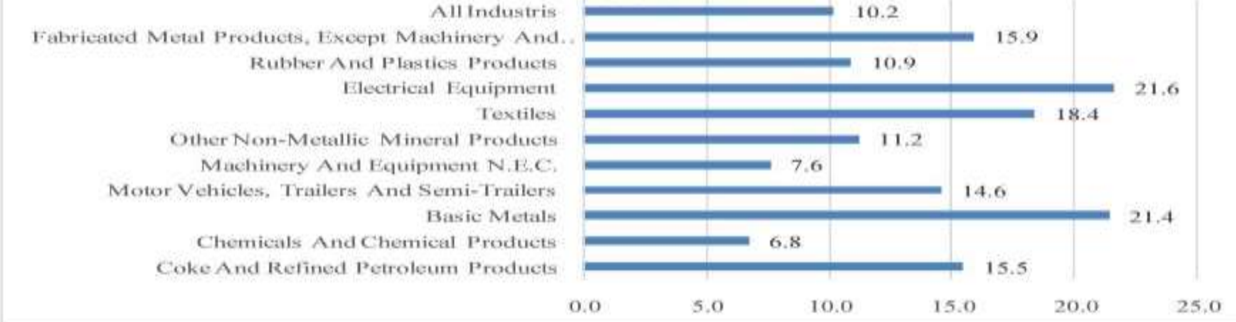
Small businesses and retailers bore the brunt of the initial impact of the second wave as they faced liquidity crunches and stretched working capital. It is expected that once the second wave stabilizes, businesses will see 70% of pre- covid revenue. Healthcare infrastructure was the most impacted as systemic issues led to an inability to accommodate the exponential rise in cases during the second wave. While the second wave is expected to upset economic growth, the overall impact is expected to be moderate as businesses and States have adjusted their businesses and cycles to the COVID situation prevalent. The manufacturing PMI remained unchanged in April 2021 compared to March levels of 55.4. However, l, eight month lows were witnessed for manufacturing orders through April and May for example, Fuel demand was also experienced due to the demand for petrol declining by 6.3%, whereas demand for diesel declined by 1.7%. A few large auto players recorded a sales decline of nearly 9% in April as compared to March. As the sector witnessed a moderate impact, an economic recovery is expected. However, it may not be V- Shaped such as the recovery post the first wave.

Loss for Top 10 Industries:



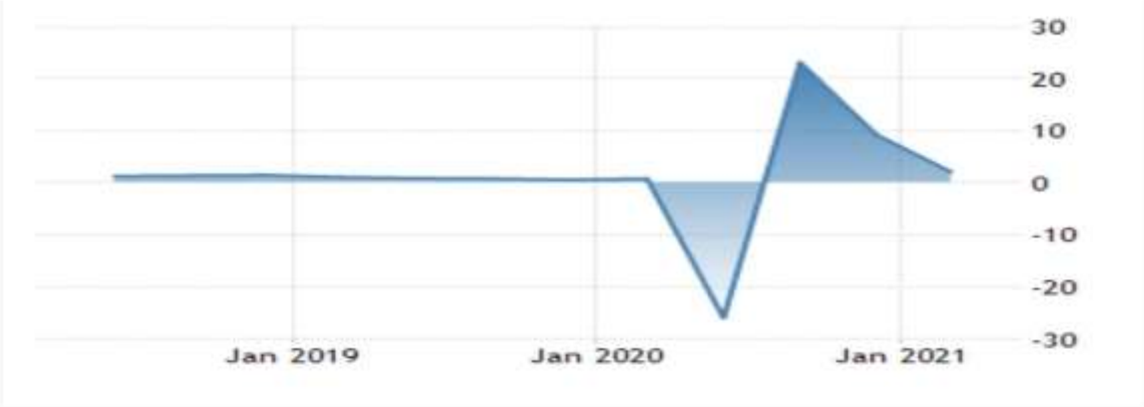
The composition of loss across top 10 industries, where we find that highest loss is estimated for coke and refined petroleum products, if accounts (2.4% of the base year Net Value Added) followed by basic metals and chemical products it accounts (2.1% each), similarly motor vehicles (1.5%) machinery and equipment (1.3%), the textile (1.2%), among others.

Decline ratio



With COVID-19, the largest decline (% as compared to previous benchmark period- average NVA of 2014- 2017) is expected for basic metals and electric equipment (approximately 21% for each), followed by textiles (18%) coke and refined petroleum products and motor vehicles (approximately 15% each); and rubber and plastic products and other non-metallic products (approximately 11% each), among others.

India's' GDP Growth Rate



The gross domestic product (GDP) in India expended 2.10 percent in the first quarter of 2021 over the previous quarter. In India, the growth rate in GDP measures the change in the seasonally adjusted value of the goods and services produced by the Indian economy during the quarter. India is one of the largest economy in the world and the second most populous. The most important and the fastest growing sector of India economy are service. Trade, hotel, transport and communication. financing, insurance, real estate and business service and community, social and personal services account for more than 60 percent of GDP. Agriculture, forestry and fishing constitute around 12 percent of the output, but employs more than 50 percent of the labor force. Manufacturing account for 15 percent of GDP, construction for another 8 percent and mining, quarrying, electricity, gas and water supply for the remaining 5 percent.

Micro Small Medium enterprises

The MSME Sector is an important pillar of Indian economy as it contributes greatly to growth of Indian economy with a vast network of around 30 million units, and it creating employment of about 70 million, manufacturing more than 6000 products contributing about 45% to manufacturing output and about 40% of exports, directly. The lockdown affected these small firms from both domestic demand and supply side. The sudden collapse of trade also affects MSME sector. India's top exports including labor intensive products starting from Gems and jewelry to garments or sea food are mainly supplied by MSME sector. Similarly, the lockdown affected the imports of raw materials and intermediates which affect the supply chain of MSME sector therefore, the Covid-19 is going to affect MSME sector and millions empl9in this sector. Infect, if the situation gets worse and prolongs for a few months, many small and tiny firms may cease to exist as it would be difficult for them to survive and hold into their men and machines.

Impact on Automobile sector

As per government report, the Indian automotive industry sufferd Rs 2300 crore lopss per day and an estimated job loss in the sector was about 3.45 lakh, as a direcct result of pandamic.

The automobilr secto, which was grappling with the new Bharat Stage (BS) VI regulations, was faced with the shortage of spare parts from China where factories were shut following the coronavirus outbreak. Add to this the anti-China bandwagaon in Indgia.

Conclusion:

The manufacturing sector may shrink in the range of 5.5-20 per cent from best case to worst case scenario, respectively. In manufacturing, some of the most affected industries are likely to be metals and chemical products, motor vehicles, machinery and equipment, textiles, etc. The impact of COVD-19 on India’s trade is going to be huge. The estimated fall in India’s exports is going to be 13.7-20.8 per cent in 2021 over 2020. The estimated fall in imports ranges from 17.3 to 25 percent. Exports and imports may effected severely. In the Union Budget for FY 2020-21, the government allocated USD 3 billion for reforms in the power, renewable energy, and infrastructure sector. The government is planning to provide a package of approximately USD 9.6 billion to restructure debt repayment for the power sector as an added aid. USD 23.4 bllion was allocated for the transport sector, which included investments in roads, highways, railways, shipping ports and civil aviation. India’s role in the post-COVID-19 era, particularly in the industrial sector, is a subject of great interest, hope and speculation to the rest of the world.Given the estimated fall out COVID-19 on Indian economy, the government should not worry about the fiscal rule and go all out in adopting counter cyclical fiscal measures to stop things from going bad to worse. It is time for big initiatives to help firms which not only depend on the domestic economy but also an international trade. Government also needs to ensure that the stimulus measures are well directed at some of the worst affected sectors like manufacturing, construction, travel, transportation, tourism, hotel, etc.

Reference:

1. Gupta, M., Minai, M. H. (2019). An empirical analysis of forecast performance of the GDP growth in India. *Global Business Review*, 20(2), 368–386.
2. Consultancy, Org The impact of the Coronavirus on the global consulting industry

3. Hidayat (2020). Careless Management of COVID-19 Plague in Indonesia. Retrieved Tirto.id, March 21, 2020
4. Kurniati, Y., & Yanfitri, Y. (2010). INDUSTRIAL DYNAMICS OF MANUFACTURING AND RESPONSE TO BUSINESS CYCLE. Bulletin of Monetary Economics and Banking, 13 (2), 135 -. https://doi.org/10.21098/bemp.v13i2.258.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

ATMANIRBHAR BHARAT ABHIYAN: A BOOST TO SELF RELIANT INDIA

Dr. M. Madhuri Devi[1] Preksha Mahadeokar[2]
[1]Assistant Professor Bhilai Mahila Mahavidyalaya, Bhilai (C.G)
[2]Research Scholar Hemchand Yadav, Vishwavidyalaya (C.G)
Corresponding Author- **Dr. M. Madhuri Devi**
Email id: madhurikiran@gmail.com
DOI- 10.5281/zenodo.7269214

Abstract
Self-Reliance is the ability to depend on own efforts and resources. A Self-Reliant Economy is the one that is efficient enough to produce goods and services to not only fulfil its domestic demand but also to supply round the globe. India's vision of becoming a Self-Reliant Economy was backed by our Honourable Prime Minister Narendra Modi with the launch of 'Make in India' initiative on 25th September 2014. The initiative not only fostered economic growth of the country, but also improved India's rank in global list of Ease of doing Business from 149 (2014) to 63 (2019). About a year ago, the economies all around the globe were forced to observe immediate shut downs as a safety measure towards the havoc of Covid 19 Pandemic. To revive the economy from terrors of the pandemic, Government of India came up with the launch of 'Atmanirbhar Bharat Abhiyan' that acted as a boost to recoup the slowdowns and flourish Indian markets. The present study is based upon the discussion of Atmanirbhar Bharat Abhiyan to highlight the measures adopted by the Government of India to restore the economy and accordingly bring forward the challenges and solution to the scheme.

Keywords: *Atmanirbhar Bharat Abhiyan, Self-reliance, Covid 19*

Introduction

India is a country with ample amount of untapped potential and resources. The easy availability of resources makes India a potential producer that can withstand the global demand along with fulfilling the demand of its domestic market. The only need is to use this potential by boosting the manufacturing sector. The Government of India, in the year 2014 came up with an initiative 'Make in India' to utilise its existing talent base and resources to generate employment and accordingly increase home production units. The motive behind this intiative was to make India self-reliant and self-sufficient. But, With the outbreak of Covid-19 pandemic, when whole world was under immediate shut downs, closure of almost all the economic activities led to economic recession all around. This in turn disturbed trade and money flow within the economies' which ultimately resulted in liquidity crunch all around the globe. To cope up with this situation various governments announced various packages to revive their economies. The Government of India announced one such package - *Atmanirbhar Bharat*. *Atmanirbhar Bharat Abhiyan* announced on 12th May 2020 by Honourable Prime Minister is an economic stimulus package that focuses on reviving businesses and enterprises by injecting money into the economy. The motive behind announcement of this package is not only to aid India out of the Pandemic but also to ensure India of being self-sustaining and self-reliant.

The study in later pages discusses the Atmanirbhar Bharat Abhiyan and draws out challenges in the path of self-reliance.

Review Of Literature

This section comprises of the review of various literatures that the author has gone through while studying the content of importance.

Ajay Massand, M.K. Lodi, Lubna Ambreen (2020); *Atmanirbhar Bharat: Economic, Legal, And Social Aspects*; International Journal of Management (IJM) Volume 11, Issue 6, June 2020. The study focused upon analysing the impact of Atmanirbhar Bharat Abhiyan on liquidity, legal, labour and social aspects. The study concluded that Atmanirbhar Bharat Abhiyan is very well equipped to revive the economic downfall. G. S. Shikhare (2020); *Atmanirbhar Bharat Abhiyan and Swadeshi*; Dogo Rangsang Research Journal Vol-10 Issue-07 No. 4 July 2020. The study is focused upon analysis of Atmanirbhar Bharat Abhiyan along with its association to Gandhian Approach of Swadeshi. The study brought out that mere implementation of economic reforms cannot bring substantial changes but their association with Gandhian ideology would help in fast revival of the economy. Manoj Gupta (2021); *"Atmanirbhar Bharat," "Dual Circulation": Shared Internal Woes Post COVID-19 Open not Dissimilar Economic Paths for India and China*; Prabandhan: Indian Journal of Management Vol-14 Issue-2 February 2021. The study presents analysis of Chinese 'Dual Circulation' Strategy and India's 'Atmanirbhar Bharat Abhiyan'.

Pushkar Dubey, Kailash Kumar Sahu (2020); *MSMEs in COVID-19 crisis and India's economic relief package: a critical review*; The International Journal of Indian Psychology, Volume 8, Issue 4, Oct-Dec, 2020. The study highlights current conditions of MSMEs amid corona virus crisis and an analysis of the impact of economic relief package in reviving the business activities of MSMEs.

Subhash Sharma (2020); *Viswa Vision for Atmanirbhar Bharat*; https://ssrn.com/abstract=3705150. The study presents the idea of Viswa Vision to make India Viswa Guru through Atmanirbhar Bharat and found out that Social, Spritual, Political, Economical and Technological factors must act in harmony . Ranjith PV, Ajay Massand (2021); *Role of Atmanirbhar Bharat in Revitalisation of Supply Chain in India*; *Journal of Contemporary Issues in Business and Government,* Volume 27, Issue 1. The primary objective of the study is to identify various challenges and solutions for the supply chain amidst COVID Pandemic and to determine Atmanirbhar as one of the possible solutions. The study also highlights cases of different industries of India in adopting Atmanirbhar as a revival strategy for make in India.

Objectives

Upon reviewing the above literatures, the author has come up with establishment of objectives that would act as a base for the study.

- To study the scope of Atmanirbhar Bharat Abhiyan
- To elaborate the measures taken by the Government of India under the Scheme.
- To find out the challenges in the path of Atmanirbhar Bharat Abhiyan.
- To provide suggestive measures to overcome the challenges.

Research Methodology

The study is based on descriptive analysis and discussion based on policy announcement and various literatures available. The study is also empirical in nature that presents discussion that relate it to the government's policy. The data for present study is acquired from several secondary sources that include articles from online newspapers and journals, various research papers, and Governmental announcements.

Atmanirbhar Bhart Abhiyan: Discussion

Atmanirbhar Bharat Abhiyan, announced by Honourable Prime Minister Shri Narendra Modi on 12th May 2020 to fight COVID-19 pandemic is a comprehensive economic package that involves an amount of ₹ 20 lakh crore which is as high as 10% of India's GDP. The benefits of Atmanirbhar Bharat Abhiyan are aimed towards betterment of following five tranches:

- Businesses including MSMEs, NBFCs, and HFCs

- Migrant workers, Small Farmers, Street Vendors and Poor
- Agriculture and its allied sectors
- Special Package for 8 critical industries that include Coal and mining, Defence Productions, Minerals, Power Distribution Companies, Social Infrastructure, Air Space Management, Atomic Energy Reforms, and Space Sector
- MGNREGA Funds

The five pillars to ensure self-reliant India through this Abhiyan are outlined as follows:

Economy

The aim of Atmanirbhar Bharat Abhiyan is to bring quantum jump in the Indian Economy by making it a USD 5 Tn economy and a global economic powerhouse by the year 2025. For this, it is essential to recoup the growth momentum that was lost due to Covid 19 pandemic.

Infrastructure

To aim at achieving the aforementioned target of USD 5 Tn economy, an amount of around ₹100 lakh crore is proposed to be injected in the economy towards infrastructural development.

System

Based on the 21st century technological reforms, efforts are being made to make India technologically efficient so as to ace the day-to-day operations and maintain lower costs of doing businesses.

Vibrant Demography

India being Second most populous country in the world has around 65.95% of people aged 15-64 which makes India a 'Young Country'. This section of demographics is targeted through Atmanirbhar Bharat Abhiyan to achieve self-sustained and self-reliant economy.

Supply and Demand

The Covid 19 Pandemic caused sudden stoppage of all activities relating to trade and services which in turn cut the connections of economies with one another. With sudden shortage of supply, the Atmanirbhar Bharat Abhiyan has helped India to stand strong and start domestic production of essentials which were often considered for imports prior to Covid 19 pandemic.

6.1 **Benefits provided under Atmanirbhar Bharat Abhiyan**

Atmanirbhar Bharat Abhiyan is an extensive Package with a large number of benefits offered. Some of these benefits are listed as under:

Reforms for MSMEs, and NBFCs

The Government of India allocated an amount of ₹ 3 lakh Crore in the form of collateral free automatic loans with tenure upto 4 years and moratorium of 12 months. These funds acted as seed money to start the production processes. For NBFCs, an amount of ₹ 30,000 crore in the form of special liquidity scheme which aimed at increasing transactions of investment grade debt paper of NBFCs / HFCs / MFIs.

Measures for supporting Migrant workers, Street vendors and Poor

Free Food grains to migrant labours across all the states / UTs for two months was envisaged in the scheme. The scheme also involves extending bank credit facility of ₹10,000 for each enterprise of rural / urban venders. Providing concessional credit of ₹ 2 lakh crore to Pradhan Mantri KISAN beneficiaries was also one of the benefits extended by the Government of India.

Reforms for agriculture and its allied sectors

Under the scheme, a whooping amount of ₹ 10,000 Crore was allocated towards betterment of existing micro food enterprises (MFEs), Self Help Groups Co-operatives and Farmer Producer Organisations. The scheme also includes allocation of ₹ 20,000 Crore to fishermen through Pradhan Mantri Matsya Sampada Yojana (PMMSY). Setting up of Animal Husbandry Infrastructure Development Fund for ₹ 15000 Crore to support private investments in Dairy products.

Measures relating to taxation and EPF support for businesses and workers

Due date of filing Income Tax Refunds (ITRs) for F.Y 2019-2020 was extended from July and October to November 2020. Also, pending ITRs were immediately issued. The date for filing GST Returns was also extended upto June 2020.

Statutory Provident Fund Contribution was reduced from 12% to 10% for both employees as well as employers.

Support to state governments

Under the Atmanirbhar Bhart Abhiyan Package, the borrowing limit for State Governments was pushed forward from 3% to 5%. This in turn was proposed to increase resources of state governments by ₹ 4.28 lakh crore.

1.2 Atmanirbhar Bharat Abhiyan 2.0

Announcement on 12th October 2020 mentioned the launch of Atmanirbhar Bharat Abhiyan 2.0. The announcement includes distribution of SBI Utsav Cards in the form of Festival advance and launch of special LTC Vouchers. The scheme also included ₹ 25,000 Crore to Ministry of Road Transport and Ministry of Defence in the form of additional capital expenditure.

1.3 Atmanirbhar Bharat Abhiyan 3.0

12th November 2020 marked for the day of announcement of Atmanribhar Bharat Abhiyan 3.0 by Honourable Finance Minister Smt. Nirmala Sitharaman. Twelve announcements focused upon creating jobs and taxation relief measures were announced. These include:

- Launch of Atmanirbhar Bharat Rozgar Yojana to incentivize job creation module.
- Additional Credit of ₹ 3 Lakh crore to existing Emergency Credit Line Guarantee Scheme (ECLGS)
- Atmanirbhar Manufacturing Production linked incentive amounting to ₹ 1.46 lakh crore.
- Additional outlay to Pradhan Mantri Awaas Yojana (urban) amounting to ₹ 18,000 crore.
- Relaxation in Performance security on Government tenders and Earnest Money Deposits to support Construction and Infrastructure.
- Demand Booster in the form of Real Estate Income Tax Relief for home buyers and developers.
- Equity infusion of ₹ 6,000 crore in NIIF Debt platform and ₹ 1.10 Lakh crore towards Infra Debt Financing.
- Helping 140 million farmers with ₹ 65,000 crores for subsidised fertilisers.
- Reforms for Boosting Rural employment Through enhanced outlays under Pradhan Mantri Garib Kalyan Rozgar Yojana.
- Funds to EXIM Bank for promoting export projects through Line of Crits under IDEAS scheme.
- Capital and Industrial Stimulus of ₹ 10,200 crores.
- Funds to Department of Biotechnology for developing vaccine in India to combat Covid 19.

1.4 Challenges on the path of Atmanirbhar Bharat Abhiyan

Despite the issuance of timely and detailed policies to recoup India from Covid 19 Pandemic, some of the challenges like disturbed supply chain due to different lockdown restrictions of State Governments / UTs or combating low aggregate demand or investment slow down are hard to fight up. Moreover, burgeoning fiscal deficits or lower productivity due to migration of labour or difficulty in mobilising finances due lower forex rates are some of the challenges that India still needs to overcome.

Conclusion

From the above discussion it is evident that the Atmanirbhar Bharat Abhiyan has covered almost all sectors of the economy to stand strong in adverse time such that of Covid 19. The benefits offered under the scheme are complementary to the idea of Self-Reliant India. The reforms are basically a means of infusing liquidity and increasing the flow of money in the economy. Increase in Government investments, reduction in scarcity of resources, increasing expenditure on health infrastructure and long-term modifications are some the rewards that would help India in creating a self-sustained environment and boost its global existence.

References

1. Ajay Massand, M.K. Lodi, Lubna Ambreen (2020); *Atmanirbhar Bharat: Economic, Legal, And Social Aspects*; International Journal of Management (IJM) Volume 11, Issue 6, June 2020.
2. G. S. Shikhare (2020); *Atmanirbhar Bharat Abhiyan and Swadeshi*; Dogo

Rangsang Research Journal Vol-10 Issue-07 No. 4 July 2020.
3. Manoj Gupta (2021); *"Atmanirbhar Bharat," "Dual Circulation": Shared Internal Woes Post COVID-19 Open not Dissimilar Economic Paths for India and China*; Prabandhan: Indian Journal of Management Vol-14 Issue-2 February 2021.
4. P Nandan and B.T. Prathima (2020); *Athma Nirbhar Bharat: A new Self-Reliant India*; MS Ramaiah Management Review January - June 2020, Vol 11(01)
5. Pushkar Dubey, Kailash Kumar Sahu (2020); *MSMEs in COVID-19 crisis and India's economic relief package: a critical review*; The International Journal of Indian Psychology, Volume 8, Issue 4, Oct- Dec, 2020.
6. Subhash Sharma (2020); *Viswa Vision for Atmanirbhar Bharat*; https://ssrn.com/abstract=3705150
7. Ranjith PV, Ajay Massand (2021); *Role of Atmanirbhar Bharat in Revitalisation of Supply Chain in India*; Journal of Contemporary Issues in Business and Government, Volume 27, Issue 1.
8. *Online References*
9. https://pib.gov.in/PressReleasePage.aspx?PRID=1660691
10. https://aatmanirbharbharat.mygov.in/
11. https://finsindia.org/journal/education-employability-employment-and-entrepreneurship-in-relation-to-five-pillars-of-atmanirbhar-bharat-post-covid-19/
12. https://scholar.google.com/scholar?start=30&q=atmanirbhar+bharat&hl=en&as_sdt=0,5
13. https://www.careinsurance.com/blog/health-insurance-articles/atmanirbhar-bharat-abhiyaan-a-campaign-for-self-reliant-india
14. https://www.lexology.com/library/detail.aspx?g=90f8bea8-aec6-401b-8373-140df6c90e2a
15. https://vikaspedia.in/news/atmanirbhar-bharat
16. https://www.drishtiias.com/daily-updates/daily-news-editorials/atma-nirbhar-bharat-abhiyan-challenges
17. https://static.pib.gov.in/WriteReadData/userfiles/MOF.pdf

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

DOMESTIC VIOLENCE AND COVID-19 : REFERENCE WITH KACHCHH DISTRICT

Maheshwari Rekhaben Atmaram[1] Dr. Pradeep Prajapati[2]
Corresponding Author- Maheshwari Rekhaben Atmaram
[1]Ph.D Scholar
[2]Guide
Email id: rekhadhua92@gmail.com
DOI- 10.5281/zenodo.7269221

Abstract:

It is said that if there is a safe place in the world, it is home. Where women can be safest, but are women really safe at home? No! Indeed, there are many homes today where women are not safe. Violence against women occurs from their homes. The safest place in the world today is not safe for women This study was in the context of domestic violence and COVID 19. For this, during lockdown, I tried to know the impacts of COVID 19. One of the many impacts of the lockdown was domestic violence. So I tried to explain violence against women. It was reported from Kachchh police station. The thoughts, traditions, norms, arrogance of the person are mainly responsible for domestic violence. Violence occurs only when violence is tolerated. Resist violence and confront that situation. Education can play an important role in coping with such a situation, as the medium of education can change human thinking. Educating women increases their confidence and also brings awareness. Education can change the mindset of both men and women. Which will work for the betterment of society.

Key Words: Home, safety, Domestic Violence, Traditions, Norms, Beliefs, Ego, Thought, Tolerance, Education, Awareness, customs

Introduction:

There is no doubt that the status of women determines the shape of the country. Discrimination and inequality against women affects the development process. Incidents of domestic violence are on the rise today due to the ongoing incidents of discrimination against women. Violence has not diminished since the enactment of the Domestic Violence Act. Many incidents of domestic violence do not occur. It is suppressed in any way. There are many reasons for this, such as shame, lack of education, fear of insecurity, lack of cooperation in society, high cost of justice, etc. Violence against women is found in every society, religion, caste, community. Violence against women is a daily occurrence in our country. Some of the impacts of COVID 19 have been observed during the COVID 19 lockdown.

One in three women worldwide experience physical or sexual violence mostly by an intimate partner. Violence against women and girls is a human rights violation. Before the pandemic 243 million women and girls, aged 15-49 experienced sexual and/or physical violence by an intimate partner in the past year.

Since the pandemic, violence against women, especially domestic violence has intensified. Since the outbreak of COVID-19, emerging data and reports from those on the front lines, have shown that all types of violence against women and girls, particularly domestic violence, has intensified.

Globally, 6% of women report they have been subjected to sexual violence from someone other than their husband or partner. One hundred thirty-seven women are killed by a member of their family every day.

What is COVID-19?

COVID-19 is the disease caused by a new corona virus called SARS-CoV-2. WHO first learned of this new virus on 31st December 2019, following a report of a cluster of cases of 'viral pneumonia' in Wuhan, People's Republic of China.

Corona virus disease (COVID-19) is an infectious disease caused by a newly discovered corona virus.

The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes. Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness.

Who is most at risk of severe illness from COVID-19?

People aged 60 years and over, and those with underlying medical problems like high blood pressure, heart and lung problems, diabetes, obesity or cancer, are at higher risk of developing serious illness. However, anyone can get sick with COVID-19 and become seriously ill or die at any age.

How can we protect others and ourselves if we don't know who is infected?

Stay safe by taking some simple precautions, such as physical distancing, wearing a mask, especially when distancing cannot be maintained, keeping rooms well ventilated, avoiding crowds and close contact, regularly cleaning your hands, and coughing into a bent elbow or tissue. Check local advice where you live and work. **Do it all!**

Maintain at least a 1-metre distance between yourself and others to reduce your risk of infection when they cough, sneeze or speak. Maintain an even greater distance between yourself and others when indoors. The further away, the better.

Domestic Violence: (According to the Domestic Violence Act .. Violence includes many forms of violence and abuse. Any kind of behavior in any domestic relationship or kinship. Conduct or behavior in which., 1. Your health, safety, life, Or harms any organ. 2. Mental or physical harm is domestic violence.)

Every day many women are slapped, strangled, kicked, bent down, beaten badly every day, humiliated, raped, dowry-violence, intimidation, emotional blackmail (emotional threat), Domestic violence such as prostitution, forced marriage, trafficking in women, etc. are recorded.

Transaction control: in which a woman is not allowed to work outside the home, to monitor her wherever she goes, to control financial expenses, not to provide proper facilities for goods, food, medicine, entertainment.

Harassment of women physically and mentally is a domestic issue, in which women are often harassed with inappropriate words.

Definition of domestic violence: For the purposes of this Act, any act, omission or commission or conduct of the respondent shall constitute domestic violence in case it:

a) harms or injures or endangers the health, safety, life, limb or well-being, whether mental or physical, of the aggrieved person or tends to do so and includes causing physical abuse, sexual abuse, verbal and emotional abuse and economic abuse; or

b) harasses, harms, injures or endangers the aggrieved person with a view to coerce her or any other person related to her to meet any unlawful demand for any dowry or other property or valuable security; or

c) has the effect of threatening the aggrieved person or any person related to her by any conduct mentioned in clause (a) or clause (b); or

d) otherwise injures or causes harm, whether physical or mental, to the aggrieved person. Explanation I.—For the purposes of this section:

i. "physical abuse" means any act or conduct which is of such a nature as to cause bodily pain, harm, or danger to life, limb, or health or impair the health or development of the aggrieved person and includes assault, criminal intimidation and criminal force;

ii. "sexual abuse" includes any conduct of a sexual nature that abuses, humiliates, degrades or otherwise violates the dignity of woman;

iii. "verbal and emotional abuse" includes— (a) insults, ridicule, humiliation, name calling and insults or ridicule specially with regard to not having a child or a male child; and (b) repeated threats to cause physical pain to any person in whom the aggrieved person is interested;

iv. "economic abuse" includes— (a) deprivation of all or any economic or financial resources to which the aggrieved person is entitled under any law or custom whether payable under an order of a court or otherwise or which the aggrieved person requires out of necessity including, but not limited to, house hold necessities for the aggrieved person and her children, if any, stridhan, property, jointly or separately owned by the aggrieved person, payment of rental related to the shared house hold and maintenance; (b) disposal of household effects, any alienation of assets whether movable or immovable, valuables, shares, securities, bonds and the like or other property in which the aggrieved person has an interest or is entitled to use by virtue of the domestic relationship or which may be reasonably required by the aggrieved person or her children or her stridhan or any other property jointly or separately held by the aggrieved person; and (c) prohibition or restriction to continued access to resources or facilities which the aggrieved person is entitled to use or enjoy by virtue of the domestic relationship including access to the shared household.

Review of literature:

R. K Bohra (2013), he says that with the changing times, women have become aware of their rights. They want to make their own decisions. Which makes them victims of domestic violence. Women are harassed and harassed for disobeying their husbands. As much as society is to blame for the exploitation of women, it is also responsible for it. **Kalpana Patle (2103)** They say that the customs, ideologies, values in the society contribute to the oppression of women. **Kalpana shah (2012)** They say, women are the victims of the most violence by their own families. And endures the most. Social values prevent women from complaining. Women commit suicide in unbearable situations. **Rama Sharma and M.K. Mishra (2016)** They say that an example of how many levels of abuse women who are financially self-sufficient suffer can be found in every third household of the Indian middle class family. **Pooja Verma (2018)** They say that too many women are victims of violence perpetrated by their husbands or close associates. Despite being awake, she could not cope with domestic violence. Cultural activity, religious practices, economic and political conditions are responsible for perpetuating domestic violence. Domestic violence is a problem that women do not consider a problem. He is also reluctant to talk about it. And because of this she does not oppose violence. It is therefore imperative that women become aware of this issue. **Jaswant Prajapati,** chief operating officer of Abhayam, told the BBC: "Domestic violence cases have increased by 25% during lockdown times than usual. Domestic violence cases are coming from all over Gujarat." Most of these cases are of middle class couples. According to the official, under normal circumstances, domestic violence cases averaged around 120 a day, but the number has risen sharply.**Dr. Bhachech** also considers addiction to be one of the causes of domestic violence. In Gujarat, pan-spice shops have closed and anger is growing due to nicotine withdrawal from tobacco addicts who do not get tobacco. According to Dr. Bhachech, most people who smoke cigarettes and eat gutka do not have stocks. Domestic violence is also on the rise due to withdrawal syndrome due to lack of nicotine. **According to a survey conducted by National Family Health**, if there is no domestic violence in Indian society, the society can get tremendous economic strength. According to the study, violence between couples is 25% more dangerous than international war and terrorism. But the truth is that a reduction in domestic violence is morally inevitable, but also necessary for the prosperity of the family. **Domestic violence also increases during epidem**ics. France saw a 33 percent increase in domestic violence cases in the first week of the lockdown. Such incidents increased by 75% in Australia, while in Lebanon it doubled. Men are also victims of domestic violence, but women are the ones who suffer the most. The number of women victims of violence in America has doubled. 14% of the crimes are in which the teen's close relative has raped her. **There has been a steady increase in cases of domestic violence.** In the year 2018, the total number of cases of domestic violence related to per- and relative atrocities was 1 lakh 4 thousand 165, which increased to 1 lakh 26 thousand 575 in the year 2019. That is, an increase of up to 21% .

Objectives of Study:

1. To check the Impact of COVID-19.
2. To investigate the Impact of COVID-19 on domestic violence.

Method of study:

The study presented was in the context of domestic violence. In which the extent of violence against women in Kachchh district during COVID 19 was investigated. In which the proportion of violence against women in East and West Kachchh was known and studied. This study was based on secondary information. For this, the extent of domestic violence was investigated between March to 23rd July 2020. Which is shown in descriptive form. In which the data is analyzed by graphs. In which the rate of domestic violence in the whole of Kachchh has been stated.

IPC 498 (A) (Indian Penal Code)

Husband or relative of husband of a woman subjecting her to cruelty.- Whoever, being the husband of a woman, subjects such woman to cruelty shall be punished with imprisonment for a term which may extend to three years and shall also be liable to fine. Explanation- For the purpose of this section, "cruelty" means-

(a) any willful conduct which is of such a nature as is likely to drive the woman to commit suicide or to cause grave injury or danger to life, limb or health (whether mental or physical) of the woman; or

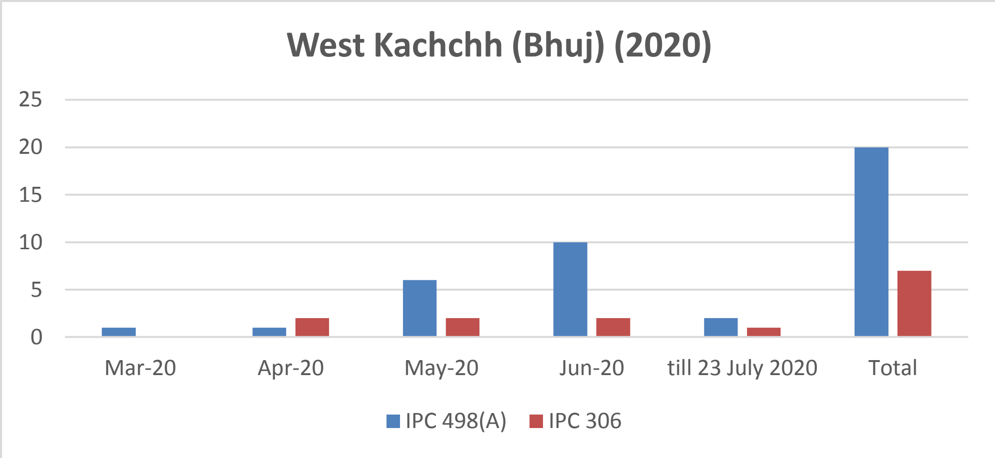
(b) harassment of the woman where such harassment is with a view to coercing her or any person related to her to meet any unlawful demand for any property or valuable security or is on account of failure by her or any person related to her to meet such demand.

IPC 306 (Indian Penal Code)

Abetment of suicide- If any person commits suicide, whoever abets the commission of such suicide, shall be punished with imprisonment of either description for a term which may extend to ten years, and shall also be liable to fine.

West Kachchh (Bhuj) (2020)

Month	IPC 498(A)	IPC 306
March 2020	1	-
April 2020	1	2
May 2020	6	2
June 2020	10	2
till 23 July 2020	2	1
Total	20	7



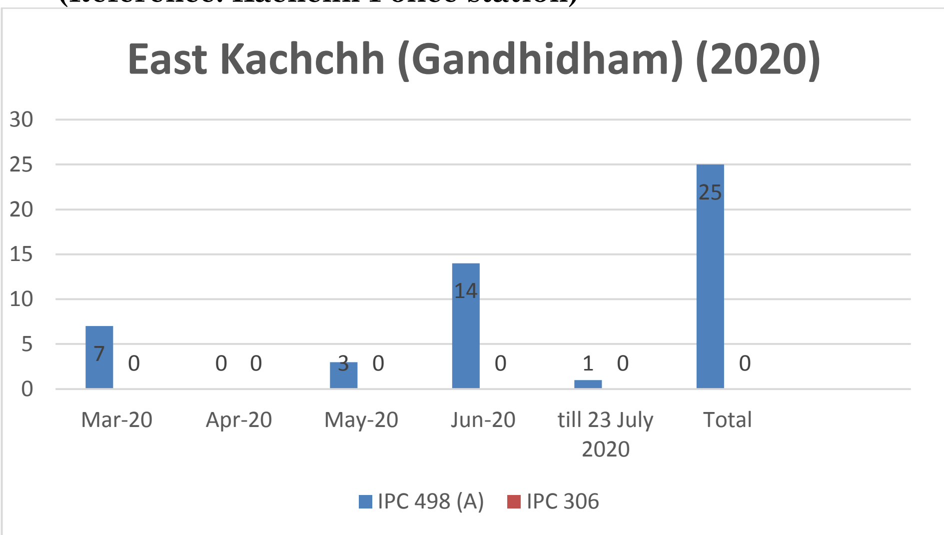
(Reference: Kachchh Police station)

(Year:2020)

East Kachchh (Gandhidham) (2020)

Month	IPC 498 (A)	IPC 306
March 2020	**7**	**0**
April 2020	**0**	**0**
May 2020	**3**	**0**
June 2020	**14**	**0**
till 23 July 2020	**1**	**0**
Total	**25**	**0**

(Reference: Kachchh Police station)



(Year: 2020)

Analysis:

The table above shows the rate of domestic violence during COVID 19. In which the proportion of East Kachchh and West Kachchh from March to July 23 is shown. In West Kachchh 20 crimes were found under 498 A and 7 crimes under 306. The highest was 10 in June and the lowest in March and April. Not a single offense was registered in March under 306. While 2 offenses were registered in April, 2 in May, 2 in June and 1 offense till July 23. In East Kachchh, 25 offenses were registered under 498-A. While not a single offense under 306 has been found. The highest number of 14 crimes was reported in June while not a single crime was reported in April. East Kachchh recorded more crimes under 498A as compared to West Kachchh. While 7 crimes were reported in West Kachchh under 306 but not a single crime was reported in East Kachchh.

Impact of COVID-19.

The lockdown has led to a 20% increase in domestic violence cases worldwide, with 4.4 million women in 114 countries unable to use contraception due to restrictions. More than 5,000 clinics in 64 countries were closed due to the corona, according to the International Planned Parenthood Federation. COVID-19 and lockdown have led to an increase in domestic violence cases. Domestic violence cases have risen by 20% in 193 UN member states.

According to the Indian Council of Medical Research (ICMR), a cumulative total of 79,96,707 samples have been tested up to June 26 with 2,20,479 samples being tested on Friday, the highest in a day since the beginning of the pandemic.

Corona virus outbreaks are also affecting people's mental health. Due to which some people even committed suicide during that time.

The lockdown that took place amid the Corona epidemic cut off people's incomes.

The women who were housewives have all the members of the family living at home, which has led to increasing workload and quarrels between in-laws who have to work at home.

The impact of COVID 19 is not only financial or physical but also has a greater impact on mental health.

Since the lockdown was declared so quickly, many were unable to return to their villages, or arrange sufficient food supplies for their families who live there.

In lock-down, milk sales have stopped and these families lack the cash to buy essential items for survival.

As schools and colleges closed, only online studies began, which increased demand for mobiles, resulting in increased sales of mobiles, increasing merchants' income, but also affecting children's eyes.

Every shop, vehicle transaction was closed due to the lockdown. Due to which it was not possible to buy the essential commodities for farming.

Human is becoming aware due to COVID-19.

People are getting closer to family

With the help of KUUMS, Sahjeevan managed to trace all the families and provided a kit with month-long supplies with supplies of food, spices and other supplies. Since pastoralists are always on the move and many not have a ration card, they do not get any relief from the government.

Reasons of Domestic violence:

It is important to know the causes of domestic violence so that domestic violence can be prevented or such behavior can be changed.

Child marriage often results in early pregnancy and social isolation, interrupts schooling, and increases a girl's risk of experiencing domestic violence.

An ego (pride) gives men control over a woman's behavior. Is a belief or ideological custom that is contrary to the right to freedom and equality.

Being a male dominated society, women should be seen as second class or they should be seen only as victim luxuries.

Women being uneducated, not aware of their rights. Lack of information about rights, lack of knowledge outside the four walls.

Violence is a way to end conflict.

The notion of masculinity combined with pressure, respect, aggression.

Drinking alcohol, bad mood

Many economic reasons are also responsible for domestic violence. Not enough necessities, less dowry.

Struggle for family property.

When a woman is beaten by her husband it is said that she deserves to be beaten, when it is raped it is said that the girls wear clothes that cause this.

Violence against women of any kind is not only perpetrated by men, violence against women is perpetrated by a woman today,

If there is violence against women, it is believed that violence is necessary.

Mental torture often leads to women committing suicide.
Violence has become very big.
(Domestic violence affects not only women but also men, children and adults.)

Conclusion:

On the one hand in Indian society the daughter is considered a goddess while on the other hand she is humiliated from moment to moment, not only physical beating is violence, using inappropriate words and harassing her mentally every day is also violence. Violence occurs when it is tolerated. First of all, she is responsible for the poor condition of the woman. So today woman needs to awaken herself. You have to protect yourself. Thoughts need to change for the betterment of women in Indian society. Education is one of the important aspects through which one can change one's mind. We can achieve the goal of women's emancipation only when we create a cultural environment where women are accepted as an essential part of Society.

Reference:

1. https://data.unwomen.org/sites/default/files/documents/COVID19/Infographic_VAW-COVID19.pdf
2. https://www.unwomen.org/en/news/in-focus/in-focus-gender-equality-in-COVID-19-response/violence-against-women-during-COVID-19
3. https://www.unwomen.org/en/what-we-do/ending-violence-against-women/facts-and-figures
4. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-COVID-19
5. https://COVID19.who.int/
6. https://www.who.int/news/item/09-03-2021-devastatingly-pervasive-1-in-3-women-globally-experience-violence
7. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-COVID-19#
8. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public
9. R.K.Bohara (2013) "Bhartiy samaj aevam mahila vikas karykrm", sagar Publication, Jaypur, 9788181914045,Pg.91,250
10. Kalpana Patel (2013) " Bhartiy sanskruti aevam mhila sashktikaran", Paradise Publishers, Jaypur, 9789380033587
11. Kalpana shah (2012) " streeno badalato darjjo ane bhumika" University Granthnirman Bord, Ahemdabad, Gujarat, shreemati jayanti ravi IAS, 9789381265352, Pg: 30
12. Rama Sharma and M.K. Mishra (2016) "Bharatiy naari vartman samsyae aur bhavi samadhan" Arjun Publising house,Delhi, 978818332135 Pg. 167
13. Pooja Verma (2018) "Aadhi aabadi ki samsyae aevam nirakaran" January-2018, Mumbai,Pg.14 jild 43, Vol XXXXIII No.1, Published by-Dr.Sulabha Kore, Pulished at- Union Bank Bhavan, Mumbai
14. https://www.bbc.com/gujarati/india-52215482
15. https://www.bbc.com/gujarati/india-52215482
16. http://sandesh.com/domestic-violence-family-and-c/
17. https://www.bbc.com/gujarati/international-52546521
18. https://www.divyabhaskar.co.in/dvb-original/explainer/news/not-rape-against-women-but-most-cases-of-domestic-violence-learn-what-women-endure-and-how-much-127789181.html
19. kachchh police station
20. Dr. kamini B. Dashora (2016) "Gander ane samaj", Bharatbhai R., Anada Prakashan, Ahemdabad 9788170571797
21. Dr. kamini B. Dashora (2015-2016) "Gander ane samaj", Bharatbhai R., Anada Prakashan, Ahemdabad8170570077
22. Dr. Chandrika Rawal (2014) streeo ane vikas, Gander ane vikas, Pashv Publication Ahemdabad 9789351082484
23. Section 3, Chapter 2 of Protection of Women from Domestic Violence Act 2015, Act No. 43 Of 2005 [13th September, 2005.] Pg: 4

24. Section 498 (A) Indian Pennal Code, chapter20A- of cruelty by husband or relatives of husband, Indian Penal Code Act No 45 of 1860 (6^{th} October 1860) Pg:108
25. https://www.divyabhaskar.co.in/video/lockdown-causes-20-increase-in-domestic-violence-cases-worldwide-44-million-women-in-114-countries-unable-to-use-contraceptives-due-to-restrictions-127268044.html
26. https://www.thehindu.com/news/national/india-coronavirus-lockdown-june-27-2020-live-updates/article31929668.ece
27. https://zeenews.india.com/gujarati/health/lockdown-causing-mental-illness-and-depression-in-people-says-doctors-90294
28. https://steps-centre.org/blog/how-do-pastoralists-in-kutch-respond-to-social-and-environmental-uncertainty/

International Journal of Advance and Applied Research

www.ijaar.co.in

ISSN – 2347-7075 Impact Factor – 7.328

Peer Reviewed Bi-Monthly

Vol.3 No.1 Sept – Oct 2022

ROLE OF FINANCIAL INSTITUTIONS IN DEVELOPMENT OF SMALL ENTERPRISES IN INDIA

Mrs. Vidya Vijay Patil

Research Student, Department of Commerce and Management

Shivaji University, Kolhapur

Email id: vidya.powar4@gmail.com

DOI- 10.5281/zenodo.7271326

Abstract

The small enterprises have been important role of Indian economy. The essential part small enterprises can be significant place of structure frame work of planning right from the beginning and occupies a crucial position in the industrial sector, the creation of employment opportunities, utilization of resources and income generation. The government at both central and state level established various financial institutions to provide non-financial and financial assistances to small enterprises. In the same way there are institutions in addition to commercial banks which cater to the financial requirements of small enterprises. This paper focuses on analyzing the contribution of small enterprises in Indian Economy, role of financial institutions in development of these Indian small enterprises.

Keywords: Small enterprises, Financing Agencies, Financial Institutions,

Introduction

The small enterprises are one of the most vital sectors of any economy in general and India in particular in ensuring equitable, inclusive & employment friendly economic growth. This sector also plays very important role in socio–economic development of Indian economy on account of their inherent advantages like low capital requirement, high employment generation, and decentralization of industrial activity, utilization of locally available resources and widening of entrepreneurial base. small enterprises has performed exceedingly well and enabled the country to achieve a wide measure of industrial growth and diversification over five decades.

The items manufactured in modern small-scale service & business enterprises in India now include rubber products, plastic products, chemical products, glass and ceramics, mechanical engineering items, hardware, electrical items, transport equipment, electronic components and equipment, automobile parts, bicycle parts, instruments, sports goods, stationery items and clocks and watches for this banks are helping the entrepreneurs to develop the business as well as develop the economy.

The central government and state government had taken initiatives for promoting such types of small scale enterprises through their separate department such as Ministry of Micro, Small & Medium Enterprises. Ministry of Micro, Small & Medium Enterprises (MSME) envision a vibrant MSME sector by promoting growth and development of the MSME Sector, including Khadi, Village and Coir Industries, in cooperation with concerned Ministries/Departments, State Governments and other Stakeholders, through providing support to existing enterprises and encouraging creation of new enterprises. A wide variety of financial institutions have been set up at the national level to cater the diverse financial requirements of the small scale industries. Following are some important financial institution that perform vital role in business enrichment.

1. Industrial Development Bank of India (IDBI)

2. Industrial Finance Corporation of India Ltd (IFCI Ltd)

3. Small Industries Development Bank of India (SIDBI)

4. Industrial Investment Bank of India Ltd (IIBI)
5. State Financial Corporation's (SFCs)
6. Maharashtra State Financial Corporation (MSFC)
7. Export Import Bank of India
8. Industrial Credit and Investment Corporation of India (ICICI)

Objective of the Study

1. To study the role and contribution of small enterprises.
2. To Study the Contribution of Financial institutions in small enterprises.
3. To study the role of financial institutions in development of Indian small enterprises.

Research Methodology

The descriptive methodology has been used to collect the data, the data collected mostly from secondary sources from various journals, books, articles, government published annuals reports, website of different government agencies.

Meaning and Role of Small Scale enterprises

A small scale industry is an industrial undertaking in which the investment under fixed assets in plant and machinery or equipment, whether held on ownership term or on lease or hire purchase, does not exceed 10 crore for manufacturing enterprise and 5 crore for service enterprise. However, the investment limit changes overtime as prescribed by the government.

Small scale industries are the second largest employer of human resource after the agricultural sector and produce a wide variety of products ranging from traditional to high-tech. small enterprises plays a pivotal role in the Indian economy as of being labour-intensive, helps to generate employment in rural as well as in urban areas. The small enterprises had also played a cardinal role in the growth operation of Indian economy since independence despite of drastic competition from the big industrial houses and not immensely enriching support from the government. The following are some of the principal role played by small enterprises in India.

1. Origination of employment
2. Equitable distribution of income
3. Assembling of resources and entrepreneurial skill
4. Regional dispersion of industries
5. Export enhancement
6. Supports the growth of large industries
7. Better relation between employer and employees

Financial Institutions Contribution in Small enterprises

For a successful setup, maintenance and progress of any small enterprises units several crucial inputs are essential for smooth functioning, the essential input, however, is the finance both for investment in fixed assets and for working capital. It is universally accepted that there is a need for easy access to credit, adequate and timely need based at a reasonable rate of interest. The financial institutions in India being consistently the major source of long term funds for the industrial sector; they provide a wide variety of financial products and services to fulfill various kinds of commercial activity. The industrial sector being small, medium or large get financial assistance to set-up and progress from this financial institution, even industries in backward areas being benefited from these institutions which help to reduce regional imbalances. The financial institutions can be classified into two parts national level and state level institutions, depending upon the geographical coverage of their operations. At the national level, they provide long and medium term loans at reasonable rates of interest. These financial institutions subscribe the debenture issues of companies; take part in underwriting the public issue of shares, guarantee loans, and deferred payments, etc. On the other hand, the State level institutions are mainly concerned with the development of medium and small scale enterprises, but they provide the same type of financial assistance as the national level institutions. A wide range of financial institutions has been set up at the national level with the initiatives of the union government to cater to the diverse financial requirements of the entrepreneurs. Following are some important financial institution that performs a vital role in business enrichment.

1. Industrial Development Bank of India (IDBI)
2. Industrial Finance Corporation of India Ltd (IFCI Ltd)
3. Small Industries Development Bank of India (SIDBI)
4. Industrial Investment Bank of India Ltd (IIBI)
5. State Financial Corporation's (SFCs)
6. Maharashtra State Financial Corporation (MSFC)
7. Export Import Bank of India
8. Industrial Credit and Investment Corporation of India (ICICI)

Major Role of Financial Institutions and development of small enterprises in India:

Indian small enterprises have proved themselves as key factor for overall economic development. Considering the role of small enterprises government has taken time to time initiatives for development and promotion of the sector. After analysis it is found that Government has made huge investments through five year plans for product, skill and competitive development of small enterprises sector. In the county like India where economy is in its developing phase has to give due consideration for key success factor. The same happened to Indian small enterprises which has attracted the attention of policy makers and researchers.

The banking sector- specifically commercial banks and specialized banks- have several ways to get involved in small enterprises finance, ranging from the creation or participation in small enterprises finance investment funds, to the creation of a special unit for financing small enterprises within the bank. Banking Sector services provided to small enterprises take various from, such as:

• Short term loans compatible with small enterprises business and income patterns

• Repeated loans, where full repayment of one loan brings access to another, and where the size of the loan depends on the client's cash flow

• Very small loans, or bank overdraft facilities are also appropriate for meeting the day-to-day financial requirements of small businesses

• Factoring and invoice discounting, asset finance (including commercial mortgages), and equity finance, all being within the framework of a customer-friendly approach. In providing all these services, it is recommended that banks take into consideration

• That outlet is located close to entrepreneurs.

• To use extremely simple loan applications.

• To limit the time between application and disbursement to a few days

• As well as to develop a public image of being approachable to low-income people.

Conclusion

The furtherance and advancement of small enterprises are essential for the development of Indian economy to achieve an impartial distribution of income and wealth, economic self-dependence, and economic sustainable developments. To boost the small enterprises sector so that it can take deserved a place in the growth mechanism of the Indian economy, it is essential to support small enterprises by educating them to make optimum utilization of inbuilt capacity to be successful both under human and economic activity. Capital as one of the key component of any sort of business activity, without adequate capital it makes a difficult path for achieving the ultimate objective of business and their set- up. Financial Institutions thus performs a pivotal role in rural alliance with the globalized world by supporting the rural population in small business set up through their several schemes and packages. In the last decade, financial institution had contributed a lot in providing finance and by delivering expertise services to these small scale enterprises but a lot of work to be accomplished for better growth and prosperity.

References

1. **Alebachew Goshim Azeref and Yohanes Tefera Gelagil (2018)** Role of Financial Institution on the Growth of Small and Medium Enterprises:-The Case in North Shewa Zone, Amhara Region, Ethiopia, Journal of Investment and Management
2. **Singh I and N S Gupta (1971)** Financing of Small Industry. S. Chand & Co Ltd, New Delhi.
3. **Subhamoy Banik (2018)** Contribution of Financial Institutions to Small Scale Industries in Economic Development of India Journal of Advance Management Research, Vol.06 Issue-01, (January 2018)
4. **Revanth (2019)** Financial Institution Support to Small Scale Industries by Commercial Bankat Madurai City International Journal of Commerce, Volume : 7 Special Issue : 3
5. **Singh, R., Verma, O.P., and Anjum, B. (2012)** Small Scale Industry: An Engine of Growth, Zenith International Journal of Business Economics & Management Research, Vol.2 Issue 5
6. **Chintan A. Shah (2020)** Role Played by Financial Institutions in Development of Indian Micro Small & Medium Enterprises (MSME's), Volume IX, Issue IV, APRIL/2020
7. **Rajamani and Nirmal Raj (2019)** Finance for Micro, Small and Medium Enterprises (MSMEs) – A Conceptual Framework, International Journal of Economic Research Volume 16, Number 2
8. **Gudata Abara Tadele Banti** (2017) Role of Financial Institutions in the Growth of Micro and Small Enterprises in Assosa Zone, Research Journal of Finance and AccountingVol.8, No.3

Mrs. Vidya Vijay Patil

9. **Charan Singh and Kishinchand Poornima Wasdani (2016)** Finance for Micro, Small, and Medium-Sized Enterprises in India: Sources and Challenges, ADBI Working Paper Series, Asian Development Bank Institute
10. **Arvind Kumar and Priyanka Sharma (2016)** Financial Institutions Role in Developing of MSME's in India, International Journal of Engineering and Management Research, Volume-6, Issue-3, May-June 2016

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

DIVAKARUNI'S SISTER OF MY HEART: A SEARCH OF IDENTITY

Jayashri Shivajirao Jadhav
Research Student, Department of Commerce and Management, Shivaji University, Kolhapur
Corresponding Author - **Jayashri Shivajirao Jadhav**
Email id: jayashrijadhav8087@gmail.com
DOI-10.5281/zenodo.7271337

Abstract
The literary work of Chitra Baneerjee Divakaruni is a verbal representation of past and present, East and West, Tradition and Modernity. She hardly ever writes in isolation. Though she inherits the tradition, simultaneously makes an effort to create new spaces beyond those established conventions. While representing the past and traditions, she has crossed the barriers of rigid tradition. Divakaruni's major themes center on her desire to investigate the identity of South Asian women. While giving voice to her immigrant experience in writing, Divakaruni has also helped immigrant women to cope with the new culture. Divakaruni's heroines face emotional constraints since they are also unable to express themselves. The protagonists of the novel become even more silent after they are married. As girls, they grow up negotiating their mothers' traditional Indian Value system and desires with Western Philosophies influencing their own generation.

Key Words: Identity, Tradition, Patriarchy, Modernism

Introduction

Chitra Banerjee Divakaruni is an Indo-American writer. She was born on 29 July 1956 in Calcutta. She has attended the institutions such as Loreto House and Presidency College in Calcutta. In 1977, she moved to Wright State University in Dayton, Ohio to get an M.A. in English Literature. Then, Divakaruni enrolled in the University of California, Berkley to receive her Ph.D. and stayed there to teach in the Bay Area for many years.

Chitra Banerjee Divakaruni is an Indian-American author, poet, and the Professor of Writing at the University of Houston Creative Writing Program. Her short story collection, *Arranged Marriage* won an American Book Award in 1996. Most of her short stories and novels are adopted in movies like *The Mistress of Spices* and *Sister of My Heart* as well as the short story *The Word Love.* Currently, *Sister of My Heart, Oleander Girl, Palace of Illusions,* and *One Amazing Thing* have all been optioned to be made into movies or TV serials.

Divakaruni's major themes center on her desire to investigate the identity of South Asian women. While giving voice to her immigrant experience in writing, Divakaruni has also helped the immigrant women to cope with the new culture by founding a helpline for the South Asian women called "MAITRI". The organization acts as a bridge for the South Asian women linguistically, socially, and culturally.

Identity

Identity is the projection of self. Self-image moulds and transform self-identity. The urge to identify with the present stimulates one in the quest for identity which operates at public and private levels. A woman defies herself in relation to the external world. She reckons her identity in others.The concept of female identity indicates how the female experience is altered into female consciousness, often in reaction to male archetypes for female experience. The female consciousness opposes the political, economic, and cultural relegation of women to positions of inferiority. Elaine Showalter has analyzed feminist consciousness and classified it into three separate phases in her book A Literature of their own: "the feminine phase of internalization, the feminist phase of revolt and the female phase of self-discovery" (13). Women are insecurely suspended between two worlds, one which they cannot totally reject and the other which they cannot easily accept. It is a crucial phase in the evolution of a feminist consciousness towards finding out their authentic self.

The women in India are not in a different position than the whole world. The actual status is entirely different from the status described in religious books. The concept of Indian womanhood is as divergent as the country itself and has undergone radical changes from era to era. India has travelled from her glorious past to degeneration; from spiritual dominance to mutual clashes; from confinement to independence. She comments on the role of the Indian woman that has been changed from that of deity to *Devadasi,* from *Shakti* to *Abala*, from homebound creature to a professional.

A Search of Identity in *Sister of My Heart*

The protagonists of the novel *Sister of My Heart* are Anju (Anjali) and Sudha (Basudha). Anju and Sudha are cousins but they are more than sisters to each other or may be called 'sister of the heart'. They are born on the same day, brought up in the same house by their mothers and aunt, and connected by almost a mystical bond of love. The girls contrast to each other in many aspects such as beauty, ambition, attitude towards life, nature, and their background. Where Anju is practical and rational, Sudha is beautiful and romantic. The two girls are persistently reminded that being female, they have to submit to a predestined fate which has no provisions for autonomy. The prohibitions compel Sudha to live within the threshold of the house, whereas Anju dreams high within the limitations. Anju shows her determination not to follow in the footsteps of the women of Chatterjee. Sudha also realizes that "most sixteen years old girls in Calcutta didn't live like we did" (SMH 51). Sudha recognizes the stringent rules that go with upholding the Chatterjee reputation, but Anju opposes the mothers and exhorts them to move ahead into the modern world of the 1980s. Anju constantly interrogates the validity of her native culture and she becomes an ardent admirer of English Literature from the early age and treasures a copy of Virginia Woolf's book, *'A Room of One's Own*. Her feelings for the book, as she records them, serve as a clue to her mental attitude,Anju is revolutionary whereas Sudha is submissive. Anju plans for a movie after skipping the class. Although Sudha opposes yet she has to agree with her. Sudha is submissive, but when her mother Nalini actually finds a suitable match for her, she gathers the courage to write Ashok. She even plans to elope and get married to him secretly. But the realization of the adverse effect of eloping on Anju's marriage stops her from doing so.Sudha's effrontery is seen twice through her actions. At the first time, is when she faces the interrogation after their escapade from school to the movie theatre when her mother scolds Pishi. Sudha

"Suddenly looks up at Aunt, her
body hard and dangerous like an arrow.
She doesn't flinch when Aunt
lunges forward to grip her by the elbow
and shake her shouting" (SMH 65)

Even she blamed her mother for her dead father,

"He would have been alive…
If you hadn't pushed him to
desperation with your constant nagging"
(SMH 65).

The second time, Sudha runs away from her in- law's house to save her unborn baby as her mother- in- law wants her to abort her baby girl. These are the two times when she takes a stand and shows her courage to face the situation. In most of the cases, she is dependent on others will and doesn't take her stand. She loves Ashok but has 'an unfocused look in her eyes when it actually comes to stand against her mother's wishes. She surrenders in her plans of eloping as she thinks of Anju more than her happiness.

Divakaruni's heroines face emotional constraints since they are also unable to express themselves. The protagonists of the novel become even more silent after they are married. As girls, they grow up negotiating their mothers' traditional Indian Value system and desires with Western Philosophies influencing their own generation. Afterward, they compromise with their in- laws and spouses. Sudha's mother-in-law overshadows her and she becomes more silent than ever. Before marriage, she is restrained by her mother Nalini, who finds Ramesh a suitable match for her. Sudha doesn't appease her mother and makes her unhappy because she is bound by her psyche which tells her not to go against her mother's wishes.

After the marriage, Anju departs for America while Sudha is entangled in the typical household of India. Anju continues her studies in the US and here Sudha toils day and night and no one understands her feelings.

Divakaruni has said once in an interview with Penguin Random House, "I have given up a lot of traditional notions about the place of women in the home, and what is not okay for them to do. I really do believe in women making their own choices, standing up for their own beliefs, fighting for them when they have to and this has certainly influenced my writings." Sudha flees away from her husband's house because she is being urged to abort her unborn daughter and returns to her paternal home. After this, she is served divorce papers stating the reasons for' desertion'. Gouri Ma and Pishi support Sudha for her decision and welcome her.

Indian women are not supposed to leave their husbands' houses. They are expected to remain obedient to the rules and regulations of the society. Sudha who is brought up traditionally leaves her husband's house which was completely unexpected from her. Sudha comes to America to create her identity and to achieve freedom and independence. Sudha starts afresh in America with her daughter for whose survival; she has walked out of the security of her wifehood.

The novel is divided into two halves, namely *The Princess in the Palace of Snakes* and *The Queen of Swords* named after the stories the girls tell each other. Often the events of the novel parallel the happenings in these stories. Also mixed in with these stories, are Bengali Myths and stories of the Gods in the Hindu tradition Being, herself an Indian exile in the USA, Divakaruni does not escape the retention of her childhood memories which are nourished by the folk tales, myths, legends and epics of *Ramayana* and *Mahabharata* told by her grandfather to her. Though *Sister of My heart* has not departed from magic realism, Divakaruni has used the element of myth and fairy tale in it aptly. In fact, it is not a rejection of myths but an adaptation of them to suit the needs of modern women that is desirable for their identity. The second book is titled as *The Queen of the Swords* and it is not a traditional fairy tale. When Anju is upset over her miscarriage, Sudha tells her the tale of the 'Queen of Swords' and how she rescues her child and herself from the enemies and relates it to what happened to their three mothers and to her. Divakaruni makes use of mythological metaphors to highlight the liveliness of experiences her characters under go.

Conclusion

Thus, women begin to reject the rigid rules and regulations which are limited for women in the society. The novel Sister *of My heart* is a journey of the sisters and the mothers to carve an identity of themselves in the society. It is a struggle to re-discover themselves through the various trials and tribulations, and thereby assert their identity. The power of sisterhood is the core of the novel. The kaleidoscopic layer of woman's personalities is beautifully portrayed by Divakaruni. She believes in women making of their own choices, standing up for their own beliefs, and fighting for them when they need to.

References

1. Divakaruni, Chitra Banerjee. (1999) *Sister of My Heart.* NewYork: Anchor Books.

2. Divakaruni, Chitra Banerjee. (2002) *Vine of Desire*.New York: Anchor Books.
3. Hall, Stuart. "Cultural Identities and Diaspora." Colonial Discourse and Post Colonial Theory: A Reader (eds.) Patrick Williams and Laura Chrisman. New York: Harvester Wheatshef, 1994
4. Nagjyoti, K. "Desires and Conflicts of Female Bonding in Chitra Banerje Divakaruni of My Novels: Sister Heart and Vine of Desire.2015.
5. http: //24 article.com/ female bonding in ChitraDivakaruni's Sister of MyHeart html Language in India www.language in india.com 1 Oct 2022

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

DID COVID-19 PANDEMIC AFFECT THE FINANCIAL PERFORMANCE OF THE COMPANIES AWFULLY?

Eeshita Goyal[1] Prof. L. N. Koli [2]
[1]Research Scholar, Department of Accountancy & law , Dayalbagh Educational Institute, Agra
[2]Professor, Department of Accountancy & law , Dayalbagh Educational Institute, Agra
Corresponding Author- **Eeshita Goyal**
Email id: eeshita.goyal29@gmail.com
DOI- 10.5281/zenodo.7272551

Abstract-
Whole economy was negatively affected, and as well as all companies have a huge impact of Covid-19 pandemic on the financial performance. This pandemic has affected globally and put a strain but this pandemic has also given many new opportunities to the companies to become more digitalize. To analyses the financial performance of before and during Covid-19 period 22 Tata Group Companies which are listed in Nifty Stock Exchange have been selected. The Normality Test, Kolmogorov-Smirnova, Shapiro-Wilk and Wilcoxon Signed Rank Test was performed to test the difference between some selected ratios in 2019- 22. The objective of the study was to calculate and analyze Return on Asset, Receivable Turnover, Current Ratio, Leverage ratio.To compare the financial performance of selected Tata Group companies of before covid-19 and during Covid-19 period and to analyze the impact of pandemic on the companies financial performance of selected Tata Group companies. This study found that the financial performance of 22 Tata Group Companies listed on the National stock exchange has improved. The analysis shows that all the ratios return on asset, leverage ratio, current ratio and receivables turnover all have increased before and during Covid-19 period.

Keywords: Financial Performance, Covid-19, Tata Group, Return on Assets, Receivables Turnover.

Introduction

Coronavirus disease (Covid-19) will be remembered in history as it has affected the whole world globally. Whole world was in a lockdown during this period. Its first case was reported in January in our country came into lockdown on 23rd March 2020. This disease spread so fast that the only way to stop this was lockdown for the government. Then due to lockdown in the most of countries of the Stock market was crashed during this period and it affected all the companies and business of the world. Covid-19 becomes the global pandemic. This pandemic does only affect India but whole world was affected. Tata Group companies are one of the oldest businesses. They are working on more than 100 countries. In Mumbai they have their headquarter. During the pandemic Tata Group contributed a lot for the communities by supporting healthcare needs, by also providing necessary items required during the Covid-19 pandemic such as hospitals, medicines, PPE kits, etc. they not only help in these area but also try to educate student and supplies required food items to the needy. They also denoted in the PM cares fund.

Need of the Study

This study will help to know the real situation of financial position of the Tata Group Companies during the pandemic. By this the creditors, shareholders and other related party can take prompt decision for the investment in that particular company. Also the selected companies were able to know their actual position of the selected study period. This research can be taken as a case study for future and will help the companies to overcome their situation during pandemic.

Objectives of the Research

1. To calculate and analyze Return on Asset, Receivable Turnover, Current Ratio and Leverage ratio.
2. To compare the financial performance of selected Tata Group Companies of before Covid-19 pandemic and during Covid-19 pandemic period.
3. To analyze the impact of Covid-19 pandemic on the companies financial performance of selected Tata Group Companies.

Review of Literature

Nguyen, H. T. X., (2022) *"The Effect of COVID-19 Pandemic on Financial Performance of Firms: Empirical Evidence from Vietnamese Logistics Enterprises"* the research paper analyse the effect of Covid-19 on the financial performance of the firms which are Vietnamese Logistic Enterprise. The researcher reveals that during the selected period profitability increases and leverage ratio, return on asset, receivables turnover decreases. Liquidity ratio does not show much change during the period. It was also found that this pandemic has a global impact on Supply chains, as transportation who do international or export were all badly hindered only some of the domestic logistic firms grow.

Ntasis, L., et.al (2021) *"The impact of COVID-19 on the technology sector: The case of TATA Consultancy Services"* the objective of this paper was to check the effect of doubt indices in Tata Consultancy Service and the residuals if the organization's emergency continues. The findings of the paper reveals that the consequence of GPR and EPU in management of risk and about portfolio investments in information technology markets and TCS stock value. The researcher also found that Organizational studies about portfolio management under uncertainty indices also practise regular data after interpolation, which analyses the performance of the portfolio daily.

Kiran, et. Al (2021) *"Impact of COVID-19 on Financial Performance of BSE Listed Companies"* the main objective of the paper was to analyse financial performance and to know the impact of covid-19 of the top 30 companies which are listed under the Bombay Stock Exchange. The paper highlights the following results shows that the selected companies were less affected because the Foreign direct investment increase, Some MNC's companies were thinking of shifting their plant from China to India. And want to increase the participation in stock market by the common public. And there was a decline in return on asset.

Sindh, G. S., et. al (2020) *"The Impact of COVID-19 Pandemic on Different Sectors of the Indian Economy: A Descriptive Study"* the paper tries to found out those industries which are mostly affected in this pandemic the analysis of the paper reveals that millions of jobs were loss during the period. Industries which were mostly affected by Covid-19 were hotels industry followed by travel, transport, oil, entertainment, Construction & real estate and advertising. It was found that hotel industry was in a loss of $305 billion in a week.

Daryanto, W. M., et. al (2021) *"Profitability Ratio Analysis before and during Covid-19: Case Study in PT Japfa Comfeed Indonesia"* the object of the study was to find difference between before and during Covid-19 period in financial performance of PT. Japfa Comfeed Indonesia from 2019-2020. The study reveals that before and during Covid-19 period there was no difference between the profitability ratios. They also found the impact of pandemic on the financial burden on the company.

Devi, S., et. al (2020) *"The Impact of COVID-19 Pandemic on the Financial Performance of Firms on the Indonesia Stock Exchange"* the objective of the study was analyse the impact of financial performance of Covid-19 of listed companies on the Indonesia Stock Exchange. The study concludes that leverage ratio decreases but leverage ratio shows no difference during the period. But during the selected period profitability ratio shows some significant difference. Selected sector found decrease in ratios such as liquidity and profitability.

Kubiczek J., Derej W. (2021) *"Financial Performance Of Businesses In The Covid-19 Pandemic Conditions – Comparative Study"* the study aims to find out the Poland business which are listed on Warsaw Stock Exchange impact of pandemic on financial performance. The researcher concludes that particular industries show some changes in sensitivity during the pandemic. Industries show decrease in revenue but some shows the positive change during pandemic.

Aifuwa, H. O., et. al (2020) *"Coronavirus Pandemic Outbreak And Firms Performance In Nigeria"* the research aims to evaluate the Private business performance of Nigeria and find the impact of pandemic and measure implemented by different countries of the world. The research reveals that Covid-19 affects both the financial as well as non-monetary performance of the private business of Nigeria. The researcher also recommends privates business should by keep in operation by the government after Covid-19.

Zhang, D., Zheng, W. (2022) *"Does COVID-19 make the firms' performance worse? Evidence from the Chinese listed companies"* the paper aims to find the impact of Covid-19 on performance with the view point of operation which is useful in ample evaluation of effect on economy of pandemic. The research paper concludes that there is increase in cost and decrease in cash flow. Consequence of policy that sale boosting is an important recovery of economy and environmental tax effect should be effectively used by the government.

Research Gap

This Covid-19 pandemic has a great impact on Tata Group Companies of India. These selected Companies faces a vast outbreak during the pandemic period. Many researches have been done on the analysis of financial performance of Tata Group Companies but only few researches have been done which shows the impact of the Covid- 19 pandemic on the selected companies of India.

Research Hypotheses

Following are the hypotheses of the study constructed by a researcher:

H_1: There is a negative effect on the profitability of the selected companies during Covid-19

H_2: There is a negative effect on the liquidity of the selected companies during Covid-19

H_3: There is a negative effect on the activity ratio of the selected companies during Covid-19

H_4: There is a negative effect on the leverage of the selected companies during Covid-19

Research Methodology

This research is purely a quantitative study. The study is based on secondary data. The data has been collected from companies official websites and other websites of internet. Also data has been collected from National Stock Exchange. Data has been taken from F.Y. 2018-20 (before Covid- 19 period) 2020-22 (during Covid- 19 period). The research sample includes 22 companies of Tata Group which are listed in National Stock Exchange. Following are the selected companies of Tata Group:

Table 1: Name of the Tata Group Companies listed in National Stock Exchange

Sr No.	Companies Name	Industry	Index Mcap (Rs. Crores)
1.	Automotive Stampings & Assemblies Ltd.	Automobile	26
2.	Indian Hotels Co. Ltd.	Services	9485
3.	NELCO Ltd.	IT	399
4.	Oriental Hotels Ltd.	Services	305
5.	Rallis India Ltd.	Fertilisers & Pesticides	4156
6.	TRF Ltd.	Industrial Manufacturing	77
7.	Taj GVK Hotels & Resorts Ltd.	Services	809
8.	Tata Coffee Ltd.	Consumer Goods	1466
9.	Tata Consultancy Services Ltd.	IT	755899
10.	Tata Consumers Products Ltd.	Consumer Goods	22191
11.	Tata Elxsi Ltd.	IT	5000
12.	Tata Investment Corporation Ltd.	Financial Services	3760
13.	Tata Metaliks Ltd.	Metals	1322
14.	Tata Motors Ltd DVR	Automobile	2021
15.	Tata Motors Ltd.	Automobile	28805
16.	Tata Power Co. Ltd.	Power	8574

17.	Tata Steel Long Products Ltd.	Metals	1134
18.	Tata Steel Ltd.	Metals	33603
19.	Tinplate Company of India Ltd.	Metals	921
20.	Titan Company Ltd.	Consumer Goods	86120
21.	Trent Ltd.	Consumer Goods	17952
22.	Voltas Ltd.	Consumer Goods	16723

The study is analytical and descriptive; numerous tests have been performed of companies of Tata Group before and during covid-19 period. Statistical tools used are Data normality test after that researcher might use non parametric test namely Wilcoxon signed-rank test if the data is not normally distributed. SPSS software has been used to analyse data. Kolmogorov-Smirnov test results shows that the sample data is not identical to normal distribution. After that the researcher used the Wilcoxon Sign Rank test, to measure the difference in financial performance of before and during COVID-19 period in this study.

Data Analysis

1. Return On Equity % (ROE)

This helps to evaluate and analyse the profitability position of a company. This percentage helps to provide an insight management into the firms.

Table 2: Analysis of Return on Equity of Tata Group Companies of National Stock Exchange

Sr No.	Companies Name	2018-19	2019-20	2020-21	2021-22
1.	Automotive Stampings & Assemblies Ltd.	-5.19	-9.18	-16.98	28.91
2.	Indian Hotels Co. Ltd.	3.34	4.50	-5.73	-0.30
3.	NELCO Ltd.	9.46	6.55	3.83	6.99
4.	Oriental Hotels Ltd.	13.63	-0.61	-9.17	-2.21
5.	Rallis India Ltd.	7.13	7.57	8.83	5.74
6.	TRF Ltd.	-18.46	-25.73	-17.55	-6.67
7.	Taj GVK Hotels & Resorts Ltd.	3.37	3.21	-3.66	1.35
8.	Tata Coffee Ltd.	5.74	5.79	7.47	7.13
9.	Tata Consultancy Services Ltd.	30.21	31.68	28.30	31.49
10.	Tata Consumers Products Ltd.	8.21	4.34	4.61	6.22
11.	Tata Elxsi Ltd.	25.36	18.43	21.44	25.34
12.	Tata Investment Corporation Ltd.	1.57	1.46	0.73	0.96
13.	Tata Metaliks Ltd.	13.15	9.79	11.80	10.10
14.	Tata Motors Ltd DVR	3.31	-11.64	-3.68	-2.17
15.	Tata Motors Ltd.	3.31	-11.64	-3.68	-2.17
16.	Tata Power Co. Ltd.	4.63	0.39	2.14	5.90
17.	Tata Steel Long Products Ltd.	9.38	-8.35	9.68	3.17
18.	Tata Steel Ltd.	7.66	4.48	9.46	14.87
19.	Tinplate Company of India Ltd.	4.93	7.93	7.23	17.81
20.	Titan Company Ltd.	11.98	11.50	5.52	10.82
21.	Trent Ltd.	4.97	2.86	-0.89	3.19
22.	Voltas Ltd.	6.81	7.79	7.14	6.33

2. Receivables Turnover Ratio (RT)

This ratio helps to know that how much proficiently the companies from the clients are collecting their receivables.

Table 3: Analysis of Receivables Turnover of Tata Group Companies of National Stock Exchange

Sr No.	Companies Name	2018-19	2019-20	2020-21	2021-22
1.	Automotive Stampings & Assemblies Ltd.	12.06	11.44	22.43	10.80
2.	Indian Hotels Co. Ltd.	11.88	11.25	4.47	8.97
3.	NELCO Ltd.	2.60	2.72	4.60	5.12
4.	Oriental Hotels Ltd.	14.69	11.78	4.71	9.25

5.	Rallis India Ltd.	3.98	4.62	5.6	6.1
6.	TRF Ltd.	0.78	0.78	0.55	0.77
7.	Taj GVK Hotels & Resorts Ltd.	16.68	8.22	7.50	23.78
8.	Tata Coffee Ltd.	5.74	5.79	6.56	7.45
9.	Tata Consultancy Services Ltd.	5.74	4.98	4.2	4.8
10.	Tata Consumers Products Ltd.	6.52	7.52	9.45	8.19
11.	Tata Elxsi Ltd.	4.82	4.30	4.14	4.25
12.	Tata Investment Corporation Ltd.	5.37	4.32	4.95	3.78
13.	Tata Metaliks Ltd.	6.35	6.04	4.80	7.21
14.	Tata Motors Ltd DVR	9.70	9.76	6.82	10.23
15.	Tata Motors Ltd.	9.70	9.76	6.82	10.23
16.	Tata Power Co. Ltd.	4.20	4.24	4.70	5.49
17.	Tata Steel Long Products Ltd.	5.62	16.03	17.74	27.20
18.	Tata Steel Ltd.	14.32	15.48	15.96	21.90
19.	Tinplate Company of India Ltd.	23.17	21.62	31.19	65.70
20.	Titan Company Ltd.	20.51	30.73	28.81	27.95
21.	Trent Ltd.	203.10	250.85	130.36	227.15
22.	Voltas Ltd.	2.60	2.72	2.59	2.73

3. Current Ratio (CR)

This ratio helps to analyse and evaluate the companies aptitude to pay their short term debts. It also measures the liquidity position of the company's.

Table 4: Analysis of Current Ratio of Tata Group Companies of National Stock Exchange

Sr No.	Companies Name	2018-19	2019-20	2020-21	2021-22
1.	Automotive Stampings & Assemblies Ltd.	0.51	0.36	0.38	0.45
2.	Indian Hotels Co. Ltd.	0.57	0.79	0.80	2.48
3.	NELCO Ltd.	1.11	1.14	0.60	0.75
4.	Oriental Hotels Ltd.	0.42	1.12	1.18	1.68
5.	Rallis India Ltd.	2	1.7	1.8	1.7
6.	TRF Ltd.	0.67	0.52	0.43	0.36
7.	Taj GVK Hotels & Resorts Ltd.	0.46	0.59	0.44	0.60
8.	Tata Coffee Ltd.	2.36	2.61	3.20	3.33
9.	Tata Consultancy Services Ltd.	4.2	3.3	2.9	2.5
10.	Tata Consumers Products Ltd.	2.93	2.60	2.28	2.25
11.	Tata Elxsi Ltd.	5.36	5.53	5.3	4.1
12.	Tata Investment Corporation Ltd.	972.81	826.09	1,538.30	980.00
13.	Tata Metaliks Ltd.	1.2	1.3	2.38	1.80
14.	Tata Motors Ltd DVR	0.58	0.53	0.93	0.98
15.	Tata Motors Ltd.	0.58	0.53	0.93	0.98
16.	Tata Power Co. Ltd.	0.55	0.51	0.41	0.53
17.	Tata Steel Long Products Ltd.	3.30	0.93	0.79	4.90
18.	Tata Steel Ltd.	0.73	0.81	1.00	0.62
19.	Tinplate Company of India Ltd.	1.7	1.9	1.91	1.99
20.	Titan Company Ltd.	1.76	2.0	2.0	2.0
21.	Trent Ltd.	1.52	3.63	4.24	4.93
22.	Voltas Ltd.	1.63	1.48	1.48	1.45

4. Leverage Ratio (LVRG Ratio)

This ratio analyses and evaluates the companies financial measurement to assesses the aptitude to meet its monetary requirement.

Table 5: Analysis of Leverage Ratio of Tata Group Companies of National Stock Exchange

Sr No.	Companies Name	2018-19	2019-20	2020-21	2021-22
1.	Automotive Stampings & Assemblies Ltd.	6.98	9.03	-2.29	-1.79
2.	Indian Hotels Co. Ltd.	0.33	0.31	0.12	0.16

3.	NELCO Ltd.	0.78	0.73	0.24	0.21
4.	Oriental Hotels Ltd.	0.72	0.68	0.92	1.04
5.	Rallis India Ltd.	0.06	0.07	0.05	0.05
6.	TRF Ltd.	-2.64	-1.32	-1.15	-1.07
7.	Taj GVK Hotels & Resorts Ltd.	0.49	0.40	0.46	0.43
8.	Tata Coffee Ltd.	0.09	0.07	0.07	0.06
9.	Tata Consultancy Services Ltd.	0.0	0.0	0.1	0.1
10.	Tata Consumers Products Ltd.	0.14	0.08	0.10	0.09
11.	Tata Elxsi Ltd.	0.0	0.0	0.0	0.0
12.	Tata Investment Corporation Ltd.	0.0	0.0	0.0	0.0
13.	Tata Metaliks Ltd.	0.0	0.6	0.14	0.11
14.	Tata Motors Ltd DVR	0.47	1.14	2.46	3.13
15.	Tata Motors Ltd.	0.79	1.14	2.46	3.13
16.	Tata Power Co. Ltd.	1.09	1.17	2.81	2.58
17.	Tata Steel Long Products Ltd.	0.0	1.67	0.50	0.29
18.	Tata Steel Ltd.	0.42	0.49	0.32	0.30
19.	Tinplate Company of India Ltd.	0.00	0.00	0.02	0.01
20.	Titan Company Ltd.	0.37	0.1	0.2	0.2
21.	Trent Ltd.	0.23	0.12	1.14	1.08
22.	Voltas Ltd.	0.03	0.02	0.05	0.06

Descriptive Statistic Analysis:

Table 6: Analysis of Descriptive Statistics of selected ratios before and during Covid-19

Indexes	N	Min	Max	Mean	Media	Std. Deviation
ROA before Covid-19	21	-25.73	31.68	4.900454550	4.950	10.6924209
ROA during Covid-19	21	-17.55	31.49	5.446363640	5.630	10.6703844
RT before Covid-19	21	0.78	250.85	19.20704550	7.020	46.6149653
RT during Covid-19	21	0.55	227.15	18.82022730	7.015	38.6033941
CR before Covid-19	21	0.36	972.81	42.43000000	1.250	189.843963
CR during Covid-19	21	0.36	980.00	35.44577780	1.680	164.720243
LEV before Covid-19	21	-2.64	9.03	0.610227273	0.185	1.77282784
LEV during Covid-19	21	-2.29	3.13	0.429318182	0.130	1.12770481

Note: *ROA represent return on asset, RT represent receivables turnover, CR represent current ratio and LEV represent Leverage ratio.*

The descriptive analysis result shows that the analysis is done for 21 Nifty Tata Group Companies of India. The above table shows that ROA has increased, during the Covid-19 period shows that it does not have much impact on the selected companies financial performance. ROA before the pandemic was 4.901 and the ROA value during the pandemic was 5.63. The average value of ROA has increased by 0.68 during the pandemic.

The receivables turnover shows that it decreased during the Covid-19 period, it shows that it has negative impact during the pandemic on the financial performance of selected Tata Group Companies. Receivables turnover before the Covid-19 period, the mean value was 7.020 and during the pandemic the mean value of receivables turnover was 7.015. The mean value receivables turnover has increased by 0.005.

There was no difference in the current ratio of the Tata Group companies of India before and during pandemic. The current ratio remains the same as 0.36. But the mean value of the current ratio was 1.250 before pandemic and during Pandemic the value was 1.680, this shows the mean value decreased as we compare the period of before and during pandemic by 0.43.

While the researchers compare the mean value of leverage ratio it show the decrease in value. Before pandemic leverage mean value was 0.185 and during the pandemic the mean value was 0.130, this shows the leverage decreases by 0.055. This can be concluded as the leverage value is decreasing during the pandemic period as it shows positive impact on companies financial performance.

Normality Test Analysis:

Table 7: Analysis of Normality Test of selected ratios before and during Covid-19

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Selected Companies ROA before Covid-19	0.198	22	0.25	.902	22	0.33
Selected Companies ROA during Covid-19	0.157	22	0.170	0.937	22	0.174
Selected Companies RT before Covid-19	0.400	22	0.000	0.334	22	0.000
Selected Companies RT during Covid-19	0.325	22	0.000	0.432	22	0.000
Selected Companies CR before Covid-19	0.531	22	0.000	0.226	22	0.000
Selected Companies CR during Covid-19	0.535	22	0.000	0.225	22	0.000
Selected Companies LVRG before Covid-19	0.338	22	0.000	0.508	22	0.000
Selected Companies LVRG during Covid-19	0.267	22	0.000	0.812	22	0.000

The above table shows the result of normality of the Kolmogorov-Smirnov test and Shapiro-Wilk test. The results shows that as the researcher calculates the return on asset of before and during pandemic the data was normally distributed as the significance value is more than 0.05. But in all other cases the significance value is less than 0.05 this shows that data is not normally distributed. This shows that parametric statistical test could not be able to analyse the data. After that to compare the financial performance ratio of before and during pandemic the researcher used non parametric test

Wilcoxon Signed-Rank Test Results:

Table 8: Analysis of Wilcoxon Signed-Rank Test of selected ratios before and during Covid-19

		N	Mean Rank	Sum of Ranks	Z-statistic	Sig
ROA after compare to ROA before COVID-19	*Negative Ranks*	10[a]	13.80	138.00	-0.373[a]	0.709
	Positive Ranks	12[b]	9.58	115.00		
	Ties	0[c]				
	Total	22				
RT after compare to ROA before COVID-19	*Negative Ranks*	11[a]	8.37	96.00	-0.678[a]	0.498
	Positive Ranks	10[b]	13.50	135.00		
	Ties	1[c]				
	Total	22				
CR after compare to ROA before COVID-19	*Negative Ranks*	10[a]	8.80	88.00	-1.250[a]	0.211
	Positive Ranks	12[b]	13.75	165.00		
	Ties	0[c]				
	Total	22				
LVRG after compare to ROA before COVID-19	*Negative Ranks*	10[a]	8.45	84.50	-0.423[a]	0.672
	Positive Ranks	9[b]	11.72	105.50		
	Ties	3[c]				
	Total	22				

[a] After > Before; [b] After < Before; [c] After = Before.

The analysis of Wilcoxon Signed-Rank Test shows the comparison before and during pandemic of financial performance of Tata Group companies of India. The test reveals that the significance value of Return on asset, receivables turnover, current ratio and leverage ratio is more than 0.05, which shows that the entire hypothesis H_1, H_2, H_3, and H_4 have been rejected.

The above analysis during the pandemic shows that selected 22 companies of Tata Group Companies return on asset of 10 companies fall and 12 companies shows an increase in ROA value. The present ratio's ties values is 0, showing that the ROA values are not the same before and during the COVID-19 pandemic. The N value of negative is 11 shows that fall in companies Receivables turnover and increase in Receivables turnover of 10 companies and Ties N value is 1 revels that 1 company show no change in Receivables turnover before and during Covid-19.

The current ratio of 10 companies shows the fall and 12 companies reveals increase in current ratio. It also indicates that there was no difference in CR between before and during the COVID-19 of any of the company.

10 companies out of 22 shows the fall in leverage ratio and 9 companies show the increase it. But it could also find that 3 companies show no difference in leverage ratio before and during Covid-19 pandemic.

Conclusion

As it could be seen that whole world was affected by the pandemic. The Covid-19 has put a strain on the all the companies of India on a global basis, but on the other hand this pandemic has given many new opportunities to the Tata Group Companies as their e-commerce business started raising more, they started manufacturing new products which are more needed during the pandemic by the consumer. This study reveals that the selected 22 companies of Tata Group of Nifty have improved in financial performance during this period. It can also be conclude that there was not much difference in the performance of return on asset, receivables turnover, current ratio and leverage ratio of the selected companies before and during pandemic. The Covid-19 pandemic shows the positive impact on the companies performance.

The Tata group companies took much prevention to overcome with the pandemic. Some sectors of Tata Group companies were very much affected but they take necessary steps for them and push more those companies which are less affected due to pandemic. They also did much digital transformation and work more on e-commerce

Limitation

The study is limited to only select companies of Tata Group research can also increase the number of companies. And only selected variables have been considered, the number of variables can also be increased. The research can also find difference in the financial performance during the period when different variants of Covid -19 came. Because during different phases the effect of Covid- 19 was different.

References

1. Aifuwa, H. O., Saidu, M., & Aifuwa, S. A. (2020). Coronavirus pandemic outbreak and firms performance in Nigeria. *Management and Human Resources Research*.
2. Daryanto, W. M., Maharani, A. P., & Wiradjaja, N. (2021). Profitability Ratio Analysis Before and During Covid-19: Case Study in PT Japfa Comfeed Indonesia. *Life*, *8*, 30.
3. Gupta, A., & Saikia, T. Impact of COVID-19 on Financial Performance of BSE Listed Companies.
4. Kubiczek, J., & Derej, W. (2021). Financial performance of businesses in the COVID-19 pandemic conditions–comparative study. *Polish Journal of Management Studies*, *24*(1), 183-201.
5. NGUYEN, H. T. X. (2022). The Effect of COVID-19 Pandemic on Financial Performance of Firms: Empirical Evidence from Vietnamese Logistics Enterprises. *The Journal of Asian Finance, Economics and Business*, *9*(2), 177-183.
6. Ntasis, L., Koronios, K., & Pappas, T. (2021). The impact of COVID-19 on the technology sector: The case of TATA Consultancy Services. *Strategic Change*, *30*(2), 137-144.
7. Rababah, A., Al-Haddad, L., Sial, M. S., Chunmei, Z., & Cherian, J. (2020). Analyzing the effects of COVID-19 pandemic on the financial performance of Chinese listed companies. *Journal of Public Affairs*, *20*(4), e2440.
8. Sidhu, G. S., Rai, J. S., Khaira, K. S., & Kaur, S. (2020). The Impact of COVID-19 pandemic on different sectors of the Indian Economy: A descriptive study. *International Journal of Economics and Financial Issues*, *10*(5), 113.
9. Zhang, D., & Zheng, W. (2022). Does COVID-19 make the firms' performance worse? Evidence from the Chinese listed companies. *Economic Analysis and Policy*, *74*, 560-570.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

The Socio-Economic study of occupational status, standard of living and consumption status of Santhal tribes living in Jharkhand

(with special reference to Giridih district)

Jitendra Kumar[1] Dr. Namita Sharma[2]
[1]Researcher, Department of Economics, Guru Ghasidas Central University, Bilaspur (C.G.)
[2]Assistant Professor, Department of Economics, Guru Ghasidas Central University, Bilaspur (C.G.)
***Corresponding Author-* Jitendra Kumar**
Email id: citujitu@gmail.com
DOI- 10.5281/zenodo.7278604

Abstract
Tribal means a group of people independent of economics who speak a language and organize to protect against external aggression. Even today in the modern world, in the inaccessible areas of the continents, human groups have been maintaining a different identity from this development civilization for thousands of years, which the economic vision of modern society considers productive, which in itself tells the state of misfortune.

Key Words: Income- expenditure, employment, consumption and socio-economic status.

Introduction

The tribe lives in any common terrain where they speak common language and behave in a similar culture. The International Labour Organization has addressed the natives of any country with the term tribal. Even in India, from time to time, such communities who are living in forests with their old beliefs away from modernity have been called tribals. A community that lives in places away from the present development which is the basis of their life, in this group, by following their social rules, they are directly and indirectly connected with their dependent donor i.e. the forest but want to connect with the stream of development according to time and circumstances, which has not yet happened. Tribal society is on the verge of success.

Review of Research Literature

- E. T. Dalton (1872) "The descriptive anaology of Bengal". This book is a considered as a celebrated work on tribals. In this book the author has describes about economic and socio-cultural stats of tribals.
- Suresh Singh (1972) "Bharat me Aadhivashi ki sitthiti" The book foucused on the condition of tribals in the country. Legislations have been made after independence to protect the rights of tribal community. Social transformation is a complex process that shapes over a period of time.
- Narendra Nath Das (1962) "History of Midanpur" The book is enriched by the information about oraon and santari tribal communities. Protest were done by oraon and santari tribal communities for their rights and representation

Area of study

The study for the presented research paper is limited to a few villages of Giridih district. From where about 300 families of Santhal Tribes, Scheduled Castes and other communities have been selected for the study.

Duration of study

Year 2020-2021 has been selected for the study.

Objectives Of Research

1. Studying the types of santhal tribal employment of the research area

2. Identifying the main causes of migration
3. Assessing santhal tribal standard of living

Research Hypothesis

1. The standard of tribal living is low and conservative.
2. The income received is not sufficient for consumption.

Research Methodology

The subject matter for the presented research paper is based on preliminary second material and facts, efforts have been made to compile such data related to the research subject which cannot be published at any level within the limits of personal access. The selection of villages for the compilation of primary data has been done through the Dev Directing method, but the process of compiling the information of more santhal tribes than this method and reaching its conclusion is not impossible but difficult, this study has been done on 300 families of a total of 20 grams.

Santhal Tribal and employment (business)

The economy of tribes is very different from the economy of an advanced society, their personal needs are very limited. Forests are not only their desired favorite habitat but also areas of livelihood. Now in such a situation, not only the Ashwini rights of the santhal tribals have been abolished. Due to the shrinking forests and the ever-increasing restrictions and pressure on the forest, the santhal tribal people have turned to agricultural wages and animal husbandry. That they do not even have their own agricultural land and those who have agricultural land, then it is very less fertile, which can produce only coarse grains. As an alternative, wages are the only economic source of the santhal tribes. The collection of minor forest produce and herbs obtained from forests is a very small economic source which is not enough for a living.

Table No.-1 Occupation of Surveyor Families

S. No.	Occupation	Santhal Tribes	Scheduled Caste	Other Caste	Percentage
1	Agriculture	33	06	04	14.34
2	Labourer	170	21	09	67.50
3	Self-employment	08	02	06	5.26
4	Government Job	08	02	03	4.27
5	Private job	17	05	06	9.21
6	total	236	36	28	100/300

(Source: Primary Data)

Table 1 shows that the highest number of santhal tribals are labourers tat is 67.50%

Santhal Tribal and Employment Sources

Study Area is still very backward economically; most of the rural population does not have adequate employment sources available at their place of residence. Sometimes you have to go outside the village. The burden on agriculture has increased due to increasing population. Land loss has arisen due to transfer of land and division of land in each culvert. Now the land owner is not able to get work for agricultural work in less land throughout the year. This is the reason why scheduled santhal tribe and scheduled caste and other class villagers living in rural areas have to go out of the village in search of employment.

Table No.-2, Source of Employment (in sample household)

S. No.	Source of Employment	Families	Percentage
1	Villages	265	88.85
2	Out of village	35	11.66
total		300	100

(Source: Primary Data)

Table 2 shows that highest number of santhal tribals is villagers tat is 88.85%

Santhal Tribal and migration

Tribal workers have to face the problem of migration, the tribes do not have enough land to get employment throughout the year and solve the food problem. The forest provides work and wages to these people in the time left from agricultural work, but due to the decrease in wild produce and forest policy, these santhal tribal families have to go out of the village to work according to the time and need, which is explained by this table.

Table No.-3, Reasons for Santhal Tribal Migration

S. No.	Type of Migration	Number of People	Percentage
1	Seasonal	26	8.88
2	Monthly	19	6.57
3	Pachhik	10	3.28
4	Need based	190	62.5
5	Drought	29	9.86
6	Yearly	20	6.57
7	Others	06	2.30
Total		300	100

(Source: Primary Data)

Table 3 shows that highest percentage of santhal tribal migration is due to need, that is 62.5% It is clear from the table above that in fact they get employment in the villages only for a few days in the year, which is why they have to go out for employment.

Consumption tendency of the santhal tribes

The consumption tendency of the santhal tribes is said to be used in the simple language of the use of goods to meet the needs, in fact the production is done for consumption, when the rest is stored after consumption, it is called saving. Before studying the consumption propensity of these 10 families, it is necessary to know that how is their economic condition? Because the economic situation determines our standard of living, consumption and savings level, it is clear from Kalika No. 1 that most of the sample households work as labourers, their consumption tendency depends on the income they get. Therefore, the details of income received by these sample families are being explained by the municipality in this way.

Table No.-4, Total Monthly Income of the Family

S. No.	Family Income	Number of families	Percentage
1	0-200	-	-
2	1000-2000	200	66.66
3	2000-3000	42	14.00
4	4000-5000	16	5.66
5	5000-6000	26	8.66
6	More than 6000	14	5.66
Total		300	100

(Source: Primary Data)

Table 4 shows that 66.66 % of familes have income between 1000-2000

Table No. 5 Monthly Income and Consumption Expenditure of Sample Households

Details about community	Monthly Income	Expenditure (in Rupees)								
		Food	Fruits	Wine	Entertainment	Festival	Cloth	Health	Others	Total
		55%	10%	8%	2%	9%	4%	2%	10%	100%
Other caste community	8930	5358	359	715	178	803	446	178	893	8930

Scheduled caste community	6200	3720	248	496	124	558	310	124	620	6200
Santhal Tribal community	4550	2730	182	364	91	410	227	91	455	4550

(Source: Primary Data)

It is clear from the above table number 5 that the consumption expenditure of these families is very low, they spend only 2% or less of their income on important media like Facewas.

Suggestions

Proper training programmes should be conducted by skilled and experienced trainers familiar with santhal tribal problems to develop traditional businesses based on resources and raw materials found in the area to improve the economic condition of the santhal tribal family, as a result of which they can improve their standard of living by strengthening their economic condition. In order to remove the orthodox superstition and ignorance prevailing in the santhal tribal society, such an education system should be developed which is in line with their native culture and helps in employment and income growth and at the same time moving fast on the path of development.

Conclusion

The personal needs of the santhal tribal community are very limited and they used to meet their needs from their forest, but in the modern economy, their rights have not been limited but eliminated, as a result they have to resort to other means of living. The impact of which is affecting their health and living, the concern is that even after so much development, they are not able to earn even two meals a day, in such a situation, there is a need for the government to implement development programs on a large scale in this area so that the unemployed santhal tribal community can get employment and earn a full living.

References

1. Static Profile of Schedule Tribes (2013) Department of Statistics, Ministry of Tribal Affairs, Government of India. tribals of India "
2. P. Enmity. Naidu Radha Publications New Delhi 2002 page 108
3. "Jesus in Tribal Development" Rai and B.K. Burman Volume 11 Page No. 20
4. K. S. Singh (1981), Economy of Tribes and Their Transformation (Concept Publishing Company New Delhi).
5. Marandi Krishna (1999) "Adivasi Nari Sidhu Kanu Dursa Zero Mela Udyapan Community Canada
6. Ali Syed Ashfaq (1973), Tribal Demography Madhya Pradesh, Jai Bharat, Publishing House Bhopal.
7. B.S. Jura (1955) Tribal Publishing Division Delhi.
8. Economic Survey of India Gazette 2021-22.
9. Economic Survey Gazette 2021-22 of Government of Jharkhand.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

The Concept of Law and Justice in the Select Novels of William Dean Howells

Dr. D. Sundaramoorthy
PhD, Guest Lecturer, Department of English Government Arts and Science College Thirupattur Tamilnadu India
***Corresponding Author-* Dr. D. Sundaramoorthy**
Email id: sundar8608@gmail.com
DOI- 10.5281/zenodo.7278620

Abstract:

The present research paper centers on "The Concept of Law and Justice in the Select Fictions of William Dean Howells". It is clear from the novels that Howells rejects any concept of law or justice as absolute in human experience. Rather, law and justice are problematic and, in a pragmatic manner, are subject to the test of experience. Man's knowledge about universal laws, for example, is imperfect and obscure because of the limitations of his human nature. In situations involving a conflict of interests or goods, justice is not automatically secured by following some abstract concept of law. Justice or injustice inheres in a situation according to action taken to resolve a conflict. Criteria for judgment, then, are not absolute but are discovered through inquiry into the actualities of a situation with a view toward effecting consequent good for the persons involved; and good is not only for the short run; it is for the long run as well.

Keywords: Imperfect, Obscure, Justice, Injustice, Actualities, consequent.

In speaking of law and justice in Howells' fiction, it should be understood that they are conceived there in ways that are philosophical and ethical rather than legalistic. The primary concern has to do with questions of man's relationship to the universe and his relationship with his fellowman. While the general problem of law and justice is touched upon in as early a novel as *A Foregone Conclusion* (1875), it is given fuller expression in later novels, some of which, along with *A Foregone Conclusion*, are considered here.

The conflict of Don Ippolito in *A Foregone Conclusion* is between his priesthood, which he does not believe in, and his desire to escape from it into freedom as a man. In that he explicitly echoes the Shylock of *The Merchant of Venice*, however, Don Ippolito is particular and universal in his conflict between his actuality and his intention. Like Shylock, Don Ippolito pleads for recognition of his essential humanity as against his particular identity as an Italian priest. Neither the Jew nor, in the novel, the priest chose the circumstances which made them the persons they are; but it is those circumstances that have made their identities, identities which are unique and yet which alienate Jew and priest from all other men. In that Don Ippolito is a priest, however, his priesthood is emblematic of his commitment to a faith in God, to a belief, in other words, that all men are somehow one in absolute reality. The point is that Don Ippolito, like all men, is alienated from his kind in the actual world where identities are many; and he is yet one with his kind in the essential humanity ail have in common. Don Ippolito's conflict, then, is one between his actuality and his spirit, between his aspiration for absolute freedom and the necessary limitations of his actual human condition, which he finally is able to accept. Justice for the priest, no more than for Shylock, can be absolute or perfect by fact of the limitations of their human actuality.

A Modern Instance, a novel in which Howells is close to tragedy. It is a work, too, in which the problem of justice is complicated by man's inability to know absolute truth. The issues reach a climax in the scene in the Indiana divorce-court; for when we ask whether Bartley Hubbard or Marcia Gaylord is more to blame for their marriage that ends in divorce, the complexity of their situation urgently asserts itself. We remember that it is sometime before the divorce proceedings that Atherton says to his wife about Bartley and Marcia: "In some sort they chose misery for themselves,--we make our own hell in this life and the next, -- or it was chosen for them by undisciplined wills that they inherited. In the long run their fate must be a just one." Here Atherton accounts for what happened to Bartley and Marcia in three different ways, and at least two of them would seem to be mutually contradictory. He says in the first place that Marcia and Bartley "chose misery for themselves," implying free will in their actions. He then contradicts this by suggesting that misery may have been "chosen for them by undisciplined wills they inherited." Finally, he appeals to a concept of fate in the long run as being just. How right or wrong Atherton may be in any part or all of what he tells his wife is something we never know in the novel; and we can't know it by reason of the complexity in the lives of Marcia and Bartley, a complexity that prohibits categorical answers and judgments.

Atherton's doctrine that it is "our deeds that judge us" is central to intention and actuality in the novel. We learn early, for example, that Bartley Hubbard is not a person who recognizes that he has any particular responsibility for his deeds. For the most part he is free and easy and apt to excuse his actions on the grounds that he did not intend them. Marcia Gaylord, on the other hand, is of a passionate and rigid nature and allows no lightness or flexibility in acts or intentions. She is never able to understand or accept the manner in which Bartley flirts with life. Their quarrel over Hannah Morrison, which finally drives them apart, recalls Bartley's flirtation with Hannah and Marcia's subsequent breaking of her engagement with him early in the novel. The characters of Bartley and Marcia, in conjunction, prove fatal to them both; for the qualities of the one act upon the qualities of the other. To say of Bartley and Marcia that either one of them is judged by his deeds is to implicate the other. Their life together is complicity, and where neither one of them intends harm to the other, no simple pronouncements about their individual guilt nor can innocence be made.

The complicity in the lives of Marcia and Bartley sheds light on Atherton's suggestion that perhaps they had "inherited" weak wills and that perhaps theirs was a fate which would be just in the long run. For according to Howells' idea of complicity the lives of all persons are involved together. This is implied early in the novel in the environmental influences and hereditary traits affecting Bartley and Marcia. Bartley, for example, is an orphan and tends to look upon himself as a "self-made" man. Marcia's resemblance to her father is pointed out. Then there is some description of the nature of personal relationships within the Gaylord family and of its relationship to the town of Equity.

All this serves to place Atherton's doctrine in a more meaningful light, as it does that doctrine in the novel that is opposed to Atherton's. Ben Halleck contends that persons are to be judged by their intentions rather than their deeds. At one point in the novel Halleck speaks to Atherton of God's judgment of man and imagines "the relief the rest, the complete exposure of Judgment Day" (288). If we take Halleck's view of the matter, the case against Marcia and Bartley would seem to be considerably simplified. But we cannot take either Halleck's or Atherton's view exclusively: both intention and deed are to be reckoned with in understanding Bartley and Marcia. If it is felt that Howells' inclines toward Atherton's view, it is because the author's realism demanded that he deal first of all with the concreteness of experience as it manifested itself in the external world of actuality; but this did not cause him to dismiss the inner life as of no importance. It is just because he would not oversimplify experience that actualities in Howells' novels are complex and problematic. Furthermore, as we saw in the case of Don Ippolito, actualities are a common ground and area of experience among men in their knowledge of one another. It is the publicity of that knowledge that is the field of complicity.

Clearly, then, Halleck and Atherton, in their different ways, oversimplify in their doctrines. Squire Gaylord also oversimplifies when he boasts of his "facts" and his "witnesses" in the divorce-court. For it is not simply Bartley Hubbard (or Marcia) who is on trial. All mankind is. Insofar, for example, as Marcia's qualities were inherited from her father, and insofar as he shaped her growing character, Squire Gaylord himself is on trial. Within the complex scheme of things absolute moral responsibility cannot be fixed. Justice is necessarily imperfect. Full justice demands Halleck's God, who knows the intricate and obscure reaches of all intention; and it demands an accounting for deeds, also. But even granting this, where intention and acts are contradictory, any form of absolute justice seems inconceivable. Only where the half worlds of intention and deed are absolutely one world is an absolute justice conceivable. Only where Halleck's doctrine (or law) and Atherton's are in fact one can their contradiction be overcome and make possible that perfect law and justice that is impossible in human experience.

A Modern Instance, in its demonstration of the complexity in the lives of Marcia Gaylord and Bartley Hubbard, shows that men can never have wholly adequate knowledge on which to make moral judgments. Acts of judgment, the novel implies, are always far from perfect; and insofar as they assume to be absolutely authoritative they are presumptuously overbearing. At the end of the novel, both Halleck and Atherton begin to have some inkling of the deficiencies of their exclusive points of view. Halleck glimpses the necessity of reckoning with deeds, and Atherton, the necessity of reckoning with intentions. In that their experience has been the test of both men, Atherton's doctrine of the deed that judges comes off better than Halleck's; but Atherton's conception of experience has been too shallow to account for the complexities in which he has been involved. Where he would judge, he has been judged. As Raymond Jaffe observes in *The Pragmatic Conception of Justice*; "In a sense, the character of the judger is the subject of the moral inquiry. It is his competence to judge, his standard of judgment or conception of the desirable that is being investigated."

Man's inability to see clearly beyond the limits of his own experience and to give absolute answers about the meaning of that experience marks Silas Lapham's situation at the end of *The Rise of Silas Lapham*. When Sewell, wondering how Lapham feels now after his failure in business, asks him whether he has any regrets, Lapham replies: "I don't know as I should always say it paid; but if I done it, and the thing was to do over again, right in the same way, I guess I should have to do it." Lapham at the last speaks of his life not out of any dogmatic certainty about its meaning; rather, he speaks out of a humble awareness of the mystery of his life in its involvement with all existence. He does not urge his guilt or innocence or question whether justice or injustice has been done. He senses that, somehow, he is a part of all that is, and he is able to accept his life on these terms.

The way in which Lapham is educated into his sense of a larger life which includes his own-- first, in the part he plays in helping to solve the conflict of the love-plot which involves his daughters and Tom Corey; and, second, in his refusal to act dishonestly in the business deal with Rogers and the Englishmen and in his identification with a common good-- has been well pointed out by Donald Pizer. The thematic similarity in the two plots is that both involve a principle of morality which requires that the individual determine correct action by reference to the common good rather than to an individual need. Within the subplot this principle requires Lapham to choose on the basis of an 'economy of pain' formula in which the fewest suffer. Within the main plot it requires him to weigh his own and Rogers's personal needs against the greater need of all men for decency and honesty. (p.323)

It is in these terms, Pizer adds, that Lapham's rise is to be posited. That rise, then, is to be regarded as Lapham's growth in awareness of his involvement with other men. His ultimate rise, however, as George Arms has said, comes "in the testing of his sensibility by Sewell.... Now at last he refuses to indulge in overweening righteousness..." (xv). Out of the conflict between Lapham's self-centered intentions and that actuality in which he is involved with others, he achieves a fuller perception of his actuality in its complicity with all other existence} and his acceptance of his limitation, a reconciliation of his conflict, is his true rise.

Pizer suggests that the "ethical core" of *The Rise of Silas Lapham* "can be described as utilitarianism (as interpreted by John Stuart Mill)"; and according to it the right action in a situation involving conflicting interests "is that which results in the greatest happiness for the greatest number" (p.325). Still, in view of Howells' method of testing his characters in the novel, and in view of the emphasis on the spiritual growth of Lapham himself, it may effectively be argued that the author's attitude is closer to pragmatism than utilitarianism. In this connection Raymond Jaffe writes: "In any conflict of goods, the morally obligatory action is that which produces the greatest good, not in the sense of producing the consequences most satisfying to the greatest number in this situation, but in the sense of producing consequences which improve the necessary instrument for creating the greatest possible good" (pp. 93-94). In the novel the necessary instruments for creating the greatest possible good are persons themselves; and Lapham's "improvement" is his growth in acquiring a finer sensibility and a fuller perception that better equip him to deal with conflicts in experience. Furthermore, Lapham's own growth is instrumental in effecting the novel's symbolic reconciliation of conflict in the ultimate marriage of Penelope Lapham and Tom Corey. Their union of differences in the ties of love, the novel implies, represents man's greatest possible good within the limitations of his human situation.

In *A Modern Instance* no single character achieves that reconciliation of self-intention with human actuality that is Lapham's. There is no character in that novel who perceives existence as a complex wholeness; and this does not except Atherton, who speaks for an exclusive kind of social responsibility. Rather than a reconciliation of conflict and a growth of persons, there remains contradiction and isolation. Lives are truncated in spirit and wasted. Where concepts of law as operative in man's life are probed in *A Modern Instance* and are found to resist all efforts of finite intelligence to make them yield absolute meaning and certainty, the lives of the characters are baffled and even destroyed by the profound contradictions in human experience. At the end of the novel Halleck is paralyzed by a faith he dares not doubt; Atherton, that bulwark of rational order, is confounded by the inadequacy of his own doctrine; Marcia has withdrawn to a bitter isolation in Equity; and Bartley Hubbard is shot and killed in Whited Sepulchre, Arizona. In *The Rise of Silas Lapham*, on the other hand, there is a modest but triumphant acceptance of man's situation. There is a progress in Lapham from isolation in proud and selfish intention into conflict, and out of conflict a reconciliation of self with others, of self with existence as a vast and ultimately mysterious complicity in which justice is a condition obtaining among men in the quality of that life they all share in common. The novel affirms, as Pizer has pointed out, its author's commitment to mankind.

In *Annie Kilburn* (1888) the possibilities for realizing justice are again shown to be limited by the complexity of the human condition. Justice in the novel is largely thought of as social justice and has to do with the problem of equitable relationships among men. Annie Kilburn, high minded and well-intentioned, comes home to Hatboro, Massachusetts, from Rome in order to do well and be of use in the world. The point the novel makes is how difficult it is to do well in the conflicting actualities of experience. Annie learns this and is able to accept the fact that social justice among persons is limited by the differences in individuals that separate them from one another. Whatever social justice can be achieved, the novel says, depends on the recognition by men of their common interests and on their voluntary cooperation in working together to realize those interests.

An absolute social justice in which all men will be treated as equals is the dream of the idealistic Reverend Mr. Peck. In "the truly Christian state," he declares, "there shall be no more asking and no more giving, no more gratitude and no more merit, no more charity, but only and evermore justice; all shall share alike, and want and luxury and killing toil and heartless indolence shall cease together" (p.240). Annie is drawn to Peck's idealism and, after his death, works to establish the Peck Social Union; but, we are told, "its working is by no means ideal" (326). Nevertheless, Annie is "mostly happy" even in the modest good that she is able to do in an imperfect situation. Her education into the difficulties of affecting even a limited union among persons in Hatboro helps her to understand her own limitations and teaches her to work within them. If ever Peck's ideal social justice is to be achieved, it will not be in this world. Here, in view of the differences among men, social justice can only be approximated; and the means to an approximate justice are through intelligent and humane action in the daily tasks of ordinary life. The view that the humbler means of common life are the best way to possible social justice is enforced by Annie's perception of the complicity of life near the end of the novel: "A perception of the unity of all things under the sun flashed and faded upon her, as such glimpses do" (319). Once again, as in *The Rise of Silas Lapham*, intention and actuality are reconciled in the perception of existence as complicity. Justice is not conceived in absolute terms but in limited, human ones as a possible good where men are willing to assume their responsibility in a common task.

It is near the end of *The Quality of Mercy*, Howells' psychological study of a defaulter who believes himself to be innocent, that Putney and Morrell question the meaning of the life of John Milton Northwick who, Putney says, seemed to be a "mere creature of circumstances--like the rest of us!" The "great ball of life," he continues, "seems to roll calmly along, and get where it's going" without apparent regard for what human beings "o or don't do." Putney guesses that it may all be "Fate." Dr. Morrell suggests, however, that it may be "Law." Then, seeing "that most things seem to turn out pretty well in the end," Putney is willing to "split the difference" with Dr. Morrell and call it "mercy."

The concepts of fate and law suggested by Putney and Morrell are attempts to account for what happens in human experience (Northwick's in particular) according to some ultimate, unifying principle as operative in the lives of men. But fate and law, as well as the God Northwick himself had called on, suggest alternative meanings for human experience and are problematic in the novel rather than definitive answers to the whole problem of law and justice. Before Northwick can be brought to trial and justice for his crime against society, he dies. The novel implies that Northwick's death, before he can be tried and the Ponkwasset Mills (society at large) collect its pound of flesh, is mercy--for both Northwick and the society which would bring him to the bar of its narrow justice. For the self-righteous justice which society would exact in Northwick's case would be unjust in view of the man's complexity of innocence and guilt in his intention and his actuality. Furthermore, one feels that the Board of Directors of the Ponkwasset Mills seeks not humane justice through the discipline of jurisprudence but, rather, vengeance, as Squire Gaylord had sought it against Bartley Hubbard in *A Modern Instance*.

Just as Silas Lapham at last acknowledged his involvement with society, so in the later novel Northwick is able at last to believe, regardless of what he had intended, that his actions had been an offense against society and that he does have a debt to pay. Having fled to exile in Canada, where he lived solely for his own purposes and intentions, Northwick at last finally gives up his presumptuousness about his absolute innocence and recognizes that his act of stealing company funds constituted a crime against the public welfare; and before he dies he is eager to make what reparation he can by way of "atonement." Northwick's act of atonement serves to indicate his acceptance of his involvement with other men in the complicity of their existence and, the novel implies, it is a complicity in which all are innocent and guilty together. That society was denied the opportunity of executing its self-righteous justice on Northwick was mercy for all.

Stated baldly, the problem in *The Son of Royal Langbrith* is whether or not the persons concerned should reveal the evil life of the dead Royal Langbrith to his son, James, and to the people of the town of Saxmills, Massachusetts. In James's eyes especially, and in those of the town's people, Royal Langbrith's image as a great man is almost sacred. During his lifetime, Langbrith had lived something of a double life; in private he was cruel and selfish; in public he was a distinguished and respected businessman. James Langbrith finally learns about his father from John Langbrith, the dead man's brother. Whether the revelation to the son about his father is to be attributed to Divine Providence at work in the actualities of human life, or whether it is to be attributed to John Langbrith's dyspeptic and inflammatory nature, is at once humorous and problematic in the novel. Indeed, the "real" meaning of the whole situation concerning Royal Langbrith is problematic. Dr. Anther attempts to answer the problem from his scientific and naturalistic point of view. Reverend Mr. Enderby, on the other hand, appeals to some "mystical legislation" as the ultimate principle behind the complex actualities of experience.

Anther's view and Enderby's are alternative possibilities of meaning in the experience of the novel; but what bearing either view has on the absolute meaning of that experience remains an open question. When, however, the question becomes one of whether or not to reveal Royal Langbrith's hidden evil to the townspeople, Anther and Enderby, and others as well, decide against it for the reason that it could do the townspeople no good to know it. It could only make them hitter and encourage dishonesty. The decision not to reveal Royal Langbrith's past, then, is made on the basis of what the probable consequences for the community would be if it knew about that past. The point here, as in *The Rise of Silas Lapham*, is that the common good comes first. In *The Son of Royal Langbrith* duty to some abstract truth or justice is superseded in favor of duty to one's fellow man for the sake of the common good. Similarly, good is served in James Langbrith's learning about his father; for it educates him into the complexities of human experience and saves him from an arrogant self-righteousness. Dr. Anther, who "had believed that he wanted justice done," (p.283) undergoes a similar kind of education. In becoming aware of the complexity of the situation in which he is involved, he gains a larger perspective on his own intentions in their relationship to actuality; and he is able to reconcile himself to that complexity as one beyond his limited power to fully understand or control. As he does in other of his novels, Howells, in *The Son of Royal Langbrith*, symbolically reconciles conflict in marriage. The symbolic reconciliation of conflict in human experience in the marriage of James Langbrith and Hope Hawberk, the daughter of the man who had been cruelly wronged by Royal

Langbrith, points to the continuing possibility of good for man in his struggle to live wisely with himself.

In the novels considered here, law and justice have been shown to be problematic in the diverse multiplicity of human experience. Truth has not been absolute and one; it has been limited and pluralistic and emergent in experience. Conflicts of interests or goods have been resolved by reference to a mode of action which seeks the greatest possible good for all concerned. Sacrifice, whether Lapham's or Northwick's or Anther's, or even Don Ippolito's, has not been for the sake of the sacrifice. It has been for a felt necessity where these characters, in their different ways, have accepted their lot in that complicity of human life which is at once the particular and universal identity of every man. A commitment to law and justice in the novels, then, has been a commitment to the possibility of good among men when men themselves have been willing to assume their responsibility for the achievement of that good in common.

Works Cited:

1. Dean Howells, William. *A Modern Instance*, Edited with an Introduction and Notes by William M. Gibson (Boston, 1957), p.333.
2. Dean Howells, William. T*he Rise of Silas Lapham*, Edited with an Introduction by George Arms (New York; Rinehart& Company, Inc., 1959), p. 394.
3. Dean Howells, William. *Annie Kilburn* (New York: Harper and Brothers, 1889), p. 240. Dean Howells, William. *The Quality of Mercy* (New York: Harper & Brothers, 1892), p. 474.
4. Jaffe, Raymond. *The Pragmatic Conception of Justice* (Berkeley and Los Angeles;
5. University of California Press, 1960), p. 93-99.
6. Pizer, Donald. "The Ethical Unity of *The Rise of Silas Lapham*," American Literature, XXXIII (November, I960), 323. Ibid.. p. 325.

Dr. D. Sundaramoorthy

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

STATUS OF MANGROVES ALONG WEST COAST OF INDIA {GUJRAT, MAHARSTRA AND GOA}

M.J. Kothari[1] D.N. PATIL[2]
[1]Bsi, Western Circle, Pune
[2]Bjs' Asc College, Wagholi, Pune.
***Corresponding Author-* M.J. Kothari**
Email id: dnpatil2030@gmail.com
DOI-10.5281/zenodo.7278627

Introduction:

The Mangroves are the tropical forest formation encircled or spread by the tidal rivers and/ or the sea water, flooded frequently by tidal water {Naskar & Guha Bakshi, 1987}. In other words these are a group of salt tolerant woody plants and characterized by typical morphological , physiological and anatomical adaptations such as evergreen woody habit , vivipary, development of pneumatophores for breathing , knee , slit , or prop roots for anchorage and salt glands , sclerophyllous tissues , sunken stomata in thick coriaceous leaves to restrict transpiration and for resistance against adverse climate forces { Kothari & Rao, 1991 } India has a 5,700 km long coast line which can be divided into west coast, east coast and island chains.

Floristic Diversity

Champion & Seth (1968) classified plant diversity, especially coastal vegetation of India as Littoral and swamp forests. This is further divided in to 1. Tidal swamp forest i.e. Estuarine vegetation 2. Littoral forests i.e. i.e. strand vegetation (Rao & Sastry, 1974).

1. **Tidal swamp forest :**

In Gujarat

coast mangrove occurs especially in the tidal creeks of Arabian sea (Saurashtra and S. Gujarat), Gulf and Cambay and Kutch (Pirotan Island etc.). Salt Marshes (Cambay, Jamnagar) and occasionally on muddy river banks. The mangrove vegetation is dominated by Avicennia marina and A. officinalis, Blasco (1975) and Kothari and Rao (1991) also noted that *c* 250 sq. km in Saurashtra coast was covered by *Avicennia marina var. acutissima.* Other members in the area are *Acanthus ilicifolius, Aegiceras corniculatum, Braguiera gymnorrhiza, Ceriops tagal, Rhizophora apiculata, R. mucronata and Sonneratia apetala.* Stem parasites like *Cassytha filiformis* growing on *Avicennia* spp was also collected. Some non-mangrove halophytic species like *Atriplex stocksii, Cressia cretica, Salicornia brachiata, Salvadora persica, Sesuvium portulacastrum, Suaeda nudiflora, S. fruticosa, S. monoica, Tamarix troupii,* tec. And sea grasses like *Halophila ovalis ssp. ovalis and ssp. ramamurthiana, Halopyrum mucronatum and Urochondra setulosa* were located. Another sea grass *Enhalus acoroides* was reported by Raghavan *et al* (1981) from Piram beyt, Gujarat.

Srinivasan (1969) recorded 55 marine algae from Okha and Dwaraka coast, of which 10 marine algae viz. *Amphiroa* sp., *Caulerpa* (5 spp.), *Chaetomorpha media, Codium* (2 spp.), *Rhodymenia palmata, Sargassum* (2spp.), and *Ulva* sp. were collected by the survey parties. Some of them e.g. *Sargassum* sp. and *Ulva* sp. were associated closely with *Avicennia marina.* These epiphytic marine algae are much valued for fish food (Kothari and Rao (1995).

In Maharashtra

especially in Thana coast, mangroves occur in muddy creek and saline areas at Dahanu, Mumbra, Vaitarna, Bhainder, Bassein etc.. Amongst them **Avicennia marina** var. **acutissima is** common and abundant. Other species found are *Avicennia officinalis, Bruguiera cylindrical, Ceriops tagal, Rhizophora mucronata, Sonneratia apetala* etc. The associated species collected along with them were **Acanthus ilicifolius, Aegiceras corniculatum, Cyperus arenarius, Derris trifoliata, Excoecaria agallocha, Halopyrum mucronatum, Salvadora persica** etc.

In Raigad district of Maharashtra also, the mangroves occur in muddy sea-shore and saline areas. The dominant species are **Avicennia marina var. acutissima and A. officinalis.** Other species found *are* **Acanthus ilicifolius, Aegiceras corniculatum, Rhizophora mucronata, Sonneratia apetala** etc. Some associated species as occur on muddy soil along with mangroves are **Aeluropus lagopoides, Cressa cretica, Cyperus spp., Salvadora persica, Sesuvium portulacastrum, Suaeda monoica** etc. (Kothari & Moorthy, 1993).

The mangroves recorded from Sindhudurg district - are **Aegiceras corniculatum, Avicennia marina, A. officinalis, Bruguiera gymnorrhiza, B. cylindrica, Ceriops tagal, Excoecaria agallocha, Kandelia candel, Lumnitzera racemosa, Rhizophora mucronata**, **Sonneratia apetala** and **S.caseolaris**. Some associated species round here are **Acanthus ilicifolius, Caesalpinia crista, Clerodendrum inerme** and **Derris trifoliata** etc.(Kulkarni,1988). While mangroves recorded by Mistry (1983-86) on muddy coast and tidal estuaries of Ratnagiri district are Aegiceras corniculatum, Avicennia officinalis, Ceriops tagal, Kandelia candel, Lumnitzera racemosa, , Rhizophora mucronata and **Sonneratia alba** etc. Similarly, on salt marshes at Around in Savantwadi area, mangroves recorded are **Aegiceras corniculatum, Avicennia marina, Excoecaria agallocha, Rhizophora mucronata, , Sonneratia caseolaris**, along with a few associates viz. **Acanthus ilicifolius, Clerodendron inerme, Salvadora persica, Sesuvium portulacastrum, Suaeda maritime** etc. (Almeida, 1990).

In Goa, the mangroves are localized in some estuarine areas like swampy river bank of Chapora, Mandovi, Tiracol, and Zuari. The occur in abundance in Chorao island and Cumberjua canal. Occasionally, they occur in muddy creeks near sea coast e.g. Betul. The common and abundant species found in these areas are **Avicennia alba, A. marina, A. officinalis, Excoecaria agallocha, Kandelia candel, Rhizophora apiculata, R. mucronata** and **Sonneratia caseolaris**, while **Aegiceras corniculatum** and **Bruguiera gymnorrhiza** are found scattered and infrequent.

New Species Recorded-The critical studies of mangroves of Gujarat and Goa revealed that two species viz**. Bruguiera cylindrica** (Rhizophoraceae) and **Porteresia coarctata** (Poaceae) are known for first time from Goa and Gujarat coast (Kothari & Roa,1991b.), one species viz. **Dolichandrone spathacea** (Bignoniaceae) as a new record for Goa state (Kothari & Rao,1995) and 2 species viz. **Halophila ovalifolia subsp. ramamurthiana** a sea grass in the family (Hydrocharitaceae) and a symbiotic lichen viz. **Roccella belangeriana** (Roccellaceae) were found as new records for western coast (Kothari & Rao,1994). The lichen species was reported by Awasthy (1981) from Pondicherry on Eastern Coast on stilt roots of **Rhizophora sp**. In 1979. After lapse of 11 years the same lichen species was recollected on the leafy branch of **Ceriops tagal** from Pitotan island, Jamnagar Gujarat in western coastal region. Similarly, Ravi Kumar and Ganesan (1990) rerecorded a new subspecies of **Halophila ovalis** from Eastern coast which was recorded again from Somnath, Veraval, West coast of India (Kothari &Rao, 1994).

Mangroves Associates- In estuarine areas of Goa, some plants found as an under growth or growing in close association with mangroves are Acanthus ilicifolius, Acrostichum aureum (a littoral fern), Caesalpinia crista, Cayratia trifoliata, Crotalaria mucronata, Cryptolepis buchnani, Cyperus arenarius, Derris trifoliate, Fimbristylis dichotoma and Sesuvium portulacastrum, etc. Epiphytes ferns like Drynaria quercifolia and orchids like Vanda tessellate are also found on Rhizophora spp. (Kothari 7 Rao, 1990).

2. **Littoral Forest or Strand Vegetation :** This includes vegetation found along sandy and rocky sea-coast.

In Gujarat, it is observed in Kutch (Kandla, Mandvi), Saurashtra (Bhavnagar, Dwarka, Gopnath, Navlakhi, Okha, tec.) and in South Gujarat (Danu, Hajjra, Tithal), etc.

Tree species as observed in these areas are *Borassus flabellifer, Delonix elata, Hyphaene dichotoma, Prosopis chilensis, Salvadora oleoides* and manmade forests *of Casurina equisetifollia* and *Cocos nucifera,* etc.

Sand binding Herbs- Along with above tree species, some sand binding herbs on sandy sea shore are also found. These are *Cassia italic, Cyperus arenarius* and *Ipomoea pre-caprae, Spinifex littoreus* etc. Some medicinal plants like *Commphora wightii* growing on rocky habitat were also collected from Diu island.

Sandy coast of Goa- Along the rocky and sandy coast of Goa, specially Polem, Agonda, Arambel, Betul, Calangute, Gonsua, Hansa (Vasco) and Miramar beach, tree species observed and collected were **Calophyllum inophyllum, Hydnocarpus laurifolia, Hyphaene dichotoma** (endemic to western coast), **Pandanus tectorius, Pongamia pinnata, Thespesia populnea** and cultivated one like **Anacardium occidentale, Casurina equisetifollia, Cocos nucifera and Terminalia catapa** etc.

Rocky sea-shore of Thane coast in Maharashtra- The tree species occurring along the sandy / rocky sea-shore of Thane coast in Maharashtra are **Borassus flabellifer, Calophyllum inophyllum, Caryota urens, Cocos nucifera, Hyphaene dichotoma, Phoenix sylvestris** and **Thespesia lampas**, etc.

Lithophyte marine algae- Some lithophytic marine algae like **Chaetomorpha media, Sargassum** sp., and **Ulva fasciata** are observed along the creek areas of Thane and Raigad associated with roots of Mangroves.

Similarly, on sandy and rocky coast of Alibag, Nagaon, murud etc. In Raigad district, Sindhudurg (including Savantwadi) and Ratnagiri districts of Maharashtra floristic composition found was more or less similar to Thane coast.

Infrequent or Rare Species:

Dalgado (1898) recorded **Lumnitzera racemosa** (Combretaceae) along the muddy banks of Siolim and Rarim rivers of Goa with remarks as 'rare'. It is not found in Goa at present. Banerjee *et al.* (1989) also report this species from Bandra in Bombay, Maharashtra as 'Common' in 1934 but not see now. However it has been collected from Sindhadurg district (Kulkarni, 1988).

Similarly, Cooke (1901) recorded **Heritiera littoralis** (Sterculaceae) from Kalanadi river bank near border of Goa and Karnataka. Rao (1985) also mention the possible occurrence of this species along Maldovi and Zuari river bank in Goa. In spite of intensive search along the above localities, the two species could not be traced out. Similarly, **Bruguiera parviflora** and **Sonneratia alba** recorded by Untawale (1998) from Goa and Banerjee *et al.* (1989) from Maharashtra could not be collected. Species of **Rhizophora** and, have also become rare or even disappear in this area and the vegetation is reduced to stunted strands of **Avicennia** spp. And **Acanthus ilicifolius** particularly in Maharashtra (Banerjee, et al.(1989).

Economic and Medicinal value of mangroves:

Mangroves are useful to mankind in various ways.

1) Mangroves provide wood for furniture, boat making, construction and fuel
2) Green leaves and fruits of **Avicennia** spp. Are used as fodder during scarcity.
3) Stem bark is good source of tannin used in leather industries and in medicines for the treatment of diarrhea (**Bruguiera gymnorrhiza**),

heart diseases like angina (**Rhizophora mucronata**), asthma and rheumatism (**Acanthus ilicifolius**), herpes and itches (**Lumnitzera racemosa**) etc.

4) Indirectly, it protects inland plants against wind and act as a buffer agent along the muddy sea shore. Its peculiar root system (Pneumatophores, knee, prop or stilt roots) holds sand and mud particales and thus help in stabilization off coastal land and conservation of soil.

5) Along with mangroves sea-grasses and salt marshes also play an important role to maintain bay environment e.g. in Piram bout, Pirotan island (Gujarat), Chorao island(Goa) and Elephanta island in Raigad dist.(M.S.).

Table-I. List Of Mangroves Along The West Coast

Sr.No	Name of the Species	Family	Distribution in India
1	**Avicennia alba** Bl.	Avicenniaceae	East and West coast
2	**A. Marina var. marina** (Forssk.) Vierh**.**	Avicenniaceae	East and West coast
3	**A.Marina** (Forssk.) Vierh**.** Var. **acutissima** Stapf & Mold.	Avicenniaceae	West coast
4	**A.officinalis** L.	Avicenniaceae	East and West coast and in the Bay Islands.
5	**Lumnitzera racemosa** Willd.	Combretaceae	East and West coast, from sunderban to Maharashtra, Andaman & Nicobar Islands.
6	**Aegiceras corniculatum** (L.) Blanco (semi-mangrove)	Myrsinaceae	East and West coast and Bay Islands.
7	**Bruguiera cylindrical (L.)Bl.**	Rhizophoraceae	Malabar, Goa, Gujarat in West Coast, East Coast & Bay Islands.
8	**B. gymnorrhiza** (L.) Lamk.	Rhizophoraceae	East and West coast, Bay Islands
9	**Ceriops tagal** (Perr.) Robin	Rhizophoraceae	East and West coast, Bay Islands
10	**Kandelia candel** (L.) Druce.	Rhizophoraceae	East and West coast, Bay Islands
11	**Rhizophora apiculata** Bl.	Rhizophoraceae	East and West coast, Bay Islands
12	**R.mucronata** Lamk**.**	Rhizophoraceae	East and West coast, Bay Islands
13	**Sonneratia alba** J.Sm.	Sonneratiaceae	Andaman & Nicobar Islands and now in Bombay
14	**S.apetala** Buch.-Hum.	Sonneratiaceae	East and West coast & Andaman & Nicobar Islands
15	**S.caseolaris (L.) Engl.**	Sonneratiaceae	East and West coast & Andaman & Nicobar Islands
16	**Excoecaria agallocha** L.	Euphorbiaceae	East and West coast & Andaman & Nicobar Islands
17	**Acrostichum aureum** L. (Semi-mangrove,	Pteridaceae	Sunderban & Mahanadi along East coast, Goa, Kerala along West coast and Bay Island

	littoral fern)		

Table-Ii. List Of Non_Mangrove Halophytes Along The West Coast

Sr.No	Name of the Species	Family	Frequency & Habitat
1	**Sesuvium portulacastrum** L.	Aizoaceae	Frequent on tidal mud, flat along the coast
2	**Arthrocnemum indicum** (Willd.) Moq.	Chenopodiaceae	Common in salt marshes in muddy coast
3	**Salicornia brachiata** Roxb.	Chenopodiaceae	Common on saline and mangrove region
4	**Suaeda fruticosa** Forssk. ex Gmel.	Chenopodiaceae	Common on mud flats and salt marshes
5	**Suaeda maritime** (L.) Dumort	Chenopodiaceae	Common on mud flats and salt marshes
6	**S.monocia** Forssk. ex Gmel	Chenopodiaceae	Common on mud flats and salt marshes
7	**S.nudiflora** (Willd.) Moq.	Chenopodiaceae	Common on mud flats and salt marshes
8	**Scirpus littoralis** Schrad.	Cyperaceae	Frequent along muddy banks of tidal creeks
9	**Aeluropus lagopoides** (L.) Trim.	Poaceae	Common on mud flat and salt pan
10	**Peplidium maritimum** (L.f.) Wettst.	Poaceae	Infrequent on mud flats and saline areas
11	**Tamarix troupii** Hole	Tamaricaceae	Frequent along tidal forest in coastal areas

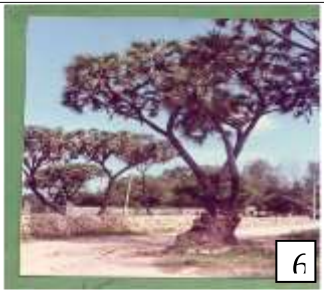
Selected References:

1. Kothari, M.J. 2002. Mangrove diversity and its role for sustaining productivity of the N.W. coast in India. *Proc. the National seminar on creeks, Estuaries & Mangroves- pollution and conservation,* Nov.2002.pp.226-293.

1 A. Kothari, M.J & Hajra, 1983. Gujarat & Rajasthan region in **Materials for a catalogue of threatened plants of India** (Eds. Jain, S.K. & A.R.K.Sastry), Botanical survey of India, Howrah. Pp.43-49.

2. -----------& S. Moorthy, 1993. **Flora of Raigad District, Maharashtra State**, botanical Survey of India, Kolkata.
3. ------------& K.M.Rao, 1991. Two new records for Goa and Gujarat **Indian Bot. Contactor** 8: 58-61.
4. ------------& ------------1994 a. **Halophila ovalis** (R.Br.) Hook.f. Subsp.**ramamurthiana** Ravik. & Ganes.- a new record for West coast of India. **Rheedea**.4 (1): 63-64.
5. ------------&------------1994 b. **Roccella belangeriana** Awas. A new record for West Coast of India**, J.Econ. Tax. Bot**. 18 (3): 610-612.
6. -------------&------------1995 a. **Dolichandrone spathacea** (L.f) K.Schum. (Bignoniaceae). A Little known plant for Goa **Ibid.** 19(2)-323-324.
7. ------------& K.M.Rao, 2001. Mangroves of Gujarat *Bull. Bot. Surv. India* 83-150.
8. ------------& -----------, 2002. *Mangroves of Goa* Bot.Surv. India, Kolkata.
9. ------------& S.Moorthy, 1993. *Flora of Raigad district* (.S.), Botanical Survey of India, Kolkata
10. -----------& N.P.Singh, 2002. Fragile Ecosystem: Kutch in *Floristic diversity & conservation strategies in India. In situ conservation* 5: 2877-2898.
11. -----------&------------, 1998. Mangroves diversity of North- West coast of India in *J. Econ. Tax. Bot*. 22(3): 573-585.

PHOTO PLATE-I. Mangroves Diversity In Coast of Gujarat Maharashtra And Goa (W. Coast of India.)



1	**Rhizophora apiculata** Bl. 1 Fruiting 2. 2.Habit
2	**Bruiguiera gymnorrhiza** (L.) Lam. 1. Fruits 2. Flower 3. Root system (Stilt Roots)
3	**Rhizophora mucronata** L.
4	**Bruiguiera cylindrica** (L.) Bl. Habit and Flowering Branch
5	**Avicennia officinalis** L.
6	**Hyphaene dichotoma** (White)Furtado – An endemic to West Coast

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

EMERGING FOOD CULTURE AMONG COLLEGE STUDENTS

Dr. Shailendra Gehlot
Assistant Professor Sociology Government College Jodhpur
Corresponding Author-* *Dr. Shailendra Gehlot
Email id: *gehlot_shail@yahoo.com*
DOI- 10.5281/zenodo.7302556

Abstract:

Food is the essential requirement for individuals which, gives energy to the body and shields from infections. Today, in our eating routine junk food is normal. Junk food is such a kind of food that is ready and served rapidly, yet junk food is less nutritious when contrasted with conventional food varieties. Junk food varieties are monstrously famous among the more youthful age due to usually accessible, minimal expense and simple to convey, yet junk food affects human wellbeing. The current paper talks about the purposes behind advocating fast food, disadvantages, and impact on human wellbeing. The investigations showed that junk food contains a high concentration of saturated fat, high calories, and high satisfied of sodium, which prompts overweight, cardiovascular infections, heart stroke, and diabetic Mellitus. This paper addresses the predominance of junk food consumption and the reasons for junk food eating habits alongside its effects on our wellbeing.

Key words: junk food, fast food, eating habbits, food culture

Eating food is fundamental for each individual; itproceeds with us alive and moreover gives us relaxation simultaneously. Food habit has been movingover the verifiable periods. The peculiarity of fastfood is filling in a high speed. fast food is any foodimmediately ready and dished up, frequently at chaineateries, and ordinarily connected with more affordable andless nutritious things. This food is a kind of mass produced food intended for business purposes. Fastfood or junk food is depicted as feasts which containa great deal of fat and sugars, oils, salt, unnecessary caloriesnotwithstanding, it has low dietary benefit and quality. Thenormal quick food varieties are chicken tenders, burgers, andfried potato shaper, canned chips, pies, pizza, delicatefluids, and so forth. At the beginning, it is called fast food since it is not difficult to make and consume. Those fixings are smooth to get ready and gobble up. fast food is popular due to their straightforwardness of assembling, eat, their taste,and so on, yet fast food impacts our lives in numerous viewpoints adversely.

The ingredients in fast food are low in nutritional value and have the best laying level on it, incurring an impact on the wellness of the individual. fast food integrates an unreasonable level of refined sugar, white flour, trans fat, etc. Many individuals like junk food as it tastes really heavenly. junk food has remarkable preferences as it allows in a strong bundle of spices that make it tasty. Besides, because of the reality numerous cafés give transport benefits, the food will become more straightforward to get at any time. Since our life becoming occupied step by step, so we are going for effortlessly made food like fast food. As the quick lifestyle has come to be exceptionally occupied, this at this point controls us at works of art and home at the indistinguishable time. Financial goal play an excellent situation in eating junk food. There are various thought processes why people eat junk food while they knew around its unpleasant results on their wellbeing and family. At the point when individuals eat low quality foods often, it goes before an individual to an expanded gamble of heftiness, cardiovascular infection, also, numerous other persistent medical issue. Fast food has numerous hurtful impacts having long term and speedy terms. The items in the fat have an exorbitant cholesterol level. Extreme calorie content material with sugar can prompt weight issues. Cholesterol and salt can increment circulatory strain, stroke, and heart issue in the chain. Unreasonable salt can impede the working of the kidney as well. Unhealthy foods present adverse impact to wellbeing and decay the medical issue whenever taken consistently without giving any medical advantages. We ought to try not to eat unhealthy foods to appreciate full wellbeing and cheerful life all through life.

What is Junk Food ?

Junk food simply implies an empty calorie food. A empty calorie food is a high calorie or calorie rich food which lacks in micronutirents such as vitamins, minerals, amino acids and fibres but has high energies(calories). These food sources don't contain the enhancements that your body necessities to stay sound. Thusly, these food varieties that has poor sound advantage is viewed as unwanted and may be called as junk food. Low quality food is an easygoing term applied to a couple of food sources which are believed to have practically zero solid advantage, yet which likewise have ingredients thought about unfortunate when eaten regularly, or to those considered undesirable to consume by any means. The term junk food was coined as shoptalk in the public interest in 1972 by Michael Jacobson, Director Of The Centre For Science, Washington DC. What make these foods to be called as junk is that it contains high levels of refined sugar, white flour, trans fat, poly unsaturated fat, salt and numerous food additives such as monosodium, glutamate, and tetrazine; at the same time it is lacking in, protiens, vitamins, essential minerals, fibres, among other healthy attributes. These food assortments have little catalyst conveying supplements and minerals and however contain raised level of calories in their place.

A food that is high in fat, sodium, and/or sugar and provides high calores yet useless in value is generally called as junk food.In reality, junk food is easy to convey, buy and eat. Generally, a junk food is given an incredibly charming appearance by adding food added substances and tones to improve flavor, surface and for growing long stretch of time of convenience.

Reasons of popularity of junk food :

junk food dependence is so high as a result of its straightforwardness. They are not difficult to get ready and are exceptionally delicious. Low quality foods, for example, potato wafers and Cheetos don't require cooking or warming. People groups like to eat them while staring at the TV, they save themselves a great deal of problems and time when they are in a rush eating pizzas and burgers as they are served at their door step hot and prepared to eat. If time constraint is one reason that pushes peoples to eating junk food, great taste also, to an extent influences them to opt for junk food. But junk foods get their taste owing to lavish usage of oils, salts and sugar. Once they caught in junk food addiction, they find it hard to think about the loss of nutrition due to junk food. Food varieties arranged external the home and café food sources have an incredible fascination for food buffs. A estimate tells that Frito Lays is selling a billion sacks of Cheetos each year. junk food promoting plays a significant part in this. There is likewise worry about the focusing of showcasing to kids since kids are simple and expected focus for junk food. Junk food has a long shelf life and may not require refrigeration for most products like chips and wafer. The transportation of junk food is simple because of its packaging as contrast with the man made food. Simplicity of transportation and accessibility increase the fame of unhealthy food step by step. The expense is less when contrasted with quality food. Less expense is likewise an integral explanation of the popularity of low quality food. It is effectively available to all classes of populace because of its low and appealing cost range.

Reasons for avoiding junk food

The expense is less when contrasted with quality food. Less expense is likewise an integral explanation of the popularity of low quality food. It is effectively available to all classes of populace because of its low and appealing cost range. This is one more consequence of junk food propensity. These are followed to impact in quick and medium term periods when people groups have an extravagant garbage feast wealthy in oil they feel tired and neglect to focus. Over supported times of unhealthy food eating blood flow drop because of fat aggregation, absence of essential oxygen, supplements and protein especially can flat their brain cells temporarily.Aside from framing plaques and tightening corridors cholesterol likewise influences liver where it is processed. Elevated cholesterol because of low quality food and diet strains liver harming it at last. This is long term impact. Unhealthy food diet is a significant reason for heart illnesses (Myocardial localized necrosis) because of plaque development in courses which requests heart to invest additional energy to pump blood on the downstream, on the upstream there is absence of returning blood to heart, this makes two harms to heart - heart fatigues because of constant additional work and it suffer in oxygen supply. The nutritional value of junk food is around one on a size of 1 to 10, which is the least. The dietary benefit is lost during the time spent making the unhealthy food so manufactured nutrients and minerals are added to remunerate it, however they are bad contrasted with regular nutrients and minerals. Normal phytochemicals are absent in junk food which absorbs the free radicals to forestall illness. Verifiable truth fat and sugar are all around as addictive as heroin and cocaine, they animate the very receptors in the cerebrum that encourage because of expanded dopamine level. Low quality foods have a ton of stowed away sugar and fat to make it habit-forming and furthermore upgrade the taste. junk food have heaps of chemical additives which are not valuable to body, things like artificial coloring and preservatives . MSG and tartrazine is in practically all kind of unhealthy food and a wide range of clinical examinations have uncovered that MSG causes obesity and of other terrible things. Every one of the methods used to handle the low quality food - canning, getting dried out and freezing, essentially annihilate the kind of food so synthetic compounds assuming some pretense of 'normal flavor' have been added to enamel the flavor, while color additives are added to make food fresh. It could cause the food to seem more appealing yet it is destructive to our bodies.

Junk food is rich in fat so accumulation of fat can takes place in bronchioles so oxygen supply tends to reduced in body which can cause some respiratory disorders.

Review Of Literature:

Junk food have been characterized by (Bender and Bender, 1995) as a "general term utilized for a restricted menu of food varieties that loan themselves to creation line methods; providers will more often than not work in items like cheeseburgers, pizzas, chicken, or sandwiches". The junk food industry, initially considered in Southern California during the 1940s, modified the dietary patterns of Americans, yet additionally those in numerous different nations all over the planet, including Asian nations (Schlosser, 2001).

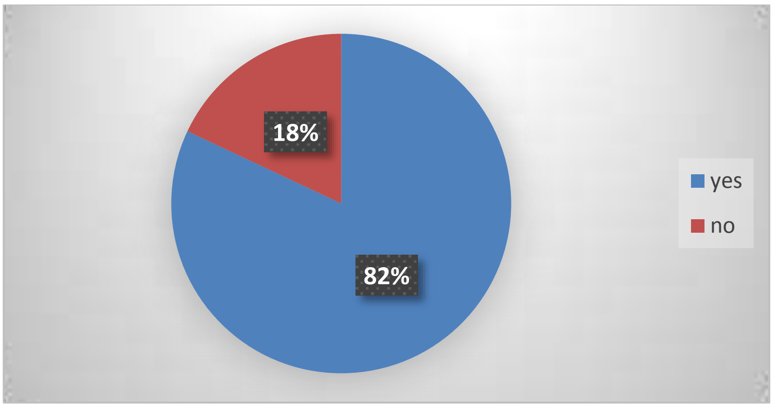
Consumption patterns of students are very interesting to review. In a review at Universities in Ankara, in Turkey, research was led the point of which was to decide junk food utilization propensities for college students. There were 401 respondents who were students, of whom 297 were female (74.0%) and 104 were male (26.0%). It was resolved that 98.0% of the students go to drive-thru eateries. The level of those students who like to go to fast food both during the week and at the end of the week was 43.8%. In the example, the most favoured junk food was pizza (285 focuses), and this was trailed by chicken doner (278 focuses) and burgers (273 focuses); while the most favoured refreshment was bubbly beverages (57.6%). Junk food chains have been profoundly imaginative and powerful at welcoming and drawing clients out of their kitchens up to fast food communities. Cullen, (1994) in his work, named “Time, tastes and technology: the economic evolution of eating out” deciphered that the rising Americanization of eating out had followed a culture of fast food and gave more significance to comfort and eating out conduct because of specific reasons, and the outcome was that emotional changes happened in the junk food utilization examples of Asian nations (Shetty, 2002). Primary changes in the interest for food in Asia have projected that Asian nations have been going through changes in their economies upheld by quick urbanization and this pattern would go on in the years to come (Huang and Howarth, 1996). Kara, Kaynak, and Kucukemiroglu, (1995), introduced the purchasers' impression of and inclinations for drive-through joints in the US and Canada. As per their review, the purchasers in the age gathering of 12 to 24 years search for assortment, cost, conveyance administration and area in America, and principally for cost and oddities in Canada. In this study endeavors are taken to comprehend the fast food utilization examples of college students in Manipal, India.

In a study by Harsh Kumar, Rajdeep Palaha and Amandeep Kaur, (2013), the junk food propensities for the hostlers were concentrated on corresponding to their utilization and mindfulness and to concentrate on the job of their folks and promotions in provoking them to eat quick food sources. Despite the fact that, there are pattern changes and their effects are on entire social orders, whether they has a place with lower, working classes as well as exclusive classes, they exist. hostel life for students for instance is totally not quite the same as residing at home particularly regarding dietary patterns. Thus, by remembering this view the review was led at the Lovely Professional University hostels to cross examine the utilization examples and consciousness of the hostel students connecting with junk food eating. The review stressed the vagueness in the information, mindfulness and utilization ways of behaving among college students living in hostels. It provided converging evidence of a direct causal link between food advertising, the parents’ roles and behavioral pattern of the hostel students relating to fast food consumption. The review was led during the October-November 2011 at the Lovely Professional University hostels. At present 18,000 students lived in the college lodgings as per data got from the college authority. A sum of 10.06% of the all out examples for example 1811 students were designated and non-parametric test (chisquare) was applied to really take a look at the decency of fit, at a 95% degree of importance. The overview gave uniting proof of a direct causal connection between food publicizing, guardians' jobs and personal conduct standards of hostel inhabitants connecting with junk food utilization. Understanding the hostel tenants eating perspectives and conduct is significant as far as their wellbeing which plainly shows that the reception of a junk food utilization culture among college lodging occupants at Lovely Professional University is a typical component. The review connoted the immediate uncertainty in the information, mindfulness and reasonable utilization conduct among college hostel occupants.

Sample:-

Age group (18-30), Sample size (350)

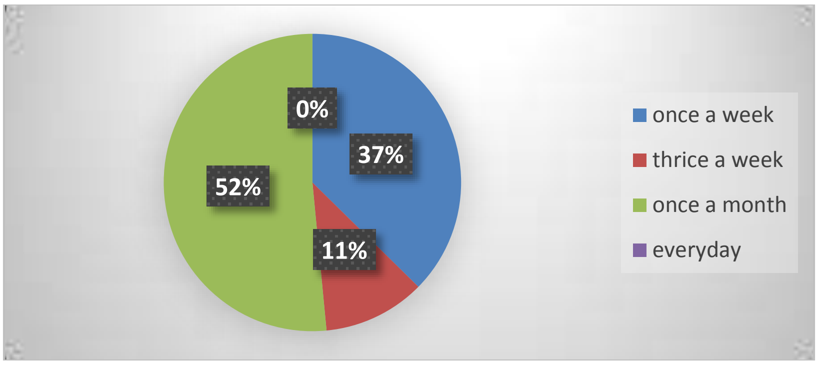
Place of sampling – students of colleges and universities in Jodhpur.



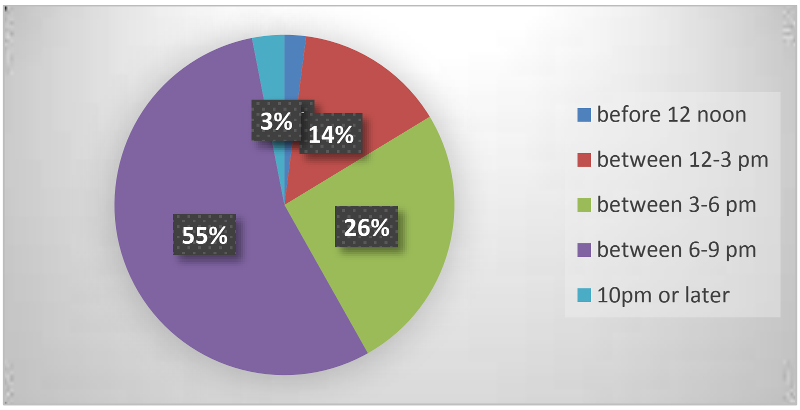
When it was asked to students about consumption of instantly prepared food and traditionally cooked food. In this question I want to know how many students consume instantly prepared food (like noodles, canned food, frozen food). I have asked 350 students, out of them 290 students replied yes that they are consuming instantly prepared food with reasons like less time needed to cook, tasty, no need of any professionalism.

Rest 60 of them replied no they are not consuming instant food with reasons like unhealthy food, causes many health related problems, insufficient amount of nutrition.

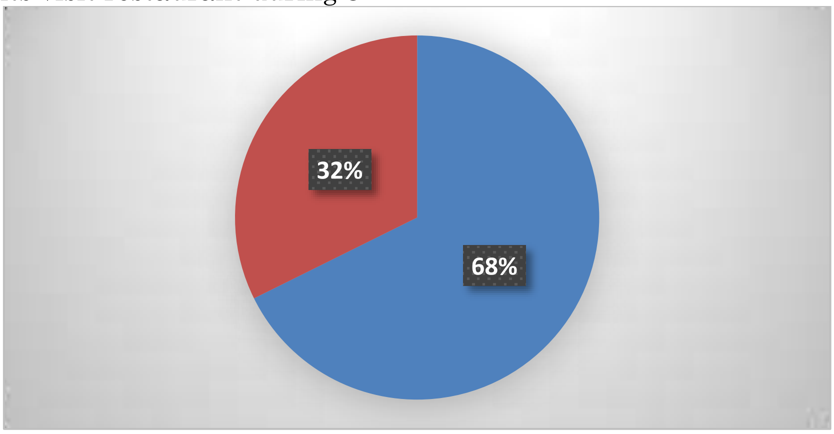
.



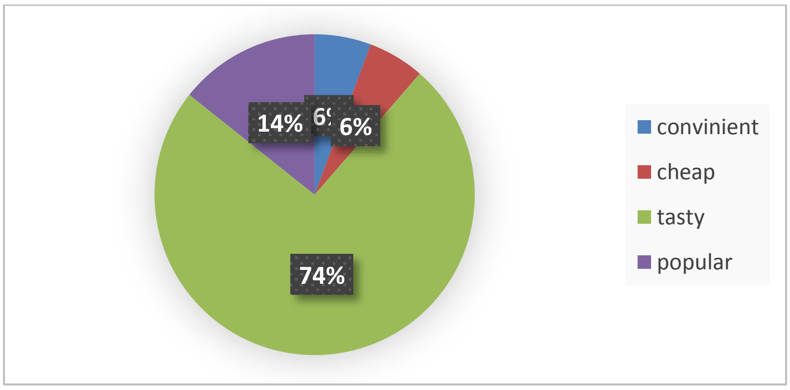
My second question was about the frequency of students to visit fast food restaurant. From the above figure it is observed that 52% of total students which is 180 students visit restaurant only once in a month, so it can be said that they visit occasionally ex- in parties of birthday, job, wedding, etc. They are very health conscious. 37% of total which is 130 students visit restaurants once in a week mostly on weekends with friends. 11% of total which is 40 students visit fast food corners thrice a week. They are less health conscious.



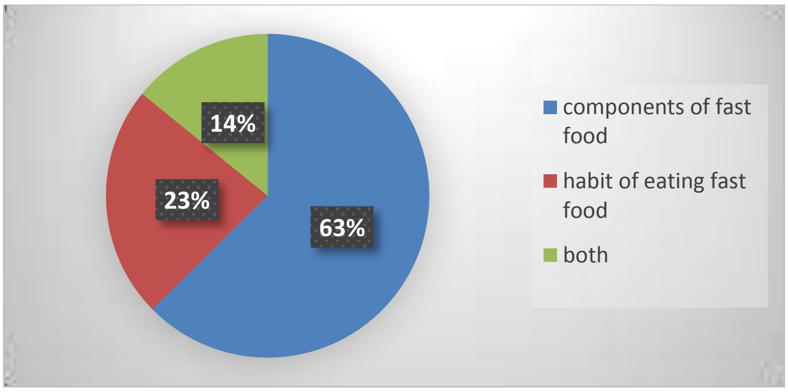
My third question was about relation between time and fast food consumption. Out of 350 students 190 students visit fast food centres in time between 6 to 9 pm reasons behind were pleasant weather of the city at night time, most of the students are free at that time, most of the good restaurants open during this time period, this time period is not too early not too late. 90 students visit restaurant during 3-6 pm they are students who don't like to be outside of the house in night time for reasons like family permission, television shows, to sleep early. 50 students like to visit fast food centres during 12-3 pm they are student who visit fast food centres which are in their institution like canteen mostly they visit in the break period of their class.



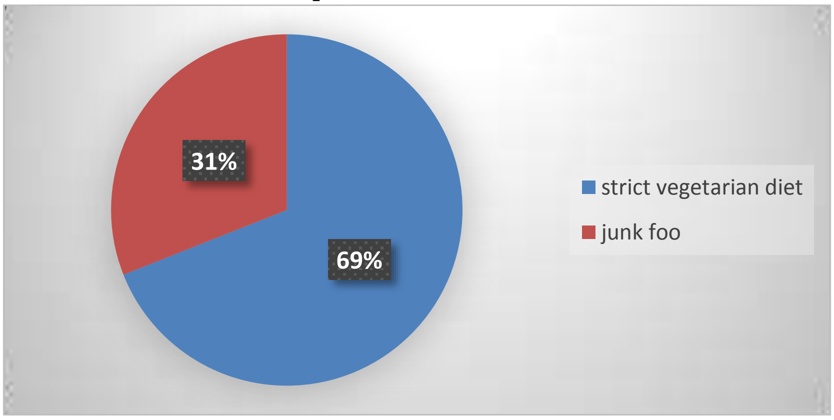
Another question was about healthy choices made by fast food chains. Through this question I want to know the students perspective on do fast food centres offer healthy choices or not. 68% of total students which is 240 replied no fast food centres do not offer healthy choices. And 110 students replied yes fast food centres offer some healthy products which are good for health.



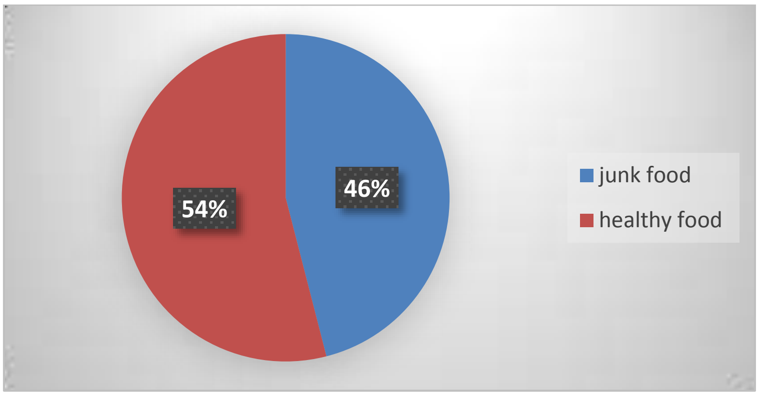
When the students were asked to select the factor that influenced them in selecting the type of the junk food 74% opted for the option taste, 14% elected the option popularity fast food which is in Trend, 6% elected the option cheap in and 6% elected the option convenience that it is easily available.



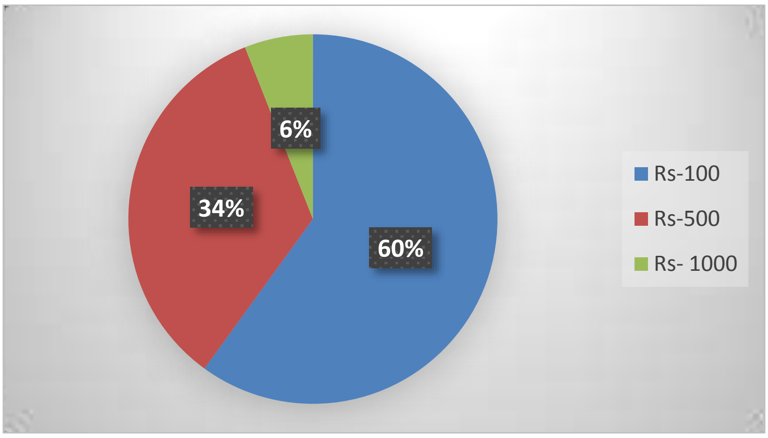
In this question I want to know students perspective on the fact that what is bad in junk food. 63% of students opted that components of fast food is bad for health such as salt, sugar, saturated fats, trans fats, calories, and processed preservatives and ingredients. 23% of students opted that habit of eating fast food is bad for health, they think this habit will led to major health problems in future. 14% of students think that both of these options are reasons behind bad effects of fast food on health.



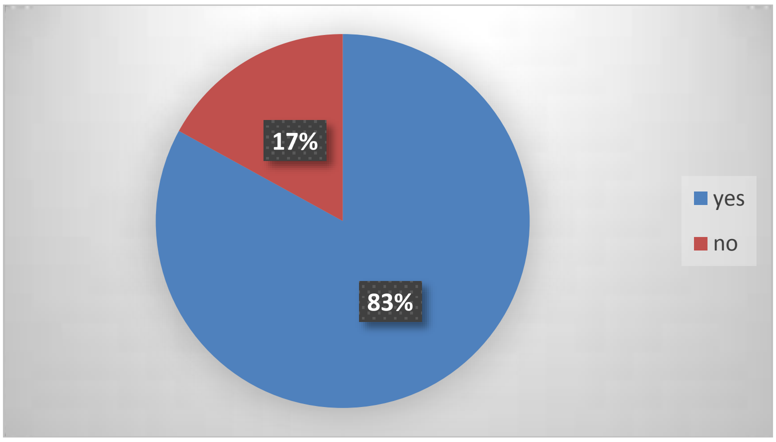
Through this question I asked the students whether they would like to follow a strict vegetarian diet throughout their life or junk food diet forever.69 percent of the students chose that they would like to have a vegetarian diet for the rest of their life, through this they can live a good, healthy and long life.31% of people chose that they would like to take junk food diet for the rest of their life, they put their test before their health.



Through this question I wanted to know that what gives more happiness to the students, junk food or healthy food.54% of students chose that healthy food makes them more happy and 46% of students chose that fast food makes them more happy.



Through this question I wanted to know how much money students spend on fast food in 1 week.60% of students chose that they spend around ₹100 in 1 week on fast food which is a medium amount. 34% of the students chose that they spend around ₹500 on fast food in 1 week which is a good amount for unhealthy thing like fast food.6% of the students chose that they spend about a thousand rupees in a week on eating fast food which is too much.



Through this question I wanted to know students thought on whether fast food should be considered an addiction or not. 83% of the students said that yes fast food addiction is really an addiction and 17% said that no, there is nothing like this.

Conclusion:-

Factors like industrialization, a more noteworthy opening up to western culture, promotion and mass impact of social media, no time for getting ready food at home, urbanization and quick improvement of the fast food industry, are the fundamental elements which have prompted the development of junk food all over the world. Utilization of quick food sources is additionally expanding step by step. Because of these variables expressed over, the dietary patterns of adolescents and youngsters are changing which prompts more prominent weight issues and other wellbeing related issues in adolescents and youthful kids. Junk food outlets are leading to both positive and adverse consequences later going into the place that is known for enormous business. The constructive outcomes are connected with expanding position valuable open doors in a country which likewise makes a difference in the financial development of the nation and in the advancement of the country overall. Though, the many adverse consequences related to indisputable general medical problems and stoutness issue in the young people and kids. Undergraduates, those are remains ceaselessly from home and in lodgings, are eating undesirable food and due to the accessibility of different food decisions around the city, they don't eat good food anymore. College life, tastes and becoming mingled makes it hard for the hostel inhabitants to eat good food. Students like for the most part to go out with the companions to fast food eatery. Results demonstrates that the majority of the students will pay between ₹200 - ₹ 300 for each visit to a drive-thru eatery also, the majority of them like to go out on n on-weekend days and furthermore on ends of the week. Burgers, pizzas and rolls are the well known decisions among the different fast food things chose regularly by the students. Time, taste, neatness, cleanliness and cash are the primary elements which have affected students to settle on having quick food things. Under study's way of behaving is evolving as indicated by their preferences and inclinations among the food things they select. The utilization of bubbly beverages and new squeezes are fundamental, as per them, while having fast food things on the grounds that the greater part of the students concurred with the assertion that they lean toward these beverages. The review affirmed that male students are probably going to consume more than the female students furthermore, there is among them a reluctance to change their fast food propensities. Social media, promotions, and going out with companions are a portion of the elements which are having a tendency to increment junk food utilization by the students.

Fast administrations and a helpful area are likewise among the purposes behind the inclination for fast food among the students. The flavour of food is additionally significant to them. Once in a while weariness likewise prompts the utilization of fast food among the individuals and later on, it turns into a constant conduct of individuals as opposed to just going to a get-together or a charming night with a companion or two. It becomes significant for the students and is it could be said a commitment for students to have feasts at the lower value end of the market, in light of the fact that of the restricted pocket cash and the different visits to the fast food outlets. From the earlier years there is in this manner a huge increment of fast food industry organizations in the Indian market and it is developing quickly at the pace of 30-35% per annum. Top brands like Pizza Hut, KFC, McDonald's and Metro eateries are the most liked among the Indians, and these cafés have made their presence more noticeable and noticeable in the nation and there is hence a calculable and extremely high development of this area in the Indian food market today.

References:-

1. www.researchgate.net, fast foods and their impact on health, Ashakiran and Deepthi.R, JKIMSU, Vol 1, No.2, July-December, 2012
2. www.livestrong.com, Reasons people eat junk food instead of healthy food, Derek Bryan, October 03, 2017
3. www.nrn.com, 4 ways to attract consumer in 2017, Fernglazgi, January 03, 2017
4. Live healthy.chron.com, Facts on lack of nutrients from a fast food diet, Jessica Bruso
5. m.onlymyhealth.com, Effects of fast food on the body, September 10, 2015
6. Scholar.sarchive.jwu.edu, Factors that affect fast food consumption, Martin W.Sivula, Ph.d, May 3, 2016
7. www.ukessays.com, Disadvantages of fast foods English language essay, 23 March 2015
8. www.fastfoodmenuprices.com, Advantages and disadvantages of fast food, Editorial staff, December 15, 2017 International Journal of Pure and Applied Mathematics Special Issue 235
9. www.livestrong.com, Definition of fast foods, Karen Hellesvig Gaskell, July 18, 2017
10. www.foodsforbetterhealth.com, Fast food vs home cooked meals, Farah Shaikh
11. www.news.com.aw, The reasons we eat junk food
12. www.healthline.com, How to stop eating junk food, Natalie Butleer, May 9, 2016

13. Vkool .com,7 tips how to avoid junk food and loss weight, Brown, February 13, 2017
14. www.researchgate.net, Factors influencing fast food consumption behavior of middle school students in Seoul, April 2011
15. www.researchgate.net, Review of trends in fast food consumption, Aysha Karnataka Baig Munazza Saeed, May 2012
16. www.shareyouressays.com, Essay on ―fast food‖, Pragati Ghosh
17. www.testbig.com, Cause and effect: fast food, Alfitrah, 03/13/2013
18. Smallbusiness.chron.com, How are teenagers affected by advertisement for fast food, Jeffrey Care
19. Batat, Wided. ―Young Consumers within a Marketplace Surrounded by Technologies: Understanding the Domain of Teenage Consumers Vulnerability.‖ The Sustainable Global Marketplace, 2014, pp. 40–40.
20. Gundry, Steven R. The Plant Paradox: The Hidden Dangers in "Healthy" Foods That Cause Disease and Weight Gain. HarperCollins, 2017.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

MARKET EFFICIENCY IN KAPAS FUTURES MARKETS OF MCX IN INDIA

Naga Sujana Kakumanu
Corresponding Author- **Naga Sujana Kakumanu**
Email id: nagasujana@gmail.com
DOI- 10.5281/zenodo.7302582

Abstract
Purpose –The derivatives market can only carry out these tasks effectively if it is impartial and efficient. These facets of the commodity derivatives market - India must therefore be thoroughly assessed. This study aims to assess the fairness with effectiveness of Kapas futures markets in India.

Keywords: Effectiveness of market, co-integration, Commodity markets in India Econometrics

Paper type: Research paper
Techniques: – The article makes use of unit root test together with Johansen co-integration test (MCX). The Johansen co-integration test is used to evaluate the Kapas Futures contract's market viability. An Augmented Dickey - Fuller test is also used to evaluate the pricing data.
Findings – Kapas contract was developed because the specified agricultural commodity's futures and spot prices in a cointegration test, which revealed a long-term correlation between spot and futures prices factors.
Originality/value – When analyzing a market's effectiveness Kapas in commodities futures markets, this article takes time-series data of prices into account.

Introduction:
Kapas is a cotton boll, a flexible material harvested from the cotton plant that protects the seed underneath. Gujarat is the primary producer of Shankar Kapas. Shankar Kapas produces approximately 45 lakh MT per year, with a total Kapas production of 180 lakh MT. The seed from such a variety is crushed to extract oil, and the byproduct left after crushing is Frequently used as cattle feed is cotton seed oil cake. Raw cotton typically contains 34% fiber, 63.5% seed, and 2.5% wastage by weight. There is a seeding season for this Kharif seasons beginning in June-July and a harvesting season beginning in October. The marketing year runs from October to September.

Kapas in MCX Derivatives Trading in India:
Kapas (raw cotton) is typically traded in loose form and delivered by truck. In India, the physical market for kapas is unorganized. There is no reliable source of Kapas data in the country. The MCX takes begun trading in Kapas (raw cotton or seed cotton) futures contracts for April 2007. Trading will be available for the fair average quality 'Kalyan' and V-797 varieties of kapas, which are primarily produced in Gujarat. In accordance with Forward Markets Commission (FMC) guidelines, the margin on its futures trading has been initially set at 4% of the total transaction. The contract size for each variety is 4 tons, and delivery will take place from six locations in Gujarat: Kadi, Viramgam, Lakhtar, Limbdi, Surendranagar, and Bawla. Futures trading in kapas are likely to provide farmers and traders with an effective tool for hedging their price risk. Many traders were looking forward to this contract. As a result, the exchange has received many trades in this counter, according to Mr Jignesh Shah, CEO and managing director, MCX. Mr Shah stated that in the event of sharp volatility in this counter, a special margin would be imposed on both

the 'buy' and 'sale' side of the trading. Abohar (Punjab), Sirsa (Haryana), Sri Ganganagar (Rajasthan), Kadi, Rajkot, and Surendranagar (Gujarat), Sendhwa (Mahdya Pradesh), Jalgaon, Akola, and Yavalmal (Maharashtra), and Guntur, Adilabad (Telangana) are important Kapas trading centres. India is the third-largest cotton grower in the world and has the most cotton cultivation land. In 2005-06, the country produced 244 lakh bales (each weighing 170 kg) of cotton.

Table:1 Kapas Traded Contract, Total Value & Average Daily Turn-over from 2004 - 2022

Instrument Type	Year	Traded Contract - (Lots)	Total Value - (Lacs)	Average Daily Turnover - (Lacs)
FUTCOM	2022	183	742.19	3.73
SFUTCOM	2021	3,491	9,405.63	36.32
FUTCOM	2020	19,766	41,350.87	160.27
FUTCOM	2019	6,623	14,368.76	55.91
FUTCOM	2018	NA	NA	NA
FUTCOM	2017	10	21.04	0.08
FUTCOM	2016	196	325.12	1.26
FUTCOM	2015	1,055	1,673.76	6.49
FUTCOM	2014	45,946	83,655.88	312.15
FUTCOM	2013	3,95,088	6,54,308.65	2,124.37
FUTCOM	2012	3,86,838	6,84,177.59	2,228.59
FUTCOM	2011	1,94,143	3,50,708.12	1,134.98
FUTCOM	2010	88,280	1,17,661.93	383.27
FUTCOM	2009	69,188	84,130.76	275.84
FUTCOM	2008	2,23,482	1,37,832.63	448.97
FUTCOM	2007	5,74,169	3,11,354.25	1,020.83
FUTCOM	2006	8,25,078	4,25,131.39	1,384.79
FUTCOM	2005	11,02,274	3,51,750.33	1,145.77
FUTCOM	2004	33,012	16,319.9	58.91

Source: www.mcx.com

Market Efficiency

The How well the futures price combines all available information about future supply and demand is referred to as a futures market's efficiency. Market players should be intelligent enough., based on the market efficiency theory, to determine an appropriate price by considering all data pertinent to the commodity's supply and demand situations. This is a prerequisite, but it's not suffice for objectivity because these rational market actors might not be risk averse. Even if the spot and futures markets exchange information in a timely manner. in this scenario, due to hedgers' risk appetite, futures prices will be distorted. (Gray, 1961).

Therefore, an impartial market needs to be both effective and free of any risk premium and not be constant; it may change in reaction to market turbulence. Future markets may also demonstrate short-term inefficiencies and lack objectivity.

Review of Literature:

(McKenzie & Holt, 2002) Several agricultural commodities futures markets are analyzed in terms of their market efficiency and objectivity. The results show that each market is long-term impartial, despite short-term imperfections and pricing biases in the futures markets. In out-of-sample forecasting, models for cattle and maize perform better than futures prices. The findings also point to short-term time risk premiums.

(Kumar & Pandey, 2013) The findings of the market efficiency study show that there is inefficiency in the futures markets due to weak links to spot markets, which may also contribute to a lack of price discovery and a reduction in the efficiency of hedging, during the early stages of the Indian commodity futures markets, particularly for contracts for the next to near month. Of course, these are normal growing pains, Additionally, it implies that liquidity plays a significant part in how the futures markets operate. There is a higher need to enhance involvement in the and particularly in the contracts for non-agricultural commodities expiring in the next to near month. Additionally, it advises speculators and hedgers to employ effective.

(Vijayakumar, 2022) The Cardamom competitiveness and price determination, a high-value agricultural plantation commodity, were determined. The test of Johansen Co-integration is used in the statistical analysis to ascertain whether it has an extensive link between the three markets stated above. Additionally, the VECM model demonstrated that the cardamom pricing for online auctions are obtained based on the respective historical prices over the long term, as opposed to the short term, when they are constructed from the current and futures markets. Granger causality studies reveal causal linkages between cardamom's spot, futures, and e-auction prices. From the contrast to futures and spot, the study discovers "cardamom's e-auction" price realization dropped. Farmers typically present ungraded commodities to online auctions, which results in lower pricing.

(R.L & Mishra, 2021) To determine looks at price formation and efficient markets, examined the specific agricultural products with the highest liquidity on the spot, futures, and mandi markets. Uses for the Johansen Co-integration test include the statistical analysis to determine if the three markets have a long-term link stated above. The VECM model also showed that spot returns for jeera, coriander, and chana as well as cotton seed and guar seed are seen to be severely impacted by mandi returns.

(Ali & Gupta, 2011) The study's conclusions have several significant ramifications for both participants in the market and decision-makers. The connection between spot pricing and futures indicates that futures prices generally have a greater causal impact on spot pricing for seven different commodities. This suggests that futures prices have a short-term impact on spot prices. Wheat futures and spot prices do not cointegrate, hence a unidirectional relationship in which futures prices drive spot prices may result in an excessive rise in wheat prices. This suggests that India's wheat futures market is not particularly effective.

(Kumar Soni, 2014) The study's findings have significant ramifications for earlier work on the same topic. Incorrect conclusions about linear or nonlinear causality in either way could emerge from failing to consider cointegration between spot and futures prices (Chen and Lin, 2004), which could affect how commodities exchanges determine prices and manage risk. The findings further indicate the necessity for additional agricultural commodity reforms in India so that markets can soon become more effective. evaluating the link in scenarios with multiple variables and how effective futures contracts are compared to one another offered on the market should be the main research priorities in the future.

(Prava Samal et al., 2015) The effectiveness of the trading of agrarian commodity futures, NCDEX was investigated every day closing price information over a 12-month period. It has been hypothesized that the NCDEX shows a trend of market efficiency through time. studied over three lag periods. In this study, many statistical tools, including the Granger Causality test, OLS regression model, and Vector auto regression model, are used.

Objective:

To investigate the futures market's hedging effectiveness through the co-integration of futures and spot prices.

Hypothesis:

H1: The unit root of Futures price is null.

H2: There is no unit root in Spot Price.

H3: Co-integration between Futures Price and Spot Price.

Research Methodology:
937 observations have been considered for data analysis dated from 2011 – 2022. E-views has been to evaluate the data that had been gathered.

A Procedure For Evaluating The Suitability Due To The Futures Market:
A successful futures market requires also maintain delivering pricing cues sent to the spot market remove greater profits except for minor transaction expenses, price arbitrage or maturity causes the future prices to be identical to the spot prices (Fama, 1970).

Examining Normality:
Since non-stationary series, the stationarity test is crucial. may have a negative impact on one another without accurate results. The variables that will be incorporated into a regression model therefore be stationary. Even though the majority of the underlying price series are non-stationary, as the price returns, is discovered to be stationary. The link from the spot market to the futures market is therefore thought to be tested using price returns rather than real prices. The Augmented Dickey-Fuller (ADF) test has been used to analyse the price series' stationarity. By include side view of the regression, the ADF, and latent divergence terms of the parameter method corrects for higher order correlation. There is a prescribed ADF test.

$$\Delta Y t = b0 + \beta Yt\text{-}1 + \mu 1Yt\text{-}1 + \mu 2Yt\text{-}2 + \ldots\ldots. + \mu\ p\ Y\ t\text{-}p + \varepsilon\ t$$

In this scenario, the time series under test is denoted by the symbol Yt, the caused by interaction is denoted by b0, the unit root test's coefficient of interest is denoted by is, the pth order autoregressive process is represented by I, and the white noise error term is denoted by t. When conducting the unit root test, the following theories need to be verified:

H0: Futures price has unit root. H1: Futures price has no unit root.

Accept null if t* is greater than the ADF critical threshold, indicating that a unit root exists. The no stationarity of mean data.

If t* exceeds the ADF critical value, That there is no unit root is the null hypothesis, which is disproved. It is stationary for the mean.

Johansen Co-integration Test:
The Johansen test in statistics is a process for assessing the cointegration of several time series, let us say k. It is named after Sren Johansen. In contrast to base on the Dickey-Fuller test, the Engle-Granger test (or improved) determine whether the error terms an isolated stationarity relationship, such a method allowed for many cointegrating connections and is thus more widely applicable.

The implications may differ slightly depending on whether the Johansen test is performed using a trace or an eigenvalue. In contrast to the alternative, which is that r = k, There are r = r* k cointegration vectors, which is the null hypothesis for the trace test. The first time the null is not rejected during testing for r* = 1, 2, etc. is utilised as a r estimate. The alternative as follows: for the maximum eigenvalue test: r = r* + 1, however it employs the same trace test as its null hypothesis. An estimator for r is provided by the initial non-rejection, and subsequent testing is done for r* = 1, 2, etc.

Two tests were created by Johansen: the max (or greatest eigenvalue) and the trace (Or trace test). As seen below, the test's layout.

$$\Lambda \max [H1(r-1)\ H1(r)] = -T \log(1-\lambda\hat{}r)$$

In contrast to the option of r+1 vectors, the null is that r cointegrating vectors exist. Trace testing is

$$\Lambda \text{ trace } [H1(r)H0] = -T \sum I = r+1p\log(1-\lambda\hat{}i)$$

Thus, the only eigenvalue that is not zero is the first.

Results and Discussions:

1. **Unit Root Test on Futures Price by using Augmented Dickey-Fuller**

Augmented Dickey-Fuller Unit Root Test on D(FP)

Null Hypothesis: D(FP) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=20)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-30.63489	0.0000
Test critical values:	1% level	-3.437130	
	5% level	-2.864422	
	10% level	-2.568357	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(FP,2)
Method: Least Squares
Date: 10/28/22 Time: 12:04
Sample (adjusted): 4 937
Included observations: 934 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(FP(-1))	-1.003497	0.032757	-30.63489	0.0000
C	-0.867284	1.005274	-0.862734	0.3885

R-squared	0.501737	Mean dependent var	0.006103
Adjusted R-squared	0.501202	S.D. dependent var	43.48312
S.E. of regression	30.71023	Akaike info criterion	9.689208
Sum squared resid	878986.1	Schwarz criterion	9.699571
Log likelihood	-4522.860	Hannan-Quinn criter.	9.693159
F-statistic	938.4967	Durbin-Watson stat	2.000393
Prob(F-statistic)	0.000000		

I conducted an Augmented Dickey Fuller test for Futures price of Kapas. The hypothesis of this test is *H*0: "Futures Price has unit root" vs. *H*1: "Futures Price has no unit root". The evaluation statistic is −30.63489. This should be compared to the critical values for H0. With are the critical values provided:
1%= 3.437130%
5%= 2.864422%
10%= 2.568357%
At a significance level of 1%, you can reject H0 because Your test statistic falls far short of all the critical values. I therefore have a very low probability of being wrong when I claim that time series lack a unit root. You can indeed accept the null.
Accept null hypothesis, i.e., If t* exceeds the ADF critical value, there is a unit root. Nonstationary data exist for the mean.
Reject the void assertion, which states the absence of a unit root, if t* exceeds the ADF critical threshold. The average data is stationary.

2. Unit Root Test on Spot Price by using Augmented Dickey-Fuller

Augmented Dickey-Fuller Unit Root Test on D(SP)

Null Hypothesis: D(SP) has a unit root
Exogenous: Constant
Lag Length: 2 (Automatic - based on SIC, maxlag=20)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-13.70408	0.0000
Test critical values:	1% level	-3.437145	
	5% level	-2.864429	
	10% level	-2.568361	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(SP,2)
Method: Least Squares
Date: 10/28/22 Time: 13:37
Sample (adjusted): 6 937
Included observations: 932 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(SP(-1))	-0.750887	0.054793	-13.70408	0.0000
D(SP(-1),2)	-0.241897	0.044430	-5.444413	0.0000
D(SP(-2),2)	-0.262439	0.031518	-8.326601	0.0000
C	-0.876718	0.663778	-1.320799	0.1869

R-squared	0.533754	Mean dependent var	-0.012232
Adjusted R-squared	0.532247	S.D. dependent var	29.51091
S.E. of regression	20.18325	Akaike info criterion	8.851866
Sum squared resid	378033.3	Schwarz criterion	8.872627
Log likelihood	-4120.969	Hannan-Quinn criter.	8.859783
F-statistic	354.1217	Durbin-Watson stat	2.014674
Prob(F-statistic)	0.000000		

I ran a Spot Price of Kapas Augmented Dickey Fuller test. This test will compare H0, "Spot Price has unit root," against H1, "Spot Price does not have unit root." 13.70408 is the test statistic. This should be compared to the critical values for H0. With are the critical values provided:
1% = 3.437145%
5% = 2.864429%
10% = 2.568361%
You can reject H0 at a significance level of less than 1% because your research statistic is significantly less than all of the fundamental values. I may therefore say with very little chance of being mistaken that time series lack a unit root. You can therefore discard H0.
Accept null if t* is greater than the ADF critical threshold, indicating that a unit root exists. The nonstationary of mean data
If t* exceeds the ADF critical value, The null hypothesis—that there is no unit root—is disproved. The mean remains steady.

3. **Johansen Co-integration test between Futures Price and Spot Price**

Johansen Cointegration Test

Date: 10/28/22 Time: 14:12
Sample (adjusted): 5 937
Included observations: 933 after adjustments
Trend assumption: Linear deterministic trend
Series: FP SP
Lags interval (in first differences): 1 to 2

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.016117	15.55753	15.49471	0.0489
At most 1	0.000426	0.397663	3.841465	0.5283

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.016117	15.15987	14.26460	0.0360
At most 1	0.000426	0.397663	3.841465	0.5283

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegrating Coefficients (normalized by b'*S11*b=I):

FP	SP
-0.007639	0.005254
0.000422	0.001778

Unrestricted Adjustment Coefficients (alpha):

D(FP)	3.877942	-0.016805
D(SP)	0.544685	-0.420417

1 Cointegrating Equation(s): Log likelihood -8637.003

Normalized cointegrating coefficients (standard error in parentheses)

FP	SP
1.000000	-0.687785
	(0.06940)

Adjustment coefficients (standard error in parentheses)

D(FP)	-0.029622
	(0.00760)
D(SP)	-0.004161
	(0.00522)

The upper panel displays trace, while the lower panel displays maximum.
The trace indicates that at r=0, 15.55753 is greater than its critical value of 15.49471 the hypothesis 1 that there are no co - integrating derivations may be rejected at the 5% range. However, the trace value of 0.397663 is lower than its 3.841465 critical value at the 5% threshold, indicating that we cannot completely rule out the existence of multiple cointegration equations.
This indicates there are cointegration links between the variables FP and SP, according to the outcomes of the Johansen using tests on traces. Lower panel's "max" likewise yields a similar result. We can rule out If there are no cointegration equations is the null hypothesis. since the maximum value is 15.15987, which is higher than its critical value of 14.26460 on the 5% mark. However, the maximum of 0.397663 is less than its critical value of 3.841465 on the 5% level, so we are unable to rule out the possibility that there are many cointegration equations.
That indicates that the max test suggests that there are cointegration links just like the trace analysis, between the attributes FP and SP.

Conclusion:

Since 2009, the commodity futures market has grown effectively as trade volume has increased. Most of the trading volume in commodities futures is being contributed to by high-net-worth individuals and proprietary trading. It's intriguing to observe that retail investors are now a big contribution to brokers' overall turnover. The efficiency and co-integration of one agricultural commodity, kapas, traded at MCX over the years 2011 to 2022, were examined in the current research. We also considered a test called the Augmented Dickey-Fuller Stationarity. the results of testing for johansen cointegration between the futures and spot prices of chosen agrarian commodity showed an eternal link between variables of Futures Price and Spot Prices.

References:

1. Ali, J., & Gupta, K. B. (2011). Efficiency in agricultural commodity futures markets in India: Evidence from cointegration and causality tests. *Agricultural Finance Review*, *71*(2), 162–178. https://doi.org/10.1108/00021461111152555
2. Kumar, B., & Pandey, A. (2013). Market efficiency in Indian commodity futures markets. *Journal of Indian Business Research*, *5*(2), 101–121. https://doi.org/10.1108/17554191311320773
3. Kumar Soni, T. (2014). Cointegration, linear and nonlinear causality. *Journal of Agribusiness in Developing and Emerging Economies*, *4*(2), 157–171. https://doi.org/10.1108/jadee-07-2012-0019
4. McKenzie, A. M., & Holt, M. T. (2002). Market efficiency in agricultural futures markets. *Applied Economics*, *34*(12), 1519–1532. https://doi.org/10.1080/00036840110102761
5. Prava Samal, G., Kumar Swain, A., Sahoo, A., & Soni, M. (2015). Market Efficiency of Agricultural Commodity Futures in India: A Case of Selected Commodity Derivatives Traded On Ncdex During 2013. *International Journal of Business and Management Invention ISSN*, *4*(1), 32–49. www.ijbmi.org
6. R.L, M., & Mishra, A. K. (2021). Market efficiency and price risk management of agricultural commodity prices in India. *Journal of Modelling in Management*. https://doi.org/10.1108/JM2-04-2021-0104
7. Vijayakumar, A. N. (2022). Price discovery and market efficiency of cardamom in India. *Vilakshan - XIMB Journal of Management*, *19*(1), 28–44. https://doi.org/10.1108/xjm-11-2020-0215

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

THE KEY TO A SECURE COMMUNICATION: A QUANTITATIVE REPORT ON COMBINING CRYPTOGRAPHY WITH THE IMAGE STEGANOGRAPHY METHODS

Sai Keerthan Kasula [1], **Krishna Prasad Puppala**[2]

[1] Student, Department of MCA, Chaitanya Bharati Institute of Technology, India.
[2] Assistant Professor, Department of MCA, Chaitanya Bharati Institute of Technology,

Corresponding Author- **Sai Keerthan Kasula**
Email id: saikeerthan.work@gmail.com

DOI- 10.5281/zenodo.7302592

Abstract
Steganography is the art of hiding the information within the information and cryptography is the art of converting the information into an unreadable format using logical and arithmetic algorithms. In today's world, many different carrier file formats can be used to communicate, but digital images are the most popular ones because of their frequency on the internet. By 2025, it's estimated that 463 exabytes of data will be created each day globally – that's the equivalent of 212,765,957 DVDs per day, for such a mass communication rate security will always be a concern. In this paper, I propose a new way of implementing steganography with the combination of cryptography. This method adds an extra layer of security between the communication of the sender and the receiver.

Keywords: *Image Steganography, LSB algorithm, AES Encryption, Cryptography, Text Embedding.*

INTRODUCTION

Steganography, which translates from Greek as covered or secret writing, has been used to conceal information for many years. While connected to cryptography, they are distinct from one another. While cryptography encrypts a message so that it cannot be decoded, steganography aims to conceal the presence of the message. The aim of steganography, to put it more specifically, "is to conceal communications inside other innocent messages in a way that does not allow any opponent to even identify that there is a second secret message there. There are many different methods for concealing messages in various media, including steganography. Invisible inks, microdots, digital signatures, covert channels, and spread-spectrum communications are a few examples of these techniques. Steganography is now employed on text, photos, music, signals, and more because to contemporary technology. Steganography has the benefit of enabling covert message delivery without the transmission's existence being discovered. Encryption frequently makes the sender or recipient appear to be someone who has something to conceal. For instance, the blueprints for your company's most recent technological advancement may be hidden in that image of your cat. Steganography, however, also has a number of drawbacks. In contrast to encryption, it typically takes a lot of overhead to cover up only a little amount of data. There are, however, workarounds for this.

1.1 Cryptography & Steganography

A steganographic system is worthless once it is identified. If the concealed data requires a key to be entered and extracted, this issue can also be solved. Before including the concealed message in the cover message, it is customary to encrypt it first. It should be emphasised, nevertheless, that steganography does not need the concealed message to be encrypted. Even though the message is written in straightforward English, it may still be buried. However, the majority of steganographers appreciate the additional level of security that encryption offers. If your hidden message is found, then at least make it as protected as possible and this is where cryptography comes in handy. Before embedding the information into the image, the proposed system makes sure that the text to be embedded is first encrypted with the help of the Advanced Encryption Standard (AES) algorithm and then it is embedded into the image. Through this practice, there will be an additional layer of security that protects the confidentiality of the secret information.

Figure 1. Iconic Representation of the Proposed System

1.2 Terminologies

Cover Image: The image in which the secret data are embedded is acknowledged as a cover image.

Stego-Image: The image after embedding secret data is referred to as a stego image. cover medium + embedded message = stego message.

Payload: The secret data that is embedded in the cover image is known as payload.

Payload Capacity: The embedding rate per pixel.

Stegokey: To get the embedded message from the stego image, some piece of secret information is needed, this is acknowledged as stegokey. hvk

Encrypt: Concealing data in (something) by converting it into a code.

Decrypt: make (a coded or unclear message) intelligible.

Steganalysis: The name of attack in steganography.

Cryptoanalysis: The name of attack in cryptography.

2. Literature Survey

G. Prashanti and K. Sandhyarani have surveyed recent achievements of LSB-based image steganography. The changes that increase steganographic outcomes, such as high resilience, high embedding capacity, and un-detectability of concealed information, are covered by the authors in this survey. In addition to this survey, two novel approaches are also suggested. In the first method, the cover picture is used to hide data or secret messages, while in the second method, a hidden grayscale image is inserted inside another grayscale image. These methods generate pseudo-random numbers using a four-state table. Secret information is embedded using this method. These two techniques are more secure because secret information is concealed using pseudo-random numbers produced by the table in discrete, arbitrarily placed LSBs of the picture.

Savita Goel proposed a new method of embedding secret messages in the cover image using the LSB method using different progressions. Several image quality metrics, including Peak Signal to Noise Ratio (PSNR), Mean Square Error (MSE), histograms, CPU time, Structure Similarity (SSIM) index, and Feature Similarity Index Measure, are used by the authors to compare the stego picture's quality to that of the cover image (FSIM). In comparison to standard LSB approaches, their investigation and experimental findings demonstrate that the suggested method is quick and extremely effective. Bingwen Feng, Wei Lu, and Wei Sun in their paper "Secure Binary Image Steganography Based on Minimizing the Distortion on the Texture" purposed a state-of-the-art approach to binary image steganography. This method is suggested to lessen the texture's distortion. The rotation, complement, and mirroring invariant texture patterns are first retrieved from the binary picture in this form of steganography. They also suggested measuring, and this strategy was really put into practise using the recommended measurement. The suggested steganographic technique provides good statistical security, high stego picture quality, and high embedding capacity, according to practical results. On based on Huffman Coding, Amitava Nag present a novel steganographic technique of LSB substitution. Their method focuses on providing excellent security, more embedding space, and tolerable stego picture quality. To begin with, a Huffman tree is created to encrypt each 8-bit segment of the secret picture. They split the encoded bits into four pieces, each of which has a decimal value from 0 to 3. These decimal numbers dictate where a message will be included in the cover picture. According to experimental findings, the Huffman table makes it exceedingly difficult for an attacker to obtain the secret information.

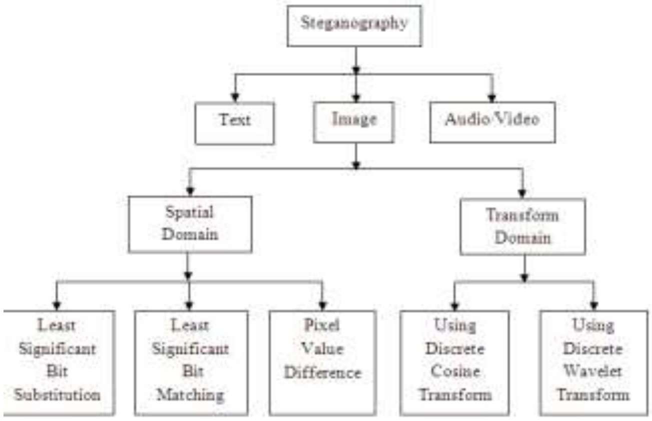


Figure.2 Flowchart of existing Image Steganography Techniques.

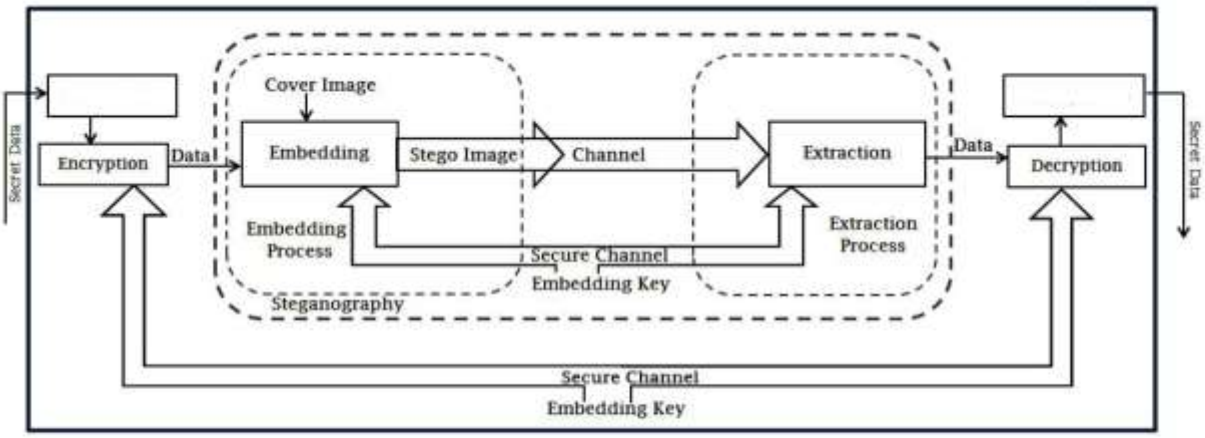


Figure 2. General System architecture of the proposed System

3. Image Steganography Methods

3.1 LSB

A popular and straightforward method for including information in a cover picture is the least significant bit (LSB) insertion. Some or all of the bytes inside of an image have their least significant bit, or the eighth bit, altered to a bit of the secret message. Red, green, and blue colour components may all be utilised in a 24-bit picture as they are each represented by a single byte. In other words, each pixel may hold 3 bits. Thus, an image with a resolution of 800 x 600 pixels has a total data storage capacity of 1,440,000 bits, or 180,000 bytes.

3.2 Bit Plane

It could be preferable to draw attention to particular bits' contributions to the look of the whole image rather than just grayscale images. Assume that an image's pixels are individually represented by 8 bits. Imagine the image is made up of 8 1-bit planes, with bit plane 1-0 (LSB) being the largest (MSB). In terms of the 8-bit bytes that make up an image's pixels, plane 0 includes all the lowest order bits and plane 7 all the highest order bits. A digital picture may be broken down into its bit planes to analyse the relative role that each bit plays in the image, which suggests that doing so might help establish the appropriateness of the amount of bits used to quantize each pixel and aid in image compression.

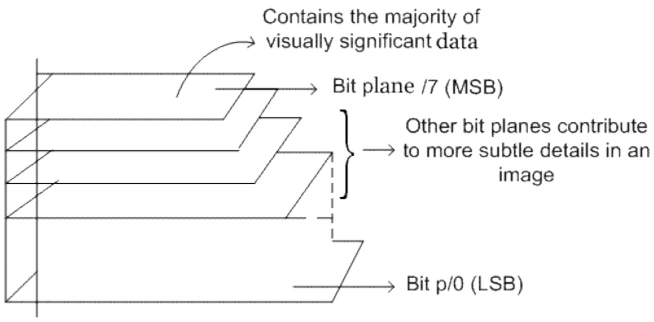


Figure3 Bit Plane

3.3 Spiral Embedding

To make the embedding more difficult to decode, the spiral embedding arranges the image's pixels in a spiral pattern. The Spiral Embedding can be effectively decoded and helps fend against visual assaults thanks to two key concepts. The first is that known locations have embedded metadata about the image's contents. With the use of this knowledge, the stego object may be decoded and the hidden message retrieved. The data is serialised and placed in a pattern that makes it impossible to decipher the message in a visual assault, which is the second factor. Building a vector containing all the information that will be embedded into the cover, including the message contents and metadata, is the first step in the spiral embedding process. The message's dimensions are stored as unsigned 16-bit integers in the first 32 places of the vector. Pixel by pixel, a bit encoding the content of the vector is written into the LSB of the cover in a spiral pattern. The procedure of reading in the stored dimensions and then adhering to the same spiral pattern that guided the embedding is all that is required to decode a stego object produced using the spiral embedding. A vector is read with the LSB values of the stego object. The vector is divided to produce a new picture with the original dimensions of the message once all contained data has been read. This embedding's outcome may then be seen.

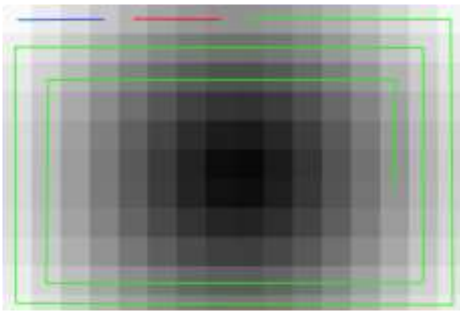


Figure.4 The Spiral Embedding pattern. The height information is embedded into the blue line pixels, the width information into the red pixels, and the message into the green pixels.

3.4 Metadata Manipulation

Data about data is known as metadata. If we consider an image file to be our data, metadata would comprise details like the image's name, caption, and dimensions (width and height). The same kinds of data are present in both audio and video files. A digital camera's photos and sound files can have information about them stored in the Exchangeable Image File (Exif) format. Information may be hidden using a variety of data fields. A tiny portion of those fields will appear if we choose properties from the context menu when we right-click on a saved.jpg file.

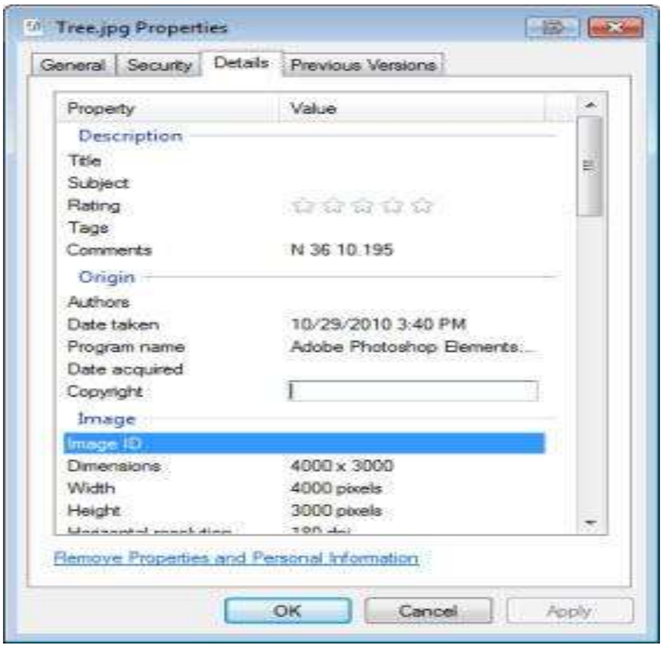


Figure 5. Meta Data Using File Properties Windows

3.5 Altering Threshold

The simplest technique for segmenting images is thresholding. Thresholding may be used to produce binary pictures from a grayscale image. The most basic thresholding techniques swap out every pixel in a picture for a black one if the image intensity is below a set constant T or a white one if it is above that constant.

3.6 Appended Data

The appending of data to the end of an image file is a straightforward and popular steganography technique. This method works because the majority of picture viewers reject any additional data, keeping the stego message concealed. You may add data to the end of an image file using the Linux "cat" command.

3.7 Png Chunk Analysis

An 8-byte signature is the first byte of a PNG file. The pieces that follow the header each provide a different piece of information about the image. A programme may safely disregard an ancillary chunk that it does not understand when it encounters one because chunks identify themselves as either critical or ancillary. Steganography is based on this. Data can be included into unidentified ancillary chunks, but picture viewers and decoders will disregard it.

A chunk is made up of four components: length (4 big-endian bytes), chunk type/name (4 bytes), chunk contents (4 bytes), and CRC (4 bytes). The CRC is a network-byte-order CRC-32 that is computed over the type and content of the chunks, but not over their length. A four-letter case-sensitive ASCII type or name is assigned to chunk kinds; see Four CC. The case of the various letters in the name (bit 5 of the character's numeric value) is a bit field that gives the decoder some knowledge about the make-up of chunks it does not recognise. The initial letter's case determines whether or not the chunk is significant. The chunk is crucial if the initial letter is uppercase; if not, the chunk is ancillary. The file's essential information is included in critical portions. A decoder must stop reading a file or provide the user a suitable warning if it comes across a crucial chunk it doesn't recognise. Whether a chunk is "public" or "private" is indicated by the case of the second letter. Lowercase is private, whereas uppercase is visible. This makes sure that the names of public and private chunks can never clash. In order to comply with the PNG standard, the third letter must be capitalised. It is set aside for a potential expansion. A chunk with a lowercase third letter should be treated the same as any other unrecognised chunk by decoders. Editors who are unfamiliar with the chunk can determine if it is safe to copy by looking at the case of the fourth letter. If lowercase, the chunk may be safely copied regardless of the extent of modifications to the file. If uppercase, it may only be copied if the modifications have not touched any critical chunks [6].

3.8 Changing The Colour Map

Indexed colour is a computing technology that manages the colours of digital photographs in a constrained way to conserve computer memory and file storage while accelerating display refresh and file transfers. It is a type of compression using vector quantization. When an image is encoded in this fashion, colour information is saved in a different piece of data called a palette, which is an array of colour elements, rather than being directly carried by the image pixel data. A colour is represented by each element in the array, which is indexed by its location in the array. Color registers are some names for the separate entries. Only its index in the palette, not the whole description of the colour, is stored in the image's pixels. Due to the indirect way in which colours are addressed, this approach is also referred to as pseudocolor or indirect colour. Using the right palette or colour map, this approach may be used to conceal data in a picture. We need to test several random colour mappings in order to decode data.

4. RESULTS

4.1 SCREENSHOTS

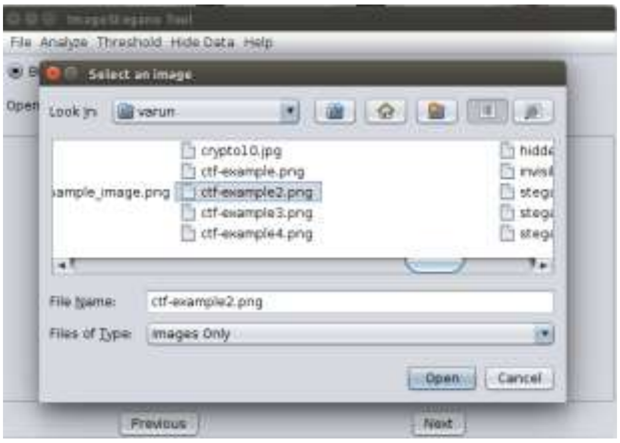


Figure 6: Opening an image to analyze

Figure 7: Hidden Image found in the 0th-bit plane

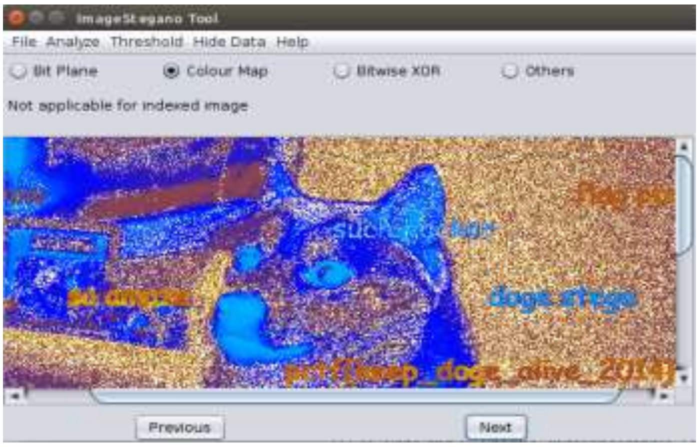


Figure 8: Changing color map

Figure 9: Hide Image GUI

Figure 10: Hidden data visible on altering the threshold

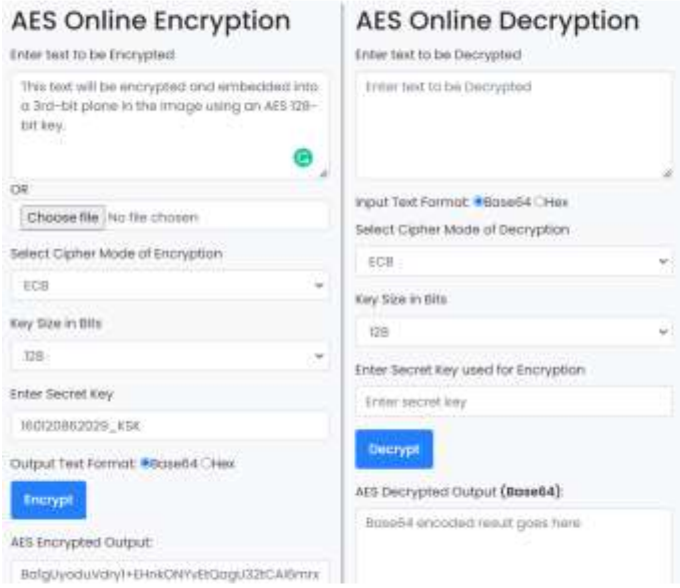


Figure 11: Using the Dependency-AES tool

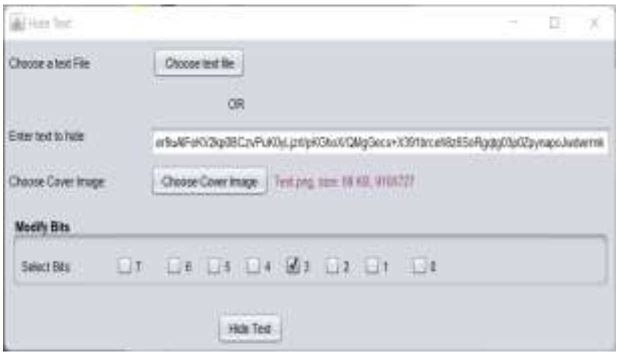


Figure 12: Hide Text using AES AND LSB

4.2 Limitations

Crypstego tool has the following limitations-

• Every steganography technique directly modifies picture pixels in the spatial domain.

• JPEG image appended data extraction is ineffective.

• Compression options are absent from the tool.

• You cannot use a JPEG picture as a cover image to conceal data.

• Since there are difficulties with JAVA base64 decoding when carrying out the last block permutation of AES decryption, encryption within the programme is not possible. Dependency is therefore being employed.

5. Conclusion

Individuals and organisations can use the crypstego programme to provide an extra layer of security by ensuring that the payload is encrypted before being embedded into the picture. This platform-independent programme is useful for examining typical steganography techniques. Despite the fact that there are many other steganography programmes out there, the crypstego tool may be considered a fusion of numerous tools. Additionally, because it is open source, additional functions will be added over time by volunteer contributors. We have concentrated on non-functional criteria in addition to functional needs. The tool's restriction is that jpeg images cannot be used as carrier images to conceal data. Additionally, compression is not used by this tool.

References

[1] B. Saha and S. Sharma, “Steganographic Techniques of Data Hiding using Digital Images”, in Defence Science Journal.

[2] Silman, J., “Steganography and Steganalysis: An Overview”, SANS Institute, 2001.

[3] Jamil, T., “Steganography: The art of hiding information in plain sight”, IEEE Potentials, 18:01, 1999.

[4] Johnson, N.F. & Jajodia, S., “Exploring Steganography: Seeing the Unseen”, Computer Journal, February 1998.

[5] Sei-Ichiro Kamata, et al: Depth-First Coding for Multi-Valued Pictures Using Bit-Plane Decomposition, IEEE Trans. on CT, Vol.43, No.5, pp.1961-1969, May 1995.
[6] https://www.w3.org/TR/PNG-Chunks.html.
[7] Herbert Schildt, "Java the Complete Reference Eleventh Edition – Mc Graw Hill India Pvt. Limited.
[8] https://www.section.io/engineering-education/implementing-aes-encryption-and-decryption-in-java/
[9] https://www.coursera.org/learn/crypto
[10] Jean-Philippe Aumasson, "Serious Cryptography: A Practical Introduction to Modern Encryption"
[11] R. Chandramouli, Nasir Memon, Analysis of LSB based Image Steganography Techniques, Proc. International Conference on Image Processing, 2001, Vol. 3, pp. 1019-1022, 2001.
[12] Jessica Fridrich, Miroslav Goljan, Dorin Hogea, Attacking the OutGuess, Proc. of 2002 ACM Workshop on Multimedia and Security, ACM Press, pp. 3-6, 2002.
[13] Jessica Fridrich, MiroslavGoljan, DorinHogea, Steganalysis of JPEG Images: Breaking the F5 Algorithm, Proc. of the 5th Information Hiding Workshop, Springer, vol. 2578, pp. 310-323, 2002.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

AN EFFECTIVE WAY OF FINDING LUNG CANCER USING DEEP LEARNING TECHNIQUES

Karavadi Abhishek[1], M kalidas[2]
* Department of MCA, Chaitanya Bharati Institute of Technology, India.
Ascend Author, sr. Assistant Professor, Department of MCA, Chaitanya Bharati Institute of Technology,India.
***Corresponding Author-* Karavadi Abhishek**
Email id: pgs20001_mca.abhishek@cbit.org.in
DOI-10.5281/zenodo.7302609

Abstract

According to world health organization, Cancer is a leading cause of death worldwide, accounting for nearly 10 million deaths in 2020, or nearly one in six deaths. The most common cancers are breast, lung, colon and rectum and prostate cancers. Around one-third of deaths from cancer are due to tobacco use, high body mass index, alcohol consumption, low fruit and vegetable intake, and lack of physical activity. Cancer-causing infections, such as human papilloma virus (HPV) and hepatitis, are responsible for approximately 30% of cancer cases in low- and lower-middle-income countries. Many cancers can be cured if detected early and treated effectively. *Computer programming used to improve cancer diagnosis, drug development, and precision medicine.* AI involves programming a computer to act, reason, and learn. It's great at finding patterns in large amounts of data, which is particularly helpful in scientific research. NCI, the Department of Energy, the Frederick National Laboratory for Cancer Research, and a transdisciplinary group of investigators are using AI to advance development of digital twins for people with cancer. Others use it to analyze imaging data and electronic health records to tailor patients' radiation doses. AI is even being harnessed to quickly analyze population-based cancer data and estimate the probability of certain cancers. And these examples just scratch the surface—Artificial Intelligence has the potential to truly transform cancer care. Lung cancer can cause complications, such as: Shortness of breath. People with lung cancer can experience shortness of breath if cancer grows to block the major airways. Lung cancer can also cause fluid to accumulate around the lungs, making it harder for the affected lung to expand fully when you inhale. In this study, lung patient Computer Tomography (CT) scan images are utilised to identify and categorise lung nodules as well as to determine the nodules' malignancy degree in relation to parameters including radon gas exposure, air pollution, and chemical exposure. CNN is being used at work for this assignment. With the help of image processing and deep learning techniques, it is now much easier to diagnose lung cancer at an early stage. Computer tomography (CT) scan images are now utilised to identify and categorise lung nodules and determine their level of malignancy. In order to put this idea into practise, we have employed the CNN algorithm to identify lung cancer from CT-SCAN images, and we have a dataset of CT-SCAN images to train CNN.

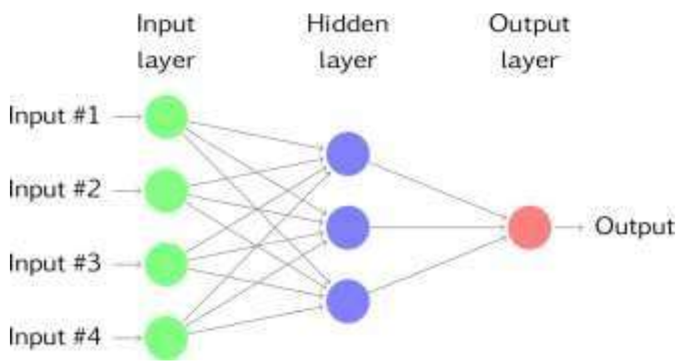
Keywords : Lung Cancer, CT-Scan, CNN, human papilloma virus, Artificial Intelligence

Introduction

The leading cause of cancer-related death is lung cancer. The windpipe, major airway, or lungs can all be the site of lung cancer onset. It results from the unregulated proliferation and dissemination of some lung cell types. Lung cancer diagnosis rates are higher in people with lung conditions including emphysema and a history of chest pain. The main risk factor for developing lung cancer in Indian men is excessive tobacco use, which includes smoking cigarettes and other smoking-related products. However, Indian women are less likely to smoke, suggesting that there may be additional risk factors. Other danger Early lung cancer identification has become crucial and simple thanks to image processing and deep learning techniques. Lung cancer, which has the greatest fatality rate of any cancer kind, is the most serious type of the disease. Many lives can be saved by early detection. Along with breast cancer in women and prostate cancer in men, lung cancer is the second most frequent type of cancer. According to the International Association of Cancer Society's (IACS) projections, there will be approximately: About 131,880 people have died from lung cancer, with 235,760 new cases reported (119,100 males and 116,660 women) (69,410 in men and 62,470 in women) Small lesions called pulmonary glands can be found inside the lungs. We can use an algorithm to identify lung cancer using CT-SCAN images and a dataset of CT-SCAN images to train CNN. Lung cancer, which has the greatest fatality rate of any cancer kind, is the most serious type of the disease. Many lives can be saved by early detection. Along with breast cancer in women and prostate cancer in men, lung cancer is the second most frequent type of cancer. The primary goal of this study is to investigate the performance of a classification algorithm to aid in the early diagnosis of lung cancer. There are two main methods for detecting lesions using DL: detection and segmentation. The detection method is a region-level classification, whereas the segmentation method is a pixel-level classification [1].

2. Algorithms Used

We will construct a 6-layer neural network that will distinguish between one image and another in order to show how to construct a convolutional neural network-based image classifier. We will construct a very modest network that can also be operated by a CPU. Traditional neural networks that are excellent at classifying images have many more parameters and need a lot of training time on a standard CPU. However, our goal is to demonstrate how to use TENSORFLOW to create a convolutional neural network in the real world. In essence, neural networks are mathematical models that can be used to address optimization issues. Neurons, the fundamental computational component of neural networks, make them up. A neuron receives an input (let's say x), processes it by multiplying it by a variable (let's say w) and adding another variable (let's say b), and then outputs a result (let's say z=wx+b). To create the final output (activation) of a neuron, this value is transferred to a non-linear function called the activation function (f). The many activation functions are varied. Sigmoid is a well-liked activation function. The term "sigmoid neuron" refers to a neuron that uses the sigmoid function as an activation function. There are several other types of neurons, including RELU and TanH, that have names based on their activation roles. If you stack neurons in a single line, it’s called a layer; which is the of the LUng Nodule Analysis 2016 (LUNA16) next building block of neural networks. See below image with Challenge demonstrate the superior detection performance of the proposed approach on nodule detection (average FROC-score of 0.893, ranking the 1st place over all submitted results), which outperforms the best result on the leaderboard of the LUNA16 Challenge (average FROC-score of 0.864).



Multiple layers work together to find the best match layer when predicting the image class, and this process is repeated until there is no more room for improvement. Deep learning not only expedites the crucial process but also enhances computer precision and CT image detection and classification effectiveness. The issue of classifying benign and cancerous tissue is discussed in this essay. It is suggested to use the convolution neural network (CNN) and deep neural network, respectively (DNN). The input data, which consists of image data, is quite resilient against deformation. To forecast the image class, numerous layers interact with one another to find the best match layer. This procedure is repeated until there is no more room for improvement. In addition to speeding up the crucial task, deep learning enhances computer accuracy and the performance of CT image detection and classification. This essay considers the issue of classifying benign and malignant growths. Convolution neural networks (CNN) and deep neural networks are suggested for use, respectively (DNN). Strong robustness against distortion exists in the input data (image data).

3. System Architecture

4. Result Anlaysis

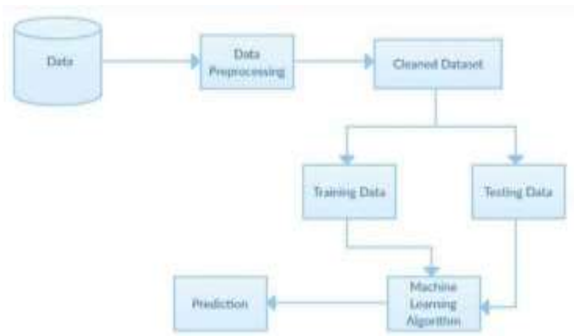


Figure : In above screen click on ‘Upload Lung Cancer Dataset’button to upload CT-SCAN images.

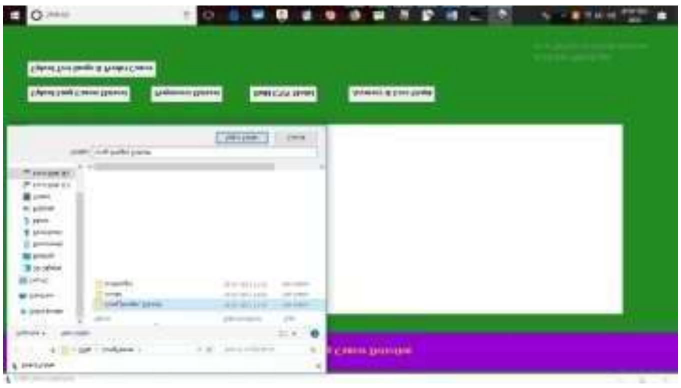


Figure :In above screen selecting and uploading ‘Lung_Image_Dataset ’folder and then click on ‘SelectFolder ’button to load images and toget below screen

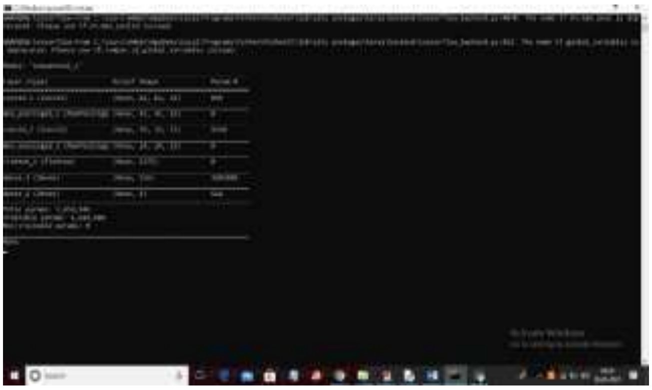


Figure : In above console to train CNN we created multiple layers where first layer process images of size 62 X 62 and second layer process 31 X 31 and goes on and now click on 'Accuracy & Loss Graph ' button to get below graph.

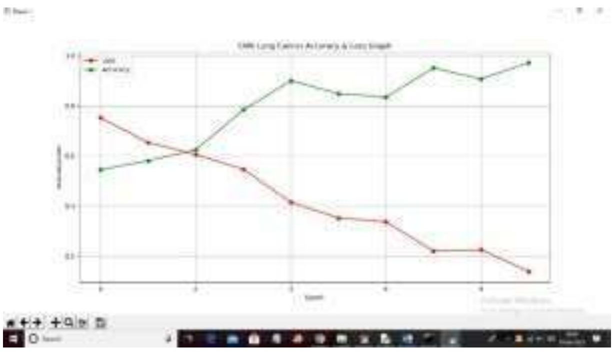


Figure : In above graph x-axis represents Epoch and Y-axis represents accuracy and loss values and in above graph we can see to train CNN we took 10 Epoch and at each increasing Epoch Loss values get decrease and accuracy gets increase and in above graph red line represents loss and green line represents accuracy. Now click on 'Upload Test Image & Predict Cancer 'button to upload test image and then detect cancer

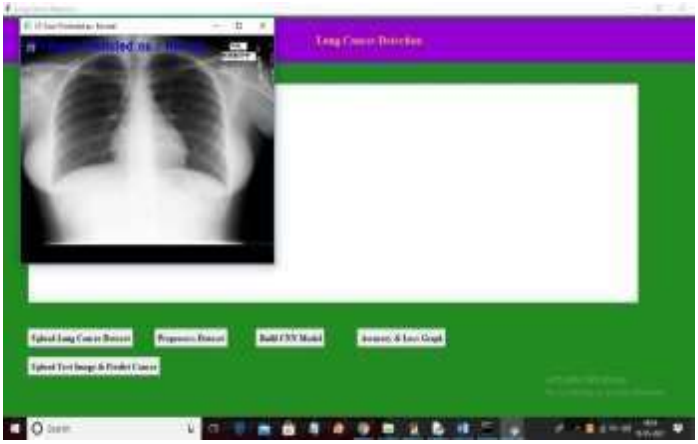


Figure : In above screen selecting and uploading ‘1.png ’file and then click on ‘Open ’button to get below result

Figure : In above screen in first image in blue colour text we can see predicted result as CT-SCAN contains abnormality and in second image we are detecting places were abnormality detected and in third image we extracted all abnormality patches from original image and then displaying. Now test other image

Figure : In above screen selecting and uploading ‘9.png ’file and then click on ‘Open ’button to get below result In above screen CT-SCAN is predicted as NORMAL. Similarly you can upload and test other images

Conclusion

With 2.09 million new cases and 1.76 million deaths from lung cancer in 2018 [2], lung cancer is the leading cause of cancer death globally. Characteristics for analysing the risk of breast cancer in the near future. Med In the past, a doctor would need to do a number of tests to determine whether a patient had lung cancer or not. However, this was a lengthy procedure. A patient may occasionally be required to undergo pointless examinations or further tests in order to diagnose lung cancer. There needs to be a preliminary test in which both the

HealthCare to reduce the process time and unneeded Collaborative Media Service Framework for check-ups. With 2.09 million new cases and 1.76 million fatalities from lung cancer in 2018 alone, it is the leading cause of cancer-related death globally [2]. The characteristics for a short-term examination of breast cancer risk. Med To determine whether a patient has lung cancer or not in the past, the doctor had to do a number of tests. However, the process took a long time. To diagnose lung cancer, a patient may occasionally need to submit to pointless examinations or additional tests. There must be a preliminary test in which both the HealthCare, in order to reduce process time and needless Collaborative Media Service Framework for check-ups.

References

[1] Shimazaki, A., Ueda, D., Choppin, A. *et al.* Deep learning-based algorithm for lung cancer detection on chest radiographs using the segmentation method. *Sci Rep* **12**, 727 (2022). https://doi.org/10.1038/s41598-021-04667-w

[2] Bray, F. *et al.* Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J. Clin.* **68**, 394–424. https://doi.org/10.3322/caac.21492 (2018).

[3] DSharma GJindal "Computer aided diagnosis system for detection of lung cancer in CT scan images International Journal of Computer and Electrical Engineering 3(5): 714-718 2011.

[4] Janarthanan R Balamurali R Annapoorani A and Vimala V 2020 Prediction of rainfall using fuzzy logic Materials Today: Proceedings

[5] DBhatnagar AKTiwari VVijayarajan AKrishnamoorthy "Classification of normal and abnormal images of lung cancer IOP Conference Series: Materials Science and Engineering Vol 263 2017.

[6] Rendon-Gonzalez, E., & Ponomaryov, V. (2016, June). Automatic Lung nodule segmentation and classification in CT images based on SVM. In 2016 9th International Kharkiv Symposium on Physics and Engineering of Microwaves, Millimeter and Submillimeter Waves (MSMW) (pp. 1- 4). IEEE. DOI: https://doi.org/10.1109/MSMW.2016.7537995.

[7] American Cancer Society, Key Statistics for Lung Cancer, 2020, Available from https://www.cancer.org/cancer/lung-cancer/about/key- statistics.html.

[8] K. Kuan, M. Ravaut, G. Manek, H. Chen, J. Lin, B. Nazir, C. Chen, T. C. Howe, Z. Zeng, and V. Chandrasekhar, "Deep learning for lung cancer detection: Tackling the kaggle data science bowl 2017 challenge, "2017, arXiv:1705.09435. [Online]. Available: http://arxiv.org/abs/1705.09435

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

GROUNDWATER MANAGEMENT FOR SUSTAINABLE DEVELOPMENT IN INDIAN ECONOMY

Dr. Kritika[1] Rishabh Sharma[2]
Assistant professor, Department of Commerce, Chaudhary Bansi Lal University, Bhiwani, Haryana
Assistant Professor, BRCM College of Engineering and Technology, Bahal, Bhiwani, Haryana
Corresponding Author- **Dr. Kritika**
Email id: **kritikasanjay2@gmail.com**
DO- 10.5281/zenodo.7302627

Abstract

Undoubtedly, one of the biggest sustainability concerns facing humanity in the twenty-first century is groundwater depletion. About 89% of the world's freshwater supplies are found in groundwater. However, there has been a global decline in ground water levels in recent years as a result of excessive ground water use and monsoon variability. It is now practically difficult to restore the water table due to the level of groundwater depletion. 27% and 23%, respectively, of the groundwater samples were classified as having poor water quality for drinking and industrial uses by the water quality index. 73% of the groundwater samples were assigned to the Ca2-HCO- type by the Piper diagram, and the remaining 27% to the mixed type. Due to the progressive rise in Na and Cl ions, Gibbs diagrams showed that the bulk of groundwater samples (70%) fell in the rock domain and the remaining 30% in the zone of evaporation. A sustainable strategy to managing water will be necessary to fulfil existing and future requirements with the currently available surface and groundwater supplies while also maintaining land and aquatic ecosystems. A sustainable management strategy must take into account the behaviour of a groundwater system and how it interacts with the environment.

Introduction

Sustainable groundwater resource development refers to the long-term, equitable, and efficient use of groundwater as a source of water while maintaining its quality and ecosystem variety (Gupta & Onta, 1997). In order to define sustainable groundwater development, this study addresses the value of groundwater resources in industrialized and developing nations, as well as the issues of over-abstraction and groundwater contamination.(Hiscock et al., n.d.). The reverse ion exchange was shown in the bivariate diagrams to be the primary mechanism controlling the groundwater geochemistry, after ion exchange and mineral dissolution.(Subba Rao et al., 2019). Water authorities throughout the world are in urgent need of tangible and focused steps to make sure that communities abide by groundwater management regulations as quickly and as efficiently as possible, with the Sustainable Development Goals only ten years away.(Castilla-Rho et al., n.d.). Although there is a chance that water can be refilled from other places, the process is incredibly sluggish and could take a year to refill one metre.(Venu, 2007)

Sustainability of Ground-Water Resources

Nearly everywhere below the surface of the earth, there is groundwater. Commonly, groundwater is a significant source of surface water. Significant subterranean water storage is groundwater. The composition of the earth's surface and subsoil varies greatly. The most direct window for studying the subsurface environment is through wells.(Alley et al., 1999). One of the primary sources of fresh water on the Earth's surface is rainfall. Rainfall only occurs in India during the monsoon season, which runs from June to October. The distribution of rainfall appears to vary widely, according to data. Rainfall is quite severe (i.e., more than 4000 mm/year) in the extreme eastern regions of the country (i.e., Assam, Tripura, Meghalya, West Bengal, etc.). (Khare & Varade, 2018). Except for the totally enclosed portions of the Quaternary aquife, groundwater is heavily impacted by surface water systems. All waterbodies present in the research region, including lakes, streams, canals, and drains, are included in the surface water system. Groundwater is significantly impacted by evaporation and evapotranspiration, particularly in areas that are located in the dry zone. With a low value observed in El Mansoura (44 mm/year) and a high rate in Cairo (142 mm/year), evaporation rates increase toward the north and east.(Eltarabily & Negm, 2019)

Groundwater Scenario

In India, groundwater evaluation is done using a watershed system, where a watershed is a hydrological unit with a single outflow and an average area of 200–300 km2. Table 1 displays the groundwater status by State in India with regard to groundwater availability, usage, and classification of assessment units (watershed). Country's annual groundwater recharge is 433.02 bcm, its current total Annual Replenishable is 100 bcm, and is now on stage 58 of development.(Khare & Varade, 2018). Due to a lack of any price system and strong control, inefficient groundwater use, indiscriminate groundwater extraction, and land-based waste disposal persisted. The highly technical understanding of the aquifer systems is of very little utility for practical management purposes due to the limited amount of research on groundwater consumption in a socioeconomic context.(Venu, 2007).

Groundwater Management Techniques

- Scientific Groundwater Development
  Understanding the local groundwater availability is essential for the scientific development of groundwater.
- Artificial Groundwater Recharge
  Enhancing the existing groundwater supplies through rainwater gathering and artificial recharge is another successful technique.
- Groundwater Development Regulation
  Regulating groundwater development in key locations is one of the key tactics for the sustainable management of groundwater.
- Achieving correct priority of water resource distribution while preserving water tables and agricultural output is the main problem. (Venu, 2007)

References

1. Alley, W. M., Reilly, T. E., & Franke, O. Lehn. (1999). *Sustainability of ground-water resources*. U.S. Dept. of the Interior, U.S. Geological Survey.
2. Castilla-Rho, J., Rojas RodrigoRojas, csiroau R., Andersen, csiroau M., Holley, unsweduau C., Mariethoz, unsweduau G., Land, C., & Carlos Castilla-Rho, J. (n.d.). *Sustainable groundwater management: How long and what will it take? Contact Details (corresponding author)*.
3. Eltarabily, M. G. A., & Negm, A. M. (2019). Groundwater management for sustainable development east of the nile delta aquifer. In *Handbook of Environmental Chemistry* (Vol. 73, pp. 687–708). Springer Verlag. https://doi.org/10.1007/698_2017_102
4. Gupta, A. das, & Onta, P. R. (1997). Aménagement durable des ressources en eaux souterraines. *Hydrological Sciences Journal*, *42*(4), 565–582. https://doi.org/10.1080/02626669709492054
5. Hiscock, K. M., Rivett, M. O., & Davison, & R. M. (n.d.). *Sustainable groundwater development*. https://www.lyellcollection.org
6. Khare, Y. D., & Varade, A. M. (2018). Approach to Groundwater Management towards Sustainable Development in India. *Acque Sotterranee - Italian Journal of Groundwater*, *7*(1), 29–36. https://doi.org/10.7343/as-2018-308

7. Subba Rao, N., Srihari, C., Deepthi Spandana, B., Sravanthi, M., Kamalesh, T., & Abraham Jayadeep, V. (2019). Comprehensive understanding of groundwater quality and hydrogeochemistry for the sustainable development of suburban area of Visakhapatnam, Andhra Pradesh, India. *Human and Ecological Risk Assessment*, *25*(1–2), 52–80. https://doi.org/10.1080/10807039.2019.1571403
8. Venu, S. (2007). *Munich Personal RePEc Archive Ground Water Management: Need for Sustainable Approach*.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

"Crop Combination Regions in Solapur District: A Regional Approach towards Suitability of Crops in Study Area"

Dr. Ganesh L Jadhav
Associate Professor, Dept. of Geography, Sambhaji College (Arts & Commerce), Murud. Dist. Latur
Corresponding Author- **Dr. Ganesh L Jadhav**
Email id: jadhav.ganesh6580@gmail.com
DOI- 10.5281/zenodo.7302648

Abstract

An agricultural region is one of the important aspects of the view of an agricultural geographer. It is a device for selection and investing regional grouping of complex agricultural phenomena. Different techniques have been applied for agricultural regionalization. Crop combination is one of the important techniques used to delineate the agricultural regions. It provides a good basis for agricultural regionalization. Extensive research is going on to explore and apply methods of crop combination. Rafiulla's Maximum Positive Deviation Method has an advantage over all other methods of crop combination. This method gives such an idea about crop associations that are representative of the primary crop, further crop combinations are conformity with the soil and rainfall. Therefore this article is an attempt to delineate the crop combination regions in the Solapur district for suitability of crops during 1993-96 to 2017-20 by using the maximum positive deviation method introduced by Rafiullah (1956). The entire study is based on secondary data sources which are collected from government publications. Tehsil is used as the areal unit for investigation. Data related to the area under major crops have been taken at the tehsil level for study. *The study reveals that changes in crop combination from two crops to the monoculture are found in seven tehsils of Solapur district during 1993-96 to 2017-20. Out of these five tehsils show, Jowar and two tehsils show sugarcane as a monoculture crop. Four tehsils remain the same as two crop combination regions. In Karmala and North Solapur, Sugarcane is entered with Jowar instead of Safflower and Sunflower respectively due to development in irrigation facilities. No changes in crop combinations regions occurred in Sangola and Mangalvedha tehsils as they are away from the irrigation facilities.*

Keywords: *Region, Agricultural region, Crop Combinations, Maximum Positive Deviation Method, Monoculture, Two crop combinations.*

Introduction

The region is one of the basic concepts of geography. A widely accepted definition of the region is 'an area that is differentiated from other areas according to the specified criteria. In other words 'a region' is a differentiated segment of the earth's surface (Whittlesey D, 1936). Among the different types of regions, the agricultural region is very important to the point of an agricultural geographer. Any segment of the earth's surface possessing a distinctive form of agriculture is an agricultural region (Singh J and Dhillon S, 1987). The agriculture region is a device for the selection and investigation of the regional grouping of the complex agricultural phenomena. The study of crop combination regions constitutes an important aspect of agricultural geography as it provides a good basis for agricultural regionalization (Husain M, 1996). It is fruitful in many ways such as understanding the cropping pattern and crop concentration, in a given area. The crop combinations give an idea about the agricultural typology and agricultural income of a region. Such a region provides a real significance and strength of individual crops, to advocate suitable devices for planning improvements in the underdeveloped regions. The principle of combination analysis thus promises to be an important tool for statistical studies in various fields of geography, particularly agricultural geography. The crop combination regions thus delineated would emphasize the regional framework of agricultural activities and specialization of crops in the area. The pattern of crop combination regions that will emerge from the delineated might also serve a meaningful purpose in balanced regional agricultural planning. So an attempt is made here to analyse crop combination regions of Solapur district for suitability crops in the study area.

Different approaches have been applied for the delineation of crop combinations. The crop combination analysis was originally introduced in geographical research by Weaver (1954) in his outstanding study of crop combinations in the Middle West of the United States of America. A simple scale of gradation was derived by Johnson (1958) based on the scale of the level of importance for each crop in East Pakistan. Rafiullah (1956) used the maximum positive deviation method for the functional classification of towns. The crop combination regions demarcated by Weaver's method have included all the crops in the combinations that have occupied about 1 per cent of the total cropped area, hence the combination becomes overgeneralized and did not show any difference from the gradation method. Therefore, this method fails to give precise crop combinations of the region under investigation. Moreover, these regions are improper. Rafiullah's maximum positive deviation method has an advantage over Weaver's method. Therefore the present article is an attempt to delineate the crop combination regions by using the maximum positive deviation method as introduced by Rafiullah.

Study Area:

Solapur is one of the major agrarian districts of Maharashtra state in India. It is also known as the *'basket of Jowar'* of the Maharashtra state due to its suitable soil conditions and favorable climate for Jowar cultivation. The district is located between 17^0 10' North to 18^0 32' North latitudes and 74^0 42' East to 76^0 15' East longitudes with a geographical area of 14895 sq. km. As per the 2011 Census, the population of the district is 43.18 lakh with a population density of 290 persons per sq. km. It consists of about 4.84 per cent geographical area of the state and 3.84 per cent population of the state. It ranks 4th in terms of area and 7th largest populous district in Maharashtra. It comprises eleven tehsils and Solapur city is the district headquarter. Climatically, the district has a tropical monsoon climate with hot and dry summer, and cold in the winter season. The maximum and minimum temperature is recorded between 41^0 Celsius and 16^0 Celsius respectively throughout the year. In the rainy season, rainfall is scanty, uncertain, and unpredictable, in the district and the average annual rainfall of the district is 489 mm. Agro-climatically the entire district falls under the rain shadow region. The soil of the district is medium to deep black and moderate to shallow soil. In 2019-20 the total cropped area of the district was 997888 hectares out of these 266954 hectares (26.75%) area were irrigated area. The rest of the agricultural area of the district (73.25%) falls under rainfed areas. Jowar is the dominant cereal crop cultivated with bajra, maize, wheat, soybean, gram, and other oilseeds like safflower, sunflower, groundnut, etc., and fruits & vegetables are also grown in the district. Sugarcane and Soybean are important commercial crops raised in the district. The district suffers from several problems viz., scanty & uncertain rainfall, drought, poverty, unemployment, and diseases including safe drinking water.

Objectives:-

The main objective of this article is to delineate the crop combination regions in the Solapur district during 1993- 96 and 2017-20 and to emphasize the regional framework for the suitability of crops in the study area.

Materials and Methods:

This study is entirely based on secondary data sources which have been obtained from government publications i.e. District Socio-economic review & Statistical abstract of Solapur district, district gazetteer of Solapur through the internet, For the measurement of data at the tehsil level, the average data for the agricultural year 1993-96 and 2017-20 have been taken into consideration. To make allowance for fluctuation in the area due to natural and human factors, three-year average data at tehsil level has been computed All the crops which account for more than 5 per cent of total cropped area in the areal unit have been selected. Tehsil is used as a unit of investigation. All eleven tehsils of the Solapur district are identified for the study.

To meet the objective of the present study, Rafiullah's Maximum Positive Deviation Method is used for the delimitation of crop combination regions in the Solapur district. Rafiullah's Maximum Positive Deviation Method gives such an idea about crop combinations that are representative of the primary crop further crop combination are conformity with the soil and rainfall distribution. Therefore maximum positive deviation method has an advantage over Weaver's method (Hussain M., 1996). Rafiullah's formula is expressed as follows.

$$d = \frac{\sum D^2p - D^2n}{N2}$$

Where d is equal to deviation, Dp is a positive difference and Dp is the negative difference from the median value of the theoretical curve value of the combination, and N is the number of functions i.e. crops in the combination of the areal unit.

Based on this the result of the crop combination regions in the Solapur district by Rafiullah's method is examined and mapped. Finally, the result and discussion with conclusion have been made.

Result and Discussion:

Crop Combination Analysis:

The study of crop combination reflects the variable position of individual crops among themselves. Such studies provide an adequate understanding of individual crop geography, an integrated reality that demands definition, and distributional analysis of crop combination and the more complex structure of valid agricultural regions (Rameshwar Thakur, 2007). The cropping pattern and crop concentration of any region are determined by the soil fertility, its texture and structure, and the temperature and moisture factor of climate. It is also determined by the socio-economic components and modern inputs. Based on empirical experience, farmers cultivate different crops not only in a year but also from one year to another.

So an attempt is made here to delineate crop combination regions in the Solapur district with a regional approach toward the suitability of crops in the study area.

Table no.1: Solapur district (Maharashtra): Crop Combination during 1993-96 by Rafiullaha's Maximum Positive Deviation Method.

Sr.No.	Tahsil	Two Crop Combination Region
1	N.Solapur	Jowar + Sunflower
2	Barshi	Jowar + Tur
3	Akkalkot	Jowar + Tur
4	S.Solapur	Jowar + Sunflower
5	Mohol	Jowar + Sunflower
6	Mangalvedha	Jowar + Bajara
7	Pandharpur	Jowar + Sugarcane
8	Sangola	Jowar + Bajara
9	Malshiras	Jowar + Sugarcane
10	Karmala	Jowar + Safflower

11	Madha	Jowar + Safflower
	District	Jowar + Sugarcane

Source: Computed by researcher on the basis of secondary data.

Crop Combination Regions during 1993-96:-

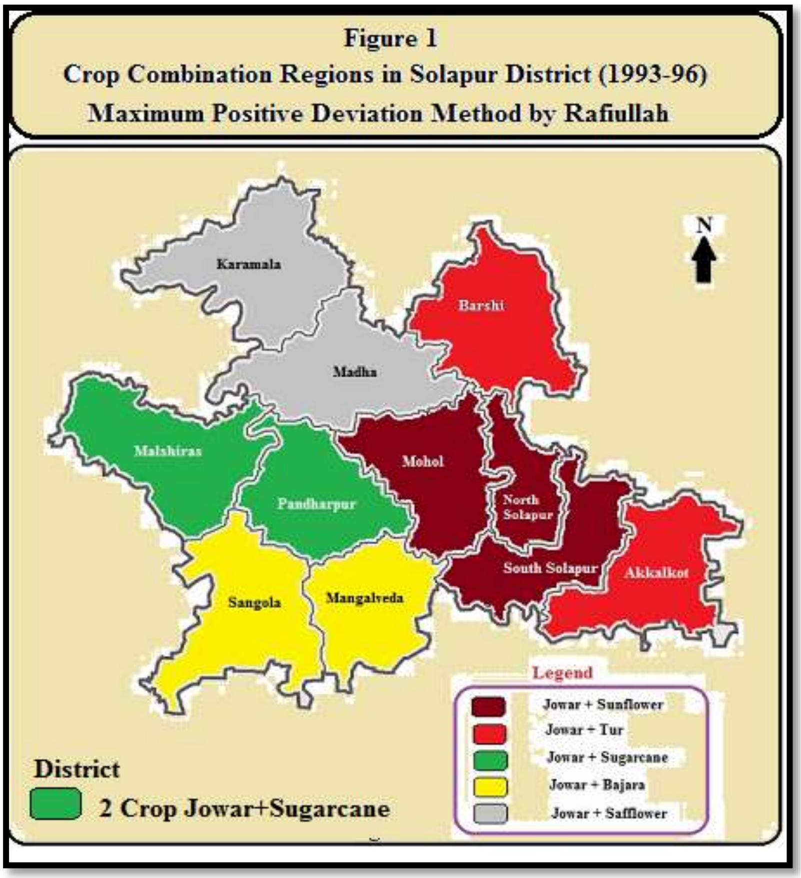


Table no. 1 and figure 1 indicate that district as a whole has a single most region of two crop combinations during 1993-96. All the tehsil of Solapur district shows two crop combination regions. Jowar with Sunflower, Tur, Bajara Sugarcane, and Safflower were combined in different associations to form two crop combination regions. Jowar, owing to favorable soil and agro-climatic conditions, ranks first in all the tehsils of the Solapur district. So the Solapur district is known as *the 'basket of Jowar'* in Maharashtra state. *'Shalu (Jowar)'* of Barshi is famous for its taste in *Roti* not only in the state of Maharashtra but also in India.

Table no. 1 and figure 1 also indicate that district is divided into 5 regions of two crop combinations during 1993-96. Jowar with Sunflower is the single most important two-crop combination which spreads over the 3 tehsils of the study region i.e. North Solapur, South Solapur, and Mohol tehsils (Figure 1). Farmers grow Sunflower with Jowar that Sunflower as a cash crop.

Jowar and Tur are important two crop combination which is found in the North-eastern and Southeastern part of the study region during 1993-96. The tehsil of Barshi and Akkalkot practice this crop combination. *Tur Dal'* of Barshi is also famous all over the country. Tur is cultivated with Jowar due to favorable soil and agro-climatic condition.

During 1993-96, two crop combination regions i.e. Jowar and Sugarcane were found in Pandharpur and Malshiras tehsils. Sugarcane is cultivated with Jowar due to development in irrigation facilities. Both tehsils benefitted from Ujani Major Project and Veer Dam. Canal irrigation facilities and co-operative sugar factories are mostly developed in these 2 tehsils of Solapur district. Two crop combination of Jowar and Bajra was practiced in Sangola and Mangalvedha tehsil during 1993-96, as both tehsils lie in highly risky drought-prone areas of Solapur district. Jowar and Bajra crops are drought registrant crops so farmers prefer and practice these two crop combinations.

Two crop combination of Jowar and Safflower was observed in the tehsils of Karmala and Madha due to the suitability of soils and climate of the region during 1993-96. Both tehsils receive very scanty and uncertain rainfall. Retreating monsoon gives a little amount of rainfall to this region. So farmers practiced these two crops in rabbi season which was suitable for the region.

Changes in Crop Combination Regions during 2017-20

Monoculture Regions

In the investigation period, changes have occurred in crop combination regions during 2017-20 with compare to 1993-96. Table no. 2 and figure 2 state that the district as a whole has Monoculture or single crop dominance i.e. Jowar. Monoculture or single crop dominance is found in 7 out of 11 tehsils of the Solapur district. Jowar has emerged as the dominant crop in Barshi, Akkalkot, South Solapur, North Solapur, and Madha tehsils (Fig.2). Apart from that Sugarcane has emerged as the single crop dominance in Pandharpur and Malshiras tehsils of the study region due to the availability of irrigation facilities (Table no. 2 & Fig.2).

Table no.2: Solapur district (Maharashtra): Crop Combination during 2017-20 by Rafiullaha's Maximum Positive Deviation Method.

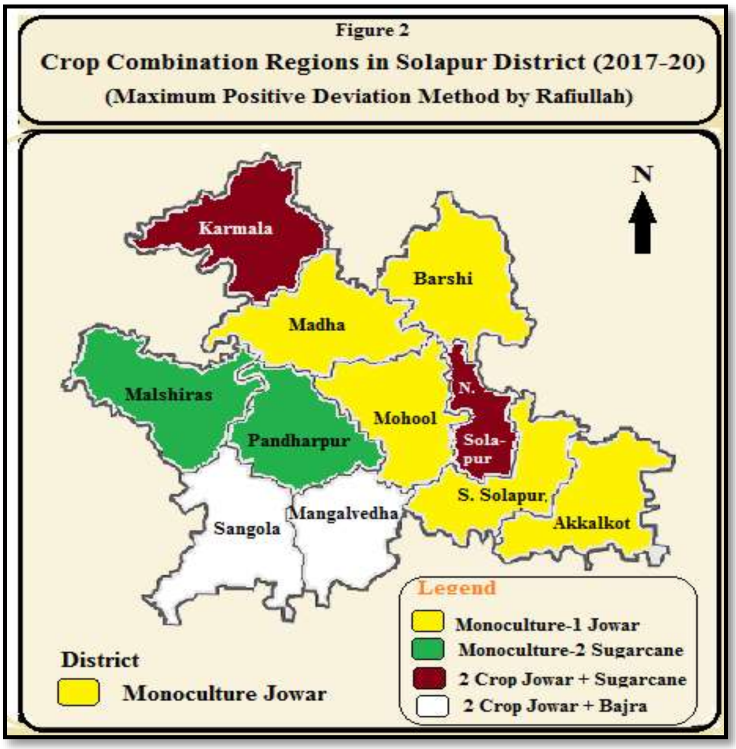
Sr.No.	Tahsil	Monoculture	2 Crop Combination Region
1	N.Solapur	-	Jowar + Sugarcane
2	Barshi	Jowar	-
3	Akkalkot	Jowar	-
4	S.Solapur	Jowar	-
5	Mohol	Jowar	-
6	Mangalvedha	-	Jowar + Bajara
7	Pandharpur	Sugarcane	-
8	Sangola	-	Jowar + Bajara
9	Malshiras	Sugarcane	-
10	Karmala	-	Jowar + Sugarcane
11	Madha	Jowar	-
	District	**Jowar**	-

Source: Computed by researcher on the basis of secondary data.

Two Crop Combination Regions

Two crop combinations are found in the remaining 4 tehsils of the study region during 2017-20. Jowar with Bajara and Sugarcane are combined in different associations to form two crop combinations. Jowar with Bajara is the single most important two-crop combination region in the south-western part of the study region (Table no. 2 Fig.2). Sangola and Mangalvedha tehsils of the study region form a two-crop combination of Jowar and Bajara. As these tehsils lie in highly risky drought-prone areas and away from irrigation facilities.

North Solapur and Karmala tehsils of the study region practice two crop combinations of Jowar and Sugarcane (Table no. 2 & Fig.2). In recent years, irrigation facilities are developed in these two tehsils so that area under sugarcane has increased tremendously.



Dr. Ganesh L Jadhav

Conclusion

As per Rafiullah's Maximum Deviation Method, five regions of two crop combinations are found at the tehsil level in Solapur district in 1993-96. Jowar is cultivated combined with Sunflower, Tur, Bajra, Safflower, and Sugarcane in different associations to form two crop combination regions. Changes in crop combination regions have been found during the period of investigation. The district as a whole has emerged as monoculture or single crop dominance i.e. Jowar cultivation during 2017-20. The soil and rainfall distribution pattern of Barshi, Madha, Mohol, South Solapur, and Akkalkot tehsils is favorable for Jowar cultivation. So monoculture is practiced in these five tehsils. Malshiras and Pandharpur tehsils show a Monoculture. Sugarcane has emerged as a single dominant crop. These two tehsils of the Solapur district have adequate irrigation facilities, so a sugar belt is developed in these areas. The remaining four tehsils of Solapur district show two crop combination regions in 2017-20. Jowar is cultivated with Bajra and Sugarcane in different associations to form two crop combination regions. In Karmala and North Solapur, farmers prefer Jowar with Sugarcane cultivation because irrigation facilities are developed in these areas in recent years. Southern tehsils of the district i.e. Sangola and Mangalvedha lie in high risky drought-prone areas and away from irrigation facilities. So Jowar is cultivated with Bajra in these tehsils as both crops are drought registrant crops. Overall analysis reveals that changes in crop combination from two crops to monoculture of Jowar are found in five tehsils of Solapur district in the last 23 years. Four tehsils remain the same as two crop combination regions. In Karmala and North Solapur, Sugarcane is entered with Jowar instead of Safflower and Sunflower respectively.

References:

1. Husain M (1996): "Systematic Agricultural Geography", Rawat Publications, Jaipur. Pp- 229-241.
2. Rameshwar Thakur (2007): "Crop Combination Regions in South Bihar Plain". Fifty Years of Indian Agriculture, book edited by Ali Mohammad et.al, Concept Publishing Company, New Delhi-110 059 pp-310-312
3. Singh J and Dhillon S (1987), "Agricultural Geography", McGraw Hill Publishing Company Limited, New Delhi pp-210, 225
4. Whittlesey D (1936), 'Major Agricultural Regions of the Earth' In Annals of the Association of American Geographer, Vol.26. P-101.

Websites:

1. https://www.findeasy.in/districts-in-maharashtra/
2. www.http://agrifarming.in/soybean-farming-information
3. https://solapur.gov.in/en/geography/#:~:text=The%20soil%20is%20medium%20to,uncertain%20rainfall%20marks%20this%20zone

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

SCREENING OF AEROBIC CELLULOLYTIC BACTERIA FROM THE GUT OF TERMITE FOR CELLULASE PRODUCTION

Prof. Surekha Bharambe[1] Dr.Kunvar Gyanendra Kumar[2]
[1]Bhagwat University Ajmer.
Isolation of DNA from Termite Gut.
Corresponding Author- **Prof. Surekha Bharambe**
Email id: surekhampatil08@gmail.com
DOI- 10.5281/zenodo.7302655

Abstract-
It is successfully applied to PCR and restriction analysis, indicating removal of common inhibitors. DNA isolated by the CTAB-PVP method can be used in most molecular biology.

Keyword - DNA isolation,PCR machine Termite,phenol, restriction enzyme 1,2,3 ,DNA Ligase

Introduction –

Phenolics is used as the major pollutants in DNA preparations from plants and animals with the resterction enyme we can cut the DNA of termite. Phenolics, as commanding oxidizing agents, can reduce the yield and purity of DNA by necessary covalently with the extracted DNA, thereby inhibiting further enzymatic modifications of the DNA such as restriction endonuclease digestion and polymerase chain reaction (PCR)]. Higher considerations of cetyltrimethyl ammonium bromide (CTAB) and the addition of antioxidants such as polyvinyl-pyrrolidone (PVP) and ß-mercaptoethanol to the extraction buffer can help to remove phenolics in DNA preparations from plants and animal.. However, PVP usually stands not used in the methods reported for DNA isolation from termite gut .

Conclusion-

DNA Isolation For DNA extraction, we used termite larvae at the last of the borer beetle Oncideres albomarginata chamela, because this life stage presents the highest concentration of phenolics and other plant contaminants and animal . DNA was isolated using CTAB and a CTAB-PVP modified method. A mortar and pestle with the addition of liquid nitrogen were used for the grinding of fresh sample-tissue (500 mg) into fine powder. The ground tissue was transferred to a 1.5 mL tube and homogenized in 1 mL of prewarmed (80 °C) extraction buffer (40 mM ethylene diamide tetraacetic acid (EDTA) pH 8.0, 100 mM Tris-HCl pH 7.5, 1.4 M NaCl, 2% w/v CTAB, 4% w/v PVP-40). ß-mercaptoethanol (2% v/v) was added to the extraction buffer just prior to use. Samples were incubated at 90 °C for 50 min with occasional mixing, and cooled to room temperature. Two microliters of RNase (1 mg/mL) were added to the solution and incubated at 57 °C for 25 min. One volume of chloroform:isoamyl alcohol (24:10) was added, and the sample was emulsified by gentle inversion and centrifuged for 15 min at 15,000 rpm. The top aqueous phase was transferred to a clean tube. A second chloroform:isoamyl extraction was completed when the aqueous phase was cloudy due to the presence of PVP. Two volumes of cold (−20 °C) 95% ethanol were added to the sample, mixed well and incubated at −20 °C until DNA strands were visible. DNA strands were improved using a sterile Pasteur pipette and washed with 70% ethanol, centrifuged for 5 min at 13000 rpm, dried and finally eluted in sterile analytic grade H_2O. Comparison of the Efficiency for the DNA Isolation Methods Electrophoresis was conducted using 10% TAE agarose gels. Gels were stained with ethidium bromide, and visualized under UV light. The quality of DNA isolated by the CTAB outmoded method and the CTAB-PVP modified method was assessed by measuring the A260/280 absorbance ratio using a spectrophotometer . A fragment of ~650 base pairs of the COI gene (corresponding to the DNA universal barcoding region) was amplified from the freshly isolated DNA and DNA that had been stored for five months. The forward primer LCO (5'-GGTCAACAAATCGG-3') and reverse primer HCO (5'-TAAACTTCAGGGATCA-3') were used for this purpose. PCR amplifications were carried out using a ramping-down of the annealing temperature (‘touchdown’; −2 °C per every five cycles) program. PCR amplification was started using the following settings: 94 °C/30 s (denaturing), 50 °C/40 s (base annealing temperature of first four cycles) and 72 °C/1 min (extension), and was continued until the base annealing temperature reached the final condition of 54 °C. Under the final conditions, the amplification was continued for 30 cycles. Additionally, the quality of the DNA isolated by both methods was evaluated by restriction analysis, for which 20 µg of DNA isolated by each method was incubated overnight with 10 U XbaI, NotI and EcoRI, and analyzed on 1% agarose gels. Evaluation of the CTAB-PVP Modified Method in Other Xylophagous Species To test if the modified method is applicable to other xylophagous insects, we isolated DNA from larvae of three additional cerambycid xylophagous beetles, Ataxia alpha, Estoloides chamelae and Lissonotus flavocinctus using the CTAB [29] and CTAB-PVP modified method as previously described. DNA isolated from each species was stored at −20 °C for three months. After the storage period, DNA was digested with EcoRI, and used as template for PCR amplification as previously described.

References

1. Dickman A studies on intenstinal for of termites with special reference to their ability to digest cellulose Biological Bulleting of the Marine Biological Laboratery woods Hole 61.85-92
2. Falk Warnecke et al. "Motupenomic & Functional analysis of hind microflora of a wood feeding higher termite" Nature November 2007 450.560-565
3. Genus cellulomonas In Bergey's manual of Systematic Bacteriology,vol2. pp 1325-1329
4. Edited byPHA sneath, N.S. Mair, M.E.sharpe & J.G.Holt Baltimore Williams &ampilkins
5. Hungate R.E. Quantitative analysis on the cellulose fermentation annals of the Entomological society of America. 36,366-387
6. International Journal of systematic & Evolutionary Microbiology(2004),54,533-536 "Cellulomonas Xylanilytica sp.nov.,a cellulolytic & xylanolytic bacterium isolated from a decayed elm tree.
7. Jayraman "Laboratory manual in biochemistry" VihEdition, International publisher 2003.
8. Journal of applied microbiology 2002 92,32-40 Aerobic & facultatively anaerobic cellulolytic bacteria from the gut of the termite zootermopsis angusticollis.
9. K.R.Aneja "Experiments in microbiology plant pathology & Biotechnology" Ivth edition. 245-275, 276-294.
10. Nature Journal 22 November.
11. https://link.springer.com/article/10.1186/s13568-019-0830-5
12. Funke G, Frodl R, Sommer H. 2004. First comprehensively documented case of Paracoccus yeei infection in a human. J Clin Microbiol 42:3366e8. http://dx.doi.org/10.1128/JCM.42.7.3366-3388.2004.
13. Gupta P, Samant T, Sahu A. 2012. Isolation of cellulose-degrading bacteria and determination of their cellulolytic potential. Int J Microbiol 2012:1e5.
14. http://dx.doi.org/10.1155/2012/578925.

15. Logan NA, Berkeley RCW. 1984. Identification of Bacillus strain using the API system.
16. J Gen Microbiol 130:1871e82.
17. Kalshoven LGE. 1956. Observation on Macrotermes gilvus Holmgr. In Java-3 accu-mulations of finely cut vegetable mater in the nests. Insect Soc 3(3):455e61.
18. Meyer VW, Braack LEO, Biggs HC, Eberohn C. 1999. Distribution and density of termite mounds in the Northern Kruger National Park, with specific referenceto those constructedby Macrotermes Holmgren (Isoptera: Terminidae). AfrEntomol 7(1):123e30.
19. Morana A, Maurelli L, Ionata E, La Cara F, Rossi M. 2011. Cellulases from fungi and bacteria and their biotechnological applications. In: Golan AE (Ed.). Cellulase:Types and Action,Mechanisms and Uses. New York (US): Nova Science Publisher,Inc.. pp. 1e79.
20. Nakashima K, Watanabe H, Saitoh H, Tokuda G, Azuma J-I. 2002. Dual cellulose digesting system of the wood-feeding termite, Coptotermes formosanus Shiraki.
21. Insect Biochem Mol Biol 32:777e84.Ohkuma M, Brune A. 2011. Diversity, structure, and evolution of the termite gutmicrobial community. In: Bignell DE, Roisin Y, Lo N (Eds.). Biology of Termites: AModerns Synthesis. New York (US): Springer Dordcreht Heidelberg. pp. 1e26.
22. http://dx.doi.org/10.1007/978-90-481-3977-4_15.
23. Roonwal ML, Chhotani OB. 1961. The termite Macrotermes gilvus malayanus (Haviland) (Termitidae) in Burma. Proc Nat Inst Sci India 27:308e16.Rosengaus RB, Traniello JFA, Bulmer MS. 2011. Ecology, behavior and evolution ofdisease resistance in termites. In: Bignell DE,
24. Roisin Y, Lo N (Eds.). Biology ofTermites: A Modern Synthesis. Berlin: SpringerVerlag. pp. 165e92.
25. Shinzato N, Muramatsu M, Matsui T, Watanabe Y. 2005. Molecular phylogenetic diversity of the bacterial community in the gut of termite Coptotermes for-mosanus. Biosci Biotechnol Biochem 96(6):1145e55.
26. Schmitt-Wagner D, Friedrich MW, Wagner B, Brune A. 2003. Phylogenetic diversity,abundance, and axial distribution of bacteria in the intestinal tract of two soil-feeding termites (Cubitermes spp.). App Environ Microbiol 69(10):6007e17.http://dx.doi.org/10.1128/AEM.69.10.6007-6017.2003.
27. Tamura K, Peterson D, Peterson N, Stecher G, Nei M, Kumar S. 2011. MEGA5: molecular evolutionary genetics analysis using maximum likelihood, evolutionarydistance, andmaximum parsimony methods. Mol Biol Evol 10:2731e9. http://dx.doi.org/10.1093/molbev/msr121.
28. Warnecke F, et al. 2007. Metagenomic and functional analysis of hindgut microbiota of awood-feeding higher termite. Nature 450:560e5. http://dx.doi.org/10.1038/nature06269.
29. Weisburg WG, Barns SM, Pelletier DA, Lane DJ. 1991. 16S ribosomal DNA amplifi- cation forphylogenetic study. J Bacteriol 173:697e703.
30. Wenzel M, Sch€onig M, Berchtold M, K€ampfer P, K€onig H. 2002. Aerobic and facul-tatively anaerobic cellulolytic bacteria from the gut of termite Zootermopsis angusticollis. J App Microbiol 92:32e40.
31. Yamada A, Inoue T, Wiwatwitaya D, Ohkuma O. 2007. A new concept of feeding groupcomposition of termites (Isoptera) in tropical ecosystems: carbon sourcecompetitions among fungus-growing termites, soil-feeding termites, litter-layermicrobes, and fire.Sociobiology 50:135e53.

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

"A COMPARATIVE STUDY OF DEMONETIZATION IN INDIA IN 1978 AND 2016 "

Vaghela Neela S.
Ph. D. scholar, Economics, Bhakta Kavi Narsinh Mehta University, Junagadh, District-Junagadh, (Gujarat)
Corresponding Author- **Vaghela Neela S.**
Email id: neelavaghela69@gmail.com
DOI- 10.5281/zenodo.7302679

Abstruct

In the presented theme paper, a comparative study of demonetisation in India in 1978 and 2016 was conducted.Through research, the researcher got information about demonetisation in India in 1978 and 2016. By comparing the information about demonetization in India in 1978 and 2016, it was found that the objectives of demonetization in 1978 and 2016 are different. The transaction mode of the country's economy has been seen to be different. A different situation has been seen in terms of the progress of the country's economy. Different effects of demonetisation in India in 1978 and 2016 have At that time the situation in the economy is not the same. Changes also come with time. also been seen. So it can be said that when demonetisation is implemented

Key Words:- Year 1978, 2016, Demonetisation, Comparative Study, objects, progress

Introduction

Ever since the introduction of paper notes into the economy of India, currency notes have been introduced and discontinued several times by the Government of India. When demonetisation was implemented, a different situation was seen in the Indian economy. Different Indian governments had different motives for implementing demonetisation. By studying the comparison of demonetisation in India in 1978 and 2016, why demonetisation is implemented and how the economic situation of the country becomes due to the implementation of demonetisation in the country's economy. It is studied. The details of which are discussed below.

Demonetization:-

When demonetization is required in a country, the currency of that country is stopped by the government. It is called demonetisation.

Demonetization in India in 1978:-

After independence not only 500 and 1000 notes but also 5000 and 10,000 notes were introduced by different governments. According to a World Economic Survey conducted in 1064, India was economically richer and stronger than Germany. But due to the large amount of currency notes and the injustice of the government, not only the corruption in India but also the economic condition of the country became very weak. Germany became economically prosperous and strong against India. In 1978 Morarji Desai's government came. Morarji Desai's Govt. Immediately took a big decision. 500, 5000 and 10,000 notes were stopped from circulation. Due to this, the country's economy once became chaotic in the early days. But this decision proved to be important for the progress of the country. After that, many governments came and went in the country but no such important decisions were taken for the progress of the country, to keep the economy of the country healthy.

Demonetization in India in 2016:-

In 2000, the Indian government re-introduced 500 and 1000 notes. Over time black money, terror funding started increasing in the country. Therefore, with the aim of removing black money, terror funding from the country and creating a cashless economy, demonetisation was implemented by the RBI in the entire country on November 8, 2016 by the order of the honorable Prime Minister Shri Narendrabhai Modi. In it, 500 and 1000 notes were withdrawn from circulation and replaced by 500 notes and a new 2000 note was put into circulation. Despite having more amount in his own account, he could get cash only within the limit of 4000/-. Due to this, there was a shortage of cash in the country's economy. It had an impact on several economic sectors of the country.

A comparative study of demonetisation in 1978 and 2016

Desai government's purpose of demonetisation in 1978 was to curb corruption in the country, injustice of the government and to advance the progress of the country. While the purpose of demonetisation in 2016 was to remove black money and terror funding from the country and make all financial transactions a cashless economy.

At the time of demonetisation in 1978, the currency of 500, 1000, 5000, 10,000 notes was stopped from the common people of the country, while at the time of demonetisation in 2016, 500 and 1000 notes were withdrawn from circulation and replaced by 500 notes with a new form and a new 2000 note. The note was put into circulation. At the time of demonetisation in 1978, only 100 notes were in circulation, while in 2016, new 2000 notes were brought into circulation. At the time of demonetisation in 1978, preference was given to large industries in the Indian economy, while at the time of demonetisation in 2016, preference was given to small industries. At the time of demonetization in 1978, the stoppage of currency of 500, 1000, 5000, 10,000 large notes had a big impact on the rich businessmen, while at the time of demonetization in 2016, every citizen of the country was more affected by the small traders. At the time of demonetisation in 1978, there was a recession in the Indian economy. While the Indian economy was in recession at the time of demonetisation in 2016.

At the time of demonetization in 1978, the Indian economy was not gaining momentum due to recession, while at the time of demonetization in 2016, the momentum of the Indian economy was stopped due to shortage of cash. At the time of demonetisation in 1978, the Indian economy did not exchange small amounts quickly. At the time of demonetisation in 2016, the Indian economy used to exchange small amounts of money quickly. Desai government's purpose of demonetisation in 1978 was to advance the progress of the country. When the demonetisation in 2016, the purpose of the Modi government was to make all financial transactions a cashless economy. Internet did not exist in India at the time of demonetisation in 1978. At the time of demonetisation in 2016, the cashless economy started with the advent of internet across the country.

Cunclusion

By studying the comparison of demonetization in India in 1978 and 2016 in the above research paper, it can be said that demonetization in India in 1978 and 2016 is different in terms of purpose, currency amount notes, effects of demonetization, modes of economic transactions. So it can be said that when demonetisation is implemented, the situation in the economy is not the same. Changes also come with time.

Reference

1. https://youtu.be/6ouAAMjV8rU
2. https://youtu.be/xqJHXXvmbaE
3. https://youtu.be/U5u-DDI_BIg

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.3 No.1 Sept – Oct 2022

SHASHI DESHPANDE'S *THAT LONG SILENCE*: A FEMINIST READING

Dr. I.M.Khairdi
Assistant Professor, Department of English, C.B.Khedgi College, Akkalkot
Dist. Solapur Maharashtra
Corresponding Author- **Dr. I.M.Khairdi**
Email id: iftekharkhairdi@gmail.com
DOI- 10.5281/zenodo.7302673

Abstract

Shashi Deshpande deals with problems confronted by educated, employed women torn between tradition and modernity. The consciousness of the changing times on the one hand and the socio-cultural mores and values that have bestowed on them a definite role on the other have led to the fragmentation of the psyche of the contemporary Indian woman. She tries to express through her female protagonists the voice of the emerging class of women who protested against the marginalization and oppression of women. Deshpande being a bold and committed writer of women's because has always raised a voice against the various forms of exploitation, humiliation, and discrimination against women. She has used silence as a metaphor in painting the patriarchal Indian society. Silence is a patriarchal weapon given to women and they have been clinging to it, unaware of the fact that silence would kill them one day so silently that they would succumb to death. The married lives of many of her heroines involve a constant struggle to find freedom from their shackled lives.

Introduction

Shashi Deshpande was born in Dharwad, in Karnataka, India, in the year 1938. She is the daughter of eminent Kannada dramatist and Sanskrit scholar Adya Rangachar, well-known as Sriranga. Deshpande received her university education, a graduate degree, in Bombay. She then moved to Bangalore where she obtained a degree in Law. Subsequently, she took a course in journalism and for a brief period worked for a magazine. She is married to a medico and lives in Bangalore. Shashi Deshpande is a widely read person, though she has never identified herself with any particular group of writers, whether of India or abroad. The novels of Shashi Deshpande bring out the fact that the women in India have begun to move towards self-perception, self expression, and self determination within the family bindings. The western concepts of equality, individual rights, and personal choice would challenge and dismantle the Indian family structure, which is based on sharing and accommodation.

Deshpande deals with problems confronted by educated, employed women torn between tradition and modernity. The consciousness of the changing times on the one hand and the socio cultural mores and values that have bestowed on them a definite role on the other have led to the fragmentation of the psyche of the contemporary Indian woman. Unlike her counterpart of the past, the woman of today is intensely aware of her familial and societal position: Caught between tradition and modernity they need to redefine themselves and their place in the family and society. The problems confronted by them do not entirely gender specific, yet circumstances that trap most of them derive from roles assigned to women in the traditional Indian milieu. The works of Shashi Deshpande has become famous at the national and international level. There are thirteen novels on her credit, out of which four are for children. Her contribution also includes five short story collections, one screenplay Drishtee (1990), and a collection of essays.

***That Long Silence*: A Feminist Reading**

Shashi Deshpande's That Long Silence (1988) is her fifth novel which derives its title from a speech made by Elizabeth Robins to the WWSL in 1907. A part of the speech forms the epigraph for the novel. It says, “If I were a man and cared to know the world I lived in, I almost think it would make me a shade uneasy, the weight of that long silence” (1). The base of the novel lies in the phrase 'that long silence' that comes in the third line itself. The phrase represents the silence of the protagonist Jaya Kulkarni. She is basically a passive woman who maintains silence throughout her life as a girl and as a woman. In the present novel, Deshpande sketches the mental conflicts, restlessness, personal screams, and revolt in the mind of a modern woman through the character portrayal of Jaya. Jaya developed her unique individuality with the support of her indulgent father. He had visualized his daughter as a winner and named her 'Jaya', which means winner. He had a high opinion of his daughter and dreamt of Jaya going to Oxford for postgraduate studies. Her father did not want her to be like other girls in the community, but different from others.

Shashi Deshpande tries to express through her female protagonists the voice of the emerging class of women who protested against the marginalization and oppression of women. Deshpande being a bold and committed writer of women’s cause has always raised a voice against the various forms of exploitation, humiliation, and discrimination against women. She has used silence as a metaphor in painting the patriarchal Indian society. Silence is a patriarchal weapon given to women and they have been clinging to it, unaware of the fact that silence would kill them one day so silently that they would succumb to death. The married lives of many of her heroines involve a constant struggle to find freedom from their shackled lives

The entire novel That Long Silence is set in Bombay and the life of the metropolitan city is vividly pictured. Jaya, the protagonist, is married to Mohan who is an engineer. Jaya, a writer by profession, writes stories mostly about girls and women. At the insistence of the editor, she begins to write about herself and her family.

The calmness in Dadar flat triggered Jaya to look back at the events that had already taken place. She herself indulged in morbid retrospection. For seventeen long years of her life, Jaya allowed her family to possess her body and soul. She didn't think anything apart from that, thus she was a dedicated bourgeois woman. All had their personal lives but she gave up hers, she could neither express herself nor achieve anything. Jaya wanted to fit herself into the ideological mould of a traditional housewife though her innate sensitivity revolted against it. Her married life was based on the foundation of compromise and commitment, not on love and mutual understanding.

That Long Silence focuses on the life of an Indian housewife who maintained her silence throughout her life even during hardships. Jaya, a middle class educated housewife undergoes suffering to achieve a new harmony of relationships with herself and her surroundings. Shashi Deshpande opines:

> It is necessary for the woman to live with-in relationships.
> But if the rules are rigidly laid that as a wife or
> as a mother, you do this and no further,
> then one becomes unhappy.
> This is what I've tried to convey in my writing.
> What I don't agree with is the idealization of motherhood
> and the false sentimental note that accompany it. (*That Long Silence* 236)

Jaya, a girl in That Long Silence, is always reprimanded by her grandmother for being very curious and ready willed. These are the qualities that the tradition bound society would not accept. This is unbecoming in a girl." For everything, a question, for everything a retort. What husband can be uncomfortable with that?" (27) The girl's entire life is restricted to her husband's well being. She is forced to understand that the comfort and well being of her husband depends on her. This is the socio-cultural framework in which Jaya lives.

Jaya has imposed silence upon herself because she feels that silence is the only weapon to defend her. Her loneliness is further accentuated as she ponders over the intrinsic isolation of the human condition. Hence she says:

> “I had neither any questions
> nor any retort,

for Mohan now and yet there was no comfort.

So many subjects were barred that

the silence seemed heavy with uneasiness". (*That Long Silence* 27)

During times of difficulties and problems, Mohan blames her and holds her responsible for their present predicaments. She recalls the advice given to her by her aunt Vanithamami and Ramukaka just before her wedding: "Remember, Jaya, she said to me solemnly, "a husband is like a sheltering tree", I ignored her. (LS 32). "Remember, Jaya, the happiness of your husband and home depends entirely on you, (LS 32) and as she was leaving Ambigaon after their wedding, Dada had also advised her." "Be good to Mohan Jaya". (LS 138) But Jaya had ignored the importance of that statement then. She now reflects on the advice:

After so many years, the words came back to me 'A sheltering tree'. Without the tree, you are dangerously unprotected and vulnerable. (LS 32) Jaya now understands the meaning of all those statements. She is compelled to think their words to execute the truths of her own life and other women in her life by unlocking their long silence. As a representative of the Urban middle class educated woman, she is unable to totally conform to the patriarchal structure and be content to follow the footsteps of the mythological role model of Sita.

Jaya and her other female counterparts like Kusum, Manda, and her mother-in-law Vimala in the novel face the same discrimination and suffer from holding secondary status within the family. An apt example is the family tree prepared by Ramukaka, covering a span of two hundred years. It had the names of great grandfathers, uncles, fathers, and sons. Jaya was surprised to know that her name did not appear in the list. When she questions, Ramukaka explains to her that she had ceased to be a member of the paternal family after marriage. But her mother's and kaki's also had no place in it because they belong to the maternal side. The temptation to dominate is universally irresistible among human beings. Traditional marriages provide this opportunity to men and blind obedience to women. Shashi Deshpande gives perfect examples of women who always submitted themselves with tremendous patience, insult, injuries, and humiliations, without any slight complaint. Mohan's mother, Kusum, and Jaya are looked upon as a pair. Kusum is unable to bear the domestic violence and kills herself by jumping into the well.

Jaya no doubt is a symbol of self renunciation. She is conditioned by her childhood experience. The fear of speech haunts and disables her to articulate. Her parents have trained her to find psychological and social justification in her marriage, and that she must live up to the expectations of her husband. She lives for him and accepts her new name after marriage. She thus yields and loses her self-identity. But her inner self refuses to be circumscribed and gets into the mould of a conventional wife. But at the same time, she has to withhold her emotions tightly to herself, not letting her husband know that she is doing so to keep her family and marriage intact. Her creativity is not a passion but a vent for her regular suffering. Her relationship with Kamal is just an escapade for sharing her emotions. Jaya accepts silence rather mournfully for seventeen years and denies her selfhood. The constant and repeated references to 'silence' in the novel show that not only in the case of Jaya but also for others silence had been a protest as well as a strategy for survival.

Conclusion

Thus, this novel is mainly concerned with the state of the modern Indian woman, who is constantly trying to know herself. Shashi Deshpande says that the theme of That Long Silence is the inner conflict in Jaya, the protagonist and at the same time there is a quest for identity. Jaya represents one half of humanity who remains silent all their life.

References

1. Deshpande, Shashi. *The Dark Holds No Terrors*. New Delhi: Penguin Books, 1980.Print.
2. Deshpande, Shashi. *Roots and Shadows*. Bombay: Orient Longman, 1983. Print.
3. Deshpande, Shashi. *That Long Silence*. New Delhi: Penguin, 1989. Print.
4. Bheda, P.D. Ed (2005). *Indian women Novelists in English*, New Delhi: Sarup & Sons.

5. Wollstonecraft, Mary. (1984). *A Vindication of the Rights of Woman*, (first published in 1792). Oxford: OUP.