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BATTERIES AT GLANCE AND THE FUTURE PROSPECT

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ABSTRACT

To fulfil today's energy demand use of unconventional energy sources like sunlight and wind is an inevitable thing for researchers. There are two aspects to handle this problem. First one is generation of electrical energy and its storage. In this review storage aspect and its development from the invention of first battery is discussed. Study of Li-ion batteries for the storage of electricity is one of the current leading research topics because it is fulfilling major current needs. The development in Li-ion batteries in last fifty years, few advantages and disadvantages of its use as on today with respect to its size, weight, cost, safety measures, reliability, recycling and disposal as compared to the other batteries and lastly the future demands are discussed. It is found that at present it is widely used in electronic instruments like mobile phones, laptops, computers and many more where power backup is required and power requirement is small. Though this battery is proving to be best and reliable for above mentioned applications, it is still to come to realization for the commercial use in mechanical systems like Electric Vehicle (EV) where high power is needed.

Keywords: Lithium ion, anode and cathode, electrolyte, Electric Vehicle, sustainable development.

1. INTRODUCTION

Discovery of electricity was breakthrough research for humans during nineteenth century. Michel Faraday could actually produce the current flowing through the wire with coil magnet experiment and created electric dynamo called electric generator. ^[1] Since then many instruments based on electrical power are developed. Today electricity has become a part and parcel of our life. Without electricity we cannot progress. In this developing era the job left for us is how efficiently we produce, store and use it by avoiding any kind of harm arising out of its production and storage. Storage aspect is one of very important elements of use of electricity. With this issue if we try to map the development over last 50 years, people made big progress. At initial stage use of elemental materials is made and then the research is made for development of the compounds which could be best suited for specific applications to make the batteries. For storage of electricity, concept of electric cell has taken the birth. The first cell was developed by Alessandro Volta in 1800. ^[2] Using his invention people could get the current flowing through the wire. He demonstrated the action of charge flow using different metals like Tin, Lead, zinc, Iron, Copper, Silver, Graphite, Gold, Manganese ore etc. For this demonstration he used two metal strips dipped in weak acid as electrolyte. We call these strips as anode and cathode materials of the battery which function as negative and positive electrode respectively of the battery. Third important thing is the electrolyte.

2. HISTORICAL DEVELOPMENT**2.1 Primary Batteries**

This is the group of non rechargeable batteries. In this battery electrochemical reaction is not reversible. When one of the reactant is exhausted, the battery is of no use. The first Zn-Cu voltaic pile (battery) developed by Volta was suffering from hydrogen bubbles accumulation on copper thereby increasing the internal resistance of the battery. This problem was solved by Daniel cell in 1836 by using the two electrolytes CuSO_4 and Zn rod immersed in H_2SO_4 solution separated by porous earthenware material which allows only metal ions to pass. Daniel cell was the first practical battery. ^[3] It had the working voltage of around 1.1 V. In 1837 Birds cell was developed by using plaster of Paris as the electrolyte separator. Later the Porous pot cell was developed which was again the version of Daniel cell. ^[4] In this cell Zn rod was dipped in ZnSO_4 solution instead of H_2SO_4 . To avoid the porous container Callaud invented Gravity cell which contains CuSO_4 solution with Cu electrode at the bottom of glass pot and ZnSO_4 solution above it because of its less density containing Zn anode as negative electrode of the battery. ^[5] But this battery was not movable and one has to draw current continuously to avoid the mixing of electrolytes by diffusion. After this, Poggendorff cell (also known as Eugene Grenet cell) tried to eliminate the problem of separation of electrolytes by using dilute sulphuric acid as electrolyte and Chromic acid as depolarizer. ^[6] By mixing these acid common electrolyte was made in which negative electrode Zn plate dipped in between two graphite positive electrode. This could generate 1.9 V. Constant current and relatively greater voltage were its advantages but the problem with this battery was the necessity of continuous removal of Zn plate when the cell is not in use to avoid the reaction with acid and its delicate glass enclosure. Later with Zinc anode Plate in sulphuric acid and Platinum cathode in nitric acid originated Grove cell. It used earthenware as electrolyte separator. ^[7] It gave operating voltage nearly double the Daniel cell voltage and high current. But

because of high cost of platinum, continuous fall of voltage during discharge and poisonous nitric acid fumes its use remained limited. All the batteries mentioned above were based on liquid electrolyte. Later solid or dry batteries have been invented.

2.2 Secondary Batteries

These are rechargeable batteries. In this battery electrochemical reaction is reversible. Gaston Plante in 1859 invented the first battery which could be charged by passing the current in reverse direction was lead acid battery. It used lead dioxide as cathode and lead as anode with sulphuric acid electrolyte. Till today it remained useful because of its low internal resistance and large current delivering capacity. Its large weight is disadvantageous. In later version in 1930s gel electrolyte was made by adding silica and in 1970s battery is made in sealed form to transport easily. This was first dry battery. Later invention was Leclanche cell in 1860. It used zinc anode and manganese dioxide cathode wrapped in a porous material and dipped in ammonium chloride solution. This assembly remained useful in communication systems but could not prove to be better because of its early decaying current and voltage when in use. ^[8]

Then the first portable dry battery of 1.5 volt was developed by Carl Gassner in 1886 with slight modification in Leclanche cell which remained most useful dry cell till today and known as zinc-carbon battery. It used plaster of Paris to make the paste of ammonium chloride electrolyte with some zinc chloride added to it. ^[9] Cathode manganese dioxide is dipped in the paste and whole thing is enclosed in zinc vessel which itself acts as anode. Later coiled cardboard replaced plaster of Paris to obtain more space for cathode and to reduce the weight.

2.3 Alkaline Batteries

In 1899 Ni-Cd battery with potassium hydroxide electrolyte was developed and used commercially as first alkaline battery whose energy density was better than lead acid battery. ^[10] In 1903 Thomson Edison patented Nickel-Iron battery which was the invention of Jungner. It was the light weight battery but has leakage and short battery life so could not get much success. Edison tried to use it in automobiles but Ford Model T was the economy automobile car at that time. In 1955 Urry used powdered zinc as an anode in zinc-carbon battery. This increased surface area of anode to increase diffusion process decreasing internal resistance of the battery. Nickel-Metal Hydride batteries appeared in 1989 to replace Ni-cd battery because of the toxicity of cadmium. It has longer life and became useful in communication satellite. ^[11]

2.4 Lithium Ion Batteries

From the foregoing discussion it is understood that people tried to eliminate the problems related to size, shape flexibility, weight, transportation, energy density, reliability, safety issues, cost etc. As Lithium is the lightest metal and its high electrochemical potential and small size Lithium ion battery overcomes many of these problems and hence became most popular in the history of batteries. After many years of research since 1912 by G.N. Lewis the customer need battery version was produced in 1970s. ^[12] In the progress history of the development of Li-ion battery major things of interest were anode and cathode materials of the battery and the electrolyte. Following years yielded numerous research articles for anode, cathode and electrolyte materials for lithium ion batteries.

2.4.1 Cathode and Anode material for Lithium ion battery

Initially people tried for metallic lithium. Its energy to weight ratio is larger. Its small size enhances diffusion process. But because of its high reactivity it is flammable when comes in contact with water and oxygen at atmospheric conditions causing the safety issues. ^[13] N.A Godshall et.al. at Stanford university and John Goodenough of Oxford university in 1980 published an article on new material Lithium cobalt Oxide (LiCoO₂) for cathode and Lithium metal for anode. ^[14] It was operated at elevated temperatures of about 400-450 °C. But in very few months Mizushima et.al. reported a room temperature operating LiCoO₂ cathode with organic electrolytes. ^[15] This happened to be good for commercial production of batteries. Godshall suggested to replace sulphur by oxygen to avoid corrosion of battery. But in 1989 J. Goodenough et. al. showed that sulphates produce higher voltages than oxides due to induction effect. ^[16] Here Lithium ion follows intercalation method to get into the cathode material while discharging of the battery. At the same time electrons flow from negative electrode to positive electrode (i.e. cathode material) in the outer circuit and we get a current from the battery. While charging Lithium ions are easily separated from LiCoO₂ compound and move towards Li anode to form Lithium metal and electrons move in opposite direction in external circuit. Batteries based on LiCoO₂ are mostly used in portable small instruments. Voltage around 4V is obtainable from this battery. This invention of intercalation phenomenon has opened a pathway for further research. It has some safety hazards when damaged. ^[17] Later in 1996 Goodenough and his co workers found phosphate material LiFePO₄ as cathode material. ^[20]

The most popular cathode materials were either lithium cobalt oxide or polyanion such as lithium iron phosphate or a spinel i.e. lithium manganese oxide. ^[21]

It remained hard to find the anode material. Of all the directions of finding the anode, carbon based anode was deemed the most promising. The most popular anode material is the graphite. In 1983 Rachid Yazmi found lithium intercalation compound in graphite as anode material for Li-ion battery. He showed that lithium can be reversibly intercalated into graphite while charging of battery.^[18] He used solid organic electrolyte (polyethylene oxide with lithium perchlorate) because there was a problem of decomposition of organic electrolyte with graphite anode. At the same time in 1993 Michel Thackeray, John Goodenough and co-workers found new material manganese spinel for anode.^[19] The spinel material was previously identified by Godshall and co-workers. Spinel is low cost material. Its performance for lithium ion conduction is good. Its degrading problem can be overcome with chemical modification of material. In 1985 Akira Yoshino developed a prototype cell using carbonaceous material for anode into which lithium can be inserted and LiCoO_2 cathode.

2.4.2 Electrolyte for Lithium ion battery

Two types of electrolytes are used to build lithium ion battery. The first one is Liquid electrolyte. This is used since the inception of Li-ion battery. It is made up of organic solvents like ethylene carbonate, dimethyl carbonate or diethyl carbonate containing lithium ions. Source of Li-ions is Li-salts like LiPF_6 , LiBF_4 or LiClO_4 .

Solid electrolytes are useful in the sense that there is no risk of leakage which is serious safety issue of the battery. For this purpose the ceramic materials are used.^[22] These are of two types: ceramics and glasses. Ceramics are having ordered crystal structures which provide ion transportation channels increasing the conductivity.^[23] In glass amorphous structures transportation is enhanced at the grain boundaries. Addition of sulphur or oxygen in these ceramics increases conductivity. Sulphur is preferred because of its larger radius enhancing conductivity.^[24]

When lithium electrodes are cycled there is much possibility of formation of dendritic structure of lithium at the electrodes thereby decreasing the performance of battery especially short circuiting if dendrite extends from anode to cathode in the cell. To avoid this and to increase the functional efficiency two dimensional growth of lithium is needed. Low li-ion concentration in LiPF_6 electrolyte favours two dimensional lithium deposition on pure lithium surfaces with controlled nucleation pulse.^[25] Lithium polymer electrolytes satisfy the following two important conditions: One is the development of highly conductive materials via the crosslinking of mobile chains to form networks which are then swollen by lithium salt solutions ("Gel electrolytes"). The other is the construction of solid polymer electrolytes with supramolecular architecture which intrinsically give rise to much enhanced mechanical strength.^[26] Intrinsic instability of liquid electrolytes results in safety issues. Solid polymer electrolytes overcome this problem but the fraction of charge carried by lithium is small. Solid electrolytes operating at 80° show poor mechanical and electrochemical stability. But by using multifunctional single ion polymer electrolyte based on polyanionic block copolymers comprising polystyrene segments all the above limitations can be overcome in lithium metal batteries.^[27]

3. CURRENT STATUS OF BATTERIES

According to the post of The Electrochemical Society on November 12, 2018 Lithium ion Battery is dominating the battery world and efforts are made to develop silicon anodes, better cathode materials and improved electrolytes. There is intense work going into recycling also, and understanding and mitigating safety issues. People are thinking of lithium metal batteries with sulphur cathodes, or sodium ion, solid state batteries or multivalent chemistries. Other aqueous battery systems like Lead-acid battery are also under consideration for betterment with new technology since everything old is new again ! Grid storage also is an important issue. Li-Ion batteries are currently the most suitable energy storage device for powering the EVs because of high energy efficiency, lack of memory effect, long cycle life, high energy density and high power density. Modern EVs Still suffer from performance barriers (range, charging rate, lifetime etc.) and technological barriers (high cost, safety, reliability) limiting their widespread adoption. Electric car became more practical since the birth of rechargeable battery in 1859. But because of relatively high cost, limited range and speed Lead-acid and Nickel-metal hydride batteries could not fulfil the customer needs till today as compared to combustion fuel vehicles.^[28] Batteries now getting developed are having big range of applications, from cars to microchips. But the question is how can the batteries become the sustainable technology for future? Most attempts to improve the design of lithium ion batteries have tackled the problems at macroscopic level but work is now focussing on the nanoscale. Nanomaterials are not working properly in current scenario because the effective increase in electrode surface area causes electrolyte decomposition because of the secondary reactions. But recently in last 20 years it is understood that such reactions could be controlled by coating the electrodes to protect the electrolyte from unwanted oxidation or reduction by the electrode materials. Air electrodes and metal-air battery technologies have already been used in primary systems such as fuel cells, but the use of lithium instead of zinc metal will increase the energy output eightfold. The oxygen electrode proceeding in tandem with lithium

according to the reaction $2\text{Li} + \text{O}_2 \rightarrow \text{Li}_2\text{O}_2$ can deliver a capacity of $1,200 \text{ mAh g}^{-1}$.^[29] The encouragement is also made to use limited lithium ($\leq 30 \mu\text{m}$) rather than thick lithium foils for numerous reasons.^[30]

4. CONCLUSION

For energy resource past technology is using combustion fuels which is endangering the future of mankind because of its adverse effects on environment and natural cycle. If new technology is emerging it should be sustainable. Batteries which are going to be developed should be used to store energies from sustainable sources such as wind and solar energy. Lithium battery is fully commercialised for low power equipment's. As lithium is available with huge quantity in sea water it can fulfil the future demand. Use of limited lithium to construct anode may also solve the problems. Using nanomaterials lithium ion battery can overcome the difficulties relating to cost, power, sustainability etc. Lithium air system seems to be helpful in future. Use of digital technology, nanomachines may be useful for energy saving. Researchers from all disciplines should work together to avoid time gap.

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TESTING OF CONSUMER DELIGHT AND BUYING BEHAVIOUR OF MOBILE PHONES

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ABSTRACT

World has witnessed vast innovation in the field of mobile phone technology from the inception of mobile phone in the market and still new developments which are beyond our imagination are planning by the corporate to implement in it. World is also witnessing a cut throat competition among the mobile phone corporate and in this scenario if a firm wants to attain a sustainable growth and profit, they have to satisfy the consumers wants and expectations and this can be achieved only by understanding the perception of consumers and manufacture products accordingly. The present study aims to examine the factors influencing the buying behaviour and their level of consumer delight. The findings of the study will be a guideline among the corporate to understand the perception of consumers towards mobile phone.

Keywords: Consumer Behaviour, Consumer Delight and Brand Loyalty.

INTRODUCTION

The development of mobile phone technology has been a long journey of Innovation, which is constantly evolving and updating because of consumers changing needs. This made a stiff competition between mobile companies in surviving in the market. If a mobile company wants to achieve a sustainable growth and profit, they must primarily satisfy the expectation of customers on the mobile phones produced by companies. To achieve this they must maintain a research and development department in understanding what are the expectations of the customers and the technology department has to impart the latest technology, which attracts and satisfy them.

There are many factors that affect the consumer's choice of mobile phones. It mainly depends upon their personal needs and financial status. The needs vary from person to person. For instance the factors that a college student looking entirely different from old aged people. The selection criteria of rich people may be different from middle-income group and it will be entirely different from poor people. This calls for them to produce different models in mobile phone targeting different category of consumers. The important factors that consider before the buying decision of mobile phone are price, storage capacity, RAM, processor, camera quality, availability of service center, after sales service quality, battery backup, sound quality, quick charging, battery backup, display size, graphics, brand, operating system, dual sim, finger print provision, face lock provision, phone body etc. The present study examines the preference of consumers in influencing their buying decision, examining the difference in buying behaviour of consumers among different age groups, and finally examining the consumer delight among the customers. Consumer delight is the difference between real satisfaction and expected satisfaction on the product before buying.

All the business firms aim to maximise their profit. However, to have a sustainable growth their profit maximisation must be through satisfying their customers. To satisfy customers, producers have to produce what the customer expects to get from the product. If the firm wants to produce the products that customer expects they have to do a serious research work to analyse the expectation of consumer and manufacture their products according to the expectation of consumer.

LITERATURE REVIEW

Some of the previous studies related to the consumer behaviour towards buying of mobile phone are discussed below:

Karjaluoto et al. (2005) aims to find out the factors that influence the buying behaviour of mobile phone by using a focus group study and the result of the study find out that it is the technical reasons or innovations in new mobile phone are the main driving forces in change in buying behaviour of mobile phone. Mack and Sharples (2009) finds out in the study that usability of mobile phones is the most influential factor when compared to all others in the buying decision of mobile phones. Malasi (2012) examined a study on the buying behaviour of mobile phone among the undergraduate students and the findings of the study showed that variety features in the mobile phone are the most important buying decisions among them. Saif et al. (2012) showed that new technologies and brands of mobile phone are the motivating factors in the buying decision of mobile phones. Das (2012) also carried out a similar study in inspecting the factors influencing the buying behaviour of mobile handsets among the consumers and the findings of the study states that brand reputation, smart

appearance, and the variety features in the handset are the most attracting features of the mobile phone. Sata (2013) also examined the factors influencing the buying decision of mobile phones among the customers of India and the result of the study indicates that price, product features, brand name, social group and durability are the core driving forces behind the selection decision of consumers.

RESEARCH GAP

The previous studies examined only about the factors that influence the buying behaviour of mobile phones. But the present study also gives an insight on the factors influencing the buying behaviour, examining the difference in the preferential factors among different age groups, inspecting the level of consumer delight on the mobile phone and examining the difference between the level of consumer delight between different age groups. Thus, the study will be helpful to mobile phone corporate to design their new models aiming to satisfy each customer group.

OBJECTIVES

The objectives of the study are as follows:

1. To find out the factors that influence the buying decision of mobile phone among different age groups and
2. To examine the difference in the level of consumer delight between different age group.

HYPOTHESIS

H₀: There is no significant difference between the level of consumer delight in buying decision between different age groups.

METHODOLOGY

The study aims to examine the buying behaviour of consumers and examining the consumer delight among the customers of mobile phone in India and the study is descriptive in nature. The study designed a structured questionnaire to understand the perception of the consumers of mobile phone in India. The study collected customers from various parts of India. The study used personal interview method to collect data. The sampling technique used for the study is quota sampling. The reason for using quota sampling is that the study includes equal number of respondents in all age groups. Thus, the result of the study will be more strong and accurate as the study considers equal number of age group members. The sample size of the study is 300. These 200 respondents are collected equally from each age group. Thus, 40 respondents each will represent from 5 age groups say below 20, 21-30, 31-40, 41-50 and above 51. The different tools and techniques used for the study are Cronbach's Alpha (for testing reliability of the questionnaire), ANOVA (for comparing whether the mean difference between different age groups towards the preference of factors in buying decision and level of consumer delight), rank analysis (for ranking the different factors according to the mean score to know the most important factor and least factor) along with descriptive statistics such as percentage, average etc. For computing consumer delight the difference between average of real satisfaction in using the mobile phone and expected satisfaction before purchasing the mobile phone is computed and if the difference is positive (real satisfaction > expected satisfaction), then it is consumer delight and if the difference is negative, then the result is cognitive dissonance.

RESULTS AND DISCUSSION

The study preliminarily looks into the demographical profile of the respondents selected for the study.

Table-1 Demographical Profile of Respondents

PERSONAL DETAILS	ATTRIBUTES	FREQUENCY	PERCENTAGE
Gender	Male	121	60.5
	Female	79	30.5
Age	Less than 20	40	20
	20-30	40	20
	30-40	40	20
	40-50	40	20
	50 and above	40	20
Marital Status	Single	105	52.5
	Married	95	47.5
Education	Illiterate	5	2.5
	SSLC and Below	20	10
	+2	25	12.5
	Degree	100	50

	PG and above	50	25
Source of Money	Student	55	27.5
	Salaried Class	35	17.5
	Business/Profession	30	15
	Housewife	40	20
	Retired	30	15
	Job Seeking	10	5
Individual Annual Income	Below 2,50,000	125	62.5
	2,50,000 to 5,00,000	55	27.5
	5,00,000 to 10,00,000	15	7.5
	10,00,000 and above	5	2.5

Source: Computed Data

After examining the demographical profile of the respondents, the study tested the reliability of the questionnaire by using cronbach’s alpha test. The result shows that 0.919 value which is highly recommendable as the value of 0.9 and hence the questionnaire is highly trustworthy (Hair et al. 2006). The study then inspected the factors influencing the buying behaviour of mobile phone among different age groups. The table-2 given below illustrates the preferential factors that consumers look before taking a buying decision on mobile phones.

Table-2 Preferential Factors of Consumers Among Different Age Groups Before Taking Buying Decision of Mobile Phones

SL.NO	PARAMETER	RANK PREFERENCE OF DIFFERENT AGE GROUPS				
		BELOW 20	20-30	30-40	40-50	50 & ABOVE
1	Influence of price of Mobile phone	1	1	1	1	1
2	Storage	7	2	2	9	6
3	Ram	6	3	3	10	7
4	Processor	8	4	4	11	8
5	Camera Quality	2	5	5	12	9
6	Availability of service centre (Nearby location)	13	6	6	2	3
7	After sales service quality	14	7	8	3	2
8	Sound quality	3	8	16	13	10
9	Quick charging	5	10	10	5	5
10	Battery Backup	4	9	9	4	4
11	Display Size	9	15	17	6	11
12	Graphics	10	16	15	14	12
13	Brand	11	18	18	15	15
14	Operating system	12	11	7	7	13
15	Sim slot	15	12	13	16	14
16	Finger print	17	14	12	17	16
17	Face lock	16	13	11	18	17
18	Phone body (metal body & plastic body)	18	17	14	8	18

Source: Computed Data

From the above table it is clear that all age group customers give first importance to price of the mobile phone only. The difference in the attitude of buying decision between youngsters and old aged customers can be visibly seen if we observe the ranking given by these groups. Old aged customers are after sales service, availability of nearby service centers etc while others give weightage to camera quality or internal storage or RAM etc. From this it is quite clear that old aged group customers are more rational and others are not rational in their buying decision.

The study also analyse the difference in consumer delight among different age groups and inspect whether the difference is significant or not. The study assumes there is no significant difference between the level of consumer delight among different age groups. The result of the analysis is showed in table-3 given below:

Table-3 Examining The Difference In Level of Consumer Delight Among Different Age Groups

Sl.NO	AGE GROUP	REAL SATISFACTION	EXPECTED SATISFACTION	CONSUMER DELIGHT	F-Stats	P-Value
1	Below 20	3.09	4.10	-1.01	617.57	0.000
2	20-30	3.12	4.09	-0.97		
3	30-40	3.86	3.80	0.06		
4	40-50	4	3.75	0.25		
5	50 & Above	4.01	3.73	0.28		

Source: Computed Data

From the above table, it is clear that as age of the consumer increases the level of consumer delight increases. This may be attributed to the maturity showing by the consumers before buying. This means that they may use to analyse and study about the mobile phone before they buy. To inspect whether this difference is significant or not, ANOVA has applied and the result of ANOVA is also illustrated in the table-3 given above. As p-value (0.000) is less than 0.05, null hypothesis assumed is not accepted at 1% level of significance. Thus alternative hypothesis is accepted.

H_1 : There is a significant difference in the level of consumer delight among different age groups.

CONCLUSION

The mobile phone industry is facing tough competition in the present day world. The features incorporated in a mobile hand set are most important factor which is considered by the consumers while purchasing the mobile phone. The findings of the study indicates that price of the handset is the most important factor followed by storage, RAM, processor, camera, quality etc. The results also reflect that consumers are very much attracted towards new technology and they used to shift from one brand to another if they incorporate new technology in their handset. Thus the study proves that to retain the customers the mobile corporate has to update latest technologies in their handset and produce different models targeting different age groups according to their taste and preference. This will help the corporate to target maximum consumers and have good sales.

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AN IMPACT OF PROGRAM LEARNING INSTRUCTION ON LEARNERS

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ABSTRACT

Disciplines try to push its development. Education knowledge-ability and innovative products go hand in hand with developing new abilities to learn. Teacher's personality influences the creative process, which depends on various factors: enthusiastic students willing to learn, i.e. a decisive element in education as well as mastering new creative processes resulting in faster and more efficient grasping new information. Education system effectiveness at the time of advanced technologies, scope of interdisciplinary knowledge as well as simultaneous higher demands for experts in changing spheres of life is becoming hot issues of the day. The world of education follows the same assessment criteria as other branches: success fast as can, cost-benefit ratio, elimination of time and money consuming activities, etc. Programmed learning-teaching process deals with control and currently is becoming almost irreplaceable component of subjects'curricula. Regardless it has a long past, its history is expressed just in decades: it encompasses methodology, teaching aids, broad spectrum of branches, therefore experts from various.

Keywords: Programmed Learning instruction and Education

INTRODUCTION

Programmed learning /instruction is a revolutionary strategy pertaining to the art and science of the teaching-learning process. it is not only a technique for effective learning, but also a successful mechanism of feedback device for the modification of teacher- behavior. It nevertheless provides insight into the problem of teaching effectiveness through improved feedback and reinforcement mechanism. according to schramm 1962 "by which a 'programmer' takes the place of a tutor for the student and leads him through a set of behaviors' designed and sequenced to make it more probable that he will behave in a given desired way in the future –in other words he will learn what the programmers designed to teach him".

Programmed learning is a practice of breaking down a body of subject-matter into its constituent elements and requiring the pupil to master one step before proceeding to the next. It allows for more pupil involvement in the mostly individualized being adopted to individual differences. In techniques, learning is more rapid to individual differences. In this technique, learning is more rapid as well as interesting. It is directed towards specific objectives and retained better as well as longer.

MEANING OF PROGRAMMED LEARNING

- Programmed instruction is the process of arranging the material to be learned into a a series of sequential steps that is from known to unknown. ----- Smith and Moore
- Programmed learning is a method of designing a reproducible sequence of instructional events to produce a measurable and consistent effect on behavior of each and every acceptable student. ----- Susan Markel
- Programmed learning refers to the arrangement of instructional material in progressive sequences. ----- Harold W.Bernard

DEFINITIONS OF PROGRAMMED LEARNING/ INSTRUCTION

Generally speaking the instruction provided by a teaching machine or programmed textbook is referred to as programmed instruction or programmed learning. Programmed learning involves instruction with carefully specified goals and skillfully arranged learning experiences which are self – instructional and self-corrective. Thus programmed instruction is a new path towards automation and individual learning / instruction.

- Leith (1966)"A programmer is sequence of small steps of instructional material most of which requires a response to be by completing a bank a system of cueing is applied, and each response is verified by the provision of immediate knowledge of results. Such a sequence is indented to be worked at the learners' Own pace as individualized self- instruction"
- Skinner (1954) "programmed learning is the first application of laboratory technique utilized in the study of the learning process to the practical problems of education "

CHARACTERISTICS OF PROGRAMMED LEARNING

- The content is broken into small easy steps and each step is presented in several sentences, each called a Frame'

- The frames are arranged sequentially.
- Most of the frames require that the learner makes some kind of response- an answer to a question or an activity to demonstrate the understanding of the material i.e., frequent response is elicited from the student.
- The student is provided with immediate confirmation of the right answer i.e., the learner is provided immediate reinforcement. In case he is correct, his response is reinforced and if he is wrong, he may correct himself by receiving the correct answer.
- Units are arranged in a careful sequence such that it shapes the behavior of a learner.
- It is the interaction between the learners and learning material which is emphasized in programmed learning here the learner is active and is motivated to learn and respond.
- Programmed learning provides self –pacing and thus learning may occur at an individual rate rather than general, depending upon nature of the learner, learning material and learning situation.
- It calls for the overt response of the learner which can be readily observed, measured and effectively controlled.
- It has provision for continuous evaluation which helps in improving the student's performance and quality of programmed learning material.
- Goals to be achieved are also evaluated and stated specifically.
- In programmed learning, the suitability and appropriateness of the material depends on the learner. If the learner makes mistakes, the programmed material should be rejected.

NATURE AND TYPES

The programmers are usually divided into two

1. Linear and
2. Branching schramm 1962 mentioned the following salient characteristics of programmed learning meaning only linear programmers in this context. "To sum up, there are the essential
 - a. Elements of programmed instruction;

Ban ordered sequence of stimulus items,

- a. to each of which a student responds in some specified way
- b. his responses being reinforced by immediate knowledge of results ,
- c. so that he moves by small steps ,
- d. therefore making few errors and practicing mostly correct responses,
- e. from what he is supposed to learn from the programme"

AGAIN PROGRAMMER LEARNING IS ALSO DIVIDED INTO THREE DISTINCT TYPES

1. linear,
2. branching and
3. Adjacent auto-instruction .skinner 1961 invented and was in favors of the linear programme. As the name indicates there is a single line which all the students have to follow .this programmer also all the students to read and respond to the same frames. The student makes progress along a single line/tract from one frame to another irrespective of the answer. Most linear /tract from one frame to another Irrespective of the answer. Most linear programmers use constructed responses. A few programmers is generally response- centered and in each frame only enough material is presented to evoke the correct response.

PRINCIPLES OF PROGRAMMED LEARNING

A good programmed learning material incorporates good principles of learning . The basic idea of programmed learning is that most efficient, pleasant and permanent learning must take place. The following are the principles on which programmed learning is based.

a) Principle of small steps

A programmer is made up of a large number of small, easy to take steps. A student can proceed from knowing very little about a topic to mastery of the subject by going through a programmer.

b) Principle of Active Responding

This principle rests on the assumption that a learner learns better by being active. Programming provides opportunity for learner to respond frequently. It not only presents material to the learner but also induces sustained activity.

c) Principle of immediate confirmation

The psychological phenomenon of reinforcement is the basis of this principle. Necessity of providing immediate confirmation is important from two points of view -1)the learner will not wildly guess;2)when the learner is not sure of the response he/she needs to be confirmed of the correctness of the response or provided with the right response.

d) Principle of self- pacing

Programmed learning is a technique of individualized learning. It is based on another basic assumption that learning can take place better if an individual is allowed to learn at his own pace. The pupil is not forced to move with other members of the class. Some students naturally learn more rapidly or more slowly than others. In a normal classroom some students may be left behind as they are not able to keep pace with the teacher but here the learner is able to learn at his own pace. This principle controls individual difference in the process of learning.

e) Principle of student testing

Continuous evaluation of the learning process helps in maximizing learning is another assumption on which programmed learning is based. The student leaves behind a recode of his responses because he is required to write a response for each frame on a response sheet. This detailed record helps in revising the programmer and also provides a feedback to the teacher about the student's progress.

STEPS IN PROGRAMMING

Topic selection: The Programmer Should Select The Most Familial topic, otherwise he has to take the help of a subject expert. He may confine himself to a specified content or a small area of the subject matter.

Content outlines: After topic selection, its outline may be prepared which should cover all the materials on plans to teach, for this the programmer has to refer to and examine relevant books and materials.

Instructional objectives: instructional objectives must be formulated which involve both task description and task analysis the former is the description of terminal behavior. The instructional objectives should be written in behavioral outcomes.

Entry skill: The learner should have some prerequisite ability and skill to understand properly the new programme. This entry skill. To prepare a programmer adequately, target-oriented entry skill data should be utilized at this stage.

Presentation of the material: suitable format is to be decided for presenting the material from the educational point of view. Then the programmed material should be presented in a sequence of frames arranged as steps towards terminal behavior.

Student participation: on analysis of the terminal behaviors one will find the critical responses of the students. Of course it is related to some part of the subject matter. The over-responses facilitate student learning. Students' participation is facilitated by presenting the Programmer in an interesting format.

Terminal behavior test: The effect of programme can be ascertained by administering the terminal behavior test, also known as performance assessment. This provides feedback to the programmer and shows the effectiveness of the effectiveness of the of the instructional materials. it may also serve as an entry skill data for the next programme on a relegated topic of higher level .

Revision: Lastly the programmer may be revised on the basis of feedback. The instructional material may be edited and modified according to the needs and requirements of the target audience.

CONCLUSION

Programmed instruction is self –instructional material developed on the psychological principal of teaching – learning process. A rapid learner can cover the material quickly and a slow learner may precede his own pace. This frees the learners from the same type of teaching materials delivered to the whole class at the same pace. The programmed learning material helps the learner to teach himself at any place and pace according to his convenes. Different types Programmers' have their special advantages and facilitate learner's initiative, participation and involvement according to their interests and ability. They provide scientific teaching and

learning for efficient and effective acquisition of knowledge and skill. The analytical the analytical thinking and self –direction of learner are also promoted through the use of programmed learning materials.

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ANALYSIS THE IMPACT OF NATURAL CALAMITIES: KERALA FLOOD 2018 & IMPACT ON INDUSTRIES

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ABSTRACT

Natural Calamities create massive destruction and long run effect on life of the people. Especially calamity like flood came with continuous rainfall create wet drought in affected region. To overcome from such situation is a crucial task. Not only people but also industries also affect from such calamity.

Kerala flood 2018 is one of a such situation. It make more emphasis on life of people as well as industries from Kerala region. This paper enlighten the Impact on Industries in Kerala region affected due to flood in August 2018. It also aware other industries to look over the difficulties occur in such destructive situation and losses occur in figures due to natural calamity like flood.

Analysis the Impact of Natural Calamities: Kerala Flood 2018 & Impact on Industries

INTRODUCTION

An adverse effect due to natural processes of the earth called natural Calamities. It include Floods, Hurricanes, Tornados, Volcanic Eruption, Earthquakes, Tsunamis etc. These Calamities especially divide in three types Hydrological, Meteorological & space Calamities. Out of these three Hydrological Calamities create massive impact on properly people as well as economy of affected areas.

Hydrological Calamities are sudden, destructive & violent changes in either quality of earth's water or movement of water on different spares. Hydrological Calamities mainly divided into Floods, Tsunamis, Liminal eruptions. Out of these three flood create massive destruction in area. It is a sudden overflow of water that entered in land. It specifically created due to inflow of the tides. The size of water bodies changes in perception to environmental changes which create the flood.

Kerala flood 2018 is one of the massive destruction arises due to unusually high rainfall during monsoon season. To look over last century Kerala flood is worst. Over 483 people died and 14 still missing. Many district of Kerala and south region still affected. Millions of people evacuated due to flood such flood not only impact on property and life of people but also on economy and industries of Kerala Region. My research is an analysis of Impact on Industries because of Kerala flood 2018.

SIGNIFICANCE OF THE STUDY

Kerala Flood 2018 is a destructive changes occur due to flood & continuous heavy rainfall. This create massive Impact on property & life of the people. It also create destructive Impact on Industries in kerla Region. Such flood specified Impact on automobiles, It and rubber sectors. The share of these companies will be impacted over Rs. 30000 crore Impact likely on Kerala industries. 5 most affective districts are Idukki, Ernakulum, Kellam, Kottayam & Pathanamthitta.

Such destruction is massive and create long run Impact on the life of people socially as well as economically. To overcome from such situation require lots of strength in monetary as well as non-monetary terms. Research especially look over these 5 affected district and industries thereon. There are three specified Industries Automobiles, It and rubber Industries which affected more are taken for research analysis.

RESEARCH METHODOLOGY

Research is specifically based on secondary data collected through Internet and Newspapers. Data collected and analysed in tabular as well as chart from to understand easily simple average method like mean is used to analysed data in different forms. The Impact is specifically on three different industries in 5 districts of Kerala region such has to be considered for Data analysis.

DATA COLLECTION

1. Impact on Industries in Rs. And in %

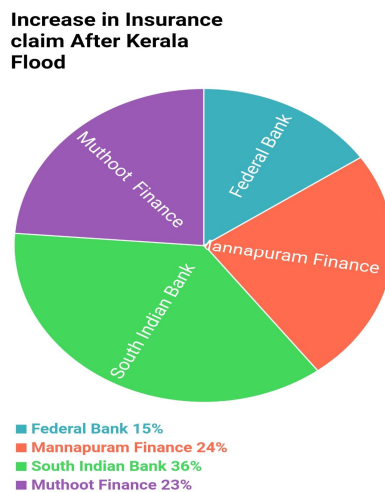
INDUSTRY	Loss in Rs.(crore)	Loss in %
Automobiles	600	60%
Rubber	280	28%
IT	120	12%
Total	1000	100

Kerala Flood Impact on Industry



2. Increase in Insurance claim after flood 2018

Bank	Claim Rise in %
Federal Bank	0.96%
Mannapuram Finance	1.50%
South Indian Bank	2.26%
Muthot Finance	1.47%



LIMITATIONS

Research is restricted to main three Industries and five district of Kerala region only that is the main constraint of such research. The incident is recent so data collection is also restrict up to news articles, bytes available on Internet only. It has very small coverage to collect proper data because figure used in such medium are may or may not be appropriate in nature and authentication of such figures are impossible in reality.

The Impact on Industries specifically in economic point of view for short run whereas their social impact is long run in nature and cannot be recovered easily. Such type of Impact cannot be evaluated in figures because it has long run effect. Kerala Flood in August 2018 is massive in nature so overall lookout on such incident is merely impossible.

CONCLUSION

Kerala Flood 2018 create long run effects on social as well as economical life of people in such region. It also create instability in region, life of the people as well as corporate world of such region. Natural Calamities always create a massive impact on individuals But their effect of corporate world is long run and may or may not be recovered.

The analysis show the Impact of Kerala Flood on Industries it is round about 1000 crore on main three Industries whereas many small industries also affected due to such calamity. Many small and connected industries to such three Industries also affected. The Insurance companies claim also increase by 2% averagely. It shows the destruction also affected on Industries as well as service sector too. It shows the destruction create effects on Industries, service sectors, primary sectors which means the effect is all over the economy of Kerala region.

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A STUDY ON “WORK-LIFE BALANCE: A REAL CHALLENGE”

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ABSTRACT

Work-Life Balance is a very important strategy for every organisation, group and individual for happy-living. Maintaining a balance between work and personal life is a necessity. A proper understanding of work-life balance can amount to more efficiency and productivity, better relationship among peers and superior-subordinate structure.

Reaching out to a balance is a challenge to every employee, and understanding and helping the employee is a tough task to every organisation. However, companies have to consider this and develop strategies to retain good employees while setting their growth path. This study attempts to provide the necessity of work-life balance, the impact of it and suggest measures to strike a balance.

Keywords: WLB, employees, challenge, factors, measures

INTRODUCTION

Work-Life Balance (WLB) is an experience of intertwining the employees' work lives and family lives for a happy balanced living. It is a unique feature of individual's life that decides the satisfaction levels among the multiple roles in personal and professional life. It is not a comparable version of two individuals.

It is affected by number of factors such as individual's nature, age, education, income level emotions, family structure, religion, culture and philosophies adopted, type of society in which live, social/societal groups to which one belongs including friend circle, material/spiritual life one lives, financial blessings, service orientations, etc.

LITERATURE REVIEW

Leinster and Brody (1998) claim that WLB is one of the most important issues daunting the organisations. Calas and Smircich (1989) argue that casual approach, challenges and assumptions not fully tested lead to work/life imbalance. Kofodimos, J. (1993) establishes when efficiency becomes central value in work, it may be problematic and spoil other important aspects of life. Landau and Arthur (1992) say that situational factors such as selfishness, earnings, domination and spouse support make difference in making balanced life.

Khan(1990) argues that people are naturally confused about their choice of life whether in work or at home, in isolation or in group. White, Michael, et al. (2003) studied high performance practices, and working hours on WLB found conflicts among them and negative spillovers. Perrons, Diane (2003) states that a marked gender disparity exists in the patterns of ownership, earnings, flexible working patterns, long hours and home-working affecting WLB.

Shanafelt, Tait D. (2012) says that though medicine is a meaningful profession in life, the doctors suffer from emotional burnout that may risk quality of care, and promote early retirement, broken relationships, alcohol use, etc. Ogilvy, J. (1995) articulates that living without goal will give a sense of life. A single goal in life is a mechanism/tool for life rather than a gift.

Caproni, Paula J. (1997) opines that one has to learn to live happily rather than attempting to balance. Large numbers of studies are conducted over decades but humans are evolving every day, and their profiles, way of life, role plays, challenges to be faced are changing beyond our imagination. Hence the work/life balance is an issue of every day.

OBJECTIVES OF THE STUDY

1. To understand the need for WLB.
2. To analyze the governing factors affecting WLB.
3. To evaluate the impact of WLB.
4. To explore the techniques/measures of WLB.

RESEARCH METHODOLOGY

This research output is the outcome of an overview of studies conducted on the areas of WLB. This is conceptually a qualitative research work, and follows the experiential approach. The researcher uses secondary data for its analysis.

SIGNIFICANCE OF THE STUDY

Living happy life matching with a right work is the expectation of everyone. But for most of the people, it is a nightmare. They struggle with many hardships and find much difficulty in settling the personal and professional living. Most of them could not even think why they suffer and could not strike a balance. Making people aware of the fundamentals for balancing their work and life is a necessity. This study will help them to understand the propriety of WLB.

SCOPE OF THE STUDY

WLB involves designing and implementing conscious changes in human minds to set a balance between their personal and professional life. This study covers the significance of WLB, factors governing it, impact of WLB and techniques required for it.

NEED FOR WLB

Traditional and modern business challenges, competition, unpredictable environment compel businessmen to become unusual in their approaches in management leading to stress and imbalance in employees. A proper view of WLB can reduce the imbalance in living and can ensure improved life. It can reduce displeasures and empower employees to face challenges. The major issue comes in taking time to do everything that we desire in an efficient way at work as well as at home.

Avoiding unwanted things and focusing on urgent and important matters is advocated by some. But the real challenge comes while we try to select. Delegation could be a solution, but what to delegate and what not, is a challenge. Getting up early is a solution, but sleeping early is a challenge especially in places like Mumbai where the day ends at 12.00 night to most of the people. Time and energy are the limited resources. All have only 24 hours.

If the productivity is to be increased in any organisation, employee has to be free-minded, and for which a peaceful family atmosphere is very essential. But a happy family is largely person-oriented which cannot be assured by the company in which he/she works.

Organizational expectations and philosophies are changing. Employee/machine, customer/ supplier, profit/service orientations are changing. Various facets of employment compel governments to remodel its dictations which consequently affect the business dimensions which in turn finally count on the employees. Families: nuclear/joint, with/without children, their education and growth, income issues, cultural compulsions, mismatching spouses, health issues of self and others will revolve around the employees affecting work.

Materialism and spiritualism concepts of ideology in life, wealth maximization, old age security fear, need for money, and feeling of lack of support from anyone are the unavoidable challenges of employees. Hence, they have to learn how to balance their life with work. By working for long hours and at odd times, workers do damage to their families.

POSITIVE IMPACT OF WLB

WLB is an essential element for the success of any company. The goals can be decisively achieved if the WLB is considered/managed.

Following are the results of WLB:

1. Growing sense of belongingness and understanding
2. Higher efficiency and productivity
3. Unbreakable team spirit.
4. Reduced absenteeism and labour turnover.
5. Satisfied, committed workforce
6. Attraction to talented candidates
7. Competitive advantage to face competition
8. Enhanced customer satisfaction

FACTORS AFFECTING WORK-LIFE BALANCE

A. Organizational/managerial factors

1. Clarity of vision, mission, objectives and organizational philosophy
2. Degree of profit/service orientation
3. Type of facilities, welfare and motivational measures
4. Lack of clear HR policies
5. Lack of control over absenteeism and overburdening others
6. Excessive managerial responsibility with no support staff
7. Poor organizational hierarchy and control system
8. Dictatorial/unethical management

B. Job/work-related factors

1. No proper assignment of tasks
2. Lack of information and facilities
3. Fixed targets to be reached with excessive workload
4. Increased working hours affecting health
5. Stress on completion of task
6. Work schedules with no priorities
7. Lack of respect from superiors and subordinates
8. Fear of retrenchment, lay-off and memos
9. Nature of job: temporary/permanent, private/government

C. Personal factors

1. Nature of self, colleagues, superiors and subordinates
2. Interest in the job, job satisfaction
3. Unhealthy competition among peers
4. Acceptance of responsibilities beyond one's capacity
5. Too much ambitious / committed to work
6. Casual approach on important things
7. No respect or concern for others especially when young
8. Undue longing for positions and properties, manipulation and lies
9. Spending money lavishly and attempting to increase income unscrupulously

D. Family/Social factors

1. Family background, single/married, young/old
2. Ladies' dual responsibilities
3. No freedom on decision making
4. Aging parents or others at home, worries on children
5. Ethical issues of children and other family members
6. Dependence on spouse's income and over-expectations
7. Lack of support from spouse due to poor relationship
8. More demanding, less tolerant, unloving, conflicting spouse
9. Health, wealth and character clashes

10. Traditional and modern life outlook of people

TECHNIQUES OF WLB

1. Scientific HR policies

Unbiased, well established HR policies on selection, training, placement, promotion, demotion, transfer, retirement and settlements can create stable employees. Such policies should be consistent and followed throughout the organisation.

2. Motivational practices

Management should create an effective motivational culture with monetary and other incentives, provide labour-saving devices and childcare arrangements. A balanced, consistent & impartial reward system helps to have a WLB.

3. Counseling and mentoring facilities

Much of the problems come due to one's lack of awareness and organized thinking on issues of self. If proper counseling is done, the confusions in employees can be settled to set a balance. A proper mentoring program can develop specific skills and knowledge in employees, to be value-based and confident in career-building by recharging them continuously.

4. Autonomy, empowerment and trust

There is no area, whether home or work, without problems. The power to manage is the needy thing for everyone. 'Unpredictability and less than expected' need to be accepted. Employees should be empowered to perform their job fearlessly. The managers have to trust the character and quality of their subordinates to create a balanced life. MBO could be a boosting factor for more involvement and freedom.

5. Committed management

Support from top management, constructive leadership, proper planning and control mechanism and making available required resources can help to build a WLB. Employees should be given necessary leave to get refreshed periodically and to learn new programmes to enrich their skills.

6. Flexible work options

According to convenience/requirement, as possible, employees can be permitted to rearrange their working hours within the span of time available. They can be facilitated to work from home, work on part-time dividing the full-time work among 2-3 people, work for more hours in less number of days, etc. This can create a quality WLB.

7. Health and wellness programmes

Programmes like yoga, meditation, stress-bursters, time management should be conducted for employees regularly to achieve WLB. A good canteen with nutritional food at subsidized rate is also a requirement.

8. Stress reduction training and spiritual enhancement

'Only-money' motive will lead to imbalance. Nowadays, employees, particularly youngsters, are overambitious, avoid food and sleep, and spoil their life. Rigorous mind-training is necessary to promote self-awareness and self-management techniques with values. Most of the things that we worry about today will be forgotten after a year. Every employee should be made to realize this through mind-enriching programmes time-to-time.

9. Knowledge sharing for unity and mutual support

Employees, if rightly motivated, can share their own success stories in balancing and solutions adopted by them for their own issues. They should be offered required facilities for learning and discussion.

CONCLUSION AND SUGGESTIONS

Life is a beautiful thing to live. It is not a thing to be managed. It is a joyful exercise. It does not work with plans always. It is true that all factors said and done work upon life, but they can't be fixed because joys and sorrows in life, failures and successes in work cannot be predicted. Everything is situational. Two children born to two similar parents are remarkably different. For the similar amount and type of job, one gets 2lacs per month and another gets Rs.20000. Hence, we have to learn to enjoy in contingencies to be happy. At the same time, companies cannot neglect this concept which affects largely the employees' work efficiency.

Ultimately life will go as it is. One has to learn how to be with it. Company wants employee's more productive time with it. Family wants him/her to be more with it. Both are right and the employee has to manage both effectively by striking a balance. Awareness of the past, understanding the present and speculating the future spiritually may get oneself on track. Though the employee has to strive for this largely, organized support from

both family and company is essential. Otherwise there will be dilly-dallying at every moment, the impact of which will be painful to both family and the company.

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AN OVERVIEW ON AVIFAUNAL DIVERSITY IN CHINTAMONI KAR BIRD SANTUARY OF**Mayukhmala Mandal**

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ABSTRACT

Chintamani Kar Bird Sanctuary is the only Protected Areas of West Bengal, within the city limit of Kolkata and is significant for its local floral and faunal diversity. Chintamani Kar Bird Sanctuary is located within a driving distance from pulsating metropolis of Kolkata, in the west of Netaji Subash Road which connects Garia with Baruipur in the Raggure area. This 20 acres Chintamani Kar Bird Sanctuary is the heaven of huge varieties of Birds, Butterflies, Ferns, epiphytes and Orchids. This sanctuary formerly known as "Kayal-er Bagan." It is recognized as Sanctuary in 1982 and bestowed with the name of Narendrapur wildlife Santuary on September 8, 2004. However since 2005, the sanctuary was finally named as Chintamani Kar Bird Santuary (CKBS). Migratory birds also enrich the avifauna of this beautiful sanctuary and also attract bird watchers mainly in season of winter. The study period was 2016 to 2017 during the month of November through February of the next year, (Visiting Time: 6 am to 2 pm of each day). This study shows remarkable variations in the avifaunal diversity. Present communication provides the present scenario of the Avifaunal diversity in these protected areas of West Bengal and scope of further research.

Keywords: Avifaunal diversity, Chintamani Kar Bird Sanctuary (CKBS), protected areas, West Bengal

INTRODUCTION

The city of Kolkata is one of the important metropolises of India. Over the years this city has undergone an immense metamorphosis from being an area surrounded by marshes and jungles interspersed by human habitations, to a concrete jungle of the modern Kolkata. In the process it has lost a large part of its natural habitat mainly during the development of the human settlement in the area. Whatever greenery that could be found, within the city limits and its adjoining areas, at present are primarily attributed to the parks, gardens, orchards and roadside plantations. The natural history of Kolkata and its surroundings have been a point of immense interest among naturalists since eighteenth century. The faunal lives of the region have been reviewed by a number of scientists, from time to time, during the past three centuries. Chintamani kar bird Sanctuary was raised to the status "Abhyaranya" or "Sanctuary" in year 1982. Opening it for public was a challenge to Govt. of West Bengal, who took the initiative to make it for public. They acquired lands from private owner at a good cost and announced the area as Narendrapur Wildlife Sanctuary in 8th September 2004. Later it was renamed to Chintamani Kar Bird Sanctuary in 21 October 2005. Renowned artist Chintamani kar fought to keep the status "Kayaler Bagan" for the sanctuary. Chintamani Kar Bird Sanctuary is popularly known as protected area reputed for its extensive variety of birds, butterflies, epiphytes, ferns and orchids. It is located very close to the metropolis Kolkata. This small sanctuary spread over 17 acres is a kin drive to the south of Kolkata.. Noted artist **Chintamani Kar** who, along with local people and NGO's, fought for decades to obtain wildlife sanctuary status for 'Kayal-er Bagan'. It was later renamed as Chintamani Kar Bird Sanctuary.

Earlier the place was bit popular as picnic spot in name of Kayal-ar bagan. The **Chintamani Kar Bird Sanctuary** used to be an old abandoned orchard and the area surrounding it is a mix of orchards, bamboo brakes, waterbodies and wasteland. The orchard originally covered 27 acres but had shrunk to 17 acres by the time it was acquired. Enormous mango trees dominate the landscape of the sanctuary and are interspersed with jackfruit, coconut palm, tamarind, guava, ficus and others trees. A new bamboo plantation has been started to attract dependent species.



MATERIALS AND METHODS

STUDY AREA

Based on the socio-environmental situation and richness of biodiversity, certain areas of the West Bengal state have already been earmarked for conservation and these areas have been brought under the Protected Area Network of the country. The Protected Area Network of West Bengal is comprising of 6 National Parks and 15 Wildlife Sanctuaries, 2 Tiger Reserves and 1 Biosphere Reserve .

List of Protected Areas in West Bengal National Parks				
Sl. No.	Name	Area (km ²)	Established on	District
1.	Buxa	117.10	1992	Jalpaiguri
2.	Gorumara	79.45	1992	Jalpaiguri
3.	Jaldapara	216.51	2014	Jalpaiguri
4.	Neora Valley	159.89	1986	Darjeeling
5.	Singalila	78.60	1986	Darjeeling
6.	Sundarban	1330.10	1984	North & South 24-Paraganas
Wildlife Sanctuaries				
1.	Ballavpur	2.02	1977	Birbhum
2.	Bethuadahari	0.67	1980	Nadia
3.	Bibhuti Bhusan	0.64	1980	North 24 Paraganas
4.	Buxa	267.92	1986	Jalpaiguri
5.	Chapramari	9.6	1976	Jalpaiguri
6.	Chintamani Kar Bird Sanctuary	0.07	1982	South 24-Paraganas
7.	Haliday Island	5.95	1976	South 24-Paraganas
8.	Jorepokhri Salamander	0.04	1985	Darjeeling
9.	Lothian Island	38	1976	South 24-Paraganas
10.	Mahananda	158.04	1976	Darjeeling
11.	Raiganj	1.3	1985	North 24-Paraganas
12.	Ramnabagan	0.14	1981	Burdwan
13.	Sajnakhali	362.4	1976	South 24-Paraganas
14.	Senchal	38.88	1976	Darjeeling
15.	West Sundarban	556.45	2013	South 24-Paraganas
Tiger Reserve				
1.	Buxa	757.9038	1983	Jalpaiguri
2.	Sundarban	2584.89	1973	South 24-Paraganas
Biosphere Reserve				
1.	Sundarban			9630

Source: Nevis Centre on Wildlife & Protected Areas Hosted by Wildlife Institute of India, Dehradun (Updated- July 5, 2017) Sponsored by Ministry of Environment, Forests & Climate Change, Govt of India http://wiienvic.nic.in/Databas e/WestBengal_7842.aspx





MAP OF THE STUDY AREA

Among them, Chintamani Kar Bird Sanctuary (0.1km²), situated at Rajpur Road in the vicinity of Kolkata metropolis and lying in between Latitude 22°25'44.4"N and Longitude 88°24'06.7"E (Fig- 1).The area was notified as Narendrapur Wildlife sanctuary vide G. O No.3019-FOR dated 8th September 2004. Later it was renamed as Chintamani Kar Bird Sanctuary vide G.O No.4300-FOR/FR/O/L/6C-3/04 dated 21.10.2005, as a sign of honour to the renowned artist Chintamani Kar who lives adjoining to the sanctuary and died on the same year.

	<p>GENERAL DETAILS</p> <p>Type : Bird Sanctuary</p> <p>Local name: Kayaler Bagan or Kayal-er-Bagan</p> <p>Area: 17 acre (extended)</p> <p>Popularity : Well known</p> <p>Country : India</p> <p>City: Kolkata</p> <p>Recognized as sanctuary by: Govt. of West Bengal</p> <p>Established year: 1982</p> <p>Lattitude: 22 25' 45" N</p> <p>Longitude: 88 24' 4" E</p> <p>Climate: Sunny and humid</p> <p>Temperature: 28 - 37 Degree C (Summer) 3 - 30 Degree C (Winter)</p> <p>Rainfall : High rainfall in the monsoon</p> <p>Wind: Wind movement is normal excluding some cases.</p> <p>Humidity : MAX: 91% MIN: 57%</p> <p>ADDRESS : Hogulkuria Rajpur Rd,Narendrapur, 24Pgs(South), West Bengal,India</p>
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STUDY PERIOD AND METHODOLOGY

The study period was 2016 to 2017 during the month of November through February of the next year by the students of Department of Zoology Charuchandra College, under Calcutta University. Methodology was followed after the hand book on identification published by Ali, S. and Ripley, S.D. 1986. Handbook of the Birds of India and Pakistan, Vol. 5, Oxford University Press, New Delhi and Ali, S. and Ripley, S.D. 1997. Handbook of the Birds of India and Pakistan, Vol. 8, Oxford University Press, New Delhi, the Director, Zoological Survey of India, Kolkata.



VEGETATION

CKBS was an orchard owned by the Kayal family before being converted into the wildlife sanctuary. The sanctuary is dominated by Mango trees (*Mangifera indica*) along with Rose Apple (*Syzygium jambos*), Aash

Phol (*Dimocarpus longan*) and other fruit trees. The whole area is having a very dense under growth, and the canal beside it having a good density of aquatic flora, many species of climbers and parasitic plants are also present in the sanctuary. This area in Narendrapur south of Kolkata, still has about 6.88 ha of fruit orchards with densely vegetated undergrowth, with the further ten acre encroached by human habitation. The area has groves of old mango *Manglfera indica* trees interspersed with other fruit bearing trees.



Mango Tree



Bamboo Tree

BIODIVERSITY OF CKBS

Forest species are commonly found in the **Chintamani Kar Bird Sanctuary**, and include Black-naped Monarch, Asian Paradise Flycatcher, Common Hawk Cuckoo, Orange-breasted Green Pigeon, Emerald Dove, Streak-throated Woodpecker, Orange-headed Thrush, White-throated Fantail, Crested Serpent Eagle, Large-tailed Nightjar, Ashy Woodswallow, Lineated Barbet and Greater Flameback. Rarities include Tickell’s Thrush, Greater Racket-tailed Drongo, Slaty-legged Crake, Eurasian Woodcock, Scarlet-backed Flowerpecker, Grey-headed Fish Eagle, Scaly Thrush, Eyebrowed Thrush, Little Spiderhunter and Blue-throated Flycatcher. The recently rediscovered Large-billed Reed Warbler was found at the edges of the Sanctuary. In addition, the sanctuary also hosts some small wildlife - namely jungle cat, civet cat, monitor lizard, jackal and others.

Result: Identification of birds - It is a house of many common birds of Kolkata, few rare birds as well as passage migrant. During March - April, we can find nesting of few birds on the tree top.

SR NO	COMMON NAME	SCIENTIFIC NAME	ORDER	FAMILY
1	Cattle Egret	Bubulcus ibis (Linnaeus, 1758)	Ciconiiformes	Ardeidae
2	Indian Pond Heron	Ardeola grayii (Sykes, 1832)	Pelecaniformes	Ardeidae
3	White-breasted Waterhen	Amaurornis phoenicurus Pennant, 1769	Gruiformes	Rallidae
4	Common Moorhen	Gallinula chloropus (Linnaeus, 1758)	Gruiformes	Rallidae
5	Bronze-winged Jacana	Metopidius indicus (Latham, 1790)	Charadriiformes	Jacanidae
6	Spotted Dove	Spilopelia chinensis (Scopoli, 1768)	Columbiformes	Columbidae
7	Rose-ringed Parakeet	Psittacula krameri (Scopoli, 1769)	Psittaciformes	Superfamily: Psittacoidea Family: Psittaculidae
8	Greater Coucal	Centropus sinensis (Stephens, 1815)[2]	Cuculiformes	Cuculidae
9	Asian Koel	Eudynamys scolopaceus (Linnaeus, 1758)	Cuculiformes	Cuculidae

10	Brown Fish Owl	<i>Ketupa zeylonensis</i> (Gmelin, 1788)	Strigiformes	Strigidae
11	Lineated Barbet	<i>Megalaima lineata</i> (Vieillot, 1816)	Piciformes	Megalaimidae
12	Blue-throated Barbet	<i>Megalaima asiatica</i> (Latham, 1790)	Piciformes	Megalaimidae
13	Streak-throated Woodpecker	<i>Picus xanthopygaeus</i> (J. E. Gray & G. R. Gray, 1847)	Piciformes	Picidae
14	Rufous Woodpecker	<i>Celeus brachyurus</i> (Vieillot, 1818)	Piciformes	Picidae
15	Black-rumped Flameback	<i>Dinopium benghalense</i> (Linnaeus, 1758)	Piciformes	Picidae
16	Greater Flameback	<i>Chrysocolaptes guttacristatus</i> (Tickell, 1833)	Piciformes	Picidae
17	Fulvous-breasted Woodpecker	<i>Dendrocopos macei</i> (Vieillot, 1818)	Piciformes	Picidae
18	Common Iora	<i>Aegithina tiphia</i> (Linnaeus, 1758)	Passeriformes	Aegithinidae
19	Black-hooded Oriole	<i>Oriolus xanthornus</i> (Linnaeus, 1758)	Passeriformes	Oriolidae
20	Black Drongo	<i>Dicrurus macrocerus</i> (Vieillot, 1817)	Passeriformes	Dicruridae
21	Ashy Drongo	<i>Dicrurus leucophaeus</i> Vieillot, 1817	Passeriformes	Dicruridae
22	Bronzed Drongo	<i>Dicrurus aeneus</i> Vieillot, 1817	Passeriformes	Dicruridae
23	Brown Shrike	<i>Lanius cristatus</i> Linnaeus, 1758	Passeriformes	Laniidae
24	Rufous Treepie	<i>Dendrocitta vagabunda</i> (Latham, 1790)	Passeriformes	Corvidae
25	Red-vented Bulbul	<i>Pycnonotus cafer</i> (Linnaeus, 1766)	Passeriformes	Pycnonotidae
26	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i> (Linnaeus, 1758)	Passeriformes	Pycnonotidae
27	Jungle Babbler	<i>Turdoides striata</i> (Dumont, 1823)	Passeriformes	Timaliidae
28	Verditer Flycatcher	<i>Eumyias thalassinus</i> Swainson, 1838	Passeriformes	Muscicapidae
29	Black-naped Monarch	<i>Hypothymis azurea</i> (Boddaert, 1783)	Passeriformes	Monarchidae
30	White-throated Fantail	<i>Rhipidura albicollis</i> (Vieillot, 1818)	Passeriformes	Rhipiduridae
31	Common Tailorbird	<i>Orthotomus sutorius</i> (Pennant, 1769)	Passeriformes	Cisticolidae

32	Taiga Flycatcher	<i>Ficedula albicilla</i> (Pallas, 1811)	Passeriformes	Muscicapidae
33	Oriental Magpie-Robin	<i>Copsychus saularis</i> (Linnaeus, 1758)	Passeriformes	Muscicapidae
34	Orange-headed Thrush	<i>Zoothera citrina</i> (Latham, 1790)	Passeriformes	Turdidae
35	Great Tit	<i>Parus major</i> Linnaeus, 1758	Passeriformes	Paridae
36	Western Yellow Wagtail	<i>Motacilla flava</i> Linnaeus, 1758	Passeriformes	Motacillidae
37	Oriental White-eye	<i>Zosterops palpebrosus</i> (Temminck, 1824)	Passeriformes	Zosteropidae (disputed)
38	Purple Sunbird	<i>Cinnyris asiaticus</i> Latham, 1790	Passeriformes	Nectariniidae
39	Pied Myna	<i>Sturnus contra</i> (Linnaeus, 1758)	Passeriformes	Sturnidae
40	White-throated Kingfisher	<i>Halcyon smyrnensis</i> (Linnaeus, 1758)	Coraciiformes	Halcyonidae



Black – Hooded Oriole



Dove



Little Egret



White Throated Kingfisher
(Halcyon smyrnensis)



Hari Chacha
(Rufous Treepie)



Jungle Babbler



Common Kingfisher
Different Birds founds in CKBS

DISCUSSION

CKBS, situated within the city limit of Kolkata, is playing a very important role in harboring a significant amount of biodiversity as a whole. It has become a refuge for the urban biodiversity of its surroundings as a dramatic change of land use pattern is happening in a rapid pace. In this changing scenario, the importance of this small but diverse wildlife sanctuary will increase every day, hence its wellbeing is of utmost importance. This documentation, hence, is of significant importance, as the baseline data for this important protected area.

Present communication on the avifaunal diversity of Chintamani Kar Bird Sanctuary (CKBS) reports 40 species under 35 genera belonging to 27 families of 11 orders. Passiformes shares 22 species, followed by Piciformes (7 species), Gruiformes (2 species), Cuculiformes (2 Species). Ciconiiformes, Pelecaniformes, Charadriiformes, Strigiformes, Columbiformes, Psittaciformes, Coraciiformes (one species each) are also enriched the avifaunal diversity of this sanctuary. In the above study it is quite alarming that major avifaunal families in Chintamani Kar Bird Sanctuary (CKBS) are gradually declining. This is mainly due to anthropogenic activities, sound and air pollution and also construction activities surrounding the CKBS. In this critical situation steps should be adopted to protect this sanctuary with special reference to avifauna.

CONCLUSION

The forest department has raised serious objections to the Kamalgazi-Baruipur extension of the Eastern Metropolitan Bypass along either side of the Adi Ganga, as it would transgress a portion of the ecologically sensitive Chintamani Kar sanctuary, better known as Koyal Bagan, in Narendrapur. The 19-km road, which will take a lot of pressure off Netaji Subhas Bose Road, is likely to take away a part of the land stretching from daag 2140 to daag 2903. Our apprehension is that a lot of very old trees, which have been home to numerous migratory and indigenous birds, may be felled. The ecological loss will be irreparable in such circumstances. The sanctuary is situated at the very critical juncture of the land to be utilised for a two-lane high-speed corridor. It is only 2.5 km away from Kamalgazi. The road for Baruipur-bound vehicles from Kamalgazi will require this land. The road for Garia-bound vehicles on the other bank of Adi Ganga faces no such problem. The work is progressing at a very high speed and the axe on the forest can come down any day. Besides felling of trees, the boundary fencing has to be relocated.

ACKNOWLEDGEMENTS

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FINANCIAL INCLUSION IN INDIA**Vaishnavi Joshi**Student, KLS Gogte College of Commerce, Belagavi

ABSTRACT

Financial Inclusion refers to the act of including all the sections of society equally in the financial system of the country. It aims at providing full access to multiple financial services provided by banks and other financial institutions to the general public at affordable costs, without discrimination. The government of India noticed that the banks were leaving out rather than attracting a large chunk of the population in its quest for progress on the digital front. Therefore, it bid the banks to review their policies regarding creation of new accounts by economically weaker sections of society. RBI has initiated policies like Basic Saving Bank Deposit (BSBD), KYC, etc. The government also introduced Pradhan Mantri Jan Dhan Yojana (PMJDY), Sukanya Samriddhi Yojana, Atal Pension Yojana (APY), etc. to encourage participation of general public into the mainstream financial system of the country.

Keywords: Financial Inclusion, RBI

OBJECTIVES OF STUDY

- To understand the meaning and need for Financial Inclusion in India.
- To know various initiatives taken by RBI and other financial institutions with regard to Financial Inclusion.

RESEARCH METHODOLOGY

Keeping in view the nature of the topic and objectives of study, secondary data has been used mainly from websites and published works.

INTRODUCTION

According to the Chairman of The Committee on Financial Inclusion, Dr. C. Rangarajan, Financial Inclusion may be defined as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost.

In a wider scope, financial inclusion refers to easy access to all available financial services at a reasonable cost. In addition to banking services, it also includes equity and insurance products as per the Chairman Dr. Raghuram Rajan of The Committee on Financial Sector Reforms.

Financial Inclusion means ensuring the timely delivery of all financial services including banking services (savings and transactions), credit at lower costs for both personal and business purposes, consultancy and advisory services, insurance services (life and non-life), among many others to all strata of society at reasonable and affordable costs.

Financial inclusion, as a concept, was first heard of in India in the year 2005 in the Annual Policy Statement released by The Reserve Bank of India. It was mainly introduced to bring the nation together without any discriminatory basis. Financial inclusion addressed the lack of a formal financial and banking system much needed to cater to the monetary requirements of the poor people.

The Khan Committee Report which was released in the year 2005 mainly discussed rural credit and microfinance. It stressed on the fact that the larger chunk of the population did not have access to a professional and licensed banking system. It laid emphasis on providing essential financial services to all sections of the society by helping and encouraging them to open no-frills bank accounts. Banks were asked to lower regulations relating to opening new bank accounts by economically weaker sections of society. Banks were asked to work together to ensure 100% financial inclusion in India by taking part in campaigns initiated by The Reserve Bank of India.

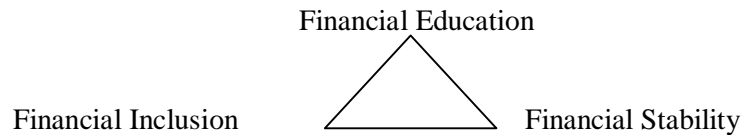
The Government of India also initiated the 'Pradhan Mantri Jan Dhan Yojana' with the sole purpose of motivating and encouraging the weaker and economically backward population to open bank accounts. The programme was started with the target to get at least 75 million individuals to open bank accounts by the year 2015.

FINANCIAL INTEGRAL STRATEGY

Every country has a financial integral strategy to build and sustain its position in the international market. An effective financial integral strategy helps a country to maintain its financial position.

A financial integral strategy of any country rests on three aspects:

The Financial Tripod



- Financial Inclusion aims at providing access to various financial services equally to all the sections to society. It handles the supply angle by making sure services reach the end users.
- Financial knowledge or literacy aims at spreading knowledge and awareness regarding the financial services provided by banks and other financial institutions. Thereby, it takes care of the demand angle by creating need for financial knowledge among the public.
- These two strategies together promote financial stability.

NEED FOR FINANCIAL INCLUSION IN INDIA

Financial inclusion contributes to the country's progress by improving its financial position, growth and stability on a global scale. It increases the availability of economic resources. It also helps to cultivate the habit of savings among the rural and urban populations of the country.

Mainly, it includes everyone in the formal financial system, thereby, mobilising all sources of finance.

FINANCIAL INCLUSION SCHEMES IN INDIA

The Government of India has been introducing several exclusive schemes for the purpose of financial inclusion. These schemes intend to provide social security to the less fortunate sections of the society. After a lot of planning and research by several financial experts and policymakers, the government launched schemes keeping financial inclusion in mind. These schemes have been launched over different years. Let us take a list of the financial inclusion schemes in the country:

- Pradhan Mantri Jan Dhan Yojana (PMJDY)
- Atal Pension Yojana (APY)
- Pradhan Mantri Vaya Vandana Yojana
- Stand Up India Scheme
- Pradhan Mantri Mudra Yojana
- Sukanya Samriddhi Yojana

FINANCIAL INCLUSION PROGRAMMES ORGANISED BY THE RESERVE BANK OF INDIA (RBI)

The Reserve Bank of India works on exclusive programmes and plans in order to have financial inclusion in the nation effectively. It applies a bank-led strategy in order to attain financial inclusion smoothly. The central bank of India also has firm regulations in place that need to be followed by every bank. The RBI also is offering qualified assistance to every bank in the nation in order to attain its financial inclusion objectives

- The RBI instructed every bank to have Basic Saving Bank Deposits (BDS) accounts for the economically weaker sections of the society. These are no-frill accounts where account holders do not have to maintain any minimum balance or minimum deposit. These account holders can withdraw cash at any ATM or at the bank branch. They should also be given the opportunity to make use of electronic payment channels for receiving and transferring money to others.
- The RBI also asked banks to have simple Know Your Client (KYC) regulations for the less fortunate people of the society. There are many people in rural areas that are unable to open bank accounts due to strict KYC norms. Hence, the RBI wants banks to have simplified KYC requirements particularly if a low-income individual is interested in opening a bank account with an amount not above Rs.50,000. It also wants minimal KYC norms if the overall credit in the accounts does not go above Rs.1 lakh for 1 year. Recently, banks have been asked to accept Aadhaar Card as identity proof as well as address proof since most people belonging to low-income groups have made Aadhaar card in their names.
- Keeping in mind about the lack of bank branches in rural areas, the RBI has asked all banking institutions to open more and more branches in villages across the nation in order to provide good banking services to the

villagers. There are many remote villages where there are no banks and also no good transportation services. It is very difficult for residents of these areas to commute to a far-off bank branch for availing banking services. Hence, with the compulsory rule of the RBI, banks are distributing the ratio of banks in villages and cities to have a balance.

- Banks have been advised to implement EBT by leveraging ICT-based banking through BCs to transfer social benefits electronically to the bank account of the beneficiary and deliver government benefits to the doorstep of the beneficiary, thus reducing dependence on cash and lowering transaction costs.
- With a view to helping the poor and the disadvantaged with access to easy credit, banks have been asked to consider introduction of a general purpose credit card facility up to `25,000 at their rural and semi-urban branches. The objective of the scheme is to provide hassle-free credit to banks' customers based on the assessment of cash flow without insistence on security, purpose or end use of the credit. This is in the nature of revolving credit entitling the holder to withdraw up to the limit sanctioned.

The government of India recently announced "Pradhan Mantri Jan Dhan Yojna, a national financial inclusion mission which aims to provide bank accounts to at least 75 million people by January 26, 2015. To achieve this milestone, it's important for both service providers and policy makers to have readily available information outlining gaps in access and interactive tools that help better understand the context at the district level.

Several Startups are working towards increasing Financial Inclusion in India by organizing various large unorganized sectors where payments primarily happen in Cash, instead of a bank transaction.

SPECIAL FINANCIAL PRODUCTS OFFERED FOR ATTAINING FINANCIAL INCLUSION

Keeping in mind that low-income people living in rural and urban areas have very limited access to financial products and services, scheduled commercial banks (SCBs) have been asked by the Reserve Bank of India to design and offer exclusive financial products to the economically weaker sections of the society. Many of them are only aware of basic financial services such as savings schemes, savings accounts, personal loans, crop loans, microfinance, etc. They do not know anything about credit cards or debit cards.

However, due to their lack of access to instant credit facilities, banks were instructed to issue cost-efficient credit cards to the low-income groups of the society. Some of the special financial products provided to them include:

- **General Credit Cards (GCC):** Banks were asked by the RBI to launch and offer General Credit Card facilities with an amount of up to Rs.25,000 at their branches located in semi-urban and rural areas.
- **Kissan Credit Cards (KCC):** The Reserve Bank of India also instructed banks to provide Kissan Credit Cards exclusively to small farmers who earn very low incomes and who have very limited funds due to which they cannot invest in proper farming tools, fertilisers, pesticides, crop seeds, tractors, land for farming, storage warehouses, etc. They are forced to rely on other wealthy landlords for getting land to sow crops. These Kissan Credit Cards are intended to help farmers make instant purchases whenever required. Many a time, farmers give up on purchasing things required for their occupation due to lack of funds.
- **ICT-Based Accounts via BCs:** The Reserve Bank also devised a plan to help banks to reach out to the unbanked individuals of the society by offering information and communications technology (ICT)-based bank accounts with the help of business correspondents (BCs). These accounts allow users to make withdrawals of cash, create deposits, and apply for loans and other forms of credit through electronic forms. This type of account makes banking inexpensive and simple.
- **Increase in ATMs:** The Reserve Bank of India also reported that many rural parts of the nation do not have enough automated teller machines (ATMs) and this is hampering many buying and selling operations of the people residing in those areas. In order to increase the availability of physical cash for these people, the number of ATMs increased massively

CONCLUSION

The Reserve Bank of India is promoting the establishment of Financial Literacy Centres (FLCs). The rural branches of various scheduled commercial banks and financial literacy centres are now required to improve financial awareness on a larger scale. Financial literary camps have been set up as at end of March 2013. A total of 2.2 million people have been educated through awareness camps, seminars and lectures during April 2012 to March 2013.

The present round of licensing new banks is essentially aimed at giving further rise to financial inclusion efforts in our country. Innovative business models aimed at furthering financial inclusion efforts would be looked into closely in processing applications for banking license. Financial inclusion plan would be an important criterion for procuring new bank licenses (Dr. D Subbarao).

NGOs, corporate sector, banks, NBFCs (Non-Banking Financial Companies), and government departments currently engaged in FI should be persuaded to increase thrust. Unless using FI infrastructure becomes a mass agenda, the real benefit cannot accrue to the society. Having invested huge sums of money in building FI infrastructure, the next wave of inclusion should be to prompt beneficiaries to use their access to financial services for improving their economic and social well-being.

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YOUNG LITERATURE IN ENGLISH – FROM STEVENSON TO ROWLING**Dr. Zeenat Khan**

Associate Professor and Head, Department of English, Shri Shahu Mandir Mahavidyalaya Pune

Many of the books considered classical children's literature today, such as Peter Rabbit, Alice in Wonderland, Peter Pan or the Boy Who Would Not Grow Up, The Wind in the Willow and Winnie the Pooh, are in fact stories that little children were told over the ages. Literary critics often questioned whether these books are truly worthy of being considered under children's literature, and their research led them to conclude that there is far more value to these stories than mere entertainment for children.

The writings of Lewis Carroll and Edward Lear reflect the cultural need during the Victorian era to understand the world from a child's perspective. In their works, children were depicted as the epitome of innocence. Later in this period however, the increasing pressures of society and morality reached oppressive levels. Perhaps in response to these pressures, the focal point of an ideal childhood shifted during the Edwardian era when children's writers created a new kind of hero — a selfish, rude and arrogant child immersed in fun and frolic all day, who refused to grow up and wanted to remain a playful child forever. The rise of the playboy hero image in the 1880s gave a further pushback to the earlier ideal of the innocent child. The irresponsible Prince Edward inadvertently boosted this image further. With the eventual onset of the war, youngsters were gripped by the fervour of martyrdom at a young age, because apparently life after childhood was no fun. "Nothing that happens after we are twelve matters very much" became the motto of this period. Two children's authors who brought this morbidly fascinating image of youngsters to the fore were James Barrie and Kenneth Grahame.

While children's authors in the Victorian era sought the ideal of harmony and enjoyment in their view of childhood, Edwardian authors went a step further, seeking to relive childhood even as adults to and bask forever in the bliss of childhood. As the earlier argument of morality and religious ideals began to recede, a new trend of spiritual, secular literature slowly took over. This idea of secularism in literature showed a fondness for nature worship and for Pan, the Greek god of nature who is depicted as half man, half demon. Barrie, Grahame and even Kipling were enchanted by this image of Pan. Barrie and Grahame had been brought up in a culture that was engulfed by the ideals of youth. Moreover, they were writing against the backdrop of the war. Under these circumstances, there was a prominent tone of escapism in their works, along with a desire to enjoy the present moment to the fullest, reflecting the psychological need of the hour.

Thus, Barrie gave life to Peter Pan who defeated Captain Hook, saying "I'm youth, I'm joy, I'm the little bird that has broken out of the egg".

When Barrie was six years old, his thirteen-year-old brother David died in an accident. Their mother was overcome by shock and grief. She constantly mourned for David and obstinately continued to wait for his return, consequently neglecting Barrie and her other children. To make his mother happy, little Barrie started to live and act like David, talking like him and wearing his clothes, becoming the living version of David who was now ageless in death. Both David and Barrie's growth thus remained stunted, though in different ways.

Barrie's mental state is apparent in the name Peter Pan or the Boy Who Refused to Grow Up. This story tells a make-believe tale of the triumph of youth over old age. Peter Pan reflects the dream of an era that yearned to live in Neverland forever in a state of suspended youth. Peter Pan symbolises not only Barrie's individual desires and wish to remain young forever, but those of contemporary society as a whole.

Kenneth Grahame's most famous work *The Wind in the Willows* is an allegory of the Industrial Revolution and its impact on the British Empire. The lead characters in this book are the shy Mole, the clever Ratty, Badger, and the conceited, intrepid and zealous Toad. These animals talk and act like humans, but also possess the characteristics of their respective species.

Grahame wrote these stories for his son Alastair, a reckless and selfish boy who was nevertheless his father's favourite. In the character of Toad, Grahame has infused these aspects of Alastair's nature. Toad's arrogance, Mole's gullibility and Rat's intelligence make the story enjoyable.

Grahame was a contemporary of Barrie and was equally smitten by the image of Pan. Just like Barrie, in his private life, Grahame was the typical Edwardian man-child, fascinated by the idea of Peter Pan-esque agelessness. *The Wind in the Willows* was at once influenced by the contrasting emotions of faith and fear. While the story was cast in the escapist mould of losing oneself in the freedom of childhood, the fear that industrialisation would put an end to rural life as well as the boundless faith the society had in nature added yet

another dimension to the tale. The motorcar in the story is a humorous depiction of the apprehensions that not only Grahame but the whole society had towards industrialisation and the inevitable changes and modernisation it would engender.

About 15 years before *The Wind in the Willows*, Grahame had published a small collection of short stories called *Pagan Papers*, which also involved the character of Pan and depicted the struggle of Londoners to escape from the industrialised world that had distanced itself from nature. Grahame devised a means of escaping from the sordid reality into the joys of nature, which he proffered to his readers. Thus, his books came to be a true representation of the circumstances of his period. His books *The Golden Age* and *Dream Days* were set in the 1890s. Grahame's pathbreaking treatise on childhood in both these books received much acclaim. The success of *The Wind in the Willows* followed in the wake of the laurels earned by both these books.

A. A. Milne's *Winnie the Pooh* was published around 1920. The storm of the war had settled, and there was a widespread desire to enjoy life in the post-war world. The sun was setting on both Victorian and Edwardian ideals of childhood. Against this backdrop, Milne devised a fantasy world worthy of the legacy of *Wonderland* and *Neverland*, and created one of the most popular children's characters of all time. The two *Winnie the Pooh* books are about a young boy named Christopher Robin. Milne named the characters after his son and the young lad's stuffed teddy bear. Christopher's teddy bear is the main character of this story. Milne had had a happy childhood. As a young man, he was enamoured by *Peter Pan* and *The Wind in the Willows*, and he looked up to Barrie and Grahame. However, Milne's experiences and intentions behind his writing were quite different from theirs. Barrie and Grahame's writings served as a vent for their private sorrows, to overcome which they weaved a wish-fulfilling fantasy world of childhood dreams. In the tale of Pooh however, the predominant tone reflects not unfulfilled desires but Milne's satisfaction with life. Unlike Barrie and Grahame, he did not set out to seek his identity in childhood fancies. *Peter Pan*, *Rat*, *Mole* and *Badger* were characters born out of Barrie and Grahame's sorrows and disappointments. But the characters in Pooh were not similarly related to Milne on a psychological level. Yet, while writing for the post-war generation, his longing for the golden period before the war compelled him to draw upon the fantasy worlds created by Barrie and Grahame in describing the simple joys of Pooh's pleasant little world.

Adults who read Pooh's stories found simply the joys of reliving their childhood. These stories were meant for purely innocent entertainment of children.

The ideas of childhood briefly described in Milne's two poetry collections — *When We Were Very Young* and *Now We Are Six* — are fully fleshed out in the fantasy world of *Winnie the Pooh*. In this world, just like in *Wonderland* and *Neverland*, the little boy Christopher Robin rules the roost. He is omniscient in this world, and his toys are his companions. The characters of these toy companions embody the various characteristics and moods of young children — the cowardly Piglet, the bouncy Tigger, and self-centred, loving, innocent, greedy Pooh all show different shades of a child's mind. Constantly eating honey (or "hunny") and confused about the actions of adults, Pooh is an embodiment of every child's psyche. Through his characters, Milne underlines the endearing silliness of young children. In *Wonderland*, Alice tries to find her own identity; in contrast, the toys in Milne's *Hundred Acres Wood* have forgotten their identity. Pooh knocks at the door of his own house and wonders why no one is opening the door.

"What a long time whoever lives here is answering this door." And he knocked again. "But Pooh," said Piglet, "it's your own house!" "Oh!" said Pooh. "So it is," he said. "Well, let's go in."

This book is full of fun and merriment, jokes and pranks. Milne uses the medium of fantasy in the book to criticise the artificiality and pretentiousness of the adult world. In Pooh's carefree world, the only thing that the characters fear is growing up and leaving the children's world behind, an eventuality from which there would be no escape. This fear is palpable in the last scene of *The House at Pooh Corner*. Once Christopher Robin starts going to school, his world of toys begins to crumble. Taking leave of the toys symbolises taking leave of childhood, and with this farewell, Milne knowing or unknowingly took leave of the fantasy genre as well. This book earned Milne and his son a great deal of popularity, but it came at a heavy cost. This popularity proved damaging to the happy relationship between father and son, and to Christopher Milne's future life. Both realised belatedly that being suspended in any phase of life is possible only in fantasy. Once hailed as a veritable psychologist of young minds, by the end of his life Milne was subjected to utter misapprehension by critics as well as his own son. With Milne's heart-rending experience, the golden age of children's literary writing came to a tragic end.

This literary trend was disrupted by Edith Nesbit, who is known as the pioneer of modern children's literature. She broke the mould of writing about imaginary worlds and sought to give young readers a taste of the world in

its raw reality, and to teach them to accept and overcome the inevitable bitter truths of human life. Her thoughts are conveyed to young readers in simple but powerful words. In her famous books *The Story of the Treasure Seekers* and *The Would Be Goods*, she depicts the ordinary struggles of a middle-class family named Bastable. *The Railway Children* and *Five Children* were also among her immensely popular books. Her unique style of writing directly or indirectly influenced many future writers. Of these, a name that certainly merits mention is J. K. Rowling.

Even as a child, Rowling was fond of writing fantasy fiction. Her childhood was troubled by her mother's illness and her own differences of opinion with her father and their eventual estrangement. She has herself admitted that the all-knowing bookworm Hermione in the Harry Potter series has shades of the eleven-year-old Rowling. In 1990, while travelling by train from London to Manchester, she was struck by the idea of a story about a small child in a school of wizardry. She then thought of the name Harry, and all the other characters and events started taking shape in her mind. While she was writing the book, Rowling's mother passed away. Saddened by the loss of her mother, she vented her grief in the book through Harry's sorrows.

Rowling paints an extremely realistic picture of human nature, human mind and its emotions, and the complexity of human relations. Thus, her books are not merely entertaining thrillers and fantasy novels but transcend the boundaries of the genre, becoming a philosophical critique of human ethos. Rowling's style of writing is extremely powerful; her readers maintain that the joy of reading the books is only partly recreated in watching the movies based on them. Take for example Dumbledore's statement in the third book, "it's not our abilities that show who we truly are, it's our choices", or Voldemort's speech on the nature of power in the last book, or the final poignant message that death is ultimately defeated if we continue to love and trust the people we've lost. Through her writings, Rowling has carved out a significant niche for children's literature in the 21st century.

Finally, the currently popular children's books such as *Famous Five* also deserve a mention. These books give a new twist to the old fairy tale format, which is perhaps the reason for their continued demand among young readers.

Nevertheless, with her rich writing style, J. K. Rowling has captivated young and old readers alike, firmly establishing the significance of children's literature in the 21st century in the gamut of mainstream literature.

CREATIVITY AND EDUCATION: SKILLS TO ENHANCE THE DEVELOPMENT OF CREATIVITY WITHIN A CLASSROOM SETTING.

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ABSTRACT

The Most powerful way to develop creativity in your students is to be a role model. Children develop creativity not when you tell them to, but when you show them". Robert J sternberg.

Creativity is a mysterious quality that some lucky people are born with. But the truth is everyone is, and can be, creative. Creativity is the ability to make or do something new that is useful or valued by others (Gardner, 1993). This "something" can be an object (like an essay or painting), a skill (like playing instrument), or an action (like using a familiar tool in a new way). The meaning of creativity is to think or do something differently. It is a kind of fantasy in which new ideas are promoted and that new ideas are essential to the advancement of human society. Creative work includes any new discovery, thought or presenting old notions in a new manner. Creativity is a mixture of several abilities or traits. Flexibility of thought and behavior is found in creativity. The nature of creativity is that it is always moving towards progressive ideas. It varies constantly and continuously according to the new conditions of human thinking. Creativity always brings important consequences. So any new imagination gives joy to thinker. Therefore creativity attracts all. It is the nature of creativity to re-explain any problem or to see a problem with new attitude. Ability of fundamental ideas, freedom of judgment, awareness, sensitivity and entertainment are the nature of creativity. By their nature, creative people, are always ready to adopt new behavior, new fantasy. So they succeed in finding new solutions to problem.

Thus the author has made an attempt to give brief Introduction to creativity. The paper has also highlights on Creative Education, Benefits of Creative Teaching, Components of creativity, Features of creativity, and Nature of creativity. The paper emphasis on Development of Creative skills. The paper concludes with developing creativity among children.

INTRODUCTION

“Creativity is a combinatorial force: it's our ability to tap into our 'inner' pool of resources-knowledge, inspiration, insight, information, and all the fragments populating our minds-that we've accumulated over the years just by being present and alive and awake to the world and to combine them in extraordinary new ways”.

MARIA POPOVA, BRAINPICKINGS

Creativity is the intellectual ability to make creation, invention and discoveries that bring novel relations, entities and unexpected solutions into existence. Creativity is the gifted ability of human beings in thinking, inference, problem-solving and product development. Creativity is a phenomenon whereby something new and somehow valuable is formed. Creativity is defined as the tendency to generate or recognize ideas, alternatives, or possibilities that may be useful in solving problems, communicating with others and entertaining ourselves and others. Creativity is the act of turning new and imaginative ideas into reality. Creativity is characterized by the ability to perceive the world in new ways, to find hidden patterns, to make connections between seemingly unrelated phenomena, and to generate solutions. Creativity involves two processes: thinking, then producing

Creativity requires passion and commitment. Creativity is the strength or capacity to inflict and create any new objects. Although novelty is given special importance in creativity, yet a creative person can present old objects in new forms instead of inventing any new objects. Creativity is inherent in each person.

CREATIVE EDUCATION

Creative education is when students are able to use imagination and critical thinking to create new and meaningful forms of Ideas where they can take risks, be independent and flexible. Instead of being taught to reiterate what was learned, students learn to develop their ability to find a various solutions to a problem. When students have more in their education, they become more engaged which helps facilitate learning plus, the goal of Creative education is to challenge each student and encourage originality. Instead of “standardizing” how students approach a problem, different responses could be encouraged .This, in turn allows more than one type of learner to exist within a classroom.

Teaching with creativity and teaching for creativity include all the characteristics of a good teaching- including high motivation, high expectations, the ability to communicate and listen and the ability to interest, engage and inspire.

Creative teachers need expertise in their particular fields but they need more than this. They need techniques that stimulate curiosity and raise self esteem and confidence. They must recognize when encouragement is needed and confidence threatened. They must balance structured learning with opportunities for self direction; and the management of groups while giving attention to individual's. Teaching for creativity is not an easy option, but it can be enjoyable and deeply fulfilling. It can involve more time and planning to generate and develop ideas and to evaluate whether they have worked. It involves confidence to improvise and take the detours, to pick up unexpected opportunities for learning; to live with uncertainty and to risk admitting that an idea led nowhere. Creative teachers are always willing to experiment but they recognize they need to learn from experiences. All of this requires more, not less, expertise of teachers.

COMPONENTS OF CREATIVITY

Creativity has four components

1. Continuity: - Creative child has the ability to consistently change in useful manner. A child who has different types of ideas continuously that child is considered to be a creative child.
2. Flexibility- Creativity in a person refers to self- control, foresightedness and the trait of taking care of others' likes and dislikes. Such a person brings a change in his/ her thoughts according to time and circumstances.
3. Originality:-Creative child does not love the old ideas. His/ her ideas have originality. Such a child is strong-willed, industrious and courageous. He/ she is always eager to start any task by himself /herself. In each case his/her opinions are entirely different from those of other child.
4. Expansion: - Creative child can exaggerate any matter or event. His / her vocabulary is very rich and has interesting way of expressing ideas.

FEATURES OF CREATIVITY

1. Creativity has original
2. It is Innovative.
3. The high degree of intellectual ability is found in creativity.
4. Flexibility is the makeup of creativity
5. The problem is the presence of knowledge
6. Creativity has the power of imagination and checking the correctness of imagination.
7. There are several dimensions and areas in creativity

HARLOCK (1978) DESCRIBES THE FEATURES OF CREATIVITY AS FOLLOWS

1. Creativity is a type of controlled imagination which directs some achievement.
2. Creativity is not a production but a process or ability.
3. The ability of creation depends on the acquisition of recognized knowledge.
4. The process of creativity is gold- directed. It is beneficial for either the individual or the group of society.
5. Creativity is a way of thinking.
6. Creativity, whether oral or written whether it is tangible or intangible, in any event is unprecedented for a man, it is a new and different direction of production.

NATURE OF CREATIVITY

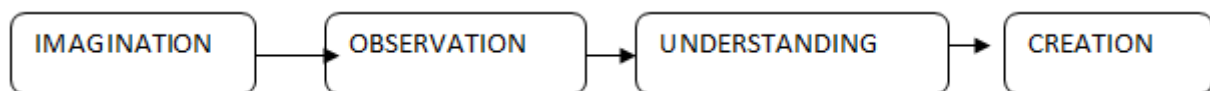
Explaining the nature of creativity, many psychologist have expressed their views

1. The nature of creativity is always growing towards development i.e., it is development- oriented
2. Creativity is able to give any work in new and basic form.
3. Creativity enhances the quality of a material or matter.
4. Creativity is mainly present. It varies according to the intellectual ability.
5. Creativity is related to intelligence.
6. The thought of creative man is constantly changing according to new situations.

7. Creativity gives happiness to the thinker of new imagination.
8. Flexibility of thought and behavior is found in creativity.
9. The nature of creativity is that it is always moving towards progressive ideas. It varies continuously according to the new conditions of human thinking.
10. Creativity always brings important consequences. So any new imagination gives joy to think. Therefore creativity attracts all.
11. By their nature, creative people, are always ready to adapt new behavior, new fantasy. So they succeed in finding new solutions to problems.
12. It is the nature of creativity to re explain any problem or to see a problem with a new attitude.
13. Ability of fundamental ideas, freedom of judgment, awareness, sensitivity and entertainment are the nature of creativity.

DEVELOPMENT OF CREATIVE SKILLS

Human beings are creatures of Creative use, and they display their abilities. But the necessity is to develop and add them to the subject-matter of teaching. In teaching by using various skills of creativity, teacher can make his/ her teaching more effective. There are four skills of creativity they are:



1. **Imagination** - The first and most important step of creativity is imagination. Imagination is abstract which cannot be seen by others. Imagination is the basis of creation. Imagination helps make knowledge applicable in solving problems and is fundamental to integrating experience and the learning process. The basic training for imagination is listening to storytelling in which the exactness of the Chosen words is the fundamental factor to “evoke worlds”. It is a whole cycle of image formation or any sensation which may be described as “hidden” as it take place without anyone else's knowledge. A person may imagine according to his/ her attitude, it may be good or bad depending on the situation. Some people imagine in a state of tension or gloominess in order to calm themselves. It is accepted as the innate ability and process of inventing partial or complete personal realms within the mind from elements derived from sense perception of the shared world. The term is technically used in psychology for the process of reviving in the mind, precepts of objects formerly given in sense perception. Imagined images are seen with the “mind's eye”. The things which are created in the world so far are based on imagination. There for, the child’s creative skills are based on imaginations. Every child has a different learning ability. Imagination in the positive and right direction influences the creative process of a child to large extent. Teacher should give the right direction to develop imagination in a child.

SOME VALUABLE FACTS TO DEVELOP CHILD'S IMAGINATION ARE:-

1. The tendency to visualize the actual objects at the initial level should be developed. Large and highly abstract imagination can draw children’s attention to the other side. So initially it is excellent work to develop the imagination of Pre-familiar things lying around the children.
 2. While developing the children's imagination thinking of teachers should be positive and objectives must be clear. Children understand simple, clear, events quickly. Teachers ask the child to imagine something that should be taken to reality.
 3. Teachers should have the necessary time to encourage creative imagination of the child. The child should be encouraged to imagine and initiate the process of creation. There is risk for children to forget the original thing if children are given unnecessary long period.
 4. Teachers should know about the imagination of all the children according to their age group.
2. **Observation**- Observation is the active acquisition of information from a primary source. It employees senses. Observation plays a significant role in the development of Creative skills. In children there is fundamental tendency of observation. Because of this important quality, child asks more and more questions about each strange thing and new things appear in his/her view. Observation is very helpful in

increasing the curiosity of a child. The observing capacity of sculptors, painters and craftsmen is more reasonable. Because of acute observation skills in students' art, they can attain efficiency and this efficiency appears in their creation.

THE FOLLOWING EFFORTS CAN BE MADE BY TEACHERS TO ENHANCE CHILDREN'S OBSERVATION CAPACITY:-

1. The tendency to observe class and textbook based things should be developed by teacher which should have direct relationship with the class-teaching.
 2. The children should be inspired by teachers to review materials that are available around them. The creative skills of children develop by observing minutely pre-familiar objects.
 3. Emphasis should be laid on the observation of content scene, events, objects, models and figures.
 4. For stimulating imagination and observation sequences, children must be motivated. They have to inspire by imagination and curiosity.
 5. Children should be given enough time to observe by the teacher.
- 3. Understanding:** - Understanding is considered to be a special quality of mankind. A person creates personality on the basis of understanding. Learning or reading is considered complete only when the child's actual understanding is developed. Clarity of understanding provides the basis of creation.

TO GENERATE AND ENHANCE UNDERSTANDING OF CHILDREN, FOLLOWING POINTS SHOULD BE NOTED:-

1. Teacher should inspire children to enhance understanding of specific aspects.
 2. Students tend to be curious. Therefore, exercise caution when drawing the attention to anything required.
 3. To achieve the primary objectives of education, it is necessary that understanding should be mingled in behavior of students. Teacher should provide opportunity to children to develop understanding.
 4. Teacher should motivate students to implement acquired understanding. Otherwise, there is risk of forgetting.
 5. For developing the tendency of using understanding and to give students of permanent stage, it is necessary that in them, the tendency to complete any work may be developed.
- 4. Creation:** - Creation is fundamental and natural way which comes in every child by birth along with the talented qualities. With the growing age of children, flexibility, originality, current flow and the strength to think new ideas help them to build the tendency and conscience to solve the problem. The creativity is the inherent such unique ability in a child which has direct relationship with self-expression and self-confidence. That trait of creativity is latent in children like saplings of seeds. Congenial atmosphere is required to be given to develop and flourish them.

DEVELOPING CREATIVITY AMONG CHILDREN

To develop creativity in children, the teacher can adopt the following measures

1. For developing creativity in children the teacher should be inspired for making artistic things related to syllabus and subject-matter.
2. Creation of different activities for each age group should be inspired by the teacher.
3. Children should be inspired for creation by keeping in mind the talents, interests and background.
4. It is necessary to keep in mind the shape of created thing for receiving the desired knowledge.
5. The activities for developing the useful and creative skills in the true sense should be encouraged. Thus it is clear that the child has capacity of creation by birth. It is required to be developed and flourished by different means.

BARRIERS TO CREATIVE TEACHING

1. Some teachers may not have the mindset of teaching their students how to be creative.
2. Some teachers might view creative work as “extra” and not needed
3. There is a “creative gap” in classroom where creativity is discouraged
4. Some studies have found that teachers cannot be creative in classroom due to pressure by the system, standards, and big classroom size.

CONCLUSION

Creativity is an important element in education. Creative opportunities should be given to students in a classroom situation. Elasticity, freedom and courage must be combined to increase the creativity. Creativity is that quality which could be followed and understandable. There should be the traits of originality, and renovation in teaching system of classroom. The need of development of creativity in students has been regarded by all educationists. Many attempts have been done in this direction and many types of activities were used to develop creativity.

Creativity is the foundation pillar of learning process. Currently skills of creation should be encouraged with a view to make harmony between complexity of syllabus and interest of children. Activities should be child centered. Various types of creation can give better success to education. Education is the mother of creation which inspires constantly the children. Creativity gives rise to curiosity. Complicated or difficult subject matter becomes simple and understandable by Creative students. Independent thinking of children facilitates to explain the subject matter. By the independent thinking, the power of imagination increases the attitude of children which undergoes positive development. The shared dexterity of imagination, observation, understanding, and creation give special contribution to make children equipped with talent. To enhance creativity, children should be entrusted with the task by the teacher according to their talent and skills. Creation will be effective if child has interest. The Conclusion is that the best use of Creative skills of children in teaching can be made. These children could receive the education to a desired level without experiencing any burden or tension and could display their talents in a respectable manner.

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ARTIFICIAL INTELLIGENCE & INTELLECTUAL PROPERTY RIGHTS: THE OWNERSHIP CONUNDRUM**L. Ashish Kumar**Assistant Professor, GITAM School of Law, Visakhapatnam

INTRODUCTION

The expression “Artificial Intelligence” or AI is often seen everywhere these days and most of them confuse that AI is used to describe a physical robot. Rather, this expression is typically applicable to softwares also. Legal Week defines AI as “the theory and development of computer systems which will perform tasks that normally require human intelligence.” Artificial intelligence is a branch of computer science with the equipping machines with reasoning and perceptual abilities.

AI came into picture at a conference at Dartmouth University in 1956: the Summer Research Project on Artificial Intelligence. Dartmouth Professor John McCarthy is attributed for coining the term “Artificial Intelligence” which has commonly understood to mean a subfield of computer science involved with making machines that can think. Marvin Minsky, one of the founders of AI, called it “the science of making machines do things that would require intelligence if done by men.”

AI can do more than what a simply computer program requests: it can reason and learn. In non-AI software, programmers give computers instructions and tasks, which would be performed. AI on other hand, can follow these as well as can also determine whether the instructions are correct or whether there is a better process to reach the anticipated outcome, or if the process had been successfully used before. AI machines learn from their experiences.

There are certain essential features to be considered as an artificial intelligence like the following: (1) communicate using natural language, (2) store information, (3) engage in automated reasoning (i.e., logic) to evaluate stored information to answer inquiries, (4) adapt to new situations and extrapolate patterns, (5) contain computer vision, and (6) include robotics functions.

AI is currently used in various fields, including making mathematical discoveries, interpreting visual scenes, diagnosing diseases, and reasoning by analogy, creating music etc. Artificial Intelligence is possibly the best solution to certain tasks because it can process data far in excess comparative to the speed of human thought.

AI & INTELLECTUAL PROPERTY RIGHTS

Intellectual Property Rights are the rights given to person for his creativity and innovation. There various kinds of IPRs such as Copyright, Patents, Trade Marks, Geographical Indications, Industrial Designs, Semi-conductor and Integrated Circuits, Plant varieties and Farmer Rights, Trade Secrets.

The main issues pertaining to the IP rights and AI can be mainly dealt in Copyrights and Patents.

AI AND COPYRIGHT

A large variety of “expert systems” or AI programs create copyrightable subject matter ranging from architectural drawings to medical advice to legal research and many. Where a computer program creates original art, music, or literature, copyright protection may be generally granted to the programmer, the computer, the user, or some combination (joint authorship).

General perception is that the programmer conceives of a copyrightable expression and puts the expression into the program so that it is available to the user. Here, the programmer will have a copyright in the expression, where the expression is fixed in a tangible medium. The works created by the AI are protected, and works based on the AI are derivative works.

The legal quandary is whether the program itself should receive copyright protection for the works it creates. This illustrates the basic problem presented by artificial intelligence; awarding copyright to the one who is the author in the sense of being the originator or intellectual inventor of a work does not further the objective of stimulating future creativity. Whether an AI should be recognized as the author of a copyrightable work is one of the most perplexing issues in copyright law. The object of copyright law is to promote the progress of science and useful arts and dissemination of knowledge. Copyright monopolies are not granted to reward authors or creators for their labors, but rather to encourage authors or creators to generate works of authorship for the benefit of society.

When deciding whether to confer a copyright to an AI, the Copyright Office or Boards and the courts must consider whether such a copyright will stimulate and encourage the AI or other authors to create future works for benefit of society. For example, the fictional character “Data” on the television series “Star Trek: The Next Generation” is an AI and a violinist, sculptor, and painter in his free time. Awarding copyright protection to Data might encourage Data or other AIs to spend more time creating artistic works, so it might make sense to award Data copyright protection for its creations.

The possible solution might be by granting Joint ownership for the joint work. A “joint work” as “a work prepared by two or more authors with the intentions that their contributions be merged into inseparable or interdependent parts of a unitary whole.” The authors of a joint work would be the co-owners of the copyrighted work. A joint author must intend to contribute to a the work as a whole, an AI may only be a joint author if the AI has intentionality, the ability to “intend.” Present perception is that AIs do not possess such intentionality. For example, if an artist agreed to draw a kaleidoscope image of a pattern that the user supplied, the artist would probably undertake the drawing with the intention of being at least a joint author. Therefore, an AI with the same contribution could be credited with the same intent, and the owner of the copyright to the AI program could be considered a joint author.

Although it would be difficult to formulate a explicit formula the ownership of copyright to every type of computer-generated work, following steps can be followed to determine the rights. The first step of any analysis is whether the computer-generated work is a derivative work based on the program. In other words, does the computer generated work contain recognizable elements of expression embodied in the computer program. If the work is a derivative work, then the owner of the copyright for the underlying work i.e., the programmer has the exclusive right to generate derivative works based on the underlying work. For computer-generated works that are not derivative works, such as poetry written by computer programs or art work drawn by computer programs, a court must follow a multi-step analysis. First, the court must determine whether the output of the program is repetitive and predictable. If the program generates the same output regardless of the user's input, then the programmer has some claim to have fixed the work in a tangible medium of expression in the computer program. Second, the court must consider whether the user's input meet the test for minimum standards of creativity. The user should not receive a copyright where the user's input is a simple command, such as “run” or “compose.” Third, if both the programmer and the user meet the requirements of fixation and originality (i.e., if the first two inquiries are both “yes”), then the court must examine whether the programmer and user intended to be joint authors. If they did so intend, then they are joint authors. Fourth, a court must determine whether the computer-generated work contains blocks of expression attributable neither to the programmer nor the user. For instance, if the computer program generates a poem that is not repetitive or predictable, and the user's contribution is minimal, then the author of the poem may be the computer program (the AI) itself. Finally, if the court finds that the AI itself authored a work, then it must examine whether the AI has the sophistication to decide whether it will generate future works. If awarding the copyright to the AI will stimulate the AI to create future works, then the AI should receive copyright protection; if not, then the court should assign the copyright to the owner of the computer program.

As of now, AIs cannot be considered as authors for copyright purposes, but this conclusion may change if AIs develop to the extent that they develop the decision-making ability to ascertain whether and how to create copyrightable works.

AI AND PATENTS

Patentable inventions have been traditionally considered to be the result of human mental processes. Patent law has evolved to acknowledge human inventors in a context where there has always been necessarily at least one to recognise.

A person who contributed to the formulation of the novel and inventive concept or concepts of a patent is called as an inventor. It is not clear whether an artificial intelligence can be called as an inventor. From the known examples of computer-assisted inventions, their human operators have been named as the inventors; however, this would become less justifiable the more a computer contributes to the conception of the inventive concept.

The pivotal question for patent law is where humans are not actively involved, can computers acting autonomously invent and become inventors. If it meets the statutory requirements, there is no bar to granting a patent for a computer-generated specification. If the invention has wider commercial use and would otherwise have been patentable had it been invented by humans, patent law should advance to allow for recognition of the same. If the inventions generated by artificial intelligence lack human ingenuity at the stage of invention, then they should be excluded from patentability provided there is a proper law to address this issue.

The patentability of these inventions depends on whether the patenting of these outcomes falls within the purposes and justifications of the patent system. The fundamental justification for the patent system is to provide an incentive for innovation and the disclosure of its results to the public. The next issue is the incentivisation of autonomous computer-generated invention. Expanding patentability of inventions to artificial intelligence would provide an incentive that would catalyse innovation and accelerate the rate of inventions with less skill and labour, minimal resources than process of inventing traditional inventions. The artificial intelligence would contribute and communicate all of the elements of the inventive concept, is sufficient to be considered as inventor of the claim. Legally, this would require not only accepting inventorship beyond natural persons, but also recognizing computers as legal persons.

CONCLUSION

Even though conferring personality to artificial persons such as corporate entities is not relatively new but granting recognition to Artificial Intelligence would lead to a new chapter in jurisprudence. Sophia, an AI Robot needs no introduction which was granted citizenship by Saudi Arabia. These kind of actions leads us to conclusion that the world is taking a progressive approach in recognising AIs. Therefore, it can be recommended that law could be amended to define “author” and “inventor” so as to include works created and invented by Artificial Intelligence. The position of authorship or inventorship in relation to copyright or patents respectively may change if AIs are granted legal status.

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AFSPA: THE DARKER SIDE OF INDIAN DEMOCRACY

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The Armed Forces Special Powers Act (AFSPA) allows the government to declare an entire state or a part of a state a 'disturbed area'. Such a notification implies that the area in the words of the text of the law, 'is in such a disturbed or dangerous condition that the use of armed forces in aid of the civil powers is necessary.' Once an area is declared 'disturbed', members of the armed forces can make preventive arrests, search premises without warrant, and even shoot and kill civilians, while engaging in the task of restoring and maintaining public order. Legal proceedings against members of the armed forces require the prior approval of the central government, a provision of the law that is seen as *de facto* immunity against prosecution.

AFSPA was adopted by the Indian Parliament in 1958 during the early days of the Naga rebellion; it originally applied to what was then the state of Assam and the Union Territory of Manipur. It has since been amended a number of times to accommodate the names of the new states of Northeast India created since then. Two other laws with the same name were enacted later: in 1983 for Punjab and Chandigarh and in 1990 for Jammu and Kashmir.

AFSPA is not based in the Constitution's Emergency Provisions (Part XVIII, Articles 352-360). The Emergency of 1975-77 and President's Rule have their legal basis in that part of the Constitution. A disturbed area declaration – and the sweeping powers that the armed forces acquire – has obvious similarities with emergencies or states of exception, including martial law and the state of siege. It is, therefore, useful to look at AFSPA through the lenses of the jurisprudence of emergency. All democratic constitutions have emergency provisions; they define an emergency, and lay out governmental powers and restraints during emergencies. Obviously, fundamental freedoms are effectively suspended in a 'disturbed area'. But since it happens under the authority of AFSPA, it is not subject to the usual restraints of a constitutional emergency. Since the temporal limits governing constitutional emergencies do not apply, a state can be under AFSPA for years – even decades – on end. The AFSPA regime, in that sense, is a form of undeclared emergency rule.

If state violence, repression and impunity are among the defining features of authoritarian rule, AFSPA surely is a piece of authoritarian legislation *par excellence*. Some of the most repressive methods in the repertoire of counter-insurgency, such as village regrouping, were used against Nagas and Mizos; and AFSPA provided legal cover. For those on the receiving end of AFSPA, living in a 'disturbed area' is no less nightmarish today than it was in the 1950s and 1960s. This is the message Irom Sharmila tried to convey to decision-makers in Delhi and to the rest of India through her 16-year long hunger-strike – an extraordinary act of 'communicative suffering'.

AFSPA has been in force in many parts of Northeast India for a long time. There are intended and unintended consequences of this – some extremely damaging to the culture of democracy. Consider an episode recounted by anthropologist Dolly Kikon. It involves a security force that no one intended to include in the meaning of 'armed forces' under AFSPA: the Central Industrial Security Force (CISF). It is designed to protect the country's economic infrastructure, including airports. In 2007, its personnel shot and killed a person in an area of Assam where it was responsible for guarding oil installations. The incident did not occur at any of the structures secured by the CISF. AFSPA was not explicitly invoked. But the CISF, while defending its action, said it had to be extra vigilant because of the region's poor security conditions. The incident was later explained as a case of 'mistaken identity'. Local citizens initially protested the killing; but soon family members accepted monetary compensation and the public mood changed; people wanted to move on and leave the incident behind. AFSPA creates 'different expectations and concepts of justice', observes Kikon. If she is right, even the Kaziranga National Park's newly acquired reputation as 'the park that shoots people to protect rhinos' is perhaps not unrelated. According to a BBC report, that brought the ire of the Indian authorities upon the reporter, the park's rangers have 'the kind of powers to shoot and kill normally only conferred on armed forces policing civil unrest.'

It has to do with the double inheritance of the postcolonial state, as Sudipta Kaviraj once put it: it being a successor to both the colonial state and the Indian national movement. AFSPA is, of course, only one of the many coercive laws in India with roots in the colonial era. Jawaharlal Nehru and his generation of leaders – who fought British colonial rule, wrote the Constitution, and was part of the national government when laws like AFSPA were adopted – were aware of this contradictory inheritance; and they gave it some thought. Thus in 1951, during the debate in Parliament on the Constitution's First Amendment Bill that expanded the

government's power to limit press freedom, Nehru accused the bill's opponents of not having 'faith in ourselves, in our Parliament or our assemblies.' He said his critics did not trust democracy.

The history of AFSPA in Northeast India is now almost as long as the history of the Republic. There is a remarkable continuity of policy from Jawaharlal Nehru to Narendra Modi. AFSPA's beginnings were in the Nehru era; many see it as the golden era of Indian democracy. By the time Irom Sharmila came to the conclusion that no government in New Delhi will ever concede to her demand of repealing AFSPA – and ended her sixteen-year hunger strike – Narendra Modi was prime minister. Civil protests in AFSPA states, and criticism by rights groups – domestic and international – have moved the needle, but ever so slightly.

In 2004, the abduction, suspected rape and murder of a young woman, Thangjam Manorama, sparked off a powerful protest movement in Manipur demanding the repeal of AFSPA. The Manmohan Singh-led first UPA government in response, appointed a committee headed by former Supreme Court Judge, B.P. Jeevan Reddy to review AFSPA: perhaps the most significant move to date towards changing the status quo on AFSPA. The committee was asked to consider whether to amend AFSPA – and bring it in line with the government's human rights obligations and commitments – or to replace it with 'a more humane' law. In its report in June 2005, the committee recommended the repeal of AFSPA, and the incorporation of some of its key provisions into the Unlawful Activities Prevention Act (UAPA). In addition, it recommended a few reforms such as creating grievance cells in districts where the army operates to 'ensure public confidence in the process of detention and arrest.'⁸ The Centre sat on the report for a while in the face of a strong push from the security establishment not to accept any of its recommendations. In March 2015, the Ministry of Home Affairs recommended to the Cabinet Committee on Security, headed by Prime Minister Modi, to reject the report.

In 2009, the idea of revoking or amending AFSPA in Jammu and Kashmir was actively debated. It was provoked by widespread anti-AFSPA protests against fake encounters – cold-blooded murder of innocent civilians framed as deaths of 'insurgents' in fictional encounters with security forces. Responding to the public anger, the then Chief Minister Omar Abdullah suggested that AFSPA would be revoked or amended when the situation improves. Kashmiri commentator Anuradha Bhasin Jamwal, however, asked rhetorically: 'Since when does he or any establishment in Jammu and Kashmir have the autonomy to deal with something that Centre imposes'? Military generals and BJP politicians – then in opposition – were sharply critical of Abdullah. People who talk of the dilution or withdrawal of AFSPA, said the then army chief, and now BJP Union minister, V.K. Singh, do it for political gains. To consider modifying AFSPA or withdrawing troops from Jammu and Kashmir, said BJP leader L.K. Advani, is to surrender to Islamabad: its 'strategy of breaking India's unity.' Even though no one had suggested withdrawing Indian troops from Jammu and Kashmir, the fact that the BJP leader saw it as being related to ideas about reforming AFSPA is significant. Not surprisingly, in the face of such strong and emotive political opposition, the talk of revoking or amending AFSPA in Jammu and Kashmir dissolved into thin air.

What these developments have in common is the critical role played by one set of special interests in determining the eventual outcome of the discussions. Our political leaders at the top seem unwilling to go against the wishes and preferences of the security establishment. This can't be good for the culture of our democracy.

I am not convinced that AFSPA is primarily a response to insurgency, that once insurgency is over – I am not even sure what that means any more – AFSPA will be gone. It will be hard to explain the long life of AFSPA in Northeast India in terms of any clear and imminent danger emanating from insurgency. While there have been some influential insurgent groups, the vast majority of armed groups routinely referred to as insurgents do not constitute insurgency in any serious analytical sense. Scholars who study insurgency and armed conflicts comparatively have long known that the idea of a mass-based insurgency – the focus of conventional counter-insurgency theory – bears no relationship to the so-called insurgencies of Northeast India.

Even when an armed group may have sovereign statehood on its list of political demands, the challenge it poses has very little in common with the guerrilla warfare envisaged in the canonical works on counter-insurgency. The resilience of armed groups in Northeast India is not because of the advantages traditionally associated with guerilla groups. They thrive by taking advantage of the imperfections in the rule of law; they maintain ties with mainstream actors in politics and business, and engage in strategic violence.

The reason AFSPA has been around for all these years in Northeast India may have more to do with the logic of path-dependency – an inability on the part of our state institutions to break away from past habits. A 'disturbed area' declaration is very rarely a response to what anyone can reasonably call a challenge to the authority of the Indian state. It is designed to provide utmost flexibility to the security forces in its operations against 'insurgent

groups' – big and small. That a decision that effectively suspends fundamental freedoms can be made so casually in a democracy has just not been part of the conversation; at least not in non-AFSPA states.

I find it interesting that while the story line about Northeast India is changing in significant ways, there is not much talk about repealing AFSPA. There is, to be sure, among citizens. But in the 'peace talks' currently underway to end various armed conflicts in the region – including the Naga talks – the repeal of AFSPA does not figure high on the list of priorities of either side. Official India now likes to re-imagine the region as India's 'gateway to the East' and a 'land-bridge to Southeast Asia.' Many see great potential for the region's prosperity in building cross-border economic ties with Southeast Asia. But unfortunately, there is no evidence thus far that our policy elites can imagine a future Northeast India without AFSPA.

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**AVIFAUNAL DIVERSITY AND ITS DEPENDENCY ON HETEROGENEOUS HABITATS OF
MOTHI DESAI VILLAGE, THANE, INDIA****Mhatre K. J.¹ and Chavhan Payal²**Assistant Professor¹ and Student²Department of Zoology, R. K. Talreja College of Arts, Science and Commerce, Ulhasnagar

ABSTRACT

India is one of 17 mega-biodiverse countries in the world. With only 2.4 percent of the earth's land area, it accounts for 7-8 percent of the world's recorded species. The Indian subcontinent hosts about 1383 bird species and within the geological boundaries of India is 1306 (Praveen J. et al., 2018). Maharashtra has 540 species of birds (Abdulali H., 1981). Birds are the indicators of the health of an ecosystem as they point out its quality for sustenance of different life forms. There are several studies on Birds of Maharashtra (Shanbhag et al, 2001; Gole et al, 1998; Kasambe et al, 2009; Mahabal A, 1989) indicating the richness of bird species in the region. However, detailed study, exclusively on birds of Mothi Desai Village in Thane district has not been carried out. Mothi Desai Village has a diversity amongst habitats like dense forest, grassland mixed with scrubs, paddy fields, creek tributaries, mangroves, mudflats and wetlands. This diversity of habitats offers suitable environment and opportunities for the bird population for feeding, resting breeding and nesting. Present study was carried out for two years from January 2017 to January 2019. Total of 229 avian species belonging to 64 families were observed which includes 49% residents, 47% winter visitors and 4% summer visitors. Few rare and threatened species were also occasionally spotted. From conservation point of view, the study area which was once undisturbed with rich faunal diversity, has been however, now impacted by urbanization pressures. The present study can establish baseline data for future effective management and planning. Since the study area is equally utilized by both resident and migrant birds, we strongly recommend the need for conservation of the site.

Keywords: Avifauna, Mothi Desai Village, Baseline study

INTRODUCTION

Biodiversity is the degree of variation of life forms within a given species, ecosystem and biome, whether naturally occurring or modified by humans (Delong, 1996). During last few decades, it has become a central concern in environmental management. India has two out of 17 global biodiversity hotspots and is a home to 1306 avian species (Praveen J. et al., 2018) of which 473 species have been seen in Thane district (Birdlife International, 2018). Birds are bipedal, egg laying, warm blooded, variably coloured, feathered vertebrates. Because of their peculiar plumage, behaviour, calls and songs, birds have been studied from a very long time.

Diversity of avifauna is one of the most important ecological indicators to evaluate the quality of habitats (Blair 1999). Birds play various useful roles such as control of insect pests of agricultural crops, predators of rodents, scavengers, seed dispensers and as pollinating agents. They provide important ecological services that contribute to maintaining ecosystem processes and some of the necessary conditions on which humans and other organisms depend. Birds occupy many levels of trophic webs, from mid-level consumers to top predators. As with other native organisms, birds help maintain sustainable population levels of their prey and predator species and, after death, provide food for scavengers and decomposers.

Many birds are important in plant reproduction through their services as pollinators or seed dispersers. Birds also provide critical resources for their many host-specific parasites, including lice that eat only feathers, flies adapted for living on birds, and mites that hitchhike on birds from plant to plant and even between countries. Some birds are considered keystone species as their presence in (or disappearance from) an ecosystem affects other species indirectly.

The estimation of local densities of avifauna helps to understand the abundance of various species of other organisms (Turner 2003). Since most of the birds are habitat specific, the heterogeneity and area size influences avian abundance and diversity (Freemark et al, 1986). Williams (1964) suggested that a larger area supports more species because it contains a greater diversity of habitat types. A more heterogeneous forest, for example, could support more bird species because of different preferences among species for habitats with particular vegetation structure and/or composition.

Avifaunal diversity all over the world has been decreasing due to the destruction of natural habitats and various anthropogenic activities. Decline in the bird population can have negative impacts on an ecosystem, and their

sensitivity to environmental change often lends them as useful indicators of environmental quality. Thus they form an important component of natural ecosystem (Manjunath and Joshi, 2012). There are several studies on avifaunal diversity of Mumbai and Thane region. Verma et al. (2004) studied biodiversity of avifauna of Mahul Creek, while (Chauhan et. al. 2008) surveyed the avifauna of Borivali Mangroves. Recently Mhatre and Kushwaha (2013) documented the bird diversity of Bhandup pumping station, Mumbai. However paucity exists in reports of avifauna exclusively from Suburban region. Thus literature survey revealed that reports on avifauna of Kalyan-Dombivli region are scanty.

Mothi Desai Village, the area under study, is a rapidly developing area with substantial biodiversity values which are under urbanization pressures. It is marked by variety of habitats such as dense forest, grassland mixed with scrubs, paddy fields, creek tributaries, mangroves, mudflats and wetlands. Existing habitat is likely to be impacted by human activities such as construction, industrial pollution and physical alteration of land use. To slow down the loss of biodiversity and to enhance its contribution to development, any strategy must integrate the conservation of biodiversity, sustainable use of its components and the equitable sharing of resources. This would need on priority to know the actual biodiversity surviving in the area. Hence, the study was set out to obtain information on the presence, richness, diversity and ongoing human activities in Mothi Desai Village of Thane. This is because outside the system of protected areas, India’s biodiversity has often found refuge in many private lands. The study will also help to increase the local awareness towards biodiversity issues and prove to be fruitful in conservation efforts.

MATERIALS AND METHODOLOGY

Study Area: Present study was carried out at Mothi Desai Village of MMR Boundary Ward, Thane District, India. The total area of the study site is approximately 3.2 km². The prevailing climatic conditions in Mothi Desai Village is typically tropical with mean annual temperature of 24.3 °C (min) to 32.9 °C (max). The average annual rainfall in the region is in the range of 1286 to 1233mm (data.gov.in).

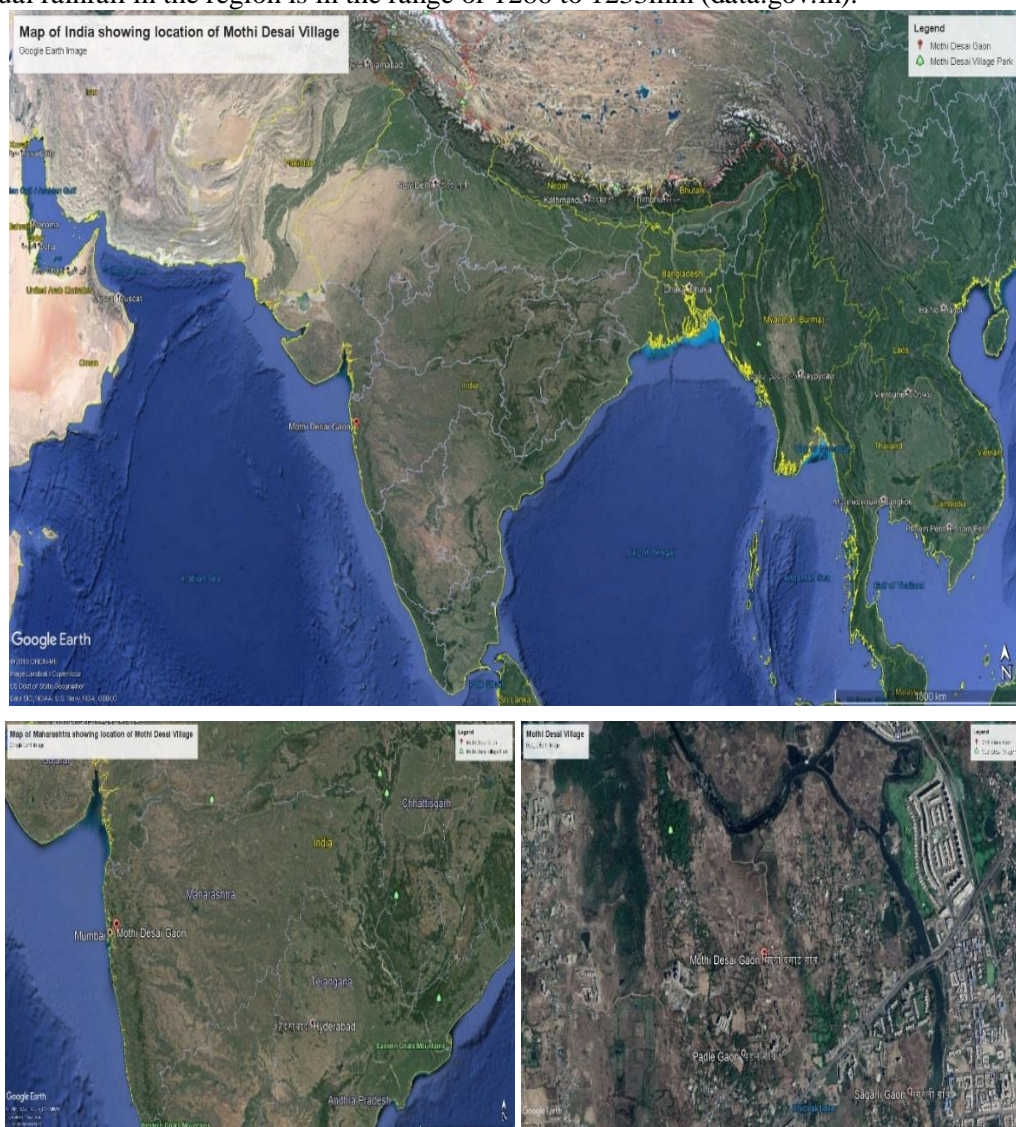


Fig. 1: Google Earth Image showing Mothi Desai Village

DATA COLLECTION

The study area was surveyed from January 2017 to January 2019 at the regular interval of fifteen days covering all the seasons. The visits were carried out in the morning from 7.00 am to 10.00 am. and in the evening from 4.00 pm to 6.00 pm. Some of the basic methods used in this study as described by Bibby et al. (1992) are:

- (a) Point counts - undertaking a bird count from a fixed location for a fixed period of time. The bird species seen or heard are recorded.
- (b) Line transect - moving along a fixed route (transect) and recording the bird species seen and heard on both sides of transect.

Besides visits were also made during different hours of the day. The birds were photographed if not identified immediately. Observations were carried out with the help of 10×42 Vanguard Orros binocular, photography was done with Nikon B700 and Sony HX 400V digital zoom camera. Identification of birds was done using field guides. The following formula was used for determining percentage of occurrence of Families (Basavarajappa, 2006).

$$\text{Percentage Occurrence} = \frac{\text{Number of species of each family}}{\text{Total number of different species seen}} \times 100$$

RESULT AND DISCUSSION

During the study period a total of 229 bird species belonging to 64 families were recorded which includes 49% resident, 47% winter and 4% summer visitors (Fig. 2). Amongst these, the family Accipitridae contributed the highest number of species (18) followed by the family Scolopacidae (14) and Ardeidae (13), whereas 28 families were found to be represented by single bird species (Fig. 3).

R - Residents, species found in the study area throughout the year; WM – Winter Migrants, species found during the winter, SM - Summer Migrants, species visiting the area during the summer season and PM- Passage Migrants, species visiting the area for stopover before further migration.

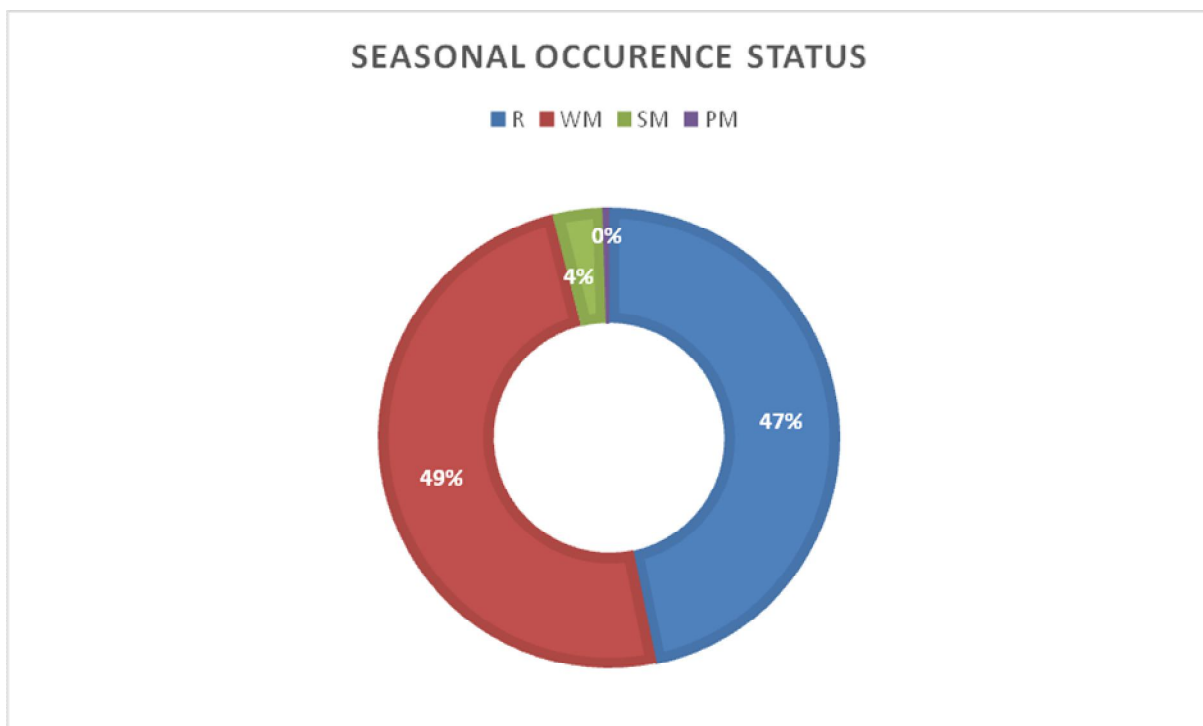


Fig. 2: Seasonal Occurrence Status of Birds (R: Resident, WM: Winter Migrant, SM: Summer Migrant, PM: Passage Migrant)

During the winter bird counts were high. Highest count of 121 species was recorded in the month of November 2018 and lowest (65 species) in the month of August 2017. Since the study area is equally utilized by both resident and migrant birds, it's a need of an hour to conserve the area for the benefits of both.

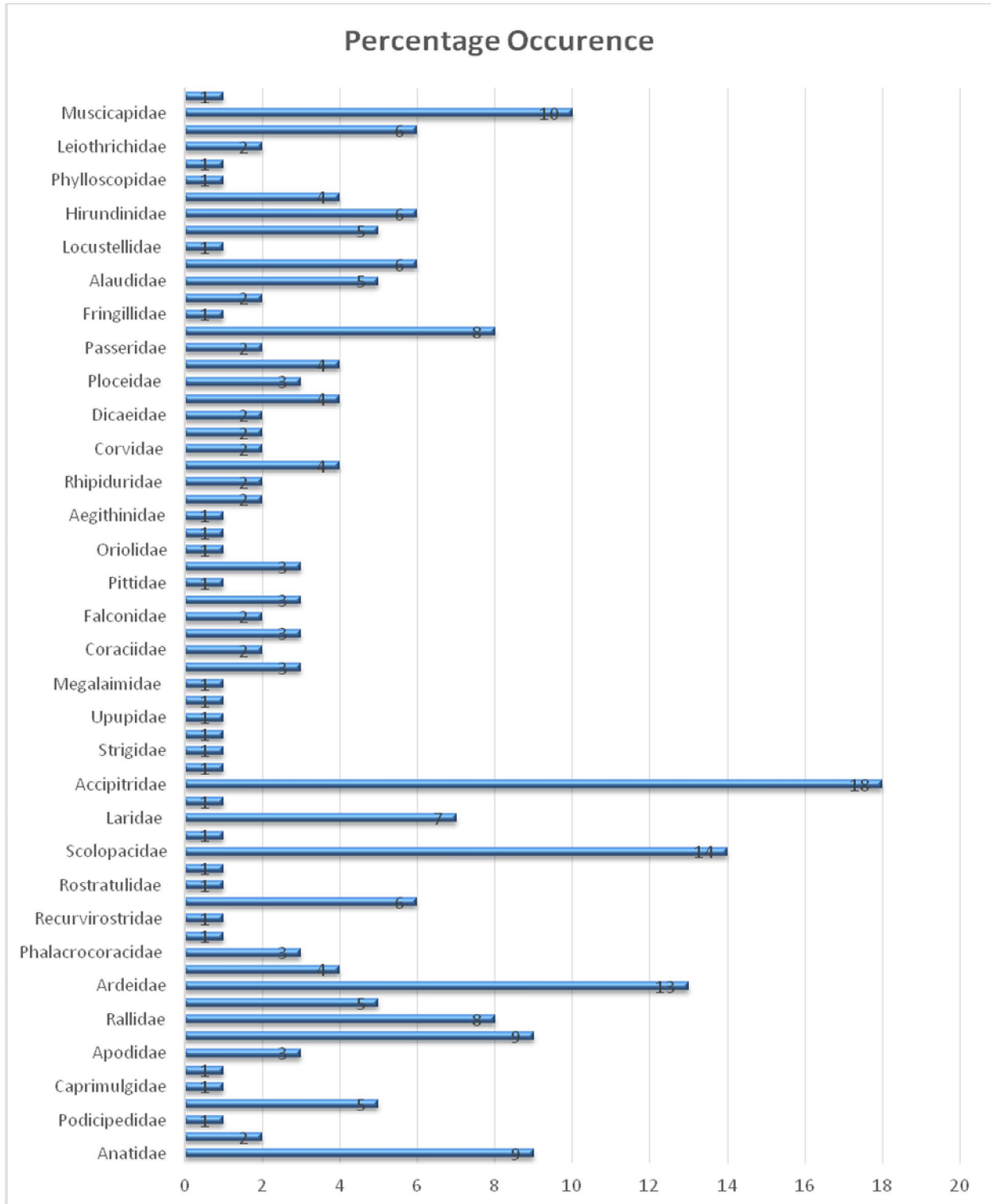


Fig. 3: Percentage Occurrence of Birds

The study area has a variety amongst the habitats forming a mosaic with seasonal grassland and paddy fields. During the study it was found out that most of the forest birds prefer edge forests for feeding and core for resting and nesting. Water birds distribution is influenced by tidal flux, i.e., during low tide waders spend most of the time in feeding along the shallow areas of the creek and during high tide waders occupy shelter within mangroves. The presence of mangroves and small dense forest around the creek has added advantage for the birds by providing roosting site as well as protection from the predators for birds like Egrets, Herons, Parakeets, Ibises, Storks, etc. The study reveals the habitat preference of birds and thus dependency on the ecosystem.

Forest and Grassland habitats together support 51% of avifauna. Mangroves associated with mudflats and wetlands provide niche for around 29% and 19% bird species, respectively (Fig. 4). Though the abundance of species varies from habitat to habitat, in all different seasons it was observed that all habitats support similar species richness.

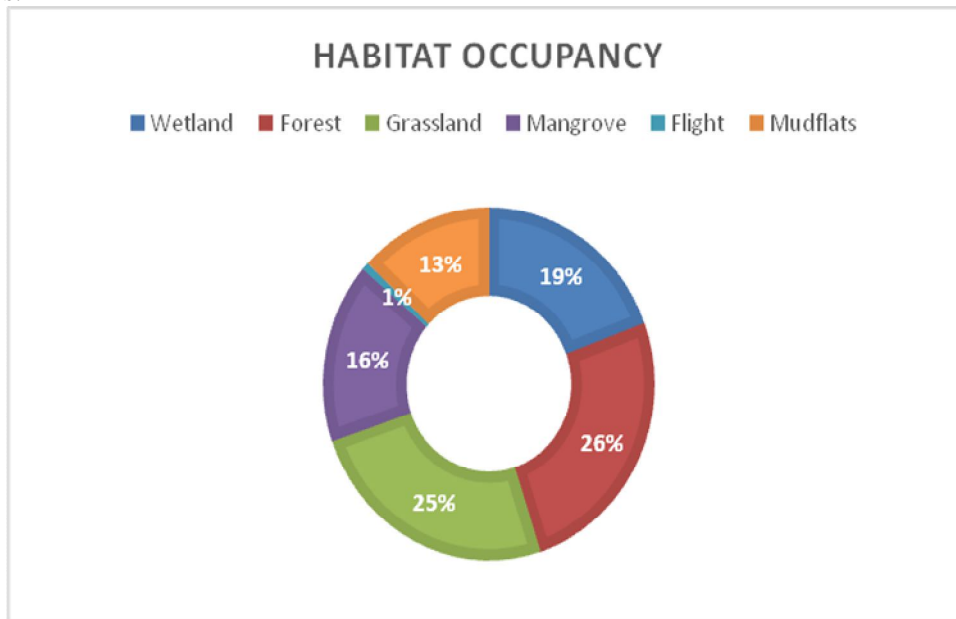


Fig. 4: Habitat occupancy

During the study 05 Threatened and 06 Near-threatened category birds were also observed, of which Painted storks, Black-headed Ibis, Black-tailed Godwit and Alexandrine parakeet are very common to the study area, which makes it more important from conservation point of view.

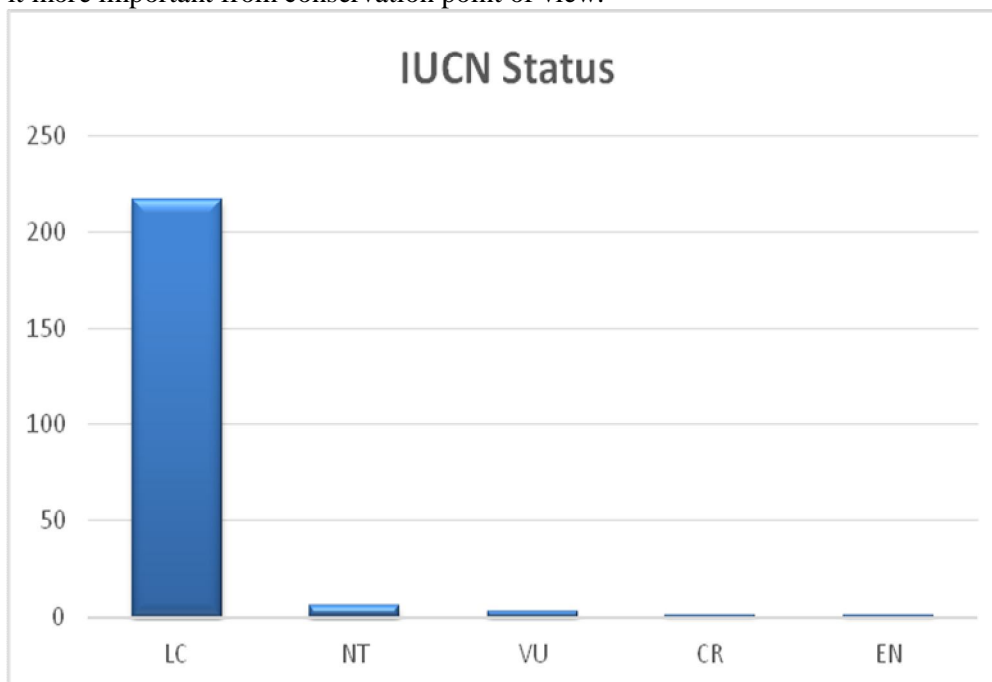


Fig. 5: IUCN Status of Avifauna observed during study period

Mothi Desai Village is a residential area and is now invaded by commercial activity due to expanding city limits. A lot of human interferences like ongoing construction activities, deforestation for various reasons, noise pollution due to vehicles and people are posing threat to avifauna. The present work revealed that even though the urban sites are continuously disturbed, these sites have supported significant number of avifauna which is excellent indicator of ecosystem health. However human disturbances can damage birds in many ways, including disrupting foraging or social behavior, increasing nest predation, interfering with parent-offspring and pair bonds, increasing nesting failures, and reducing the viability of fledglings. Additionally, birds may perceive humans as predators and leave an area; resulting in decline in species abundance. Due to urbanization pressures, it is difficult for avifauna to find the nesting locations and sheltering place or foraging habitats in this urban site.

To save the urban avifauna, reforestation is required around human habitation to facilitate the foraging, sheltering and breeding for birds. Fast growing species and fruit bearing trees suitable to the local environment should be planted within residential area to attract frugivorous and insectivorous species of birds. Thus a conservation plan could be undertaken to save the urban species of birds.

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Table No. 1 Consolidated Checklist of Birds observed during study period:

Sr. No.	Family	English Name	Scientific Name	IUCN Status
1	Anatidae	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	LC
2		Ruddy Shelduck	<i>Tadorna ferruginea</i>	LC
3		Garganey	<i>Spatula querquedula</i>	LC
4		Northern Shoveler	<i>Spatula clypeata</i>	LC
5		Gadwall	<i>Mareca strepera</i>	LC
6		Indian Spot-billed Duck	<i>Anas poecilorhyncha</i>	LC
7		Northern Pintail	<i>Anas acuta</i>	LC
8		Common Teal	<i>Anas crecca</i>	LC
9		Cotton Teal	<i>Nettapus coromandelianus</i>	LC
10	Phasianidae	Jungle Bush Quail	<i>Perdica asiatica</i>	LC
11		Painted Francolin	<i>Francolinus pictus</i>	LC
12	Podicipedidae	Little Grebe	<i>Tachybaptus ruficollis</i>	LC
13	Columbidae	Rock Pigeon	<i>Columba livia</i>	LC
14		Eurasian Collared Dove	<i>Streptopelia decaocto</i>	LC
15		Red Collared Dove	<i>Streptopelia tranquebarica</i>	LC
16		Spotted Dove	<i>Streptopelia chinensis</i>	LC
17		Laughing Dove	<i>Streptopelia senegalensis</i>	LC
18	Caprimulgidae	Savanna Nightjar	<i>Caprimulgus affinis</i>	LC
19	Hemiprocnidae	Crested Treeswift	<i>Hemiproctne coronata</i>	LC
20	Apodidae	Asian Palm Swift	<i>Cypsiurus balasiensis</i>	LC
21		Alpine Swift	<i>Tachymarptis melba</i>	LC
22		Indian House Swift	<i>Apus affinis</i>	LC
23	Cuculidae	Greater Coucal	<i>Centropus sinensis</i>	LC
24		Pied Cuckoo	<i>Clamator jacobinus</i>	LC
25		Asian Koel	<i>Eudynamis scolopaceus</i>	LC
26		Banded Bay Cuckoo	<i>Cacomantis sonneratii</i>	LC
27		Grey-bellied Cuckoo	<i>Cacomantis passerinus</i>	LC
28		Drongo Cuckoo	<i>Surniculus lugubris</i>	LC
29		Common Hawk Cuckoo	<i>Hierococcyx varius</i>	LC
30		Indian Cuckoo	<i>Cuculus micropterus</i>	LC
31		Common Cuckoo	<i>Cuculus canorus</i>	LC
32		Rallidae	Slaty-breasted Rail	<i>Lewinia striata</i>
33	Ruddy-breasted Crake		<i>Zapornia fusca</i>	LC
34	Baillon's Crake		<i>Zapornia pusilla</i>	LC
35	White-breasted Waterhen		<i>Amaurornis phoenicurus</i>	LC
36	Watercock		<i>Gallicrex cinerea</i>	LC
37	Purple Swampphen		<i>Porphyrio porphyrio</i>	LC
38	Common Moorhen		<i>Gallinula chloropus</i>	LC
39	Common Coot	<i>Fulica atra</i>	LC	
40	Ciconiidae	Painted Stork	<i>Mycteria leucocephala</i>	NT
41		Asian Openbill	<i>Anastomus oscitans</i>	LC
42		Black Stork	<i>Ciconia nigra</i>	LC
43		Woolly-necked Stork	<i>Ciconia episcopus</i>	VU
44		European White Stork	<i>Ciconia ciconia</i>	LC
45	Ardeidae	Yellow Bittern	<i>Ixobrychus sinensis</i>	LC
46		Cinnamon Bittern	<i>Ixobrychus cinnamomeus</i>	LC
47		Black Bittern	<i>Ixobrychus flavicollis</i>	LC
48		Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	LC
49		Striated Heron	<i>Butorides striata</i>	LC
50		Indian Pond Heron	<i>Ardeola grayii</i>	LC
51		Cattle Egret	<i>Bubulcus ibis</i>	LC
52		Grey Heron	<i>Ardea cinerea</i>	LC

53		Purple Heron	<i>Ardea purpurea</i>	LC
54		Great Egret	<i>Ardea alba</i>	LC
55		Intermediate Egret	<i>Ardea intermedia</i>	LC
56		Little Egret	<i>Egretta garzetta</i>	LC
57		Western Reef Egret	<i>Egretta gularis</i>	LC
58	Threskiornithidae	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	NT
59		Eurasian Spoonbill	<i>Platalea leucorodia</i>	LC
60		Indian Black Ibis	<i>Pseudibis papillosa</i>	LC
61		Glossy Ibis	<i>Plegadis falcinellus</i>	LC
62	Phalacrocoracidae	Little Cormorant	<i>Microcarbo niger</i>	LC
63		Great Cormorant	<i>Phalacrocorax carbo</i>	LC
64		Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	LC
65	Burhinidae	Eurasian Thick-knee	<i>Burhinus oedicephalus</i>	LC
66	Recurvirostridae	Pied Avocet	<i>Recurvirostra avosetta</i>	LC
67		Black-winged Stilt	<i>Himantopus himantopus</i>	LC
68	Charadriidae	Pacific Golden Plover	<i>Pluvialis fulva</i>	LC
69		Little Ringed Plover	<i>Charadrius dubius</i>	LC
70		Kentish Plover	<i>Charadrius alexandrinus</i>	LC
71		Lesser Sand Plover	<i>Charadrius mongolus</i>	LC
72		Greater Sand Plover	<i>Charadrius leschenaultii</i>	LC
73		Red-wattled Lapwing	<i>Vanellus indicus</i>	LC
74	Rostratulidae	Greater Painted-snipe	<i>Rostratula benghalensis</i>	LC
75	Charadriidae	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	LC
76		Bronze-winged Jacana	<i>Metopidius indicus</i>	LC
77	Scolopacidae	Black-tailed Godwit	<i>Limosa limosa</i>	NT
78		Ruff	<i>Calidris pugnax</i>	LC
79		Curlew Sandpiper	<i>Calidris ferruginea</i>	NT
80		Temminck's Stint	<i>Calidris temminckii</i>	LC
81		Little Stint	<i>Calidris minuta</i>	LC
82		Pintail Snipe	<i>Gallinago stenura</i>	LC
83		Common Snipe	<i>Gallinago gallinago</i>	LC
84		Common Sandpiper	<i>Actitis hypoleucos</i>	LC
85		Green Sandpiper	<i>Tringa ochropus</i>	LC
86		Spotted Redshank	<i>Tringa erythropus</i>	LC
87		Common Greenshank	<i>Tringa nebularia</i>	LC
88		Common Redshank	<i>Tringa totanus</i>	LC
89		Wood Sandpiper	<i>Tringa glareola</i>	LC
90		Marsh Sandpiper	<i>Tringa stagnatilis</i>	LC
91	Turnicidae	Barred Buttonquail	<i>Turnix suscitator</i>	LC
92	Laridae	Slender-billed Gull	<i>Chroicocephalus genei</i>	LC
93		Brown-headed Gull	<i>Chroicocephalus brunnicephalus</i>	LC
94		Black-headed Gull	<i>Chroicocephalus ridibundus</i>	LC
95		Pallas's Gull	<i>Ichthyophaga ichthyophaga</i>	LC
96		Gull-billed Tern	<i>Gelochelidon nilotica</i>	LC
97		Whiskered Tern	<i>Chlidonias hybrida</i>	LC
98		River Tern	<i>Sterna aurantia</i>	NT
99	Pandionidae	Osprey	<i>Pandion haliaetus</i>	LC
100	Accipitridae	Black-winged Kite	<i>Elanus caeruleus</i>	LC
101		Oriental Honey Buzzard	<i>Pernis ptilorhynchus</i>	LC
102		Short-toed Snake Eagle	<i>Circaetus gallicus</i>	LC
103		Indian Vulture	<i>Gyps indicus</i>	CR
104		Black Eagle	<i>Ictinaetus malaiensis</i>	LC
105		Indian Spotted Eagle	<i>Clanga hastata</i>	VU
106		Greater Spotted Eagle	<i>Clanga clanga</i>	VU
107		Steppe Eagle	<i>Aquila nipalensis</i>	EN

108		Booted Eagle	<i>Hieraaetus pennatus</i>	LC
109		Western Marsh Harrier	<i>Circus aeruginosus</i>	LC
110		Montagu's Harrier	<i>Circus pygargus</i>	LC
111		Shikra	<i>Accipiter badius</i>	LC
112		Eurasian Sparrowhawk	<i>Accipiter nisus</i>	LC
113		Brahminy Kite	<i>Haliastur indus</i>	LC
114		Black Kite	<i>Milvus migrans</i>	LC
115		White-eyed Buzzard	<i>Butastur teesa</i>	LC
116		Common Buzzard	<i>Buteo buteo</i>	LC
117		Long-legged Buzzard	<i>Buteo rufinus</i>	LC
118	Tytonidae	Common Barn Owl	<i>Tyto alba</i>	LC
119	Strigidae	Spotted Owlet	<i>Athene brama</i>	LC
120	Bucerotidae	Indian Grey Hornbill	<i>Ocyrceros birostris</i>	LC
121	Upupidae	Common Hoopoe	<i>Upupa epops</i>	LC
122	Picidae	Eurasian Wryneck	<i>Jynx torquilla</i>	LC
123	Megalaimidae	Coppersmith Barbet	<i>Psilopogon haemacephalus</i>	LC
124	Meropidae	Green Bee-eater	<i>Merops orientalis</i>	LC
125		Blue-tailed Bee-eater	<i>Merops philippinus</i>	LC
126		Blue-cheeked Bee-eater	<i>Merops persicus</i>	LC
127	Coraciidae	Indian Roller	<i>Coracias benghalensis</i>	LC
128		European Roller	<i>Coracias garrulus</i>	LC
129	Alcedinidae	Common Kingfisher	<i>Alcedo atthis</i>	LC
130		Pied Kingfisher	<i>Ceryle rudis</i>	LC
131		White-throated Kingfisher	<i>Halcyon smyrnensis</i>	LC
132	Falconidae	Common Kestrel	<i>Falco tinnunculus</i>	LC
133		Peregrine Falcon	<i>Falco peregrinus</i>	LC
134	Psittaculidae	Plum-headed Parakeet	<i>Psittacula cyanocephala</i>	LC
135		Alexandrine Parakeet	<i>Psittacula eupatria</i>	NT
136		Rose-ringed Parakeet	<i>Psittacula krameri</i>	LC
137	Pittidae	Indian Pitta	<i>Pitta brachyura</i>	LC
138	Campephagidae	Small Minivet	<i>Pericrocotus cinnamomeus</i>	LC
139		Scarlet Minivet	<i>Pericrocotus flammeus</i>	LC
140		Large Cuckooshrike	<i>Coracina javensis</i>	LC
141	Oriolidae	Indian Golden Oriole	<i>Oriolus kundoo</i>	LC
142	Vangidae	Common Woodshrike	<i>Tephrodornis pondicerianus</i>	LC
143	Aegithinidae	Common Iora	<i>Aegithina tiphia</i>	LC
144	Dicruridae	Black Drongo	<i>Dicrurus macrocercus</i>	LC
145		Ashy Drongo	<i>Dicrurus leucophaeus</i>	LC
146	Rhipiduridae	White-browed Fantail	<i>Rhipidura aureola</i>	LC
147		White-throated Fantail	<i>Rhipidura albicollis</i>	LC
148	Laniidae	Brown Shrike	<i>Lanius cristatus</i>	LC
149		Bay-backed shrike	<i>Lanius vittatus</i>	LC
150		Isabelline shrike	<i>Lanius isabellinus</i>	LC
151		Long-tailed Shrike	<i>Lanius schach</i>	LC
152	Corvidae	House Crow	<i>Corvus splendens</i>	LC
153		Large-billed Crow	<i>Corvus macrorhynchos</i>	LC
154	Monarchidae	Black-naped Monarch	<i>Hypothymis azurea</i>	LC
155		Indian Paradise-flycatcher	<i>Terpsiphone paradisi</i>	LC
156	Dicaeidae	Thick-billed Flowerpecker	<i>Dicaeum agile</i>	LC
157		Pale-billed Flowerpecker	<i>Dicaeum erythrorhynchos</i>	LC
158	Nectariniidae	Purple-rumped Sunbird	<i>Leptocoma zeylonica</i>	LC
159		Purple Sunbird	<i>Cinnyris asiaticus</i>	LC
160		Loten's Sunbird	<i>Cinnyris lotenius</i>	LC
161		Vigors's Sunbird	<i>Aethopyga vigorsii</i>	LC
162	Ploceidae	Black-breasted Weaver	<i>Ploceus benghalensis</i>	LC

163		Streaked Weaver	<i>Ploceus manyar</i>	LC
164		Baya Weaver	<i>Ploceus philippinus</i>	LC
165	Estrildidae	Red Munia	<i>Amandava amandava</i>	LC
166		White-rumped Munia	<i>Lonchura striata</i>	LC
167		Scaly-breasted Munia	<i>Lonchura punctulata</i>	LC
168		Black-headed Munia	<i>Lonchura malacca</i>	LC
169		Passeridae	House Sparrow	<i>Passer domesticus</i>
170	Yellow-throated Sparrow		<i>Gymnoris xanthocollis</i>	LC
171	Motacillidae	F Wagtail	<i>Dendronanthus indicus</i>	LC
172		Tree Pipit	<i>Anthus trivialis</i>	LC
173		Olive-backed Pipit	<i>Anthus hodgsoni</i>	LC
174		Paddy-field Pipit	<i>Anthus rufulus</i>	LC
175		Long-billed Pipit	<i>Anthus similis</i>	LC
176		Western Yellow Wagtail	<i>Motacilla flava</i>	LC
177		Citrine Wagtail	<i>Motacilla citreola</i>	LC
178		White Wagtail	<i>Motacilla alba</i>	LC
179	Fringillidae	Common Rosefinch	<i>Erythrura erythrura</i>	LC
180	Emberizidae	Red-headed Bunting	<i>Granativora bruniceps</i>	LC
181		Black-headed Bunting	<i>Granativora melanocephala</i>	LC
182	Alaudidae	Rufous-tailed Lark	<i>Ammomanes phoenicura</i>	LC
183		Ashy-crowned Sparrow Lark	<i>Eremopterix griseus</i>	LC
184		Greater Short-toed Lark	<i>Calandrella brachydactyla</i>	LC
185		Oriental Skylark	<i>Alauda gulgula</i>	LC
186		Malabar Lark	<i>Galerida malabarica</i>	LC
187	Cisticolidae	Zitting Cisticola	<i>Cisticola juncidis</i>	LC
188		Grey-breasted Prinia	<i>Prinia hodgsonii</i>	LC
189		Jungle Prinia	<i>Prinia sylvatica</i>	LC
190		Ashy Prinia	<i>Prinia socialis</i>	LC
191		Plain Prinia	<i>Prinia inornata</i>	LC
192		Common Tailorbird	<i>Orthotomus sutorius</i>	LC
193	Locustellidae	Grasshopper Warbler	<i>Locustella naevia</i>	LC
194	Acrocephalidae	Booted Warbler	<i>Iduna caligata</i>	LC
195		Sykes's Warbler	<i>Iduna rama</i>	LC
196		Blyth's Reed Warbler	<i>Acrocephalus dumetorum</i>	LC
197		field Warbler	<i>Acrocephalus agricola</i>	LC
198		Clamorous Reed Warbler	<i>Acrocephalus stentoreus</i>	LC
199	Hirundinidae	Red-rumped Swallow	<i>Cecropis daurica</i>	LC
200		Wire-tailed Swallow	<i>Hirundo smithii</i>	LC
201		Barn Swallow	<i>Hirundo rustica</i>	LC
202		Dusky Crag Martin	<i>Ptyonoprogne concolor</i>	LC
203		Sand Martin	<i>Riparia riparia</i>	LC
204		Pale Martin	<i>Riparia diluta</i>	LC
205	Pycnonotidae	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	LC
206		White-eared Bulbul	<i>Pycnonotus leucotis</i>	LC
207		Red-vented Bulbul	<i>Pycnonotus cafer</i>	LC
208		White-browed Bulbul	<i>Pycnonotus luteolus</i>	LC
209	Phylloscopidae	Common Chiffchaff	<i>Phylloscopus collybita</i>	LC
210	Sylviidae	Lesser Whitethroat	<i>Curruca curruca</i>	LC
211	Leiothrichidae	Common Babbler	<i>Argya caudata</i>	LC
212		Jungle Babbler	<i>Turdoides striata</i>	LC
213	Sturnidae	Rosy Starling	<i>Pastor roseus</i>	LC
214		Asian Pied Starling	<i>Gracupica contra</i>	LC
215		Brahminy Starling	<i>Sturnia pagodarum</i>	LC
216		Chestnut-tailed Starling	<i>Sturnia malabarica</i>	LC
217		Common Myna	<i>Acridotheres tristis</i>	LC

218		Jungle Myna	<i>Acridotheres fuscus</i>	LC
219	Muscicapidae	Indian Robin	<i>Saxicoloides fulicatus</i>	LC
220		Oriental Magpie Robin	<i>Copsychus saularis</i>	LC
221		Asian Brown Flycatcher	<i>Muscicapa dauurica</i>	LC
222		Tickell's Blue Flycatcher	<i>Cyornis tickelliae</i>	LC
223		Bluethroat	<i>Luscinia svecica</i>	LC
224		Red-breasted Flycatcher	<i>Ficedula parva</i>	LC
225		Taiga Flycatcher	<i>Ficedula albicilla</i>	LC
226		Blue Rock Thrush	<i>Monticola solitarius</i>	LC
227		Siberian Stonechat	<i>Saxicola maurus</i>	LC
228		Pied Bushchat	<i>Saxicola caprata</i>	LC
229	Turdidae	Orange-headed Thrush	<i>Geokichla citrina</i>	LC

LC: Least Concern, NT: Near Threatened, VU: Vulnerable, EN: Endangered, CR: Critically Endangered

PREDICTION OF FUTURE DEPRESSION USING DATA MINING

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ABSTRACT

Depression is a complex mental health condition that causes a person to have low mood and may leave them feeling persistently sad or hopeless. Depression can take several forms, including bipolar disorder (formally called manic-depression), which is a condition that alternates between periods of euphoria and depression. The effects of depression may extend beyond a person's emotions and mental health. Depression can also affect a person's physical health.

Purpose of this paper is to diagnose through the application of data mining, namely classification, to predict patients who will most likely develop depression or are currently suffering from depression. To obtain result, data mining software WEKA was used.

Keywords: Depression Diagnosis; Data mining; Prediction; Basic Mental Health Problems.

I. INTRODUCTION

Depression is likely to strike many people to some degree in their lifetime. According to the Centres for Disease Control and Prevention, 9.1 percent of people reported current major or minor depression. Depression may lead to serious diseases like heart diseases, diabetes, blood pressure etc. Prediction of depression will help us to prevent the affects and possibility of future diseases.

Data mining is the practice of automatically searching large stores of data to discover patterns and trends that go beyond simple analysis. Data mining uses sophisticated mathematical algorithms to segment the data and evaluate the probability of future events. Data mining is also known as Knowledge Discovery in Data (KDD). Prediction is one of the key property of data mining. Many forms of data mining are predictive. Predictions have an associated probability (How likely is this prediction to be true?). Prediction probabilities are also known as confidence (How confident can I be of this prediction?). Data mining provides the methodology and technology for healthcare organizations to evaluate treatment effectiveness, save lives of patients using predictive medicine, manage healthcare at different levels, manage customer relationship, detect waste, fraud and abuse.

It is stated in [1] that Data Mining in healthcare is used mainly for predicting various diseases, assisting with diagnosis and advising doctors in making clinical decisions. But, the potential of data mining is much bigger – it can provide question-based answers, anomaly-based discoveries, provide more informed decisions, probability measures, predictive modelling, and decision support.

[2] Stated that Prediction is nothing but finding out the knowledge or some pattern from the large amounts of data. In Data Mining, the term “Prediction” refers to calculated assumptions of certain turns of events made on the basis of available processed data. It is a cornerstone of predictive analytics. The prediction itself is calculated from the available data and modelled in accordance with the existing dynamics. The nature of prediction varies from the nature of the project. It can be simple correlation of sentiments and conversions out of which you can understand whether the user will engage with your piece of content in a productive manner or not.

In this paper we have used logistic regression to predict the result based on certain number of attributes and past data. To train and test the classification model sample data is used. Section 3 gives an overview of logistic regression. Section 4 presents the methodology and the data sets used in this research to predict depression. Section 5 evaluated the result of test data set. Finally, conclusion is covered in Section 6. The well-known WEKA tool is adopted for this study.

II LITERATURE REVIEW

[3] In this study author have analysed the performance of machine learning techniques to predict mental health disorder in children. Best First Search technique has used to eliminate redundant and irrelevant attributes. Author has compared three machine learning techniques (**Multilayer Perceptron, Multiclass Classifier, LAD Tree Technique**) based on dataset for different mental health problems. And then concluded that Multiclass Classifier produces much accurate results than other techniques on selected attributes.

[4]In this study author have predicted the future depression possibility by using data mining tool WEKA. Synthetic data, created using JAVA program was used to train and test the classification model. He has used j4.8 algorithm for prediction. Author have selected various attributes through the questionnaire. He has used training data set to create model and testing data set to predict the result on unknown instances. 400 unknown instances were used to predict the result. Finally he concluded that the outcomes for the synthetic datasets were reasonable in terms of accuracy, precision, and recall of the training and testing processes.

[6] In this study author have predicted mental health problems among children using machine learning techniques. Author has built the model which can assists the professionals to identify the problem if the known evidences of the patient are given as input. She has compared eight classification algorithm and concluded that Multilayer Perceptron, Multiclass Classifier and LAD Tree produce more accurate results than the others.

III. OVERVIEW OF LOGISTIC REGRESSION

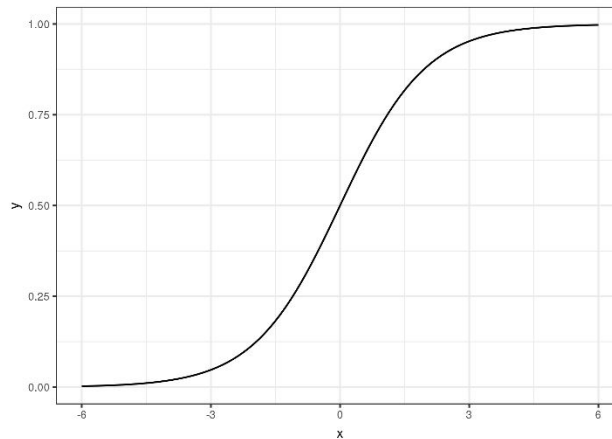
Regression is a data mining technique used to predict a range of numeric values (also called *continuous values*), given a particular dataset. Logistic regression is a statistical analysis method used to predict a data value based on prior observations of a data set. A logistic regression model predicts a dependent data variable by analysing the relationship between one or more existing independent variables.

Logistic regression is a solution for classification. Instead of fitting a straight line the logistic regression uses logit function to give the output of linear equation between 0 and 1.

Logistic function is defined as follows:

$$\text{logistic}(n)=1/1+\exp(-n)$$

and it looks like this



IV METHODOLOGY

4.1 Data Collection

To collect the data, set of attributes are selected. Attribute selection is very important part of this research. Data set are of two types. One is training data set, to create model and another one is testing data set, to test the result. We have collected data through the questionnaire. To prepare data set we have collected some attribute from online surveys. This set has 22 attributes including the class variable ‘Depression Possibility’. The final set of attributes is presented in Table below.

SET OF ATTRIBUTES

Attribute	Values			
Fatigue	negative:0	mild:1	medium:2	positive:3
Mood swing	negative:0	mild:1	medium:2	positive:3
Dry Mouth	negative:0	mild:1	medium:2	positive:3
Vision Problems	negative:0	mild:1	medium:2	positive:3
Dizziness	negative:0	mild:1	medium:2	positive:3
Irritability	negative:0	mild:1	medium:2	positive:3
Constipation	negative:0	mild:1	medium:2	positive:3
Feelings of guilt	negative:0	mild:1	medium:2	positive:3
Worthlessness	negative:0	mild:1	medium:2	positive:3
Loss of interest	negative:0	mild:1	medium:2	positive:3

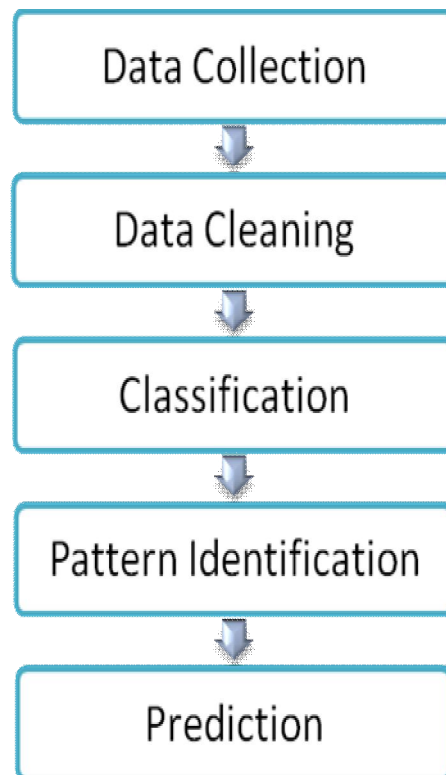
Difficulty concentrating	negative:0	mild:1	medium:2	positive:3
Difficulty Remembering	negative:0	mild:1	medium:2	positive:3
Insomnia	negative:0	mild:1	medium:2	positive:3
Oversleeping	negative:0	mild:1	medium:2	positive:3
Low appetite	negative:0	mild:1	medium:2	positive:3
Weight loss	negative:0	mild:1	medium:2	positive:3
Thoughts of death	negative:0	mild:1	medium:2	positive:3
Headache	negative:0	mild:1	medium:2	positive:3
Pessimism	negative:0	mild:1	medium:2	positive:3
Early morning awakening	negative:0	mild:1	medium:2	positive:3
Slowed thinking	negative:0	mild:1	medium:2	positive:3
Depression Possibility	{ tested_negative, tested_positive }			

(Table: Attribute set)

4.2 MODEL BUILDING

In this study , classification is deployed for finding hidden patterns in data set. Logistic regression is used to predict the result. To build this model training data set has used. After collecting data , data cleaning takes place. In data cleaning we replace the null values and then proceed for model creation.

As weka accepts csv or .arff files, so to create model data file for creating model is created with **.arff** extension. The depression classification model was used to predict 48 unseen instances through re-evaluating the model on these unseen instance. We have built model using training data set and further we will use the same model to predict the result. Following flowchart will depict the flow of this study.



(Fig: Methodology of the study)

V. RESULT

In this section, the performance analysis of logistic regression algorithms is carried out with a common dataset using WEKA tool. First, the model has loaded by using weka explorer and then we set the test data set i.e testing file(.arff) with unknown instances. Then classifiers were executed by including all the attributes (22) identified from the test data file(.arff) and then they were executed. The WEKA tool provides various measures to understand the classification. The value of actual class is unknown therefore ‘?’ is used. As a result, it will give us either Positive or Negative value according to the prediction. The accuracy of the classifier depends on how well the classifier classifies the data set being tested. We have applied our model on 48 unknown instances and the result is as below.

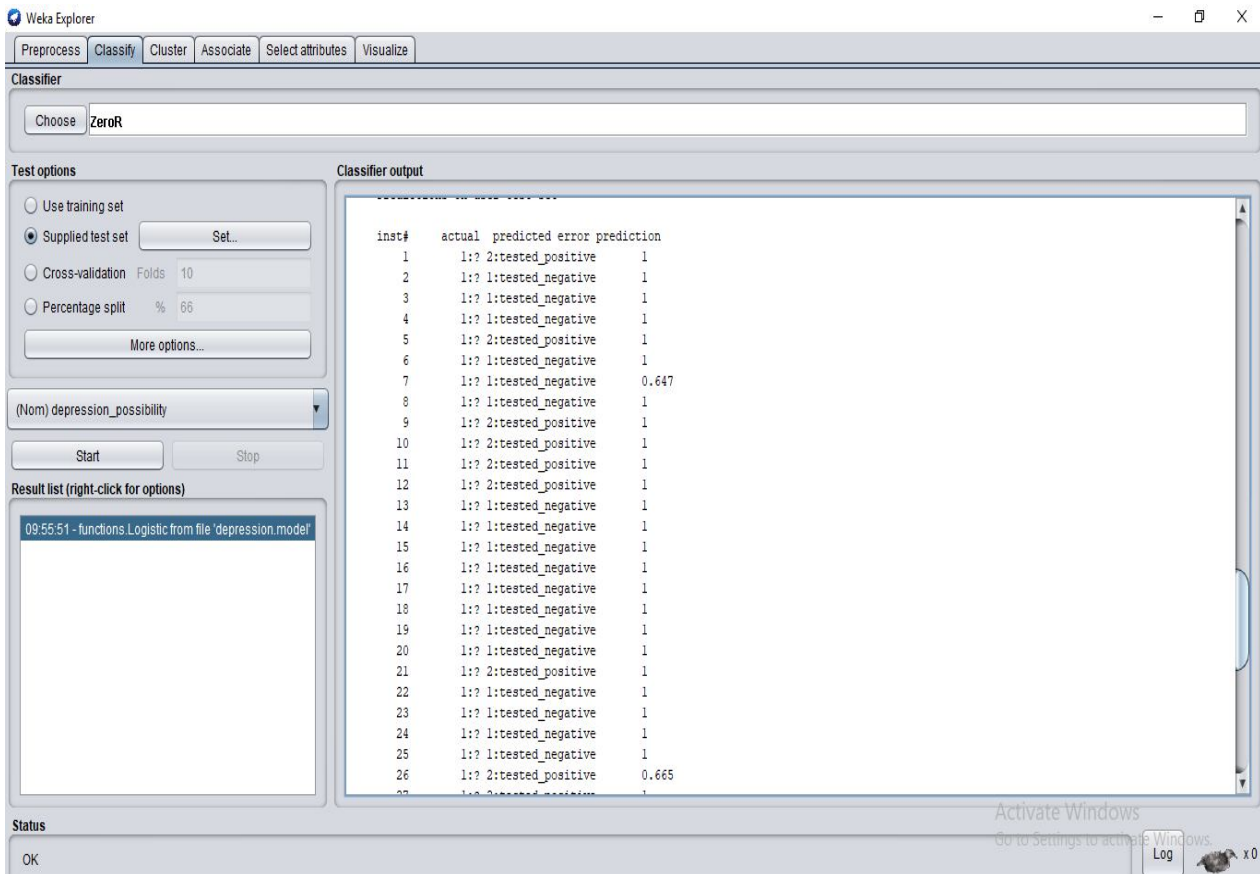


Fig: Result of Testing Data Set

VI. CONCLUSION

Now a days depression is rapidly growing illness. It may lead to serious diseases. So better to diagnose it as early as possible. But it is hard to predict because of number of symptoms. Data mining has various set of algorithms which can use to predict anything from past data. In this study we have used logistic regression algorithm to predict future depression using past data set. Which will predict, may the person will face depression in future or not. Logistic regression gives the accurate result for categorical outcomes than normal regression. The data set is very minimal and in future, the research may be applied for a large data set to obtain more accuracy. This model can be expanded to create a system to predict depression among people with more set of attributes.

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ADOPTION OF MOBILE WALLETS AMONG CUSTOMERS

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ABSTRACT

The government's digital push insists the economy to a new era of Digitization in India which drives to tremendous growth of digital payment systems especially through mobile wallets application. The purpose of the study is to explore the perception and attitude of customers towards the usage of mobile wallets. The collected data are systematically analysed with the help of statistical tools such as Garrett Ranking Method, Weighted Scoring Method etc, and proposed some suggestions on the grounds of major findings of the study. The study shows a positive attitude and satisfaction towards the adoption of mobile wallets for e-payment purpose.

Keywords: E- Payment, Demonetization, Digitalization, Mobile wallets

INTRODUCTION

The government's initiative of demonetization had resulted in the transformation towards digital payment systems through the usage of mobile and internet facility. Hence after the demonetization, most of the people began electronic payments for their transaction. This transformation from traditional payment to digital payments made more transparency in transactions and brings better and innovated services to the customers at their finger tips. Mobile wallets being a recent innovative method of digital payment allow the customers to make their transactions digitally through their smart phones.

STATEMENT OF PROBLEM

With the government's demonetization initiative to remove black money problem, the economy had witnessed in massive rise in mobile payment apps download for electronic payments by the customers. As a result mobile wallets have emerged as a remarkable contributor in achieving the vision cashless economy. Since India being a developing nation and propelling towards digital economy and due to emergence of several digital payment solutions, the customers can avail better digital services at their convenience. Hence in this context, the present study focuses on customer perception on usage of mobile wallets with special reference to Kollam district of Kerala state.

OBJECTIVES

1. To identify the awareness level of mobile wallets among customers.
2. To know the factors for opting mobile wallets usage.
3. To identify the reasons impacting non- usage of mobile wallets.
4. To examine the customer satisfaction level regarding the usage of mobile wallets.

RESEARCH METHODOLOGY

The study is descriptive, empirical, and analytical in nature. Primary data have been collected by using a well-structured questionnaire. A sample size of 80 respondents is drawn from the population on the basis of convenient sampling method. Secondary data are collected from the websites, books, magazines, related articles and earlier related studies. The area of the study is confined to kollam district of Kerala state and the data for the study are drawn during the period from November 2018 to March 2019. Collected data are analysed using simple statistical technique of percentage analysis and graphical charts are used for better presentation. Statistical tools of Garrett ranking and weighted score ranking methods are used for ranking the data.

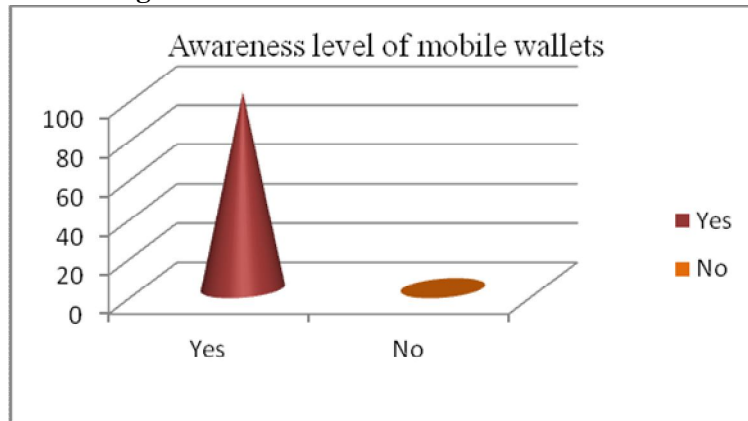
REVIEW OF LITERATURE

Pinal Chauhan (2013) in his study "E-Wallet: The Trusted Partner in our Pocket", elaborated how electronic-wallets are going to make money transaction without making hindrances to the customers. Also points out an encryption algorithm, known by the name RC4 is used for providing a secure transaction.

Poonam Painuly And Shalu Rathi (2016) in their research paper "Mobile wallet :An upcoming mode of business transaction "have analysed the advantages of mobile wallets such as ease of transaction , convenience in handling application and also studied mobile payment instruments. **Hem Shwetha Rathore (2016)** in her research paper "Adoption of Digital wallet by consumers "have analysed the factors that impact the consumers in adoption of digital wallet and also analysed the risk and challenges confronting by consumers while usage of digital wallet.

DATA ANALYSIS AND INTERPRETATION

Figure -1 Awareness level of mobile wallets



Source: Prepared from the analysis

The study reveals that all the respondents are aware of mobile wallets.

Table – 1: Factors for opting mobile wallets

Factors	Weighted average Mean (W.M)	Mean score(W.M/80)	Rank
Discount	191	2.38	V
Cash back	281	3.51	I
Offers \$ rewards	269	3.36	II
Instant payment	251	3.31	III
Convenient \$ time saving	208	2.6	IV

Source : prepared from analysis

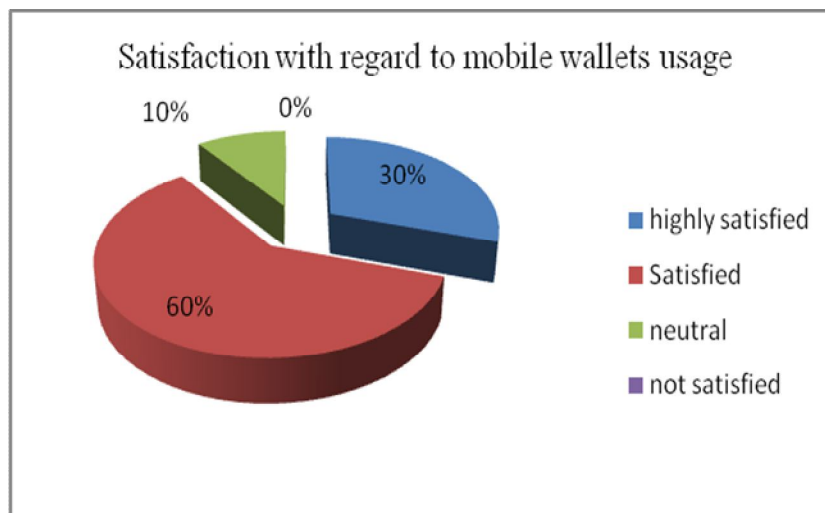
The table shows that the most influencing factor for opting mobile wallets are its cash back offers and also the second influencing factors is its offers and rewards provides to customers.

Table – 2. Reasons for non-usage of mobile wallets

Reasons	Percent position (100 (Rij -0.5)/Nj))	Garret value	Average score	Rank
Unsecure	$100(1-.0.5)/4 = 12.5$	73	56.81	I
Time consumption	$100(2-0.5)/4 = 37.5$	57	46.9	III
Danger of losing money	$100(3 -0.5)/4 = 62.5$	44	53.32	II
Difficulty procedure	$100(4- 0.5)/4 = 87.5$	27	43.88	IV

The table reveals that the major reason for non usage of mobile wallets is because of its security problem and the second concern is that the danger of losing money while using mobile wallets

Figure -2. Satisfaction with regard to mobile wallet usage.



The study reveals that about 60% of the respondents are satisfied with the usage of mobile wallets and 30% are highly satisfied with mobile wallets application.

FINDINGS

- All the respondents are aware of mobile wallet payment system.
- The most influencing factor for opting mobile wallets are its cash back offers and also the second influencing factors is its offers and rewards provides to customers.
- The major reason for non usage of mobile wallets is because of its security problem and the other major concern is that the danger of losing money while using mobile wallets.
- About 60% of the sample respondents are satisfied with the adoption and usage of mobile wallets.

SUGGESTIONS

- Provide better security measures for ensuring safety of mobile wallet users.
- Provide toll-free number or customer care service for resolving customer complaints.
- Transaction speed should be improved.
- Mobile wallets is not suitable for huge payments, this should be taken into consideration.

CONCLUSION

With the introduction of mobile wallets for digital payments, the customers become extremely convenient for making their cash transactions through their smart phones around the clock. But at the same time it poses security concern while dealing with transaction online, which steps back the customers from using mobile wallets for their digital payments. By providing high security measures the vision of “Digital India” can be accomplished.

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TECHNICAL ANALYSIS OF CRYPTOCURRENCY**Ajay B. Mali**

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EXECUTIVE SUMMARY

The report “**Technical Analysis of Cryptocurrencies**” is a study to analyze strength and weakness of the scrip of four major companies. The selected Cryptocurrencies are of Bitcoin, Ethereum, Bitcoin Cash, OmiseGO, EOS, Litecoin, and Ripple. The primary objective of the study is to suggest the investor whether to buy the scrip or not based on the analysis of the trend of the scrip. Technical analysis takes a completely different approach unlike Fundamental analysis; it doesn't consider the “value” of a company or a commodity.

To analyze the scrip in technical analysis, tools like Candlestick patterns, Relative strength index (RSI), Moving average convergence and divergence (MACD), Moving average crossover, Volume and Bollinger bands are used. In the Technical analysis, the movement of the corresponding graphs is studied to interpret whether to buy, sell or hold the shares using the various chart patterns and indicators collectively.

OBJECTIVES

1. To better understand Cryptocurrency market investment during intraday trading as well as Cryptocurrency picking at the right time by creating investment strategies and trading opportunities.
2. Understand and identify the Overbought and Oversold price levels as derived from all the historical data available.
3. To forecast the future trends and provide suitable suggestions to the investors.
4. To maximize gains from all sorts of trading activities and minimize risk and losses arising from such activities.

SCOPE

1. The study covers a period from 16/05/2018 to 23/05/2018.
2. The study helps to find out the future trends in the prices of Bitcoin, Ethereum, Bitcoin Cash, OmiseGO, EOS, Litecoin, and Ripple. Valuable hints can be identified by the investors for their future buying and selling.

INDUSTRY OVERVIEW**CRYPTOCURRENCY EXCHANGE**

Cryptocurrency exchanges or digital currency exchanges (DCE) are businesses that allow customers to trade cryptocurrencies or digital currencies for other assets, such as conventional fiat money, or different digital currencies. They can be market makers that typically take the bid/ask spreads as transaction commissions for their services or simply charge fees as a matching platform.

DCEs may be brick-and-mortar businesses, exchanging traditional payment methods and digital currencies, or strictly online businesses, exchanging electronically transferred money and digital currencies. Most digital currency exchanges operate outside of Western countries, avoiding regulatory oversight and complicating prosecutions, but DCEs often handle Western fiat currencies, sometimes maintaining bank accounts in several countries to facilitate deposits in various national currencies. They may accept credit card payments, wire transfers, postal money orders, cryptocurrency or other forms of payment in exchange for digital currencies. They can send cryptocurrency to your personal cryptocurrency wallet. Many can convert digital currency balances into anonymous prepaid cards which can be used to withdraw funds from ATMs worldwide.

Some digital currencies are backed by real-world commodities such as gold.

Creators of digital currencies are often independent of the DCEs that trade the currency. In one type of system, digital currency providers (DCP), are businesses that keep and administer accounts for their customers, but generally do not issue digital currency to those customers directly. Customers buy or sell digital currency from DCEs, who transfer the digital currency into or out of the customer's DCP account. Some DCEs are subsidiaries of DCP, but many are legally independent businesses. The denomination of funds kept in DCP accounts may be of a real or fictitious currency.

OVER THE COUNTER TRADING (OTC)

Over-the-counter or off-the-exchange trading of bitcoins is a more flexible and convenient way of trading bitcoins comparing to traditional exchanges.

OTC trading has kept growing since 2014 in various financial markets as more institutions taking the trades off the exchange. Today, many corporations or institutions employ individual traders or bitcoin-OTC trading desks to perform this task at moderate expenses. Some representatives' bitcoin-OTC trading desks could be Bitfinex.com, itBit, Coinfloor, Octagon Strategy Limited, Local Bitcoins, Bitstamp, BitX etc.

INTRODUCTION TO TECHNICAL ANALYSIS

Technical analysis is directed towards predicting the price of a security. The price at which a buyer and seller settle a deal is the one precise figure which synthesis, weighs and finally expresses all factors, rational and irrational, quantifiable and non-quantifiable and is the only figure that counts. Thus, the technical analysis provides a simplified and comprehensive picture of what is happening to the price of a security. Like a shadow or reflection, it shows the broad outline of the whole situation and it works in practice.

ASSUMPTION IN TECHNICAL ANALYSIS

Unlike fundamental analysts, technical analysts don't care whether a Cryptocurrency is undervalued or overvalued. In fact, the only thing that matters is the Cryptocurrencies past trading data (price and volume) and what information this data can provide about the future movement in the security.

Technical Analysis is based on few key assumptions. One needs to be aware of these assumptions to ensure the best results.

1) Markets discount everything –

This assumption tells us that, all known and unknown information in the public domain is reflected in the latest Cryptocurrency price. For example, there could be an insider in the company buying the company's Cryptocurrency in large quantity in anticipation of a good quarterly earnings announcement. While he does this secretly, the price reacts to his actions thus revealing to the technical analyst that this could be a good buy.

2) The 'how' is more important than 'why' –

This is an extension to the first assumption. Going with the same example as discussed above – the technical analyst would not be interested in questioning why the insider bought the Cryptocurrency as long he knows how the price reacted to the insider's action.

3) Price moves in trend –

All major moves in the market is an outcome of a trend. The concept of trend is the foundation of technical analysis. For example, the recent upward movement in the NIFTY Index to 7700 from 6400 did not happen overnight. This move happened in a phased manner, in over 11 months. Another way to look at it is, once the trend is established, the price moves in the direction of the trend.

4) History tends to repeat itself –

In the technical analysis context, the price trend tends to repeat itself. This happens because the market participants consistently react to price movements in a remarkably similar way, each and every time the price moves in a certain direction. For example, in up trending markets, market participants get greedy and want to buy irrespective of the high price. Likewise, in a down trend, market participants want to sell irrespective of the low and unattractive prices. This human reaction ensures that the price history repeats itself.

BITCOIN

At the time of writing, Bitcoin trading at \$7,649 is representing a fall of over 3% in last 24-hours.



BTC showing the signs of gaining a bearish momentum and the respective fall of 5% was duly followed, once the important neckline support of \$7,800 was broken.

Currently, the dark clouds over the flag-bearer currency are still hovering and BTC is expected to be under constant selling pressure unless now the resistance range of \$7,800 – \$8,100 is crossed over. With moving averages sloping down, the Bears have opened up correction possibility to \$7,000 and \$6,400 levels. Currently, there is no trade setup that BTC allows to follow and traders should be on the side-lines unless a proper level for entry opportunity truly exist.

Ethereum: Ethereum is representing a fall of 4.27% in last 24-hours.



Ether has broken the important support line of \$600 which was also the neck-line support of the head and shoulders pattern formed for which the breakout was expected over \$745. Currently, even as Ether has broken the baseline support, it will be important to observe it as one of the positive cryptocurrencies finding subtle baseline support at \$545 which also represents the 61.8% Fibonacci Retracement level of the pull-back from \$358 – \$838. Ether, has moved below the support line but yet, is showing some strength on lower levels compared to other cryptocurrency. A close above \$630 again will get ETH an upward momentum to \$745 whereas a dip below \$545 can get ETH to plunge down to \$480 levels.

BITCOIN CASH



Bitcoin Cash is representing a fall of about 6% in last 24-hours. It has been the most bearish cryptocurrency over the last whole week and our analysis over the support region of \$1,100 for a bull set-up failed over last 2 days.

BCH has formed a descending trade channel which is sloping down steeply. BCH now duly faces resistance along the downtrend line of the channel and only a breach above the same could get traders a breather for a momentum to it’s nearest EMA.

At present levels, BCH doesn't provide any attractive trade set-up and the only relevant supports that can be seen are at \$870 (also 78.6% Fibonacci Retracement of the pull-back from \$600 – \$1838) and \$755 which forms as baseline support. On upper side BCH will face resistance between the range of \$1,050 – \$1,150 and thus, it is better for traders to be on the sideline till it provides a set-up on either of the above mentioned levels.

OMISEGO (OMG)



OMG is representing a fall of over 7.5% in last 24-hours. OMG has formed a descending triangle and a lower highs pattern where Bears will continue to hold their strength. The only relevant small-time support can be seen at \$9.8 forming the baseline of the descending triangle. If the baseline support is broken, OMG can slip down to \$8.8 and \$8.1. The only way the bearish outlook can be invalidated is if it breaks the lower highs pattern on daily charts.

EOS (E - OPERATING SYSTEM)



EOS is under the constant mode of selling pressure and has formed a bearish trade zone with line of descendance and lower highs pattern supporting the same. The only relevant support which can be treated as minor support for a 5-10% pull back can be viewed at \$9.8. If the relevant support is broken, EOS may plunge to \$7.8 range where Bulls would find interest to dive in. The upcoming launch of EOS mainnet will help us realise the further trend action in coming days

LITECOIN



Litecoin has formed a short-ranged descending triangle and is currently representing a bearish trend forming lower highs and a bearish crossover with 20 day EMA sloping down steeply. Litecoin has major support at \$114 where a pull-back of 10-15% upto it's short-ranged downtrend line can be expected. The RSI also is showing in the oversold zone and so the respective support gains more strength likewise. If the baseline support of \$114 is broken, it might slip down to test \$107 and \$100.

Ripple: Ripple, trading at \$0.59 is representing a fall of 3.7% in last 24-hours.



Ripple has important support at \$0.56 which if broken can get price to test the previous low support zone of \$0.45. With RSI in daily charts representing at 35 and moving slowly into the oversold zone, XRP might have a pull-back chance against the respective immediate support upto the downtrend line of resistance.

PRICE ANALYSIS

	16th May	23rd May	% Change	Previous Week		Current Week	
	Close	Close		High	Low	High	Low
BTC	8,346	7,503	-10.1	9,393	8,100	8,590	7,435
BCH	1,278	996	-22.1	1,665	1,215	1,341	969
ETH	707	577	-18.4	767	638	723	565
LTC	140	119	-14.9	161	131	141	116
XRP	0.71	0.59	-16.1	0.80	0.63	0.71	0.57

WEEKLY PRICE POINTERS

R2	\$9,100	\$870	\$1,550	\$159	\$0.82
R1	\$8,100	\$745	\$1,350	\$136	\$0.67
Cryptocurrency	BTC	ETH	BCH	LTC	XRP
S1	\$6,950	\$545	\$870	\$114	\$0.56
S2	\$6,425	\$480	\$755	\$107	\$0.45

CONCLUSION

BTC is under the bearish zone and will continue to slip down and only a breakout above \$8,100 will get BTC back in the pull-back momentum which again should face due resistance close to its exponential moving averages. A bull set-up can be attractive only on lower levels of support where the ideal RSI index should be considered as well and so, traders should patiently wait for the same.

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A CASE STUDY ON IMPORT OF TOYS FROM CHINA TO INDIA

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ABSTRACT

The case study is all about the import of toys from China to India and how has the government reacted to the recent increase in the import of toys from china and what are the various regulations being imposed on the industry. The study also discusses a detailed SWOT analysis of Indian toy Market and the consumers of Indian toys. This is a secondary research study and the data has been taken from the data bank of import and export of DGFT i.e. Directorate general of foreign exchange official website to know how much is the growth from the past year and what governmental factors are responsible for the same.

INTRODUCTION

The gathering momentum of India-China relations is visible in the expansion of our bilateral economic ties. The process of engagement in the Asian region has truly taken off”, - Manmohan Singh [Keynote address delivered at special leaders dialogue of ASEAN Business Advisory Council on December 12, 2005]

Across time and cultures humans have interacted with aesthetic and functional object called toys. The design, production, marketing consumption and use of these objects have a relationship to the arts that is both cyclical and symbiotic. Toys can be categorized as infants, toddlers etc. Many similar types of toys have emerged (dolls, construction) toys etc. as a “facilitator” for play. Therefore china toy industry covers all the families of the heavy and light childcare products for babies from 0 to 3 years. China Toy design is often a product of the technology and values of the society. Contemporary toy design specifically is unique in its synetic appropriation of the design from many sources. Therefore china toy industry has been enjoying constant growth because of its high quality and reputation of its products, attaining a prominent position in the sector as a benchmark. The Indian toy industry is estimated to be worth Rs 1,700 crore and growing 15-20% a year. Funskool, a joint venture between tyre maker MRF and US toy maker Hasbro Inc, recently introduced two high-end block games - Mindstorm and Taj Mahal- carrying price tags of Rs 22,000 and Rs 27,000, respectively. At the year end March 2011, it clocked revenues of Rs 80 crore while Mattel, which sells toys under Fisher-Price, Barbie and Hotwheels brands, has an India turnover of approximately 300 crore. Toys inspired by flicks such as Transformers, Batman, Spider Man, Madagascar and Lord of the Rings too have created ripples among kids and young adults. Television characters and cartoons-inspired shelf-scorchers include BeyBlades, Ben 10 and Blazing YoYos. "Today with the presence of so many modern trade stores and the whole experience of touch and feel available, the Indian toy industry is poised for growth," says Bakshi. According to a Euromonitor study, spending on toys and games in India is set to grow at 157% between 2016 and 2020, much faster than other Asian countries such as China (84%), Taiwan (35%), South Korea (33.1%) and Singapore (17.2%). Cars 2 is the latest success story in India's booming toy www.theinternationaljournal.org > RJEBS: economy that has become a huge money spinner for toy makers, retailers, some Hollywood studios and children's television channels. Attention deficit of working parents towards their children is certainly one of the reasons for booming toy market, so toys and gadgets come into play,(Future Brands, CEO and social commentator Santosh Desai said). Parents try to make up for their lack of time to spend with kids by pampering them and surrendering to most of their demands, as working parents getting richer and much busier than the previous generation.

"I have a belief, that is when China and India are truly strong enough to fully bring out their own spirit and style, then that will truly usher in a new Asian century," – Wen Jiabao [Speech delivered at the annual press conference at the end of the session of the National People's Congress, the Chinese parliament. (Times of India, March 14, 2006)]. “

REVIEW OF LITERATURE

China's top export markets are the EU, US and Japan. India's top market is the EU but its share has fallen as other market destinations have grown, especially China. In terms of overall exports, India's share of services in total exports is much higher than China's. China's largest exports are final manufactured goods. And only one category—clothing—appears in the leading export sectors for manufacturing of both economies (**Qureshi and Wan 2008**).

Overall the majority of India's exports is services and 5 intermediate manufactured goods, while China's is finished manufactured goods. Dimaranan et al. (2007) point out that this is largely due to China's role as the

assembly point in some global production networks. India is beginning to build connections to such networks but this is far less developed than in China (Yusuf et al. 2007).

Adapting the Global Trade Analysis Project methodology to China and India, Dimaranan et al. (2007) analyze the possible effects of China's and India's growth and trade on other countries out to 2020. Their results show that rising trade benefits China and India the most, but also benefits other countries and hurts only a few under certain circumstances. The benefits of variety and quality of exports generally outweigh the negative aspects of falling terms of trade effects.

The two countries put additional pressure on countries to keep up, certainly, but the net results may overall be positive. For example, as competition increases in the high-tech sectors as China and India move into these areas, this could create opportunities for other countries to take up the slack in labor intensive goods. Qureshi and Wan (2008) also analyze who China and India might affect as they increase their trade.

Recently, however, other major export categories have emerged and these have much less overlap, lowering the competition between the two. One of the suggestions from this analysis is that the overlap in terms of both countries vying to sell similar products in the same markets is surprisingly low and falling.

Formal analyses suggest that bilateral trade could grow with substantial benefits on both sides in the long run (Bhattacharya and Bhattacharyay 2007, Wu and Zhou 2006). One of the reasons that trade has room to expand is that there are areas of complementarity.

While both countries have been shown to have a revealed comparative advantage in some similar manufactured goods, the majority of India's exports to China are intermediate industrial goods and primary products (especially iron ore), and China sells an increasing amount of transport equipment to India (Wu and Zhou 2006).

Though both China and India are members of WTO and support fair multilateral trading system, just like many countries they too have been keen in signing free trade agreements (FTA) with countries around the world. These FTAs in most of the cases cover only goods trade without much coverage to services trade, investment, and trade facilitation without the exception of a few agreements, such as China-Singapore FTA, China-Costa Rica FTA, India-Japan FTA and India-Korea FTA. Until June 2012, China has signed 12 FTAs and India 13 FTAs (Wignaraja, 2012)

Their include gradual rather than sharp acceleration; a reliance on services and domestic consumption rather than on industry and exports; an emphasis on high technology and IT services rather than on low-cost labour inputs to manufactured exports; growth driven by local private entrepreneurs as government withdraws rather than by government agencies and enterprises or foreign investors; low reliance on foreign direct investment; and, more generally, more emphasis on increased productivity than on a rapid increase in the factors of production (capital and labour) (Sheehan, 2008, pp.14-15).

OBJECTIVES OF THE STUDY

1. To familiarize with the Toy industry.
2. To find out the history of Toy industry in import sector.
3. To study growth rate for import performance of chinese toys in India for the year (2016- 2017 to 2017-2018).

RESEARCH METHODOLOGY

The Study: The present study is descriptive in nature as it requires quantifiable data involving numerical and statistical explanations and explains about the scope of import of toys from China.

The Sample: The present research has been conducted on secondary data of import of toys from China for the period 2016-17 to 2017-18..

The Tools: Secondary data collection: The secondary data were collected from government official websites, and review of literature was done from various research journals and newspapers.

TOY INDUSTRY IN INDIA

Toy Association of India (TAI), the principal toy association, estimates that the toy market in India is about INR 20 billion at current prices; All India Toy Manufacturers association (AITMA), also estimates the size of the market at the retail level to be about INR 20 billion. As per estimates, there are more than 3000 toy makers in the country. These are a heterogeneous group - from the very small to large multinationals with an Indian

presence. TAI itself has a membership of over 700 units, of which about 400 are toy manufacturers in their own right. AITMA has a significant presence across the country too, but the bulk of its members are from Western India. Toys manufactured in India can be broadly classified into the following categories- Plastic Toys include Mechanical & Activity toys, Plastic & Soft Dolls, Plush/Stuffed Toys, Board games/Puzzles, Educational Games & Toys, Wooden Toys, Metal/ Tin Toys, Electronic Toys/Games, Collectibles and Stationary items converted into playthings.

The Indian toy market can be categorized as under:

Unorganised sector: It consists of producers scattered across the country. It is said that 60 per cent toy factories are set up in Delhi and 30 per cent toy units are in Mumbai, while 10 per cent toy units are set up in Saharanpur, Moradabad, Mysore and Jammu and Kashmir Toys made in the unorganized sector use cheap recycled plastic, which can be a source of poisoning and lack of regulatory control poses serious health risks to the children.

Organised sector: The large toy companies, which have a presence in India today, are the Mattel Toys, Hasbro (through Funskool) and Lego (distribution only) through the Mahindra Intertrade, a company set up by one of the country's largest business houses

Mattel- Mattel is recognized as one of the 100 Most Trustworthy U.S. Companies by Forbes Magazine. The Mattel Company is a \$6 billion company and their market share in India is around 20%. Mattel Toys (India) Private Limited is a subsidiary of Mattel, Inc., the worldwide leader in the design, manufacture and marketing of toys and family products. The Mattel family is comprised of such best-selling brands as Barbie®, the most popular fashion doll ever introduced, Hot Wheels®, Matchbox®, Polly Pocket®, Radica® and Fisher-Price® brands

Lego- Lego is a company based in Denmark founded in early 70's, is world's sixth-largest manufacturer of toys, very popular in Europe and North America.

Funskool - is the third largest producer set up in 1987. Funskool is the joint venture between the Indian tyre giant MRF, and Hasbro Inc., a leading toy company. Hasbro is a worldwide leader in children's and family leisure time entertainment products and services, including the design, manufacture and marketing of games and toys ranging from traditional to high-tech.

INDIAN TOY MARKET CONSUMERS

- The largest group of consumers in the Indian toy industry are the preteenagers in the age between 7 and 12. • They are generating 44% of value sales. In this age they are major decision influencers and through their media consumption get aware of the product variety.
- In India there are hardly any toys for the target group adults.
- Indian consumers are really price-sensitive and tend to buy impulsive. Because of that, toys with a low price point up to 199 INR (3.30 USD) account for the majority of sales with 46 % share. This fits with the focus on unbranded toys many Indian manufacturers have.
- Independent small neighborhood retail stores are among the favourite stores for Indians to shop
- The major shopping period of toys is during Diwali (every year in autumn), the traditional Hindu festival of lights where it is common to buy presents for family and close friends, and Raksha Bandhan, a festival where presents are exchanged between brothers and sisters.
- If someone receives a gift in India, traditionally this person also gives a gift back, which of course boosts sales.

LIFTING OF IMPORT BAN ON CHINESE TOYS IN INDIA

India in March, 2009 lifted the ban on importing toys from China provided they conform to international safety norms which was imposed on January 23 on the import of Chinese toys for six months on grounds of public health and safety. According to a public notice by then Commerce Ministry, the import of toys from China will be allowed if they conform to the standards prescribed in "ASTM F963" or "ISO 8124 (parts I - III) or IS 9873 (parts I - III)". These regulations primarily deal with safety and health hazards. A blanket ban on imports of all toys from China was put in place by India. While the DGFT notification placing the ban had not indicated any reason for prohibiting toy imports. Later it was clarified that the ban was placed due to health concerns as toxins had been found in toys from China on earlier occasions. The quality of toys manufactured in China came under the international scanner in 2007 when the world's leading toy manufacturer Mattel called back over 20 million China made toys world-wide due to the presence of excessive levels of lead paint and other contaminants.

India's move to ban Chinese toy imports can also be seen as a non-tariff barrier as the Indian market has been flooded with cheap Chinese toys over the last few years. As per industry estimates, the Chinese have captured more than 60% of the Indian toys market.

GUIDELINES AND STANDARDS FOR IMPORT OF TOYS

CHINA

China's toy industry is regulated since early 2007 by China Compulsory Certification (CCC) from the nation's Certification and Accreditation Administration (CNCA). Toys are subject to inspection and certification review. Chinese toys must meet the criteria set by International standard ISO8124.1:2002 which itself is modeled on EU's standard for toys (EN71 Safety of Toys - Safety aspects related to mechanical and physical properties). But there are no standards for phthalates.

INDIA

BUREAU OF INDIAN STANDARD

With regard to safety guideline for toys, Bureau of Indian Standards (BIS) has published three standards

1. IS 9873 (Part 1): 2001/ISO 8124 ---1:2001 covers Safety Requirements of Toys, Safety Aspects related to mechanical and physical properties.
2. IS 9873 (Part 2): 1999/ISO 8124 ---2:1994 covers Safety Requirements of Toys, Flammability requirements; and , 3. IS 9873 (Part 3): 1999/ISO 8124 ---
- 3: 1997 covers Safety Requirements of Toys; Migration of certain elements (has limits for heavy metals).

None of these standards give limit for phthalates in children's toys and childcare articles. The BIS guideline with regard to toy production is self-regulatory and not mandatory. Toy manufacturers don't register for the ISI mark for their products and therefore do not follow even the voluntary standard.

GOVERNMENT REGULATIONS AND RESTRICTIONS ON IMPORT OF TOYS

TOY SAFETY REGULATIONS, LABELING AND TESTING REQUIREMENTS

Toy Safety implies guaranteeing that toys, particularly those made for children are sheltered, more often than not through the use of set safety standards. In India, business toys must almost certainly breeze through safety tests so as to be imported and sold. Presently, we clarify what importers must think about Toy Safety Regulations, Labeling, and Testing Requirements. What's more, we likewise clarify why compliance with abroad standards and orders can't be underestimated while sourcing manufacturers in China.

TOY SAFETY REGULATIONS

Specific safety standards and substance restrictions apply to toys, and other children's products, in most developed countries like India. The scope of products fitting the definition of a toy, or a children's product, is wide. That said, most applicable directives and standards can be grouped in at least one of the following categories:

- Physical / Mechanical Properties
- Substance Restrictions
- Electrical Safety Regulations

The regulations refer to ASTM and ISO standards, of which the importer is required to ensure compliance. The assessment, both on applicable standards, and a supplier capability to comply must be made before mass production begins. Never rely on the supplier to make such an assessment, as it's always the importer that is ultimately responsible for ensuring compliance.

LABELING REQUIREMENTS

In addition, to product and substance regulations, importers must ensure compliance with all applicable labeling requirements.

Labeling requirements are a part of Toys and Children's Product Standards, applicable to several product categories. Below follows an overview of what may be required, but beware that labeling requirements differ in differing countries.

- Country of Origin (e.g. 'Made in China')
- Warning Labels (e.g. Loose parts)
- Other marks (e.g. ISO)

As already said, importers shall never make the assumption that the supplier is already aware of a product must be labeled, according to regulations in a certain country. Instead, the buyer/importer must provide all the necessary documentation directly to the supplier/exporter.

COMPLIANCE TESTING AND CERTIFICATION

A Certificate or a substance test report is only valid when a material sample, submitted to the testing company. Changing a material, for example, a button or fabric may render a product non-compliant. Therefore, the importer must go through the compliance procedure each a product is made.

As testing costs are multiplied by the number of materials and components, in addition to batch specific testing, compliance costs increase with variety. This practice force importer to limit the number of different materials, colors, and components

12% GST RATE ON IMPORT BABY TOYS FROM CHINA:

- Toys like tricycles, scooters, pedal cars, etc. (including parts and accessories thereof) [other than electronic toys] [9503].
- Playing cards, chess board, carom board and other board games, like ludo, etc.[9504].

18% GST RATE ON IMPORT BABY TOYS FROM CHINA;

- Electronic Toys like tricycles, scooters, pedal cars, etc. (including parts and accessories thereof) [9503].

28% GST RATE ON IMPORT BABY TOYS FROM CHINA;

- 9504 Video games consoles and Machines.

STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS (SWOT) ANALYSIS OF INDIAN TOY INDUSTRY

Strengths (Reliability and resources)

- Indian toys manufacturing industry is quite old.
- Focusing on Educational toys.
- Growing large domestic market.
- Wide range and varieties of toys in plastics and cardboard.
- Availability of skilled and cheapest manpower
- Growing confidence in the Indian toy industry.
- Easy availability of most of the raw materials.
- Effective coordination among TAI, TAITMA and SGEPC.
- Emerging Market for toys.
- Government support for obtaining finance
- Less overhead costs.
- Manufacturing industry set-up and association
- Support from MSME for toys manufacturing.
- Know requirements of Indian children.

WEAKNESSES (TECHNOLOGY AND VARIETY IN THE MARKET)

- Mostly small scale and micro level units are toys manufacturing enterprises
- Low Volume of Production.
- Lack of Research and Development facilities (almost negligible).
- Uneven Technical knowledge.
- Focusing only over sales, absence of focus on export.
- Do not bother about Quality parameters and standards.
- Unable to compete in terms of features and specifications.
- Comparatively higher cost of funds.

- Do not focus on Brand Building, Advertising and Promotion.
- Lack of innovation, conceptualization and designing skills.
- Unavailability of trained field specific skilled manpower.
- High cost of the raw material leads to higher cost of production of plastic toys.
- Unable to manufacture electronic toys and video games of world class level

OPPORTUNITIES (NEW MARKET)

- Good buying capacity of parents.
- High Demand from children.
- Toys are demanded on each and every occasion.
- Well developed market in domestic as well as overseas.
- Good support of MSME to go for ‘Make’ decisions.
- Government support towards ‘Make in India’.
- Opening of Play schools creates demand for education in a play way method.
- The Export market for toys is currently untapped by Indian toys.
- The Chinese toys manufacturing industry is under pressure.
- Increasing role of NID and MSME.
- Access to online market channels for toys.

THREATS (WIDE VARIETY AND COMPETITION)

The uninspected inflow of imported inferior quality and unsafe Chinese toys in India.

- Competition from international players as they also started manufacturing operations and trading in India.
- Most of the major raw materials are not available in India which leads to dependency on other markets.
- China and other countries’ traders capturing the Indian toy market.
- The rising wages for skilled manpower.
- High Technology and designing used by foreign manufacturers.
- No focus over safety and quality standards
- Based on international market requirements.
- Quite far away from international market in terms of electronic toys and video games.

RESEARCH DATA

DEPARTMENT OF COMMERCE

EXPORT IMPORT DATA BANK

Import :: Commodity-wise all countries

S.No.	Country	Values in Rs. Lacs			Quantity in thousands		
		2016-2017	2017-2018	%Growth	2016-2017	2017-2018	%Growth
1.	AUSTRALIA	0.24	19.32	7,936.86			
2.	AUSTRIA		0.05				
3.	BAHARAIN IS		0.01				
4.	BANGLADESH PR		0.00				
5.	BELARUS	3.74	14.09	276.95			
6.	BELGIUM	3.80	1.83	-51.87			
7.	BRAZIL	0.51					

8.	BULGARIA	1.46	0.02	-98.72			
9.	CANADA	229.21	155.45	-32.18			
10.	CHILE	12.42					
11.	CHINA P RP	170,842.56	172,664.67	4.59			
12.	CYPRUS		85.83				
13.	CZECH REPUBLIC	1.01	343.71	33,773.19			
14.	DENMARK	611.16	433.84	-29.01			
15.	EGYPT A RP		13.81				
16.	ESTONIA	0.47					
17.	FRANCE	115.78	63.44	-45.21			
18.	GERMANY	2,792.73	1,690.00	-39.49			
19.	GREECE		13.96				
20.	HONG KONG	523.63	867.69	65.71			
21.	HUNGARY	58.40	2.40	-95.90			
22.	INDONESIA	625.07	534.46	-14.50			
23.	IRELAND		1.03				
24.	ISRAEL	20.55					
25.	ITALY	199.45	232.18	16.41			
26.	JAPAN	2.58	24.13	833.69			
27.	KOREA DP RP	2.90					
28.	KOREA RP	37.00	40.69	9.97			
29.	LATVIA	4.67					
30.	MACEDONIA	10.48	5.58	-46.72			
31.	MALAYSIA	1,709.86	1,451.11	-15.13			
32.	MALDIVES		0.06				
33.	MEXICO	43.23	13.09	-69.72			
34.	NETHERLAND	47.69	5.52	-88.42			
35.	PHILIPPINES	0.43	0.00	-99.56			
36.	POLAND	34.31	45.81	33.53			
37.	PORTUGAL	11.11	0.43	-96.16			
38.	QATAR	0.23					
39.	ROMANIA	17.75	14.78	-16.75			
40.	RUSSIA	9.28					
41.	SAUDI ARAB		6.10				
42.	SINGAPORE	18.21	10.68	-41.35			
43.	SOUTH AFRICA	0.48					
44.	SPAIN	37.81	11.88	-68.59			
45.	SRI LANKA DSR	1,004.38	3,077.91	206.45			
46.	SWAZILAND	3.03					
47.	SWEDEN	61.57	57.58	-6.48			

48.	SWITZERLAND	5.06	48.64	860.34			
49.	TAIWAN	53.75	50.36	-6.31			
50.	THAILAND	718.32	499.34	-30.48			
51.	TURKEY	38.00	48.66	28.05			
52.	U ARAB EMTS	40.94	43.72	6.77			
53.	U K	175.03	81.84	-53.24			
54.	U S A	540.29	760.94	40.84			
55.	UKRAINE		16.02				
56.	UNSPECIFIED	0.03	4.02	14,772.96			
57.	VIETNAM SOC REP	247.79	1,053.47	325.15			
	Total	180,918.41	181,510.13	0.33			
	India's Total	257,767,536.68	300,103,343.35	16.42			
	%Share	0.0702	0.0605				

DATA INTERPRETATION

The research data has been taken from the DGFT i.e. directorate general of foreign trade official website and the data is highly accurate. The chances of bias and adulterated data is negligible. From the table above we can clearly see the import and export data bank showing the commodity wise country data.

The above data shows the import of toys from different countries of the world in the year 2016-2018. Main points of the data are as follows

- Their has been a total import of 180918.41 rupees of toys in the year 2016-17.
- Their has been a total import of 181510.13 rupees of toys in the year 2017-18.
- Out of the India's total import in the year i.e 25776753668, import of toys include only 0.0702% share of total import done by the country in the year 2016-17.
- Out of the India's total import in the year i.e 30010334335, import of toys include only 0.0605% share of total import done by the country in the year 2017-18.
- From the table it is clear that the import of toys from various countries have increased in the year 2017-18 in comparison to 2016-17.
- The growth of toys import is 0.33 % and total import of the country is 16.42% and is expected to increase in the near future if the current trend continues.
- When it comes to China, their has been an increase in the import of toys from 170,842.56 in the year 2016-17 to 172,664.67 in the year 2017-18.
- Growth in terms of percentage is 4.59%.
- The most growth has been from CZEHC Republic, although the numbers are small but in terms of growth in import of toys from here is highest i.e. 33773.19%.

BENEFITS AND REASONS OF INCREASE IN IMPORT OF TOYS FROM CHINA

- **Flexibility:** Chinese manufacturers are flexible, and this is an important skill and part of their competitive advantage in the global market.
- **Potential:** China is a one-stop-shop place. You find all, in one place and there is a wide choice of potential partners: many toy factories.
- **Compliance:** Toy importers have to respect a lot of standards and regulations, but in China, they found that toy suppliers are sensitive to it. Professional Chinese factories/industries are manufacturing good quality products, in compliance with the toy safety regulations.
- **Low Labor cost and taxes:** The labor cost and tax levels are too low in China. These conditions make China the leader in toy manufacturing.

- **The corporate system:** China's manufacturing unit does not work in isolation. China has cultivated an ecosystem that includes low-wage laborers, skilled workers, component manufacturers, and assembly providers.

CONCLUSION

Conclusion Although India's move to ban Chinese toy imports can also be seen as a non-tariff barrier as the Indian market has been flooded with cheap Chinese toys over the last few years. But still China is a very attractive destination for import of toys as predicted from the study. As per industry estimates, the Chinese have captured more than 70% of the Indian toys market. The Indian toy industry is approximately worth Rs 2,500 crore of which Rs 1,000 crore is in the organised sector and the rest is in the unorganised sector. The role of toys and games has transitioned from parenting to tools of child learning and development. Parents nowadays are pre occupied with their professional life and hence, the role of toys and games has become more important. Toys and games play a crucial part in child's development and increasing their overall proficiency. This has surged the growth of toys and games market in India and its import. Large variety of toys and games are available in China because of abundant cheap labour. Thus there is great likelihood of further import of toys from. But at the same time it should not be forgotten that present party which has come in center in India, how it will take imports whether it will reassure or discourage it during 2018 to 2022.

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ANALYSIS OF WATER QUALITY OF CHIKHLOLI LAKE OF AMBERNATH, DISTRICT THANE, MAHARASHTRA, BY USING SOME PHYSICO -CHEMICAL PARAMETERS**Mudaliar Shanti L.¹ and Patel Alpa K.²**

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ABSTRACT

Ambernath Taluka is located in Thane district and has a varied geographical structure with hills which descend from Matheran ranges. The area has wide range of Plant Biodiversity & few water bodies like lakes and Ulhas River flowing through it. With this Ambernath also has a semi urban and well developed residential area, as well as heavily polluted industrial areas. Present investigation deals with the study of physico-chemical parameters of Chikhloli Lake of that area. The Parameters selected were Temperature, pH, BOD, Alkalinity, Hardness etc. The lake water is not used for drinking, agriculture and other domestic purpose. By observing the result it can be concluded that the readings are not within a range of permissible limit of standards (BIS, IS-10500, FAO). The result shows that overall water quality was found unfit for drinking and irrigation purpose.

Keywords: Chikhloli Lake, Physicochemical parameter, BOD, Hardness.

INTRODUCTION

Water is a vital and unique element as it is can be naturally found as a solid, liquid or gas. India receives about 1400-1800mm of rainfall annually. About 96% of this water is used for agriculture, 3% of domestic use and 1% for industrial activity. An analysis revealed that about 70% of all the available water in our country is polluted due to the discharge of effluent from the industries, domestic waste, land and agricultural drainage^[1]. Water resources are of critical importance to both natural ecosystem and human development. It is essential for agriculture, industry and human existence. The healthy aquatic ecosystem is depended on the physico-chemical and biological characteristics^[2]. The quality of water in any ecosystem provides significant information about the available resources for supporting life in that ecosystem. Good quality of water resources depends on a large number of physico-chemical parameters and biological characteristics. To asses that monitoring of these parameters is essential to identify magnitude and source of any pollution load. These characteristics can identify certain condition for the ecology of living organisms and suggest appropriate conservation and management strategies. Water is universal solvent dissolving a number of substances that it comes in contact with. However water for human consumption and other domestic purposes should be free from disease causing organisms, poisonous substances, excessive amount of minerals and organic matter. It should also be free from color, turbidity, taste and odour.^[3] Now a day due to rapid industrialization, deforestation and over population most of our natural water bodies are gradually becoming degraded to a great extent. Unplanned and excessive exploitation resulted.



Map of Chikhloli Lake

MATERIAL AND METHODS**Sample collection**

For the collection and analysis of lake water collected from the three different sites. Water was collected by using pre rinsed plastic container of one liter capacity. During sampling containers were dipped and filled it at a depth of 30cm below the surface of the lake. The samples were labeled and transported to the laboratory.

Physico-chemical analysis

The collected samples were analyzed for the different physicochemical parameters such as pH, temperature, total hardness, alkalinity, BOD etc. as per standard methods given by APHA (2005). The experimental results were compared to the permissible limit of drinking and irrigation water quality standards (BIS, IS-10500, FAO).^[4]

RESULTS AND DISCUSSION

In the present study value of alkalinity, BOD was very high with compared to irrigation and drinking water quality standards (BIS, IS-10500, FAO). Thus the data of study indicate that the ponds are highly polluted, contaminated and unsafe or very risky for human use. Table 1. Shows physicochemical parameters of Chikhloli Lake.

Table1:Results of physico-chemical parameters of Chikhloli Lake of Ambernath

Samplingsite ⇔ parameters ↓	Ambernathlake	IrrigationstandardsBIS- FAO	DrinkingstandardsIS:1050 0
pH	8.6	6.5-8.5	6.5-8.5
Temperature	23°C		
color	Lightbrownish		
Alkalinity (mg/L)	144	200	600
Totalhardness as	192	300	600
BOD(mg/L)	120	100	
DO(mg/L)	5.2	05	

The pH values were found in the range of 8.1-8.7 and thus slightly alkaline trend reveals in every pond sites. The pH affects most of the biological processes and biochemical reactions in water body.^[5]

Temperature is one of the most counted factors of aquatic environment. It plays a vital role in physic-chemical and biological behavior of aquatic ecosystem. Temperature values were ranging from 21°C to 25 °C. It shows the differences in temperature according to its location.

BOD is amount oxygen utilities by microorganisms in stabilizing the organic matter. It is an indicator of amount of oxygen present in a water body. It is proportional to the amount of organic waste to be degraded aerobically.^[6] Increase BOD value result depletion of oxygen. In current investigation value is 120 mg/L.

The anion responsible for hardness is mainly bicarbonate, sulphate, chloride, nitrate etc. Other metabolic ions dissolved in water are calcium, magnesium, iron, strontium and manganese.^[7] Hardness has great effect on biodiversity. 192mg/Lis the value observed in present investigation.

The total alkalinity is 144mg/L. According to Durrani (1993), withdrawal of CO₂ from bicarbonates for photosynthesis by algae may increase total alkalinity. Total alkalinity may be used as a tool for measurement of productivity.^[8]

Dissolved oxygen is essential for a healthy aquatic ecosystem. In this study maximum Do and BOD value was found more than the permissible limit Dissolved oxygen and BOD are the important parameter in water quality assessment which depends on temperature, extent of biological activity, concentration of organic matter and microbial population such as bacteria and fungi.

CONCLUSION

Ambernath Lake clearly shows that without undergoing the treatment, the water of the lake is not useful for human consumption and also cannot be used by aquatic flora and fauna. So there is a need for proper treatment and restoration of water for human and environment.

There is a need for awareness among the local people to maintain the water bodies over there. If proper care is taken or if necessary actions are taken then the lake water can be utilized by the people in near future.

ACKNOWLEDGEMENT

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FISCAL DEVELOPMENT IN JAMMU AND KASHMIR**Parvaze Ahmad Kira**

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ABSTRACT

Jammu and Kashmir is a special category state because of some inherent features, which are acting as impediments to the state's mobilization of resources and to its growth and development. Despite the steps taken by the state government, fiscal parameters of the state has not been improved significantly, which is a serious problem, and necessary efforts are required to look in to the factors which have become impediments in the state's economic and fiscal development. This paper tries to analyse the fiscal trends of some important variables and the extent of fiscal dependence of the state on the union government.

Keywords: Special category state; fiscal trends; Grants in-aid

INTRODUCTION

Jammu and Kashmir is often called paradise on earth but the fiscal position of this state has been in a state of deterioration from more than two decades now. A lot of reasons one can provide for this unhealthy financial position of the state, but the real and technical factors are imperative to address. Though Jammu And Kashmir State has got special status two decades back in Indian federation but this special status of the state has not really improved the fiscal position of the state because of so many lacunae's in the formulation, execution and implementation of policies. As a consequence state is fully covered with debt from bottom to neck and it seems that the state is becoming more and more dependent on this special status and more specifically on the grants and loans from the centre, which is a matter of concern. Further, the state's own revenue position has not shown significant improvement over these years because of ineffective policies and lack of reforms in different sectors of the state. The state of Jammu and Kashmir is endowed by nature a number of revenue generating resources but the state is not getting the benefits because of political, social and economic factors.

The state of Jammu and Kashmir has been very heavily dependent on the central devolution, because the State's own tax revenue efforts has not been increased considerably over the years. Also, Non-tax revenue of the state has been declining over the years which have increased the problem of dependence of the state on the centre. Further in Jammu and Kashmir greater reliance is laid on indirect taxation because personal taxation is limited due to low per-capita income. Sales tax is the most important tax levied in the state and it has been one of the major sources of revenue to the state government.

Long-term development of J&K is a formidable challenge in many ways. The systems and processes of fiscal federalism that work for the rest of the country are not necessarily optimal for J&K. The content and process of development of J&K has to be designed keeping in view the State's unique historical, institutional and political factors. Then Jammu and Kashmir has some unique economic disadvantages arising out of remoteness and poor connectivity, hilly and often inhospitable terrain, vulnerability to natural disasters, a weak resource base, poor infrastructure, sparse population density, shallow markets and most importantly a law and order situation. Taken together, all these factors have resulted in a classic 'backwardness trap' of low economic activity, low employment and low-income generation.

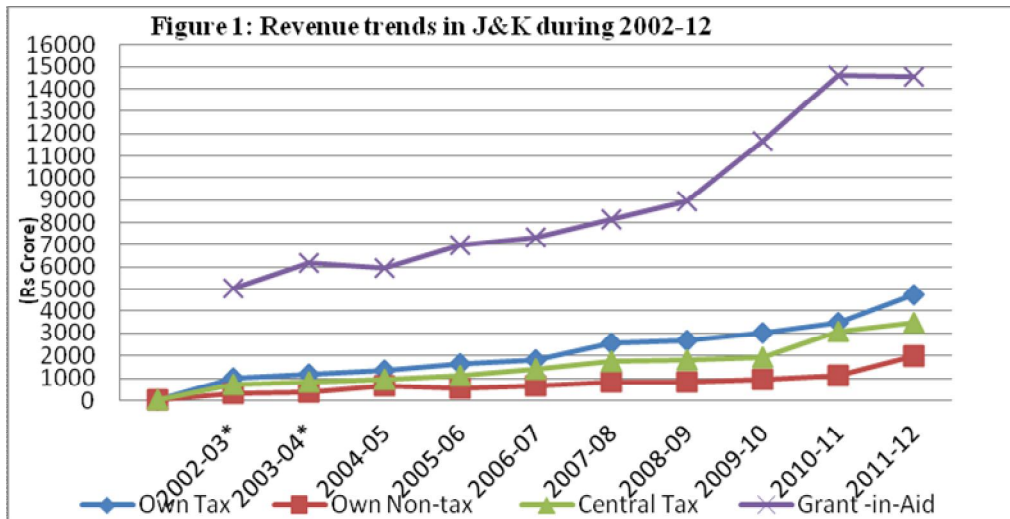
However, since finance is almost considered as the life-blood of economic activities, in order to be able to accelerate the tempo of development, it is imperative that both the central government and the state governments must generate increasingly large financial resources. But the state governments particularly Special category states have been complaining of the inadequacy of financial resources at their disposal, the central government has been alleging that the state governments do not make sufficient efforts to mobilizing adequate resources and they do not manage their finances properly. Almost all the finance commissions have highlighted the need for internal resources mobilisation and better financial management.

The implementation of 6th pay commission by the state has further deteriorated the fiscal position in Jammu And Kashmir State and the consequences of this partial implementation of 6th pay commission have further widened the Revenue-Expenditure Gap. Further, the volatile condition increases the fiscal instability in Jammu and Kashmir state and make it more dependent upon external sources of revenue.

Among the 14 smaller states of India, Jammu and Kashmir ranks 10th in the overall competitiveness ranking of the states. Jammu and Kashmir has been ranked 6th in terms of its economic strength, it has been ranked 7th in terms of its business efficiency, 10th in human resource and 11th in infrastructure. Jammu and Kashmir has been ranked 14th in governance quality (National productivity council 2004).

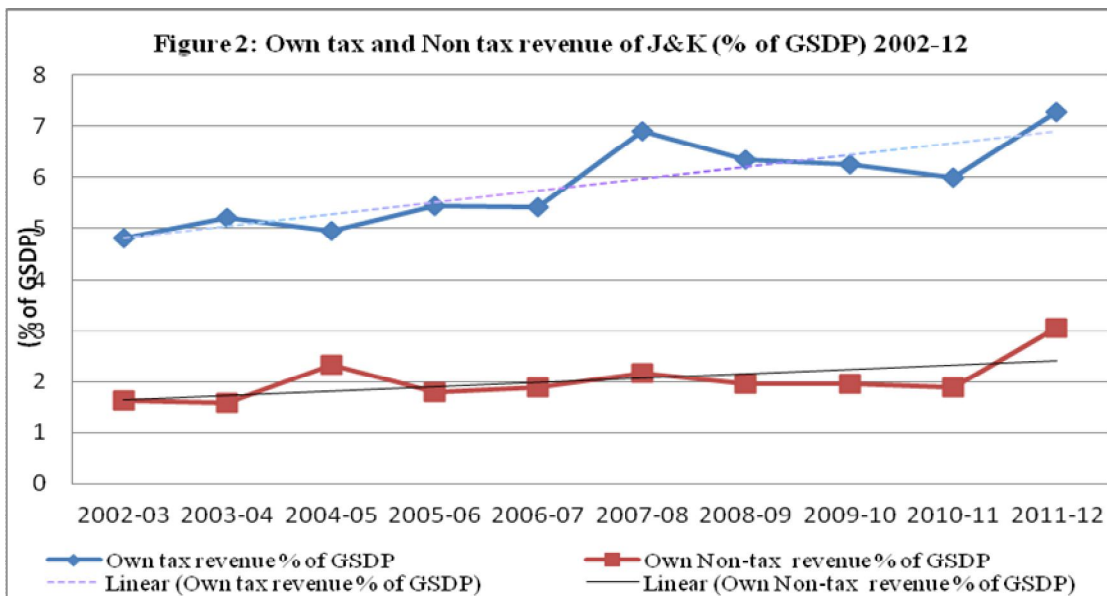
OVERALL REVENUE TREND OF JAMMU AND KASHMIR

Figure 1 shows revenue trends in Jammu and Kashmir during 2002-12. Total revenue receipts over this period has increased more than three times to 24783 Crore. Further, Own non-tax revenue has shown a very sluggish growth over this period as compared to other components of revenue receipts of the State. Own tax revenue followed by Central tax transfers has shown significant improvement during this period because of the efforts done by the State and the fiscal reforms implemented in many sectors. Jammu and Kashmir being a Special Category State (SCS) gets Grant-in-Aid because of the financial complexities and political reasons. Grants-in-Aid has shown almost three fold increase because of the stability in the State and the increased fiscal deficit, and has the largest share in the total revenue receipts of the State during this period. So, total revenue receipts of Jammu and Kashmir has shown improvement over this period but still has to enhance its Own tax and non-tax revenues to stabilize its fiscal position.



OWN TAX AND NON TAX REVENUE OF J&K

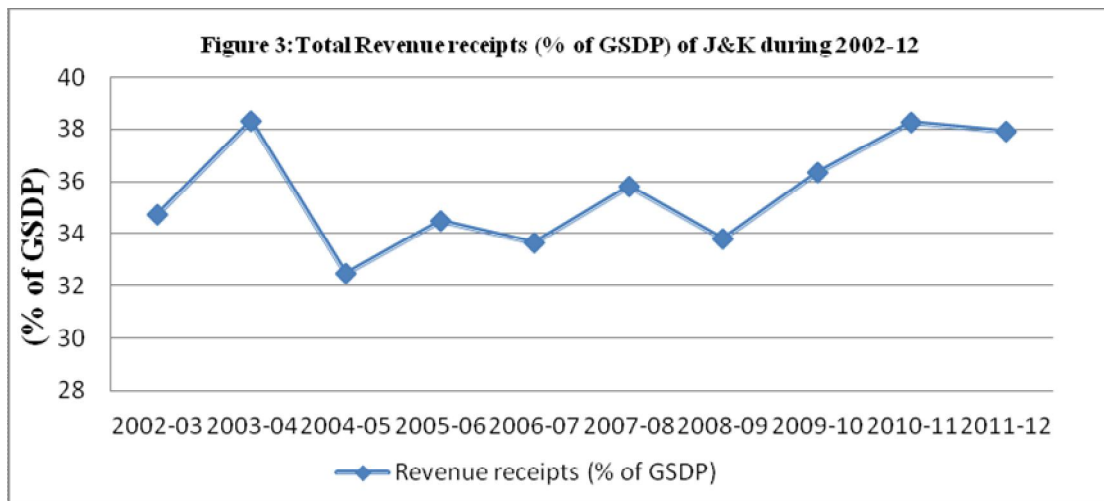
Own tax revenue as a percentage of GSDP of the State has shown positive trend because of the increase in the sales tax/VAT, particularly since 2006. Whereas, non tax revenue as a percentage of GSDP of the state has shown a very moderate trend during 2002-12, which is a concern for the State (see figure 2). It is therefore necessary for the State that the share of non tax revenue should increase in the overall revenue receipts because it is an important indicator to check the pulse of fiscal situation of the State.



STATE'S REVENUE RECEIPTS AS PERCENTAGE OF GSDP

Total revenue receipts as a percentage of GSDP is also an important indicator of the fiscal stability of the State. It is because increase in the total revenue receipts particularly own tax revenue, own non tax revenue and Central tax transfers of the State as a percentage of GSDP will increase the fiscal stability and also, will decrease the overall dependency of the State on the Centre. Figure 3 provides a clear view of the Total revenue

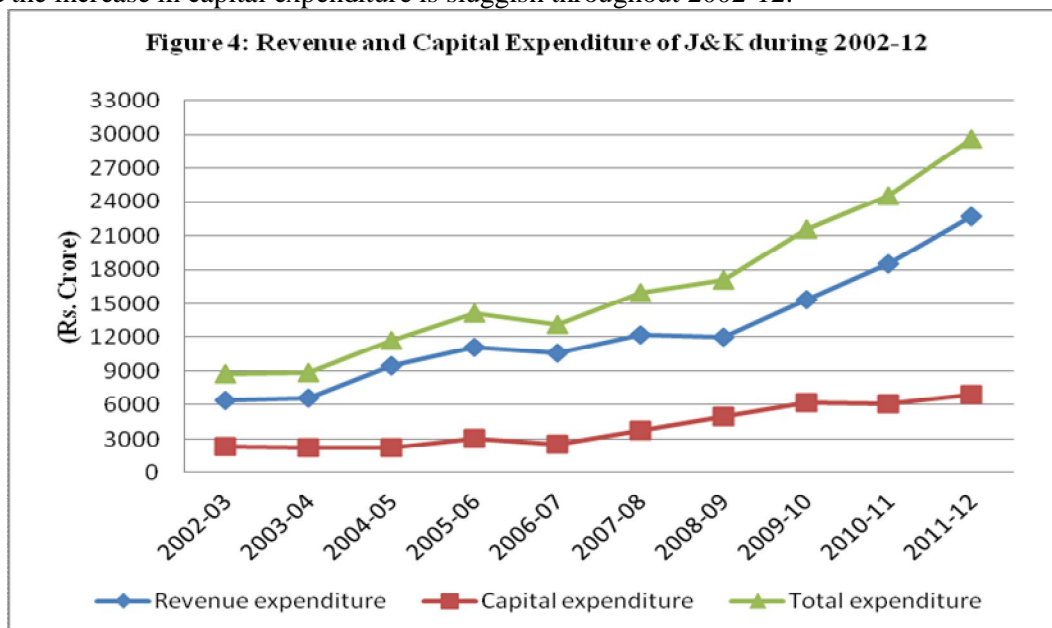
receipts of Jammu and Kashmir as a percentage of GSDP during 2002-12. It is highly visible from the figure 3 that total revenue receipts of the State have not increased significantly and have shown inconsistency over the period. Total revenue receipts of Jammu and Kashmir as a percentage of GSDP have increased by 3.17% during 2002-12, which is highly insignificant growth and a matter of concern for the State.



EXPENDITURE TREND IN JAMMU AND KASHMIR

The total expenditure of the State increased from Rs. 13,114 Crore in 2006-07 to Rs. 28645 Crore in 2011-12 (118%). The capital and revenue expenditure components have increased by 140% and 114% respectively during the period 2006-12. The plan expenditure increased by Rs. 83 Crore (one per cent) from Rs.6639 Crore in 2010-11 to Rs. 6722 in 2011-12. However, the non-plan expenditure increased sharply by Rs. 3959 Crore (22 per cent) from Rs. 17964 Crore in 2010-11 to Rs.21923 Crore in 2011-12. The share of salary /wages / pension in the total expenditure during 2006-07 stood at 44.86 per cent, which had increased to 46.92 per cent during 2011-12 (Economic survey of J&K 2012-13).

It is clear from figure 4 that Total expenditure of the State has increased throughout the period, particularly since 2006-07 it has shown steep rise because of the rapid increase in both revenue and capital expenditures. Furthermore capital expenditure of Jammu and Kashmir has declined slightly during 2011-12. It is clear that out of total expenditure committed by the State, revenue expenditure has the highest share which is increasing day by day and the increase in capital expenditure is sluggish throughout 2002-12.



OWN INCOME EFFORT AND DEPENDENCE OF JAMMU AND KASHMIR ON THE CENTRE

States have announced proposals/initiatives in their budgets that would enable them to conform to the fiscal prudence norms set by the Thirteenth Finance commission (FC-XIII). The broad fiscal stance of the states has been towards enhancing their own tax and non-tax collections, while continuing with their existing pattern of expenditures (State finances 2012-13).

Jammu and Kashmir in order to enhance its revenue has raised its value added tax (VAT) rate on certain commodities, such as, liquor products, tobacco and allied products. Further, Jammu and Kashmir has raised its toll rates and has proposed measures on user charges/cost recovery from social and economic services. Moreover, the state has attempted to rationalise its expenditure through austerity measures imposed in 2009 and is still in force.

TOTAL OWN INCOME AND EXPENDITURE OF J&K

Income and expenditure gap of Jammu and Kashmir has increased throughout 2002-12, but since 2005-06, it has widened to a large extent because of rapid increase in total expenditure and a very gradual increase in the revenue resources of the State (see figure 5). It is because of this wide income-expenditure gap, the State’s debt has increased to an alarming level and its dependency on the Centre has increased. Further, despite of expenditure compression measures Jammu and Kashmir is feeling helpless to decrease its total expenditure because of inefficient policies adopted by the State and lack of planning. It is therefore, necessary for the State to enhance its resources and to curtail its expenditures, because it a two prong approach to decrease the income-expenditure gap.

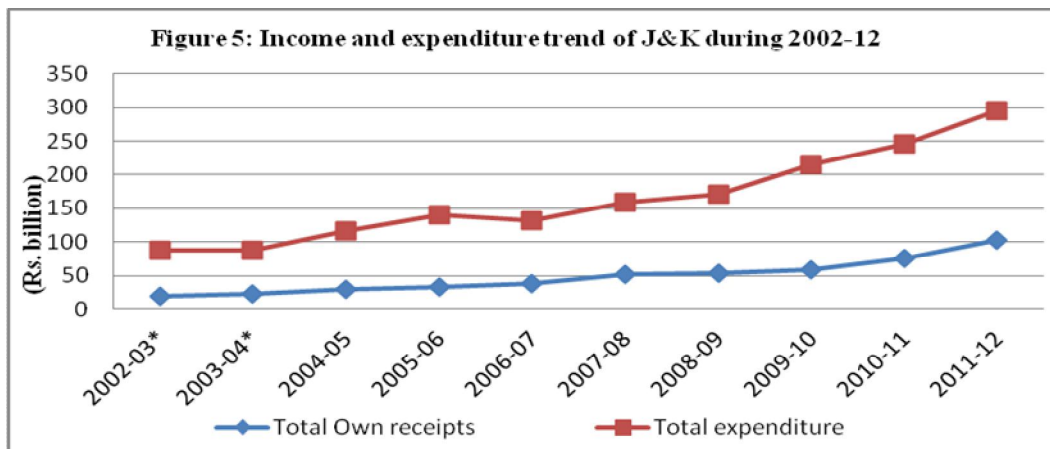
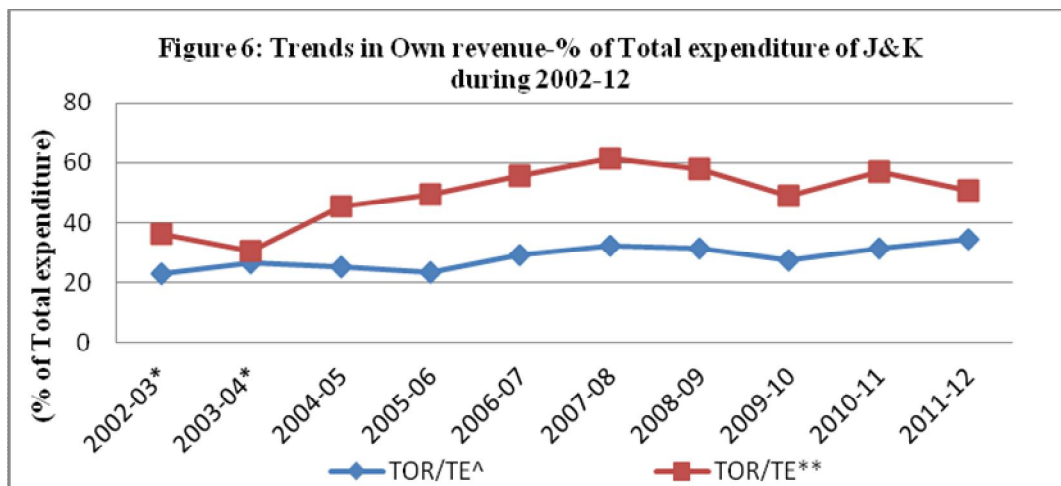


Figure 6 provides a clear picture of the revenue position of the State and it is explicit from the figure that own revenue resources of the State has increased but not significantly, it is because the State is only able to finance its expenditure to a limit of 34.63 per cent (excluding capital receipts) and 50.82 per cent (including capital receipts). Moreover, own income of the State has shown ups and downs during this period in both cases, because of inconsistency in revenue and capital receipts.



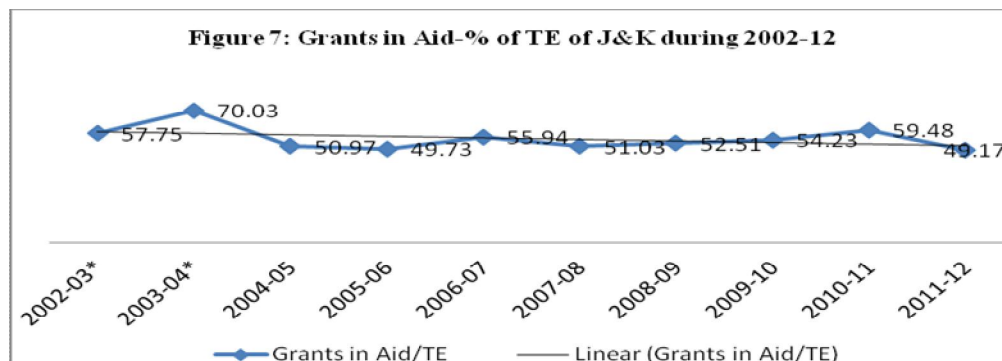
Note: ^ Capital receipts & Grants in Aid not included in Total own income.

** Capital receipts included but not Grants in Aid.

GRANTS IN-AID AND TOTAL EXPENDITURE OF J&K

Jammu and Kashmir is getting a substantial amount of revenue from the Centre in the form of grants in aid, as being a Special Category State (SCS). However, grants in aid has been an important and free source of income for Jammu and Kashmir to finance its expenditures, right from the time the state got special category status. Due to lack of resources in hand, Jammu and Kashmir has become addicted to grants in aid and has not been able to decrease its dependency on this discretionary revenue significantly.

Figure 7 gives an overall perception of state's dependency on grants in aid to finance its total expenditures. As it is clear from the figure that grants in aid has been a significant resource for the State to finance its expenditures throughout 2002-12. Grants in aid to total expenditure ratio has shown ups and downs and not a consistent behaviour over these years, which means that the State's dependency on grants in aid is very gradually decreasing as is evident from the slope of trend line.



CONCLUSION

Jammu and Kashmir has been facing financial problems before and after accession to the Indian federation because of deep rooted backwardness, complex location, political instability and inefficient policies adopted by the State. The Own revenue resources of Jammu and Kashmir has not been shown significant rise particularly non tax revenues and capital receipts because of lack of reforms, negligible investments and instability in the State. Moreover, the State's high expenditures and lack of resource mobilization has widened deficit gap and the State has become dependent and addicted to debt and discretionary grants from the Centre, which is not conducive for the growth of fiscal development in Jammu and Kashmir. Furthermore, the above analysis of the state shows that the fiscal variables are not showing consistency in their growth and their improvement is very gradual, which is a very serious concern for the State.

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IMPACT OF SOCIAL MEDIA ON ACADEMIC PERFORMANCE OF STUDENTS: AN EMPIRICAL STUDY

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ABSTRACT

In 21st century, world is moving fast due to change in technology especially in communication technology. People can feel the change every moment. Technology made every phase of life more convenient. It is growing very fast and making impact on people's life in various means. Social media is one of the medium of technology. In today's scenario it is more popular media among the youth. Adding to this, fast development in smart phones pushes youth to use such technology conveniently.

Social media like WhatsApp, Facebook, twitter and YouTube are very good application to communicate or exchange ideas between each other. It is an effective medium of flow of information and thoughts. These applications are helpful for the youth and occupies them throughout a day. However, this application has evolved as effective medium for social networking and exchanging of ideas. It impacts badly on the life of youth. Therefore it is required to know how it is affecting the performance of the students at large. This study is an attempt to find impact of social media on academic performance of youth with reference to Pune, India.

The study was conducted upon 150 respondents and questionnaire method was used as tool of collecting data. This study will show that social media is popular medium for making effective communication and faster which enhancing transfer of information and connecting students easier. After examining it empirically, it is noticed that social media has a negative impact on youth and badly affect their performance in study, behavior and activities of day to day life. It affects their study time and reduces the ability of writing. These media has found to be highly addictive and difficult to control. The impact of these media is so powerful that youth gave up their real world interest and unable to control themselves from constant chatting and replying to the text.

INTRODUCTION

The advancement of modern technology have offered different communication channels to the society. Communication has been made simple as people are no longer communicate face to face with the other people. The modern technology has allowed people to make friends virtually. Individuals are interested in making virtual friends by joining social media networks. Because of convenient feature of web based social networking services, it becomes more popular among youth. They are the heavy users of services provided by social media applications such as Facebook, WhatsApp, titter and YouTube. Thus attention has been moved from real world to virtual world and visible to invisible friends.

More than 100 million Indian populations are active on social media and every second the number is being increased. India is the second largest market in using Facebook and WhatsApp worldwide. As per the MacAfee report (2014) 66% youth feel more accepted on social media than in person.

So, It is important to evaluate the amount of usage of social networking sites by college going students and its impact on their performance, engagement and achievement.

LITERATURE REVIEW

Kuppuswamy S. Narayaan PB (2011) ,The researcher has found that the use of Facebook and WhatsApp are increasing by the youth because of its features. The modern generation is more involved in using these application. The study claims that due to the increased popularity of social networking sites the youths are more distract-acted from their studies and loosing concentration. But it is also emerging as a medium of making friends and social ties with the world that revolves around them.

Jain MR, Anand N, Gupta P (2012), in their study they found that the youths are more participative on social issues and express their feeling about it. The social issues are discussed by the youths on social networking sites and raises their voice in order to show the concern about the issues. The finding of this paper states that youth spreads awareness about such social issues among their closed circle on social networking sites. They do not discuss the same outside the social networking sites.

Camilia ON, Ibrahim SD, Dalhatu BL (2013), In his study of the impact of social networking sites on the students explains that youth do not understand as to when and where to use these WhatsApp and Facebook. It is witnessed using social networking sites in the locations such as lecture halls when lectures are going on and also during study and reading hours of their regular schedules. The author's suggestion to youth is that in order to

allocate their time effectively they should reschedule their timings of use of such social networking sites to complete their task in hand.

Johnson Yeboah &Georg Dominic Ewur Takoradi Polytechnic,Ghana (2014), conducted a survey to find out the Impact of whatsapp messenger on study of youth and data was collected from 550 students of territory institutions of Ghana. The result reveals that WhatsApp has negative impact on the study of youth. It creates impact on their writing skill such as spellings and grammatical construction of sentences. It is difficult to maintain balance between online activities and academic performance with WhatsApp.

Ms. Anshu Bhatt, Dr. Mohd. Arshad (2016). Authors conducted a survey to find out impact of WhatsApp on youth. Researchers collected data from 100 students of schools and college going students in Agra region, India. The study shows that WhatsApp is easy way of medium for communication with their friends. It shows that excess use of social media adversely impacts their study , routine lives. The impact is such that students give up their real interest and their emotional quotient to the social media. It also creates an impact on their psychology and routine life. They cannot stop chatting and replying on social media.

OBJECTIVE

1. The aim of the study is to find out how students are addicted to social media
2. To find out use of media affects their academic performance
3. The excess use of social media application distracts students from the study.

HYPOTHESIS

H1 – The use of Facebook and WhatsApp hampers the academic performance of the students.

H2 – The use of Facebook and WhatsApp distracts the students.

RESEARCH METHODOLOGY

The study incorporates the quantitative approach for finding the research objectives. Random sampling has been done effectively and questionnaire tool was used to collect data from the respondents. The questions were closed ended. The survey was conducted on college going students targeting the age group between 18 to 22. This study was restricted to Pune, India. Therefore, samples were taken from Pune city. Total 150 respondent filled the questionnaire. They were asked 10 questions on social media and its use. Data was collected through internet survey.

DATA ANALYSIS AND INTERPRETATION

When respondent were asked which social media application they used for communication? The 48% of total respondent use whatsapp , 31% used facebook and 10% & 11% used twitter and instagram respectively. It shows that whatsapp is more popular application among the students for chatting and sharing videos followed by facebook. Whatsapp is easy way to communicate with each other and more effective medium of communication among the student.

Figure-1

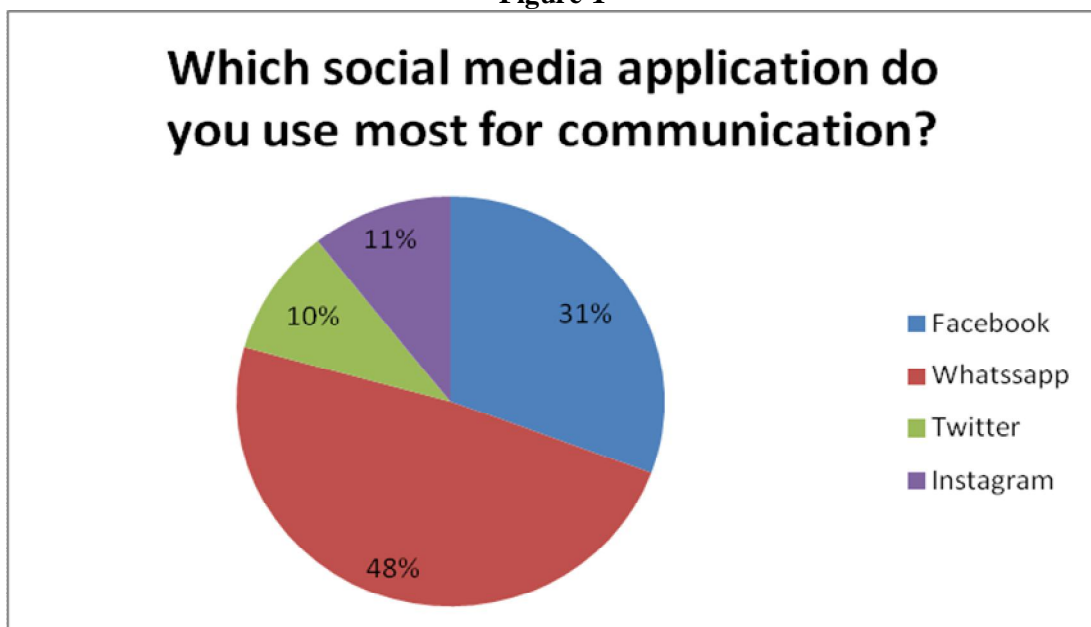
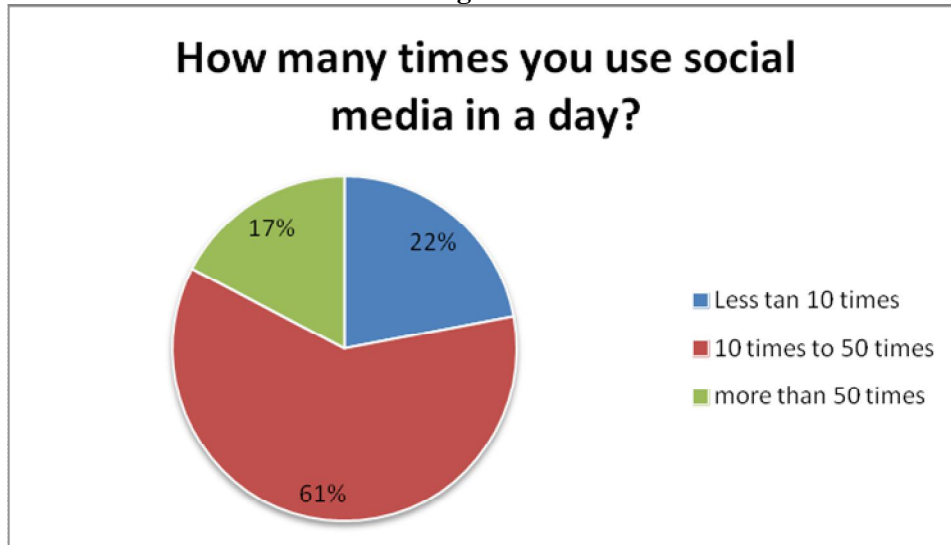


Figure-2



When respondents were asked how many times they use social media in a day? The study shows that 61% of the population use social media 10 to 50 times in a day. Most of the students are giving replay after every beep of the cell phones while doing any activity such as study. That clearly indicates the amount of distraction they face while studying which in turn reduces their focus or concentration while studying.

Impact of use of social media on Study

Responses	Yes	Neutral	No
Are you addicted of social media?	69%	8%	23%
Does frequent use of social affect your study?	64%	16%	20%
Does use of social media affects your concentration while studying?	61%	11%	27%
Does use of social media affects your writing ability?	78%	5%	17%
Do you think that excess use of social media affects your academic score?	61%	14%	25%

While studying the impact of use of social media on academic study, five different questions were asked. 64% of the respondent agrees that frequent use of social media affects their study. 61% of people are losing their concentration while studying after frequent use of social media application. 69% of population are addicted of social media whereas 78% of population reveals that the use of social media affect their writing ability and 61% respondents are saying their academics grades are affected by excess use of social media. It clearly shows that use of social media affects the student’s academic performance.

Impact of social media on distraction

Responses	Agree	Disagree	Neutral
Do you think social media occupies your privacy?	82%	13%	5%
Do you feel distracted when you use social media?	76%	18%	6%
Do you feel psychological changes in you because of social media	58%	30%	12%

To study the impact of social media on student’s distraction, respondent were asked three question on privacy occupancy, distraction and psychological changes because of social media. It is found that 82% students are agreed that social media occupies their privacy.76% respondent feel distracted and 58% respondent feel psychological in themselves. This shows that social media impacts positively on respondent and feels distracted from the regular activities and schedules.

CONCLUSION

The main objective of the research was to check the impact of social media on student’s academic performance. This study reveals that social media has negative impact on academic performance of the students. Social media is quite popular among young generation and they are almost addicted to it. It is difficult for them to find out way to come from them. .Because of this students feel some psychological change in them and they feel distracted from the activities. Therefore it has created negative impact on their study and their academic performance is degrading. The study confirms that social media hampers the academic performance and students feels distracted because of excess use of social media.

So, It is important for the student to limit the access of social media to certain extent. They should spend more time with scheduled activity and study not with social media. They should restrict themselves from using social media. Young generation always wants to be in touch with their friends via social media. The youth should find a way to come out from this dilemma. Limiting the access of social media is one way to improve the academic performance.

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ART IN LITERATURE AND LITERATURE IN ART

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ABSTRACT

It is a fundamental fact of life Art has continued to fascinate human beings since they developed the faculties which enabled them to practice. There was a time when people thought that works of art and written pieces of literature are very different in how they connect to audience. Like pictures are received information which directly delivers an idea to audience while writing is perceived information as while writing can be depicted by audience in a variety of way. But now society has overcome this stereotype mindset and identify art as more versatile and appropriate way to communicate and express one's ideas and feeling. Now even Literature holds the hand of art to publicize their writing. Many art works represent images of the religious literature like Bible art extremely important to the world of literature. Many art movements like Romanticism, Dadaism are partially based on the literature of that time and mainly established to express the scenario of that time. Even the crisis of World War I inspired a tremendous amount of creative output from artists and writers, civilians, men and women. The creative works of giving textual, visual or plastic form of First World War experience would go on into the 1930's and after.

INTRODUCTION

Literature and art both work as mediator between a creator and audience. As an artist paints and use art elements, like the choice of color, composition, or how the forms are put together in the same way, an author writes, he takes words to create a story to communicate with us. Through his/her creation, we are able to create a picture of the character, visit new places and find meaning in what could be seen as simple events. An author's writing style is his platform to share art and communicate with the world.

Keywords: Ekphrasis, communication, interpretation, juxtaposition, expression, representation.

“Interpretation is a compliment that mediocrity pays to genius”.

- Susan Santag “Against Interpretation”

If people can create it, you'll probably find it in some category. Literature and arts spans everything from writing books, designing buildings, sculpting stones and painting on a canvas, to designing fashion, writing articles and acting in a play. From the first cave paintings to the modern works in digital age, it is always about communication and expression.¹ Art has continued to fascinate human beings since they developed the faculties which enabled them to practice it is a fundamental fact of life. From centuries it has been argued that from Plato's theory of mimesis to recent claims about arts roots in the mechanisms of Darwinian evolution. Whatever hypothesis one chooses to follow in one's understanding of art, it is never say far from the sense of art's experience potential, which again and again reveals its power of emotional and intellectual appeal. Artworks communicate through their elements we might never notice at first, like the choice of color, composition, or how the forms are either put together or fractured.

But first of all let's understand the very first question. How can we define art? Let's take a few seconds and think about this. Is art something about painting which are hung in the galleries or museums? Is it photographs that people take and publish in magazines? Or is it a classical music? And what about literature? Literature is art! Art can be elucidate as communication between an artist and the audience. As an artist paints, an author writes, he takes words to create a story to communicate with us. Through his/her creation, we are able to create a picture of the character, visit new places and find meaning in what could be seen as simple events. An author's writing style is their platform to share art and communicate with the world.² As an art, literature is the organization of words to give pleasure; through them it elevates and transforms experience; through them it function in society as a continuing symbolic criticism of values. Literature is also a form of human expression as any art form. We can define art as an expression of ideas or feelings shared through an individual or group's works in some medium or other. Rather than using paint, wood, movement, speech, fabric or sound or any other of the myriad media available to artist over time, literature uses the medium of ideas and feelings as transmitted by the written word. Like any individual interpretation and reflect the author's/artists personal background, lived or imagined experience an era. Just like other art forms, literature is also subject to the process of ekphrasis, the interpretation of the work's essence, ideas and feelings into another medium. Examples of this include paintings which have inspired music, and vice versa, music which has inspired choreography and

poetry, painting which have been reinterpreted into sculptures or story-works of literature likewise are readily form of art.

There was a time when people think that works of art and written pieces of literature are very different in how they connect to audience. Like picture are received information, which directly conveys an idea to audience, while writing is perceived information as it can be depicted by audience in a variety of a ways. Many messages and meanings can be created and supported with textual evidence by different readers from pieces of writing. But now society has overcome this stereotype mindset and identify art as more versatile and appropriate way to communicate and express one's ideas and feelings. Now even literature holds the hand of the art to publicize their writings. Art and literature are bound together in several ways. Great works of art have inspired great works of literature, great works of literature have inspired art, and together art and literature have simultaneously represented similar movements. Art and literature can be seen weaving around each other, influencing one and other and being used as a tool to teach students about liberal arts and humanity. Many art works have been used in literature classrooms as tools to understand specific works or movements.³

Art and literature often reflects on the time period in which it was created, whether as a statement of support or a reaction against something. The crisis in the World War I also known as the Great War, claimed millions of lives, with battle fronts in Europe and other areas, was a distinctly modern conflict in many ways. However, it inspired a tremendous amount of creative output from artists and writers, civilians, men and women. The varied prospective represented in the first World War art shows us that British artists and writers witnessed and experienced different wars even though only one conflict is recorded in history.⁴ The polarity between the emotional and intellectual art has existed for centuries. One can choose artist from the same age using the same style or subject, discovers that the works elicit completely different responses from the spectators.⁵ One of the worth mentioning works under this category is "Merry-Go-Round" Gertler shows a stylized image of soldiers of WWI. This painting is often discussed alongside the great literary work WWI which also depicts many author's views of the war and the young men of the lost generations following their pointless lot in life that was given to them as if placed on a magical Merry-Go-Round with no end. This was artist's protest against the war. It was considered a modern work and goes hand in hand with the rebellious literature of the time that expressed similar understanding of the war where some paintings show the conflict between armies, some are to show the pain of common people. "The Scream" by Munch represents a very important movement in literature painting; expressionism was a movement in literature that consists of a large shift away from realism. The goal of expressionistic writers was to find a way to express emotion so that the reader could better understand the human conditions. Realistic representations could not meet this goal and therefore works were created that had dream like qualities, unrealistic settings, usually centered on one character that represented an entire kind of people. As can be seen "The scream" also shows one central image, dreamy and unrealistic, which represents an emotion, fear, in a way that moves the audience. The work is shown alongside expressionistic work written by artist such as Eugene O'Neill and Sophie Treadwell as a visual example of the modern expressionistic movement.

The conflicts of Great War produced one art movement: Dada. Its name was drawn randomly by German poets Richard Huelsenpe and Hugo Ball, when plunged a knife into French-German dictionary and its point landed on Dada, which means "Hobby horse". Dada established itself in Zurich in 1916. Where large number of writers or artists dedicated themselves to it and got there audience out of there bourgeois complacency and conversational thinking. As in Zurich, the thrust behind Paris Dada came from the literacy contingent. Inspired by Tzara's dada magazines, three young poets- Louis Arugen, Andre Breton and Philipe Soupault- founded a journal called 'Litterature'. It was so Avant-garde that there was hardly anything in it that the literary establishment would consider literature. Other than that even an art movement Romanticism by the German writer poet Friedrich Von Schlegel in late 18th century. The term derived from the Gothic novels of such writers as Horace Walpole in England, which projected an aura of glam that became to sense a fundamental transformations in consciousness occurring, a transformation that reached its peak in the first half of the 19th century.⁶

The turn of 19th and 20th century saw a range of turning points in all artistic activity and formal experimentation- so characteristics of the modernist period- resulted in revisions and adjustments in the perceptions of works of art, ultimately ushering in our current post modern age, with its passion for eclecticism and boundary crossing. The exploration of intersection between visual arts and literature is indicated by writers and poets who deliberately choose to address a work of art as an integral part of literacy discourse. W.H. Auden's reflections on Brugel's master-pieces are away the best looked upon as an illustration of the manner in which words and images may be merged into an inseparable whole. In A.S. Byatt's 'The Mattise stories', Mattise's paintings determine the characters of self perception and corresponds to, or contrast with, developments in their lives,

foregrounding the recurrent theme of transience. In some cases, however, a work of art may not even be explicitly referred to in a literary text: Colm Toibins 'The testament of Mary' was written partly in response to Titan's and Tintoretto's representations of the mother of Jesus, or rather the tension between divinity and humanity which emerges from their Juxtaposition.⁷ Art works that represent images of the religious literature like Bible are extremely important to the world of literature because aside from religious aspects the Bible is one of the oldest large works of literature that remains for literary study. For example "The Madonna of the book" is an image of Mary and Christ together reading. It is one of many images created in response to Biblical teaching and creates a visual representation of the written world, a theme that we will further explore as both art and literature grow in popularity.

Many English painters during the Romantic era followed the lead of such painters as William Wordsworth (1770-1850) and Percy Bysshe Shelley and steeped themselves in nature, emotionally swept away by its beauties and moods or awed by its sublime power and intimations of the infinite. 'Ophelia' an example of painting based on the English literature was created as a visual representation of the character Ophelia depicted in Shakespeare's Hamlet. This scene shows Ophelia singing while floating in the river Denmark before she drowns, a scene well known to those who have read and studied Hamlet. Literature is fortunate in that its medium allows it to form relationships with other arts relatively easily: after all, no art exists outside of language, in which it is discussed and commented upon. It is thus only natural to see writers interpreting and responding to works of art, analyzing the creative process, reflecting on the role and status of the artist or asking questions about art's complexities to our so-called "reality".⁸

Finally, as new trends appear among the well established approaches to literature, new insights may be gained by applying them. A stylometric analysis of 19th century novels yields colorful computer graphics, which might arguably be considered as a form of abstract art themselves, but which at the same time have a classification, interpretative and representational value.

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MARKETING MANAGEMENT BY MAD OVER MARKETING: A SMART AD CREATOR**Prof. Pooja Ahuja¹ and Prof. Ravi Ahuja²**

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ABSTRACT

Marketing in today's era is not just about creating awareness but also to sell the product with creative ad's. The era demands digital sight to it and mostly the presence should actively involve social media. Social media is significant for start-ups in their success or failure in fund raising. Investing energy into utilizing online social media and exhausting these platforms consciously contributes to the financial success of start-ups. Therefore, start-ups which are popular among online fans and followers can manage to raise larger amounts of funding in the early stages. This research paper is about the mad over marketing. As the name goes, it is all about marketing that curates lovely marketing stories on facebook along with being crowdsourced too. The purpose of this study is examine the how marketing is working over social media platforms and giving a creative side to a product. The team of MOM is successful because of two main factors – Smart content and dedicated initiatives.

Keywords: Marketing, Smart content, start up, social media, MOM.

INTRODUCTION

Mad Over Marketing is a Facebook page that breathes about marketing. Run by a bunch of 5 people who started it as a small initiative, Mad Over Marketing now has more than 10,000 fans within 8 months.

Facebook is a home for millions of business pages all out there to communicate something or the other. Some are able to make a mark while many get washed away with time. Content is the big differentiator! In today's times, either you produce good original content or curate it. M.O.M over the period of time has gained a lot of consideration and now is working with mostly all the prevailing giants of the industry. The clients of M.O.M includes Game of Thrones, the last season of this popular TV show is going to start by 14th April, 2019 it is also working for Zomato, Shiseido, a Japanese cosmetics company, KFC, Hotstar etc. They also feature the best ad campaigns made by other marketing companies just to give recognition to great marketing efforts by different brands.

AIMS AND OBJECTIVES

- To understand how Mad over marketing works in the competitive world.
- To enquire how the company is keeping the marketing concept alive with smart content.
- To illustrate the comparative advantage Mad Over Marketing has due to its dedicated efforts.

RESEARCH METHODOLOGY

The study presents the profile of successful Marketing initiatives by Mad Over Marketing. The research is completely based on Primary Data through a telephonic interview and Secondary Data which is collected through the Published sources, Magazines, Journals, Newspapers, Books, and Internet Sources.

LIMITATIONS

1. The research study has limitation of time.
2. The study is generalized and indicative.
3. The analysed date is limited.

FINDINGS

Founded: 2012

Primary Work: Ad creation

Name of the Founders: Snehal Kanodia Umang Sonthalia, Wamika Mimani, Siddhant More, Nikhil Daga.

Mad over marketing is a Facebook page which was started by 5 college students of St. Xavier's, Kolkata. The main aim was to popularize the concept of marketing so this gave the rise to a Facebook page i.e. MOM. They believed that spamming people for marketing will not bring results so they made a page on Facebook, Instagram and in few years the philosophy worked out well for them as it stayed true to the good, solid content.

Being specialised in Marketing, I was amazed with the success of Mad Over Marketing so through their Website I got into contact with Siddhant More He is one of the founder member of the company who is quite friendly and helped me with the research. I asked him few question over a phone using the telephonic method of research. My first question to Siddhant More was how the idea came into the mind for MOM. "Well, it was a college fest where we had to promote the concept of marketing and to promote it the team decided to make a page which later became huge"

The Initial Investment required was zero as for the team as the start-up is based on Facebook page. My Next question was regarding the marketing strategy to which Siddhant said, "We being the young use real content and every piece put up on our page or website is done by hand. So it's a very well controlled environment with no compromise on content quality, which has made our business more successful in overseas and right now being the fans of the upcoming last season of Games of thrones we are working with the most creative content for the series. So yes, the strategy used is just the real content and word of mouth"

The good content is king in today's time and through this brand management is more appreciated so I asked siddhant more regarding the brand management strategies, to which he explained "Mad over Marketing is a facebook page and facebook was not enough so the team launched our website in 2012. In just 2 years MOM grew to 80k engaged subscribers without a penny spent, and the website has gotten over 6 lakh views in just 40 days. MOM have a good recognition in America, England, and the Dubai so there is a lot if international content being shared as well. Apart from this, we have a series of commercial projects on." I later asked about the future plans to which he said, "We have not limited our franchise just to marketing we are also doing event management which is basically managed by Siddhant More and Wamika Miman, we have also started a new page Mad Over Movies which has opportunities for the movies to be promoted by us". The last question was regarding number of employees it has currently and who is the competitor of M.O.M, "we started with the team of 5 and I was appointed later in 2014 as PR person and currently we are family of less than 10people and our biggest competitors are Mdotmarketing". MdotMarketing is a Online giant led by Chris Haberman, who is their CEO.

The analyses of the study gives the idea that the real content always win with the combination of smart work and as I learned the investment made was nothing in 2012 and now it is earning in millions.

RECOMMENDATIONS

Internet Advertising is one of the most successful methods to reach out the target audience and having a presence on social media is indispensable which makes Online Marketing Strategy necessary nowadays.

There are few recommendations for the Internet Advertising whether you want to advertise your product or you want to be a promoter just Mad over Marketing these recommendations are very much useful:

1. Advertising on search engines

The most frequently used Internet Advertising method is through Search Engine Marketing (SEM) and the most used company for same is undoubtedly GOOGLE. In fact, the huge technological giant has a method so you do sponsored advertising: Google AdWords

2. Advertising on Social Media

Social media is the most effective platform for the advertisements specially when you have a online business and initially it doesn't cost much to your pocket. India has the fastest online market for ecommerce and this is possibly because of social media. Online advertisers are expected to outspend TV advertisers by \$40 billion this year.

That means 40 percent of the world's ad spending is expected to take place online in 2019, according to new forecasts from advertising measurement company Zenith. Online ad spending first beat out TV as the biggest ad medium last year.

3. E-mail marketing

For many years this form of advertising has dominated the Internet and is no annoying, intrusive and ineffective: mass email advertisements.

In fact, we receive so many email per day that we've become kind of immune to the advertising and don't need more than two seconds to send it straight to the *Spam* folder.

E-mail marketing has nothing to do with this but rather goes much further and can be considered a fundamental piece of your digital marketing strategy.

E-mail marketing would cover an entire article (probably more) but for this, were talking about advertising and are referring to camouflaging promotions and advertisements within every day, friendly and valuable messages that the user won't want to delete.

It's a tolerable and friendly form of advertising, and you should definitely use it but consider it as part of your digital marketing strategy not as a form of advertising.

Apple, for example, is one of the companies who tend to use it frequently in order to share their promotions without the users seeing it as only an advertisement.

4. Remarketing

Remarketing is one of the best Internet advertising techniques for both small and large advertisers.

It's not just a form of advertising but is rather a very good **feature that allows you to create personalized advertisements that will be shown to users who have previously visited your website but didn't complete any conversion.**

This solution is found within **Google AdWords**, the online advertising giant, and **is mainly focused on Return on Investment.** Therefore, **it's an option you should consider if a lot of users are leaving your site without buying anything.**

Be careful because **poorly utilizing remarketing can seem aggressive**, but with a good configuration it won't be negative at all: it can be very useful and profitable for your business. Even though these are the main forms of Internet advertising, there are still others and you can even mix them together and opt for an online advertising strategy that includes various types of advertisements. So, being what it is, **it is important that you have some clear advice before starting to advertise on the vast Internet.** Below we're giving you 10 tips that you are or should be keeping in mind when advertising online.

CONCLUSION

The Motivation for this research paper is my passion for marketing and while doing research I came to know about Mad Over Marketing and the work they do is totally amazing with this I would like to conclude that the don't be lazy if you have any passion just follow it and make the best of it with the smart work and solid content. Marketing is a field which is dynamic and the constant thing prevails in market is the original write ups and unique ad campaigns. So the marketing managers must take up these ideologies for the success of their business.

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- <http://lighthouseinsights.in/mad-over-marketing-on-facebook.html/>
- <https://www.quora.com/How-is-Mad-Over-Marketing-working>

GLUCOSE PHOSPHATE ISOMERASE (GPI) VARIATION IN TRIPLOID OYSTER-AN INDICATOR FOR CLIMATE CHANGE**Dr. Jyothi V. Mallia**Assistant Professor, Department of Zoology, SICES Degree College, Ambernath (W)

ABSTRACT

In present study triploid edible oysters produced in lab and reared in Tuticorin bay were analysed and compared with diploid for Isozyme Glucose phosphate isomerase which is an important enzyme for controlling glucose level in eukaryotes. Polymorphism in gene level help the organism to survive the climate change especially at high temperature and pH and the expression of the gene by allozyme analysis can be used as an indicator for organism selection during aquaculture

Keywords: Polymorphism, Triploidy, climate change, GPI, Edible oyster

INTRODUCTION

Climate change is harmfully affecting aquaculture systems all around the world as it mainly effects on species physiology (De Silva 2012). It is therefore imperative that vulnerable aquaculture industries are identified, thereby allowing researchers, managers and stakeholders to optimally allocate financial and human resources to address the key challenges and develop adaptation strategies

In the present study main objective was to note the specific relationships between triploids, population fitness and climatic stress in edible oyster, *Crassostrea madarasensis* (Preston) a filter feeding bivalve mollusc by subjecting diploid and triploid populations produced in lab condition and cultured in tuticorin bay. We specifically tested whether the tendency for triploids dominate more extreme, aquatic condition. Triploid organisms have limited capacity to mature and in most species where triploid individuals do not produce gametes or viable larvae and are considered to be sterile. An advantage of sterile organisms is that they transfer less biochemical energy to the gonad, so the other tissues can gain more weight over time. Induction of triploidy and its evaluation has been carried out in India (Mallia, 2004) and other molluscs of commercial interest (Guo and Allen 1994; Utting *et al.*, 1996),

Allozymes are mostly primary products of transcriptionally active genes and it is assumed that a specific enzyme profile is the reflection of the genetic makeup of a given species. They may be used to “fingerprint” a species/stock/individual considering all other variables as constant (Sarangi and Mandal, 1996). Allozymes offer a potentially powerful and reliable tool for resolving genetic relatedness/divergence questions by employing the degree of polymorphism of diverse alleles at different loci involved in translating specific enzymes and their varied multiple molecular forms. They have been used widely as molecular tags in genetic, phylogenetic, taxonomic and evolutionary studies and in strain or type identification (Richardson *et al.*, 1986).

Electrophoretic separation of allozymes provides a visual presentation of the products of a single gene. The application of electrophoretic techniques on genetically controlled polymorphic enzymes can also be used to confirm gynogenesis and polyploidy (Ryman and Utter, 1986). Electrophoresis is particularly applicable for diagnosis of ploidy because it allows direct visualization of gene duplication at discrete structural gene loci (Allen *et al.*, 1982). It has also been applied effectively to a considerable array of studies to determine gene dosages in polyploid vertebrates (Balasano *et al.*, 1972).

Glucose phosphate isomerase (GPI) is one of commonly used isozymes in molluscs, (Allen *et al.*, 1982; Hawkins *et al.*, 1994; Magoulas *et al.*, 2000). According to Allen *et al.* (1982) these enzymes were found to be sufficiently heterozygous for screening of diploids from polyploids. According to Balasano *et al.* (1972) it is also possible to determine the frequency of triploidy by screening albumin phenotypes in natural populations. Beaumont and Kelly (1989) point out that triploid mussels can serve as a useful research tool to address current genetic phenomena such as heterozygosity with growth correlations and heterozygote deficiencies in marine bivalves. In the induction of triploidy by targeting meiosis I, the homologous chromosomes that normally separate from each other at this stage of cell division are prevented from doing so, and thus, all of the heterozygosity of the female parent is retained in the egg. The addition of the male haploid chromosome set further increases heterozygosity beyond that of meiotic II induced triploids or diploids. It has been suggested by Stanley *et al.* (1984) that I meiotic triploids have higher heterozygosity levels than II meiotic triploids.

MATERIALS AND METHODS

Sample collection

One year old edible oysters produced in hatchery reared in bay were used in this study. They were from three groups, viz. A normal diploid (2n); triploid group produced by blocking polar body II with 6 DMAP (3nII) and a triploid group produced by blocking polar body I with 6-DMAP (3nI). (Mallia, 2004, Mallia *et.al.*, 2005). Thirty oysters sampled randomly from each group that were reared at Tuticorin bay, were transported to Kochi (340km away) in wet gunny bags avoiding mechanical damage. In the laboratory, they were transferred to aerated seawater (salinity: 32ppt; temperature: 29°C), and fed with mixed algae, (4,000 cells/oyster) on the next day.

Preparation of tissue extract

About 0.5 g adductor muscle was excised from each oyster for allozyme electrophoresis. The tissue was minced in the cold (4°C-10°C) and was homogenized using a homogenizer in selected media. The homogenizing solutions consisted of distilled water ½: 1 (w/v). Homogenates were taken in ice-cold eppendorf tubes and centrifuged at a speed of 10,000 rpm for 45 minutes at 4°C. The supernatant was transferred to another set of cold-labeled eppendorf tubes and centrifugation was repeated for another 30 minutes. The supernatant was stored at -85°C in New Brunswick Ultra low freezer until they were analyzed on the following day.

Electrophoresis

The supernatant was analyzed by vertical PAGE using a mini gel electrophoresis unit (Mighty small SE 250; Hoefer, USA). A stock solution (30%) of acrylamide and bis-acrylamide was used. Electrophoresis was carried out to assess allozyme variation of GPI. A locus was considered polymorphic only if its common allele had a frequency not higher than 0.95. For staining used the recipes as followed by Shaw and Prasad (1970). Agar overlay (2%) was also used for GPI assay

RESULT

Two zones of activity of Glucose phosphate isomerase (GPI) were observed. Numbers were assigned to loci sequentially in relation to the electrophoretic mobilities of the homomeric isozymes. Numbering began with “1” for enzyme locus closest to the cathode and proceeded towards the anode. Tris glycine buffer gave good result.

The *GPI-1** locus had two allele viz. 100 and 120 in triploids, only a single allele was present in the control. At *GPI-2**, two alleles were scored, a fast moving 100 and a slow moving 90. Like *GPI-1** was monomorphic in control but exhibited polymorphisms in both triploids (Figure1)

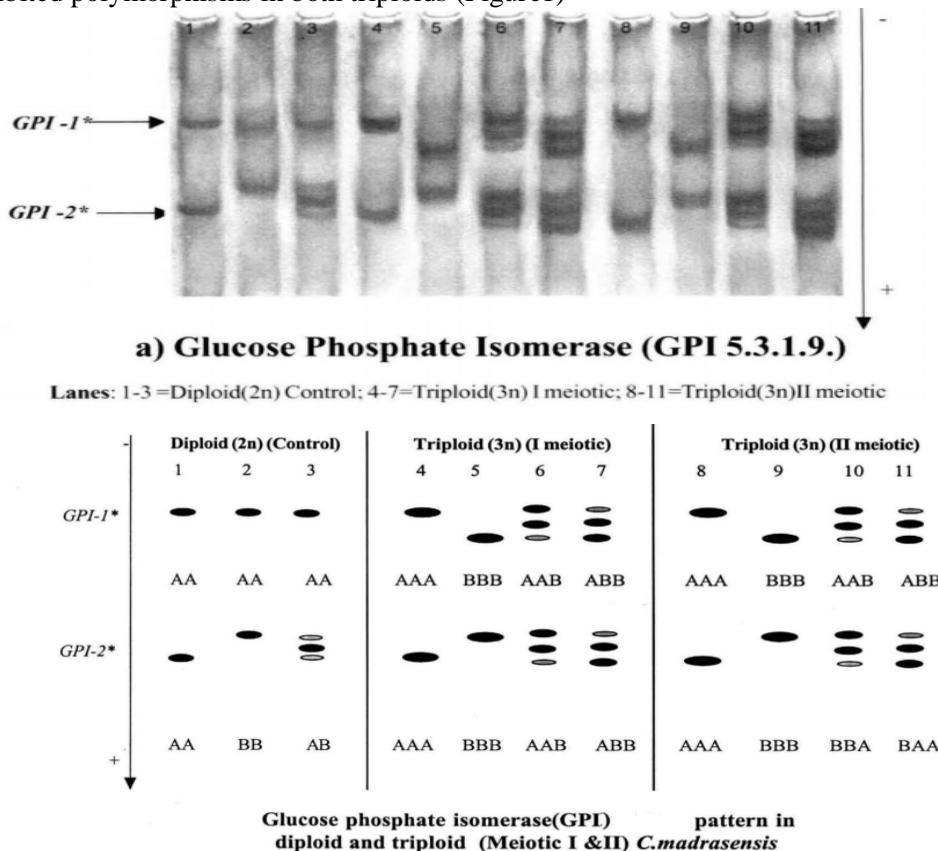


Fig-1: Glucose phosphate isomerase Gel and GPI pattern

Allelic frequency and heterozygosity

Comparison of allele frequencies reveals that all alleles of three groups were polymorphic except at loci *GPI 1* of control. Heterozygosity varied greatly among all loci and among groups. Paired comparison “t” tests indicated that single locus heterozygosity was consistently higher in both meiosis I and II triploids (Fig.2.)

a) Zymogram patterns of Glucose phosphate isomerase in *C.madrasensis*

	2n (Control)	3n (I meiotic)	3n (II meiotic)
<i>GPI-1*</i>	AA = 100/100 (All 3 samples)	AAA= 100/100/100 BBB= 120/120/120 AAB= 100/100/100/100/120/120 ABB= 100/100/120/120/120/120	AAA= 100/100/100 BBB= 120/120/120 AAB= 100/100/100/100/120/120 ABB= 100/100/120/120/120/120
<i>GPI-2*</i>	AA =100/100 BB =090/090 AB =100/90	AAA= 100/100/100 BBB = 090/090/090 BBA = 090/090/090/090/100/100 BAA= 090/090/100/100/100/100	AAA= 100/100/100 BBB = 090/090/090 BBA = 090/090/090/090/100/100 BAA = 090/090/100/100/100/100

Table-1: Zymogram patterns of Glucose phosphate isomerase

CONCLUSION

Increased heterozygosity per triploid individual indicates their survival in the environment and in the present study GPI isozyme is useful as a marker for triploid oysters which can survive in high temperature. GPI has an essential function in glycolysis and gluconeogenesis pathway and is universally distributed among all eukaryotes. Enzyme analysis (present study) coupled with growth performance (Mallia *et al*, 2006) reflects the health status of triploid oyster and their ability to successfully acclimate the new environmental conditions. In Tuticorin temperature mainly ranges from 25-42 ° C. While exposure to higher temperature energetic adjustments are raised and hence maintenance of higher glycogen reserves in polymorphic gene which contribute to cellular homeostasis and muscle function.

Our study provides the first empirical evidence that triploid advantage in oysters at high temperature habitats involves homeostatic maintenance of reproductive output under increasing abiotic stress.

Thus screening of GPI isozyme is useful as a indicator for risk assessment provides guidance to scientists and stakeholders on how climate change is expected to alter the physiology, life cycles and environment of aquaculture species, the way they are farming. The study also highlights critical data gaps in aquaculture research across a broad range of farming systems. Aquaculture production provides significant social and economic benefits globally, and the methods presented provide a broadly applicable, cost-effective and rapid approach to assessing the organisms which survive high temperature by climate change and choosing a suitable edible food species for farmers.

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**AN ANALYTICAL STUDY OF PROBLEMS AND PROSPECTS OF E-COMMERCE IN
SULTANATE OF OMAN****Dr. Lavakush Singh**Department of Commerce, Abeda Inamdar Senior College, Azam Campus, Pune

ABSTRACT

The present paper relates to conceptual framework of Electronic Commerce, its status in Sultanate of Oman and various challenges in success and growth thereof in India. Currently There is limited e-commerce activity by the private sector in the country. The government is actively promoting a “digital society” and “e-government” services through the Information Technology Authority . Some of the most frequently requested government services, such as business registration and customs clearance of imported goods, payment of utility bills, payment of traffic fines, etc. are being conducted on-line. In 2008 the sultanate of Oman enacted legislation governing e-Commerce, and ITA officials have recently identified opportunities in: e-payments (secure credentialing), Arabic language e-mobile content and E-Government applications. The ITA hosts an annual cyber security conference in Muscat, which may be of interest to firms interested in entering the market. Oman Tradanet specializes in Business-to-Business services. Other sites specializing in E-commerce applications are Business Gateways International, E-Oman (Information Technology Authority) and Knowledge Oasis Muscat. According to a study by Frost & Sullivan, internet spending in the Middle East is booming with GCC countries expecting a 40 percent growth in E-Commerce by 2020 and is expected to reach \$41.5 billion. Oman is expected to have a total market share of 12 percent across the GCC countries. Internet users constitute 74.2% of the population (2015).

Keywords: E-Commerce-Government, Digital Society, Cyber Security Etc

INTRODUCTION

The E-commerce market in Oman accounts to only 1% of total sales. It is still a nascent market and have ample opportunities to grow in future. On the other hand, global e-commerce market is about to reach US\$ 2 trillion by 2020 and have a share of 7.8% of all sales. In developed nations, e-commerce share ranges from 45-80%. China and India have seen a revolution in e-commerce industry in past decade. Many companies are established during this time and became billion dollar companies. In Oman, More than 20% of the population made at least One (1) online purchase in 2014. Despite Oman has one of the highest smart phone usage in Middle East region, only 8% of the population did mobile shopping. Most of the items purchased online in Oman are groceries and music. However, more than 1/4th of the population of Oman still purchases products from foreign websites. High smartphone penetration has helped e-commerce to grow in Oman and neighboring GCC countries. Oman and UAE has 2nd highest smartphone penetration in gulf region after Qatar which has 79% penetration. The biggest hurdle in e-commerce market is changing the mindset of people. Customer want to buy products directly from shops. As per the survey conducted by Mordor Intelligence, we found that customers want to touch and feel the product through which they perceive the quality of the product.

REVIEW OF LITERATURE

This chapter includes a review of available literature on factors that are hindering the growth of online shopping in Oman. It focuses on consumers. attitudes towards online shopping and identifies what drives people to shopping carts and what puts them off. Absence of any reliable study on consumers' online buying behavior and online shopping in Oman makes this research a more significant one. As Oman is located in the Middle East, the researcher considered researches and reports about the MENA region (Middle East and North Africa) as reliable sources. This literature review includes references to scholarly literature available on the barriers as to why the Sultanate of Oman has not progressed the way it should have in terms of e-shopping and e-commerce, and how its essentially cautious and conservative business approach could be one of the reasons for the failure of e-commerce to gain much ground in the sultanate. This chapter describes the state of e-commerce in Oman. It discusses the factors affecting online shopping growth in the Sultanate.

- I. The literature review studies the shopping behavior in mall environment and describes the lack of local shopping portals. Then, it explains the absence of multichannel retailing (physical store and online store) in Oman. -Online shoppers prefer to buy locally. According to the latest MasterCard Worldwide Survey on Online Shopping Behavior, faster deliveries times, buying trusted and familiar brands and being able to return goods easily, drives people to shop online from local stores (**O.Carroll, 2012**)

- II. Consumer concerns on security and privacy issues, in the process of online transactions, are major obstacles in the development of e-commerce. As a correct choice can only be identified in the future, consumers are forced to deal with uncertainty, or take a risk with their choices () state that perceived risk influenced both attitudes toward online shopping and intention to shop online. **Taylor, 1974). Vijayasarathy & Jones (2000)**
- III. online consumers were also concerned that online vendors may not deliver the goods ordered or that merchandise maybe inferior, incorrectly selected, or may never arrive. **Abramson and Hollingshead (1999)**
- IV. As deep-rooted traditional shopping habits prevail consumers make their purchasing decisions, after they personally see, hear, touch, taste and try the product in question. Online shopping could only provide visual and audio effects which influence consumer online buying decision. Consumer's buying behaviour and the resulting purchase decision are strongly influenced by cultural, social, personal and psychological characteristics **(Kotler et al, 2003)**
- V. Customers put off online shopping by delivery procedures. Customers also get frustrated by unsuitable times of delivery and unreliable delivery services. Waiting days or weeks for goods would lead to abandon online shopping. Customers expect their orders to be home on time and without failed risks, otherwise they will not buy again. **Dennis et al. (2002)**
- VI. A survey conducted in Saudi Arabia considered the lack of individual home addresses is another significant obstacle to online shopping growth. In Oman, individuals have no uniquely identified addresses or mailboxes, and mail cannot be delivered to homes or offices. **Al-Solbi and Mayhew (2005)**
- VII. A cash culture is still prevalent in the region with consumers still favoring traditional payment methods, through concerns over the security of card payments. Although people are aware of in Oman prefer to get cash at an ATM to pay for their needs rather than using a credit card transaction facilities offered by available credit cards, they nevertheless remain dubious with using credit cards comfortably for online and offline payments. **J. F. Rodrick 2009**
- VIII. Some markets have the technological infrastructure to support e-commerce, but poor incountry dynamics such as logistics, digital laws, or cultural biases that make internet users wary of purchasing online **(At-Kearney, 2012).**

OBJECTIVES

- i. To study the Conceptual framework of E-Commerce in Sultanate of Oman
- ii. To study the present status of E-Commerce in Sultanate of Oman
- iii. To study the challenges and opportunities before E-commerce in Sultanate of Oman
- iv. To study the factors responsible for growth of E-Commerce in Sultanate of Oman

Research Methodology: the data has been collected from secondary sources, such as Government websites, Report of US Embassy and other articles published in Newspaper and magazines.

CONCEPTUAL FRAMEWORK

E-business is the application of Information and Communication Technologies (ICT) in support of all the activities of business. Commerce constitutes the exchange of products and services between businesses, groups and individuals and can be seen as one of the essential activities of any business. Electronic commerce focuses on the use of ICT (Information and Communication Technologies) to enable the external activities and relationships of the business with individuals, groups and other businesses or e business refers to business with help of internet (i.e.) doing business with the help of internet network.

The term "E-Business" was coined by IBM's marketing and Internet teams in 1996. In 1997, IBM marketing, with its agency Ogilvy & Mather began to use its foundation in IT solutions and expertise to market itself as a leader of conducting business on the Internet through the term "e-business." Then CEO Louis V. Gerstner, Jr. was prepared to invest \$1 billion to market this new brand. After conducting worldwide market research, in October 1997, IBM began with an eight-page piece in the Wall Street Journal that would introduce the concept of "e-business" and advertise IBM's expertise in this new field. IBM decided not to trademark the term "e-business" in the hopes that other companies would use the term and create an entire new industry. However, this proved to be too successful and by 2000, to differentiate itself, IBM launched a \$300 million campaign about its "e-business infrastructure" capabilities. Since that time, however, the terms, "e-business" and "E-Commerce"

have been loosely interchangeable and have become a part of the common vernacular E-business includes E-Commerce, but also covers internal processes such as production, inventory management, product development, risk management, finance, knowledge management and human resources. E-business strategy is more complex, more focused on internal processes, and aimed at cost savings and improvements in efficiency, productivity and cost savings. Meaning of E-Business: E-Business is the conduct of business on the Internet, not only buying and selling, but also servicing the customers and collaborating with the business partners. E-Business includes customer service (e-service) and intra-business tasks.

5. CURRENT STATUS OF E-COMMERCE IN OMAN

The study elucidates the situation of Oman and predicts the growth of its E-commerce Industry. Report talks about growth, market trends, progress, challenges, opportunities, technologies in use, growth forecast, major companies, upcoming companies and projects etc. in the E-commerce sector of Oman. In addition to it, the report also talks about economic conditions of and future forecast of its current economic scenario and effect of its current policy changes in to its economy, reasons and implications on the growth of this sector. Lastly, the report is segmented by various types' E-commerce available in the country.

- In early 2006, Oman's government began to implement the e-Government initiative in conjunction with the provision of electronic payments (e-Payment) and in particular Internet payments. This was identified as a critical shared service in the Omani e-Government architecture and serve as a main enabler to the online delivery of Government Services and goods. The Information Technology Authority (ITA) of the Sultanate of Oman has taken up the strategic initiative to drive the development of e-Payments in Oman. On May 18, 2008, Oman legalized electronic transactions by adopting the Electronic Transactions Law, the first law for legalizing electronic transactions in Oman. The e-transactions law consists of 9 sections and combined as 54 articles and legalizes the use of digital signatures in electronic commerce and communications through letters, emails, etc. in order to assure adequate protection to businesses and common public, this law provides for penalties in the case of electronic crimes involving e-transactions. Protection for adequate privacy in matters related to personal data held in computer systems and processes for enabling electronic transactions is assured by the new e-transactions law of Oman. In 2016, the Central Bank of Oman launched a national debit card payment gateway infrastructure for e-commerce transactions, Oman Net Debit Card E-Payment Gateway infrastructure, which will provide safe and secure e-commerce transactions, A new law for the protection of e-payment is expected to be passed in the middle of 2017, details of which are unknown at the moment.
- **Domestic E-Commerce (B2C)**
More than half of online shoppers in Oman use the internet to buy airline tickets, shop for clothes and beauty products, and more. Consumers in the Sultanate of Oman are now gradually exploring online shopping options, according to the 2014 Online Shopping Behavior Study conducted by Master Card. According to the study, nearly one fifth of the respondents made at least one online purchase last year, a slight increase than 2012. 15 percent of the respondents identified Oman Air as the most commonly visited website for online shopping.
- **Cross-Border E-Commerce**
According to the 2014 Online Shopping Behavior Study conducted by MasterCard, Google and Amazon have emerged as the next three most popular websites for online shopping in Oman. Omani residents also use websites such as eBay, Ali-express to order products, and there are instances of using vehicle-related websites in the United States to order vehicle spare parts and supplies. China remains a favorite country of origin for ordering furnishing, machinery, construction materials, etc. Omani e-shopping consumers shop mostly for clothing, airline tickets, beauty care products, and hotel reservations online.
- **B2B E-Commerce**
Omani companies and even individuals do order products directly from foreign companies and payment is usually made through bank transfers or money exchanges. Courier companies like Fedex, DHL are used to ship the goods.
- **E-Commerce Services**
Banks, logistics companies, Ports. Oman Post is working on serving the e-commerce market and to make use of Oman Post's branches and vehicles for deliveries.
- **E-Commerce Intellectual Property Rights**

Oman does not have a data protection law that provides a detailed guideline of the obligations of organizations that collect personal data from the public. The “Protecting Your Intellectual Property in Oman” section provides a more comprehensive discussion.

- **Popular E-Commerce Sites**

Amazon, eBay, Aliexpress, Namshi, Royal Oman Police, Invest Easy, Bayan Customs,

- **Online Payment**

Payment gateways using bank cards, Money Exchanges, Bank transfers .Thirty-nine percent of Oman respondents still feel offline shopping is “more secure”, with only 24 percent considering online shopping “equally safe,” a survey conducted by YouGov has found. Across the Gulf Cooperation Council (GCC), the lack of confidence in online payment security has deterred 34 percent from shopping online, says the report. The study interviewed 2,700 participants from across the GCC, including Oman, UAE, Saudi Arabia, Bahrain, Kuwait and Qatar.

- **Mobile e-Commerce**

Thawani, a start-up, unveiled its new platform that will offer new mode of e-payment, which the company said will be an alternative payment method to cash, credit and debit cards. Compatible with Android and Apple iOS mobile platforms, a user needs only to download the app from the respective app store and create an account, entering all relevant payment information linked to the app. This is a fairly new area and a potential opportunity for U.S. companies

- **Digital Marketing**

The “Direct Marketing” section of Chapter 3 provides a more comprehensive discussion of the advertising outlets in Oman.

- **Major Buying Holidays**

Online sales of airline tickets and holidays surge around the Eid holidays and school summer holidays.

- **Social Media**

There is an increasing trend among businesses especially among Omani owned SMEs and entrepreneurs to promote and sell their merchandise through social media avenues such as Instagram, Facebook, etc. With more than 2.9 million mobile Internet subscribers, the social media landscape in the Sultanate is going through a radical change. As the country is giving thrust to its tourism sector, Oman Air, the national airline, is witnessing an impressive rise in its number of social media fans. Equally surprising is the fact that YouTube is the most preferred social media channel at 63% — ahead of Instagram (51%) and Facebook (45%), per ZLOG. Companies are increasingly using “social media influencers” for store and product promotions.

6. FACTORS AFFECTING ECOMMERCE GROWTH IN OMAN; following are important factor affecting e-commerce growth in Oman

- **Privacy and Security Concerns**

Many banks in Oman offer attractive schemes to purchase credit cards, and encourage the use of it with less interest and more products, the majority of Omani consumers remain reluctant to use their credit cards and give their financial details online. According to a Payment One survey conducted by Javelin Strategy & Research released in December 2011, the majority of active online shoppers are concerned that their credit card data would be intercepted or that unauthorized parties would access the information saved in the merchants database (Leggat, 2011). A study has revealed that 43% of internet users in the Middle East have been put off buying products online because they do not trust online payment systems (ibid). In April 2008, the Internet Crime Complaint Center reported that online payment fraud complaints filed by consumers in 2007 reached \$239 million compared to \$198 million in 2006. The CBO (Central Bank of Oman) advises citizens and residents to take the utmost caution when carrying out electronic trading. Authorities send messages to warn and advise Omanis to take all the preventive procedures to make sure of the identity of the seller, to deal only with the authorized credit card companies, and to avoid financial transactions with unauthorized websites or individuals, as not to fall victim to scams.

- **Dominant Cash Culture**

Cash is widely used in Oman; most Omanis pay for their daily needs in cash. Doctors and hospitals often expect cash payment for health services. Many companies pay salaries in cash. Small restaurants and coffee shops accept cash only. A deep rooted cash culture is still highly influencing consumers buying behavior. A research conducted by Ernst & Young (2012) in the MENA found that 60 % opt for cash when they asked

how they would like to pay when they shop online. However, only 19 % like to pay by credit card and 18 % prefer to use debit cards for online purchases. People remain reluctant to buy online due to the lack of innovative payment options. In their report, McAfee's Dots and Don'ts of Online Shopping, McAfee (2008) consider that consumers are rightfully concerned about providing their financial information online.

- **Unreliable Delivery**

Most online shoppers in Oman face delay in receiving their products and some do not receive anything at all. A research published by "The Independent" on January 2013 found that 60% of people shopping online last year had problems with delivery of their items (Charlton, 2013). Some of global online e-retailers do not offer shipping to certain countries, for instance, e-Bay and Tesco do not ship to Oman. Besides, many online portals charge high shipping costs to Oman which increases the total cost of the product.

- **Lack of Individual Home Address**

Lack of a door-to-door postal service has a negative impact on online shopping growth. Oman does not use a postal system that delivers to home addresses. "If you need to receive mail or packages in Oman you have to pay extra charges for alternate services which provide mail tracking and more expedient service, such as Aramex and DHL" (Oman Coast, 2012). Businesses in Oman use international shipping companies. services like Aramex to deliver safely on their contracts. Individuals use their work addresses, i.e. the address of the company they work for, if they have to receive parcels from abroad. The location of a company is easier to be identified by couriers than a home address.

- **Consumer Cognition**

In 2011, the Sultanate of Oman has introduced Information Technology studies to students in the early stages of education. It aims to develop education and raise its efficiency in the light of modern challenges and requirements of the future. This step helps Omanis to improve their computer skills in the long run.

- **Language barrier**

Although English is widely spoken in the urban areas of Oman, Arabic and Baluchi are the primary spoken languages in the rural areas. Oman's literacy rate has increased to 86.6 % as of 2008 (World Data Atlas, 2012). Oman is making strong efforts to teach English as the second language to the younger generation, and the number of providers of English language training has expanded to meet the increased demand.

- **Previous Experience**

Another cognition factor that impacts online shopping growth is consumers. Previous experience. Consumers. previous experiences with online purchases, or lack thereof, can be of significant influence on their purchasing decisions. Negative experiences increases the level of risk perception with online purchasing and hamper online shopping growth. Individual cognition and consumer behavior have great impact on online shopping.

- **Lack of Local Shopping Portals**

Oman has an advanced technological infrastructure to support e-commerce and an active Internet user base; however, managers of online shopping sites say the growth in online shopping in Oman, although encouraging, is not as high as expected. "People still have a lot of questions and concerns about online payments. And so many of them just prefer to get information about products on offer and actually physically visit stores to check them out. Retail stores in Muscat do not perceive online shopping as a challenge, at least for the time being.

- **Absence of Multichannel Retailing**

Multichannel retailing allows the consumer to transact via a variety of connected channels such as in-store, online over a computer, and via a mobile site or app.. According to The Gulf (2012), growth in multichannel in the Middle East is being constrained by a lack of content, with many local retailers failing to offer online product catalogues or purchase facilities on their websites. Other barriers include a level of mistrust of local retailers, poor customer service, and absence of an established and trusted postal system. The absence of multichannel retailing (physical store and online store) in Oman is impacting online growth

7. CONCLUSION

There has not been research on online shopping in Oman and therefore this study is very useful for further research. Most of the studies are based on UAE and rest of the GCC countries.

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STUDY ON IMPACT OF DIGITAL PAYMENT SYSTEM AMONG CONSUMERS OF AMBADI VILLAGE OF BHIWANDI CITY.

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INTRODUCTION

Today smart phone becomes payment tool along with other applications. Online payment gateways expands E-commerce & M-commerce transactions. Payment through online mode will be more secure & convenient not only to consumers but also for merchants & also it become a biggest platform to expand the business & market as a whole. Government of India has introduced the digital India programme with the motivation to transform India a digitally strengthen in society by using advanced technologies , which leads to economic development & public welfare. Indian banking sector playing a pivotal role in development of Indian economy, emphasizing more on technological advancement & strategic changes in their system. Banks nowadays stressing more on employees training & improvement in their products & services, channels, delivery system, payment system & so on in order to create, maintain & increase the number of customers. Due to changing needs & preference of customers, stiff competition & globalization , nationalization of banks compels the banks to bring improvement in their core & non-core services.

OBJECTIVES OF THE STUDY

1. To understand the concept of digital payment system in India.
2. To Analyse the different digital modes of payments available in India.
3. To know the challenges, growth & benefits of using digital payment system.
4. To study the awareness among consumers towards using digital payment system in ambadi village of Bhiwandi City.
5. To study the Impact of using digital payment system on consumers of Ambadi village of Bhiwandi city .

STATEMENT OF THE PROBLEM

Within the last decade or so, our world has become rapidly more digitized. Two important factors that have contributed to this development are the use of mobile phones, and the use of the Internet. In today's world of financing and personal money management, convenience and time are extremely valuable commodities. Today consumers are very busy in their life. Life style is changing day by day due to excessive working hours & job stress & other economic & social & personal obligations they can't approach to bank with limited working hours. They don't have time to do banking transactions they want everything as per their convenience. Today, the country is all set to leap frog to a new, more convenient & secure way to electronically handle surplus of payments with the advancement of technology

SAMPLE SIZE

Among population of consumers of sample size of 150 was determined both by qualitative and quantitative approach. This study was conducted in the rural area of ambadi village of Bhiwandi city, The sample size of the study was 150 respondents.

RESEARCH DESIGN

This study is descriptive research design has been used in carrying out the present study to know the impact of digital payment system.

POPULATION

Ambadi is a large village located in Bhiwandi Taluka of Thane district, Maharashtra with total 705 families residing. The Ambadi village has population of 3060 of which 1578 are males while 1482 are females as per population census 2011. In Ambadi village population of children with age 0-6 is 438 which makes up 14.31% of total population of village. Average sex ratio of Ambadi village is 939 which is higher than Maharashtra state average of 929. Ambadi village has lower literacy rate compared to Maharashtra. In 2011, literacy rate of Ambadi village was 81.96 % compared to 82.34 % of Maharashtra. In Ambadi Male literacy stands at 87.91% while female literacy rate was 75.59%. As per constitution of India and Panchyati Raaj Act, Ambadi village is administrated by Sarpanch (Head of Village) who is elected representative of village

METHODOLOGY

Primary data and secondary data have been used. Primary data was collected through the structured questionnaire and the secondary data was collected from various Books, RBI publications, reports, NCPI Journals, Articles, Newspapers, Magazines and Websites.

SAMPLING TECHNIQUE

150 sample size will be selected through non probability sampling by convenience sampling method. Sample comprised of business men, salaried people & students irrespective of age & occupation but most of the customers were men as compared to women.

DATA ANALYSIS TOOLS

Collected data will be analysed using mean, likert five point scale & chi square test method at 5 % level of significance at 1 degree of freedom.

HYPOTHESIS

H0: There is no significant difference in age of respondents & usage of Digital payment system.

H1: There is significant difference in age of respondents & usage of Digital payment system.

.REVIEW OF LITERATURE

- ❖ Dr. S. Manikandanet,al (2015), in their study on“An empirical study on adoption of mobile wallet with reference to Chennai city”to explain the adoption & application of wallet money endorsed by different companies & various factors that the consumers decisions to adopt mobile wallet & risk & challenges faced by users of mobile wallet . data was collected from 50 respondents & statistical tolls like ANOVA method was applied to results of hypothesis.
- ❖ Shamshersinghet,al (2017) , their research on “study of consumers perceptions of digital payment mode” with the object to find out the impact of demographic factors on adoption of digital mode of payment . the data was collected from 50 respondents from the different parts of Delhi. Likert five point rating scale method & Anova& frequency analysis method was used by SPSS model.for obtaining responses by interview melthod.
- ❖ K Suma Vally at el, (2018) studied “ A study on digital payment in India with reference of consumer adoption”. To understand the positive impact that digitalization of payment system. Primary data was collected from 183 respondents in hydrabad .chi- square technique was used and convenient sampling method was adopted . The study gave more importance on the awareness on maximum utilization of technology.

CONCEPTS

Digital Wallet/ E-wallet: A digital wallet is the online equivalent of a physical wallet. It refers to an electronic device or online service consumers can use to make electronic transactions. Users can securely store their bank information and card details in the e-wallet system. Additionally, they can also fund their wallet account and use that money for payment transactions.

Mobile wallet: A mobile wallet is a financial instrument that allows businesses and individuals to receive and send money via mobile devices.It is a type of e-commerce model that is developed with mobile devices owing to their convenience and easy access. A mobile wallet is also called mobile money or a mobile money transfer.

Payment Gateway: A payment gateway is the online equivalent of PoS machines. That means, essentially, that a gateway works as a bridge between the website and the card acquirers or banks, providing the technical solution that authorizes card payments. When using a payment gateway, merchants are required to establish a contractual relationship with banks and card acquirers, as well as with the gateway provider.

BENEFITS	CHALLENGES / PROBLEMS
➤ Easy way of making payments.	➤ Slow internet speed
➤ Keep track of transactions	➤ Fear of using online digital payment system
➤ Cash back & other offers	➤ Lack of awarness& illiteracy
➤ Security , confidentiality, integrity &Authencity	➤ Habits of using cash as a medium of payment.
➤ Opportunity to grow in multiple directions for catering the increasing demand of consumers	➤ Technical error, payment conflicts caused by technical glitches & anomalies.

towards payment features	
➤ Easy to manage & use.	➤ Risk of fraud/ misuse of payment network & data theft
➤ No transaction charged up to certain limits.	➤ Inefficient , slow & expensive , cross border payment barrier.

Here is the list of best digital wallet for all your online transactions including bill payments, DTH Recharge etc.

Digital wallets	Details
Paytm	Paytm is one of India’s Largest Mobile payment and e-commerce platform. Initially, it was started only with online mobile recharge and payment of bills for some aspects. But now it has a unique place in the market. Paytm is the Consumer Brand formed by One97 communication which includes SoftBank,SAIF PartnerAlibaba, GroupAlipay,Meditak,Paytm
1. StateBank Buddy	SBI Buddy is one the best and first Online Payment wallet on mobile phones. This mobile wallet is specifically designed for the prepaid application which can be used for the dealer application for the transaction which is being flexible at time and place. It is the semi-closed wallet to transfer the money safely.
4. ICICI Pockets	ICICI BANK is the multi-national banking and financial service. Here user will be able to create a safe and secure payment named iMobile Smart Keys, the unique digital application includes chat, messenger, games and searching option. It is the borderless account, the cheapest currency account for the online seller.
1. HDFC Chillr	HDFC Bank has introduced it’s UPI digital wallet, it is one of the best online payment wallets. Chiller has been running on IMPS. HDFC chiller is India’s First unparalleled bank mobile app for payment that links directly to your bank detail account.
BHIM	Bharat Interface for Money (BHIM) is a payment app that lets you make simple, easy and quick transactions using Unified Payments Interface (UPI). You can make direct bank payments to anyone on UPI using their UPI ID or scanning their QR with the BHIM app. You can also request money through the app from a UPI ID.

GROWTH OF DIGITAL PAYMENT SYSTEM

- The digital payments system in India has evolved the most among 25 countries with India’s Immediate Payment Service (IMPS) being the only system at level 5 in the Faster Payments Innovation Index (FPII).
- As per KPGM-CII report, India has 3rd largest user base in the world with more than 300 mn users, nearly 50% ie. 150 mn users are mobile internet users.
- The indianfintech software market is forecasted to touch \$2.4 bn in the year 2020. From \$ 1.2. bn.

DATA ANALYSIS & INTERPRETATION

Table 1 Demographic profile of the respondents:

	Categories	Count	Percentage
Age	21-30 Years	75	50
	33-40 Years	45	30
	41 to 50 Years	19	12.67
	51 & above	11	7.33
Gender	Male	85	56.67
	Female	65	43.33
Education Level	Below graduates	40	26.67
	Graduate	58	38.67
	Post Graduate	52	34.67
Annual Income	Rs.100001to Rs.200000	27	18
	Rs.200001 to Rs.300000	59	39.33
	Rs.300001 to Rs.400000	41	27.33
	Above Rs.400001.	23	15.33
Profession	Service	87	59

	Business	33	22
	Professional	22	14.67
	Any other	08	5.33

INTERPRETATIONS

- 50 % of the respondents are in the age group of 21 to 30
- 56.67% are Male, 43.33% are female , of the respondents post-graduates, 34.67 % .
- 49% of respondents been working in service area and
- 18% of the respondents earn annual incomeranging from 100001 to 200000.

Table no. 2. Respondents and their opinion about overall usage of Mobile & Digital wallet.

PARTICULAR	USAGE %	%
Movie tickets	11	7.33
To pay bills	37	24.67
Railway reservations	35	23.33
Recharge mobile	32	21.33
Transfer money	20	13.33
Electronic products	15	10

INTERPRETATIONS

As per the above table, 7.33% majority of the respondents preferred to use banking wallet payment for Movie Tickets to 13.33% ,for transfer money followed by Recharging mobile.

Table 3 Related to factors influencing to opt for Mobile & Digital wallets:

Factors opt for m-wallet	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Instant Payments	0	0	0	25	125
Reputation of the Bank	0	0	0	20	130
Seamless process	0	0	0	16	134
Instant Refunds	0	0	0	55	95
Rewards and offers	0	0	0	50	100

INTERPRETATIONS

From the above table it is clear that 8.33% of the respondents believe that instant payments is an important factor and 63.33% of the respondents look over the instant refund one of the factor provided.

Table 4 Factors Abstaining The Usage Of Mobile-Wallets

Factors abstaining the usage	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Prefer to use other cashless Payment option	0	3	30	40	77
concerned about the security of mobile & Digital payments	0	2	28	32	88
The cost of data access onwireless plan is too high	85	43	12	10	0
Possibility of information theft during wireless transmission atpoint-of-sale.	0	0	20	33	97

INTERPRETATIONS

From the above table No.4 it shows that more than 51.33% of the respondents are strongly agreeThat they are concerned about the security of Mobile payments and more than 51.33% preferStrongly agree that they prefer to use other cashless payment option.

Table 5 Overall Preferences

NO.OF RESPONDENTS	PAYTM / BHIM	OTHERS	TOTAL
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MALE	45	40	85
FEMALE	30	35	65
TOTAL	75	75	150

Chi-Square Test

CATEGORY	OBSERVED FREQUENCY (O)	EXPECTED FREQUENCY (E)	(O-E)	(O-E) ² /O
A	45	43	2	0.093
B	30	32	2	0.125
C	40	42	2	0.095
D	35	33	2	0.121
TOTAL			Total	0.341

INTERPRETATIONS

The above table reveals that there is no significant difference in Hence, the calculated value less than table value ($p > 0.05$) at 1 degree of freedom table value is 3.847. Hence the hypothesis stands. Alternative hypothesis is rejected and the null hypothesis is accepted.

FINDINGS

- The users of mobile & digital technology are much satisfied on its usage
- Factors like brand loyalty, convenience of shopping etc plays an important role in adoption of technological innovations in banking sector.
- Security and safety of funds plays a challenging factor for the users.

CONCLUSION & SUGGESTIONS

In India still many people use cash for the payment and for transactions after demonetisation & due to lack of awareness & fear of technological problems. There is strong need to make the society as cashless. Advancement in technology paved the ways to open opportunities for all to make cashless transaction. Digital payment system need to strengthened with organisations, users & government equally sharing responsibilities of securing the digital payment system . there is strong need to monitor system and cyber fraud management [policy should be developed so that it would have greater positive effect on society.

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**EMPHASIZING INNOCENT SUFFERING: AN INTERTEXTUAL STUDY OF THE BOOK OF JOB
IN ELIE WIESEL'S NIGHT**

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ABSTRACT

'Why do the innocent suffer?' this is a question that has intrigued almost every individual at some point of time in their lives. This question has been dealt with in this paper, taking for study two different narratives: *The Book of Job* and *Elie Wiesel's Night*. The central theme of innocent suffering seen in these two works has been analyzed as an Intertextual study. Julia Kristeva's poststructuralist theory of Intertextuality is used for analysis.

Keywords: Innocent suffering, crisis of faith, holocaust, intertextuality

INTRODUCTION

Suffering is a phenomenon that has preoccupied the minds of great men in history. Scholars, philosophers and theologians have made futile efforts to decipher the meaning of suffering, especially of the innocent. There has been no single explanation of the cause or purpose of suffering, though suffering itself is a universal reality. Unspeakable suffering, pain, loss, or destruction follows from some sinful acts committed by individuals or natural disasters. The subject has spawned a plethora of both scholarly and popular books. From the days of Job, the Biblical character, humans have agonized over innocent, undeserved suffering.

Every day we see innocent people suffer and die young. The loss of thousands of innocent lives in the tsunami of December 2004, millions of lives perishing in natural disasters such as earthquakes, tornados, floods etc. Even a sudden medical ailment such as a five year old child being diagnosed with cancer or any other mysterious medical anomaly, would fall into the category of undeserved or innocent suffering. What is the point of all this suffering? Some have said that suffering exists because God permits it in our lives for certain reasons which are known only to Him. We all invariably believe in a God who is the embodiment of love, grace and mercy. If God is so good, why are we subjected to suffering and all the agony?. In the face of undeserved suffering the goodness of God and authority that He possesses becomes a matter of enquiry.

In order to emphasize the theme of "innocent suffering," the most notable Biblical story of Job who suffers for seemingly no reason except for the wager between God and Satan has been taken for study. This is an intertextual study on the theme of "innocent suffering" as seen in the *Book of Job* and the autobiographical novel *Night* by the Holocaust survivor Elie Wiesel.

INTERTEXTUALITY

It is essential to discuss the postmodern concept of intertextuality before making a thematic intertextual analysis of the topic. In order to understand intertextuality, it is imperative also to highlight the theory of postmodernism. Postmodernism in literature and the arts has parallels with post-structuralism in linguistic and literary theory. Post-structural critics such as Jacques Derrida, Michel Foucault, Jacques Lacan and Roland Barthes brought in new perspectives in analyzing a text. In fact their ideology was viewed as being radical, with the elimination of the role of the author, while analyzing a text. Not only was the role of the author sidelined, a very distinctive post-structural view set forth by them was that no text can mean what it seems to say. A post-structural critic uses a variety of perspectives to create a multifaceted interpretation of a text, even if these interpretations conflict with one another. Intertextuality is a post-structural theory posited by Julia Kristeva a French Semiotician.

In her writings and research, Kristeva strongly opposed the Saussurean concept of semiology. Structuralist semiotics advocated the objectivity of language, stating myths, oral cultural traditions, literary texts, or any cultural text can be scientifically analyzed. However, this approach neglected to give attention and importance to the human subject who performs the actual analysis of a given text under consideration. All these aspects which were not taken into consideration by structural semiotics led to the emergence of the theory of intertextuality. Kristeva established a new perspective of semiotics, which she calls 'semianalysis'. In this approach she emphasizes the idea that texts are always in a state of production, rather than being products to be quickly brought in for analysis by a reader. In her view, ideas are not presented in such a way as to encourage readers to come up with their own interpretation of its meaning.

In one of her most important essays: “The Bounded Texts” and also in “Word, Dialogue, and Novel,” Kristeva is concerned with establishing the manner in which a text is constructed, keeping in mind the knowledge and ideas that the author would have gained from his previous reading experiences. She argues that authors do not create their texts from their own mind, but rather compile them from previous texts. Thus, the text becomes “a permutation of texts, an intertextuality in the space of a given text,” in which “several utterances, taken from other texts, intersect and neutralize one another” (Kristeva 36).

She also argues that, the text is not an individual, isolated work but a compilation of cultural textuality. Kristeva believes that the individual text and the cultural text are made from the same textual material and cannot be separated from each other. Intertextuality therefore deals with a text’s existence and role within the society and history. In Kristeva’s view, a text is understood using certain socially pre-existent meaning. This happens simultaneously both ‘inside’ (reader’s view) and ‘outside’ (society’s influence) of the text. The communication between the author and the reader is always paired with an intertextual relation between words and their prior existence in past texts. As Kristeva state: “any text is constructed as a mosaic of quotations; any text is the absorption and transformation of another” (66).

The idea that every text is made up of previous texts and reflects it through citation, allusion, use of phrases and themes of older texts, becomes the method for emphasizing the rhetorical concept of suffering seen in the *Book of Job* and *Night*.

BOOK OF JOB

It is interesting to note that the Joban narrative has received more literary adaptations, artistic renderings and critical analysis than any other biblical narrative. Regardless of culture, religion and gender, every person will undergo some type of misery in the course of his or her lifetime. The *Book of Job*, the authorship of which continues to be a mystery, deals with a deep seated conflict between the integrity of God and the integrity of man.

Job is presented as a pious patriarch whose ways and will are in complete accord with those of his God. At this point God makes a wager with Satan to test the limit of Job’s faithfulness and his integrity towards God in the face of suffering. As a result Job loses all of his children, his wealth, health and the reputation that he had created for himself. The only thing that Job is spared of is his life which is not worth the living in the condition that he is in. In spite of all this, Job’s trust in God remains unshaken. He refuses to impute the cause of his suffering to God, who has stripped him of all but his life. He is instigated by his wife to “curse God and die”. His friends in the guise of comforting him only aggravate all the pain that he is going through. Job is pushed to the brink of probing the meaning of life, especially life where suffering and injustice prevail for no apparent reason.

A pious man as Job will naturally vent his anger as an honest expression of faith. He will explode with indignation and demand a hearing before the tribunal of heaven. Job is no exception to this, he does precisely that. During God’s lengthy silence, Job’s fury intensifies until the depth of his fear and despair are put into words. Job becomes very human, an example of suffering victims everywhere. Job accuses God of being unjust and as someone who derives sadistic pleasure in tormenting His weak yet noble creation. Job feels that before God man is robbed of his integrity, he is dehumanized.

God in response to Job’s queries does not answer the enigma behind Job’s suffering. God rather presents the meaning and order of life by posing a set of questions to Job. He places the human dilemma about the mystery of life in a broader context, where Job experiences God in His overwhelming majesty as the Creator. Job becomes acutely aware that he is finite, small and human. Job is humbled before this God but not condemned. Job experiences God in a new way by returning to the beginnings of all things. In those beginnings there is the potential for all human beings to find new meanings in life, just as Job does. The book has a fairytale ending with Job receiving from God a “double fold” of all that he had lost.

Job’s life and the suffering that he went through became a source of many theologians and philosophers to question the meaning and purpose of the prevalence of injustice and evil in this world: Why did the innocent suffer? , What was the point of human existence when human beings experienced inner torment and endless doubts about the justice of God? And how does the human being find his true self amid the dehumanizing forces of a supposedly ordered universe?

NIGHT

Another exceedingly overwhelming example of innocent suffering is seen in *Night* written by Hungarian born American Novelist Elie Wiesel, a survivor o the Nazi concentration camps at Auschwitz and Buchenwald.

Wiesel is amongst the most important authors of Holocaust literature. Through his fiction, prose, poems, essays and dramas, he has attempted to reconcile with the evil of Nazi Germany and the apparent indifference of God towards the suffering of the Jews.

Wiesel's family was one of the thousands of Jewish families which bore the brunt of Hitler's hatred towards the Jews. Wiesel was fifteen years old when he and his family were sent to Auschwitz concentration camp. *Night* is a story about survival. The big question is that whether or not Wiesel will survive in the midst of the horrendous evil. In *Night* we find Wiesel constantly wondering and questioning Yahweh (the Hebrew God whom Wiesel worships), the reason for the suffering of the millions of Jews like him. He feels he and the others don't deserve any of what they are going through. Wiesel's struggle to maintain and make sense of his faith is the most important theme in the *Night*.

Night is an autobiography. It is the story of Eliezer Wiesel (the author) living in Europe in a small town at the time of World War II. It is the true account of the horrible brutality, torture, degradation, loss and inhumanity he suffered because of just one thing 'He is Jewish'.

The story of *Night* opens in Sighet, Transylvania where Eliezer lives a normal life as a deeply religious Jew. In 1944, Eliezer's family and the other Jews are first confined to the Jewish ghettos and then moved out. After a horrible train ride, they arrive at Birkenau, a concentration camp in Poland. Eliezer doesn't realize that he is seeing his mother and younger sister Tzipora for the last time. Eliezer and his father manage to remain together. After arriving at the work camp in Buna, they are assigned to work in an electrical factory. Labour isn't difficult, but the prevailing conditions are horrific.

Eliezer watches as he and the other prisoners slowly lose their humanity. Just months later Buna is evacuated before the Russians can liberate it. After a fifty mile run in the middle of a snow storm, Eliezer, his father and other prisoners are put into cattle cars that take them to a concentration camp in Buchenwald. Although Eliezer and his father are two of only twelve who survive the ride in the snow storm, Eliezer's father dies of dysentery almost immediately. Eliezer survives when Buchenwald is liberated on April 11, 1945.

At the beginning of *Night*, Eliezer (Wiesel) compares praying to breathing. It is such an innate part of his being that he does it so mechanically. His faith in God is unconditional. He believes that since God is good and is omnipotent, His creation must be good too. This deep child like faith of Eliezer, becomes the reason for Eliezer to question his faith in God, owing to his experiences during the Holocaust. Eliezer becomes witness to some of the horrific killing of the Jews by the Nazis at the concentration camps. He sees mass graves and the crematorium. He begins to wonder where God is in all of this. He is faced with the biggest theological conflict in his life: Is the all good Creator actually good? And, if the Creator actually exists. *Night* is not just about how Wiesel survives, it is also about what parts of him survive.

Eliezer survives physically, but collapses emotionally. His faith is shattered. This change in Eliezer is because of the simple reason that he believed and loved a good God. He could not come to terms with the fact of his undeserved suffering.

CONCLUSION

In the *extremis* of suffering, experiential chaos ensues. One is left mute, with only raw emotions to emit and bewail the loss or the disaster that has befallen one. Sooner or later the sufferer strives by all means to find the reason for their suffering. Famous philosophers like Plato, Plotinus, Saint Augustine and Camus have tried to solve the mystery revolving around unjust suffering. However, none of their findings put together, will be able to give an answer to the question of 'Why the innocent suffer?' Plagued by this interest in knowing the reason for innocent suffering, the two narratives were taken for an intertextual study, to emphasize the meaning of innocent suffering.

The poststructuralist concept of intertextuality coined by the French semiotician Julia Kristeva, has been used in this study to analyse the theme of innocent suffering, seen in the works taken for study. Intertextuality emphasizes the interdependence of literary texts. Kristeva claims that texts are dependent on other texts that have gone before them. She is pointing not only to the way the texts echo each other, but also to the way texts are transposed into one another, so that meanings in one text are overlaid with meanings from another text. Intertextuality among texts could refer to more than just the commonality of meaning between texts.

The *Book of Job* falls under the Wisdom literature category in the Bible. It is considered as a moral fable with a lesson, meant to teach people the value of trusting God in times of extreme crisis and suffering. *Night* by Wiesel falls under the category of Holocaust literature. It deals with the events of one of the greatest upheavals of the twentieth century and the most traumatic destruction of the Jewish people.

One universal question asked by two different people as portrayed by two different authors: ‘Why do the innocent suffer? If God is good, why does He allow suffering in this world?’, has been studied using intertextuality as a tool for this purpose. After studying the two narratives it can be concluded that, though the answers to the universal question on innocent suffering are differently worded in each narrative, it has the same significance. The authors of the two narratives belong to different periods of time, however the issue that they have addressed: ‘suffering of the innocent’ is a universal phenomenon going beyond the bars of time, religion, caste, creed and nationality. It is evident that any individual who goes through suffering would immediately go through a crisis of faith, because humanity has been attuned to believe that God is good and benevolent, and no evil can come from Him.

Like Job and Wiesel, an unjust sufferer begins to question God’s goodness, and in some instances would even turn out to become an atheist or nihilist. It may be asserted that just as the phenomenon of innocent suffering is universal, so is its antidote.

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**NIKI CARO'S WHALE RIDER: TESTIMONY OF A MAORI GIRL
"MY NAME IS PAIKEA APIRANA AND I COME FROM A LONG LINE OF CHIEFS..."**

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ABSTRACT

Colonization is recognized as having had a destructive effect on indigenous gender relations which reached out across all spheres of indigenous society. Colonial system positioned indigenous women as the property of men with roles which were primarily domestic. Linda Tuhiwai Smith in her Decolonizing Methodologies, points out that a key issue for indigenous women in any challenge of contemporary indigenous politics is the restoration to women of what are seen as their traditional roles, rights and responsibilities. In Niki Caro's film Whale Rider, Paikea claims her right to be the chief of the tribe and in the end her determined claims restores her rights and responsibilities. Paikea decolonizes the mind of her grandfather Koro who believes that women are not capable of leading a community. Colonialism has recorded distorted history of Indigenous peoples. In that history the prominent role played by Indigenous women are silenced. Representation is also about proposing solutions to the real-life dilemmas that indigenous communities confront and trying to capture the complexities of being indigenous. In this context, this paper shows how the film represents back the struggles and lives of the indigenous peoples to the dominant society. Thus, this paper argues that Niki Caro's Whale Rider is a testimony of a young Maori girl and it also voices the silenced stories in the film.

Keywords: Colonialism, Indigenous Women, Maori People, Testimonies.

Storytelling is so much a part of every culture and its literature, but this is especially true of indigenous peoples. Linda Tuhiwai Smith in her book *Decolonizing Methodologies* says, "Indigenous languages, knowledges and cultures have been silenced or misrepresented, ridiculed or condemned in academic and popular discourses." (20) Therefore it is in the hands of the indigenous peoples to represent themselves and voice their cultures to the world. This is the reason why indigenous peoples tell their own stories; write their own versions, in their own ways, for their own purposes. It is not simply about giving an oral account or a genealogical naming of the land, but a very powerful need to give testimony to and restore a spirit, to bring back into existence a world fragmented and dying. The film *Whale Rider* written and directed by Niki Caro is based on Witi Ihimaera's novel *The Whale Rider* which tells the story of the Maori people. This paper takes up three concepts from Smith's *Decolonizing Methodologies* and applies it to the select work for study. The concepts are testimonies, effect of colonization in indigenous gender relations and contested stories and multiple discourses about the past by different communities.

Testimonio, a Spanish term understood as "witness account", embodies a narrative research methodology rooted in Latin American history. A testimonio is a first-person account by the person (narrator) who has faced instances of social and political inequality, oppression, or any specific form of marginalization. John Beverley, an expert on testimonial literature, suggests that the best way approach the subaltern is through testimonial literature. Testimonial literatures alter the balance between the centre and the periphery reconfiguring the global cultural differences pushing the margins to the centre. According to Gugelberger, the situation of narration in testimonio has to involve an urgency to communicate, a problem of repression, poverty, subalternity, imprisonment, struggle for survival, and so on.

Testimonies are to simply put telling one's own stories. Indigenous people's writing is named as "the empire writes back" and it also becomes a testimony of their lives and cultures. Maori author Witi Ihimaera sees his writing as a valuable opportunity to express his experience of being a Maori. He has assembled a five-volume anthology of Maori literature which he argues represents the "crossroads . . . of a literature of a past and a literature of a present and future" (qtd. in Smith 150). Ihimaera is the first Maori author to publish both a book of short stories, *Pounamu Pouramu* (1972), and a novel *Tangi* (1973). Among his works *The Whale Rider* is the novel that the Maori community accepts best. It is a magical, mythical work about a young girl whose relationship with a whale ensures the salvation of her village. It is based on an ancestral story of the Whangara people of the east coast of Aotearoa/New Zealand.

Unlike the novel which is narrated in the first and third person point of view with the girl's uncle's narrative voice, Niki Caro's film *Whale Rider* begins with Pai's narrative voice. The first-person narrative makes the film a testimony. The film involves an urgency to communicate and a problem of repression. Through testimonies the voice of the voiceless is registered. Pai says:

In the old days, the land felt a great emptiness. It was waiting: waiting to be filled up; waiting for someone to love it; waiting for a leader. And he came on the back of a whale—a man to lead a new people. Our ancestor, Paikea. But now we were waiting for the firstborn of the new generation, for the descendant of the whale rider, for the boy who would be chief... There was no gladness when I was born. My twin brother died and took our mother with him... Everyone was waiting for the firstborn boy to lead us. But he died. And I didn't. (*Whale Rider* 01:07-03:34)

Whale Rider portrays a young girl Pai's journey to become the chief of the community. It also depicts the burden of Koro, Pai's grandfather who is searching for an answer to a question that who will be the next leader to lead the community. The irony is that the leader is beside him but his narrowed vision of tradition and strict rules do not let him see the person who is meant to be the leader. Not that he does not like his granddaughter he loves her, Pai says, "My Koro wished in his heart that I'd never been born. But he changed his mind" (*Whale Rider* 07:28-36). When it comes to leading the community, as a person who stands for his tradition he restricts Pai from attending the sacred school of learning the Maori tradition. One of the reasons for Koro's mindset could be the impact of colonialism in the history of indigenous peoples.

Koro is in perpetual mourning for a lost tradition, for his diminished community. His students in the Sacred school of learning fail to meet his expectations that a leader will emerge, Koro takes to his bed, bitter and disappointed. Paula Morris in her review of the film says, "To Koro, history is a burden, to be borne and passed on. To Pai, history is alive, calling to her from the ocean". When Pai asks Koro about the history of their ancestors, Koro tells her to look closely at the rope which is used to operate the motor in the boat and asks her what she sees. Seeing that Pai says, "Lots of little bits of rope all twisted together". Koro tells, "That's right. Weave together the threads of Paikea, so that our line remains strong. Each one of your ancestors, all joined together and strong. All the way back to the whale of yours". After telling this, Koro uses the rope to start the motor but it tears off. Koro says, "Useless bloody rope. I'll get another one" (*Whale Rider* 17:04-43). Here the rope can be a metaphor for Pai herself because Koro sees his granddaughter as useless and searches for the chief in other families. While her grandfather is away to get another rope, Pai mends the torn rope and starts the motor. She makes the motor work. Pai's this particular act foretells and becomes a symbol of mending the torn community back to their ancestors by becoming the chief. Koro is unable to see this gift of Pai.

Pai communicates with the sea, the whales and her ancestors. She also finds the sacred whale's tooth which Koro threw it in the sea and asked the boys to find it but the boys could not get it. All these events show Pai's innate potential of becoming a chief. She is not the chosen one according to her grandfather. In her school day speech with tears filled eyes, she says: "I was not the leader my grandfather was expecting". She says that by being born she broke the line of ancient ones. She also argues that "It wasn't anybody's fault. It just happened" (*Whale Rider* 1:09:46-56). Her point is that if the knowledge of the community is given to everyone, there will be lots of leaders. She validates her point by saying that if the chosen one becomes tired others can intervene and help the community to be strong again. According to Koro, Pai's twin brother is the chosen one but he died and she did not. Therefore her speech questions the hierarchy that prevails in learning the knowledge of the community. It tries to widen the narrowed view of the community. It is Pai's plea to Koro, to give the knowledge to everyone not only to the chosen one and also regardless of one's gender.

The effect of Colonization on indigenous gender relations is a destructive one. It reached out across all spheres of indigenous society. Colonial system positioned indigenous women as the property of men with roles which were primarily domestic. Smith in her *Decolonizing Methodologies*, points out that a key issue for indigenous women in any challenge of contemporary indigenous politics is the restoration to women of what are seen as their traditional roles, rights and responsibilities. Smith also says that Maori women are caught between the written accounts of white male writers and the assertions of the few Maori women who are contesting those early accounts. She gives instances for that, one is Elsdon Best's view where he says of his research among the Tuhoe tribe, "As in most other barbaric lands, we find that women were looked upon here as being inferior to man". The other one is Rangimarie Rose Pere's view, she herself a descendant of Tuhoe Potiki, says, "As a female, I have been exposed to very positive female role models from both my natural parents' descent lines. The most senior men and women ... made it quite clear from the legacy they left that men and women, adults and children, work alongside each other and together" (qtd. in Smith 170).

This is one such example which reveals how the indigenous peoples, especially indigenous women are wrongly portrayed by Western researchers. Indigenous women have to question the misrepresentation. Therefore the uphill task for Maori women seeking to reconstruct traditional roles is that they have to challenge existing knowledge which is primarily ideological or false (Smith 170). In the film *Whale Rider* we have Pai's grandmother who is from Muriwai's line. She says to Pai that she should be proud of her Muriwai blood.

Despite Koro's strict rules, Pai tries her best to learn the tradition of her community. She learns to use 'taiaha' from her uncle. She claims her genealogical right to be the chief of the community and in the end her determined claims restores her rights and responsibilities of being a chief of the community. Koro after Pai's rescuing of whales tells her: "Wise leader, forgive me. I am just a fledgling new to flight" (*Whale Rider* 1:29:28-38). One can say that Pai decolonizes the mind of her grandfather Koro who believes that only males are allowed to ascend to chieftdom and women are not capable of leading a community. Like Muriwai, the female hero who participated in the traditional roles of women in the past, Pai reconstructs the traditional roles in the present. Thus the process of decolonization involves a critical engagement with the colonial past.

The idea of contested stories and multiple discourses about the past, by different communities, is closely linked to the politics of everyday contemporary indigenous life. It is very much a part of the fabric of communities that value oral ways of knowing. These contested accounts are stored within genealogies, within the landscape, within weavings and carvings, even within the personal names that many people carried. The means by which these histories were stored was through their systems of knowledge. Many of these systems have since been reclassified as oral traditions rather than histories (Smith 33). In the film, there is only a slight mention of Muriwai the female hero of the Moari community but Paikea the male hero is mentioned in a full-fledged manner and Paikea's image of riding a whale is shown in a carving. Muriwai's story is sidelined in the film. This shows that how within the Maori community the politics of representation exists.

Niki Caro is a non-Maori New Zealander. When it comes to rendering unfamiliar communities, Niki Caro says that by being on the ground with the people she could experience the truth and beauty of a culture. Regarding the rendering of Maori in *Whale Rider* Niki Caro says, "I am absolutely in service of the truth of the story". Though Niki Caro seems to be faithful to the original story, she fails to highlight the story of Muriwai. For instance, Paikea's story is told in the very beginning of the movie but not the story of Muriwai. The Myth of Muriwai – "Act-like-a-male"- Muriwai was the greatest chief of Pai's grandmother Nanny Flowers' Tribe. Mihi Kotukutuku who is known as a model of female non-conformity is a descendant of Muriwai. Thus both in the myth and history, one can see the active role of women but it is not taken into account by the male-dominated indigenous society.

In the film, Pai challenges tradition and embraces the forgotten past in order to find the strength to lead her people forward. The film ends with Pai's hopeful narrative voice: "My name is Paikea Apirana and I come from a long line of chiefs stretching all the way back to the whale rider. I'm not a prophet, but I know that our people will keep going forward all together, with all of our strength" (*Whale Rider* 1:33:14-34). Upasana Tayal says, "Unlike other films featuring Maoris, *Whale Rider* ends on a surprisingly positive note" (Review). Pai narrates her own story. She becomes the representative of the female hero Muriwai.

In conclusion, Niki Caro though an outsider, she tries to be part of the community and represents the genesis, function, and implications of Maori ritual beliefs and the role of women to the world and also to the indigenous community in the increasingly Westernized New Zealand. The film unveils the operation of patriarchy in the so-called matriarchal indigenous communities. Thus, this paper shows how the film represents back the struggles, complexities and lives of the indigenous peoples to the dominant society through the testimony of a young Maori girl. It also reads the silences in the film which in turn tells the silenced stories within the indigenous communities. The film is not only a testimony of a Maori girl but it is also a testimony of an indigenous culture that is dying slowly.

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BANKING AND FINANCE**Kalyani R. Salunkhe**Gogte College of Commerce, Belgavi

ABSTRACT

Banking is the service sector which deals with the accepting money deposits and lending money for borrowing, but in recent year banking sector is largely grown up, it is not only restricted to its main function along with acceptance of deposits and lending it functioning as the financial intermediary to various business activities, where the different banks are specially established to provide financial support to trade, business and other activities.

Finance is nothing but the money, without finance it is impossible to run any business activity, in short it also called as the livelihood of any business or organization.

Therefore banking industry provides the financial help in organizational activity. Along with bank today, there are various private trusts providing financial loan facilities throw micro finance especially in rural area.

INTRODUCTION

In modern arena, business runs or operates in a financial system of the country wherein it uses the services and facilities provided by banks. After demonetization every business transactions are take place throw bank accounts.

In business finance means arranging money or fund for business activity. In simple words, business finance is the process or activity deals with the estimation of fund, raising fund, allocating and managing funds to meet the financial needs of the organization.

LITERATURE REVIEW

“Money is the matter of functions four, a medium, a measure, a standard and store.”

-UNKNOWN SOURCE

“Business finance is the art of raising and spending money for business”.

-P.G.HASTINGS

RESEARCH METHODOLOGY

Source: secondary data,

The relevant information related to research paper is collected from text books, magazines, financial journals, daily articles, web pages.

MEANING

- **Bank** :- Bank is an institution deals with acceptance of deposits of fund or money and lending it to borrowers, where banks collects money from its account holder and provide loans and advances to borrower.
- **Banking** :- banking is the process of issuing or accepting deposits and lending it to the borrower, it is the business activity which insuring safeguard of money deposited with it and lending to borrower with hope of earning profit by collecting interest on it.
- **Finance** :- Finance is nothing but money or money's worth. In simple word finance means estimation of fund, raising, allocating and managing funds to meet the need of organization.

TYPES OF BANKING

- **Group banking**
Group banking is the type of the banking which deals with the services offered to the group of people or the service of banking is provided to group of people rather than individual. E.g. this kind of banking is helpful for company employees.
 - **Mixed banking**
It is the combination of investment banking and deposit banking, this type of banks provided opportunities for industrialization and helps to reduce the liquidity of commercial banks.
 - **Branch banking**
Branch banking is nothing but one bank can operate throw different places throw its subsidies or branches where the main branch is set at one place and operating throw its branches.
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- **Chain banking**

Chain banking is refer to those banking activity where one bank controls the more than three banks or more where the main branch controls the local banking activities. It is differ from branch banking, in this case all local bank branches owned by one banking institution.

TYPES OF FINANCE

1. Short-term finance

Short-term finance is finance issued for the short period of time where the time period is up to 12 months, the borrower receive fund for minimum 15days to maximum 1year to meeting of day to day business operations, and these can be recovered within short span. These kind of fund is also called as working capital finance, it consist of stock of raw material, sundry debtors, bank balances, work-in-progress, account receivable, finished goods etc.

- ❖ **Need of short-term finance**

Short term finance is needed to fulfill the need of temporary working capital like payment of direct expenses- e.g. Carriage, freight etc. ,purchase of raw material, payment of manufacturing expenses- e.g. Heating, fuel, wages, power etc. ,distribution and administrative expenses, payment of selling etc.

- ❖ **Sources of short-term finance**

There are various sources of short-term finance they are as follows:-

- **Trade credit**

trade credit is the credit facility where the one trader can extend his credit while purchasing products, there is no need to pay immediately after purchase of any goods on account.

- **Commercial paper**

Commercial papers are those instruments which are issued as the short term debt instruments for fulfilling short term need of liabilities payable. The maturity of this paper is up to 270 days.

- **Public Deposit**

Public deposits are the most important source to raise the fund in short period of time to meet the need of working capital in organization.

- **Bank credit**

Bank credit is the total amount of credit provided by bank to individual or to any company or to organization. The bank credit is given to business or organization or to individual on their ability to repay the amount of credit and there previous performance of credit activity and ability.

- **Installment credit**

Installment credit is the source where the barrower barrow fixed amount of credit for mentioned period of time and make agreement to repay debts or credited amount in monthly based installment

- **Customer advances**

- ❖ **Importance of short-term finance**

- Short-term finance helps to maintain good relations in business.

- It helps to improve morale of the employees.

- It helps to increase efficiency of the business.

- It helps to make prompt payment to receive cash discount.

- It enhances the credit worthiness of the business.

- **Factors affecting short-term finance.**

There are several factors affecting short-term finance

- Nature of business

- Nature of operations

- Size of business

- Quality of production

- Demand as per season

- Turnover rate
- Efficiency and productivity
- Earning
- Fluctuation in supply
- Tax level
- Government regulations
- Business cycle
- Changes in price level
- Unit cost of marketing.

2. Medium term finance

Medium term finance is the finance which is issued to fulfill the requirement of more than one year period, it is the period between short term and long term finance, commonly medium term finance is considered the period of one year to 5 year as per some authors but as per report of State Industrial Finance Corporation of West Bengal, stated that medium term finance or credits are those credits which are issued or required for minimum period of one year to maximum ten years. It is issued for raising regular or permanent working capital, purchase of new machinery or installation of new technology, for heavy repairs etc.

❖ Need of medium term finance

- It is need to meet the requirement of permanent working capital
- Needed to know modernized expenditure of business.
- It is needed to replace non-usable machines.
- It is needed to raise credits for long term need.
- It is needed for maintenance and heavy repairs of machinery.

❖ Sources of medium term finance

• Public deposits for medium term

Public deposits are the most important source to raise the fund in medium period of time to meet the need of regular working capital in organization

• Commercial banks

A **commercial** bank is banks that provide **services** like accepting deposits, providing business loans, and offering basic investment products. The main function of **this** bank is to accept fund for deposit from the public for the purpose of lending money to the borrowers.

• Financial corporations

Financial corporations are the company or organization which may either government or public, private corporation which deals with the entity of incorporation with various medium term firm or businesses.

• Term loans

Term loans are the loans provided by banks to individual or to business for specific period of time where the fixed rate of interest is applicable and the repayment of loan is mentioned for the specific period of time.

• Medium term debenture

• Plough-in back of profits

❖ Factors affecting medium term finance

- Nature of business
- Size of business
- Production line diversity
- Expansion and growth

- Introducing new technology
- Advertisement campaign
- Production method

3. Long term finance

Long term finance is finance or credits are those funds which are issued for investment in long term assets like fixed assets- land buildings or machinery where the period of issued fund is more than ten years. It is also called as fixed capital which is used to acquire fixed assets. As like it is also helps to acquire intangible assets like goodwill, copyrights, patents, trademarks etc.

❖ Need of long term finance

- It is needed to fulfill the requirement of long term capital or share capital.
- It is needed to raise fund for acquisitions of fixed assets.
- It is needed for acquiring intangible asset.
- To meet the need of preliminary expenses, establishment cost of business etc.

❖ Sources of long term finance

• Equity shares

Equity shares are those share which are ordinary in nature, and the equity share holders have entitle for the voting in annual general meeting. Return on equity share is not fixed.

• Preference shares

Preference shares are those shares which carry the preferential right and the rate of return is fixed on the investment.

• Long term public deposits

Public deposits are the most important source to raise the fund in long period of time to meet the need of fixed capital in organization.

• Mutual funds

Mutual funds are those funds which raise the money by investing investment in units or throw the sale of units to public by investing in securities by mean of different mutual fund schemes.

• Term loan from financial intermediaries/ institution

There are number of financial institutions providing term loans in rural as well as in urban areas to start as well run the long term businesses, the financial institutions like HDBI, IFCI, ICICI etc are established with the motto of proving financial support to long term businesses by providing term loans.

• Venture capital

The venture capital is an important source which plays a vital role in providing support and guidance to the start-up industries in their initial and development stage

• International agencies or institutions

There are many more agencies or institutions work internationally to provide the financial assistance for long term finance e.g. GDR, ADR etc.

Importance of long term finance

1. It helps to expand business
2. It helps to fulfill long term requirement of fund
3. It helps in acquisition of fixed assets
4. It helps in acquisition of intangible assets

Difference between Banking and Finance

Banking and finance are two different terms used to collectively refer the services provided by banking and non-banking financial institutions. In commonly these terms are similarly used with the common meaning to each other but they are related to each other.

Banking is the business activity takes place in the banks which are either commercial or schedule banks works under the regulatory authority.

Whereas, Financial institutions include a number of companies that provide financial services like equity firms, insurance companies, financial research firms, venture capital organization or firm, brokerages, pension funds, private, , investment funds etc.

The services provided by banking and financial institution are different from each other but are collectively referred as financial services

The most important difference between the financial institutions and is banks can obtain deposits and financial services cannot obtain any deposits from public.

Finance provides a larger range of services than a bank like insurance services, asset management services, financial research facilities, etc.

Banking sector is regulated under the rules and regulations by central authority where the laws related to regulations are more compare to finance.

CONCLUSION

In today's arena the term banking and finance are functioning similar functions to some extend but still their main function is differ from each other, where the banking is includes the depositing activities as well as lending but the financial institutions are only deals with providing funds to fulfill the requirement of funds in business. In financial support to small, medium, long industry the government role is also important where the government also provides the facilities throw financial corporations.

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EMERGING ACTIVITY OF SERVICE SECTOR IN INDIA HEALTHCARE INDUSTRY

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ABSTRACT

Medical tourism is now considered as an emerging activity of India's service sector. It has an immense potential to grow. Every year, large number of patients from different countries comes to India for healthcare services, particularly in cities of Maharashtra, Gujarat, Goa, Kerala & Karnataka. Presently it has been observed that healthcare related services are flourishing in India. It is mainly on account of availability of infrastructure and low cost of services. This research identifies the various healthcare services which have attracted foreigners towards developing economies. It aims at finding out the causes responsible for the growth of healthcare tourism in India. It also identifies some of the issues of foreign patients during their stay in hospitals.

Keywords: Healthcare Tourism, Health care services, foreign patients, India

INTRODUCTION

According to Mckinsey, healthcare tourism is defined as travelling explicitly for medical reasons in a foreign country. He defined these individuals as 'Medical Travellers', whose main motivation for travel is a specific medical purpose. They can be categorized as a special Interest Tourist (SIT). In other words, healthcare tourism is the activity whereby foreigners travel to other countries in order to get superior health related services at low cost by highly skilled doctors & surgeons.

Traditionally, healthcare tourism usually referred to those who travelled from poor countries to rich countries for treatment which is domestically unavailable. However, in recent years, people are travelling from advanced countries to developing countries for quick, low cost & effective healthcare services.

Presently, healthcare tourism is the main source of foreign exchange earnings in several countries like India, Singapore, Thailand, Malaysia & Nepal. In Indian context, it is the fastest developing segment of service sector. It is generating more income & employment opportunities along with higher foreign exchange earnings. In Indian context, the international trade in healthcare services has huge economic potential in near future.

REVIEW OF LITERATURE

Bookman and Bookman (2007) in the book wrote about the foreign patients who are travelling to developing countries for healthcare has increased. They have been offered with the best healthcare services including pre and post hospitalization.

M Horowitz & J Rosensweis in their article stated that the composition of healthcare tourism has changed over the period of time. In the past, patients used to travel from poor countries to rich countries to obtain healthcare services. However, now the direction has changed in favour of developing countries which were poor once upon a time. According to the authors, countries like India, Singapore & Thailand are well established healthcare tourists hubs, attracting large number of foreign patients & generating substantial revenue from services offered.

Sack C; scherag A & Hotmann G (2011) in their article reveals that countries where hospitals are undergoing mandatory or voluntary accreditation are believed to have a positive impact on quality of services provided & patient satisfaction.

SIGNIFICANCE OF THE STUDY

Today India's medical tourism sector is witnessing rapid growth over the years. In the last decade, India has become the most preferred destination among the foreigners. They are in search of high quality health care services at low cost which they find in India. At present, India offers world class healthcare services which cost substantially less than those in advanced countries.

OBJECTIVES

- 1) To identify the various health care services available in India.
- 2) To identify the reasons for the growth of healthcare tourism.
- 3) To examine the benefits of healthcare tourism.

4) To evaluate the challenges / issues of foreigners during their stay in India.

RESEARCH METHODOLOGY

The present research is analytical & exploratory in nature. It makes use of secondary data. The relevant secondary data has been collected from various research articles, journals, magazines & websites.

ANALYSIS & DISCUSSION

Medical Treatment / services offered In India

Advanced & Life caring Healthcare	-	Knee Replacement
Organ Transplants		
Cardio Vascular Surgery		
Infertility Treatment		
Cosmetic Surgery	-	Dental care
Plastic surgery		
Obesity surgery		
Skin Treatment		
Wellness	-	Spas, stress relief, Rejuvenation centres
Alternative Medicine	-	Yoga & meditation, Ayurveda, Unani treatment

REASONS FOR MEDICAL TOURISM

- 1) Good quality of healthcare services
- 2) World class facilities
- 3) Access to latest technology
- 4) Availability of best doctors & surgeons
- 5) Customer care
- 6) Travel opportunities
- 7) No waiting list
- 8) Procedure not available in home country
- 9) High success rate and popularity
- 10) Treatment secrecy

BENEFITS OF MEDICAL TOURISM

- Most of the medical tourism considers low cost as one of the main benefit of medical tourism, but it is not the only factor responsible for its growing popularity. Besides low cost, the patient can obtain the best healthcare & treatment.
- Individuals particularly from countries like UK & Canada does not wait for medical treatment. Hence treatment with holidays in other countries proves to be double advantageous. For instance: relaxing on a beach after a surgery.
- Doctors & patients involved in treatment / operation of foreign patients get worldwide reputation. This in turn increases their profits in the long run.
- Patients who do not have access to certain procedure in their home country can see medical tourism as an alternative. They can travel to other countries & opt for procedure of their choice.

CHALLENGES OF MEDICAL TOURISM

- Foreign patients find it difficult to get authentic information about various treatment options. Moreover, language barriers also act as a major impediment in getting the correct information.
- Patients might find it difficult to get proper pre & post operative care particularly if the patient has travelled a long distance for availability of treatment.

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- Cost of treatment increase if patient is forced to stay for longer days in hospital.
 - Travelling to other countries for treatment might pose the risk of catching infection & allergies.
 - In case if the patient is not satisfied with the treatment offered in other countries, it would be difficult to sue doctor since intra country laws & procedure are different.
 - Quite often services offered in hospitals are not up to the mark. Hospitals are not clean and hygiene. The patients are also not much happy with the food which is served at the hospital.

CONCLUSION

India's Healthcare tourism is the fastest growing segment of service sector. Today India is offering world class low cost health related facilities not only to Indians but also to foreigners. Individuals from country like United States of America, England and others consider India as the most affordable destination for healthcare services. In today's world of globalization, India offers services of well trained doctors / surgeons, fluent English speaking medical staff & a good combination of allopathic, herbal & other alternative systems of medicines. In this context, it must be noted that Government can play a vital role in enhancing the benefits of healthcare tourism. They definitely create positive effects on the economy such as creation of income & employment.

Development of supporting infrastructure such as transportation, communication, Accommodation in hotels & other channels like accreditation of hospitals would enable expansion of India's healthcare tourism.

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PROBLEMS AND PROSPECTS OF SMALL SCALE INDUSTRIES IN SHIVAMOGGA DISTRICT**Satisha S. V.**Research Scholar, No.14, IInd Cross, Hosamane Extension Shivamogga, Karnataka**ABSTRACT**

The study on Problems and Prospects of Small Scale Industries in Shivamogga District covers two taluks of Shivamogga district it namely Shivamogga and Bhadravathi, where there are many small scale industries located. While the registered number of units covers the period is in excess of 11,000 only around 260 units of engaged in actual production at present. These industries are engaged in the manufacturing of industrial spare parts, accessories, tools semi finished products, spares for welding and electronic machinery, machine tools etc., and Very few units manufactured exportable items like auto spares and metallurgical goods. Many other industries are involved in the production of processed food and ready to eat food items. A couple of garment industries have started operating recently. Many small units are still producing traditional goods like Agarbatti candles area waste based plates and cups, baskets and spare parts for use by farming community.

Keywords: Small scale, industry, Shivamogga,

INTRODUCTION

There are many more large scale industries in shivamogga district but the small scale sector has created a strong case for its existence. With the deterioration of these too large industries dependence on small scale sector has increased enormously. These units provide job opportunities for semi skilled and unskilled workers in abundance. A couple of units have been earning fare amount of foreign exchange. Therefore it is considered essential to assess the contribution of small scale sector to the Shivamogga district economy. Keeping this as primary motive the present study is under taken.

This does not mean that the small scale sector in Shivamogga District is not confronted with bottlenecks and problems. In fact many industries have closed down on account of not being able to find solutions to their problems. An attempt is made in this study to examine the major problems faced by the small scale units in Shivamogga District. Due focus is also given to examine the prospects sector in the study area in course of time.

SCOPE OF THE STUDY

The study covers the Shivamogga and Bhadravathi taluks of Shivamogga District where there is a large concentration of small scale industrial units in the industrial estates / areas established in the two cities. These two cities happen to be the too larger cities in Shivamogga District, Shivamogga being the first largest followed by Bhadravathi taluk.

The other talukas of Shivamogga Districts are Thirthahalli, Sagar, Shikaripura, Soraba and Hosanagar. There is less number of small industries in these talukas. However, their performance, growth, problems etc., are more or less similar to the situation prevailing in small scale units in the study area.

SELECTION OF THE STUDY UNITS

The field study covers a total number of 100 small scale industrial units selected on stratified sample basis. Weightage is accorded to the actual number of units in different categories of SSIs viz., chemical, food Processing, engineering, Automobile and Electronic etc., while selecting the units in the study area.

Details of existing Micro and Small Enterprises and Artisan Units in Shivamogga District.

NIC CODE NO.	TYPE OF INDUSTRY	NUMBER OF UNITS	INVESTMENT (Lakh Rs.)	EMPLOYMENT
20	Agro Based	2505	6730.00	8950
22	Soda water(aerated Water)	50	25.00	250
23	Cotton textile	-	-	-
24	Woolen, silk and artificial thread based clothes	-	-	-
25	Jute & jute based	-	-	-
26	Readymade garments & embroidery	1500	790.00	3700
27	Wood/wooden based furniture	1650	900.00	5250
28	Paper and paper products (printing)	410	570.00	1330
29	Leather based	740	320.00	1660

31	Chemical/Chemical based	190	447.00	1775
30	Rubber, Plastic & Petro based	281	680.00	1075
32	Mineral based Ferrous & non ferrous	47	2235.00	1130
33	Metal based (steel Fab.)	240	425.00	730
35	Engineering units	1300	2210.00	6450
36	Electrical machinery and transport equipment	430	725.00	790
97	Repairing & servicing	1325	1130.00	6320
01	Others	2415	5210.00	10542
	Automobile	390	840.00	3280
	Other Services	587	790.00	1727

GENERAL ISSUES RAISED BY INDUSTRY ASSOCIATION:

Following points are reproduced based on the discussion with Industry Association.

- a. **Non availability of skilled manpower:** Inefficient human factor creates innumerable problems for the survival of industries. Non availability of adequate skilled manpower poses problems to Micro and Small Enterprises.
- b. **In adequate credit assistance:** Need based cash flow for working capital is lacking, which is affecting the smooth functioning of Micro and Small Enterprises.
- c. **Competition from global market:** Small scale units find it very difficult to compete with the imported articles which are comparatively very cheap and of better quality.
- d. **Lack of power:** Lack of uninterrupted power supply is the major problem faced by industries of this district.
- e. **Lack of Scientific segregation:** There is no scientific segregation of Micro and Small Enterprises as per pollution norms for the classification of Red, Orange or Green categories.
- f. **Absence of adequate infrastructure:** Most of industrial estates are not having provision for maintenance of infrastructure. Absence of adequate infrastructure adversely affects the quality, quantity and production schedule of the enterprises which ultimately results in under-utilization of capacity.

LIMITATIONS OF THE STUDY

Though the study is a comprehensive and systematic exploration into the Small Scale industries in Shivamogga, it may place certain restrictions on the conclusions and their application to other situations. The following are such important limitations of the present study.

1. The study deals with units located in only two Taluks in the District.
2. Most of the selected units are reluctant to furnish the required information about profits and turnover.
3. The study has not covered the entire population
4. It is natural during the survey, some of the respondents may show indifference in furnishing the data.
5. Correctness and accuracy of data in respect of cost and production suffers since the owner-managers may not maintained correct records in many cases.

CONCLUSION

The proposed study is an attempt to assess the significance, problems and prospects of small scale industries in Shivamogga District. This study would enable the policy makers to execute required solutions to mitigate the problems confronting the small scale sector. This would enable small scale industries to have greater economies in scale in terms of increased out put reduced costs and greater market share. It would also gives scope for creation of job opportunity to the semi skilled and unskilled youth in the study area and more effective utilization of local latent resources.

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