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ACTION RESEARCH: A REQUISITE FOR SUSTAINABLE DEVELOPMENT IN INDIAN EDUCATION SYSTEM

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“A child without education is like a bird without wings”

Tibetan proverb

ABSTRACT

India believes in understanding the core of education through prototypes and timeworn philosophies shows the glimpses of intact diverse culture yet teaches similar theories and principles to maintain equalised education across country. It is often criticised not only for promoting rote learning, but lack of quality of education at all levels, low eminence in research, lack of prominence in teacher's training. Nevertheless trend started changing rapidly and Indian education system improving the quality of delivering education through actions and instruction. In response to the problem, one should emphasise on improving teaching practice through creating learning environment that promotes action research and reflective teaching. Action research empowers teachers to examine their own practice through classroom-based inquiry and provides a platform to develop as a whole. The present paper attempts to bridge this research gap by providing Indian perspective of education for conducting action research practice to enrich education, training and research. It highlights the importance of Action research and its implications.

Keywords: Action research, Learning environment, Reflective teaching

INDIAN EDUCATIONAL SYSTEM: ENVISION

India is a secular and democratic nation having cultural diversity, showing strong commitment towards values and wellbeing for all. Therefore, Government of India (GOI) considers the diversity in community, factors of religion, language, ethnic, urban-rural divide etc. while formulating any kind of educational policy.

Tibetan proverb “A child without education is like a bird without wings” rightly indicates the significance of education by Mahatma Gandhi who had envisaged education as a means of awakening conscience against injustice, violence and inequality. Gandhiji further transformed the vision of society through emphasis on using mother tongue as a source for socialising the child. He envisioned India where every individual realises her or his talents and potential by working with others towards restructuring the world. National Commissions elaborated on the themes emerging out of Mahatma Gandhi's educational philosophy in order to attain national development.

DIRECTIVE PRINCIPLES OF STATE AND NATIONAL POLICY ON EDUCATION

Education plays a vital role in cultivating national prosperity and welfare in multicultural society. Hence, focussing on education is important for the government. National education system was formed for manifesting resonance and promoting philosophies that focus on values system for fostering peace, compassion and tolerance in a multicultural society. India's requisite is diverse culture and heritage must grow, flourish and sustain. Ever since 1986, National Policy on education (NEP) ascertains rigorous effort on educating country's children in divergent society by designing curriculum and assessments responsive to differences in the society. Hence, ‘Directive principles of state policy’ were formulated to ensure full time elementary education to all the children. Its purpose is to maintain essential standards of education in multi-cultural society. The In 1992, NEP extended their roles in amending regional and social imbalances and education for women, scheduled castes/scheduled tribes (SC/STs) and minorities.

The ministry of Human Resource Development (MHRD) is the nodal ministry for the sector. The other national bodies include the National Council of Educational Research and Training (NCERT), The University Grants Commission (UGC), All India Council of Technical Education (AICTE), and The National Council for Teacher Education (NCTE) at the central level. At state level, Department of Education and the State Council of Educational Research and Training (SCERT) ensure quality of education. The central and the state governments are jointly responsible for organising education within the national framework of education.

Educational policy planning is under the overall charge of the MHRD which includes the Department of Elementary Education and Literacy and the Department of Secondary and Higher Education. Educational

system broadly comprises of school education (elementary, secondary and higher secondary), higher education (general and professional) and vocational education. The age wise distribution puts pupils as: pre-primary education (until age 6), primary education (ages 6 – 11), secondary education (ages 11 – 16), tertiary education (ages 16 and beyond, includes university education), vocational education (training for specific trades), and adult education (ages 18 and beyond developing skills, attitudes or values).

PRESENT STATUS OF EDUCATION

There has been significant progress in status of education since independence. Literacy rate was recorded as around 74.04 per cent in year 2011. Compared to 2001 there has been a considerable progress in education both in males and females in urban as well as rural areas.

ROLE OF NATIONAL POLICY ON EDUCATION, 1986 (NPE)

India is undergoing through various educational reforms to systematise educational system but it has been recognised that these educational reforms are not sufficient to solve the existing educational problems. Further, modern education is facing challenges such as poor quality of education at all levels, low quality of research, inadequate physical infrastructure, teacher apathy, low quality of training, and lack of autonomy and accountability. India has been criticized for promoting rote learning rather than problem solving approach. Chakraborty, (2016) indicates that Indian education system seems to be producing zombies since in most of the school students spending majority of their time in preparing for competitive exams rather than learning or playing. Teaching and learning methods used in most of the schools discourages questioning, learning application and creativity. To address these issues NPE was formed for making learning a joyful experience by stepping ahead from textbooks and examination and removing stress. It proposed the National curriculum framework, 2005 (NCF) as a means of evolving a national system of education, recommending a core component derived from the vision of national development enshrined in the constitution. NCF points out “Need for plurality and flexibility within education while maintaining the standards of education in order to cover a growing variety of children”. NCF aimed at bringing reforms in the education system by creating constructive learning through developing learner centric curriculum, that foster autonomy to the learner. Government attempted to innovate with new formats and systems of education so as to explore and develop concepts, language knowledge and rational thinking for overall development. Thus NCF introduced multidisciplinary curriculum in education by providing divergent exposure to students for developing real life learning experiences. These real life experiences help in understanding and cultivation right kind of skills among learners. Improvement in learning is essential and it is the accountability of teacher to monitor exhaustively and accentuate on student’s learning and make it practically relevant.

These initiatives necessitated changes in teacher’s education institutions like District Institutes of Education and Training (DIET). Various workshops and programmes are being organized by government for practitioners or educators also so as to train them towards digital sources and its usage in teaching aid. Further, both the central and the state governments make budgetary allocation available for training of teachers and teacher education and to recruit qualified teacher educator. Additionally, a resilient distinct provision has been envisaged at middle ground where government is merging the best of public and private education policies to enhance greater scope for bottom-up innovation and quality-assurance. In other words, they have freedom to experiment with initiatives to improve teacher performance and children’s learning outcomes.

ACTION RESEARCH: REQUISITE FOR TEACHER’S EDUCATION AND TRAINING

The Education Commission report by Tilak, (1996) elaborated as the fortune of India is being designed in their classroom, and are striving for constant improvements in their spectrum of education and teaching and thus framework being designed for considering all stages of education including teacher’s education. NCF for Teacher Education (NCFTE, 2009) redefined for educating teachers by observing their role and defines as “The status of the teacher as a reflection for developing the socio-cultural ethos in the society”. It also elaborated the role of teachers as transmitter, inspirer and promoters for emitting knowledge in the society. The advisory committee in their report ‘Learning without burden’ recognised the need for the involvement of teachers in designing curriculum, preparation of textbook and design modules for imparting skills to the teachers. Presently, educational institutions for teacher’s education transformed their roles from educational institutes to active centres for imparting knowledge. These active centres focus not only on research but also in practical experimentations for improving educational quality methods and curricula for students. In addition, there is a need to innovate with different models for teacher’s education as teaching will promote student’s learning through activity, discovery, observation and understanding.

Educational institutions for teacher’s education emphasize on using action research during teachers training programme as it is an exploratory tool for teacher (candidates) to investigate educational problems and to

improve their knowledge regarding self-teaching practice. Action Research (AR) is a guide for educators as it helps in creating their own theories in education and improves their own teaching. Barone et. al, (1996) highlighted that action research can be used to replace traditional, ineffective teacher in service training as a means for professional development activities. Andrew and Johnson, (2012) propounded as “To be effective teachers sometimes require training to use action research method for in-service training”. This creates the need for teaching action research; these teaching can be extended over multiple sessions. AR sessions emphasize on active learning that allow teachers to manipulate the ideas and enhance their assimilation of the information and align the concepts with the current curriculum.

ACTION RESEARCH: AN ESSENCE

The term action research (AR) coined in 1940 by the German social psychologist named Kurt Lewin is considered as a founder of this field. AR is widely used in day-to-day life in various fields. It provides a perspective of exploring, learning and reflection. Burnaford et. al. (2000), Githens (2009), Edwards (2005) identified the role of teachers as researchers, whereas teachers perceive their actions, its result and outcome through AR. Spencer (1894) precisely indicated the prospective of education as “The great aim of education is not knowledge but the action”. He further accentuated as “When looking at action research practice

it allows teachers to know about their teaching at the same time that it helps to improve teaching”. AR is a cyclic process in which teachers as a researchers notice their actions and its implications. In nutshell, AR is “Research in Action”, where implementation of action is done to improve the teaching practice and thus repeating the actions and assist continuous research.

Explicitly, AR in education is expressed by various authors as a process of understanding school environment and improves the quality of the education through action research process (Johnson, 2012; McTaggart, 1997, Hine 2013). Authors further highlight the involvement of practitioners as it provides exposure to new knowledge and understanding about improving educational practices and helps in resolving problems at classrooms and schools level (Stringer et. al, 2009, Hine 2013).

Cochran and Lytle (1993) elucidate, “Within education the main goal of action research is to determine ways to enhance competencies among children as well as professionals workers working within the educational systems therefore matching with educational benefits of both teachers and a student”. They further explain that AR is directly linked to the student’s learning along with growth and development of teachers (Sikula, 1996, Osterman and Kottkamp, 1993; Tomlinson, 1995). Additionally, AR is concerned with resolving curriculum related issues and often promotes institutional change.

Studies examine different traditions of AR and recognise its emergence in different countries. There are five major traditions of educational AR; firstly AR tradition in USA extended through the work of Kurt Lewin. AR brought into US schools by Stephen Corley in (1953). Further, Horace –Mann Lincon institute of Columbia University outlined different phases of AR. Research mainly emphasizes on the following outline

1. The identification of problem area;
2. The selection of specific problem and formulation, of hypothesis or prediction, of specific goals and procedures for reaching objectives.
3. The careful recording of actions and accumulation, of indications to determine the aim.
4. The inference from these indications is to determine if goals are accomplished.
5. Continuous retesting of these generalisations in actions.

Corey (1953) defines educational action research as a legitimate form of educational inquiry against attack from academic research community but failed to establish so.

EMERGENCE OF ACTION RESEARCH: A GLOBAL PROSPECTIVE

The idea of action in the field of education emerged in UK in 1960 for school based curriculum development. This movement took place in response to students’ dissatisfaction in British secondary schools. John Elliot (1973) was crucial player in taking initiatives and emphasized on restructuring the content of curriculum, transform instructional process for school teacher and university professionals. Another development in Britain during this period was Educational Priority programme which involved teachers and academicians in collaborative research.

Stenhouse (1975) Elliot (1973, 1990) initiated major curriculum reforms project during 1960 and 1970, including ‘Humanities curriculum projects’ which dealt with teaching controversial issues. ‘Ford Teaching

project' which deals with implementing an inquiry/discovery approach to teaching, 'Teacher-student interaction and quality learning projects', focuses on problem of teaching / understanding the context or system of public examination. These projects involved university academicians working with teachers. The effect of these lead to the establishment of collaborative action research network (CARN), an international network which sponsors conferences, publishes AR studies, creating awareness and discussion of AR methodology.

Initiatives were also taken in the form of participatory AR in Australia involves political, social and economic environments. The idea behind taking initiative was to understand the values of 'teachers as producers of educational knowledge'. The participatory AR project includes 'The innovative grant project', 'language and learning project', and 'curriculum development centres', 'assessment centres for teacher's education' at unit, as well as at state level. These projects in 1970 were funded by common wealth school commission projects. These projects provided the sense of 'changing notion' among teachers so as to stimulate school based development and evaluation through teachers who were engaged in studying their own teaching practices for developments. Australian educational AR developed close tie with British "Teacher-as -Researcher movement". McTaggart and Kemmis (1988) were one of the leading propels of educational AR in Australia.

Tradition of Self-Study research, 1990 emerged and is accepted as a method of self-study within colleges and universities especially among teachers and educators. Various researches at colleges and universities level have taken place on wide range of substantive issues included teaching experiences and current teaching practices, educational philosophy in teaching, few studies focused struggle of teachers, educators on issue of race, class and gender. Cochran -Smith & Lytle (1993) promoted reflective practitioner movement in teaching and teachers education. This movement recognised and valued the practical knowledge of teachers. These collaborative researches involved university academicians and teachers in some aspects of research process but not owned and controlled by teachers.

ACTION RESEARCH: AN EDUCATIONAL DIMENSION

AR practice inspires new ideas and facilitates innovation and experimentation in teaching. Therefore, NCF encourages the use of AR as tool for systematic learning and transformation. Furthermore, educators typically conduct AR as an extension of particular educational reforms may be as a part of educational performance or improvement, related to particular project. AR method is particularly alluring to education as it indicates when and why formative transformations are required and what impact will it have when revised strategies. AR is evidence-based authentic research which is problem centric and result oriented rather than based on traditional teaching methods.

Conducting AR is beneficial for evaluating effectiveness of teaching strategies and lesson designs in context to improve teaching and learning. Involving in AR is a stirring experience because it entails learning by doing. AR involves continuous planning, evaluation and modification as a series of steps. In fact, AR is widely used in education; especially by teachers as its main purpose is to conceive "teachers as researchers" and they are engaging in creating new ideas, implementing those ideas in their teaching and learning. Schaefer (1967) elaborated its implication on organisation and discover AR as essential element of any institution's culture and suggested that schools should not restrain them for teaching and learning rather than should be an informative centre of inquiry for producing and transmitting knowledge. Now a day's teachers have become more sensitive towards their classroom events. Formal classrooms have shifted from academic inquiry to collaborative inquiry where students as well as teachers become involved in experimentation with teaching and learning. AR is used as a structure or a practice in educational systems for improving their students at school level and supports communities as a whole. Therefore, it is considered as an essential component towards sustainability in education and research

CONCLUSION

The paper envisages Indian education system showcasing the glimpses of diverse culture, sharing different values and attitude yet can be teach similar theories and principles . Government of India recognizes the prerequisite of introducing integrative eccentricity to maintain quality and standards in education. National Policy on education plays significant role in restructuring and standardise the curriculum considering divergent environment. Therefore National Policy on education created NCF with the objective of bringing reforms in the education system and creating constructive learning environment for divergent culture and nurture learner centric curriculum. NCF expresses the role of teacher as facilitator to supports and encourage active participation of the learner. It encourages the use of Action Research as tool for systematic transformation that inspires new ideas and facilitates innovation and experimentation in teaching. The present paper describes significance of Action Research in teaching and learning and it is considered as a crucial tool to solve their teaching problems. This paper also focuses on shifting role of educational institutions into active centres for

improving teaching, educational methods and curricula. It further suggests that this active centre must be harmonized with school curriculum to meet the requirements of school. Implementing changes in education will help in social, economic and political transformations and able to bring changes in the society as a whole.

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BILINGUALLY CONSTRAINED RECURSIVE AUTO ENCODER (BRAE)

Shilpa G V

ABSTRACT

Sentiment Analysis is a process of extracting one's opinion and analyzing whether the opinion is positive, negative or neutral. Cross Lingual Sentiment Analysis (CLSA) deals with the prediction of the opinion of the content in the testing language using the trained language which is trained with the help of classifiers. CLSA adopts the features of Natural Language Processing (NLP) tools. This provides the mechanism to adopt the similar features present in the resource rich language to the resource poor language. Resource rich language has a good availability of labeled corpus, resource poor language suffers with the availability of the labeled corpus. Syntax based features and lexical based features were adopted in the traditional methods of the classification of the Sentiment Analysis. Some of the popular approaches make use of the Machine Translation method. This was helpful in converting the documents of test language to the trained language using the training language classifier. Machine translation method fails for most of the language pairs and when they were successful; its accuracy was too low. This made to follow the other approaches and led to the introduction of Bilingually Constrained Recursive Auto Encoder (BRAE).

INTRODUCTION

Sentiment Analysis has been performed most on the English language, but there is a work in other languages such as German, Chinese, and Spanish etc and also there are other works that has been carried out in the regional language. In order to perform the Sentiment Analysis on these languages Cross Lingual methods has to be used because of the scarcity of the labeled corpus in these languages. Trained language in the CLSA predicts and analyzes the opinion of the testing language. CLSA often made use of Machine Translation method which converted the text in test language to the trained language using the training classifier. But this method could not sustain for the longer time since it failed for the most of the pairs in a language. This led to evolve efficient tool of Cross Lingual Sentiment Analysis which helped reducing the effort of annotating the data manually. This paper introduces the architecture of Recursive Auto-Encoder and Bilingually Constrained Recursive Auto Encoder to perform the CLSA between the resource rich and resource poor language. One language acts as a source language where as other represents the target language. Linked word net of two Indian regional languages has been used to reduce the language gap in between these languages. Hindi and Marathi have been used as two languages which basically do not make use of the Machine Translation method. Based on the survey, there was 72% of accuracy for Hindi and 84% of accuracy for Marathi^[1]. When the bilingual dictionary has been used, there is improvement in the accuracy over 13% to 15%. New word net has been created for the target language correspondingly that matches the synset from the source language wordnet with the help of expansion based methods. As a result of this both source and the target language now have same synset identifier.

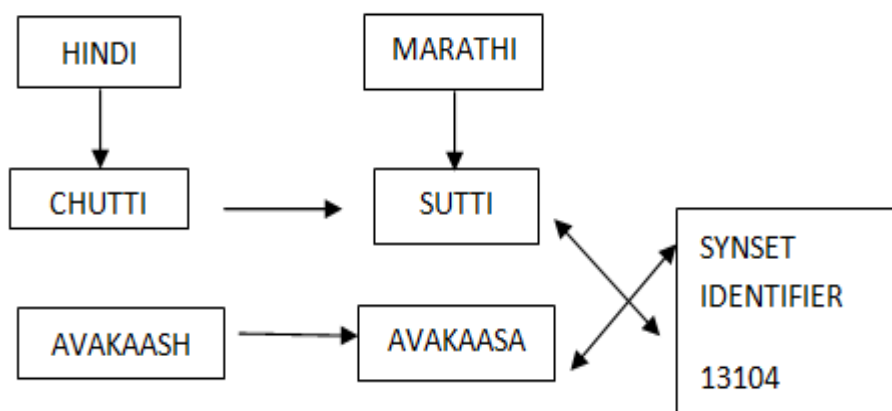


Figure-1: Example of Multidict of Hindi and Marathi

Figure 1 represents that Hindi and Marathi word nets have been build with the expansion based method. In the above figure 1, Hindi and Marathi acts as a resource rich and resource poor language respectively. Here Marathi word net is getting expanded by receiving the word net from Hindi. Therefore now both the target and source language has same synset identifier. When the word net has repeated occurrences from multi languages, it is referred to be Multidict. Each Multidict contains a row and column where as a row contains the words with the similar meaning and the column contains the synset identifier for the identified similar meanings.

SENSE BASED FEATURES

The sense based features^[2] helps in the better understandability of the document and improves the accuracy in the Sentiment Analysis of any document. Implementing sense based features helps to overcome some of the issues such as,

- Evaluating the benefits and accuracy of the sense based features over the word based features.
- The problem of unrecognized words in the training dataset can be avoided by using the similarity metrics

Sense based features helps in generating the sentiment analysis classifier in a more superior way to avoid the severity of unidentified words in the testing dataset by replacing them with the identified words from the training dataset. This feature was not possible while using the word based representation as it does not support the comparison of vast data to check its similarity. POS based analysis has been made to improve the accuracy of the Sentiment Analysis. The comparison has been made between the samples created by the word based feature and the sense based feature. The synset replacement algorithm is used to replace the unidentified synset in the testing data set with the most relevant matching synset from the training data set. This helps in the improvement of the Performance of Sentiment Analysis. Some of the examples have been illustrated to show how the Sentiment Analysis works based on sense based features.

Sentence 1: " Rama's face fell when he heard that he has failed in the examination."

Sentence 2: " An Orange fell from the tree."

In the above two sentences, the word "fell" appears in two different contexts. In sentence 1, the word "fell" represents the expression of sadness or the disappointment. In sentence 2, "fell" represents that the fruit has fallen due to the gravity of the Earth. While reading the sentence 1, the user opinion towards the sentence shows a negative polarity due to negative sense in the word "fell", whereas the sentence 2 does not infer any polarity, it is neither a positive opinion nor a negative opinion, therefore the sentence 2 does not infer any sentiment. By analyzing the second scenario, the word sense feature is more clearly understood.

Sentence 3: " King Cobra is deadly poisonous."

Sentence 4: " Rane spins the ball in a deadly way."

The word "deadly" in the above two sentences gives both positive as well as negative polarity. Sentence 3 infers a negative polarity as it is representing a dangerous entity, sentence 4 infers a positive polarity. Finally consider the third scenario,

Sentence 5: " Tip's language is very vulgar."

Sentence 6: " He behaves in a crude way."

In sentence 5 and 6, the words "vulgar" and "crude" are semantically similar in nature. These words can be identified with the synonymous nature by looking into its senses of the word. After analyzing all the three scenarios, one can conclude that the scenario 1 can be analyzed with the a sentiment and also a non-sentiment sentence. Scenario 2 has opposite polarities where as one infers positive sentiment and the other infers the negative sentiment. The third scenario demonstrates the senses of words that is the identification of the words with similar meaning in a synset.

2.1 Representation of the sense based words

By considering that both Hindi and Marathi have the same synset identifier, the words from each language has been represented with both the languages with the help of the corresponding identifier. For the target language, the training word set and testing word set is mapped for the respective synset identifier during the cross lingual settings^[3]. Training dataset builds a classification model and tests it on testing data set. Since both wordset contains synset identifier, the experiment is classified into manually annotated dataset and the automatically annotated data set. Therefore the evaluation have been classified as manually annotated words and automatically annotated words generated by Word Sense Disambiguation Engine.

2.1.1 Sentiment classification using Naïve translation

A classifier developed using the training language is used to convert the testing language dataset to the training language dataset. Now the converted words are mapped from testing documents to the respective training dataset, Naïve translation is obtained as a result of this conversion. Semantic transfer or the syntactic transfer is not maintained. Multidict is used for the translation and two approaches are used for the replacement method i.e, Exact Word Replacement and the Random Word Replacement^[4].

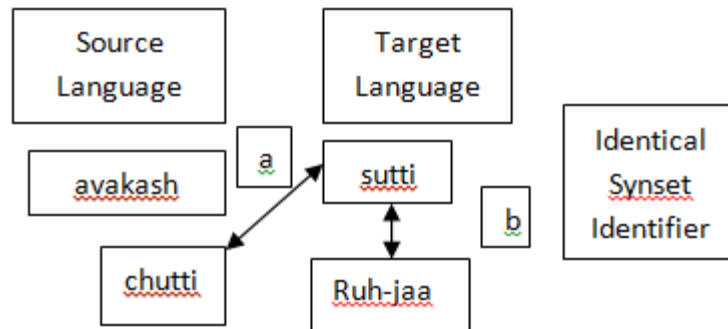


Fig-2: Example of Exact Word Replacement (a) and Random Word Replacement (b)

EXACT WORD REPLACEMENT

The word that is most similar is chosen and the respective word from source language is chosen and the replacement is done on a basis of disambiguation word sense identifier for the target language. In the figure 2, for the target word “sutti”, similar word from the source “chutti” is selected (a).

Random Word Replacement: Some random word having the identical synset identifier is replaced. For example, in the figure 2, the random word “Ruh-jaa” is chosen for the word “sutti”.

The dataset for Hindi and Marathi has been collected from the tourism review document which has been assigned with a positive and negative polarity by a native reviewer. Hindi and Marathi corpora consist of 11038 and 12566 words respectively. Each review consists of four to five sentences of approximately 20 words. A native reviewer has made the Sentiment Analysis on this tourist document and has provided 100 positive and negative reviews for the Hindi document and 75 positive and negative reviews for the Marathi document. The native speaker has manually annotated the words which are used as the manually annotated dataset. On the basis of the POS tagging, annotation tool assigns each word to all the possible sense entries. Then the right matching word is chosen by the lexicographer based on the context.

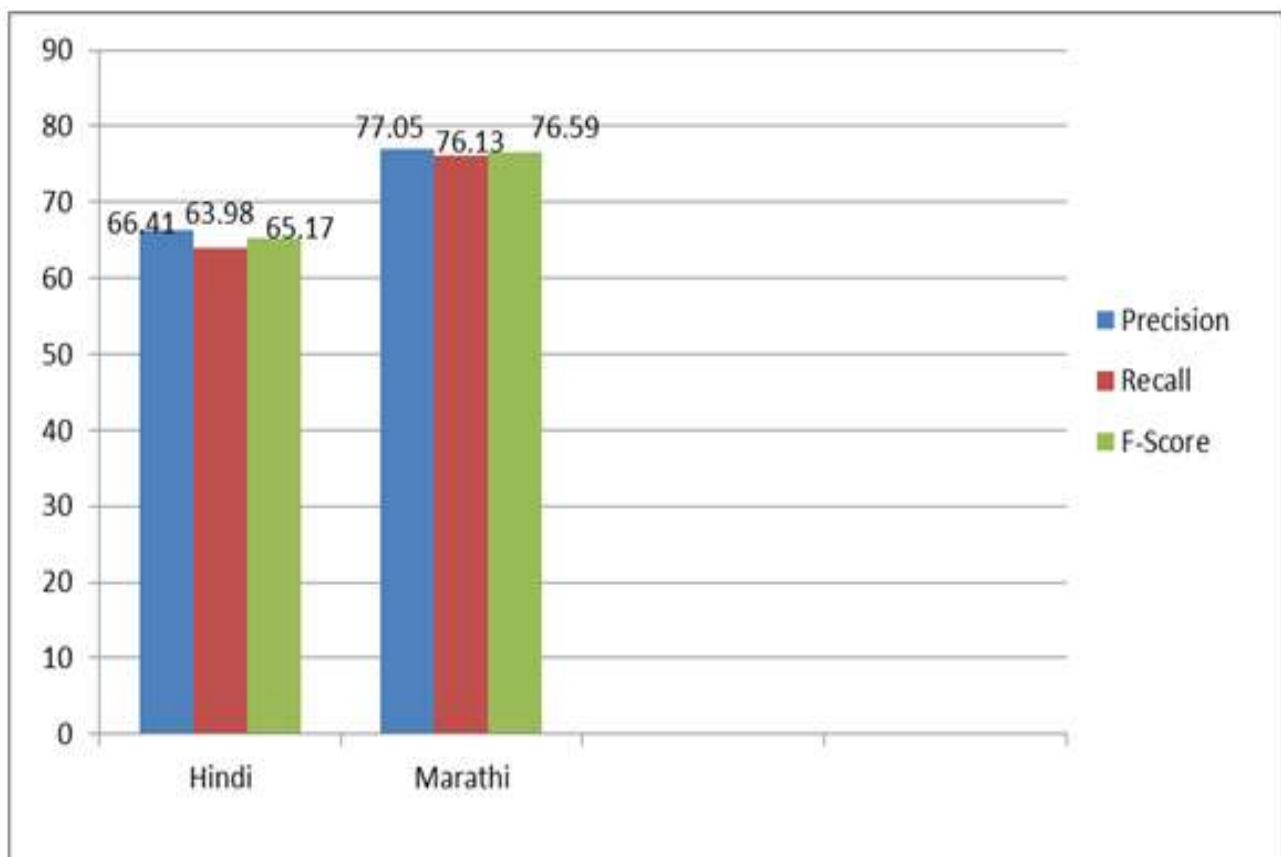


Figure-3: Annotation statistics for Hindi and Marathi.

Figure 3 represents the overall precision, recall and f-score for Hindi and Marathi dataset. The p precision, recall and f-score has been calculated separately for noun, adverb, verb and adjective and a overall average has been provided for both Hindi and Marathi dataset.

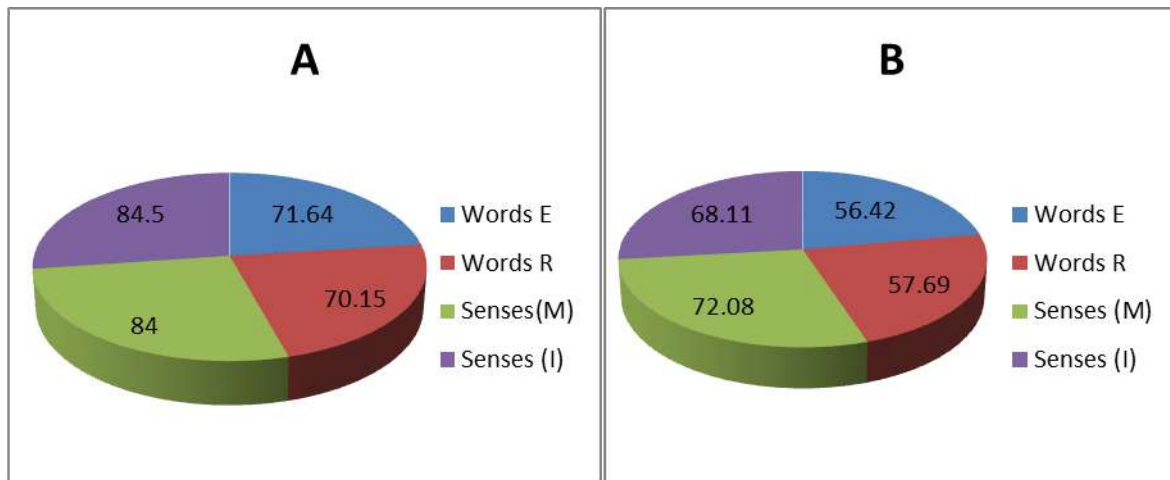


Figure-4: Cross Lingual Sentiment Analysis Accuracy when Hindi is used as training language (A) and Marathi is used as training language (B)

Figure 4 represents the accuracy of CLSA when Hindi is used as training language and Marathi is used as the testing language in the pie-chart (A), and when Hindi is used as testing language and Marathi is used as the training language in the pie-chart (B). The exact match word is represented by Words E and randomly selected words are represented by Words R. Senses (M) is where the word senses are used for Marathi and Senses (I) where the word senses are used for Hindi. When Hindi is used as the target language, some improvements can be seen in the positive recall than using Marathi as a target language. This approach can be used as an alteration method for the Machine Translation method based CLSA approach since most of the Indian languages do not use the Machine Translation method. Hindi word net consists of finer sense details in its word net than Marathi, therefore Hindi have a less accuracy while compared to Marathi. This may result in assigning an improper sense for a word in Hindi more than that of the chances in Marathi. Also when Hindi is used as a testing language, the CLSA accuracy falls down. This low accuracy is also because of the reason that Marathi has a very less corpora containing only few training samples.

Due to the missing concepts and the defect in the Hindi morphology analyzer, the usage of this approach may fall back. Since Marathi is expanded by taking the words from Hindi, most of the concepts that are present in Marathi are derived from Hindi; some of the concepts which are present in Hindi may not be included in the Marathi word net which leads low accuracy in sense based CLSA. Morphology analyzer searches for the deep words for the verbs which do not match the words present in Hindi word net and this causes the lower accuracy for Hindi.

2.2 Analysis with POS tagging

With the analysis of POS tagging, two comparisons has been made,

- Trained words associated with the particular POS
- Trained word senses with the particular POS

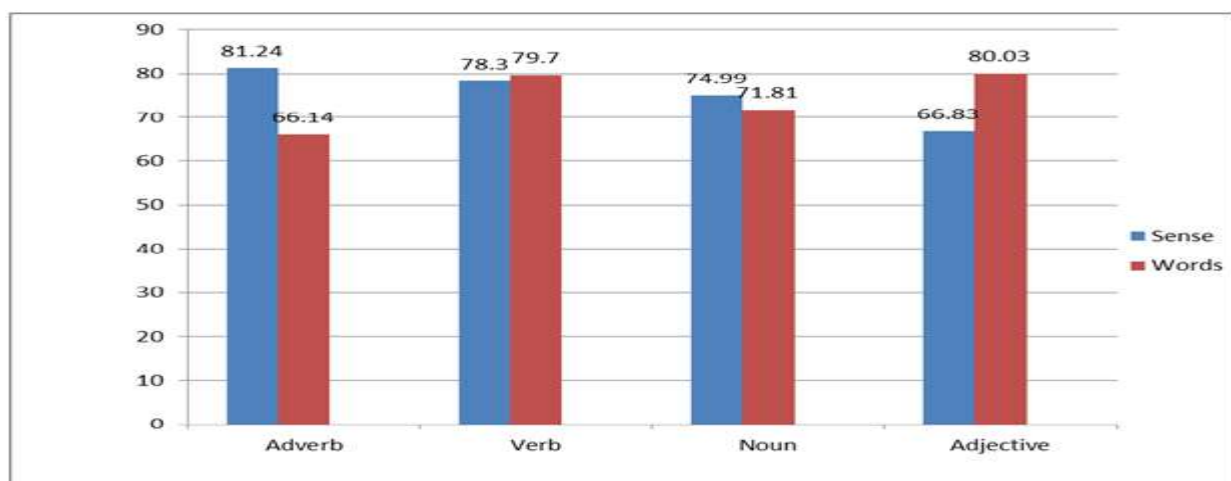


Fig05: Manually annotated data set using POS tagging with x-axis representing POS category and y-axis representing the accuracy

Figure 5 represents the accuracy that has been obtained with the classification of the POS tagging for the manual word senses and just words. The performance of the classification based on the POS is directly affected by the adjectives in the lexeme space^[5]. The performance of Sentiment Analysis has been more affected with the disambiguation of verb and adverb synsets than the disambiguation of adjectives and noun. Sentiment Analysis is directly conveyed with the use of the adjectives but this direct use of adjectives alone without using any other word sense features may result in the low accuracy. At some point of time, the sentiments may be difficult to analyze and it may be difficult to express directly by using adjectives.

Due to some drawbacks in the word sense features such as, low disambiguation accuracy, negation handling, interjections word net coverage and document specificity, word sense features could not sustain for a longer time.

Low disambiguation accuracy: It all depends on the annotation system used for the Sentiment Analysis of automatic word sense annotation.

Negation handling: While handling the negation entity, the words are considered as units for Sentiment Analysis. Since syntax is neglected in understanding the sentiment, the positive sentences containing the negative words is considered to be the negative polarity sentences. For example, "She cried in the celebration of her happiness." Even though the sentence represents her happiness, because of the word "cried", it is inferring a negative polarity.

Interjections word net coverage: Some of the interjections are not included in the word net and hence it fails to get disambiguated. The words like "wow", "yeahh" are not included in the word net and cannot be given any polarity.

Document specificity: Since one document contains the description of many concepts, it is difficult to make a overall Sentiment Analysis. For example the document of trip may be containing the information regarding to the public behavior of that country, its tradition, traffic in the respective cities, tourist places and hence it may contain difference of opinion which fails to assign a overall Sentiment to the document^[6].

3. BILINGUALLY CONSTRAINED RECURSIVE AUTO-ENCODER (BRAE)

This approach aims to learn the vector representation for both source and the target language. Before getting into BRAE, bilingual document representation learning (BiDRL)^[7] is important. The architecture is shown in figure 6. Both monolingual and bilingual constraints are proposed to learn the model after obtaining the dataset from source and target language. Words are built in each individual language with the help of monolingual model. The consistent embedding space is built between two languages with the help of bilingual model. Joint learning is a semi supervised model and it uses the sentiment labels from the training dataset. Wit the use of this approach, both semantic and sentiment relationship can be achieved. The existing algorithms make use of semantic connection only where as the BRAE approach learns the representation of word and document together. The previous algorithm just provides the average of the total words present in the dataset but the BRAE provides high embedding performance with the use of sentiment labels which helps in creating a bridge between two languages. In monolingual model, both the words and documents are mapped to unique vectors in the paragraph vector. Each document is considered to be a unique token with respect to the context of entire word set present in the document. This makes every word in the document to be predicted easily by the tokens.

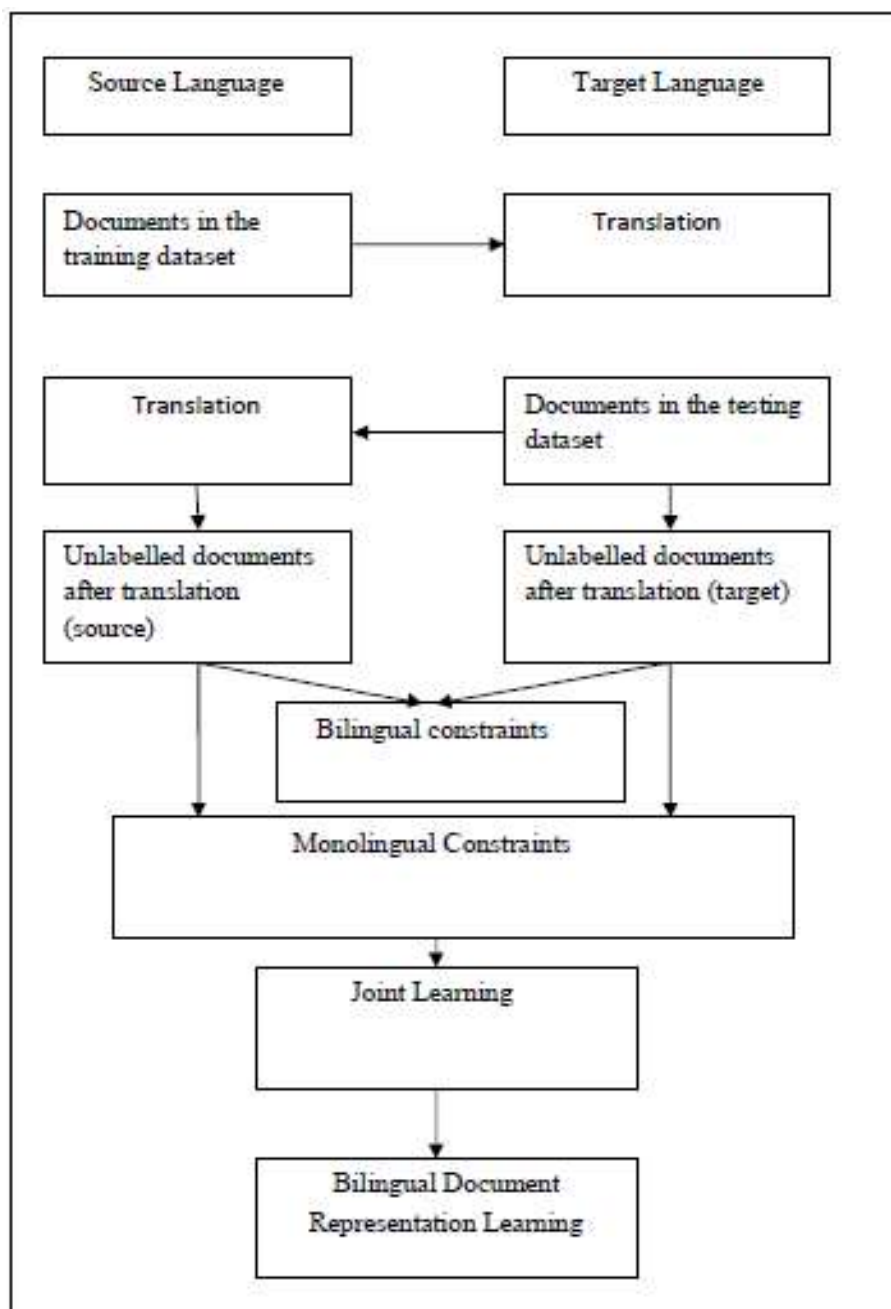


Figure-6: Architecture of BiDRL

Drawback of the bilingual model learning is that embedding space over source and target language must be consistent. Therefore three strategies are proposed to overcome the language gap. Introducing the logistic regressions is the first approach which helps the documents with same sentiment to categorize under same area in the embedding space. The second approach is to reduce the distance between original and the translated document. Final approach is to generate the similar representation of text for the same sentiment ^[8].

UNSUPERVISED TRAINING PHASE OF BRAE

Recursive Auto Encoder training and the cross training are the two phases in unsupervised training of BRAE. In RAE training, RAE framework has to be applied and source and target phrases have to be pre-trained. In cross training phase, the source phrase will be updated using the target phrase representation and source phrase representation will be obtained. And also target phrase will be updated using the source phrase representation and target phrase representation will be obtained. This iteration will be repeating until the cross joint error is minimized and the phase is terminated ^[9].

SUPERVISED TRAINING PHASE OF BRAE

Each source and the target language is trained using the labeled monolingual dataset. The first phase in supervised training is training for the resource rich language that is for the source language. Here the parameters of RAE source language are modified. The next phase is training of the resource poor language or the target

language. Here the parameters of RAE target language are modified and the final phase is to predict the overall sentiment of the document.

Overall sentiment is predicted in association with the target language using the phrase embeddings of the top layer ^[10].

CONCLUSION

The major advantage of this BRAE model is because of the usage of the words that are not present in the labeled data set in the test data. The model was successful in assigning a polarity even for the unknown word by comparing it with the word which is semantically similar in nature. The model provided a benefit of obtaining exact grammatical phrases and it was successful in inferring the correct polarity to the polysemy words. This eliminates the need of manually annotated dataset and the word net. For example, the sentence “She cried out with her daughter fame in the media” assigns the positive polarity with BRAE model where as other baseline models assigned the negative polarity. Some errors were found where the model actually failed to assign the correct sentiment for the sentence like “He was destroying the fun every time, but this time he dint do it”. This sentence was assigned with negative polarity even though it represents the positivity. And also the sentence “This performance made her previous to look good” assigned a positive polarity instead of assigning a negative one. The model failed in subtle contextual sentences. The future enhancements that can be made to the BRAE model are to learn the phrase embeddings for multiple languages at the same time. Paraphrase detection can be done by applying the BRAE framework to this cross lingual tasks.

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CO-CURRICULAR ACTIVITIES AND ITS IMPACT ON LEARNING ACHIEVEMENT OF HIGHER SECONDARY SCHOOL STUDENTS

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ABSTRACT

The present paper is an attempt to examine the Co-curricular activities and its impact on learning achievement of higher secondary school students. The principle purpose of the study is to find out the Co-curricular activities and its impact on learning achievement of higher secondary school students organized in higher secondary schools in relation to academic performance of the study due to government and private school variation. In the present study sample consisted of 100 higher secondary school students from the two school of Nadia district in West Bengal. The selected schools are two types, out of which 1 are govt. and 1 are private School. Simple random sampling technique was adopted in this study. It is an Ex post-facto type as the current status of phenomena what exist at present has been considered. In this study a standardize tool of structured questionnaire was used. The data were analyzed with the help of correlation and t-test. The result shows that there exist no significant differences of facilities about co-curricular activities due to management variation. This study also revealed that there exist no significant relationship between High Co-curricular activities score and academic performance score, Average Co-curricular activities score and academic performance score and Low Co-Curricular activities score in relation to academic performance score.

Keywords: Co-curricular Activity, Higher Secondary School Student, Learning Achievement.

INTRODUCTION

Co-curricular activities are considered as an important part of child development. It is a new way of imparting education through scientific blends on the part of education. It is a new invention for the new generation to grow up a child with excellence. Co-curricular activities from a vital link in the total pattern of educational experiences. These experiences comprise inside as well as outside class-room experiences to cover all facts of growth pattern and ensure balanced development of the child and good citizenship for the country. Schools are selected to play its major role. But many schools are found not arranging various types of co-curricular activities due to different problems.

The modern meaning of curriculum is very wide and comprehensive. It includes the totality of experiences of the child i.e. acquired inside and outside the school. However, the curriculum meant for them is not sufficient enough to fulfill the overall development. To see this crisis, the formal education of the school houses many activities as a part of education for the all-round development of the child and their personality. As these activities are significantly joined with the Curriculum, it is called co-curricular activities, which can help in the physical, intellectual, moral, social, emotional, aesthetic and spiritual development of an individual.

Secondary stage of education is the most significant part of formal education. It covers the period of adolescents. All psychologist and educationist are of the opinion that instincts of adolescents should be properly trained and guided, as this period brings about the maximum bodily development. Therefore, in order to make the body active various games and sports should be organized for them. In fact, secondary school should play a vital role in organizing co-curricular activities for adolescent students.

The new Education Policy (1986) lays special emphasis on the need of co-curricular activities. "Productive and Creative activities help in the harmonious development of 4H's : Head, Heart, Hand and Health. These activities provide for the expression of the child's manifold talents. In fact, co-curricular activities are the most useful and integral part of curricular program."

CO-CURRICULAR ACTIVITY

Co-curricular activities are defined as the activities that enable to supplement and complement the curricula or main syllabi activities. These are the very important part and parcel of educational institutions to develop the students' personality as well as to strengthen the classroom learning. Co-curricular activities facilitate in the development of various domains of mind and personality such as intellectual, emotional, social, moral and aesthetic development. Creativity, Enthusiasm, and Energetic, Positive thinking are some of the facets of personality development and the outcomes of extracurricular activities.

EXAMPLES OF CO-CURRICULAR ACTIVITIES

There are different types of Co-curricular activities – Sports, Musical activities, Debate, Model, Art, Drama, Story writing Competition, Essay writing Competition, Art Craft etc.

LEARNING ACHIEVEMENT

Learning achievement is the result had been achieved or acquired form of the subject child. It added that learning achievement is the result of which resulted in changes within the individual as a result of activity in learning.

It is understandable that learning achievement is the result or level of ability that has been achieved by students after attending a teaching-learning process within a certain time in the form of changes in behavior, skills and knowledge and will then be measured and assessed and then realized in numbers or statement.

HIGHER SECONDARY SCHOOL STUDENTS

In Indian educational system, a student undergoes ten years of schooling. After this, a student should undergo two years of academic program in order to join the college program/degree. These two years of academic program is called Higher Secondary level. It includes XI and XII students. In the present study, the term Higher Secondary Students refers the first year students of Higher Secondary program.

REVIEW OF RELATED LITERATURE

Review of related literature is divided into two categories –

STUDIES CONDUCTED IN INDIA

- Poonam (2002) conducted a study of the perception of assistant about co-curricular activities at primary stage with special reference to value inculcation. The objectives of this study were :
 - i) To find out the various types of Co-curricular activities organized in primary Schools.
 - ii) To Study the perception of teachers regarding purpose of organizing co-curricular activities.
 - iii) To study the awareness of teachers about the potential of co-curricular activities as a source of value inculcation. To study the problem faced by the teachers in organization of co-curricular activities. This study was confined to the teachers of Municipal Corporation of Delhi in Najafgarh Zone.
- Saha (2005) conducted a study of the facilities of co-curricular activities and extent of participation in the secondary schools with special reference to silchar Municipal area, G.U. Assam, studied that the financial crisis of the school is very crucial and there is a lack of trained teachers. Co-curricular activities still to get scientific place in the school's time table. Most of the schools keep a period for co-curricular activities just to carry out the direction of the departmental authorities. Nevertheless, the schools arrange annual sports, cultural functions and competitions and students take part with full enthusiasm. But if they are given better facilities they would show better performances.
- Grewal (2012) conducted a study on students towards co-curricular activities between rural and urban government school September 2012, Vol 1 issue iv ISSN; 2277 – 1255 BAHRTIYAN INTERNATIONAL JOURNAL OF EDUCATION AND RESEARCH. Objectives of the study were as follows –
 - i) To study the perception of students towards co-curricular activities organized in rural and govt. school.
 - ii) To find out the regularity of various co-curricular activities organized rural and govt. school.
 - iii) To find out the regularity of various co-curricular activities in rural and urban variation.

STUDIES CONDUCTED IN ABROAD

- Silikar and quirk (1997) examine the effects of extra-curricular activity participation on the academic achievement of high school students. Participants consisted of 123 high schools students who participated in inter scholastic soccer during the first quarter of the school year but were not involved in any extra-curricular activities during the second quarter.

The results of the study indicated that participants had higher grade point in the first quarter (i.e., during Soccer Season) than in the second quarter (outside Soccer Season) and the students attends were also found higher during the soccer season.

- Coojley (2001) observed that Nature and extent of funding for co-curricular activities varies from one school to the next and govt. involvement occurs for one or more of the following reason : safe guard the public order to maintain fitness and physical abilities among students to promote sense of identity belong and unify among citizen to reproduce values consistent with the govt. ideology in a community or society consequently, being review as physically fit or as one, who associates with athletes, he become as essential aspects of the image making of politician.

- Booth (2008), Lkagami (2000), Jhonson and Coffey (2004) reported that participation in co-curricular and extra-curricular, especially in sports, yoga, visit field, social service and drama helped in reducing the anxiety level of the participants.

RATIONALE OF THE STUDY

From the review of literature found that most of the research covering the cognitive aspect only. These intellectual not only aim of education, the main aim of education is all round development of personality of the child that is beside intellectual growth. Curricular activities in the school are mainly cognitive in nature and concentrate on the intellectual growth of the student. From the previous report of literature it is observed that, if a student is sound and healthy in non intellectual growth he or she ultimately becomes healthy and fit for intellectual growth. It is observed that most of the study is concerned with intellectual growth of the student. Very study conducted considering sample from these areas of Bengal not a single study so far conducted. That is it is a new attempt for the investigator.

- Are the co-curricular activities differentiated in secondary schools by the management?
- Do the co-curricular activities of secondary schools needed for student's achievement?

THE PROBLEM

Here, the investigator decides to do a short study about "Co-curricular activities and its impact on learning achievement of higher secondary school students".

OBJECTIVES OF THE STUDY

The Objectives are

- 1) To examine co-curricular activities organized in the secondary school due to Government and Private school variation.
- 2) To find out the different type of co-curricular activities organized in higher secondary school due to Government and Private school variation.
- 3) To find out the extent of provision of play ground, games materials (indoor and outdoor) due to Government and Private school variation.
- 4) The number of co-curricular activities present in the school program due to Government and Private school variation.

HYPOTHESIS OF THE STUDY

- H_{01} - There exist no significant differences of facilities about co-curricular activities due to management variation.
- H_{02} - There exist no significant relationship between high co-curricular activities score and academic performance score of higher secondary school students.
- H_{03} - There exist no significant relationship between average co-curricular activities score and academic performance score of higher secondary school students.
- H_{04} - There exist no significant relationship between low co-curricular activities score and academic performance score of higher secondary school students.

METHODOLOGY

DESIGN

The main objectives of the study is to find out the co-curricular activities organized in the higher secondary level schools in relation to academic performances of the students due to management variation. It is descriptive survey design. The descriptive survey method had undoubtedly been the most popular and most widely used research method of education. It is an ex-post facto design because current status of the phenomena studied and cause-effect relationship that is co-curricular activity and academic performance will be studied.

SAMPLE

In the present study sample consisted of 100 higher secondary school students from the two schools of Nadia district in West Bengal. Simple random sampling technique was adopted in this study. The selected schools are two types, out of which 1 are govt. and 1 are private School.

Table-1: Selection of Sample on the Basis of Variable

Variation	Sub Sample	Total Number
Management	Government	50
	Private	50

TOOLS

In the present study questionnaire was used as a tools to collect the data. This questionnaire was prepared by the researcher itself. Standardization process was followed. The items while being constructed one were taken to examine that they are assessing the importance of co-curricular activities in schools. Secondly, the items were given to experts to find out whether the content is in conformity with the main subject of my study. A few items were changed as per their suggestions. This was done for content validity. To assess the reliability of the scale it was applied on 10 of the newly made scale was calculated by split half method. The reliability of newly made scale was 0.80. This was high in nature and it confirmed that the scale was a reliable one.

DESCRIPTION

The main objectives is to find out the co-curricular activities and its impact on learning achievement of higher secondary school students organized in higher secondary school in relation to academic performance of the study due to government and private school variation.

SYSTEMATIZATION OF DATA**Table-2: Showing the frequency distribution of co-curricular activities among the higher secondary school students due to government variation.**

SCORES	FREQUENCY
54 – 63	6
64 – 73	21
74 – 83	10
84 – 93	3

Table-3: Showing the frequency distribution of co-curricular activities among the higher secondary school students due to private variation.

SCORES	FREQUENCY
54 – 63	14
64 – 73	27
74 – 83	15
84 – 93	4

Table-4: Showing the mean differences of the government and private school

Variation	Sub Sample	N	Mean	SD
Management	Government	40	71	7.98
	Private	60	70	8.52

Table-5: Showing the frequency distribution of academic performance among the higher secondary school students due to government variation

SCORES	FREQUENCY
8 – 17	3
18 – 27	8
28 – 37	9
38 – 47	13
48 – 57	3
58 – 67	1
68 – 77	3

Table-6: Showing the frequency distribution of academic performance among the higher secondary school students due to private variation

SCORES	FREQUENCY
53 – 62	15
63 – 72	30
73 – 82	13
83 – 92	2

Table-7: Showing the mean differences of the government and private school

Variation	Sub Sample	N	Mean	SD
Management	Government	40	37.5	15.16
	Private	60	67.83	7.73

Table-8: Categorization of the students

Categories	No of Students	Total No Students
High	23	100
Average	59	
Low	18	

ANALYSIS AND INTERPRETATION

For the analysis of data researcher used descriptive and inferential statistics. Researcher used central tendency (Mean), Standard deviation, r and t-test.

TESTING HYPOTHESIS:-

- 1) H_{01} – There exist no significant differences of facilities about co-curricular activities due to management variation.

Table-9: Showing the frequency distribution of academic performance among the higher secondary school students due to private variation

Variation	Sub Sample	N	Mean	SD	't'	Significance Level
Management	Government	40	71	7.98	1.71	Not
	Private	60	70	8.52		Significant

Df=98

It is seen from the table that the calculated 't' value (1.71) of management is lesser than the critical 't' value (2.63) at 0.01 level of significance. So, the result is not significant. The Null hypothesis is accepted i.e. there exist no significant difference of facilities about co-curricular activities due to management variation.

- 2) H_{02} – There is no significant relationship between high co-curricular activities score and academic performance score of higher secondary school students.

Table-10: Showing the 'r' value of high co-curricular activities score and academic performance score of higher secondary school students

Variation	N	'r'	df	Significance Level
High level of Co-curricular activities	23	0.33	21	Not Significant
High Academic performance group				

It is seen from the table that the calculated 'r' value (0.33) is lesser than the critical 'r' value (0.526) at 0.01 level of significance. So, the result is not significant. The Null hypothesis is accepted i.e. there exist no significant relationship between high co-curricular activities and academic performance score of higher secondary school students.

- 3) H_{03} – There exist no significant relationship between average co-curricular activities score and academic performance score of higher secondary school Students.

Table-11: Showing the 'r' value of average co-curricular activities score and academic performance score of higher secondary school students

Variation	N	'r'	df	Significance Level
Average level of Co-curricular activities	59	-0.012	57	Not Significant
Average Academic performance group				

It is seen from the table that the calculated 'r' value (-0.012) is lesser than the critical 'r' value (0.325) at 0.01 level of Significance. So, the result is not significant. The Null hypothesis is accepted i.e. there exist no significant relationship between average co-curricular activities score and academic performance score of higher secondary school students.

- 4) H_{04} – There exist no significant relationship between low co-curricular activities score and academic performance score of higher secondary school students.

Table-12: Showing the 'r' value of low curricular activities score and academic performance score of higher secondary school students

Variation	N	'r'	df	Significance Level
Low level of Co-curricular activities	18	0.44	16	Not Significant
Low Academic performance group				

It is seen from the table that the calculated 'r' value (0.44) is smaller than the critical 'r' value (0.590) at 0.01 level of significance. So, the result is not significant. The Null hypothesis is accepted i.e. there is no significant relationship between low co-curricular activities and academic performance score of higher secondary school students.

FINDINGS OF THE STUDY

The following results have been obtained on the analysis of data

1. There exist no significant differences of facilities about co-curricular activities due to management variation.
2. There exist no significant relationship between high co-curricular activities and academic performance score of higher secondary school students.
3. There exist no significant relationship between average co-curricular activities and academic performance score of higher secondary school students.
4. There exist no significant relationship between low co-curricular activities and academic performance score of higher secondary school students.

LIMITATION OF THE STUDY

The limitations are

1. In choosing the sample the investigator selected only 100 higher secondary school students as the sample of his study. They were far from representative of population.
2. No sophisticated methods like ANOVA, F-Value were computed for analysis and interpretation of the data. Any graphical representation is also not being available for proper analysis of data.
3. The situation and environment in which the study was conducted may be also affecting the reliability of the data.
4. In choosing the sample the investigators divide the students on the basis of Government and private School. Furthermore stratification were considered e.g. sex, locality, religion, academic stream etc.
5. The study was confined to students of class XI only.

SUGGESTIONS FOR FURTHER RESEARCH

The investigation was endowed with some practical experience during the time of investigation upon which he wanted to recommend some suggestions for further study.

These are

- i) A study may be conducted rural and urban school student.
- ii) A study may be conducted on other fields like psychomotor, Effective.
- iii) A study may be conducted in India and other countries.
- iv) Studies may be taken up to primary, elementary, College Students.

CONCLUSION

Finally we observed that there does not any significant relationship between high, average, and low co-curricular activities and academic performance. So the null hypothesis is accepted. Activities related to physical development are conducted on more regular basis in both types of schools as compared to other activities related to social, cultural, aesthetic, literary and academic development etc. Overall frequencies of co-curricular activities, cultural activities, civic activities, literary and academic activities, physical development activities are more in the government school as compared to the private school. Regular period for different kinds of co-curricular activities need to be marked clearly in the time-table. Appropriate grades, awards, recognition and facilitation need to be given to the students for participating in co-curricular activities to encourage them for these activities and to retain their interest in co-curricular activities.

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EFFECTIVENESS OF GEOGEBRA ON ACHIEVEMENT IN MATHEMATICS OF STANDARD XI STUDENTS

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ABSTRACT

Geogebra is a Mathematical software used for the teaching learning process. The main aim of the present study is to find the effectiveness of this software on the achievement of Mathematics. The investigator developed a multimedia based content with a specially designed mathematical software called Geogebra for the unit Integral Calculus. The control group was taught through traditional method of teaching, whereas the experimental group was subjected to the Mathematical software Geogebra. Result shows that there exist significant relationship between the achievement scores of experimental group and the control group. Results indicate that there is an impact of the software in the achievement of Integral Calculus in Mathematics among eleventh standard students.

Keywords: Geogebra, Integral Calculus, etc

INTRODUCTION

In the present scenario, Mathematics is not a separate domain. It deals with all the aspects of our day- to- day life. The role of Teacher is more crucial in teaching Mathematics. To make their students globally competitive, teachers need to adopt new methods of instruction and evaluation techniques. As the higher secondary Mathematics deals with abstract concepts in the State Board syllabus of Tamil Nadu, technology mediated teaching is needed to make it as visualization and connect to the real life situation of students. Development of Computer software includes operation, logical, functions and relations which are foundation of Mathematics. Nowadays, the Mathematical processes are quickly converted into computer software. To teach Mathematics lot of multimedia packages are available to enhance the teaching-learning process.

NEED AND SIGNIFICANCE OF THE STUDY

A sense of fear and failure exists regarding Mathematics among majority of children (NCERT, 2006). The complexity of learning Mathematics could be made easy if teaching is done through appropriate strategies. There was a lack of teacher preparation and support in teaching Mathematics (NCERT, 2006). At the higher secondary level, in State Board Curriculum the syllabus on Integral Calculus is a new arrival in which the students feel difficult to understand the concepts. Teaching Integral Calculus using the traditional approach fails to help students understand the basic concepts of Integral calculus (Axtell, 2006). Technology can greatly aid the process of mathematical exploration, and clever use of such aids can help in engaging students (NCERT, 2006). Therefore the Investigator adopt Mathematical software Geogebra to test its effectiveness on the achievement of Mathematics of Standard XI students studying under the State Board Curriculum.

MEANING

Geogebra is an interactive software to teach geometry, algebra, statistics and calculus application. Teachers and students can use Geogebra to make conjectures and to understand integral calculus problems.

REVIEW OF RELATED LITERATURE

Enver Tatar and Yilmaz Zengin. (2016) determined the conceptual understanding of Definite Integral with the help of Geogebra. The objective of the study was to determine the effect of CAI with the help of Geogebra on achievement of secondary Mathematics teacher in the topic 'Definite Integral'. This study was conducted with 35 prospective Mathematics secondary teachers studying in the Turkey University. Embedded design was adopted. Knowledge test on definite Integral and an opinionnaire were utilized for the data collection. It was found that Geogebra contributes towards the success of Definite Integral topic.

Ocal, Mehmat Faith.(2017) examined the effect of Geogebra on students conceptual and procedural knowledge. The purpose of this study was to investigate whether instruction with Geogebra has effect on students' achievements regarding their conceptual and procedural knowledge on the applications of derivative subject. This study adopted the quantitative approach with pre-test post-test control group true experimental design. The participants were composed of two calculus classrooms involving 31 and 24 students, respectively. The experimental group with 31 students received instruction with Geogebra while the control group received traditional instruction in learning the applications of derivative. The findings indicated that instruction with Geogebra had positive effect on students' scores regarding conceptual knowledge and their overall scores.

OBJECTIVE OF THE STUDY

To find the significant difference between post test scores of control group and experimental group.

HYPOTHESIS OF THE STUDY

There is no significant difference between post test scores of control group and experimental group.

METHODOLOGY

The investigator used Experimental method to find out the effectiveness of Geogebra among standard XI students. The sample consists of sixty students in which thirty students were kept under control group and thirty students were kept under experimental group. An entry behaviour test was conducted, based on the scores it was found that there exist no significant difference between control group and experimental group. Integral calculus from the Eleventh standard state board curriculum was taken for the experiment. Pre test was conducted for both the groups. The experimental group was taught by the specially designed Mathematical software Geogebra and control group was taught through traditional method of teaching. Both the groups were post tested.

RESEARCH INSTRUMENTS

1. Achievement Test in Mathematics on the Unit of 'Integral Calculus' constructed and validated by the investigator and guide (2017).
2. A Multimedia based content on standard XI Mathematics for the unit 'Integral Calculus', was constructed and validated by the investigator and guide (2017).
3. Geogebra a Mathematical software.

FINDING OF THE STUDY

There is significant difference between post test scores of control group and experimental group.

RESULT AND DISCUSSIONS

There is significant difference between post test scores of control group and experimental group.

Difference between control group and experimental group in post test

Post test	N	Mean	S.D	Calculated 't' Value	Remarks at level 5%
Control Group	30	30.60	5.84	8.60	S
Experimental Group	30	50.30	11.10		

(For df 58 the table value of 't' is 2.00, S – Significant)

From the table it is inferred that the calculated 't' value (8.60) is greater than the table value (2.00) for degree of freedom 58 at 0.05 level of significance. Therefore the null hypothesis is rejected. Hence it is concluded that there is significant difference between control group and experimental group students in post test scores. By comparing the mean scores of control group (30.60) and experimental group (50.30) in their post test scores, it is inferred that the experiment group scores are greater than the control group.

CONCLUSION

The scores of the entry behaviour test show that there was no significant difference between control group and the experimental group. Result shows that there exists significant difference between the post test scores of control group and experimental group. The mean scores of experimental group is greater than the control group. It is evident that the improvement of scores in experimental group was only due to the intervention of Geogebra. Therefore there is a positive impact of Geogebra on the achievement in mathematics among Experimental group students.

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GROUND-STATE PROPERTIES OF SOME LIGHT NUCLEI WITH A SOFT-CORE GAUSSIAN AND A YUKAWA LIKE NN-POTENTIAL

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ABSTRACT

Since the deBroglie wavelength of heavy-ions is relatively large, classical approximations are expected to be good, so classical microscopic calculations are used to study Heavy-ion collision calculations. For heavy-ion collisions form of nucleon-nucleon (NN) potential and ground-state (GS) properties like binding energy (BE), root-mean-square radius (R_{rms}) and quadrupole deformation parameter (β_2) of the generated nuclei plays very important role in heavy-ion reactions. Soft-core Gaussian form of NN-potential is used for these studies so far. For many nuclear physics studies Yukawa like NN-potential is used. The "STATIC" method is a potential energy minimization program. The dependence of the ground-state properties of the nuclei generated using the "STATIC" method on the parameters of the soft core Gaussian and the Yukawa like NN-Potentials are studied here. It is found that if the location of the NN-potential minimum matches with each other for both forms of the potential than the form of the NN-potential whether it is exponential or Gaussian does not seem to be important for the ground-state properties like binding energies, rms radius and quadrupole deformation parameter β_2 .

Keywords: Classical Microscopic Approach, Ground-state properties, Heavy-ion reactions, NN-potential.

INTRODUCTION

Heavy-ion reactions at energies near and below the Coulomb barrier have been the subject of many experimental and theoretical studies for many years now [1]. Heavy-ion reactions have been studied theoretically in either macroscopic or microscopic approaches. Since the deBroglie wavelength of heavy-ions is relatively large, classical approximations are expected to be good for high-energy collisions [2-4]. Classical approximations have been, however, used for study of low energy collisions as well, particularly for fusion reactions around the barrier energies [5-9]. Classical macroscopic approaches are based on the assumption of a continuous distribution of nuclear matter. In classical microscopic approaches like Classical Molecular Dynamics (CMD) [8] and a 3-stage Classical Molecular Dynamics (3S-CMD) [10] method classical many-body equations are solved numerically.

The central inputs to the CMD and 3S-CMD methods for simulation of heavy-ion collisions are the nucleon-nucleon (NN) potential between all the nucleons, the configuration of the nucleon positions in the nuclei in their ground state and specification of other initial conditions for collision. The ground-state configuration of nucleon positions in the given nucleus is obtained by a "STATIC" method which is a potential energy minimization procedure [8, 9, 11, 12]. The total potential energy of this frozen configuration generated by "STATIC" method gives the binding energy and the rms radius which is calculated from all the particle coordinates. For $A \geq 5$ a number of static isomeric configurations exist [11]. Therefore, a large number of randomly generated different initial configurations are considered. With each initial configuration a minimum potential energy configuration which corresponds to a static equilibrium state is obtained and a final equilibrium configuration is chosen that has the minimum potential energy among them [6-8].

The nucleons interact with each other by a given form of the NN-potential along with the usual Coulomb interaction. The parameters of the NN potential are usually determined by fitting to binding energy (BE) and root-mean-square radius (R_{rms}) of many nuclei. In many studies the interaction potential used is a soft-core Gaussian form of NN-potential [5-8] with the potential parameter set called potential P4 of ref. [5-7, 12, 13]. Thus, a proper ground state configuration of the colliding nuclei and the form of NN-potential is very important in the heavy-ion collision studies. In nuclear physics studies, however, Yukawa like potential is often used for the NN-interaction. Therefore, in this paper the dependence of the ground state properties of the so constructed nuclei on the parameters of the NN-potential and the form of the NN-potential itself is discussed. By using soft-core Gaussian form of NN-potential with potential P4 as a reference, potential parameters of Yukawa like potentials [12,14] are adjusted such that ground-state (GS) properties of generated nuclei matches well with that of P4 and the soft core Gaussian potential and the Yukawa like form of NN-potentials are compared.

CALCULATIONAL DETAILS

In the classical approximations, nucleons are considered as classical point particles, which interact via two-body forces. In the recent work the study is carried out using a soft-core Gaussian form of NN-potential given in eq. (1) [7-9,15,16]. Nucleon *spin* is explicitly neglected here.

$$V_N(r_{ij}) = -V_0 \left(1 - \frac{C}{r_{ij}} \right) \exp \left(-\frac{r_{ij}^2}{r_0^2} \right) \quad (1)$$

where, V_0 , C and r_0 are the depth parameter, repulsive-core radius and range parameter respectively. Here r_{ij} is the distance between the i^{th} and j^{th} particle. The parameters V_0 , C and r_0 can be chosen so that the NN-potential reproduces gross properties of the nuclei in their ground state such as, the ground state binding energy (BE), the root-mean-square radius (R_{rms}) etc.

In nuclear physics studies Yukawa like potential [12,14] is often used for the NN-interaction. Yukawa like potential given by eq. (2) is chosen, which has exponential form rather than Gaussian form,

$$V_{ij}(r_{ij}) = -V_0 \left(1 - \frac{C}{r_{ij}} \right) \frac{1}{r_{ij}} \exp \left(\frac{-r_{ij}}{r_0} \right) \quad (2)$$

The Coulomb potential between protons has the usual form given in eq. (3) is also added to the both potentials.

$$V_C(r_{ij}) = \frac{1.44}{r_{ij}} (\text{MeV}) \quad (3)$$

Further, the differences between the effective strengths of the nuclear interaction between the like and unlike particles is taken into account by taking the NN-potential between the like particles to BE about 20% weaker than that between the unlike particles [6, 9,17].

For each ground state configuration generated by the “STATIC” method the BE of the nucleus is determined from the following equation [6, 12],

$$V = BE = \sum_i \sum_{j>i} V_{ij} \quad (4)$$

where V_{ij} is the two body potential consisting of the NN-potential given in eq. (1) or (2) and the Coulomb potential given by eq. (3).

The R_{rms} of the nucleus is determined using following expression [6, 12],

$$R_{\text{rms}} = \sqrt{\frac{1}{A} \sum_{i=1}^A (x_i^2 + y_i^2 + z_i^2)} \quad (5)$$

where x_i , y_i and z_i are the components of the position vector \vec{r}_i of i^{th} nucleon of the nucleus described in the frame of reference attached to the centre of mass of the nucleus, and A is the mass number of the nucleus.

The quadrupole deformation parameter (β_2) of the nucleus is determined as [6, 12]:

$$\beta_2 = \sqrt{\frac{16\pi}{5}} \left(1 - \frac{R(90^\circ)}{R_0} \right) \quad (6)$$

Taking R_0 as the experimental rms radius of the nucleus and $R(90^\circ)$ as the (rms) length of an axes which is perpendicular to the symmetry axis the quadrupole deformation parameter β_2 for the axial symmetric nuclei is determined.

The STATIC method is a potential energy minimization program. In this method the nucleons are assumed to be classical point particles without any spin. Protons and neutrons are assumed to have equal masses. The individual nuclei used in the collision calculations are obtained by generating a random distribution of all the nucleon positions in a sphere of radius R , where R is approximately the radius of the corresponding nucleus. However, this random distribution of nucleon positions is generally very “hot”, i.e., energetically very unstable, since, in particular nucleons may be sufficiently close to each other for the short-range repulsion to be very large. Further, such configurations in general may not have density distributions that correspond to nuclear saturation densities. Therefore, to obtain a configuration of the nucleon positions corresponding to an equilibrium ground-state with the correct two-body correlations, this “hot” distribution may be “cooled” by one of the following methods called the “STATIC” method and the “DYNAMIC” method [9]. When A is not very

large, “STATIC” method is much faster than the “DYNAMIC” method. A ground-state configuration is obtained by cyclically minimizing the total energy of the configuration with respect to small displacements of single coordinates of different nucleons taken one at a time. This method is called “STATIC” because of the static displacements of nucleons [9]. This method is similar to the static solution of Hatree-Fock (HF) equations by the variational approach.

Here, the dependence of the ground-state properties of the nuclei generated using the “STATIC” method on the parameters of the NN-Potential, and the form of the NN-Potential is studied. In the “STATIC” method the internal kinetic energy in the ground-state of a nucleus is zero and the binding energy is equal to the potential energy. The dependence of the distribution of the ground-state properties of the generated nuclear configurations on the soft-core Gaussian form of the NN-potential and the Yukawa form of the NN-potential is compared. In many classical calculations of heavy-ion collisions involving ^{24}Mg as one of the collision partner has been carried out [18-20]. About 1000 initial random configurations for ^{24}Mg are chosen as an example and the final ground state configuration in each case is obtained by using the “STATIC” program for both NN-potentials [14].

Soft-core Gaussian potential, eq. (1) approaches zero at large nucleon-nucleon separation distances very fast, while comparatively a Yukawa like potential goes to zero at large distances slowly. For comparison of soft-core Gaussian potential (eq. (1)) and Yukawa potential (eq. (2)), potential parameter P4 ($V_0 = 1155 \text{ MeV}$, $C = 2.07 \text{ fm}$, $r_0 = 1.2 \text{ fm}$) of the soft-core Gaussian potential is chosen as a reference. By adjusting the potential parameters of the Yukawa type potential, we have tried to match with the features of the potential P4.

RESULTS AND DISCUSSION

Value of the range parameter of the Yukawa potential is about 0.4 fm [21]. Therefore, choosing the range parameter $r_0 = 0.4 \text{ fm}$ in Yukawa like potential, value of V_0 and C is adjusted such that depth of the potential minimum, and the location of this minimum matches with that of the potential P4 of soft-core Gaussian potential. This potential parameter set is called as potential Y04 [12]. The values of these potential parameter set for different NN-potentials are given in Table 1.

Table-1: Potential parameters set P4 for soft-core Gaussian NN-potential and Y04 & Y03 for Yukawa type NN-potential

Potential parameter set	$V_0 \text{ (MeV)}$	$C \text{ (fm)}$	$r_0 \text{ (fm)}$
P4	1155.0	2.07	1.2
Y04	19038.5	2.043	0.4
Y03	167690.0	2.103	0.3

NN-potentials eq. (1 & 2) as a function of distance between the nucleons r_{ij} for potential parameters P4 and Y04 are shown in fig.1 (a). Even though the potential depth, location of the minimum and core-radii in the case of the two potentials are nearly identical, the distributions of BE of ^{24}Mg are significantly different. Calculated ground-state properties of ^{24}Mg [12] with Yukawa-type potential Y04 are shown in fig. 1(b-d) and are compared with those obtained with soft-core Gaussian potential P4. Yukawa-like potential with $r_0 = 0.4 \text{ fm}$ shows longer range and does not exactly match with the potential P4.

About 1000 initial random configurations for ^{24}Mg are chosen and the final ground state configuration in each case is obtained by using the “STATIC” program. Initial configuration gives rise to a different final nuclear configuration in a given nucleus with different ground properties. Ground state, BE and R_{rms} of all the generated configuration with potential P4 [5, 12] are shown as different points in blue in fig. 1(b) which is a two dimension plot of BE versus R_{rms} . Various final configurations are represented by different points in this plot. This gives rise to a distribution of points in this plot which is characteristic of this nucleus with the particular potential. Similarly a two-dimension plot of BE versus β_2 is shown in fig 1(c). It is observed that different initial configurations give rise to final configurations with different deformation properties as well, with both types of deformation, i.e. prolate and oblate, being generated for the same potential but depending on the initial configurations of nuclear positions. Fig. 1(d) shows a two-dimension plot of the R_{rms} versus β_2 .

Fig. 1(b) also shows the comparison of the distribution of binding energy (BE) versus rms radius (R_{rms}) obtained in case of the potentials P4 and Y04. The Yukawa like NN-potential and GS properties of all the generated configuration with potential Y04 are shown in red in fig. 1. Calculated binding energy distributions with Yukawa potential shows more binding energies as compared to that with potential P4 (Fig. 1(b)). This difference arises because of the large differences in the behaviour of the two potentials at distances $r_{ij} > r_{\text{min}}$, where Yukawa potential is deeper compared to soft-core Gaussian potential with P4, resulting in more potential

energy for the pair of particles with $r_{ij} > r_{min}$. Fig. 1(c) shows the comparison of distribution of binding energy (BE) versus deformation parameter (β_2) obtained in case of the two potentials in fig. 1(a). Wider range of the Yukawa potential also results in wider distribution of $+\beta_2$ values as seen in fig. 1(c). The comparison of R_{rms} versus β_2 with the two potentials is shown in fig. 1(d). Since the core-radius of the potential P4 is slightly more than that of the Yukawa potential Y04, it results in slightly larger values of radius for the distributions with potentials P4 as seen in fig. 1(d).

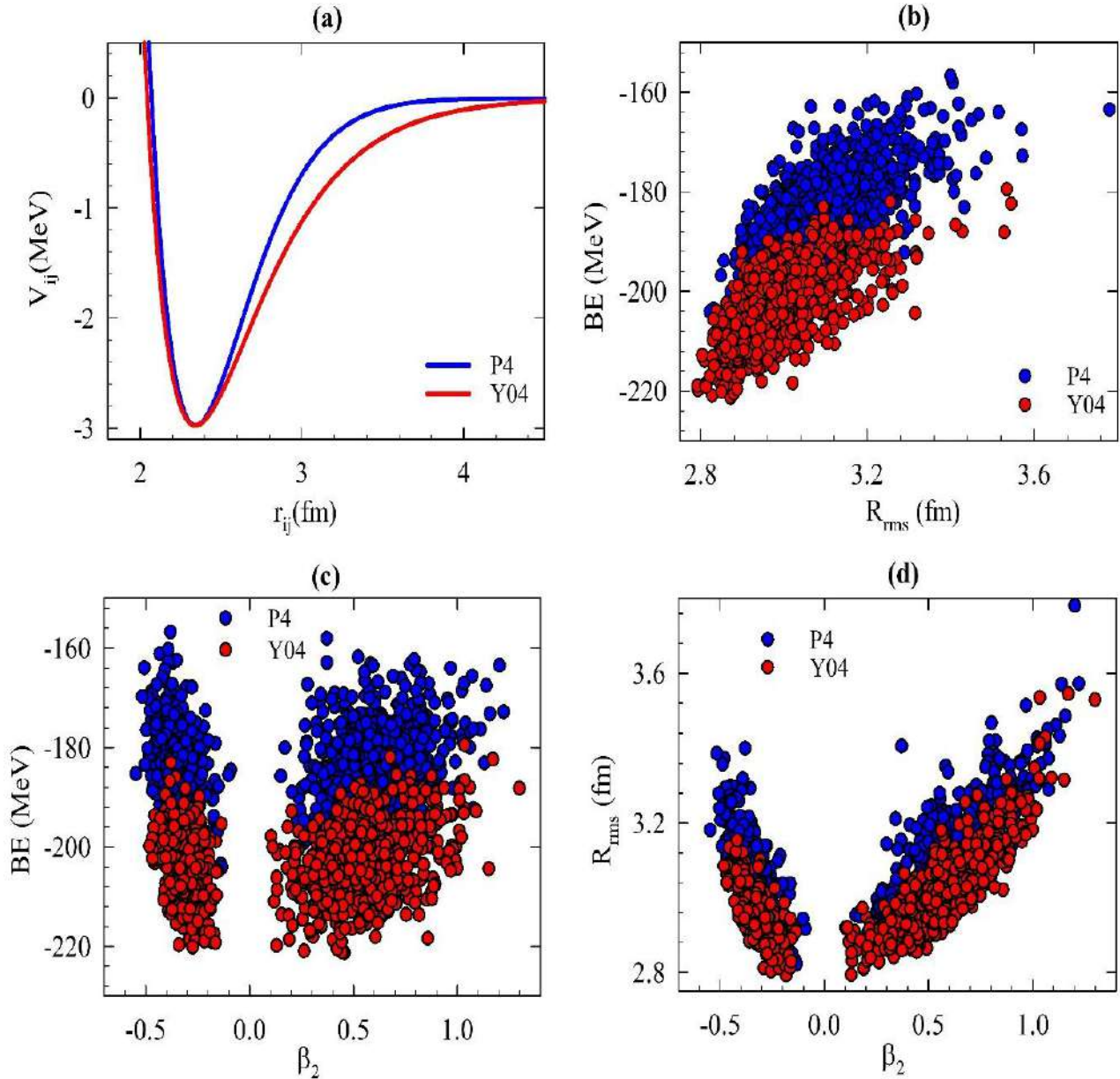


Figure-1: NN Potential and ground-state properties of ^{24}Mg generated with potential parameter set P4 and Y04.

Because of slightly higher value of the range parameter r_0 of Yukawa like potential it does not exactly match with the potential P4 of soft-core Gaussian potential but has larger range. Therefore, a smaller value of range parameter $r_0=0.3\text{fm}$ is also chosen and V_0 and C are adjusted so that the minimum of the two potentials match is called as potential Y03 [14]. The parameters are given in Table 1 and the potentials with GS properties are plotted in fig. 2.

NN-potentials eq. (1 & 2) as a function of distance between the nucleons r_{ij} for potential parameters P4 and Y03 are shown in fig.2 (a). The distribution of ground-state binding energies, rms radius (R_{rms}) and deformation parameter (β_2) of ^{24}Mg with Yukawa potential with $r_0=0.3$ fm (Y03) are shown in fig. 2(b), (c) and (d) respectively in red and compared with those generated with the potential P4. The ground-state properties almost match in both the cases since the potentials near the core-radius; at the location of minimum, and at small distances larger than r_{min} match. The two potentials are only slightly different from each other for $3.0\text{ fm} \leq r_{ij} \leq 4.0\text{ fm}$ because of the form of the potential.

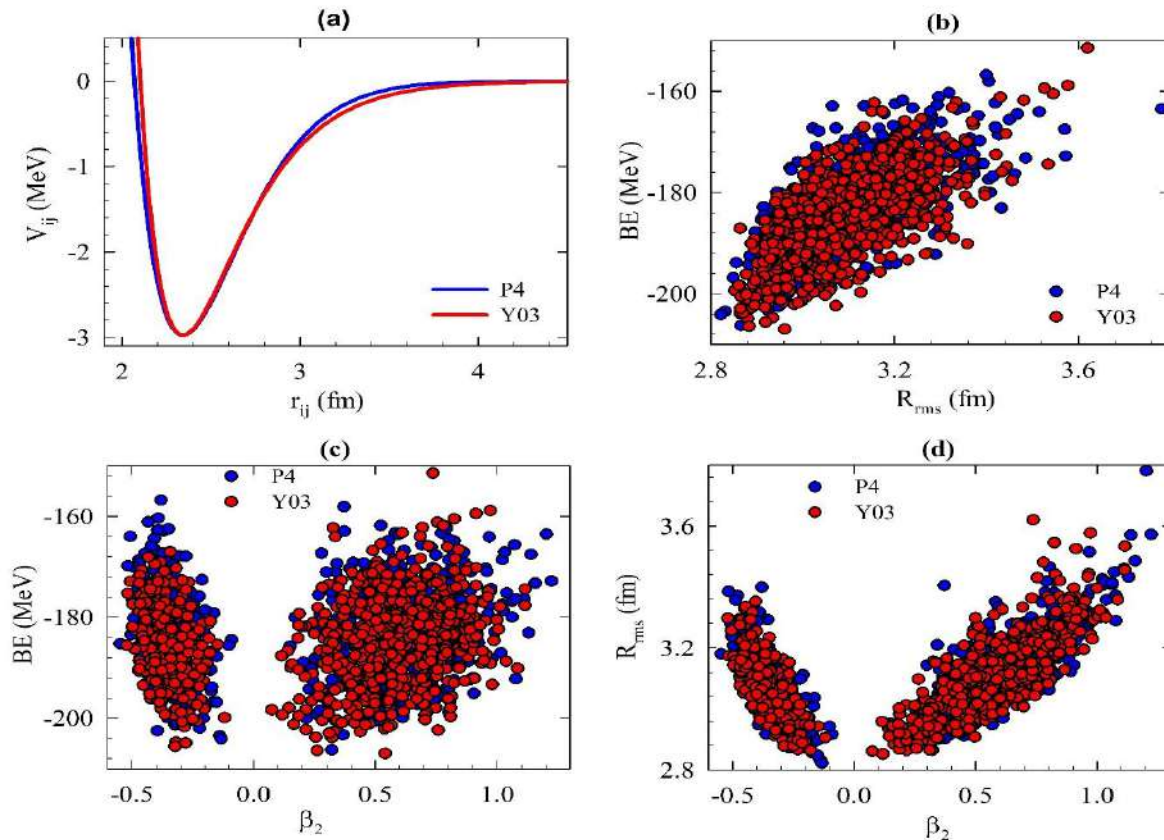


Figure-2: NN Potential and ground-state properties of ^{24}Mg generated with potential parameter set P4 and Y03.

Apart from ^{24}Mg ground-state properties of some more lighter nuclei are also generated using soft-core Gaussian form of NN-potential with potential P4 and Yukawa like NN-potential with potential Y03 and Y04. GS properties of ^2H , ^4He , ^{16}O , ^{40}Ca along with ^{24}Mg are shown in Table 2. Here, the configurations corresponding to the maximum BE of all the generated configurations for the given nucleus [13] are chosen.

Nuclei with smaller mass number like ^2H and ^4He shows almost same values of GS properties like BE, R_{rms} and β_2 for all three potential parameters as shown in Table 2. For nuclei with large mass number, values of BE increases because of wider range of Yukawa potential with parameter Y04 and it is shown in Table 2 with BE values of ^{16}O , ^{24}Mg and ^{40}Ca . The values of GS properties are nearly same for all the generated nuclei using potential parameter set P4 and Y03 in Table 2. R_{rms} of ^{24}Mg generated by potential Y03 is slightly higher than that of potential P4 with little larger value of β_2 . While for ^{40}Ca nuclei, R_{rms} value using potential Y03 is smaller than potential P4. Because of slightly higher value of the range parameter r_0 of potential Y04 shown in fig. 2(a) BE of some nuclei is higher than that of using potential parameter set P4.

Table-2: Comparison of GS Properties of Potential Parameter set P4, Y03 and Y04

Nuclei	P4		Y03		Y04		Expt.	
	BE (MeV)	R_{rms} (fm)	BE (MeV)	R_{rms} (fm)	BE (MeV)	R_{rms} (fm)	BE [22] (MeV)	R_{rms} [23] (fm)
^2H	-2.97	1.17	-2.97	1.17	-2.97	1.17	-2.23	2.11
^4He	-16.04	1.43	-16.04	1.43	-16.04	1.43	-28.30	1.67
^{16}O	-131.10	2.45	-131.36	2.45	-137.97	2.44	-127.46	2.73
^{24}Mg	-206.34	2.86	-206.85	2.96	-221.31	2.87	-198.25	3.08
^{40}Ca	-351.09	3.46	-355.08	3.06	-386.34	3.09	-342.06	3.48

CONCLUSION

From the above study it can be concluded that, so far as the values of the NN-potential in the vicinity of the potential minimum match with each other, the form of the NN-potential whether it is exponential or Gaussian does not seem to be important for the ground-state properties like binding energies (BE), rms radius (R_{rms}) and deformation parameter (β_2). Further, if the potential is wider than BE is larger and if it is same than there is no appreciable change in BE. In the present study, Yukawa-like potential with $r_0=0.3$ fm exactly matches with the soft-core Gaussian form of NN-potential P4 with $r_0=1.2$ fm with slightly longer range.

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WORKING CONDITIONS AFFECTING LABOURERS: A STUDY ON CO-OPERATIVE SUGAR MILLS OF PUNJAB

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ABSTRACT

In present scenario the manageable workload, welfare facilities/social security facilities, working according to skills, adequate work equipment, safe hazard free environment, etc. greatly affect the productivity, morale among employees, and makes them more efficient. Such factors enhances physical, social and mental well-being of labourers and so there study becomes important. The present paper deals with the study of association of type of labour with the source of employment; employment according to skill; promotion basis; working duration and effect on health.

Keywords: Duration, efficiency, health, labour, overtime, promotion, rest frequency

[1] INTRODUCTION

A healthful and positive work environment conditions are essential for labourer's mental and physical well being, which further impacts their capabilities in performing their daily routine. The physical and mental capabilities of labourer can be influenced by the facilities provided by an organisation in the workplace. The healthful working conditions such as manageable workload, adequate work equipment, welfare facilities/social security facilities, safe hazard free environment, working according to skills, etc., can lead to higher productivity, higher morale among employees, and less stress. On another hand, the poor working conditions, not only slow down the productivity, but can cause long term health problems including stress, depression and anxiety. The level of socio and economic satisfaction depends the type and nature of job, working hours, work environment and other factors related to work. The productivity efficiently and desire to work hard and grow depend upon the type of employment and income. The amount of income determines economic satisfaction or dissatisfaction. Hence, the study of the working conditions along with employment pattern becomes important.

[2] AIM

The aim of the present study is to find the study of association between the type of labour and the source of employment; employment according to skill; promotion basis; working duration and effect on health.

[3] RESEARCH METHODOLOGY & STATISTICAL TOOLS

The present study is explanatory in nature and tends to achieve the stipulated objectives for which data is collected from employees of Co- Operative Sugar Mills in Punjab. Statistical tools like mean, standard deviation, chi-square test and one way ANOVA are used to analyse the data.

[4] RESULTS AND DISCUSSION**[A] Type of Labourer Employed**

Table 1 shows the overall numbers of labourers employed in Co- Operative Sugar Mills in Punjab according to skills. It has been clearly depicted in Table 1 that majority of labourers i.e. 201 (36.55 percent) sampled labourers from overall 550 sampled labourers are employed as unskilled labourer, followed by 186 (33.82 percent) sampled labourers, who are employed as skilled labourer. Further, the remaining 163 (29.64 percent) sampled labourers are employed as semi – skilled labourer.

In case of permanent labourers employed in the mills, out of total permanent 190 labourers, the majority of labourers i.e. 105 (55.26 percent) labourers are employed as skilled labourer. Further, 48 (25.26 percent) are employed as unskilled labourers, followed 37 (19.47 percent) labourers who are employed as semi-skilled labourers. In case of seasonal permanent labourers, different trend has been observed during the study. As large numbers of seasonal permanent i.e. 126 (44.52 percent) are employed as semi- labourers, followed by 81 labourers, who are employed as skilled labourers. The remaining 76 (26.86 percent) labourers are employed as unskilled labourer. During the study, it has been found that all contract labourers i.e. 77 (100 percent) are employed as unskilled labourer.

Chi-square value has been found less than its critical value at 5 percent level of significance, hence, it can be concluded that there is an association between skills and types of labours.

TABLE 1 :- Type of labour

Type Of Labour	Regular / Permanent		Seasonal Permanent		Contract		Sampled	
	No.	%	No.	%	No.	%	No.	%
Skilled	105	55.26	81	28.62	0	0.00	186	33.82
Semi- Skilled	37	19.47	126	44.52	0	0.00	163	29.64
Unskilled	48	25.26	76	26.86	77	100.00	201	36.55
Total	190	100.00	283	100.00	77	100.00	550	100.00
chi-square	203.466							
p-value	.0001**							

[B] Source of Employment

During the study, it has been discovered that the predominant number of sampled labourers are employed directly by Co-Operative Sugar Mills. Table 2 shows 469 (85.27 percent) labourers out of total sampled labourers i.e. 550 (100 percent) are employed directly by their respectively mills. Further, 42 (7.64 percent) sampled labourers stated their source of employment via contractors and 39 (7.09 percent) sampled labourers are employed on basis on blood relationship. The similar trend has been observed in case for permanent and seasonal permanent labourers. As 178 (93.64 percent) labourers and 259 (91.52 percent) seasonal permanent labourers stated that they are employed directly by the mills. The remaining 12 (6.32 percent) permanent labourers and 24 (8.48 percent) seasonal permanent labourers reported their source of employment on basis of blood relationship. During the study, neither permanent labourer or seasonal permanent labourer stated their source of employment on the basis of contract. The majority of contract labourers i.e. 42 (54.55 percent) out of 77 contract labourers, stated that they are hired by contractors. The remaining 32 (41.56 percent) revealed that they are employed by mills on contract basis and 3 (3.09 percent) stated that their source of employment on basis on blood relationship but on contract.

Chi-square value has been found less than its critical value at 5 percent level of significance, hence, it can be concluded that there is an association between source of employment and types of labours.

TABLE 2 :- Source of Employment

Sources	Regular / Permanent		Seasonal Permanent		Contract		Sampled	
	No.	%	No.	%	No.	%	No.	%
Directly By Employer	178	93.68	259	91.52	32	41.56	469	85.27
Through Contractor	0	0.00	0	0.00	42	54.55	42	7.64
Blood Relationships	12	6.32	24	8.48	3	3.90	39	7.09
Total	190	100.00	283	100.00	77	100.00	550	100.00
chi-square	280.167							
p-value	.0001**							

[C] Employment according to Skill Wise

One of variable to determine, whether labourer is satisfied with their job, is to identify whether they are working according to their skills level or not. The socio-economic conditions can have impact, if person is dissatisfying with job, if he thinks he is not working according to their skills.

Table 3 shows that predominant number of sampled labourers i.e. 506 (92 percent), out of overall sampled labourers i.e. 550 (100 percent), stated that they are employed according to their skill level. The remaining 44 (8 percent) sampled labourers reported that they are not employed according to their skill level. The similar trend has been noticed in case of permanent labourers, seasonal permanent labourers and contract labourers. As 185 (97.37 percent) permanent labourers, 260 (91.87 percent) seasonal permanent labourers, 61 (79.22 percent) contract labourers stated that they are employed according to their skill level. During the study, the negligible number of 5 (2.63 percent) permanent labourers revealed that they are not working to their skill level. The remaining, 23 (8.13 percent) seasonal permanent labourers and 16 (20.78 percent) contract labourers stated that they are not working to their skill level.

Chi-square value has been found less than its critical value at 5 percent level of significance, hence, it can be concluded that there is an association between employment based on skills and types of labours.

TABLE 3 :- Employment according to Skill Wise								
Yes/ No	Regular / Permanent		Seasonal Permanent		Contract		Sampled	
	No.	%	No.	%	No.	%	No.	%
Yes	185	97.37	260	91.87	61	79.22	506	92.00
No	5	2.63	23	8.13	16	20.78	44	8.00
Total	190	100.00	283	100.00	77	100.00	550	100.00
Chi-Square	24.531							
p-value	.0001**							

[D] Promotion

Promotions are an important aspect of employee's life. As considerable increases in income or wage of labourer can have major affect on work performance. Different organisation use promotion as reward for high productivity of their worker which accelerate their efforts.

During the study, preponderance number of sampled labourers i.e. 345 (62.73 percent) stated that they have not been promoted for couple years. Rather, their promotion is over due. The remaining 205 (37.27 percent) sampled labourers, out of 550 (100 percent) sampled labourers reported that they have been promoted in the past as shown in Table 4. The similar trend has been observed for permanent labourers and seasonal permanent labourers. As the majority of permanent labourers i.e. 103 (54.21 percent) and 165 (58.30 percent) seasonal permanent labourers stated that there has not been no promotion for them. The remaining 87 (45.79 percent) permanent labourers and 118 (41.70 percent) seasonal permanent labourers revealed that they have been promoted in the past. During the study, no promotion cases has been found among contract labourers.

Chi-square value has been found less than its critical value at 5 percent level of significance, hence, it can be concluded that there is an association between promotion and types of labours.

TABLE 4 :- Whether Promoted or not ?								
Yes/No	Regular / Permanent		Seasonal Permanent		Contract		Sampled	
	No.	%	No.	%	No.	%	No.	%
Yes	87	45.79	118	41.70	0	0.00	205	37.27
No	103	54.21	165	58.30	77	100.00	345	62.73
Total	190	100.00	283	100.00	77	100.00	550	100.00
chi-square	54.017							
p-value	.0001**							

Out of 205 sampled labourers, who received the promotion, the majority of them i.e. 189 (92.20 percent) sampled labourers stated their promotion basis on performance and seniority. The remaining 16 (7.8 percent) sampled labourers reported seniority as basis for their promotion as depicted in Table 5. Table 5 clearly shows that 83 (95.40 percent) permanent labourers and 106 (89.83 percent) seasonal permanent labourers, out of 103 permanent labourers and 165 seasonal permanent labourers stated that received promotion on basis of performance and seniority. Only 4 (4.6 percent) permanent labourers and 12 (10.17 percent) seasonal permanent labourers reported seniority as basis for their promotion. Chi-square value has been found less than its critical value at 5 percent level of significance, hence, it can be concluded that there is an association between basis of promotion and types of labours.

TABLE 5 :- Promotion Basis								
Basis	Regular / Permanent		Seasonal Permanent		Contract		Sampled	
	No.	%	No.	%	No.	%	No.	%
Performance	0	0.00	0	0.00	0	0.00	0	0.00
Seniority	4	4.60	12	10.17	0	0.00	16	7.80
Both	83	95.40	106	89.83	0	0.00	189	92.20
Total	87	100.00	118	100.00	0	0.00	205	100.00
chi-square	2.161							
p-value	.0001**							

[E] Working Duration

A labour cannot be forced to work for more than eight hours as the labour law. However, a labourer can work for overtime according to his wish and the requirement of respective organisation for which he gets extra remuneration. Table 6 shows daily working hours, of the sampled labourers employed in the Co-Operative Sugar Mills. During the study, the preponderance number of sampled labourers i.e. 526 (95.64 percent), out of 550 sampled labourers, stated that their working hours to be 8 hours. Further, 13 (16.88 percent) sampled labourers reported that 10 hours as daily working hours, followed by 11 (14.29 percent) sampled labourers are those who work for 12 hours in day. During the study, all permanent labourers and seasonal permanent labourers reported that they work for 8 hours in the day. Out of 77 contract labourers, 53 (68.83 percent) labourers reported that they work for 8 hours in the day. Further, it has been found during the study that few labourers work for more than 8 hours in the day. As 13 (16.88 percent) contract labourers reported 10 hours as their daily working hours, followed by 11 (14.29 percent) contract labourers who stated that they work for 12 hours in the day.

Chi-square value has been found less than its critical value at 5 percent level of significance, hence, it can be concluded that there is an association between working hours and types of labours.

TABLE 6:- Working Hours in the Day								
Hours	Regular / Permanent		Seasonal Permanent		Contract		Sampled	
	No.	%	No.	%	No.	%	No.	%
8 Hours	190	100.00	283	100.00	53	68.83	526	95.64
10 Hours	0	0.00	0	0.00	13	16.88	13	2.36
12 Hours	0	0.00	0	0.00	11	14.29	11	2.00
Total	190	100.00	283	100.00	77	100.00	550	100.00
chi-square	154.155							
p-value	.0001**							

Table 7 reveals the number of working days in the month for the labourers in Co-Operative Sugar Mills. It can be clearly seen in the Table 7 that majority of sampled labourers i.e. 283 (51.45 percent), out of overall 550 sampled labourers have revealed that they work for 26 days in the month. Further, 190 (34.55 percent) sampled labourers reported 24 days as working days in the month and the remaining 77 (14 percent) sampled labourers work for 30 days in the month. All 190 (100 percent) permanent labourers covered in the day reported that they work for 24 days in the month during non crushing season, where as they work got 26 days in the month during crushing season. Further, all 283 (100 percent) seasonal permanent labourers stated 26 days as working days in the month. During the study, it has been found that all 77 (100 percent) contract labourers work for 30 days in the month. They don't get any day off in the month. They also stated that, if they can any day off in the month, there is deduction in income.

Chi-square value has been found less than its critical value at 5 percent level of significance, hence, it can be concluded that there is an association between working days and types of labours.

TABLE 7:- Working Days in A Month								
Days	Regular / Permanent		Seasonal Permanent		Contract		Sampled	
	No.	%	No.	%	No.	%	No.	%
24 Days	190	100.00	0	0.00	0	0.00	190	34.55
26 Days	0	0.00	283	100.00	0	0.00	283	51.45
30 Days	0	0.00	0	0.00	77	100.00	77	14.00
Total	190	100.00	283	100.00	77	100.00	550	100.00
chi-square	1100.000							
p-value	.0001**							

Table 8 reveals the number of working months for overall labourers working in Co-Operative Sugar Mills. During the study, the majority of sampled labourers i.e. 318 (57.82 percent) reported that they work for 4 months in year in the mills. Further, 199 (36.18 percent) sampled labourers revealed that are employed for 12 months, followed by 24 (4.36 percent) sampled labourers who are work for 5 months in year in the mills. The remaining 9 (1.64 percent) sampled labourers stated that they are employed for 6 months in mills.

All 190 (100 percent) permanent labourers covered during the study are employed as regular labourers. Hence, they are employed for whole year i.e. 12 months. The majority of seasonal permanent labourers i.e. 278 (98.23 percent) reported that 4 months as working months in year in the mills. The labourers also revealed that over period time of crushing season has been declining. According to them reduction in sugarcane production over couple of years, is one of main reasons for short crushing season. Only 5 (1.77 percent) seasonal permanent labourers stated that through they work for 12 months in mills. The majority of contract labourers i.e. 40 (51.95 percent) reported that they are employed for 4 months in the mills, followed by 24 (31.17 percent) contract labourers who stated 5 months as working months in the mills. Only 9 (11.69 percent) of them stated that they worked in mills for 6 months. The remaining 4 (5.19 percent) contract labourers are employed for 12 months.

Chi-square value has been found less than its critical value at 5 percent level of significance, hence, it can be concluded that there is an association between working months and types of labours.

TABLE 8 :- Working Months in the Year								
Months	Regular / Permanent		Seasonal Permanent		Contract		Sampled	
	No.	%	No.	%	No.	%	No.	%
4 Months	0	0.00	278	98.23	40	51.95	318	57.82
5 Months	0	0.00	0	0.00	24	31.17	24	4.36
6 Months	0	0.00	0	0.00	9	11.69	9	1.64
12 Months	190	100.00	5	1.77	4	5.19	199	36.18
Total	190	100.00	283	100.00	77	100.00	550	100.00
chi-square	719.920							
p-value	.0001**							

[F] Health and Safety Measures

There are another different factors which attract labourers particular for work, apart from monetary factors. One of the important factor is health and safety measures for labourers at the work. If the working conditions pose a threat to their health or safety, then monetary factors become secondary. Table 9 clearly shows that majority of sampled labourers, 440 (80 percent) reported that present work doesn't affect their health. The remaining 110 (20 percent) sampled labourers, out of overall 550 sampled labourers stated their health is affect while working in mills. The labourers reported few health problems such as body ache, hand and eye irritation, neck pain, body odour and knee problem. The labourers also stated increase in work load, age, not enough equipment, sometimes working without break, as reasons for health problems faced by them. In case of permanent labourers and seasonal permanent labourers, predominant number of labourers i.e. 156 (82.11 percent) permanent labourers and 221(78.09 percent) seasonal permanent labourers stated that they don't suffer ant health problems, while working in the mills. Only 34 (17.89 percent) permanent labourers and 62 (21.91 percent) seasonal permanent labourers reported that they suffer from health problems, while working in the mills. Out of 77 contract labourers, 63 (81.82 percent) of them, doesn't have any affect on their health and 14 (18.18 percent) stated that working in mills, affect their health.

Chi-square value has been found less than its critical value at 5 percent level of significance, hence, it can be concluded that there is an association between effect on health and types of labours.

TABLE 9:- Health being Affected by Work								
Yes/ No	Regular / Permanent		Seasonal Permanent		Contract		Sampled	
	No.	%	No.	%	No.	%	No.	%
Yes	34	17.89	62	21.91	14	18.18	110	20.00
No	156	82.11	221	78.09	63	81.82	440	80.00
Total	190	100.00	283	100.00	77	100.00	550	100.00
chi-square	1.329							
p-value	.0001**							

During the study, the majority of sampled labourers i.e. 432 (78.55 percent) labourers, revealed that they are provided with adequate equipment for their safety, where as 118 (21.45 percent) of them reported that they are not provided with adequate equipment for safety as shown in Table 10. Further, the labourers also stated that equipment provided for safety are old and outdated. The similar trend has been observed during study for permanent and seasonal permanent labourers. As majority of permanent labourers i.e. 165 (86.84 percent) and

253 (89.40 percent) seasonal permanent labourers reported that they are provided with adequate equipment for their safety. The remaining 25 (13.16 percent) permanent labourers and 30 (10.60 percent) seasonal permanent labourers reported that they are not provided adequate equipment for safety. The opposite trend has been observed for the contract labourers as compared with permanent labourers and seasonal permanent labourers. As most of contract labourers i.e. 63 (81.82 percent) revealed that their contractors don't provided them adequate equipment for safety. Only 14 (18.18 percent) of them reported that they are provided with adequate equipment for their safety.

Chi-square value has been found less than its critical value at 5 percent level of significance, hence, it can be concluded that there is an association between provision of equipment safety and types of labours.

TABLE 10:- Are You Provided with Equipment for Safety?								
Yes/No	Regular / Permanent		Seasonal Permanent		Contract		Sampled	
	No.	%	No.	%	No.	%	No.	%
Yes	165	86.84	253	89.40	14	18.18	432	78.55
No	25	13.16	30	10.60	63	81.82	118	21.45
Total	190	100.00	283	100.00	77	100.00	550	100.00
chi-square	194.040							
p-value	.0001**							

[G] Particular for Night Shift

During the study, it has been unfolded that predominant number of sampled labourers i.e. 508 (92.36 percent), work during night shift during crushing season. Only 42 (7.64 percent) of sampled labourers stated that they don't work at night shift as shown in Table 11.

All 190 (100 percent) permanent labourers and 283 (100 percent) seasonal permanent labourers covered in the study reported that during crushing season, they work during night shift. Only 35 (45.45 percent) contract labourers, out of 77 (100 percent) contract labourers, stated that they work during night shift. The remaining 42 (54.55 percent) of them stated that they don't work at night shift.

Chi-square value has been found less than its critical value at 5 percent level of significance, hence, it can be concluded that there is an association between working night shift and types of labours.

TABLE 11:- Do you work during night shift?								
Yes/No	Regular / Permanent		Seasonal Permanent		Contract		Sampled	
	No.	%	No.	%	No.	%	No.	%
Yes	190	100.00	283	100.00	35	45.45	508	92.36
No	0	0.00	0	0.00	42	54.55	42	7.64
Total	190	100.00	283	100.00	77	100.00	550	100.00
chi-square	279.331							
p-value	.0001**							

During the study, most of sampled labourers i.e. 481 (87.45 percent) stated that there is regular and proper system for changeover shifts. Only 69 (12.55 percent) sample labourers, out of overall 550 labourers stated that there is no regular and proper system for changing shift during crushing season as shown in Table 12. The Regular and proper shift change system has been reported by all 190 (100 percent) permanent labourers and 283 (100 percent) seasonal permanent labourers covered in the study. The opposite trend has been observed in case for contract labourers. As the majority of them i.e. 69 (89.61 percent) stated that there is no regular and proper system for changing shift during crushing season. Only 8 (10.39 percent) of contract labourers stated that there is regular and proper system for changeover shifts. Chi-square value has been found less than its critical value at 5 percent level of significance, hence, it can be concluded that there is an association between shifting system and types of labours.

TABLE 12:- Regular and Proper Shift Change System								
Opinion	Regular / Permanent		Seasonal Permanent		Contract		Sampled	
	No.	%	No.	%	No.	%	No.	%
Yes	190	100.00	283	100.00	8	10.39	481	87.45

No	0	0.00	0	0.00	69	89.61	69	12.55
Total	190	100.00	283	100.00	77	100.00	550	100.00
chi-square	484.660							
p-value	.0001**							

[5] CONCLUSION

During the study, it has been unfolded that the majority of sampled labourers, permanent and seasonal permanent labourers are employed as skilled or semi skilled labourers. But the opposite trend has been noticed in the case of contract labourers, as majority of them are employed as unskilled labourers. This trend clearly shows that contract labourers are hire by mills which doesn't require much skills. The predominant number of sampled labourers are employed directly by Co-Operative Sugar Mills. Particularly, permanent labourers and seasonal permanent labourers, as more than 50 percent of them are directly employed by their respective mills. But majority of contract labourers are hire by contractors, which are further hire by mills on contact basis. One of variable to determine, whether labourer is satisfy with their job, is to identify whether they are working according to their skills level or not. The preponderance number of sampled labourers including permanent labourers, seasonal labourers and contract labourers i.e. more than 90 percent are satisfy with job, in sense that they employed according to skill level. Further, large number of sampled labourers i.e. more than 50 percent stated that they have not received any promotion over couple of years. Rather their promotion is pending for more 2-4 years. Those labourers who received promotion in the past, nearly 90 percent of them stated their promotion basis on performance and seniority. A labour cannot be forced to work for more than eight hours as the labour law. During the study, more than 90 percent of sampled labourers, stated that their working hours to be 8 hours. All permanent labourers and seasonal permanent labourers stated that their working hours to be 8 hours. It has been found that around 35 percent of contract labourers are working more than 8 hours in day. All permanent labourers covered in the day reported that they work for 24 days in the month during non crushing season, where as they work got 26 days in the month during crushing season. Further, all seasonal permanent labourers stated 26 days as working days in the month. During the study, it has been found that all 77 (100 percent) contract labourers work for 30 days in the month. Further, this study unfolded that around 57 percent sampled labourers work for 4 months in year in the mills. All 190 (100 percent) permanent labourers covered during the study are employed as regular labourers. Hence, they are employed for whole year i.e. 12 months. This study also reveals, about 80 percent of sampled labourer do not work overtime during crushing season. Labourers mention that due to decline in sugarcane production in past, there are hardly any overtime available to them. Less than 15 percent of sampled labourers reported that they work overtime. Further, the labourers stated that hardly get one or two shifts in month for overtime. During the study, it has been found that all 190 permanent labourers received half hour rest in the day along with one day off in week during the crushing season. In addition to this, permanent labourers during off season also gets second and fourth Saturday as off. All 283 seasonal permanent labourers gets half hour rest in the day along with one day off in week. It has been found that none of contract labourers received day off in week. Rather, around 66 percent of contract labourers, reported that they get half hour in day as rest interval. One of the important factor is health and safety measures for labourers at the work. If the working conditions pose a threat to their health or safety, then monetary factors become secondary. The 80 percent of sampled labourers reported that present work doesn't affect their health. The remaining 20 percent sampled labourers, stated their health is affect while working in mills. The labourers reported few health problems such as body ache, hand and eye irritation, neck pain, body odour and knee problem. The labourers also stated increase in work load, age, not enough equipment, sometimes working without break, as reasons for health problems faced by them. During the study, it has been unfolded that predominant number of sampled labourers i.e. 92.36 percent, work during night shift during crushing season. Only 7.64 percent of sampled labourers stated that they don't work at night shift. The Regular and proper shift change system has been reported by all permanent labourers and seasonal permanent labourers covered in the study. The opposite tread has been observed in case for contract labourers. As the majority of them, more than 80 percent stated that there is no regular and proper system for changing shift during crushing season. Thus, this study clearly reveals permanent labourers and seasonal permanent have better working conditions as compared with contract labourers.

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MEASURING THE IMPACT OF IPO GRADING ON STOCK MARKET PERFORMANCE IN INDIAN STOCK

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ABSTRACT

SEBI is the main controller of Indian stock market had presented the idea of IPO grading. From being a voluntary procedure at its initiation it has turned into a mandatory procedure from May 2007. This was done so as to decline the data asymmetry between the retail financial specialists and qualified institutional buyers (QIBs) and to safeguard the abundance of retail financial experts from the interests in low quality Initial Public Offerings (IPOs). Initial public offering grades, which are based on the fundamentals of the organizations should establish quality flags about the future prospects of the organization's execution and subsequently guarantee better returns from the interests in quality IPOs. This study is an efforts to measuring the impact of IPO grading on performance of Indian stock market. For the purpose of the study total 237 IPOs selected which came after May 2007 furthermore, have IPO grades at the time of issue. The result indicates that, grading has no significant impact on share performance of Indian stock market.

Keywords: IPO, IPO Grading, NSE, Mandatory, Non mandatory period.

INTRODUCTION

The Idea Behind Introducing of IPO Grade

IPO grading is the grade assigned by a Credit Rating Agency registered with SEBI, to the initial public offering (IPO) of equity shares or any other security which may be converted into or exchanged with equity shares at a later date.

Procedure For IPO Grading In India

In India the process of IPO grading carried by the credit rating agencies like CRISIL, CARE, FITCH, BRICKWORKS & ICRA which are registered with SEBI and allotted grade on the scale of 1 to 5 fundamental where, 1 being the poor and 5 being with strong fundamental. Following is the legal frame work of the IPO grading in India.

Table No-1: Description of IPO Grades

Grade/Scale	Fundamentals
1/5	Poor Fundamentals
2/5	Below Average Fundamentals
3/5	Average Fundamentals
4/5	Above Average Fundamentals
5/5	Strong Fundamentals

There were numerous weak just as false issues used to hit the capital market. The quantity of such issues hit the rooftop, at whatever point the share trading system execution is additional common. Initial public offering Grade, utilized to change over the crucial nature of an organization to a straightforward number, as the normal speculators may do not have the pertinent information and aptitude to decode complex money related information. As per the SEBI rules, Credit Rating Agencies (CRAs) are expected to analyse organizations, to grade on the following parameters:

1. Business prospects and competitive position of the company;
2. Risks and prospects of new projects;
3. Company's financial position;
4. Quality of management;
5. Corporate governance practices; and
6. Compliance and litigation history

REVIEW OF LITERATURE**Rani Poonam, K P Kaushik (2015)**

The researcher has investigated pre impact of IPO and grade of value data on undervaluing of IPO. For the study purpose total 76 book building IPOs chosen from NSE. By using regression model and ratio analysis mainly two ratio, return on assets and debt to total assets, have significant impact on under-pricing. In addition researcher has try to highlight that, grading to equity has no impact on under-pricing as well additionally endeavour to feature the significance of a pre-IPO financial execution since when first time equity instruments of a corporate substance is exchanged auxiliary market, similar makes a speculator pay more.

Joshy Jacob, AgarwallaSobhesh Kumar (2015)

The researcher has examined whether the introduction of IPO grading has influence on demand pricing and efficiency. By using cross sectional regression of 182 selected graded IPOs of six year the researcher has found out that grades appear to have an impact on the demand of the institutional investors, it has no influence on the IPO pricing efficiency & difference in grading do not significantly explain the cross-sectional differences in market-adjusted under-pricing.

Jampala Rajesh C., P.Adilaxmi and DokkuSrinivasa Rao (2015)

To measures the impact of IPO grading performance during short term and long-term period total 146 IPOs selected through the book building process. By using correlation and other statistical techniques the study found that 60% of the listing companies on stocks traded below listing priceand only 4.25% return earn during the initial period which is lost 25% during next 3 year. Further it is found that IPO grading significantly affects IPOs after market performance, while the higher grade of IPO performed undervalue during the initial day of listing while exceedingly over performed in following three year of listing.

S.Saravanan, R.Satish (2014)

The study investigated the opportunities available for the retail investors to gain in the IPO through the IPO grading. For the purpose of study total 140 stocks selected during the period of 2009 to 2013 and study found that IPO grading has no effect on retail financial investors for choice of the stock, furthermore it's been discovered that IPO grading has positive impact towards listing gain and there is a moderate connection between retail investors intrigue and posting day returns.

RESEARCH GAP

From the above literature reviews it was found that most of the studies have done when IPO rating was mandatory. There is no comparative studies available for measuring the impact of IPO grading on stock market performance. Here, the researcher has made an attempt to measure the impact of IPO grading on stock market performance during the mandatory and voluntary time period.

OBJECTIVE OF THE STUDY

The objective of the study is to measure the impact of the IPO grading on stock market performance.

RESEARCH METHODOLOGY

Total 237 IPO offered to the public during the study period, out of that due to non-availability of data or insufficient of data researcher has eliminated 52 companies and finally researcher has selected 185 companies by applying judgemental sampling technique for the study purpose. The study is based on secondary data collected from NSE, BSE, and capital line data base and money control during the time period of 2010 to 2018. For data analysis and testing of hypothesis, we have applied Pearson correlation using SPSS (Demo Version 20).

DATA ANALYSIS OF THE STUDY**Demographic Information****Table No-2: Grading Activities of IPO during Various Years**

IPOs Activity	YEAR									Total
	2010	2011	20102	2013	2014	2015	2016	2017	2018	
Graded	62	40	11	5	4	1	---	---	---	123
Non- Graded	7	2	1	1	4	21	28	36	14	114

The above table no. 2 discloses the demographic information about the IPOs activity during the study time period. Out of the total sample 123 IPOs are graded and rest of the IPOs were none graded. From the table it has been seen that the Highest IPOs allotted grades in the year 2010 followed by year 2011 & 2012. During the study time period of 2016 to 2018 the IPOs were found non- graded as it was voluntary time period.

Table No-3: Total Issued IPO of Industrial Sector during the Study Period

Industrial Sector	Fre.	%	Industrial Sector	Fre.	%
Construction	11	4.6	Steel	10	4.2
Chemical	7	3.0	Telecommunication	8	3.4
Engineering	10	4.2	Textile & Synthetics	8	3.4
Finance & Banking	20	8.4	Jewellery	8	3.4
Food Processing	12	5.1	Infrastructure	6	2.5
Health Care	14	5.9	Real Estate	6	2.5
Automobile	2	0.8	Information Technology	6	2.5
Manufacturing	11	4.6	Investing	7	3.0
Education	7	3.0	Media & Entertainment	9	3.8
Mining/ Minerals	4	1.7	Electronic	6	2.5
Miscellaneous	30	12.7	Software	3	1.3
Paper And Pulp	2	0.8	Transportation	2	.8
Pharmaceuticals	4	1.7	FMCG	4	1.7
Plastics	2	0.8	Insurance	6	2.5
Power	10	4.2	Agriculture	2	0.8

The table no. 3 discloses the issued IPO by different industrial sectors. Out of the different 30 sector, finance and banking sectors seems generous in issued 20 IPO which is followed by Health Care, food & processing, manufacturing and construction sectors. While the least of the IPO issued by paper & pulp, plastics, agricultural and transportation sectors. While on the other side remaining industries had issued less than 10 IPOs during the study period.

Table No-4: Comparative Study of IPO Return of Graded and Non-Graded IPOs

Durations	Return (%)	
	Graded IPO	Non-Graded IPO
Day One	6.4306	14.4648
Day Seven	5.8440	15.4368
One Month	-.1172	15.7569
Three Month	-1.2687	27.3953
Six Month	10.8659	41.7898
One Year	.0377	44.6167
Two Year	-15.5690	25.5989
Three Year	-8.4048	11.6810

The above table no. 4 demonstrates the arrival of graded and non-graded IPOs return of the different time span. It has been seen that on the very first moment of graded IPO return found just 6.43%, while as contrast with non-graded IPOs it discovered 14.46% and return of non-graded IPO essentially increments from introductory day to finish of two year. While on the opposite side return of graded IPO discovered negative on the very first month, three month and long term period. On the finish of one year least of the IPO return found at 0.37% just to the financial specialists. Along these lines, from the above table it very well may be reasoned that, there is no effect of grading on execution of offer as mean score estimation of non-graded IPOs created higher return as contrast with Graded IPOs.

Table No-5: Performance of IPOs

Durations	N	Range	Min	Max	Sum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Return of day one	183	314.18	-72.44	241.74	1948.08	10.65	35.75	1277.8	1.967	.180	10.10	.357
Return of day seven	183	287.56	-81.10	206.46	1990.36	10.88	40.30	1624.4	1.304	.180	4.04	.357
Return of one month	183	239.35	-87.40	151.95	1502.47	8.21	40.88	1671.4	.762	.180	1.95	.357
Return of three month	175	436.21	-90.90	345.31	2300.42	13.15	58.06	3371.2	1.764	.184	6.27	.365
Return of six month	167	555.54	-90.83	464.71	4288.52	25.68	81.07	6571.9	1.812	.188	5.53	.374
Return of one year	144	718.68	-92.68	626.00	2546.43	17.68	104.34	10886.5	2.498	.202	9.67	.401
Return of two year	121	633.53	-99.50	534.03	-442.97	-3.66	87.89	7723.9	2.548	.220	11.27	.437
Return of three year	98	810.44	-99.75	710.69	-562.56	-5.74	120.11	14426.4	3.202	.244	14.40	.483

Table No-6: Performance of NIFTY 50 Index

Durations	N	Range	Min.	Max.	Sum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Niftyreturn of day one	184	6.19	-2.87	3.32	-11.70	-.06	.91	.83	.211	.179	2.028	.356
Niftyreturn of dayseven	184	14.96	-6.71	8.25	19.27	.10	2.28	5.21	.026	.179	.915	.356
Niftyreturn of one month	184	25.46	-10.43	15.03	163.53	.89	4.30	18.51	-.041	.179	-.142	.356
Niftyreturn of three month	176	28.88	-13.23	15.65	153.53	.87	6.20	38.46	-.012	.183	-.549	.364
Niftyreturn of six month	168	45.66	-18.39	27.27	621.06	3.70	9.10	82.81	.201	.187	-.494	.373
Niftyreturn of one year	145	67.87	-23.36	44.51	593.02	4.09	13.81	190.78	-.180	.201	-.588	.400
Niftyreturn of two year	122	61.45	-10.74	50.71	1443.06	11.83	16.31	265.90	.678	.219	-.575	.435
Niftyreturn of three year	99	73.87	-3.98	69.89	2243.53	22.66	20.15	406.11	.754	.243	-.258	.481

The table no. 5 shows the mean value of the return of IPOs from listing day to three year after listing show decline trend and range from 10.65 % to 8.21%, at the end of one month, while it found highest at 25.68% at the end of six month, which is found negative at the end of long term period. Variance of return also increased considerably over time, and standard deviation of return significantly increased from the initial day of listing to 36 month. So it can be concluded that Indian IPOs during the study time period found traded under price in listing day and underperformed during long period of time.

The table no. 6 represents the mean value of the nifty return of IPOs from listing day to three year. The market return vary from 35.75% to 120.11% in 36 month of listing and at the same the sample return (185 IPOs) 10.65% to -5.74%.

So from the above table no. 5 & 6 it can be concluded that there is no significance difference between selected IPOs and market index return. The IPOs stock market is producing positive return but selected sample IPOs yielding negative return.

HYPOTHESIS AND ITS TESTING

H₀₁: There is no significant linear relationship between IPO Grade and Various Return.

To test the above mentioned hypothesis, we have applied Pearson correlation test as per requirement.

Table No-7: Hypothesis and Its Testing

Variables	Test Applied	Correlation Value	P Value	Result
Raw Return	Parametric Test	-.064	.390	Insignificant
Market Return	Parametric Test	.013	.857	Insignificant
Day One Return	Parametric Test	-.065	.385	Insignificant
Day Seven Return	Parametric Test	-.064	.392	Insignificant
One Month Return	Parametric Test	-.101	.175	Insignificant
Three Month Return	Parametric Test	-.180*	.017	Significant
Six Month Return	Parametric Test	-.117	.132	Insignificant
One Year Return	Parametric Test	-.141	.092	Insignificant
Two Year Return	Parametric Test	-.063	.490	Insignificant
Three Year Return	Parametric Test	.113	.268	Insignificant

The above table no. 7 portrays Pearson Co-relation between IPO Grade and various returns. The result found Insignificant except three month return of IPO. As p value are greater than 0.05 except in case of three month, i.e. 0.17, so we cannot reject the null hypothesis. Means there is no significant linear relationship between IPO grade and selected variable except return of three month.

CONCLUSION

From the study it can be concluded that the selected IPOs below listing price during initial day of listing and underperformed in 36 month of listing. The IPOs started underperformed after one month of listing and highly underperformed during the 24 month and 36 month of listing. The market nifty 50 index return vary from the sample return of IPOs means the nifty 50 index yielding positive return but the sample IPOs found in negative return. So it can be said that the IPO grading has Inverse impact or there is no significant linear relationship between the IPO grade and performance of stock during the study.

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REACH AND RICHNESS FACTOR INDEX FOR SCHOLARLY PUBLICATIONS: A NEW ALTERNATIVE APPROACH

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ABSTRACT

Publication productivity is often considered to measure the performance of an institution or an author. The new measurement suggested and gives a solution as a new alternative approach for h-index and activity index. The h index is derived from the citations of the publications and the number of publications. The h-index does not include all the citations and it matches only partial citation with number of papers. There are four new approaches as alternative for h-index and three new approaches as alternative for the activity index. In order to verify the significance of the method derived for RF index and Reach activity index, case study with IIM research output, a dominant management institutions namely Indian Institution of Management, were taken for the analysis. Out of 20 IIMs, 13 were established before 2015, 6 were established in 2015 and one established in 2016. The institutions those were established before 2015 were taken up for the study. There were 13 IIMs established before 2015 and the faculty research publications of these institutions were taken up for the study. The data were collected from Scopus data base.

Keywords: h-Index, RF Index, Activity Index, Citations, IIM

INTRODUCTION

Publication productivity is often considered to measure the performance of an institution or an author. The performances were associated strongly with an individual faculty member's reputation, visibility, and advancement in the academic environment, particularly at research institutions and universities (Creamer, 1998). A well known research productivity indicator is the number of publications produced by scientists, institutions, or research groups.

The existing indexing techniques such as h index (Hirsch, 2005); h2 index (Kosmulski, 2006); g index (Egghe, 2006); a index (Jin, 2006); Normalized h index (hnom) (Sidiropoulos, Katsaros, and Manolopoulos 2007); r Index (Jin et al, 2007a); ar index, (Jin, 2007b); e index (Zhang, 2009); hg index, (Alonso 2010); p index (GanganPrathap, 2010); mapping techniques (Karpagam et al. 2011) are currently measured indices for scholarly publications.

To evaluate the productivity of research institutions and individual researcher and to map the growth of the research area, citation analysis, indices and mapping the trend techniques have become tools over the years.

In order to verify the significance of the method derived for RF Index (RFI) and Reach Activity Index (RAI), case study with IIM research output, dominant management institutions namely Indian Institution of Management, were taken for the analysis. Out of 20 IIMs, 13 were established before 2015, 6 were established in 2015 and one established in 2016. The institutions those were established before 2015 were taken up for the study. There were 13 IIMs established before 2015 and the faculty research publications of these institutions were taken up for the study. The data were collected from Scopus data base.

INDICES AND SCHOLARLY PUBLICATIONS

Large varieties of individual citation metrics have been proposed to measure the scientific output of individual authors and organization. The most widely disseminated of which is the h-index.

Collaborative papers attract more citations than those without any collaboration. Also articles written in international collaboration receive more citations than articles written in domestic collaboration, which in turn receive more citations than articles written in local collaboration, thereby, suggesting that internationally co-authored articles represent a more important segment of the world science. Some researchers showed that research by larger groups tends to be more influential.

h-index - definitions

- The h-index "gives an estimate of the importance, significance, and broad impact of a scientist's cumulative research contributions" Hirsch, J. E. (2005). An index to quantify an individual's scientific research output. Proceedings of the National Academy of Sciences, 102(46), 16569-16572

- “A scientist has an index h if h of his or her N_p papers have at least h citations each and the other $(N_p - h)$ papers have less than or equal to h citations each.” Hirsch, J. E. (2005). An index to quantify an individual's scientific research output. *Proceedings of the National Academy of Sciences*, 102(46), 16569-16572
- “If an h -graph for an author has an h index of 12, it means that of the total number of documents selected to produce the graph, 12 of the documents have been cited at least 12 times. Published documents with fewer citations than h , in this case less than 12, are considered, but would not count in the h index.” http://help.scopus.com.ezproxy.auckland.ac.nz/flare/Content/h_auteval.htm
- “The value of h is equal to the number of papers (N) in the list that have N or more citations.” http://images.isiknowledge.com.ezproxy.auckland.ac.nz/WOK46/help/WOS/h_citationrpt.html#footnote

The other features of h -index were

- h index is derived from the citations of the publications and the number of publications.
- h -index does not include all the citations and it match only partial citation with number of papers.
- The h -index can never exceed the total number of publications of an author published.
- The h -index can never get decreased.
- Increase in h -index necessarily needs even citation in all the papers.
- Increase of the citations of the particular paper will not be changed the h -index by the Institution / author.
- If the next publications of the h -index get matches cited then h -index increase.
- If the uncited publications gets cited then h -index increase
- Both publications and citations increase then only h -index increase.
- Author who produces a small number of influential papers with high citation rates will have low h -indexes if citations to their other papers are low, even though their contribution to a discipline may be high.
- Author with short publishing careers might appear disadvantaged by low h -indexes, even though their impact in a discipline may be high

NEED FOR DEVELOPING A NEW METHOD RICHNESS FACTOR INDEX

The drawback of the majority of the metrics is that they take into consideration the number of publications. There are many reasons why the total number of citations cannot be used to adequately compare individual researchers.

- There was usually more than one author for each publication. The citation may have from any one of the authors.
- The author may use different analysis tools and, techniques for their analysis. This tool and technique may be an impact of fetching the citation.
- The publication may be published in a journal which has high impact factor. Twenty five percent of the most highly cited articles can account for 90% of a journal's IF. Adam D: The counting house. *Nature*. 2002; 415(6873): 726–9.
- The references may be included for the sake of inclusion for current publications.
- Currently the database that includes the publications such as SCOPUS, IEEE, Proquest, Ebescio etc. has also impact on citation.
- Organisation in which the author belongs also influences the citation.

It has been decided to construct an index that accounts for number of authors contributed for the publications and age of publications.

Collaborative papers attract more citations than those without any collaboration. Also articles written in international collaboration receive more citations than articles written in domestic collaboration, which in turn receive more citations than articles written in local collaboration, thereby, suggesting that internationally co-authored articles represent a more important segment of the world science (Narin and whitlow, 1990). Some researchers showed that research by larger groups tends to be more influential (Crane, 1972; Goffman and Warren, 1980)

Measure of Reach, Reach Activity Index and Richness Factor Index

In this study, Chelvan and Gopal formula for Measure of Reach, Reach Activity Index and Richness Factor Index (Tamizhchelvan and Gopalakrishnan 2018a, 2018b, 2018c, 2018d), a new derived method has been employed. The new alternative approach for activity index is calculated for Institutions of individual Country with three varieties like Reach, Unreach/Reach and Unreach activity indices. The new alternative approach for h-index is calculated for specifically on paper, organization, year and author with four Richness Factor Indices. The methods and their formulae were shown in Table 1

Table 1 Reach, Reach Activity Index and Richness Factor Index

In the case of above indices, higher the value has been considered as higher the order. However higher value were expected for RAI and RF Index whereas least value expected for URAI and UAI since these were related with uncited publications.

APPLICATION OF RF INDEX IN MEASURING THE PUBLICATIONS

The variants used in calculating RF index were

- TP – Total Publication
- RP – Reach Publications (CP – Cited Publications)
- RPP – Reach Publication Percentage
- URP – Unreached Publications (UCP – Uncited Publications)
- TC – Total Citations
- AoP – Age of Publication
- TA – Total Authors
- RA – Reached Authors (Total Authors from cited publications)
- URA – Unreached Authors (Total Authors from uncited publications)
- AoY – Age of Year
- PoP – Period of Publish
- NoP – Number of Paper

CASE STUDY WITH IIM RESEARCH OUTPUT

In order to verify the significance of the method derived for RF index and Reach activity index, a dominant management institutions research output, namely Indian Institution of Management, were taken for the analysis. Out of 20 IIMs, 13 were established before 2015, 6 were established in 2015 and one established in 2016. The institutions those were established before 2015 were taken up for the study. There were 13 IIMs established before 2015 and the faculty research publications of these institutions were taken up for the study. The data were collected from Scopus data base.

OVERVIEW OF IIMS PUBLICATIONS

Indian Institute of Management (IIM), a pioneering institution, was initiated by Jawaharlal Nehru, the first Prime Minister of India, based on the recommendation of the Planning Commission. IIMs are registered as societies under the Indian Societies Registration Act. Each IIM is autonomous and exercises independent control over its day-to-day operations. However, the administration of all IIMs and the overall strategy of IIMs are overseen by the IIM council. The IIM Council is headed by India's Minister of Human Resource Development and consists of the chairpersons and directors of all IIMs and senior officials from the Ministry of Human Resource Development of the Government of India. There exist 20 IIMs of which 6 of them were established after 2015, in this study, the publications 13 IIMs are available in the Scopus only taken for this study.

Query term used for retrieving the data from Scopus data base as follows

The research output data from Scopus, a multidisciplinary online database which is an international indexing and abstracting database, have been downloaded using the search terms as follows Query:

((AF-ID ("Indian Institute of Management Ahmedabad" 60033308) OR

AF-ID ("Indian Institute of Management Bangalore" 60071271) OR

AF-ID ("Indian Institute of Management Calcutta" 60070899) OR
 AF-ID ("Indian Institute of Management Indore" 60105397) OR
 AF-ID ("Indian Institute of Management Kashipur" 60107372) OR
 AF-ID ("Indian Institute of Management Kozhikode" 60079444) OR
 AF-ID ("Indian Institute of Management Lucknow" 60072366) OR
 AF-ID ("Indian Institute of Management Raipur" 60107378) OR
 AF-ID ("Indian Institute of Management Ranchi" 60107373) OR
 AF-ID ("Indian Institute of Management Rohtak" 60107374) OR
 AF-ID ("Indian Institute of Management Shillong" 60107375) OR
 AFID ("Indian Institute of Management Tiruchirappalli" 60107376) OR
 AF-ID ("Indian Institute of Management Udaipur" 60107377)))

A total of 6061 publications were identified during the period of 1965 to 2018. The overview of these 13 IIM publications was shown in Table 2.

Table 2 Overview of IIMs Publications

Out of 6061 publications, 1548 (25.5%) papers were solo research where as 4513 (74.5%) of papers collaborative in nature. 67.8% of publications were published during the block period of 2010-2018. It is followed by 1266 (20.9%) papers during the block period of 2001-2009. In all nearly 89% of publications were published during the period 2001 and 2018. Only 3811 (62.9%) of papers were cited and has received a total citation of 44490 which has been contributed together by 10131 authors. The average citation per paper works out to 7.34 per paper.

Further the contribution of 13 IIMs were analysed based on total papers published, reached papers, un reached papers, total authors, total citation, solo research, collaborated research and top author of the institutions. . The same has been shown in Table 3.

Table 3 Citation Analysis of Publications

Out of the total papers contributed by all IIM together, only 62.88% of papers were cited. In other words 37.12% of papers were not cited. Cited paper total authors works out to 65.42%. Uncited papers total authors' works out to 34.58%.

The institution wise RAI, URAI, UAI and RF were calculated based on the formulae stated above and the same has been shown in Table 4 along with h-index of the respective institution.

Table 4 Institution wise Richness Factor Index Vs h-Index

The RF index values were in three decimal places. In order to obtain precision and for easy understanding the RF index has been multiplied by 103 i.e. by 1000. The same has been shown in table 5.

The RAI ranges between 0.54 and 1.07. Similarly the URAI ranges between 0.82 and 2.49 where as UAI ranges between 0.88 and 1.60. The RF index ranges between 0.002 and 0.025. In the case of h-index it ranges between 7 and 47.

It can be seen from the above table, IIM-A and IIM-C has same h-index. Based on the h-index it cannot be inferred which organization can be ranked first. The RAI value will enable to identify that IIM-C (1.07) has edge over IIM-A (1.03) even though IIM-A has more citation and more number of papers. URAI and UAI value confirms the order. It can also be seen from the table that RAI of IIM-A and IIM-B has same value where as h-index of these organisation were 47 and 46. Based on URAI and UAI value, it can be inferred that IIM-B as edge over IIM-A. The RF index also confirms that IIM-B has edge over IIM-A. The RF index of IIM-A works out to 0.002 which is least among the IIMs, since it may be because of Period of publish were more and as well as collaborated authors. It can be inferred that IIM-A has started the research output early comparing the others.

IIM-S has the maximum RF index works out to 24.91 whose h-index is 9. This indicates that IIM-S contributions have highest richness in output. This is because of reasonable citations and minimal total authors even though it has minimum publications.

The same has been observed for the recently established IIMs score more RFI and less RAI value with less Citation comparatively with oldest IIMs.

The rank assigned based on RF and h- index were compared and the same has been shown in Table 5 and in figure

Table 5 Richness Factor Vs h-index – Rank Comparison

Figure 1 Green colour: Up bars and Red colour: Down bars

Top Author Richness Factor

The richness factor for top authors has been calculated and the same has been compared with h-index shown in Table 6 and figure 2.

Table 6 Top Author Richness Factor Vs H Index

Figure 2 Green colour Up bars and Red colour Down bars

Table 7 Year wise Richness Factor Vs h-index – Rank Comparison

According to h-index, IIM-A top author positioned first place. It is followed by IIM-C second rank, IIM-B third rank and IIM-Rohtak fourth rank. The least rank were obtained by IIM-T(13th rank), IIM-R(12th rank) and IIM-U(11th rank).

Their rank based on RF index, IIM-A(12th rank); IIM-C(13th rank); IIM-B (7th rank) and IIM-Rohtak (6th rank). These authors obtained least rank.

According to RF index, IIM-S positioned first rank. It is followed by IIM-K (2nd rank); IIM-Raipur (3rd rank) and IIM-I(4th rank).

Comparison of RF index and other index

It is found essential to compare the RF index over other indices. Therefore attempt has been made to compare the same. The comparison of RF index and other index has been shown in Table 8.

Table 8 Comparison of RF Index with other index.

The RF index thus derived has a supremacy over other index.

CONCLUSION

At any circumstances their h- index cannot get lowered than the one they obtained even if they have not published any paper or even not cited. h-index will be more if the author publish more number of papers. If an author has only 4 papers, the author h-index cannot get more than 4 whereas if the papers has more citation, the author RF-index gets raised.

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of IIMs. The analyses performed within this article are only examples. They should not be utilized in real-world analytic products as they are based only on very limited and data collected from SCOPUS database. Assumptions made within the analysis are not reflective of the position of any officials in IIMs.

The case study clearly indicates the reliability of method than h-index. The RF Index can increase or decrease with time, as it depends on the age of publications, number of authors in a publication, number of citations. It can vary over the years as well as every year.

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Table-1: Reach, Reach Activity Index and Richness Factor Index

Index Name	Formula	
Reach Percentage	Reach output of Institution / Total output of Institution	
Reach Activity Index (RAI)	$RAI = \frac{R_{ij}/T_{io}}{R_{oj}/T_{oo}}$ <p> R_{ij}= Number of Reached publications for the particular Institutions a particular country. T_{io}= Total publications for the particular Institution R_{oj}= Number of Reached / Cited publications of all the Institutions T_{oo} = Total publications of all the Institutions </p>	
Unreach/Reach Activity Index (URAI)	$URAI = \frac{R_{ij}/U_{io}}{R_{oj}/U_{oo}}$ <p> R_{ij}= Number of Reached publications for the particular Institution / a particular country U_{io}= Total Unreached / Uncited publications for the particular Institution R_{oj}= Number of Reached / cited publications of all the Institutions U_{oo} = Total Unreached / uncited of all the Institutions </p>	
Unreach Activity Index (UAI)	$UAI = \frac{U_{ij}/T_{io}}{U_{oj}/T_{oo}}$ <p> U_{ij}= Number of Unreached publications for the particular Institution / a particular country T_{io}= Total publications for the particular Institution U_{oj}= Number of Unreached / uncited publications of all the Institutions T_{oo} = Total publications of all the Institutions </p>	
Richness Factor Index (RFI)	RFI = No. of citations/no. of authors*age of the paper	
Richness Factor Index for a paper (RFI_{Paper})	$RFI_{Paper} = \frac{Cit_{Paper}}{(Tot_{author} * AoP)}$ <p> RFI_{Paper} = Richness Factor Index of paper Cit_{Paper} = No. of Citations of a paper Tot_{author} = Total No. of authors of a paper AoP = Age of a paper </p>	<p> AoP = (Base year of the study – Paper published year) + 1 Eg. Let Base year may be 2018 Paper publication year may be 2017 Therefore $AoP = (2018-2017) + 1 = 1+1 = 2$ </p>
Richness Factor Index for an Organization (RFI_{Org})	$RFI_{Org} = \frac{Cit_{Org}}{(Tot_{author} * NoP)}$ <p> RFI_{Org} = Richness Factor Index of an Organization Cit_{Org} = No. of Citations of an Organization Tot_{author} = Total No. of authors of an Organization NoP = Number of a paper </p>	
Richness Factor Index for a year (RFI_{Year})	$RFI_{Year} = \frac{Cit_{Year}}{(Tot_{author} * AoY)}$ <p> RFI_{Year} = Richness Factor Index of Year Cit_{Year} = No. of Citations of a Year Tot_{author} = Total No. of authors of a Year AoY = Age of a Year </p>	<p> AoY = (Current Year – Year of publication)+1 Eg. Let the year publication 2004 Current year = 2018 Therefore $AoY = (2018-2004)+1 = 14+1 = 15$ </p>
Richness Factor Index for an author (RFI_{Author})	$RFI_{Author} = \frac{Cit_{Author}}{(Tot_{Paper} * Tot_{author} * PoP)}$ <p> RFI_{Author} = Richness Factor Index of an Author Cit_{Author} = No. of Citations of an Author Tot_{Paper} = Total No. of Paper by an Author Tot_{author} = Total No. of Collaborated authors PoP = Period of Publish </p>	<p> PoP = (Last paper published year – First published Paper year) + 1 Eg. Let first published paper year 2002 Last published Paper year may be 2018 Therefore $AoP = (2018-2002) + 1 = 16+1 = 17$ </p>

Table-2: Overview of IIMs Publications

S.No.	Description	No. of papers	%
Authorship pattern			
1	Single	1548	25.5
2	Two	2262	37.3
3	Three	1374	22.7
4	Four	514	8.5
5	Five	179	3.0
6	Six & above	184	3.0
Citation			
1	Cited papers	3811	62.9
2	Uncited papers	2250	37.1
Research pattern			
1	Solo	1548	25.5
2	Collaborated	4513	74.5
Block Years			
1	1965-1973	35	.6
2	1974-1982	88	1.5
3	1983-1991	147	2.4
4	1992-2000	417	6.9
5	2001-2009	1266	20.9
6	2010-2018	4108	67.8
Total publications		6061	

Table-3: Citation Analysis of Publications

S.No.	IIMs	ToP	ToA	Total Citations	Cited Paper	Uncited Paper	Cited paper total authors	Uncited paper total Authors
	Total	6061	15487	44490	3811	2250	10131	5356
	%				62.88	37.12	65.42	34.58
	Average				11.67	2.69	4.39	1.13

Table-4: Institution wise Richness Factor Vs h-Index

S.No.	IIMs	ToP	Cited	Uncited	ToA	Cited authors	Uncited Authors	Citations	RAI	URAI	UAI	RF	RFI *1000	h-index
1	IIM-A	1542	999 (64.79)	543 (35.21)	4070	2919 (71.72)	1151 (28.28)	13852	1.03	0.92	0.95	0.002	2.21	47
2	IIM-B	1156	752 (65.05)	404 (34.95)	3368	2276 (67.58)	1092 (32.42)	10027	1.03	0.91	0.94	0.003	2.58	46
3	IIM-C	1285	867 (67.47)	418 (32.53)	3172	2220 (69.99)	952 (30.01)	10936	1.07	0.82	0.88	0.003	2.68	47
4	IIM-I	393	203 (51.65)	190 (48.35)	902	447 (49.56)	455 (50.44)	1758	0.82	1.59	1.30	0.005	4.96	18
5	IIM-Kashipur	83	41 (49.4)	42 (50.6)	184	92 (50)	92 (50)	176	0.79	1.74	1.36	0.012	11.52	8
6	IIM-K	387	251 (64.86)	136 (35.14)	913	558 (61.12)	355 (38.88)	1946	1.03	0.92	0.95	0.006	5.51	21
7	IIM-L	567	358 (63.14)	209 (36.86)	1256	780 (62.1)	476 (37.9)	3661	1.00	0.99	0.99	0.005	5.14	27
8	IIM-Raipur	169	84 (49.7)	85 (50.3)	503	262 (52.09)	241 (47.91)	477	0.79	1.71	1.35	0.006	5.61	11
9	IIM-R	74	32 (43.24)	42 (56.76)	199	74 (37.19)	125 (62.81)	132	0.69	2.22	1.53	0.009	8.96	7
10	IIM-Rohtak	185	119 (64.32)	66 (35.68)	383	234 (61.1)	149 (38.9)	815	1.02	0.94	0.96	0.012	11.50	15

11	IIM-S	66	40 (60.61)	26 (39.39)	163	108 (66.26)	55 (33.74)	268	0.96	1.10	1.06	0.025	24.91	9
12	IIM-T	65	29 (44.62)	36 (55.38)	160	70 (43.75)	90 (56.25)	222	0.71	2.10	1.49	0.021	21.35	7
13	IIM-U	89	36 (40.45)	53 (59.55)	214	91 (42.52)	123 (57.48)	220	0.64	2.49	1.60	0.012	11.55	7
	Total	6061	3811 (62.88)	2250 (37.12)	15487	10131 (65.42)	5356 (34.58)	44490						

Table-5: Richness Factor Vs h-index – Rank Comparison

S. No.	IIMs	RF	RFI×1000	RF rank	h-index	h-index rank
1	IIM-A	0.002	2.21	13	47	1
2	IIM-B	0.003	2.58	12	46	2
3	IIM-C	0.003	2.68	11	47	3
4	IIM-I	0.005	4.96	9	18	4
5	IIM-Kashipur	0.012	11.52	4	8	5
6	IIM-K	0.006	5.51	8	21	6
7	IIM-L	0.005	5.14	10	27	7
8	IIM-Raipur	0.006	5.61	7	11	8
9	IIM-R	0.009	8.96	6	7	9
10	IIM-Rohtak	0.012	11.50	3	15	10
11	IIM-S	0.025	24.91	1	9	13
12	IIM-T	0.021	21.35	2	7	11
13	IIM-U	0.012	11.55	6	7	12

Table-6: Top Author Richness Factor Vs H Index

S.No.	Inst. Name	Author name	Total no. of papers	Total no. Authors	Total Citations	First Published Year	Last Published Year	RF Index	RFI x 1000	RF Rank	h-index	h-Rank
1	IIM-A	Shukla, P.R.	69	254	1472	1992	2018	0.003	3.11	12	22	1
2	IIM-B	Gosh, P	39	126	369	2010	2018	0.008	8.34	7	10	3
3	IIM-C	Mukerjee R.	124	270	995	1990	2018	0.001	1.02	13	18	2
4	IIM-I	Dey S.	18	41	81	2010	2018	0.012	12.20	4	5	8
5	IIM-Kashipur	Batra S.	12	28	26	2015	2018	0.019	19.35	2	3	10
6	IIM-K	Balooni K.	20	54	168	2000	2018	0.008	8.19	8	8	7
7	IIM-L	Ali J.	31	52	179	2007	2016	0.011	11.10	5	8	6
8	IIM-Raipur	Gupta S.	30	105	218	2013	2018	0.012	11.53	3	9	5
9	IIM-R	Bala P.K.	9	20	6	2013	2017	0.007	6.67	11	2	12
10	IIM-Rohtak	Khare A.	45	96	290	2011	2017	0.01	9.59	6	10	4
11	IIM-S	Roychoudhury B.	8	23	34	2010	2018	0.021	20.53	1	3	9
12	IIM-T	Godwin T.	7	15	4	2013	2017	0.008	7.62	10	2	13
13	IIM-U	Roy S.	12	27	13	2014	2018	0.008	8.02	9	3	11

Table-7: Comparison of RF Index with other index

S. No.	Various indices	RF index
1	It is based on citation alone	It is based on citation, age of the paper, number of authors
2	Calculation based on one variable	Calculation based on several variable such as citation, year, authors
3	Citations and cited papers alone taken in to	It considered total citation and uncited papers also

	consideration. That to only partial papers and partial citation alone considered. Uncited papers were not considered	in to consideration.
4	Total papers published were not considered	Total published paper were considered
5	Index values were of increasing nature	Index value were get increased or decreased
6	Number of co-authors not considered	Number of Co-authors also considered.
7	Position of the co-author does not matters	Position of the co-author matters.
8	Equal weightage were given for all authors.	No equal weightage were given for authors.
9	Once high index value obtained, it will not get reduces and will be everlasting	The index value depends on number of authors, age of a paper, number of co others.
10	Continuous effort may not necessary	Continuous effort is mandatory to retain the value.

Figure-1: Green colour: Up bars and Red colour: Down bars

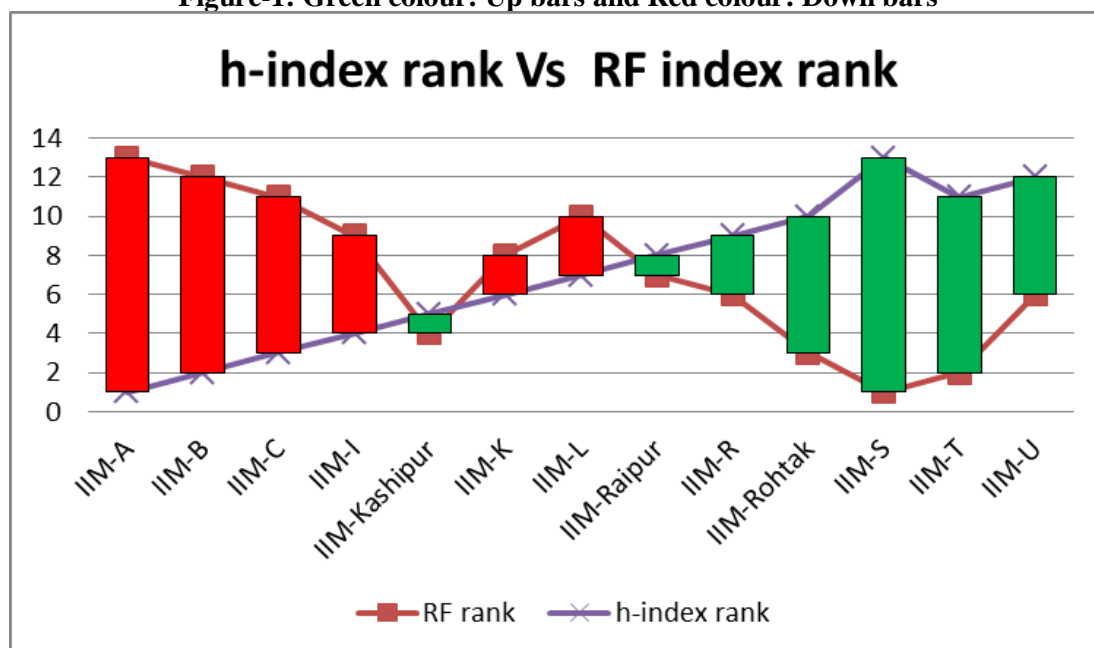
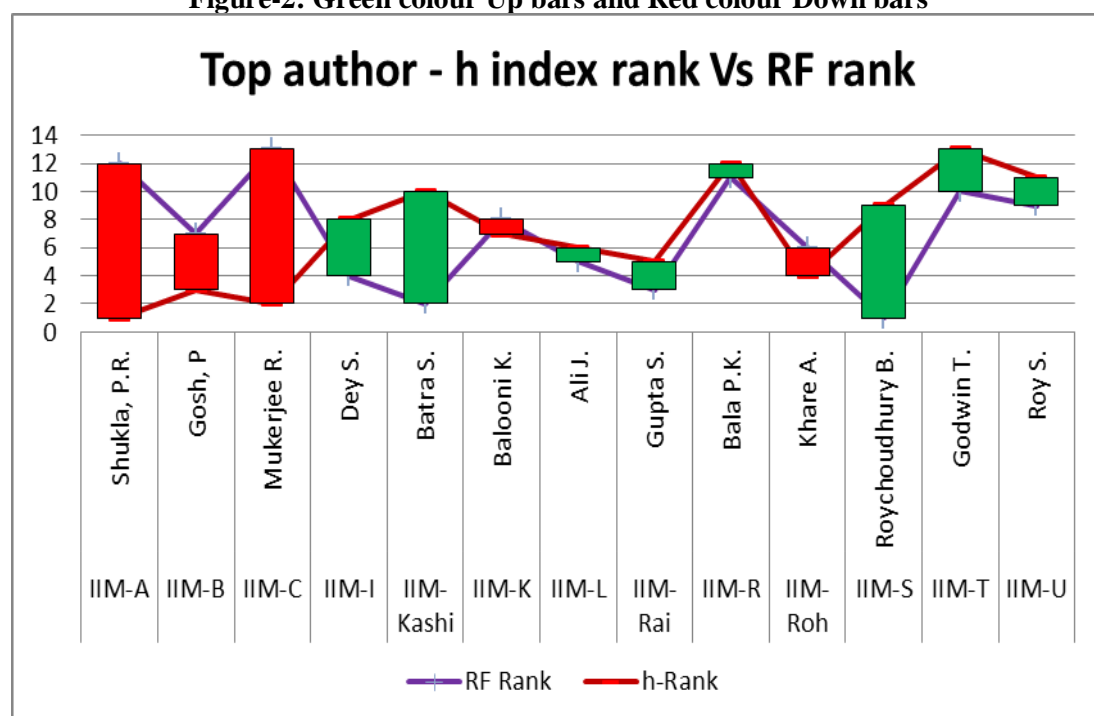


Figure-2: Green colour Up bars and Red colour Down bars



REVIEW OF THE BANKING OMBUDSMAN SCHEME 2006 AS AMENDED 2017

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ABSTRACT

Since many people are availing banking services and banking services also got expanded through technological advancements, disputes pertaining to banking services especially between the bankers and customers are increasing. Each of these disputes are having small value still, it might take considerable time and cost for the disposal through the conventional means. For overcoming this constrains, RBI has constituted the institution of Banking Ombudsman across the country. Based on the recommendations of Narasimhan Committee, RBI has established the institution of Banking Ombudsman for the speedy resolution of bank-customer disputes. The author had written an article "Analysis of Banking Ombudsman Scheme" in the journal of Current Tamilnadu Cases on 2016 (Current Tamil Nadu Cases Journal Section in December, 2016). However, in 2015 RBI advised 34 banks to establish Internal Ombudsman in their respective banks and the same Scheme got revised in 2018. The 2006 Banking Ombudsman scheme also got amended substantially in 2017. Considering these recent developments, the author has done comparative analysis of all Ombudsman Scheme along with Internal Ombudsman mechanism in this article.

Keywords: Banking Ombudsman, Internal Ombudsman, Bank-customer dispute settlement.

INTRODUCTION

Banks are the integral part of every trade and commercial transactions. Due to technological advancements, banking services are easily available and accessible. Union government's initiative on Jan Dhal account, almost everyone in India is availing banking services including online banking facilities. There are 31.20 crore accounts opened under Pradhan Mantri Jan-Dhan Yojana (PMJDY) As on February 28, 2018

Since many people are availing banking services and banking services also got expanded through technological advancements, disputes pertaining to banking services especially between the bankers and customers are increasing. Each of these disputes are having small value still, it might take considerable time and cost for the disposal through conventional means. Customer satisfaction and customer grievance resolution has been the primary focus of RBI. Various committees of RBI including Sri R. G. Saraiya commission, Sri. R. K. Talwar commission, Goiporia Committee have highlighted the significance of timely and admirable services by the banks to the customers. Narasimhan Committee on Banking and Financial Sector Reforms had suggested that Banking Ombudsman can be established for the disposal of bank-customer disputes in speedy and harmonious manner. Based on this recommendation, RBI has framed Banking Ombudsman Scheme and established Banking Ombudsmans across the country.

ORGANIZATION OF BANKING OMBUDSMAN

RBI has framed the Banking Ombudsman Scheme in 1995 and established the institution of Banking Ombudsman under section 35A of Banking Regulation Act 1949. This Scheme has been amended by RBI in 2002, 2006, 2009 and 2017. At present, there are 21 Banking Ombudsman are functioning across the country. The territorial limit of each Ombudsman has been prescribed by RBI.

The banking Ombudsman scheme is applicable across India including Jammu and Kashmir. This scheme is applies to all banks which are having place of business in India irrespective of their place of establishment. Earlier, the 1995 Banking Ombudsman Scheme had excluded Regional Rural Banks and Primary Cooperative Banks from its application. From 2002 onwards, this scheme also applies to Regional Rural Banks and Primary Cooperative Banks.

The person who is working in RBI and possess the qualification/rank of chief general manager or general manager may be appointed as Banking Ombudsman by RBI. A person may be appointed as Ombudsman for the period of 3 years at a time. For the better functioning of each Banking Ombudsman, RBI can facilitate them with special secretariats and staffs. The 1995 and 2002 schemes had specified that a person who was having the knowledge of banking, public administration, legal and financial services should be appointed as Banking Ombudsman. The 2002 scheme specified the minimum age limit as 55 for the post of Banking Ombudsman. the appointed Banking Ombudsman hold his office minimum of three years or extended 2 years or till the age of 65 which ever is earlier.

The 1995 Ombudsman scheme mandated each bank must borne proportionately the salary and other expenditure of Banking Ombudsman. the 2002 Scheme also mandated the banks to share the remuneration and other expenditures of the Banking ombudsman. However, from 2006 onwards, for ensuring impartiality and fairness, RBI itself has taken care of the remuneration and other expenditure of the Banking Ombudsman.

POWERS AND FUNCTIONS OF BANKING OMBUDSMAN

Banking Ombudsman must hear the complaints filed by the bank customers which are related to banking services. After the receipt of the complaint, the Banking Ombudsman should try to settle the dispute through conciliation or mediation; if conciliation/mediation fails then, he can pass an award on merits of the case.

The Banking Ombudsman can make his own budget in accordance with RBI expenditure rules 2005 and consultation with RBI. The Banking Ombudsman has an obligation to submit its annual report on the expenditures and review of yearly performances of the Banking Ombudsman. RBI can consolidate the reports all Banking Ombudsman and publish it for public interest. RBI publishes annual report of Banking Ombudsman in every year on its website.

DISPUTE RESOLUTION PROCESS BY THE BANKING OMBUDSMAN:

Pecuniary Jurisdiction of the Banking Ombudsman:

The Banking Ombudsman can hear the complaints of the bank customer on the grounds of complaints mentioned under clause 8 of 2006 Scheme. Clause 7 of the Banking Ombudsman Scheme states that the Banking Ombudsman can hear the complaints irrespective of the pecuniary value of the complaint and try to resolve the dispute through conciliation or mediation. However, The Banking Ombudsman cannot pass an award which exceeds the the pecuniary value of 20 Million.

Subject matter/grounds of complaint:

The customer of a bank can file his complaint before the concerned Banking Ombudsman which is having territorial jurisdiction if he has any grievance of any one of the following banking services,-

- 1) Nonpayment or delay in payment of Drafts, bills, cheques and other payment instruments.
- 2) Non acceptance of small denomination notes/coins without sufficient cause which have been tendered for any purpose or commission charges.
- 3) Non acceptance or delay in acceptance of invert remittances.
- 4) Delay or failure in issuance of bankers cheques, pay orders or drafts.
- 5) Not following the prescribed working hours by the bank.
- 6) Not providing or delay in providing banking services which have been promised by the bank or its selling agent.
- 7) Not crediting or delay in crediting of proceeds to the customer account.
- 8) Not returning the deposit to the customer.
- 9) Not following the rate of interest guidelines given by RBI with regards to the deposits or money in the savings account or current account.
- 10) Complaints relating to NRI account including remittances.
- 11) Refuse to open a deposit account by a customer.
- 12) Levy of charges by the bank without giving notice to the customer.
- 13) Non observance of RBI directions with regards to ATM card and prepaid card operations by the bank including,
 - a. Without dispense of the amount by the ATM the account has been debited.
 - b. Account has been debited more than once for a withdrawal.
 - c. The ATM has dispensed less or expense amount to the customer.
 - d. The bank has debited an account without the use of debit card or details of the card by the customer.
 - e. Use of stolen or clone debit cards.
 - f. Any other issues pertaining to debit card operations.

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- 14) Delay in closing or refuse to close the deposit account of the customer.
 - 15) Not following the bank practices and commitments to the customers code issued by Banking Codes and Standards Board of India and which has been adopted by the bank.
 - 16) Non observance of RBI directions with regards to credit card operations by the bank including,-
 - a. Unwanted calls on add on cards or insurance for credit cards.
 - b. Levy of annual charges by the bank on the credit card which has lifetime validity.
 - c. Wrong debits and wrong billings upon the credit card.
 - d. Inappropriate approach by the bank or recovery agency for the recovery of the credit card amount including threatening calls.
 - e. non observance of the RBI guidelines on engagement of recovery agents by the bank.
 - f. Wrong reporting of credit information by the bank to the credit information Bureau.
 - g. Non rectification or delay in rectification of wrongly reported credit information by the bank to the credit information Bureau.
 - h. Any other issues pertaining to credit card operations.
 - 17) Delay in disbursement or non disbursement of pension (it has happened due to the bank's fault).
 - 18) Non acceptance or failure to accept the payment towards tax which is required by RBI or government.
 - 19) Non observance of RBI guidelines relating to mobile banking and electronic banking including,-
 - a. Delay or failure to make the online payment or online fund transfer.
 - b. Unauthorized electronic or online fund transfer.
 - 20) Non issuance or failure to issue or redemption of government securities by the bank.
 - 21) Non observance of RBI guidelines on providing para banking services like sale of insurance, mutual funds and any other third party financial instruments by the banks including the following,-
 - a. Sale or improper sale of unworthy third party financial products.
 - b. Lack of transparency in the sale of such products.
 - c. Nondisclosure of dispute resolution mechanism available for the disputes pertaining to these products.
 - d. Refuse to facilitate or delay in facilitation the customer by the bank after the sale.
 - 22) Force closer of deposit account without any sufficient reason without giving proper notice to the customer.
 - 23) The customer who has grievances on loans issued by the bank can also file his grievances before the banking Ombudsman including the following issues,-
 - a. Not following RBI's specifications on interest rates.
 - b. Delay in the disposal of the loan application.
 - c. Non acceptance of loan application by the bank without any reason.
 - d. Not following the lenders code as specified by RBI and adopted by the bank.
 - e. Non observance of any other instructions/directions issued by Rbi.
 - f. non observance of the RBI guidelines on engagement of recovery agents by the bank.
 - 24) any other grievances which may be specified/notified by RBI.

The 1995 Banking Ombudsman Scheme had permitted the customers to file their grievances pertaining to bank guarantee and letter of credit commitment (failed to honour) of the bank to the customer. The 2002 Scheme also retain this ground within the ambit of the Banking Ombudsman However, this ground has been taken away by the 2006 Scheme.

COMPLAINT FILING PROCEDURE

The customer who has any one or more of the grievances listed in the clause 8 of the Banking Ombudsman Scheme 2006 can file his complaint before the Banking Ombudsman who has territorial jurisdiction over that bank. The customer or his authorised representative other than advocate can file his complaint. If the complaint is relating to credit card or other services which have centralised operations then, the customer can file his complaint to the banking Ombudsman in whose jurisdiction the billing address of the customer is located. Aggrieved customer also can file his complaint through online.

The Banking Ombudsman also hear the complaints received by RBI or central government under this scheme. The Department of Administrative Reforms and Public Grievances of Government of India has provided a web based application CPGRAMS for citizens to lodge online complaints. Government Departments and banks are subordinate offices under this system to receive and redress complaints forwarded through this portal. RBI is the Nodal Office for RBI. Twenty Ombudsman offices are subordinate offices for banking related grievances.

The customer must state his name and address, details of the bank, details of his grievances and the remedy which the customer wants Along with his signature. In the complaint, He also supposed to enclosed necessary documents which explains or supports his grievance. If a complaint is been filed in online, the print out of the same be treated as submission of complaint to the Banking Ombudsman by the customer.

The customer must adhere the time limit of initiation of his dispute resolution before the Banking Ombudsman. The complaint must filed within one year from the date of the unsatisfactory reply from the bank about the grievance of the customer. If the bank has not given any reply then, the customer should approach the Banking Ombudsman within one year and one month from the date of the service of notice about the grievance of the customer to the bank.

The Banking Ombudsman may reject the complaint in the following circumstances

- a. The customer has filed his complaint before the Banking Ombudsman without approaching the concerned bank for his grievance.
- b. The complaint is vexatious or frivolous one.
- c. The complaint is been filed after the expiry of the limitation period prescribed by the Indian Limitation Act for such claims.
- d. The complaint is related to the same cause of action which has been resolved by the Banking Ombudsman already irrespective of whether the complaint has been received from the same complainant or not.
- e. The same complaint is related to the same cause of action of dispute which is pending or disposed by any other forum or court or arbitral tribunal.
- f. The complaint Requires the consideration of elaborate documentary and oral evidence (
- g. The complaint is been made without any sufficient cause
- h. (the complaint is not not pursued with reasonable diligence
- i. The customer has not suffered no loss or injury or any inconvenience because of the aggrieved act of the bank.

RBI stated that complaints pertaining to demonetisation related issues are outside the pervue of Banking Ombudsman. During the implementation of Demonetisation in November 2016 and post Demonetisation, people had suffered a lot on withdrawal of cash and exchange of old currencies.

In M/S Durga Hotel Complex vs Reserve Bank Of India & Ors, The Supreme Court held that the Banking Ombudsman will lose its jurisdiction when the same dispute is been referred to any other forum by either of the parties. In this case, a partnership obtained loan from a bank and the bank had decided to grant the loan in instalments. After the release of first instalment, the bank declaim to pay the remaining loan. The loanee had approached the Banking Ombudsman for mandating the bank to perform its obligations. Meanwhile, the bank has approached Debt Recovery Tribunal (DRT) for the recovery of loan which had been granted to the loanee.

COMPLAINT HEARING PROCEDURE

After the receipt of the complaint, the Banking Ombudsman shall send the copy of the same to the concerned bank or the branch under the advice of Nodal officer who is responsible for facilitating the bank for Banking Ombudsman affairs. The Banking Ombudsman try to resolve the dispute through conciliation or mediation. For ensuring the settlement, the Banking Ombudsman can ask the parties to submit their supportive documents and

other information. If the documents are not conclusive enough to understand the dispute then, Banking Ombudsman may arrange the meeting with the parties and discuss about the disputes and try for the settlement. If the parties are agree for the settlement then, the Banking Ombudsman can pass an order of settlement along with the parties terms of settlement.

If the disputants could not reach any settlement within one month from the date of the receipt or further period prescribed by the Banking Ombudsman then, he can decide the case on merit and pass an award or reject the complaint in accordance with principles of banking practices and the evidence which are submitted by the parties. Banking Ombudsman must give brief reasons for the award and the award should contain the details of the specific performance of the bank or compensation which is to be paid to the complainant.

Banking Ombudsman has the power to call documents from the parties. The 2017 amendment has added one presumption clause with regards to non submission of documents by banks. The Banking Ombudsman may presume that failure of bank on the submission documents or certified copies could be the reason such information or that document might against the bank.

However, the Banking Ombudsman can pass an award up to INR 20 Million or the claimed compensation by the customer which ever is lower. He can grant compensation up to 1 Lakh for the time, expenses and mental agony to the customer. Earlier, compensation for mental agony this was only available to credit card related claims. The Banking Ombudsman cannot pass the award beyond these pecuniary limits. The term compensation denotes the exclusive amount involved in the dispute.

APPEAL PROCEDURE

The parties who are unsatisfied with the decision of the Banking Ombudsman can approach the appellate authority. The complainant can approach the Banking Ombudsman against the decision of rejection of complaint by the Banking Ombudsman under clause 13 (d)-(g) or challenging the awarded compensation. The 1995 Scheme did not provide this appeal mechanism to customer. The 2002 Scheme did not provide appeal facility against the decision of Banking Ombudsman on rejection of complaints.

If the complainant wants to file the appeal then, he must approach the appellate authority within 30 days from the date of decision of the Banking Ombudsman or 30 days from the date of communication of the decision by the Banking Ombudsman. The Deputy Governor of the Consumer Education and Protection Department is the designated Appellate Authority for hearing the appeals under the Banking Ombudsman Scheme. The banks can file appeal against the award of the Banking Ombudsman within 30 days from the date of receipt of letter of acceptance of award by the customer. However, the bank may file its appeal upon the permission from its chairman or managing director or executive director or the person who is having above equal rank.

ENFORCEMENT OF AWARD

The complainant who wishes to enforce the Banking Ombudsman's award shall send his letter of acceptance of award to the concerned bank for its execution within 30 days from the date of the receipt of the award. If the customer fails to send his acceptance letter as on time then the award become laps. The bank should furnish its compliance report to the Banking Ombudsman within 30 days from the date receipt of the acceptance letter from the customer. If the parties have decided to file appeal then, the same time frame will commence after the decision of appellate authority.

Case las relating to banking ombudsman's jurisdiction

1) Prabir G Dastidar vs Icici Bank Ltd. on 22 January, 2014

In this case, a consumer (bank customer had deposited INR 11000 amount through cheque for his credit card due. However, the bank had not entered that amount in his credit card account. Being aggrieved by the act of the bank, the customer had approached the Banking Ombudsman. The Banking Ombudsman had instructed to credit INR 11000 to his account and pay INR 7000 as compensation for mental agony.

The customer had filed his case before the District consumer forum. For the enhancement of compensation for mental agony. the state commission held that the consumer can approach consumer forum even after the same dispute has been adjudicated by Banking Ombudsman. However, the state commission had not altered the award passed by the Banking Ombudsman and held that this compensation is justifiable.

2) T.N. Parameswaran Pillai vs Banking Ombudsman and Ors. on 10 November, 1999

A customer has asked loan of INR 10 lakhs from the a bank and he had given INR 20 Lakh worth property as collateral. However, the bank had granted only INR 75000. The customer had approached the Banking Ombudsman for the enhancement of his loan. However, the Banking Ombudsman refused to hear his grievance and stated that Banking Ombudsman cannot hear the complaints relating to enhancement of loan. Later, Kerala High Court had endorsed the decision of the Banking Ombudsman.

3) Balla Rama Rao vs Office of the Banking Ombudsman,

In this case a landlord approached Banking Ombudsman for getting interest for delay in payment of rent arrears by a tenant bank. The Banking Ombudsman held that it cannot hear the complaints relating to tenancy matters. Andhra Pradesh High Court had upheld the decision of the Banking Ombudsman.

4) Shri Umakant Choure vs Banking Ombudsman And Ors,

the Banking Ombudsman held that Advocate fee is outside the perview of Banking Ombudsman's jurisdiction. the Madhya Pradesh High Court reaffirmed the decision of Banking Ombudsman

PERFORMANCE ASSESSMENT OF THE BANKING OMBUDSMAN:

RBI publishes comprehensive annual report on Banking Ombudsman every year. It contains the details of complaint received by each Banking Ombudsman, types of complaints received, settlement rate and other information. The number of complaints received by Banking Ombudsman offices is rising every year. During 2016-17, the Banking Ombudsman offices had received 1,30,000 complaints which is 27% higher than the previous year 2015-16. Out of these complaints, the Banking Ombudsman office have disposed 92% (1,25,000) complaints. the appellate authority was handled 18 appeal cases during 2016-17 and it had disposed 11 cases.

INTERNAL BANKING OMBUDSMAN:

RBI has advised 34 banks (26 public sector banks, 5 private banks and 3 foreign banks) to appoint Independent Ombudsman for ensuring the internal grievance redressal mechanism of the respective banks. The internal Ombudsman is supposed to take care of rejected or partially disposed of the complaint by the respective banks. However, till September 2018,, the role of Internal Ombudsman was unclear. Respective banks staffs have been appointed as Internal Ombudsman. Though, RBI mandated the banks to state the decision of internal Ombudsman on the grievance of the customer still, no banks given their reply in this manner. Further, the customers were not allowed to directly access Internal Ombudsman.

In September 3, 2018, RBI issued a public notice under section 35A of Banking Regulation Act and mandated all scheduled banks excluding Regional Rural Banks (RRB) to establish an independent Banking Ombudsman in their respective banks. This notification has provided statutory backup for the Internal Ombudsman and it ensures the independence of Banking Ombudsman from the respective banks. The internal Ombudsman can be appointed for the period of 5 years and he can be re appointed. The Internal Ombudsman should be independent from the bank and he is supposed to give his report only to the bank customer service committee. The author has come across a peculiar internal Ombudsman scheme from Allahabad Bank. As per this scheme, the Internal Ombudsman can hear the grievance from the customers directly and the pecuniary value of the grievance is not supposed INR 3 Lakh. The parties can file appeal against the decision of the Internal Ombudsman to the manager.

In S.Mahendran vs K.Elango, Senior Manager, Canara Bank, , the Banking Ombudsman had passed an award against the Canara Bank to pay compensation to the customer who had taken loan through pledge. The Banking Ombudsman found that the bank not adhere RBI directions on interest rate on loan. However, Canara bank had not implemented the award till 2015. The customer had again approached the Banking Ombudsman in 2015, however, the Banking Ombudsman refused to hear the dispute on the ground of lack of jurisdiction. Later this dispute reached before the High Court of Madras, RBI explained that the 2006 Ombudsman Scheme does not permit the Banking Ombudsman to review or re look at the decision of the previous Ombudsman and informed about the Internal Ombudsman mechanism to the High Court. The High Court has ordered Canara Bank's Internal Ombudsman to look in to the matter and decide the revised calculation of the claim and disposed the dispute within 4 weeks.

ADVANTAGES OF BANKING OMBUDSMAN SCHEME

- a. Filing the complaint before the banking Ombudsman is very easy. Even customer can file his complaint through online.
- b. There is no fee for filing complaint before the Banking Ombudsman. If the customer who is a consumer can approach consumer forum for his grievance redressal but, he requires to pay filing fee and his complaint will be heard along with other pending cases.
- c. The Banking Ombudsman follows simple procedure for the disposal of the complaints. Which saves the time and cost of the complainant and the bank.
- d. The Banking Ombudsman helps the parties to resolve their disputes through mediation and it passes the award on merit only if the parties are not resolving their dispute through mediation. This approach of the

Banking Ombudsman will ensure the future relationship of the banker and customer should be well maintained.

DISADVANTAGES OF THE BANKING OMBUDSMAN SCHEME

- a. The author believes this Scheme is not an alternate Scheme for the dispute resolution; it is an optional scheme for the resolution of banking disputes. Because, the implementation of the Banking Ombudsman award lie in the customer's hands. If the customer does not want to to enforce award then, the entire process of the Banking Ombudsman become redundant.
- b. The Banking Ombudsman cannot provide additional expenditure incurred by the complainant for filing and arguing his dispute before the Banking Ombudsman (advocate fee).
- c. The Banking Ombudsman cannot grant compensation for mental agony, loss of time and cost due to the deficiency in service by the bank to the customer as compare to the consumer forums. Till July 2017, Banking Ombudsman had not given the power to award compensation for mental agony, loss of time and money to the customer excluding credit card related claims.
- d. If either party file the same pending dispute before any other forum then Banking Ombudsman will lose its jurisdiction.

CONCLUSION

RBI has brought the Banking Ombudsman Scheme for the speedy disposal of the bank-customer grievances. Compare to earlier Ombudsman scheme, 2006 scheme is efficient one. It clearly express the boundaries of Banking Ombudsman and enhance the scope of appeal by the customer. Most of Banking Ombudsman decisions are accepted by the customers. However, there is overlapping jurisdiction between Banking Ombudsman, Consumer Forums and Debt Recovery Tribunal may result in ineffective functioning of Banking Ombudsman. The author feels that the Banking Ombudsman should be given equal status as other alternate dispute resolution mechanism mentioned under section 89 of Civil Procedure Code so that the option of the customer to choose other forum in case of non satisfaction of the outcome of the decision. At the same time, the author urges that impartiality of Ombudsman should be vital for getting much preference recognition from consumers.

The author feels that institution of "Internal Ombudsman" is appreciable one. However, its implementation must be proper and the "Internal Ombudsman" should kept independent from respective banks. Otherwise, the object of the creation of such institution becomes redundant. Further, the 2018 revised Internal Ombudsman scheme is not available in public domain and public don't aware about this institution. The author urges RBI to disclose the information relating to Internal Ombudsman and ensure that all banks are providing information about their Internal Ombudsman details to public.

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31. The Banking Ombudsman Scheme 2006 as amended 2017 clause 10(1).
32. The complaint requires consideration of elaborate documentary and oral evidence , without any sufficient cause, not pursued with reasonable diligence, no loss or damage or inconvenience caused to the complainant.
33. The Banking Ombudsman Scheme 2006 as amended in 2017.
34. Annual report of Banking Ombudsman Schenme 201-17.
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TELEVISION DEPENDENCY: A STUDY ON RURAL WOMEN IN TAMIL NADU

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ABSTRACT

Television presents the viewers a different world, and it provides the viewer the much needed relaxation. Since television is available in the homes, women viewers might become dependent on television viewing. This study tries to find out if rural women in Villupuram District of Tamil Nadu are dependent on watching television. This study is based on the findings of a UGC- UPE funded project.

INTRODUCTION

People spend a lot of time viewing television. Some researchers say that, this devotion to television simply means that people enjoy television and make a conscious decision to watch it. Other researches have consistently suggested that some television viewers call themselves television addicts since they are unable to control their television viewing time. This study tries to find out if rural women in Villupuram District of Tamil Nadu are dependent on watching television. This study is based on the findings of a UGC- UPE funded project.

REVIEW OF LITERATURE

Researchers studied the reasons why people watch television very often, and said that it is a source of some pleasant relaxation, it is readily available, and it is a well-established habit (Verplanken & Orbell, 2003). The power of habit and the pleasure of being entertained seem to be irresistible (Mundorf & Brownell, 1990). Studies on overall television viewing patterns have found that viewers tend to be loyal to specific channels and programmes (Webster & Washkag, 1983). Other studies have found viewers exhibit genre loyalty (Brosius, Wober & Weimann, 1992).

Researchers explain television dependency by way of explaining substance dependence. When it comes to substance dependence, it is described as a disorder that includes spending a lot of time using the substance, at times over using it, or making efforts to reduce. This might include giving up on important family, societal or other activities to use the substance, or undergoing withdrawal symptoms when stopping the usage of substance.

People who watch a lot of television seem to go through the same criteria. Since television takes a person to a different world, it provides a person the much needed distraction and escape and this makes a person dependent on watching television. The difficulty arises when people strongly sense that they ought not to watch as much as they do and yet find themselves strangely unable to reduce their viewing (Kubey & Csikszentmihalyi, 2002). This state can be defined as a state when viewers are said to become dependent on television.

Researchers (Kubey & Csikszentmihalyi, 2002), studied people's reactions to television. The researchers have undertaken laboratory experiments in which they have monitored the brain waves (using an electroencephalograph, or EEG), skin resistance or heart rate of people watching television. To track behavior and emotion in the normal course of life, as opposed to the artificial conditions of the lab, researchers have used the Experience Sampling Method (ESM). They say that habit-forming drugs work in similar ways. A tranquilizer that leaves the body rapidly is much more likely to cause dependence than one that leaves the body slowly. This is precisely because the user is more aware that the drug's effects are wearing off. Similarly, viewers' feel less relaxed if they stop viewing and this may be a significant factor in not turning the television set off.

Therefore, the irony of television is that people watch a great deal longer than they plan to, even though prolonged viewing is less rewarding (Kubey & Csikszentmihalyi, 2002). For some, an unease or guilt that they are not doing something more productive and are viewing television may also accompany the viewing. Researchers in Japan, U.K. U.S. have found that this guilt occurs much more among middle-class viewers than among less affluent ones.

Even though television does seem to meet the criteria for substance dependence, not all researchers would go so far as to call television addictive. McIlwraith (1998) reported that "displacement of other activities by television may be socially significant but still fall short of the clinical requirement of significant impairment." He argued that a new category of "television addiction" may not be necessary if heavy viewing stems from conditions such as depression and social phobia. At the same time, millions of people sense that they cannot readily control the amount of television they watch and feel that they are television-dependent.

Rubin and Windahl's (1986) uses-and-dependency model places media users within a broader social framework that constrains or facilitates an individual's dependence on a medium. Social structures, in combination with gratifications sought and the media system, produce dependency on a medium that in turn determines the effect the medium produces. Within this model, dependency on a medium may be a function of available resources, such as when a lonely individual has no other alternative to fulfill needs for companionship and turns to television for comfort. In the present study, it can be said that rural women become dependent on television since in most of the rural homes the television is the only readily available means of getting information or entertainment.

Dependency may be revealed through a number of ways. It could be through thoughts, feelings, or behaviors. For example, the dependency on a medium may influence the amount of time a person chooses to spend with a particular medium. In this model, individuals develop dependency on a medium when they sense a lack of functional alternatives or when their choice for other media use are restricted. Therefore, the decision to spend time with television is characterized by a desire to satisfy basic psychological wants and needs. This could be to maintain a good mood, or to gratify a desire, or for information seeking.

METHOD

This study attempts to find out rural women's dependency on television viewing. The participants of the study were 514 rural women from Villupuram District of Tamil Nadu. These rural women were selected from the villages in Villupuram district of Tamil Nadu.

INSTRUMENT

A survey instrument was used to collect data. The questionnaire included a 5 point Likert –type scale from 'Very Often' to 'Never' and was used to measure rural women's dependency on television viewing. Higher scores indicated lower Television Dependency.

ANALYSIS

TV Dependency (TVD)

Table: TVD 1

Variable: I get angry when someone disturbs me when I am watching television	Light Viewers	Moderate Viewers	Heavy Viewers
Very Often	8%	19%	21%
Often	15%	36%	48%
Sometimes	17%	18%	20%
Rarely	41%	15%	6%
Never	19%	12%	5%

For the statement 'I get angry when someone disturbs me when I am watching television' 41% of light viewers answered rarely followed by 19% of light viewers answered never, 48% of heavy viewers answered often followed by 21% of heavy viewers answered very often and 36% of moderate viewers answered often followed by 19% of moderate viewers answered very often.

Table: TVD 2

Variable: I dislike being distracted while watching television	Light Viewers	Moderate Viewers	Heavy Viewers
Very Often	11%	19%	22%
Often	13%	38%	49%
Sometimes	15%	17%	20%
Rarely	44%	15%	6%
Never	17%	11%	3%

For the statement 'I follow up with I dislike being distracted while watching television' 44% of light viewers answered rarely followed by 17% of light viewers answered never, 49% of heavy viewers answered often followed by 22% of heavy viewers answered very often and 38% of moderate viewers answered often followed by 19% of moderate viewers answered very often.

Table: TVD 3

Variable: I have repetitive thoughts about the television program that I watch	Light Viewers	Moderate Viewers	Heavy Viewers
Very Often	8%	20%	26%

Often	10%	35%	47%
Sometimes	15%	13%	15%
Rarely	49%	17%	8%
Never	18%	15%	4%

For the statement 'I have repetitive thoughts about the television program that I watch' 49% of light viewers answered rarely followed by 18% of light viewers answered never, 47% of heavy viewers answered often followed by 26% of heavy viewers answered very often and 35% of moderate viewers answered often followed by 20% of moderate viewers answered very often.

Table: TVD 4

Variable: I talk about television programmes when I am not watching them	Light Viewers	Moderate Viewers	Heavy Viewers
Very Often	11%	23%	25%
Often	10%	32%	50%
Sometimes	15%	14%	16%
Rarely	42%	19%	7%
Never	22%	12%	2%

For the statement 'I talk about television programmes when I am not watching them' 42% of light viewers answered rarely followed by 22% of light viewers answered never, 50% of heavy viewers answered often followed by 25% of heavy viewers answered very often and 32% of moderate viewers answered often followed by 23% of moderate viewers answered very often.

Table: TVD 5

Variable: I postpone other activities for watching television	Light Viewers	Moderate Viewers	Heavy Viewers
Very Often	8%	24%	27%
Often	10%	36%	45%
Sometimes	17%	13%	18%
Rarely	41%	21%	6%
Never	24%	6%	4%

For the statement 'I postponed other activities for watching television' 41% of light viewers answered rarely followed by 24% of light viewers answered never, 45% of heavy viewers answered often followed by 27% of heavy viewers answered very often and 36% of moderate viewers answered often followed by 24% of moderate viewers answered very often.

Table: TVD 6

Variable: I feel lost without television	Light Viewers	Moderate Viewers	Heavy Viewers
Very Often	5%	21%	23%
Often	9%	31%	39%
Sometimes	15%	15%	17%
Rarely	44%	17%	15%
Never	27%	16%	6%

For the statement 'I feel lost without television' 44% of light viewers answered rarely followed by 27% of light viewers answered never, 39% of heavy viewers answered often followed by 23% of heavy viewers answered very often and 31% of moderate viewers answered often followed by 21% of moderate viewers answered very often.

Table: TVD 7

Variable: Watching television is one of the most important activities in my daily life	Light Viewers	Moderate Viewers	Heavy Viewers
Very Often	8%	23%	28%
Often	12%	35%	46%
Sometimes	13%	14%	12%
Rarely	41%	19%	9%
Never	26%	9%	5%

For the statement 'Watching television is one of the most important activities in my daily life' 41% of light viewers answered rarely followed by 26% of light viewers answered never, 46% of heavy viewers answered often followed by 28% of heavy viewers answered very often and 35% of moderate viewers answered often followed by 23% of moderate viewers answered very often.

Table: TVD 8

Variable: Every day I look forward to watch television programmes	Light Viewers	Moderate Viewers	Heavy Viewers
Very Often	4%	23%	30%
Often	10%	32%	43%
Sometimes	15%	16%	10%
Rarely	49%	18%	12%
Never	22%	11%	5%

For the statement 'Every day I look forward to watch television programmes' 49% of light viewers answered rarely followed by 22% of light viewers answered never, 43% of heavy viewers answered often followed by 30% of heavy viewers answered very often and 32% of moderate viewers answered often followed by 23% of moderate viewers answered very often.

DISCUSSION

From the study, it is found that rural women who are heavy television viewers are the ones who get angry when someone disturbs them when they are watching television, they dislike being distracted while watching television. They have repetitive thoughts about the television program that they watch, they talk about television programmes when they are not watching them and postpone other activities for watching television. They feel lost without television. Watching television is one of the most important activities in their daily life, and every day they look forward to watch television programmes.

CONCLUSION

Rural women who are heavy viewers of television are the ones who feel dependent on television. They exhibit a strong dependency towards television viewing. This could be because the rural women are mostly confined to their homes after a long day's work. They do not have any other alternative for both information and entertainment other than television viewing. This habit of viewing television for long hours can make them become dependent on television. Television provides an alternate world for the rural women which in turn makes them dependent on it.

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**ASSESSMENT OF HUMAN RESOURCE MANAGEMENT PRACTICES FOCUSING ON
MOTIVATION OF EMPLOYEES: THE CASE STUDY OF KABUL PROVINCIAL COUNCIL**

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ABSTRACT

This study was conducted on the Assessment of Human Resource Management practices and the impact of compensation on the motivation of employees with special reference to Kabul provincial council. Its primary objective was to identify the major problems encountered in utilization and motivation of Human Resources; and to suggest possible remedies to alleviate these problems. To this effect, basic questions were raised pertaining to the approaches to professional and supporting staff compensation, recruitment and selection; the criteria used to select; factors affecting recruitment and selection process, views of staff on the executives, managerial approaches, manager employee communication, training and development; and the problems encountered and the solutions sought in resolving these problems. The data were obtained from the management body of the organization as well as from the professionals and supporting staff of this organization. These data were gathered mainly through questionnaires and interviews. The data obtained were quantitatively and qualitatively analyzed using relevant statistical tools, including regression analysis, correlation analysis, tables and percentages. It was found that lack of appropriate authority of the HRM department to perform its responsibilities was the major problem for lack of motivation of the employees of the organization. Finally, the major findings of the study were summarized, conclusion was drawn and recommendations were suggested.

Keywords: Compensation, Organisational practices, Recruitment, Selection

INTRODUCTION

In any organization, of all the resources required to attain the organizational goals, the most important and crucial element is the human resource. Thus, creating an organization which facilitates the condition for effective and efficient performance of workers on one hand; and staffing the organization with the appropriate people on the other hand becomes the most primary task of management of an organization. (Heneman *et al.*, 1987) In their book entitled "HRM", Byars and Rue (1987) stated that an organization or a business cannot succeed without proper management of its human resources since the management of human resource is very important. Therefore, any organization or business firm is nothing in the absence of proper utilization of human resources without which the whole lot of the organization success would be impossible. In other words, the number and quality of employees does not guarantee the organizational prosperity in its own right.

The major concern of this study, therefore, is to examine the human resource management practices in general; and the human resource management problems with special reference to Kabul provincial council in particular. Accordingly, the particular situation which the researcher observes daily at the workplace triggered him to investigate the case in detail; and to identify the problems that revolve around HRM functions on areas of recruitment and selection, training and development, compensation packages, placement or assignment, etc. and other related managerial practices with respect to the authorities and responsibilities given to the human resource management unit in the organization.

STATEMENT OF THE PROBLEMS

The effectiveness of Kabul provincial council depends upon its ability to acquire and effectively use the existing workforce to achieve its goal. To this end, the Human Resource Management unit of the organization should have a definite plan appropriate for the recruitment, selection, assignment, training and development, compensation and proper utilization of its human resources. According to the general manager, the organization currently spends 72.5% of its annual recurrent budget for salary of employees. Researcher observed the problem of not practicing of proper HR practices and also management is not worrying about motivation of employees in the organization. This research result may solve the gap of not proper utilization of HR resource practices and also give some guideline to adopt some techniques for motivation of employees.

The general objective of this study was to identify the prevailing problems related to the recruitment, selection, placement, compensation, training and development, and motivation of employees that prevent the goals of the organization from being achieved. It also focuses on sketching the manner in which human resources have been handled in the study area and suggest how it would better be managed towards efficient attainment of organizational objectives.

METHODOLOGY

Research Design

The research design used for this research work was descriptive as well as explanatory research design. The essence of this was an attempt to investigate the relationship between independent variable “Human Resource Management” and the dependent variable “Organization Achievement”. In other words the study looked at the effective management of Human Resource and the Organization Achievement.

Sample size and sampling Techniques

Since the human resource management bodies were few in number, all of them, that is 11 (100%), were included in the study by employing availability sampling because of their potentiality to generate reliable information. With regard to the sampling of managerial, professional and supporting staff respondents of the other departments, 70 of 140 employees (50%) of this category were included in the study by employing random sampling technique.

Data collection

The data for the study were obtained from primary and secondary sources. Primary data were collected by observation, interview and questionnaire. Mostly, closed-ended questions were included in the questionnaires to use the results in SPSS. Semi-structured interview was also made with the HRM manager. As secondary sources, the available relevant literatures were consulted to acquire knowledge and insights in the area of the study. Besides, documents and guiding principles related to the recruitment, selection, placement, compensation, etc. and utilization of professional and supporting staff were thoroughly reviewed in order to obtain background information about issue under study.

Model specification

As mentioned earlier, the models known as correlation analysis, simple linear regression analysis and one sample t-test were used to test the hypothesis. The hypothesis was formulated to test the relationship between compensation and motivation of employees. Accordingly, compensation was treated as an independent variable and motivation as a dependent variable. That is to say compensation replaces X and Motivation replaces Y in the formula used. The formula for coefficient of correlation is:

$$r = \frac{\sum(X - \bar{X})(Y - \bar{Y})}{(n - 1) s_x s_y}$$

And the formula for regression analysis is:

$$Y' = a + bX$$

After using the data in the software, the strength and direction of influence between the variables was determined and finally, the hypothesis was tested using one sample t-test.

Results

Following are the some major results of questionnaire and interview in the form of tables and figures which allow researcher to draw conclusion on research questions

Table-1: Gender * qualification Cross tabulation

			Qualification				Total
			Graduate	Diploma	Certificate	12 Complete	
Gender	Male	Count	24	10	0	2	36
		% within gender	66.7%	27.8%	.0%	5.6%	100.0%
		% within qualification	80.0%	38.5%	.0%	100.0%	60.0%
	Female	Count	6	16	2	0	24
		% within gender	25.0%	66.7%	8.3%	.0%	100.0%
		% within qualification	20.0%	61.5%	100.0%	.0%	40.0%
Total		Count	30	26	2	2	60
		% within gender	50.0%	43.3%	3.3%	3.3%	100.0%
		% within qualification	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Own survey result

This implies that male employees had more qualifications than females. This in turn shows that male employees had the capacity to control key work positions because of their qualification.

Table-2: Orientation to new Employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Orientation	32	45.7	47.1	47.1
	take training	2	2.9	2.9	50.0
	start work	30	42.9	44.1	94.1
	Other	4	5.7	5.9	100.0
	Total	68	97.1	100.0	
Missing	99	2	2.9		
	Total	70	100.0		

Source: Own survey result

This shows that the organization didn't give orientation for many employees.

Table-3: Placement criteria

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Management decision	24	34.3	34.3	34.3
	work experience	8	11.4	11.4	45.7
	Qualification	16	22.9	22.9	68.6
	employees' competence	6	8.6	8.6	77.1
	Other	16	22.9	22.9	100.0
	Total	70	100.0	100.0	

Source: Own survey result

This reveals that management decision was superior to qualification of employees during placement of employees.

Table 4: Participation of managers in placement decision

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	8.6	25.0	52.6
	No	18	25.7	74.92	100.0
	Total	24	34.3	100.0	
Missing	99	46	65.7		
	Total	70	100.0		

Source: Own survey result

This indicates that the decision of placement is made by few managers in the organization.

Table-5: Transparency of selection criteria for trainees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	16	22.9	25.8	25.8
	fairly poor	14	20.0	22.6	48.4
	Good	14	20.0	22.6	71.0
	very good	14	20.0	22.6	93.5
	Excellent	4	5.7	6.5	100.0
	Total	62	88.6	100.0	
Missing	99	8	11.4		
	Total	70	100.0		

Source: Own survey result

This shows that the transparency of the selection criteria is minimal.

Table-6: Consistency of training

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	24	34.3	40.0	40.0
	fairly poor	10	14.3	16.7	56.7
	Good	16	22.9	26.7	83.3
	very good	6	8.6	10.0	93.3
	Excellent	4	5.7	6.7	100.0
	Total	60	85.7	100.0	
Missing	99	10	14.3		
Total		70	100.0		

Source: Own survey result

Table reveals the idea of respondents in relation to consistency of training given to employees of the organization. This shows that the training given to employees of the organization lacks consistency.

Table-7: Relationship between job and training

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	18	25.7	29.0	29.0
	fairly poor	14	20.0	22.6	51.6
	Good	10	14.3	16.1	67.7
	very good	12	17.1	19.4	87.1
	Excellent	8	11.4	12.9	100.0
	Total	62	88.6	100.0	
Missing	99	8	11.4		
Total		70	100.0		

Source: Own survey result

Table above shows respondents' ideas regarding whether the trainings given to employees of the organization were job related. This reveals that the trainings provided by the organization to employees of the organization usually were not job related.

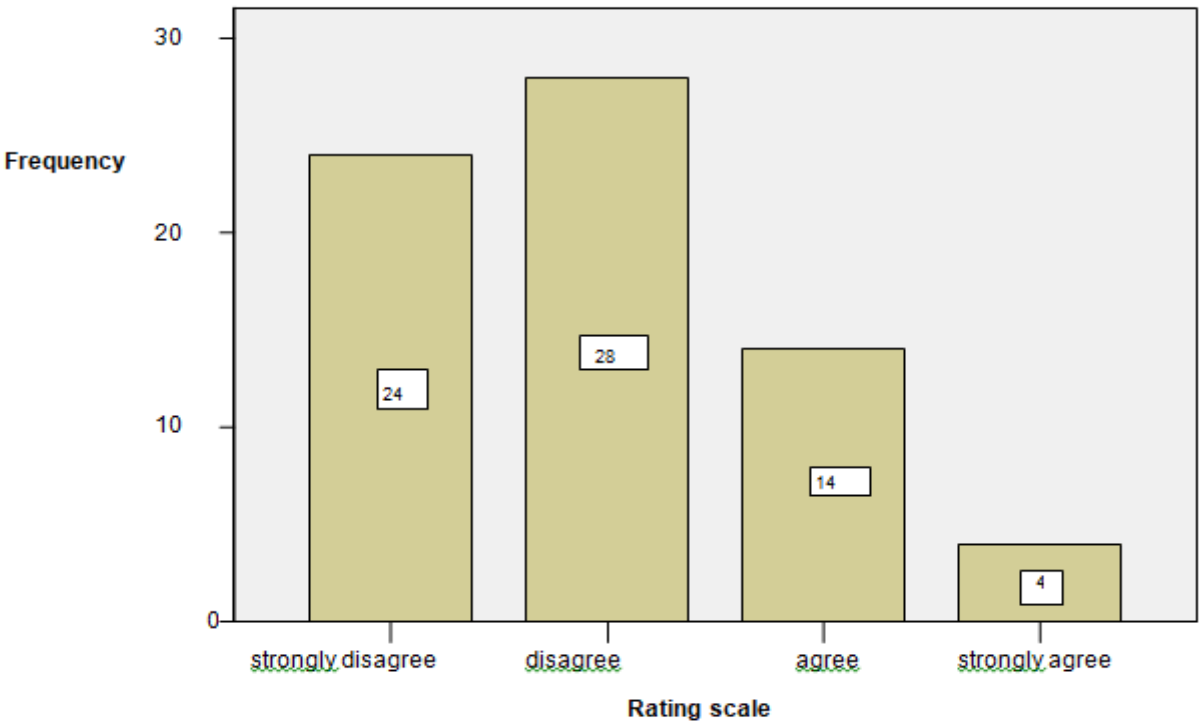
Table-8: practicability of training

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	14	20.0	22.6	22.6
	fairly poor	16	22.9	25.8	48.4
	Good	14	20.0	22.6	71.0
	very good	14	20.0	22.6	93.5
	Excellent	4	5.7	6.5	100.0
	Total	62	88.6	100.0	
Missing	99	8	11.4		
Total		70	100.0		

Source: Own survey result

Table above depicts the response of respondents regarding whether the skills obtained from the trainings provided by the organization to its employees can be put easily in to practice. This implies that it is difficult to apply the skills obtained from trainings immediately in to practice.

Figure-1: Compensation
Satisfaction with salary



This shows that most of the employees of the organization were not satisfied with their current salary.

Figure-2: Fringe Benefit
Fringe benefits

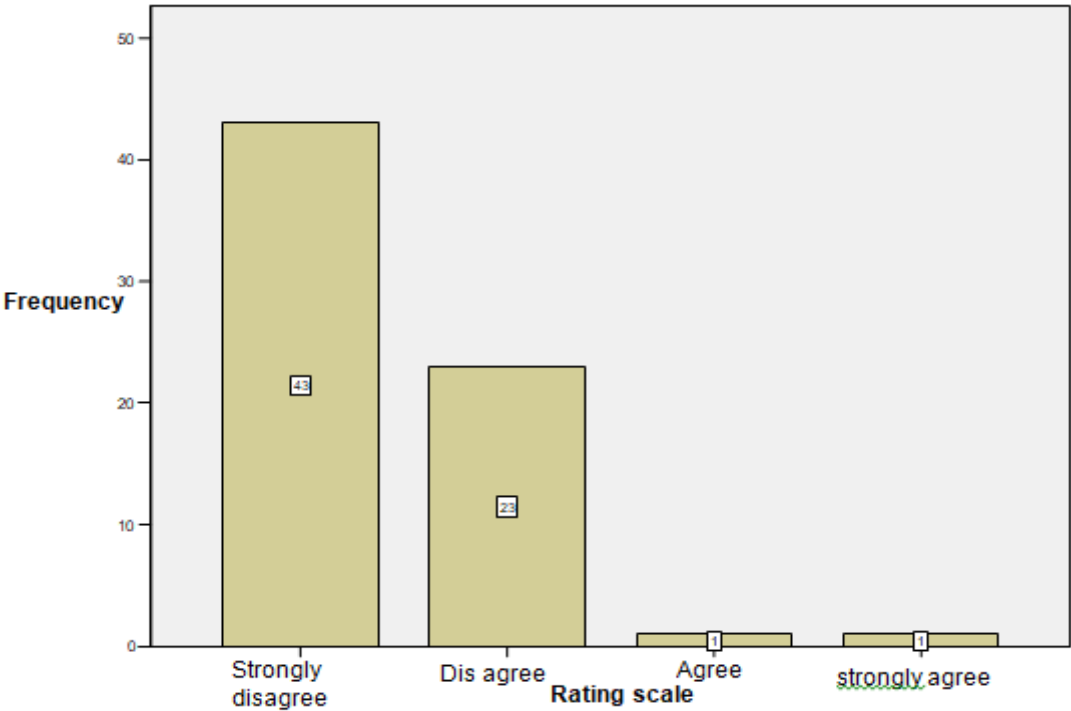


Figure 2 Benefits other than salary as rated by respondents

Figure 2 exhibits ratings by respondents concerning their satisfaction with the benefits that they obtain as a result of their employment in the organization. This demonstrates that fringe benefits were not given to employees of the organization.

Figure-3: Bonus

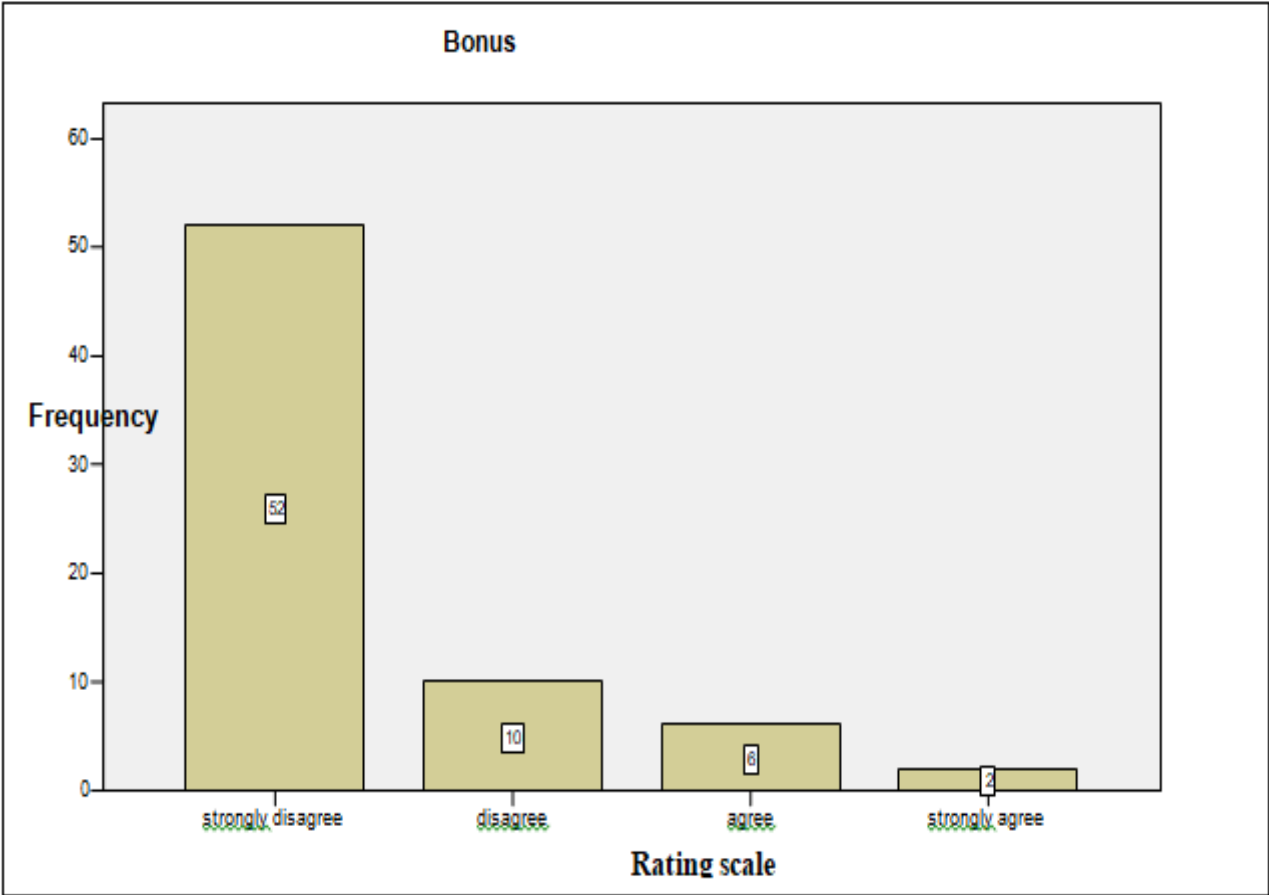
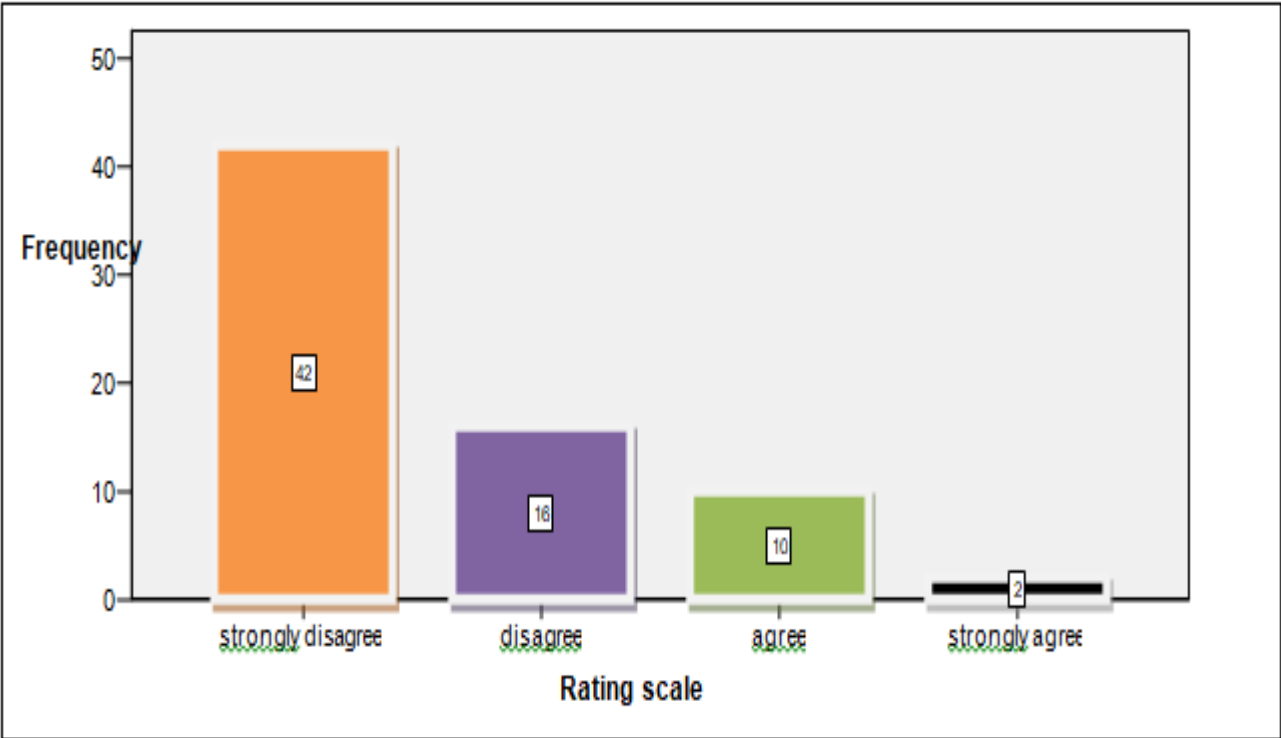


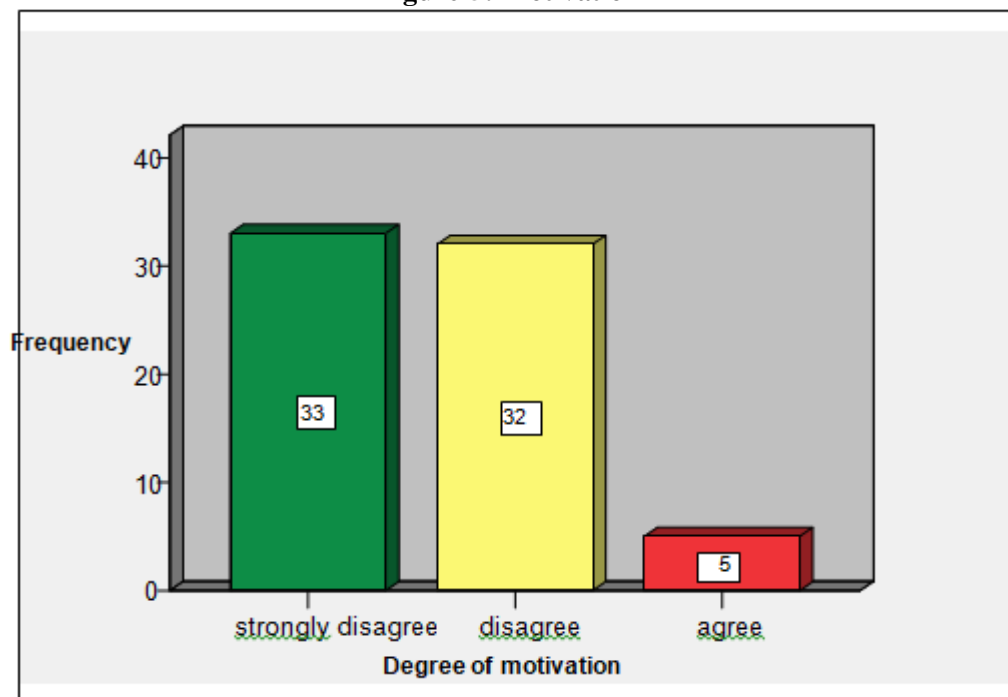
Figure 3 depicts the opinion of respondents in relation to bonus payment of the organization in return for senior performances. This indicates that the organization didn’t pay bonuses for senior performances regularly.

Figure-4: Salary increment



This reveals that the organization didn’t increase salaries regularly as it was expected by its employees. This implies that large number of employees of the organization were dissatisfied with stagnant salary since there was no change in salary of employees.

Figure-5: Motivation



This shows that the employees of the organization lacked motivation to properly accomplish their respective responsibilities. This condition was similar with the compensation condition analyzed earlier. The researcher attempted to identify their relationship and interdependence by using the hypothesis testing method to the end of this section. Interview was also made with the human resources manager of the organization to verify the responses of the respondents and also to clarify some confusion related to human resource functions. Accordingly, the researcher presented some questions and the HRM unit head of the organization answered them briefly. First, the researcher wanted to know the functions of the HRM unit. He replied that the functions are recruitment and selection, analyzing organizational structure, placing employees appropriately and solving transfer problems of employees. Secondly, he clarified that the authority of recruitment and selection was given to Civil Service and Good Governance Office of Kabul Town Administration whereas the HRM unit of Kabul City PC was only a committee member. Next, he suggested about general authority given to HRM. He said that the management of the organization had strong influence on the HRM unit.

The researcher also inquired if the HRM unit used to prepare a definite plan for training of employees of the organization. He didn't deny that there was no any plan except that training was given when need arises in the organization and when there was a call for training from different bodies. This shows that training was spontaneous, not pre-planned. He also suggested regarding motivation of employees. The manager believed that many of the employees could be motivated by incentives. However, it was difficult for the department to give incentives since compensation structure follows top-down approach. This is to say it is determined at the center and incentives like bonuses were also highly influenced by the top management of the organization.

Finally, he was asked to comment on the satisfaction of employees with their current salary. According to him, except the top level managers, all employees were not satisfied with their salaries because there had not been salary increment structure for a long time for all office experts and contractual employees.

HYPOTHESIS TESTING

H₀: There is no interdependence between compensation and motivation.

H₁: Motivation of employees depends on the compensation given to them.

To describe the variables, compensation was averaged from four different variables by SPSS software system. These variables were: Satisfaction with salary, satisfaction with fringe benefits, bonus payment conditions, and salary increment conditions. On the other hand, motivation, as a single variable was rated by the respondents. All the five variables were rated on a four point (forced) scale to minimize indifferent ratings by the respondents which adversely affect reliability of data.

However, before moving in to the process of testing the hypothesis, it is essential to test the reliability of data of the two variables.

Reliability Statistics

Cronbach's Alpha	N of Items
.907	2

Table-9: Reliability Statistics of the data of the two variables.

Table 9 shows that the data of the two variables were reliable since the obtained value, 90.7% was by far greater than 70% which is considered as an acceptable value and even 80% which is a preferred value for reliability analysis (Argyrous, 2005). This indicates that the data can be used for further analysis and therefore correlation analysis was continued to find if there was some kind of relationship between the variables.

Pearson correlation

		Motivation	Compensation
Motivation	Pearson Correlation	1	.834(**)
	Sig. (2-tailed)		.000
	N	70	70
Compensation	Pearson Correlation	.834(**)	1
	Sig. (2-tailed)	.000	
	N	70	70

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

Table-10 Pearson correlation analysis model

Table 10 demonstrates the relationship between compensation and motivation. The value 83.4% was obtained which shows a very strong relationship between them. However, the value only tells us the direction and strength of association that exists between the two variables. For this specific analysis, we can understand from the table that: an increase in a 1% compensation of employees was correlated with 83.4% increase in motivation.

Coefficient of determination

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.834(a)	.695	.691	.347

a Predictors: (Constant), Compensation

Table 11 Coefficient of determination (R or r^2)

As demonstrated in table11, the square of the correlation coefficient, r^2 or R square was now calculated by the system and it was found to be 0.691 when adjusted to the data of the two variables. This was a substantial reduction in error rate. This shows that the least squares regression line explains 69.1% of the variance of the dependent variable relative to the variance explained by the horizontal line. In this study therefore, 69.1% of the variance in motivation was resulted due to the variance in compensation.

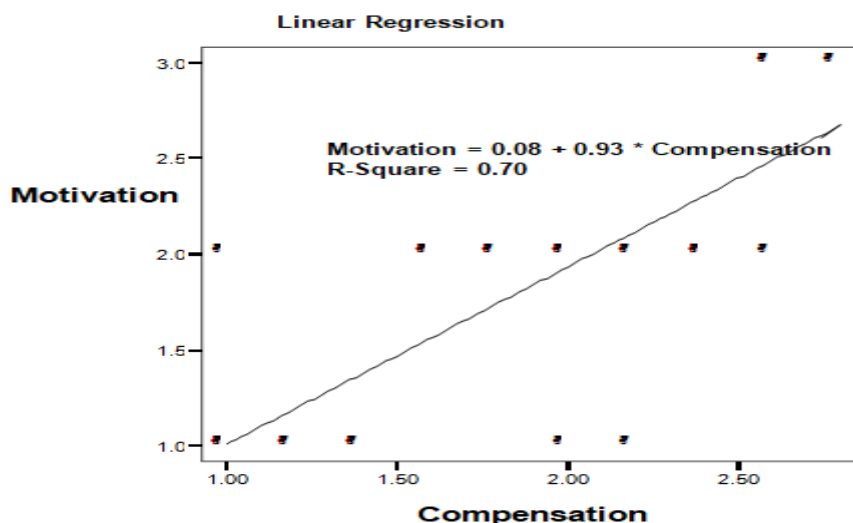


Figure-6: Scatter diagram of regression

Figure 6 above also depicts how motivation depends on compensation along the regression line which was sketched based on the mathematical equation, $y = a + bx$, where y is motivation, a is the y-intercept (constant), b is the slope of the regression line and x is compensation. The coefficients a and b are presented under the heading β in the following table of coefficients. This shows that for 1% increase in compensation, motivation of employee's increases by 93%.

Now, let us come back to the hypothesis testing. The formula for linear regression analysis is given by $y = a + bx$ as stated earlier and it was calculated by the system as follows.

Coefficients (a)

Model		Unstandardized Coefficients.		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	.081	.129		.632	.530
	Compensation	.926	.074	.834	12.453	.000

a Dependent Variable: motivation

Table 12 Coefficients of standard error

Table 12 reveals the standard error in addition to the coefficients. As it was depicted by figure 6, all points did not fall on the straight line. They were scattered which shows the degree of error of the estimate since it is very difficult to accurately estimate the magnitude of variables in business and economics (Pallant, 2007). So, the coefficients under standard error capture such errors. The formula for the standard error of the estimate is given by:

$$s_{y \cdot x} = \sqrt{\frac{\sum(Y - Y')^2}{n - 2}}$$

This standard error is the same as standard deviation. This standard error of the estimate measures the dispersion about the regression line. It is the measure of the average distance of points from the regression line. In other words, it shows the average distance of values from the sample mean.

One-Sample Test

	Test Value = 0					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
	Lower	Upper	Lower	Upper	Lower	Upper
Motivation	21.480	69	.000	1.600	1.45	1.75
Compensation	24.452	69	.000	1.64000	1.5062	1.7738

Table-13: One-Sample Test

Table 13 shows the test of the samples at 95% confidence interval of the difference.

The tables show the significance level of alpha under normal distribution. Here, the hypothesis was tested at 95% confidence interval. This means the risk of the researcher to accept the wrong hypothesis or to reject the correct hypothesis is 5%.

So far, it was discussed that motivation of employees depends on compensation. The above tables also support that finding. As it can be observed from the table, the calculated value of the two tailed test (0.00) is not located between the lower value (1.45) and the upper value (1.75) at 95% confidence interval of the difference. This shows that the null hypothesis which says, "There is no interdependence between compensation and motivation" was rejected and the alternative hypothesis which says, "Motivation of employees depends on compensation" was accepted. Therefore, depending on the analysis, the researcher concluded that motivation highly depends on compensation.

SUMMARY

This study has focused on the issues of human resources management practices in civil service organizations of Afghanistan. A case study approach was utilized and Kabul Town PC was considered for this study. The basic and underlying objective of the study was to determine whether human resources management was

appropriately practiced so that employees were motivated to accomplish their responsibilities and identify the major bottlenecks that contributed to motivation problems. For this study, 81 employees were selected by using random sampling and purposive sampling methods among whom one was interviewed and the other 80 were asked to fill questionnaires prepared for the purpose; and 70 of them were filled and returned back. The information gathered was analyzed descriptively and also the hypothesis was tested statistically by using statistical tools such as correlation, regression analysis and one sample t-test.

The results of the study indicated that employees did not consider the HRM department as a fruitful division because of different reasons. As it was discussed in the findings, the reasons were lack of appropriate authority, inability to plan activities carefully and other similar problems. Finally, the hypothesis was tested and it was found that the major cause for employees' dissatisfaction (demotivation) was lack of appropriate compensation among other variables.

CONCLUSION

Based on the analysis made on data and the findings drawn from the analysis, the following conclusions have been made.

- -The employees of the organization had not recognized the HRM department as a valuable department mainly because of lack of adequate authority to accomplish its responsibilities freely.
- Promotion of employees had no predetermined and transparent criteria.
- Management decision was more powerful than government policy during vacancy criteria formulation.
- It was management body that decides whether to recruit applicants either from internal or external environment of the organization for a vacancy identified by HRM department of the organization.
- Almost half of the newly hired employees of the organization started work without taking any form of orientation or socialization.
- Positioning or placement of employees of the organization was more influenced by management decision than qualification of employees.
- Trainings provided by the organization were accidental (spontaneous) rather than planned and pre-determined.
- The criteria used to select trainees for the trainings given by the organization were not clearly defined.
- The trainings given also lack consistency of purpose.
- The jobs employees performed and the skills they acquired from the given trainings were not related and therefore it was found to be difficult to practically apply the skills obtained on the actual jobs.
- To the end, it was also found that the employees of the organization were dissatisfied with the compensation package and this has resulted in lack of motivation of employees to accomplish their respective activities.

RECOMMENDATIONS

It is clear that the government wants its organizations to be efficient and effective in their services. This is possible only if employees in the organizations perform their respective activities as expected by the government which requires appropriate management. This management process must be the one that satisfies the employees so that they can be motivated to accomplish their responsibilities efficiently and effectively as expected.

Therefore, based on the analysis and findings of the research, the following recommendations have been suggested for the solution (betterment) of the identified problems.

1. The HRM department of the organization should be given adequate authority to accomplish its functions with freedom.
2. The government should give total authority and responsibility of recruitment and selection to the HRM department because separation of its authority from vacancy filling responsibility creates problems of conflict of interest.
3. The decision of whether internal or external recruitment should be made by the HRM department since it is the body that knows about both the opened positions and the talent of the required employees.
4. The HRM department should always arrange socialization (orientation) programs for the newly hired employees because they need to know the work environment, the work itself and the coworkers before starting the actual work.

5. The top management of the organization should think to improve placement of employees since qualification should be given due attention than personal issues.
6. The HRM department of the organization should clearly specify the criteria by which it selects employees for training.
7. Definite plan of training should also be prepared by the HRM department in consultation with all the concerned bodies.
8. The training given by the organization should be consistent and also job related so that it can be easily put in to practice at actual work.
9. Ultimately, the government should improve compensation condition of employees and consequently motivation of employees can be boosted to enable them serve the society efficiently and effectively.

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ECOMMERCE IN INDIA: SCENARIO AND IMPACT ON THE ECONOMY

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ABSTRACT

India is witnessing a sharp growth in the Internet usage, smartphone penetration and online shoppers, ecommerce industry in India has a big room for development. In this paper, I have discussed about the current plight of ecommerce in India along with the impact of the New Ecommerce Policy, 2018. Also, I have computed Karl Pearson's correlation coefficient between GDP, ecommerce market revenue and unemployment rate in order to ascertain the impact of ecommerce on the economy. In addition to this, Multiple Regression of three variables (Internet users, Telecom sector revenue and IT industry growth rate) on ecommerce has been undertaken in order to ascertain the variables that have an impact on the growth of ecommerce industry in India.

Keywords: Ecommerce, New Draft Ecommerce Policy, Multiple Linear Regression analysis, Gross National Product, Smartphone Penetration

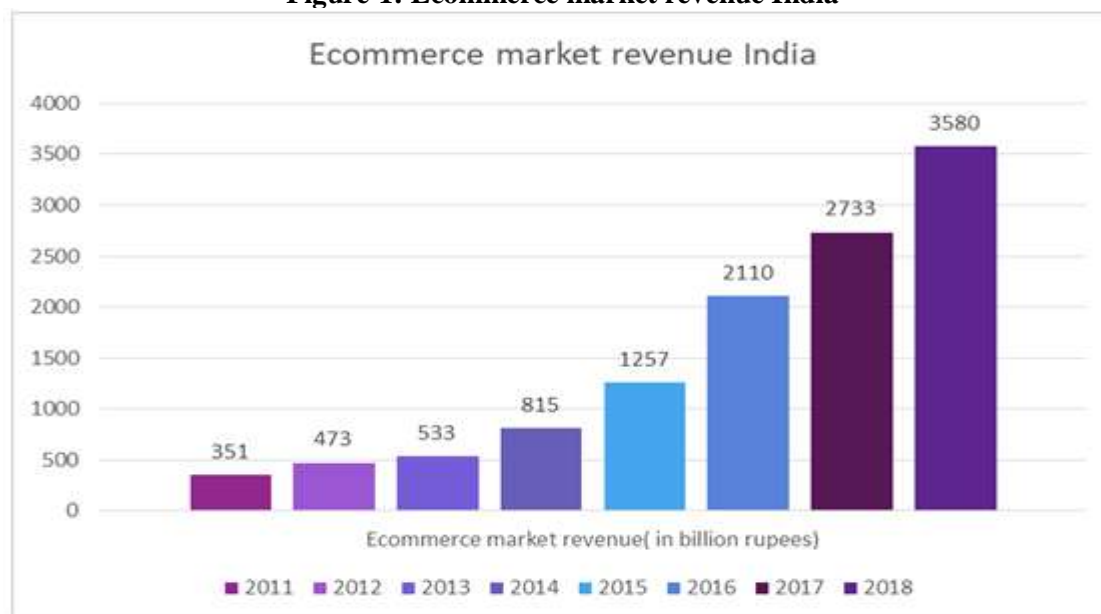
INTRODUCTION

The term Ecommerce was coined back in 1960s as “the buying and selling of goods through transmission of data”. This transmission of data was made possible by the introduction of Electronic Data Interchange. Later, The World Trade Organization (WTO) defined Ecommerce in the year 1990s as, “The production, distribution, marketing, sale or delivery of goods and services by electronic means”. Finally the definition of Ecommerce has evolved as, “the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet but also all other activities which are associated with any transaction such as:

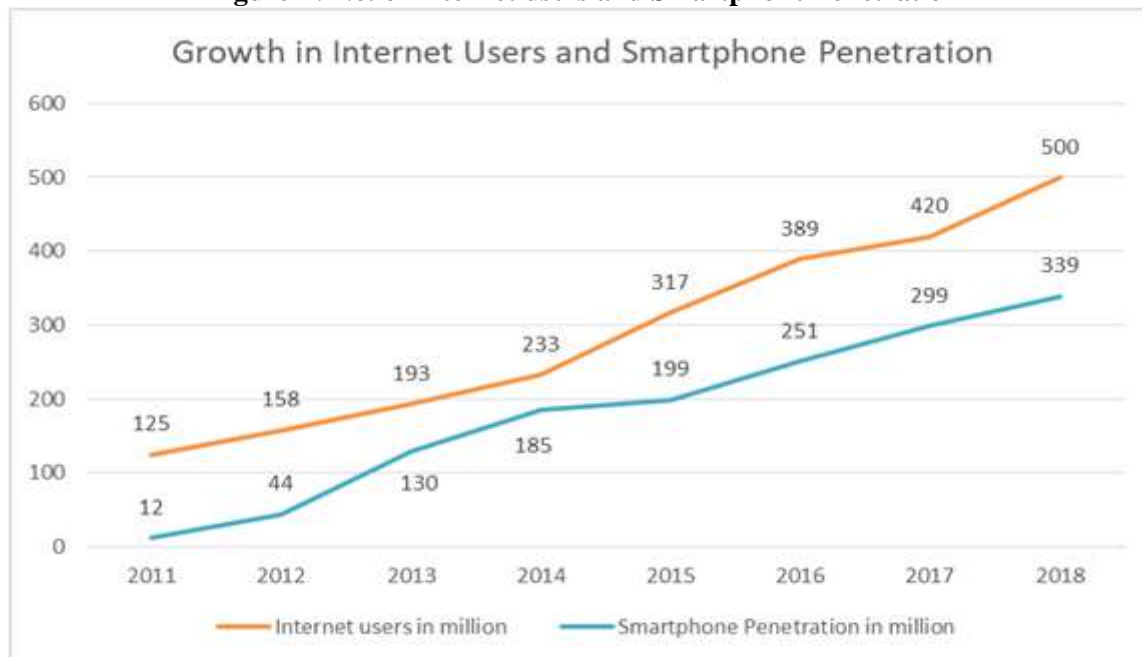
- Delivery
- Payment facilitation,
- Supply chain and service management, can also be categorized or put under this section of economy” (Kumar Anuj et al. (2018)). It operates in all four of the major market segments: business to business, business to consumer, consumer to consumer, and consumer to business.

With the improvement in Internet, mobile and other such technological accessibility, e commerce has ended up becoming an indispensable part of lives of people, especially in the urban areas and its market revenue has reached ₹3580 crore in 2018 from ₹351 crore in 2011(Figure 1). Similarly, Smartphone Penetration and number of Internet Users has reached 339 million and 500 million in 2018 respectively (Figure2).

Figure-1: Ecommerce market revenue India



Source: National Report on Ecommerce Development in India

Figure-2: No. of Internet users and Smartphone Penetration

Source: IAMI and statia.com

REVIEW OF LITERATURE

Vaithianathan (2017) examined the current plight of e-commerce in India and states the opportunities for research in future. This study aimed to act as a catalyst for future research in e-commerce in the Indian economy.

Gefen (2000) undertook a study on the interesting idea in the context of the E-commerce which included inquiring about and purchasing books on the Internet. It was inferred that both conversancy with an Internet vendor and its processes and a feeling of trust in the vendor influenced the respondents' behavior to inquire about books, and ultimately their intention to make a purchase.

Mohapatra (2012) studies the effect of the Internet on the brand equity of a business. It states that with help of Internet plays an effective role in helping a firm gain competitive advantage by playing a significant role in product positioning and generating brand awareness.

Tarafdar, Vaidya (2006) in their research paper provides a framework that explains the impact of organizational factors on the susceptibility to employ e commerce technologies.

Kaur, Joshi (2012) throws light on various advantages of e commerce in the field of internet marketing, supply chain management, online transaction processing, automated inventory management systems, Electronic Data Interchange (EDI), and automated data collection systems.

Hawk (2004) studies the challenges of conducting B2C e-commerce in developing countries and concludes that low credit card penetration and poor delivery systems are considered as one of the major barriers for B2C e-commerce in developing countries.

NEW DRAFT ECOMMERCE POLICY 2018**Background**

In November 2017, The Retailers Association of India sought help from the Prime Minister's Office over unscrupulous trade activities adopted by e commerce players in India. The retailers of India such as Aditya Birla Retail Ltd., Fab India, Future Group etc. complained that the e-tailers have not followed the rules set up by the Government for e commerce players which mainly were:-

- E-tailers must not have greater than 25% sales from one vendor
- In March, 2016, the Government disallowed FDI in B2C e- commerce in India, while FDI in marketplaces were allowed to continue.

But, companies like Amazon and Flipkart found a way around these restrictions by setting up new sellers in order to comply with the rules. Also, they continued to provide heavy discounts out of foreign capital. This led to the introduction of the New Ecommerce Policy of 2018

Features

- Any entity involved in e-commerce marketplace shall not exercise ownership or control over the inventory it offers to sell. Any such ownership over the inventory will convert it into inventory based model from marketplace based model, which is not entitled to FDI. Thus, an entity shall be deemed to own the inventory of a vendor if over 25% of the purchases of such a vendor are through the said entity.
- An entity shall not be permitted to sell products of a vendor if it owns any stake in the vendor's company or exercises any form of control over the inventory of such vendor. The entity will also be prohibited from selling products of vendor companies over which it has equity interest.
- All online retailers are required to maintain a level playing field for all the vendors selling their products on the platform, and it shall not affect the sale prices of goods in any manner.
- Further, the entity cannot enter into exclusive sales agreements with the vendors, pushing them to sell their products only on one platform.

Impact**➤ Effects of the policy on online retailers**

1. The online retail giants like Flipkart, Amazon, and EBay will have to reform their business models to comply with the policy. They will neither be able to promote sales of their preferred vendors nor able to sell products of those brands in which their direct or indirect equity interest is involved.
2. The most alluring features offered by ecommerce retail giants like, the discounts, flash sales, cash backs etc. will now become a thing of past, and this will severely hit their sales

➤ Benefits to the Local Small Retailers

1. The present policy clearly aims to help small retailers to compete with the corporate giants and to bring equality and objectivity in the Indian retail sector.
2. The customers who had been lured away by the big online retailers will return to the local, brick and mortar retailers as they will get fewer incentives and options on online platforms
3. Apart from these local retailers, small online retail companies (for example, Snapdeal, ShopClues etc), which do not have enough foreign capital to compete with the giants, will also benefit from the policy.

➤ Impact on End Consumers

1. The segment which is most affected by the policy is the end consumers, who made use of offers and discounts and other incentives of online retailers for all their needs, including the rudimentary needs of groceries and clothing.
2. The attractive flash sales and discounts going year round offered affordable products to middle class customers, but these will not be available to them anymore.
3. As the provision of cash backs will also be regulated, the incentive given to customers to shop more often from a said platform will reduce, affecting the decision of the customer. This will ultimately result in less shopping by a majority of customers.

OBJECTIVES OF THE STUDY**1. Relationship of Ecommerce with GDP and Unemployment rate-****• Hypothesis 1**

H₀: There is no statistically significant relationship between Ecommerce growth rate and GNP

H₁: There is a statistically significant relationship between Ecommerce growth rate and GNP

• Hypothesis 2

H₀: There is no statistically significant relationship between Ecommerce growth rate and Unemployment Rate

H₁: There is a statistically significant relationship between Ecommerce growth rate and Unemployment Rate

- **Database** - It includes secondary data collected from various sources. Data on Gross National Product (GNP) is collected from 'ceicdata.com', on Unemployment rate collected from 'Statia.com' and data on Ecommerce Growth Rate collected from 'National Report on Ecommerce Development in India'.

Table-1: Gross National Product (GNP), Ecommerce Growth Rate and Unemployment Rate

Years	Ecommerce Growth Rate	Unemployment Rate	GNP(\$ billion)
2011	0.14	3.54	1693
2012	0.15	3.62	1809
2013	0.16	3.57	1808
2014	0.18	3.53	1836
2015	0.18	3.49	2015
2016	0.2	3.46	2079
2017	0.21	3.4	2493
2018	0.22	3.5	2573

- **Methodology-** To understand the relationship of Ecommerce with GNP and unemployment rate, Karl Pearson's Coefficient of Correlation is calculated using Bivariate Correlation in SPSS.

Correlations				
		GNP OF India(\$ billion)	Unemployment rate	Ecommerce growth rate
GNP OF India(\$ billion)	Pearson Correlation	1	-.708*	.921**
	Sig. (2-tailed)		.050	.001
	N	8	8	8
Unemployment rate	Pearson Correlation	-.708*	1	-.764*
	Sig. (2-tailed)	.050		.027
	N	8	8	8
Ecommerce growth rate	Pearson Correlation	.921**	-.764*	1
	Sig. (2-tailed)	.001	.027	
	N	8	8	8

*. Correlation is significant at the 0.05 level (2-tailed).

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

- **Result on testing of Hypothesis I-** Pearson's Correlation coefficient in this case comes out to be 0.921. The sig value (2-tailed) is 0.001 which is less than 0.05. Therefore, the null hypothesis is rejected.
- **Result on testing of Hypothesis II** - In this case, Pearson's Correlation coefficient in this case comes out to be -0.764(which depicts a high negative correlation).The sig value (2-tailed) comes out to be 0.027 which is less than 0.05. Therefore, the null hypothesis is rejected. Therefore, Ecommerce growth rate and unemployment rate are negatively correlated.

2. Impact of Number of Internet users, Telecom Sector Revenue and IT sector growth rate on Ecommerce market

- **Hypothesis 3-** H₀: There will be no significant prediction of Ecommerce market revenue by Internet users, Telecom Sector Revenue and IT sector growth rate

H₁: There will be a significant prediction of Ecommerce market revenue by Internet users, Telecom Sector Revenue and IT sector growth rate

Database- The secondary data for the period 2011 to 2018 on Internet users and IT industry is collected from 'statia.com'. Data on Telecom sector revenue is collected from "Financial Reports" of Telecom Regulatory Authority of India'.

Table-2: Number of Internet users, IT industry growth rate and Ecommerce market size

Years	Ecommerce market revenue(₹billion)	Internet users(in million)	Telecom sector revenue(₹ crore)	IT sector growth rate(as a percentage of GDP)
2011	351	121	1413116	6.4
2012	473	158	1549490	7.5
2013	533	193	1654305	8
2014	815	233	1796490	8.1
2015	1257	317	1988512	9.5
2016	2110	389	2133851	9.3
2017	2733	420	2333411	7.7
2018	3580	500	2555000	8

METHODOLOGY

To ascertain the variables that have an impact on the growth of ecommerce industry in India, Multiple Linear Regression of three variables (Internet users, Telecom sector revenue and IT industry growth rate) on ecommerce has been undertaken using SPSS, where Y is size of Ecommerce industry in billion rupees, X1 is Internet users in India in million, X2 is Telecom sector revenue in India in crore rupees and X3 is IT sector revenue growth in India (as a percentage of GDP).

The generalized multiple regression equation is presented below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where,

Y= Size of ecommerce industry (₹ billion)

X₁= Internet users in India (in million)

X₂ is Telecom sector revenue in India

X₃ is IT sector revenue growth in India (as a percentage of GDP)

β₁-β₃= Regression coefficients

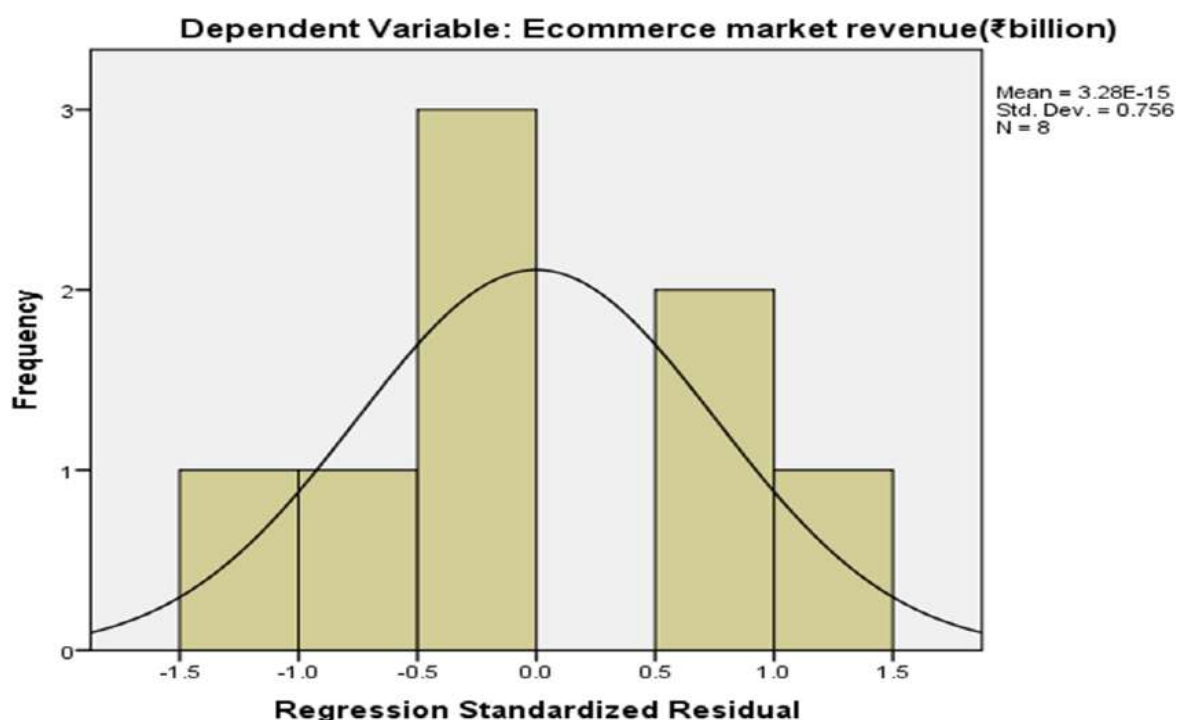
ε= Error term

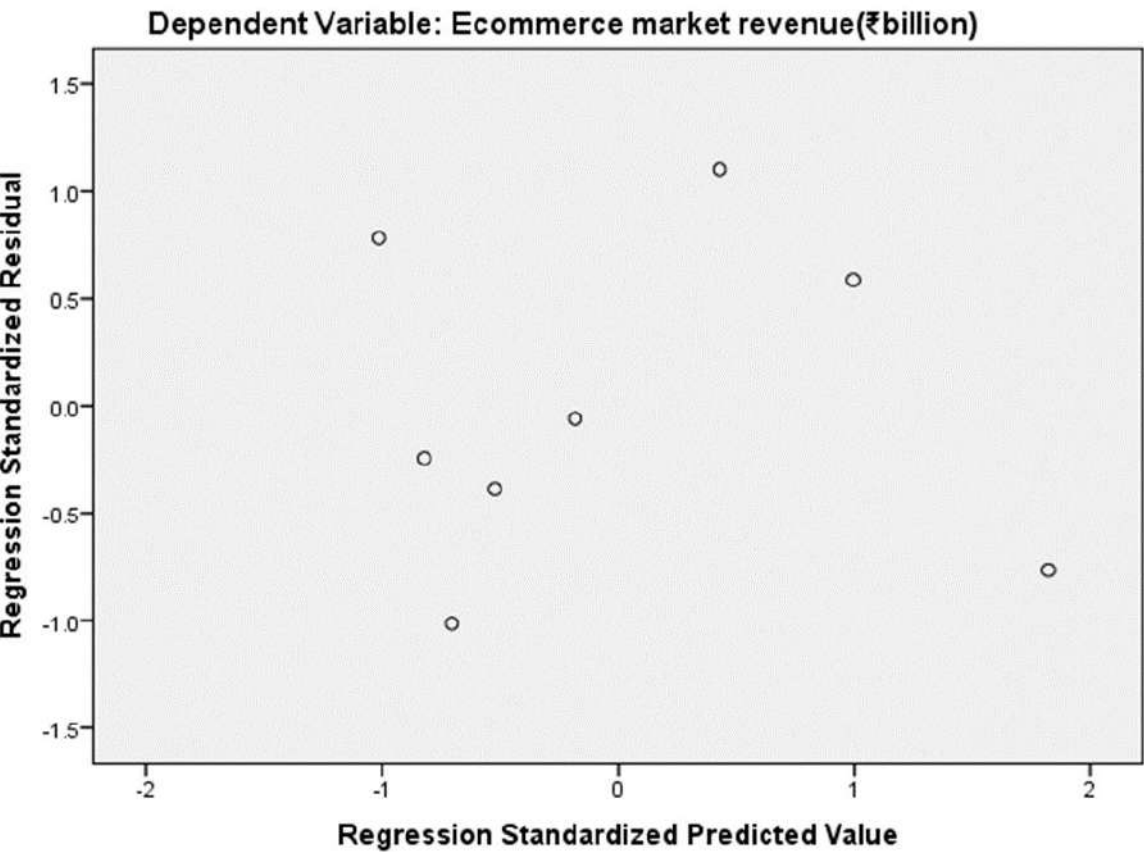
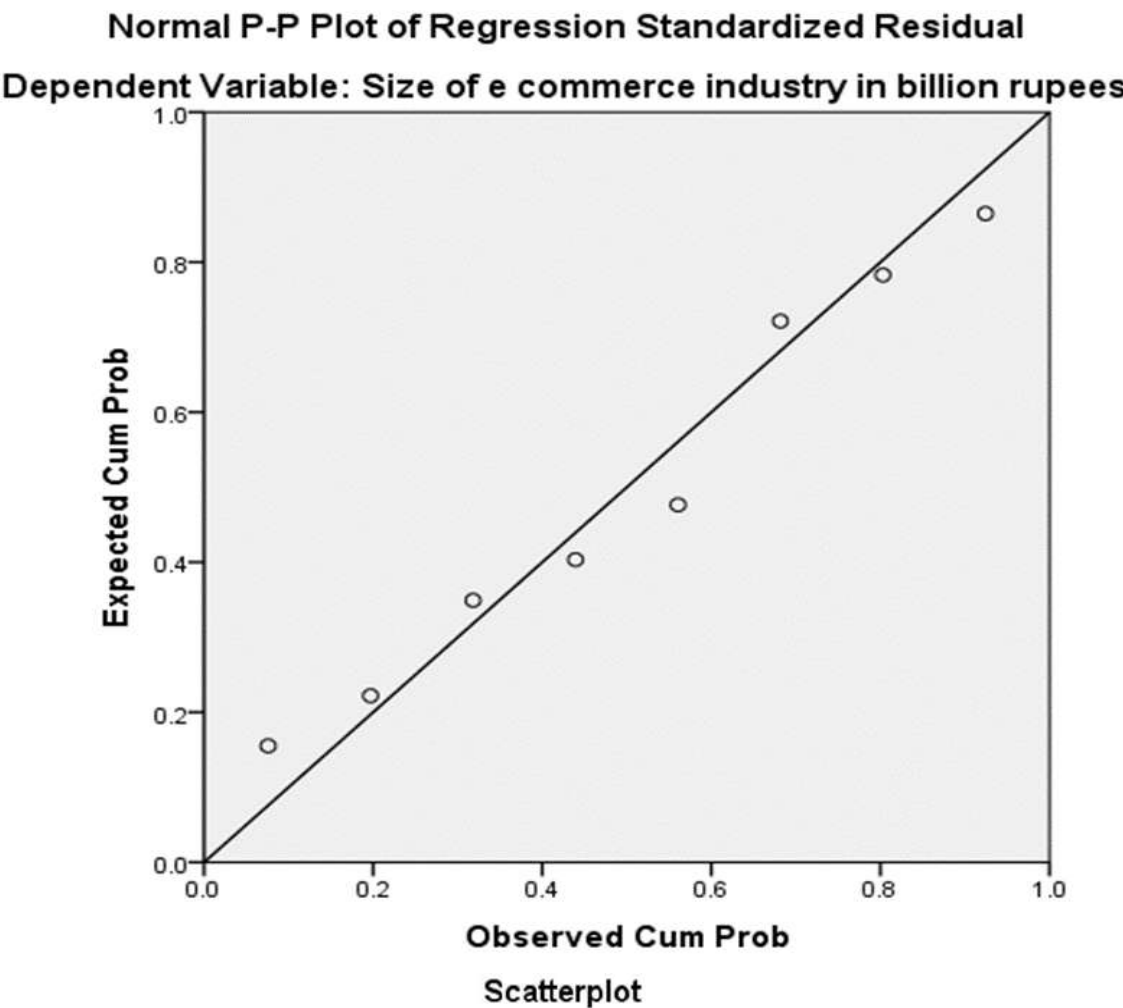
All the necessary assumptions pertaining to Multiple Regression (Linear Relationship, Multivariate Normality, absence of Multicollinearity and Homoscedasticity) have been checked using the followig Table, Histogram and Scatterplot

Table-3: Output Table of Multiple Linear Regression

Variable	Coefficient	Std. Error	t-Static	Prob.
(Constant)	-4545.145	591.43	-7.684	.002
Internet users in India (in million)	13.971	83.543	.167	.875
Telecom sector revenue(₹ crore)	4.559	1.280	3.563	.024
IT sector growth rate(as a percentage of GDP)	.003	0.000	17.368	.000
R-squared	.998a			
Adjusted R-squared	.996			
F-statistic	305.810			
Prob(F-statistic)	.000b			

Histogram





$$Y = -4545.145 + 13.971X_1 + 4.559X_2 + 0.003X_3 + 104.45891$$

• Result on testing of Hypothesis

From Table 3, it can be observed that out of three variables Internet users in India (in million) and Telecom sector revenue (₹ crore) have a statistically significant (5% level of significance) impact on Ecommerce market revenue (₹ billion) as reflected by their respective p-values. On the other hand, IT sector growth rate (as a percentage of GDP) does not have significant impact on Ecommerce market revenue (₹ billion) as its p-value is 0.875 which is higher than 0.05. Therefore, null hypothesis is rejected. In addition Adjusted R-squared is 99.6% showing that the variation caused in dependent variable by the independent variables is nearly 100% which is a very high explanation of dependent variable by independent variable. P-value of F-statistic (0.000) also indicates that the model is a good fit at 5% level of significance.

FINDINGS

- 1) **There is a high positive correlation between GNP and Ecommerce growth rate-** Growth of Ecommerce industry exhibits the per capita income of the population so, it is a very sound indicator of the economy of the country
- 2) **Presence of a high negative correlation between Unemployment rate and Ecommerce growth rate-** The high negative correlation between the Eco Unemployment rate and Ecommerce growth rate depicts that the ecommerce industry generates a large amount of employment in the country.
- 3) **Impact of Number of Internet users and Telecom Sector revenue on the Ecommerce market -** Number of Internet users, Telecom Sector revenue and smartphone penetration are the key factors, which impact the Ecommerce market size. Indian IT sector does not impact the Ecommerce market because except for some of the B2B models, IT sector doesn't have a major contribution to the Ecommerce market and is stuck with low end of the IT services value chain.

CONCLUSION

Innovations like digital payments, hyper-local logistics and analytics driven customer engagement will likely support the growth in the sector. The growth in e-commerce sector will also boost employment, revenues from export, tax collection by ex-chequers, and provide better products and services to customers in the long-term. However, the New Draft Ecommerce Policy, 2018 may inhibit the growth of ecommerce industry in India as discussed in this paper. Nevertheless, The Indian e-commerce industry has been experiencing a continuous growth and is expected to surpass the US to become the second largest e-commerce market in the world by 2034.

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A STUDY ON BAJAJ AUTOMOBILE INDUSTRY IN NAGPUR

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ABSTRACT

The road transport comprise of buses, trucks, jeeps, cars, auto, scooters and motor cycles. Within local limits, it is more desirable to use a four wheeler or two wheeler vehicle. An alternative option is to hire a four wheeler or three wheeler auto. Basically it provides various means of transportation for all kinds of people right from poor to richest. The use of cycle may be considered as cheapest mean.

For the common man, apart from bus services, autos and self-transport in the form of scooter or motorcycle is a convenient option. It enables two wheeler and three wheeler manufacturing company to have a good prospect in automobile business. It is the common people in India uses two wheelers the most.

The various two wheelers comprise scooter, moped, motorcycle etc. which may include vehicle available with gear or without gear. The vehicle with gear have rather more variety than the other. It again comprise vehicle with automatic gear or manual changing gear enabled vehicles. The wide varied options provide two wheeler users to get attracted towards using it as compared to other options. Therefore the companies engaged in such business may able to attract many users/ customers.

It may be one of the reasons, the two wheeler vehicle companies may be considered as progressing. The study intended to appraise the two wheeler companies through one of leading manufacturing companies of India. It therefore proposed to appraise the automobile companies of India taking into consideration the two wheeler manufacturing company. The sample unit considered for such financial study is Bajaj Auto Limited. The study is very useful in analyzing the progress of automobile industry of India.

Keywords: Spanning automobiles, National Capital, DTS-Fi, Torque Expansion, SNS

INTRODUCTION

The automotive industry in India is one of the larger markets in the world. It had previously been one of the fastest growing globally, but is currently experiencing flat or negative growth rates. India's passenger car and commercial vehicle manufacturing industry is the sixth largest in the world. According to recent reports, India overtook Brazil and became the sixth largest passenger vehicle producer in the world (beating such old and new auto makers as Belgium, United Kingdom, Italy, Canada, Mexico, Russia, Spain, France, Brazil), grew 16 to 18 percent to sell around three million units.

India emerged as Asia's fourth largest exporter of passenger cars, behind Japan, South Korea, and Thailand. India beat Thailand to become Asia's third largest exporter of passenger cars. According to the Society of Indian Automobile Manufacturers, annual vehicle sales are projected to increase to 4 million, no longer 5 million as previously projected.

The majority of India's car manufacturing industry is based around three clusters in the south, west and north. The southern cluster consisting of Chennai is the biggest with 35% of the revenue share. The western hub near Mumbai and Pune contributes to 33% of the market and the northern cluster around the National Capital Region contributes 32%.

Chennai, with India operations of Ford, Hyundai, Renault, Mitubishi, Nissan, BMW, Caparo, Daimler and Hindustan Motors is about to begin their operations by 2014. Chennai accounts for 60% of the country's automotive exports. Gurgaon and Manesar in Haryana form the northern cluster where the country's largest car manufacturer, Maruti Suzuki, is based. The Chakan corridor near Pune, Maharashtra is the western cluster with companies like General Motors, Volkswagen, Skoda, Mahindra and Mahindra, Tata Motors, Mercedes Benz, Land Rover, Jaguar Cars, Fiat and Force Motors having assembly plants in the area.

Another emerging cluster is in the state of Gujarat with manufacturing facility of General Motors in Halol and further planned for Tata Nano at their plant in Sanand, Ford, Maruti Suzuki and Peugeot-Citroen plants are also set to come up in Gujarat and Kolkata with Hindustan Motors, Noida with Honda and Bangalore with Tootaare.

TWO WHEELER IN INDIA

The two-wheeler industry in India has grown rapidly in the country since the announcement of the process of liberalization in 1991, Previously, there were only a handful of two-wheeler models available in the country.

Currently, India is the second largest producer of two-wheelers in the world. It stands next only to China and Japan in terms of the number of two-wheelers produced and the sales of two-wheelers respectively.

Bajaj auto began trading in imported Vespa Scooters in 1948. Meanwhile Automobile Products of India (API) commenced production of scooters in the country in the early 50's. Until 1958, API and Enfield were the only producers of two-wheelers in India. However, Bajaj signed a technical collaboration in 1960 with Piaggio of Italy to produce Bajaj Scooters. This deal expired in 1971.

Bajaj Auto is a major Indian automobile manufacturer. It is India's largest and the world's 4th largest two- and three-wheeler maker. It is based in Pune, Maharashtra, with plants in Akurdi and Chakan (near Pune), Waluj (near Aurangabad) and Pantnagar in Uttaranchal. Bajaj Auto makes and exports motor scooters, motorcycles and the auto rickshaw.

Over the last decade, the company has successfully changed its image from a scooter manufacturer to a two-wheeler manufacturer. Its product range encompasses Scooterettes, Scooters and Motorcycles. Its real growth in numbers has come in the last four years after successful introduction of a few models in the motorcycle segment.

BAJAJ GROUP

The Bajaj Group is amongst the top 10 business houses in India. Its footprint stretches over a wide range of industries, spanning automobiles (two-wheelers and three-wheelers), home appliances, lighting, iron and steel, insurance, travel and finance. The group's flagship company, Bajaj Auto, is ranked as the world's fourth largest two- and three-wheeler manufacturer and the Bajaj brand is well-known across several countries in Latin America, Africa, Middle East, South and South East Asia. Founded in 1926, at the height of India's movement for independence from the British, the group has an illustrious history.

The integrity, dedication, resourcefulness and determination to succeed which are characteristic of the group today, are often traced back to its birth during those days of relentless devotion to a common cause. Jamnalal Bajaj, founder of the group, was a close confidant and disciple of Mahatma Gandhi. In fact, Gandhiji had adopted him as his son. This close relationship and his deep involvement in the independence movement did not leave Jamnalal Bajaj with much time to spend on his newly launched business venture.

The present Chairman of the group, Rahul Bajaj, took charge of the business in 1965. Under his leadership, the turnover of the Bajaj Auto the flagship company has gone up from INR.72 million to INR. 120 billion, its product portfolio has expanded and the brand has found a global market. He is one of India's most distinguished business leaders and internationally respected for his business acumen and entrepreneurial spirit. Bajaj Auto is the flagship of the Bajaj group of companies. The group comprises of 34 companies and was founded in the year 1926.

The Bajaj Group is amongst the top 10 business houses in India. Its footprint stretches over a wide range of industries, spanning automobiles (two-wheelers and three-wheelers), home appliances, lighting, iron and steel, insurance, travel and finance.

BAJAJ GROUP OF COMPANIES

Bajaj Auto is the flagship of the Bajaj group of companies. The group comprises of 34 companies and was founded in the year 1926. The companies in the group are:

- Bajaj Auto Ltd.
- Bajaj Holdings & Investment Ltd.
- Bajaj Finserv Ltd.
- Bajaj Allianz General Insurance Company Ltd.
- Bajaj Allianz Life Insurance Co. Ltd
- Bajaj Financial Solutions Ltd.
- Bajaj Auto Finance Ltd.
- Bajaj Allianz Financial Distributors Ltd.
- Bajaj Auto Holdings Ltd.
- PT Bajaj Auto Indonesia (PTBAI)
- Bajaj Auto International Holdings BV

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- Bajaj Electricals Ltd.
 - Hind Lamps Ltd.
 - Bajaj Ventures Ltd.
 - Mukand Ltd.
 - Mukand Engineers Ltd.
 - Mukand International Ltd.
 - Bajaj Sevashram Pvt. Ltd.
 - Jamnalal Sons Pvt. Ltd.
 - Rahul Securities Pvt Ltd
 - Shekhar Holdings Pvt Ltd
 - Madhur Securities Pvt Ltd
 - Niraj Holdings Pvt Ltd
 - Shishir Holdings Pvt Ltd
 - Kamalnayan Investments & Trading Pvt Ltd
 - Sanraj Nayan Investments Pvt. Ltd.
 - Hercules Hoists Ltd.
 - Hind Musafir Agency Pvt. Ltd.
 - Bajaj International Pvt. Ltd.
 - Bachhraj Factories Pvt. Ltd.
 - Baroda Industries Pvt. Ltd.
 - Jeevan Ltd.
 - Bachhraj & Co Pvt Ltd
 - The Hindustan Housing Co. Ltd.
 - Hospet Steels Ltd

NEED FOR THE STUDY

The research study proposed to evaluate the performance of automobile companies. The sample unit i.e. Bajaj Auto dealt in two wheelers and three wheelers companies.

The study intended to study the performance of Bajaj Auto Limited in the field of two as well as three wheeler companies.

SCOPE OF THE STUDY

It has studied the norms of companies and its various products.

OBJECTIVES OF THE STUDY

The objectives provide a base to any research work. The study has laid down certain objectives before initiating the research work. The objectives of the research study are as follows:

- ✓ To study the various products of Bajaj Auto Limited.
- ✓ To analyze the growth of the company in automobile sector.
- ✓ To review the various automobile services of Bajaj Auto Limited
- ✓ To study the range of two wheelers and three wheelers vehicles of Bajaj Auto Limited

IMPORTANCE OF STUDY

The study is very useful in analyzing the progress of automobile industry of India. The industry is no doubt gaining more response from the market. The various types of automobiles are also attracting various groups of people.

The study has taken Bajaj Auto Limited as a sample organization which has a range of two wheelers and three wheelers. The study is important for automobile sector to analyse their growth in the sector. It is important to analyse the Growth aspects in two as well as three wheelers vehicles.

RESEARCH METHODOLOGY

The research methodology is historical. The primary source was Nagpur office of Bajaj auto Limited. Other sources also comprised books on automobile companies, internet etc.

HYPOTHESIS

The study has proposed following hypotheses in respect of the present research:

- I. Automobile sector in India is developing.
- II. Bajaj Auto Limited is continually progressing automobile company.

LIMITATIONS OF THE STUDY

The main limitations are as follows:

- ❖ The study has conducted by considering Bajaj Auto Limited as a sample unit.
- ❖ The sample organization covers only two as well as three wheeler vehicles and not covers the four wheeler vehicles. The study therefore could be considered for only two as well as three wheeler vehicles only.

ANALYSIS AND INTERPRETATION

The study has taken the prime tool of ratio analysis to study the financial management system of the sample organization. The analysis primarily require study of financial statements of the company i.e. study of Balance Sheet and Profit and Loss Account for a certain period of time. The study has taken a period of five years into consideration.

Tools and Techniques

Simple percentage

Respondents' data

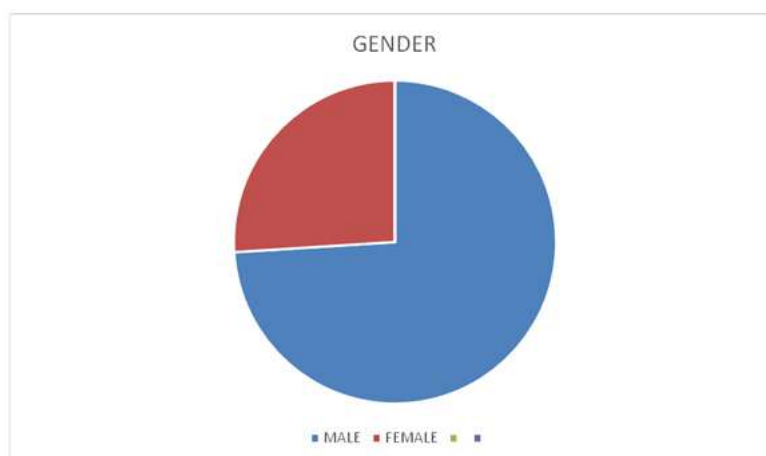
Question no.1

Gender of the respondents

Gender	No. of Respondent	Percentage
Male	148	074
Female	052	026
Total	200	100

(SOURCE: PRIMARY DATA)

The above table shows the gender of the respondents. Out of the total respondents taken for the study, 74 % are male and the remaining 26 % are female.



Question on. 2

Category of the Respondent:

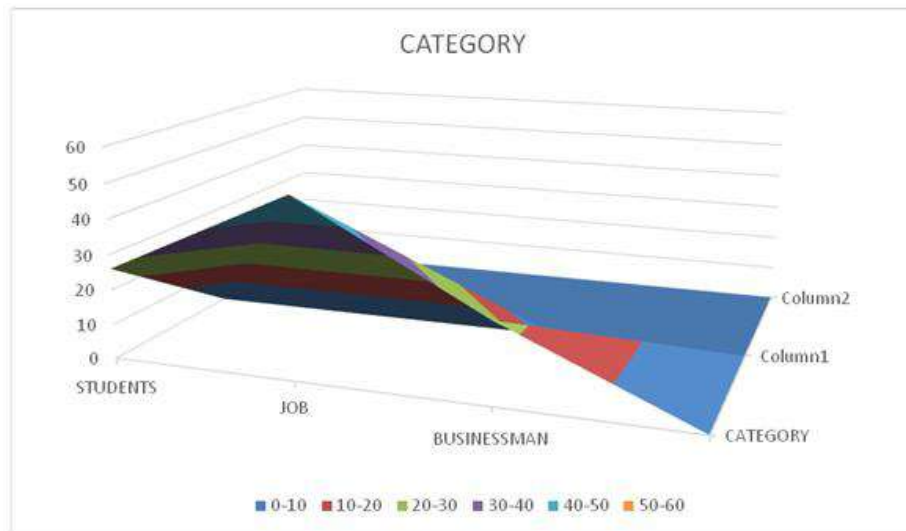
Category	No. of Respondent	Percentage
Student	052	026
Job	102	051

Businessman	046	023
Total	200	100

(SOURCE: PRIMARY DATA)

The above table shows the respondents Category.

Out of the total respondents taken for the study, 26% of the people are students, 51% of the people are in Job and remaining 23% from Businessman. Majority of the people from Job.



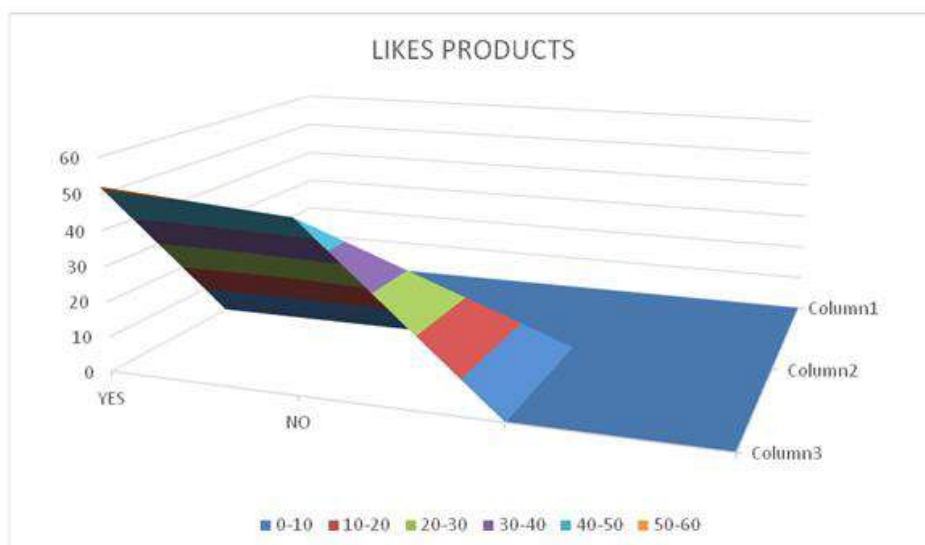
Question no. 3

Bajaj Automobile products likes by everyone

Likes	No. of Respondent	Percentage
Yes	104	052
No	096	048
Total	200	100

(SOURCE: PRIMARY DATA)

The above table shows Bajaj products likes by everyone. Out of the total respondents taken for the study, 52 % opinion Bajaj products likes by everyone while 48% are not agree. Majority of the people agree Bajaj products likes by everyone.



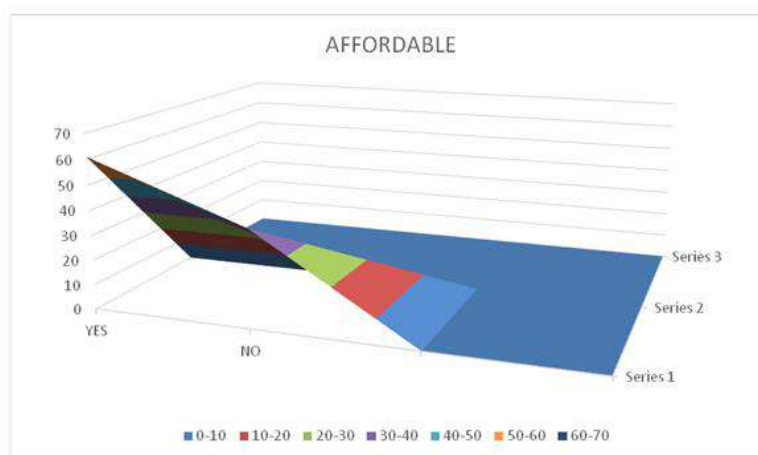
Question no.4

Bajaj products are affordable

Affordable	No. of respondents	Percentage
Yes	122	061
No	078	039
Total	200	100

(SOURCE: PRIMARY DATA)

The above table shows Bajaj products are affordable. Out of the total respondents taken for the study 61% opinion that Bajaj products are affordable while 39% opinion that Bajaj products are affordable is not affordable. Majority of People opinion that Bajaj products are affordable.



Question no. 5

Journey is safe

Safe Journey	No. of respondents	Percentage
Yes	182	091
No	018	009
Total	300	100

(SOURCE: PRIMARY DATA)

The above table shows people opinion that Journey is safe. Out of the total respondents taken for the study, 91 % opinion that journey is safe and 9% opinion that journey is not safe. Majority of the people opinion that Journey is Safe.



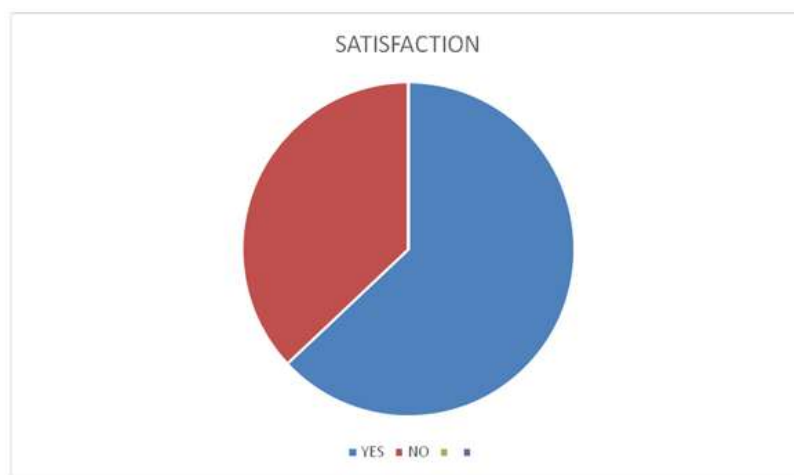
Question no. 6

People feels Satisfaction

Satisfaction	No. of respondents	Percentage
Yes	126	063
No	074	037
Total	200	100

(SOURCE: PRIMARY DATA)

The above table shows people feel satisfaction. Out of the total respondents taken for the study, 63% opinion that People feel satisfaction and 37% opinion that People not feel satisfaction. Majority of the people opinion that People feel satisfaction.



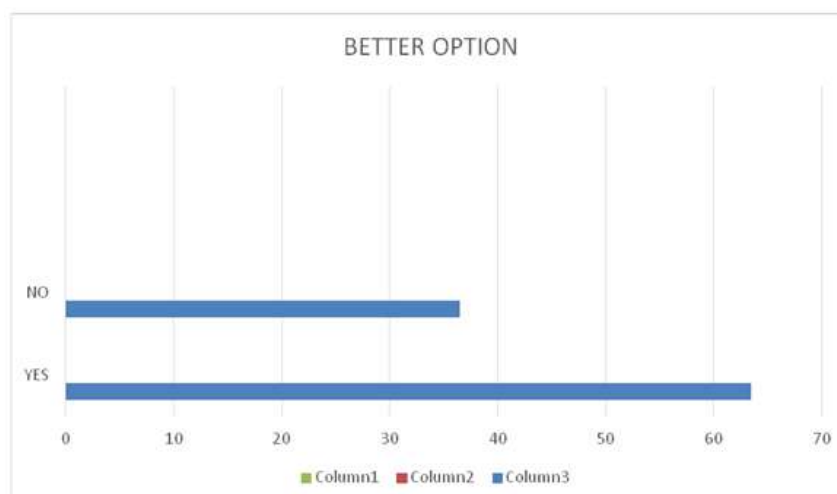
Question no. 7

Better option as compare to other company

Better Option	No. of respondents	Percentage
Yes	127	63.5
No	073	36.5
Total	200	100

(SOURCE: PRIMARY DATA)

The above table shows people opinion that better option as compare to other company. Out of the total respondents taken for the study, 63.5 % opinion that Better option as compare to other company and 36.5% Better option as compare to other company. Majority of the people opinion Better option as compare to other company.



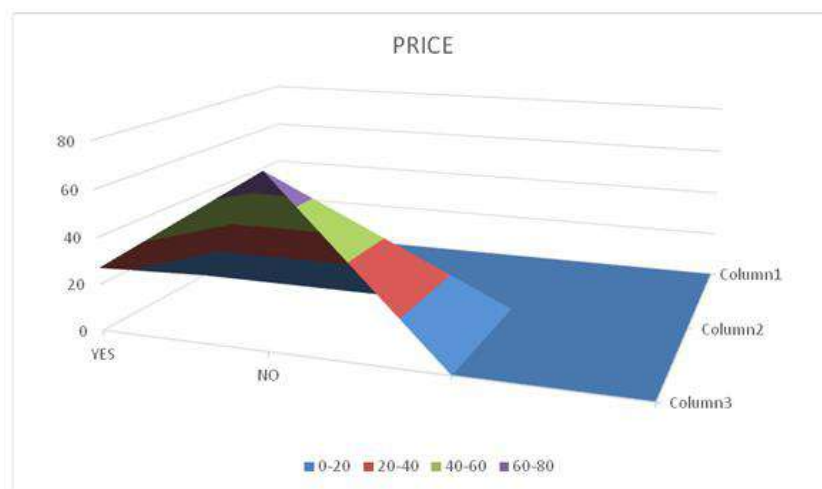
Question no. 8

Pricing is high

Pricing is high	No. of respondents	Percentage
Yes	054	027
No	146	073
Total	200	100

(SOURCE: PRIMARY DATA)

The above table shows people opinion that Pricing is high. Out of the total respondents taken for the study, 27 % opinion that Costing of Pricing is high and 73% opinion that Costing of Pricing is not high. Majority of the people opinion that Costing of Pricing is not high.



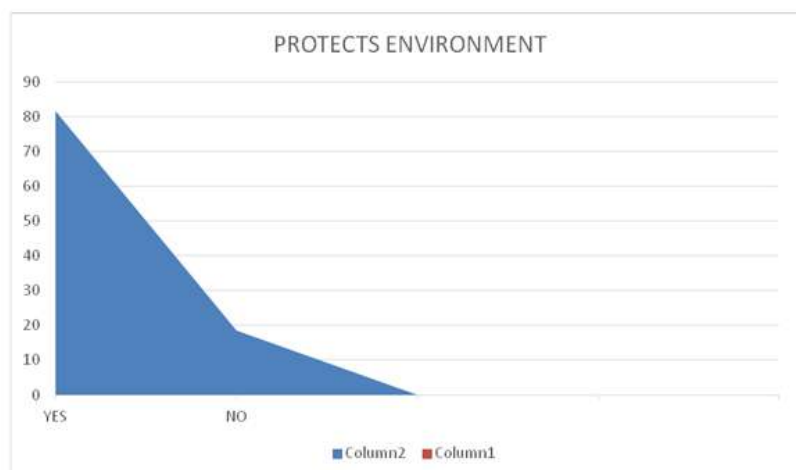
Question no. 09

Bajaj Automobile products protect environment.

Protect Environment	No. of respondents	Percentage
Yes	163	81.5
No	037	18.5
Total	200	100

(SOURCE: PRIMARY DATA)

The above table shows people opinion that Bajaj Automobile products protect environment. Out of the total respondents taken for the study, 81.5 % opinion Bajaj Automobile products protect environment and 18.5% opinion Bajaj Automobile products not protect environment. Majority of the opinion that Bajaj Automobile products protect environment.

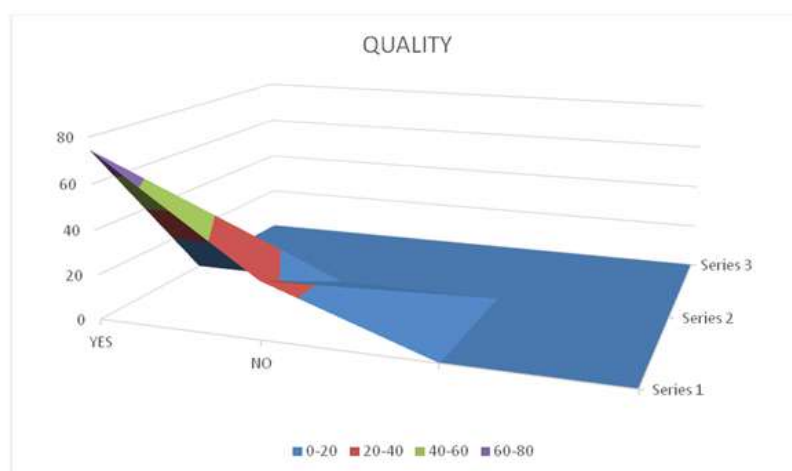


Question no. 10

Quality of Bajaj Automobile Products is good.

Quality	No. of respondents	Percentage
Yes	149	74.5
No	051	25.5
Total	200	100

The above table shows Quality of Bajaj Automobile Products. Out of the total respondents taken for the study 98.67% people opinion that Quality of Bajaj Automobile Products is good, while 1.33% people opinion that Quality of Bajaj Automobile Products not good. Majority of the opinion that Quality of Bajaj Automobile Products is good.



Result

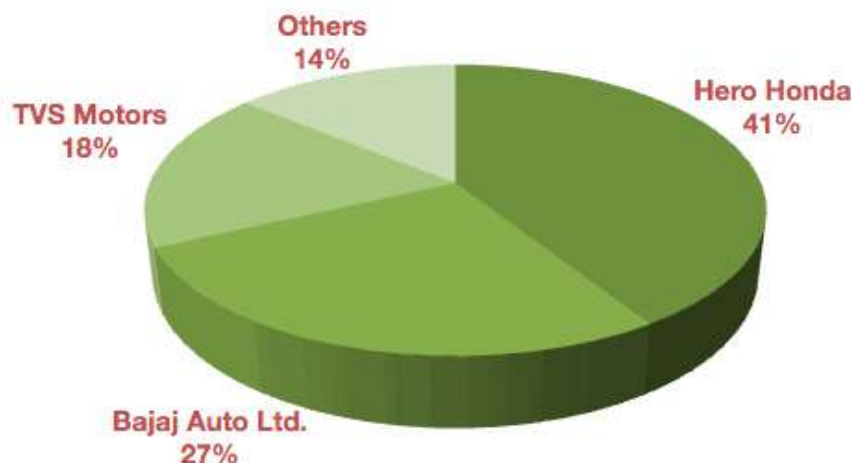
- Majority of the People are Male.
- Majority of the people are doing Job.
- Majority of the people agree Bajaj products likes by everyone.
- Majority of People opinion that Bajaj products are affordable.
- Majority of the people opinion that Journey is Safe.
- Majority of the people opinion that People feel satisfaction.
- Majority of the people opinion Better option as compare to other company.
- Majority of the people opinion that Costing of Pricing is not high.
- Majority of the opinion that Bajaj Automobile products protect environment.
- Majority of the opinion that Quality of Bajaj Automobile Products is good.

Conclusion & Recommendation

Bajaj Auto is the flagship company of the Bajaj Group of Companies. Bajaj Auto Limited (BAL) is currently India's second largest two wheeler and three wheeler manufacturer. The core competency of Bajaj Auto Ltd is its technology and innovation. Both DTS-i (Digital Twin Spark Ignition) and DTS-Fi (Digital Twin Spark Fuel Ignition) are technological breakthroughs by Bajaj. BAL is also a pioneer in product innovation having introduced technologies such as Exhaust TEC (Exhaust Torque Expansion Chamber), LED Tail Lamps, LCD Display, SNS, Spare parts (Tubeless tyres, rear disc brakes), Black colour scheme etc.

Today, the company has become a market leader with annual production in excess of 2.35 million units which was about 4000 units in 1961. These days, Bajaj Auto Ltd. has started offering products in all segments (mopeds & scooterettes, scooters, motorcycles, three wheelers).

The motorcycle segment constitutes about 81.5% of the two wheeler market in India. It also contributes to three-fourths of the total exports in the two wheeler industry. The study observed Bajaj is the second largest player in this segment after Hero Honda.



The study at the phase also analyzed the peer comparison of the sample organization with its competitors and revealed following results:

In view of the above, the study holds true the framed hypotheses to consider that the automobile sector in India is developing. It has been stated on the basis of another hypothesis stating that the Bajaj Auto Limited is continually progressing automobile company. The same has been reflected through ratio analysis done on the basis of its financial statements.

The study therefore holds the framed hypotheses true and accepted.

SUGGESTIONS

- ✓ Bajaj Auto Limited is a leading company in two wheelers vehicles manufacturing mopeds, motor cycles and scooters. Though it is in a very convenient position, the study recommends to be innovative in the sector in order manufacture vehicles as per demands of the customers.
- ✓ The study recommends to enter into the four wheeler vehicle segments also. However, the company is already indulged into four wheeler segment but the progress is much required.
- ✓ The company must strive for new models and technologies which would attract the buyers. The need of the day would be studied by the company and innovate accordingly.
- ✓ The company must advertise widely about its wide range of products to make the customers more aware of its products.
- ✓ The company must always review the prices of the products in comparison with that of its competitors.

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RELATIONSHIP OF ORGANIZATIONAL JUSTICE WITH INSTIGATED WORKPLACE INCIVILITY: A STUDY OF SELECT I.T FIRMS IN AND AROUND CHANDIGARH

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ABSTRACT

The purpose of this study is to analyze the relationship and impact of Organizational justice on Workplace incivility in information and technology sector in and around Chandigarh. The scope of the study is confined to top five IT firms located in and around Chandigarh. Middle level employees would be considered for the purpose of the study Data is collected from 210 respondents including both male and female participants. It is expected that the results and findings of the study will be useful not only for the IT sector but also to other organizations, their managers, employees and in particular their HR departments.

INTRODUCTION

Most of the research on workplace incivility surrounds the concept of a spiraling effect to suggest increasing intense behavior that has a starting and a tipping point (Andersson and Pearson, CL Porath et al). This is suggestive of the thought that certain outcomes of workplace incivility become the cause for a continuous cycle. Say, incivility can be the reason why a person feels alienated at the workplace. Being alienated can eventually turn into incivility. Such a spiral can also trigger uncivil behaviors. The incidents and the outcomes become important in such a case.

Feelings of injustice contribute to perpetuating incivility in work settings as people reciprocate or escalate exchanges. The experience of injustice can prompt desire to exact revenge to reciprocate the derogatory nature of an exchange (Barclay et al.2005). In the course of restoring balance in their relationships with offending colleagues, people are likely to engage in deviant behavior that runs contrary to organizational values and undermines the quality of team functioning. So, in this context this study explores the relationship and impact of Organizational justice on Instigated workplace incivility.

Organizational Justice

According to Greenberg and Baran (2009), Organizational justice is the study of people's perception of fairness in organization. Organizational Justice is historically routed in Equity theory. Equity theory according to Adam (1965), states that people undergo cognitive conflict when things go in contrast to their prospect.

Organizational justice is the key factor to most successful organizations. In order to keep a satisfied, committed a loyal employee in the organization, the organization needs to be fair in its system regarding justice. When employees see themselves as partners in the organization, they perceive higher level of justice.

Wat and Shaffer (2005) state that equity has generally been conceptualized in terms of perceived fairness and operationalized as a three-dimensional construct: distributive, procedural and interactional justice.

Distributive justice refers to employees' perception concerning whether benefits are distributed fairly or not (Folger and Cropanzano (1998). According to Greenberg and Baron (2009). Distributive Justice is that form of organizational justice that focuses on people's belief, that their workers will receive fairness in the amounts of valued work with similar outcomes (e. g. pay., motivation, etc).

Procedural Justice is defined as fairness issues concerning the methods, mechanisms and process employed to determine outcomes (Folger and Cropanzano, 1998). Greenberg (1996) views procedural justice as the perception of an individual concerning whether the procedures or methods used in the making of a decision about him / herself of a third person are appropriate. In cases of procedural injustice, people will not only accept the output as unfair, they also will not consider the whole organizational system by accepting that unfair.

Interactional justice is about how the behaviors of the decision makers are perceived (Bias and Moag. (1986). It is the way recipients of justice are treated by management in terms of organizational practices (Cohen-Charash and Speitor, 2001). Interactional justice actual performance of decision-making process in an organization.

Workplace Incivility

The theory for Conservation of Resources suggests that people tend to witness psychological distress when they see actual and/or threat of resource loss. Similarly, when people at a workplace experience rude or uncivil behavior, they tend to deplete resources like a positive mood. These workplace deviant behaviors tend to disrupt the environment of an organization and lowers employee morale (Hoel, Einarsen, & Cooper, 2003; Keashly &

Jagatic, 2003).

Andersson and Pearson (1999) have defined workplace incivility as "...low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect". This is one of the most popular definitions of workplace incivility and is referenced in most researched around the subject. Workplace incivility can occur in various forms such as use of rude language, gossiping/spreading rumors, disrespectful gestures, insensitivity during work hours, deprecating humor or checking email while talking to someone.

According to Schilpzand et al (2014), workplace incivility can be divided into three distinct types Experienced incivility, Instigated incivility, Witnessed incivility

Experienced incivility – This takes place when the individual is actually exposed to uncivil behavior at workplace. Age, gender, generation, race, conflict management style, workgroup norms.

Instigated incivility – This phenomenon focuses on the perpetrator and the factors that make him act in an uncivil manner. The instigator's viewpoint with respect to the organizational justice, reciprocity, power and depression all trigger workplace incivility. Revengeful feeling also amounts to instigated incivility.

Witnessed incivility – Bystanders observing uncivil acts taking place are also significantly impacted from witnessed incivility which affects their abilities.

REVIEW OF LITERATURE

Organizational justice and Instigated workplace incivility

According to Sayers (2011) research was conducted in order to analyze and evaluate the procedural and the interactional justice perception which is based on the moderators related to the relationship between the violation of the psychological contract and the incivility in the workplace. With the help of this research, a stronger relationship was observed between the two. The research that happened resulted in the analysis that there is some relationship among the two factors. Organizational justice is directly proportional to the instigated workplace incivility.

According to Scruggs, research was done in order to identify and analyze the effects of the workplace incivility of the organization injustice and a survey was conducted after taking data from different organizations and some survey was conducted. This also proved that there is a stronger relationship between organizational injustice and the work incivility (Cortina, 2017). If the organization or the authorities in an organization does not provide proper justice to the employees, then this surely effects the workplace and therefore the survey and the research has proven the same thing.

According to Arif (2017), research was performed and it was identified that the incivility in the workplace can be the reason for the absence of employees. This research was conducted in order to find out the factors that are responsible for work incivility and also the methods which can be considered to stop these factors and promote work incivility. This research when conducted by asking some of the questions from the employees then it was analyzed that if any injustice happens in the organization or any judgement that is done against the employees' leaves an impact on their motivation which in turn results in the absence of these employees. The absence of one employee or this type of behavior in the organization instigates the incivility as the work isn't done properly.

Pandey and Sharma, (2016) notice that in the information technology sector the employees used to face incivility in the workplace due to which they are developing issues in maintaining of the interpersonal relationships with the other individuals or colleagues who are working in the organization. Furthermore, the author also states that due to the workplace incivility the employees are undergoing stress and there for face huddles in their coping behavior.

Joy and Blau, (2015) reveals that the information technology sector use to possess a greater number of workplace incivility than the other organization. It is because there was increased number of employees working that leads to the development of competition within the team or in the organization itself. Apart from this the author also states that the physical and verbal aggression also become part of the workplace incivility due to which most of the employees used to face mental stress and psychological issues which result in the harmful effects that further turns into undesirable behavior.

The literature states that workplace incivility can generate a spiral of behaviors and is mainly triggered as a response to uncivil behavior by others in the organization that have many adverse results and implications on

the organizations as well as on the employees. Further literature also suggests that there exists a relationship between organizational injustice and the work incivility.

OBJECTIVES

- 1) To study the relationship of Organizational justice with Instigated workplace incivility among the employees of select firms of information technology sector.
- 2) To examine the impact of demographic variables on Organizational justice and Instigated workplace incivility among the employees of select firms of information technology sector.

SCOPE OF THE STUDY

The scope of the study is confined to top five IT firms located in and around Chandigarh. Middle level employees have been considered for the purpose of the study. Top five IT firms are selected on the bases of their market capitalization indexing of Bombay Stock Exchange (BSE) list as on October, 2018.

Selected IT firms are: - TCS, Infosys, Wipro, HCL-Tech, Tech Mahindra

TOOLS FOR DATA COLLECTION

- 1) Organizational justice: Components of Organizational Justice (Cropanzo, Bowen, & Gilliland, 2007)
- 2) Instigated workplace incivility: - The Adapted Workplace Incivility Scale (WIS): -Gary Blau and Lynne Andersson.

Sample

Data has been collected from 210 respondents including male and female participants.

ANALYSIS AND INTERPRETATION

Table-1

Age	Frequency	Percentage
25-30	33	15.7%
30-35	70	33.3%
35-40	69	32.9%
40-45	38	18.1%
Total	210	100.0%

Table 1 presents the descriptive statistics about the age category of employees of select firms of information technology sector. It is referred that the total number of (210) employees' majority of 33.3% belongs to the age category of 30 to 35 years and 32.9% of employees belong to the age category of 35 to 40 years. While 15.7% of employees belong to the age category of 25 to 30 and 18.1% employees belongs to the age category of 40 to 45 years.

Table-2

Gender	Frequency	Percentage
Male	119	56.7%
Female	91	43.3%
Total	210	100.0%

Table 2 presents the frequency distribution of employees of select firms of information technology sector. The total number of the respondents are 210, out of which 56.7% employees are male and 43.3% employees are female.

Table-3

Educational Qualifications	Frequency	Percentage
Graduate	148	70.5%
Postgraduate	62	29.5%
Total	210	100.0%

Table 3 throws light on the education level of employees who were the part of this research study. It can be observed that 70.5% employees are graduate. However, 29.5% of employees are post graduate.

Table-4

Marital Status	Frequency	Percentage
Married	167	79.5%
Unmarried	43	20.5%
Total	210	100.0%

Table 4 depicts the descriptive statistics which presents the information about the marital status of employees of select firms of information technology sector. The total number of the respondents are 210, out of which 79.5% employees are married and 20.5% employees are unmarried.

Table-5

Work Experience	Frequency	Percentage
<5	54	25.7%
5-10	103	49.0%
11-15	53	25.2%
Total	210	100.0%

Table 5 shows the descriptive statistics and presents information about the work experience of employees of select firms of information technology sector. It is referred that out of the total number of (210) employees' majority of 49% employees has "5-10" years' work experience and work experience of 25.7% of employees is "<5" years. But 25.2% of employees has 11-15 years' work experience.

Table-6

Level in management	Frequency	Percentage
Lower	40	19.0%
Middle	170	81.0%
Total	210	100.0%

Table 6 presents information about the level of management of employees. Looking at the mean value it is referred that the majority of employees i.e., 81% are middle. While 19% employees are at lower level.

Table-7

	N	Mean	Median	Mode	Std. Deviation	Skewness	Kurtosis
Organizational Justice	210	107.86	108.00	115.00	10.04	-0.50	0.33
Workplace Instigated Incivility	210	46.94	48.00	45.00	6.90	-0.35	-0.57

Observing table 7 it can be is referred that the average value (107.86) for organizational justice is smaller than their median (108.00) and mode (115.00) with standard deviation 10.04. Whereas median value (48) for Instigated workplace incivility is larger than their mean (46.94) and mode (45) with standard deviation 6.90. The distributions of Organizational justice and Instigated workplace incivility among the employees of select firms of information technology sector are negatively skewed with coefficient of skewness -0.50 and -0.35, respectively. Although curve of Organizational justice is platykurtic as values of kurtosis is -0.57 less than zero. While value of kurtosis for Instigated workplace incivility is 0.33 thus curve for Instigated workplace incivility among the employees of select firms of information technology sector is leptokurtic.

Hypothesis 1: There exists a relationship between Organizational justice and Instigated workplace incivility among the employees of select firms of information technology sector.

Table-8

		Workplace Instigated Incivility	Organizational Justice
Workplace Instigated Incivility	r-value	1	.603**
	p-value		.000
Organizational Justice	r-value		1
	p-value		

Table 8 represents the correlation values between the Organizational justice and Instigated workplace incivility among the employees of select firms of information technology sector. Correlation values measure the strength and direction of linear relationship between the two variables. Correlation value lies between +1 to -1. +1 indicates the perfect positive correlation while -1 indicates the perfect negative correlation. Any variable shows

correlation with itself with the value of 1. The correlation results revealed that the coefficient of correlation for Organizational justice and Instigated workplace incivility has come out to be 0.603 which is significant at 0.01 level with p-value 0.000, hence there is a significant positive relation between Organizational justice and Instigated workplace incivility among the employees of select firms of information technology sector. Thus Hypothesis-1 is accepted.

Hypothesis 2: There exists an impact of Organizational justice on Instigated workplace incivility among the employees of select firms of information technology sector.

Table-9

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.603	.364	.361	5.51958

The step wise regression is used here to estimate the relationship between dependent variable (workplace instigated incivility) and independent variable (organizational justice). In stepwise regression a regression model is fitted in which the choice of variables is carried out by automatic procedure. In each step, a variable is considered for addition to or subtraction from the set of explanatory variables based on some pre-specified criterion. The table shows the linear regression model summary and overall fit statistics for the dependent variable workplace instigated incivility with independent variable (organizational justice). As shown in table the analysis revealed the relationship between workplace instigated incivility and organizational justice, where adjusted R^2 of model 1 is .361 with the $R^2 = 0.364$. It can be concluded that the organizational justice, explain 36.4% variation in the dependent variable workplace instigated incivility.

Table-10

ANOVA						
Model		Sum of Squares	df	Mean Square	F-value	p-value
1	Regression	3627.309	1	3627.309	119.062	.0001**
	Residual	6336.886	208	30.466		
	Total	9964.195	209			

The f-value in the table 10 is showing whether the overall regression model is a good fit for the data. The table shows that independent variable (organizational justice) statistically significantly predicts the dependent variable (workplace instigated incivility) ($p < 0.05$) and thus the regression model is a good fit of the data.

Table-11

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t-value	p-value
		B	Std. Error	Beta		
1	(Constant)	2.176	4.120		.528	.598
	Organizational Justice	.415	.038	.603	10.912	.0001**

The unstandardized coefficients in table 11 indicate that how much the dependent variable varies with an independent variable when all other independent variables are held constant. The coefficients Table is showing that organizational justice has a significant positive impact on workplace instigated incivility with standardized coefficient of beta being 0.603. Thus, the model for workplace instigated incivility (Y) and organizational justice (X) is

$$Y = 2.176 + 0.415 X$$

Hypothesis 3(a): There is a significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to age.

Hypothesis 3(b): There is a significant difference between levels of Organizational justice among the employees of select firms of information technology sector with regard to age.

Table-12

	Age							
	25-30		30-35		35-40		40-45	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Organizational Justice	108.76	9.86	106.69	9.91	107.68	10.82	109.55	8.98
Workplace Instigated Incivility	45.67	6.39	45.21	7.64	47.90	6.72	49.47	5.17

Table 12 depicts the mean value and standard deviation for workplace instigated incivility of different age groups. Looking at the table it is referred that workplace instigated incivility has highest mean value (47.90) for 35-40 age group with standard deviation 6.72 and lowest mean value (45.21) for age group 30-35 with standard deviation 7.64. However, age group 25-30 has mean value (45.67) for workplace instigated incivility with standard deviation 6.39. While organizational justice has highest mean value (108.76) for 25-30 age group with standard deviation 9.86 and lowest mean value (106.69) for 30-35 age group with standard deviation 9.91. But age group 35-40 years has mean value 107.68 for organizational justice with standard deviation 10.82.

Table-13

ANOVA						
		Sum of Squares	df	Mean Square	F-value	p-value
Organizational Justice	Between Groups	234.188	3	78.063	.772	.511
	Within Groups	20825.527	206	101.095		
	Total	21059.714	209			
Workplace Instigated Incivility	Between Groups	569.313	3	189.771	4.161	.007**
	Within Groups	9394.883	206	45.606		
	Total	9964.195	209			

Table 13 shows the output of the ANOVA analysis and whether there is a statistically significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to age. It can be seen that the significance value is $p = 0.007$, which is below 0.01 and, therefore, there is a statistically significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to age. Thus, hypothesis H3(a) is accepted i.e., there is a significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to age.

But p-value for organizational justice is 0.511 which is more than 5% level of significance, hence there is a non-significant difference between levels of organizational justice among the employees of select firms of information technology sector with regard to age. Thus, hypothesis H3(b) is not accepted.

Table-14

Multiple Comparisons						
Dependent Variable: Workplace Instigated Incivility						
LSD						
(I) Age		Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
					Lower Bound	Upper Bound
25-30	30-35	.45238	1.42602	.751	-2.3591	3.2638
	35-40	-2.23188	1.42932	.120	-5.0499	.5861
	40-45	-3.80702*	1.60691	.019*	-6.9751	-.6389
30-35	25-30	-.45238	1.42602	.751	-3.2638	2.3591
	35-40	-2.68427*	1.14563	.020*	-4.9429	-.4256
	40-45	-4.25940*	1.36076	.002**	-6.9422	-1.5766
35-40	25-30	2.23188	1.42932	.120	-.5861	5.0499

40-45	30-35	2.68427*	1.14563	.020*	.4256	4.9429
	40-45	-1.57513	1.36423	.250	-4.2648	1.1145
	25-30	3.80702*	1.60691	.019*	.6389	6.9751
	30-35	4.25940*	1.36076	.002**	1.5766	6.9422
	35-40	1.57513	1.36423	.250	-1.1145	4.2648

Table 14 interprets the **Multiple Comparisons**, to define which groups differed from each other. The LSD post hoc test is generally the preferred test for conducting post hoc tests on a one-way ANOVA, but there are many others. It can be seen from the table that there is a statistically significant difference between “25-30” and “40-45” age groups ($p = 0.019$) for workplace instigated incivility among the employees of select firms of information technology sector. Similarly, there is a significant difference between the “35-40” years and “30-35” years age groups ($p=0.20$) for workplace instigated incivility as well as between “40-45” and “30-35” age group ($p=0.002$).

Hypothesis 4(a): There is a significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to gender.

Hypothesis 4(b): There is a significant difference between levels Organizational justice among the employees of select firms of information technology sector with regard to gender.

Table-15

	Gender					t-value	p-value
	Male		Female				
	Mean	SD	Mean	SD			
Organizational Justice	107.55	9.86	108.25	10.31	.499	.619	
Workplace Instigated Incivility	46.82	7.44	47.10	6.17	.294	.769	

Table 15 reveals the mean value, standard deviation and t-values of organizational justice and workplace instigated incivility for gender category. From table it can be interpreted that value of workplace instigated incivility is found little higher in female employees (mean = 47.10) as compared to male employees (mean = 46.82). Table shows non-significant modification in level of workplace instigated incivility ($t= 0.294$, $p=0.769 > .05$), which means that there is a non-significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to gender. Thus, hypothesis 4(a) is not accepted.

Similarly, for organizational justice, mean value (108.25) of female employees is greater than the mean value (107.55) of male employees. Also, there is a non-significant difference between levels of organizational justice among the employees of select firms of information technology sector with regard to gender. Thus, hypothesis 4(b) is also not accepted.

Hypothesis 5(a): There is a significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to educational qualification.

Hypothesis 5(b): There is a significant difference between levels of Organizational Justice among the employees of select firms of information technology sector with regard to educational qualification.

Table-16

	Educational Qualifications					
	Graduate		Postgraduate		t-value	p-value
	Mean	SD	Mean	SD		
Organizational Justice	108.30	9.70	106.79	10.81	.997	.320
Workplace Instigated Incivility	47.95	6.06	44.53	8.16	3.347	.001**

The mean value, standard deviation and t-values of organizational justice and workplace instigated incivility for educational qualification is depicts by Table 16. From table it can concluded that value of workplace instigated incivility is found smaller in postgraduate employees (mean = 44.53) as compared to graduate employees (mean = 47.95). Table shows a significant modification in level of workplace instigated incivility ($t= 3.347$, $p=0.001 < 0.01$), which means that there is a significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to educational qualification. Thus, hypothesis 5(a) is accepted.

Likewise, for organizational justice, mean value (106.79) of postgraduate employees is smaller than the mean value (108.30) of graduate employees. But there is a non-significant difference between levels of organizational justice among the employees of select firms of information technology sector with regard to educational qualification as p-value (0.320) is more than 5% level of significance. Thus, hypothesis 5(b) is not accepted.

Hypothesis 6(a): There is a significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to marital status.

Hypothesis 6(b): There is a significant difference between levels of Organizational Justice among the employees of select firms of information technology sector with regard to marital status

Table-17

	Marital Status					
	Married		Unmarried		t-value	p-value
	Mean	SD	Mean	SD		
Organizational Justice	107.90	9.83	107.67	10.93	.134	.894
Workplace Instigated Incivility	47.44	6.85	44.98	6.85	2.106	.036*

Table 17 exhibits the mean value, standard deviation and t-values of organizational justice and workplace instigated incivility for marital status group. Value of workplace instigated incivility is found smaller in unmarried employees (mean = 44.98) as compared to married employees (mean = 47.44). Table shows a significant modification in level of workplace instigated incivility ($t = 2.106$, $p = 0.0361 < 0.05$), which means that there is a significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to marital status. Thus, hypothesis 6(a) is accepted.

For organizational justice, mean value (107.67) of unmarried employees is smaller than the mean value (107.90) of married employees. As p-value for organizational justice (0.894) is more than 5% level of significance hence there is a non-significant difference between levels of organizational justice among the employees of select firms of information technology sector with regard to marital status. Thus, hypothesis 6(b) is not accepted.

Hypothesis 7(a): There is a significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to work experience.

Hypothesis 7(b): There is a significant difference between levels of Organizational Justice among the employees of select firms of information technology sector with regard to work experience.

Table-18

	Work Experience					
	<5		5-10		11-15	
	Mean	SD	Mean	SD	Mean	SD
Organizational Justice	105.98	10.24	108.59	10.27	108.34	9.30
Workplace Instigated Incivility	43.63	5.87	47.22	7.32	49.75	5.64

Table 18 shows the mean value and standard deviation for workplace instigated incivility and organizational justice of different work experience groups. From table it is referred that workplace instigated incivility has highest mean value (49.75) for “11-15” years’ work experience group with standard deviation 5.64 and lowest mean value (43.63) for “<5” years’ work experience group with standard deviation 5.87. However, work experience group “5-10” years has mean value (47.22) for workplace instigated incivility with standard deviation 7.32. While organizational justice has highest mean value (108.59) for “5-10” years’ work experience group with standard deviation 10.27 and lowest mean value (105.98) for “<5” years’ work experience group with standard deviation 10.24. But work experience group “11-15” years has mean value 108.34 for organizational justice with standard deviation 9.30.

Table-19

ANOVA						
		Sum of Squares	df	Mean Square	F-value	p-value
Organizational Justice	Between Groups	257.972	2	128.986	1.284	.279

Workplace Instigated Incivility	Within Groups	20801.742	207	100.492		
	Total	21059.714	209			
	Between Groups	1019.927	2	509.964	11.802	.0001**
	Within Groups	8944.268	207	43.209		
	Total	9964.195	209			

The output of the ANOVA analysis for testing whether there is a statistically significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to work experience is presented by Table. From the above table, It can be seen that the significance value is $p = 0.0001$, which is less than 0.01 and, therefore, there is a statistically significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to work experience. Thus, hypothesis H7(a) is accepted.

But there is a non-significant difference between levels of organizational justice among the employees of select firms of information technology sector with regard to work experience as p-value for organizational justice is 0.279 which is more than 5% level of significance. Thus, hypothesis H7(b) is not accepted.

Table-20

Multiple Comparisons							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
						Lower Bound	Upper Bound
Workplace Instigated Incivility	<5	5-10	-3.59367*	1.10439	.001**	-5.7710	-1.4164
		11-15	-6.12509*	1.27100	.0001**	-8.6308	-3.6193
	5-10	<5	3.59367*	1.10439	.001**	1.4164	5.7710
		11-15	-2.53142*	1.11120	.024*	-4.7221	-.3407
	11-15	<5	6.12509*	1.27100	.0001**	3.6193	8.6308
		5-10	2.53142*	1.11120	.024*	.3407	4.7221

Table 20 reveals the **Multiple Comparisons** to define which groups differed from each other. The LSD post hoc test is generally the preferred test for conducting post hoc tests on a one-way ANOVA, but there are many others. It can be seen from the table that there is a statistically significant difference between "<5" years and "5-10" years' work experience groups ($p = 0.001$) for workplace instigated incivility among the employees of select firms of information technology sector. Similarly, there is a significant difference between the "<5" years and "11-15" years' work experience groups ($p=0.0001$) for workplace instigated incivility as well as between "11-15" years and "5-10" years' work experience groups ($p=0.024$).

Hypothesis 8(a): There is a significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to designation

Hypothesis 8(b): There is a significant difference between levels of Organizational Justice among the employees of select firms of information technology sector with regard to designation.

Table-21

	Level in management					t-value	p-value
	Lower		Middle				
	Mean	SD	Mean	SD			
Organizational Justice	105.35	9.37	108.45	10.13	1.765	.079	
Workplace Instigated Incivility	44.15	7.34	47.59	6.65	2.888	.004**	

Table 21 supports the mean value, standard deviation and t-values of organizational justice and workplace instigated incivility for designation group. Table depicts that value of workplace instigated incivility is found higher in employees who have middle level in management (mean = 47.59) as compared to employees who

have lower level in management (mean = 44.15). Further table shows a significant modification in the levels of workplace instigated incivility ($t = 2.888$, $p = 0.004 < 0.01$), which means that there is a significant difference between levels of Instigated workplace incivility among the employees of select firms of information technology sector with regard to designation. Thus, hypothesis 8(a) is accepted.

For organizational justice, mean value (108.45) of employees who have middle level in management is higher than the mean value (105.35) of employees who have lower level in management. As p-value for organizational justice (0.079) is more than 5% level of significance hence there is a non-significant difference between levels of organizational justice among the employees of select firms of information technology sector with regard to designation. Thus, hypothesis 8(b) is not accepted.

CONCLUSION AND SUGGESTIONS

It is necessary to implement the provisions of the Corporate Code. Codes can be changed and supplemented, and, therefore, it is recommended to hold training sessions periodically for all employees so that the ideas of the Code will firmly enter the minds of all employees. There must be proper guidelines and guidance for promoting a civil work environment. In addition to discussing articles of the Corporate Code, one can include game moments in trainings and seminars. This is a good way to foster employee loyalty.

Incidents and complaints of uncivil behavior, must be addressed using ways that foster clear communication and candor. For the development of organizational behavior and communication skills, the following exercises can be used: contact establishing exercises; listening exercises; exercises that form personal feedback; training aimed at resolving conflicts (Roter, 2018).

Active socio-psychological training on the principles of interconnection, psychological comfort, and openness must be conducted to reduce the level of psychological violence, rudeness, and other forms of deviant behavior in interpersonal interaction of employees. This may help in the creation of better social environment of the organization.

Complaints and incidents of incivility must be dealt with in a confidential manner

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EMPLOYEE DEVELOPMENT AND ITS IMPACT ON JOB SATISFACTION AMONG JOURNALISTS OF CHANDIGARH AND PUNJAB

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ABSTRACT

Purpose: The research investigated the relationship between employee development and job satisfaction among journalists of Chandigarh and Punjab. The effect of socio-demographic variables with respect to employee development of Chandigarh and Punjab journalists was also studied.

Design\Methodology\Approach: By judgemental sampling method, 189 journalists from Chandigarh and Punjab were selected for the study. The data was collected through two questionnaires, one self-structured questionnaire on Employee Development and second, a Job Satisfaction Scale (Spector 1985). Socio-demographic variables were analyzed by ANOVA and t-test. For relationship and impact among variables, Pearson Correlation and Regression analysis was carried out.

Findings: The results showed a significant positive relationship between employee development and job satisfaction ($r=.168$). The level of significance in this study was $P<0.05$.

Research limitations: The research is restricted to only Chandigarh and Punjab with limited sample size ($n=189$), the results cannot be generalized to a larger extent.

Practical implications: Indulging in high employee development practices may lead to higher job satisfaction in journalists. Media houses should promote employee development programmes.

Originality value: The study offers value to media houses as it focuses on journalists and studies the impact of employee development on job satisfaction.

Keywords: Employee Development, Job Satisfaction, Journalists

INTRODUCTION

Many companies feel that the only way to grow and gain financial benefit is through infusion of fresh blood. But the whole thought is a big mistake. It not only negatively impacts employee satisfaction and retention, but in the long run has downbeat business consequences when they compete globally. Companies should endow on-going employee development if they want to retain the employees and also be successful. (Shelton, 2001). Endeavours should be made to enhance the capabilities, skills set, personal ability, knowledge and experience of employees so that the employees and the organization derives from development. Improving skill set and the capabilities of workers helps make and adapt to changes, which is a critical base of viable benefit in a global market (McKinsey, 2006).

The role of employee development is also very critical to change employee's attitude towards satisfaction with job and retention. Development programmes assist workforce to be better informed and skilled, which in turn help the employees to complete their designated work in the way the company desires. This also increases the workforce's satisfaction, as workers like to complete work the correct way (Isiaka, 2011).

Employee development endeavours can make a phenomenal transformation by enhancing feeling of personal growth. Employees usually care about an organisation, if they feel the organisation bothers for them (Garger, 1999). Jurkiewicz (2000) stated that employee satisfaction and commitment can be impacted by two factors, "feelings that the organization can be relied on to carry out its commitments to its employees and feelings that the individual is of some importance to the organization." While, companies need their workforce to assist them be prosperous, the workforce also wants to feel as if they are contributing in reaching the goals of the business (Gerbman, 2000). Organisations that indulge in employee development programs report better employee satisfaction and decreased turnover rate (Wagner, 2000).

In the present day media, where skills need to be improved every day to meet the changing demands of the profession and technology, employee development is inevitable. Also, the job stress in media industry is high and job swapping is on a rise, because of which much importance is being laid on job satisfaction and the ways to increase the level of employees' satisfaction. This study tries to explore the relation and impact of employee development on job satisfaction in media industry.

EMPLOYEE DEVELOPMENT

Employee development can be explained as the improvement of employee skills in terms of experience and knowledge associated with their work skills and personal ability and with the overall organization advantage that is derived by engaging in development activities. Employee development as a conception is not limited to vocational training, education, wages, salary or rewards but includes complete development of an employee off and on work in alignment with the all-inclusive organisational development.

“Employee development means to develop the abilities of an individual employee and organization as a whole so; hence employee development consists of individual or employee and overall growth of the employee as when employees of the organization would develop the organization, organization would be more flourished and the employee performance would increase” (**Elena 2000**).

“It entails in creating opportunities for promotion within the company and also providing opportunities for training and skill development that let employees to improve their employability on the internal and/or external labour market.” (**Butler & Waldrop, 2001**).

Jacobs and Washington (2003) stated, “employee development is an integrated planning arrangement provided for a period of time to ensure that all employees in the organisation have the competencies to do their work based on their potential to achieve organisational goals.”

“Employee development is described as the process of enhancing organisational performance and individual learning due to developments in human resources, organisation and career.” (**Jacobs, 2006**) “Employee development is the process of developing and improving the skills of employees through organisational development, training and development meant at improving the performance of the organisation” (**Swanson, 2001**).

To say, most authors feel employee development encompasses improvement of skills and employability, opportunities for promotion, employees overall growth and increased potential of employees, to meet organisational goals.

JOB SATISFACTION

Job satisfaction is about the way workforce feels and thinks about the work place and its different facets. Job satisfaction denotes peoples’ behaviour, the level to which they like or abhor their place of work. Job satisfaction is represented by sense of accomplishment of workers and victory. Job satisfaction necessities, that a good worker is rewarded for his or her own efforts. **Kaliski (2007)** inferred job satisfaction as one’s zeal and delight with their work and said that job satisfaction is a critical factor that helps employees get income promotion, accomplish other goals and get recognition.

Smith et al. (1969) elucidated job satisfaction, “as the feelings a worker has about his job. These feelings were based on the individual’s perceptions of the difference between what was expected as a fair return and what was actually experienced.” **Locke (1976)** explained it, “as a pleasurable emotional state resulting from the appraisal of one’s job or job experience.” **Schultz (1982)** regards it as, “the psychological disposition of people toward their work and this involves a collection of numerous attitudes or feelings.”

“Job satisfaction is the collection of feeling and beliefs that people have about their current job. People’s levels of degree of job satisfaction can range from extreme satisfaction to extreme dissatisfaction” (**George et al., 2008**). Job satisfaction could mean different things for varied individuals. Job satisfaction though mostly linked to motivation, has an unclear relation with it. Satisfaction is different from motivation. Job satisfaction is a mental state, an attitude and can be related to the feeling of accomplishment (**Mullins, 2005**). “We consider that job satisfaction represents a feeling that appears as a result of the perception that the job enables the material and psychological needs.” (**Aziri, 2008**). “Job satisfaction is the extent to which one is happy with their job hence an employee’s willingness to perform at an optimum level.” (**Hoffman-Miller 2013**).

To infer, job satisfaction according to many authors means positive attitude towards work, the employee’s willingness to perform and a collection of feelings employees have about their work.

STATEMENT OF THE PROBLEM

The present research emphasises on the relationship of employee development and job satisfaction among selected journalists of Punjab and Chandigarh.

LITERATURE REVIEW**STUDIES RELATED TO EMPLOYEE DEVELOPMENT**

Lee and Bruvold (2003) studied the relation amongst perceived investment in employees' development (PIED), organizational commitment, job satisfaction and intention to leave. The authors collected a sample of 405 nurses via a survey on a seven-point response format. Characteristics of each sample were studied via descriptive statistical analysis and then inter-correlations were computed. Scale dimensionality on the two samples was assessed via Factor analysis. The survey suggested that PIED is positively associated with affective commitment and job satisfaction. The survey also suggested that PIED and continuance commitment have no association. The study found that the relation between PIED and intention to leave was mediated by affective commitment and job satisfaction.

Dr. Balachandran (2012) discussed employee development practices, effective compensation, employee turnover and retention. This article explained practices of human resource development like selection, recruitment, training and development amongst others that develop human resources. The paper also explained ways to retain the most-talented and intelligent employees. The ways discussed in the paper included rewarding employees with attractive compensation packages and employee development via job-rotation, job enlargement, down-ward and lateral moves, job-transfers, promotions, temporary assignments outside and with the country, mentoring and sabbaticals.

Eric (2012) studied how performance of employee is affected by employees' training and development at Accra Polytechnic. This was done, by conducting a survey via a self-administered questionnaire on fifty senior staff members. The study found organizational issues that constrained training and development included lack of management support. The study also established that training and development positively affected personnel of the organisation. The study recommended organisations would be more successful if departments are empowered to hold employee training and development sessions in order to further improve their capability.

Strnadova & Reznakova (2014) examined employee development management system at the Research and Development Department of IT Company Y Soft Corporation through an unstructured interview method. The investigation studied the system of evaluating employees' performance within the department. The primary data obtained through the interview was developed into a case study. Analysis stated that as a part of employee development, a personal development strategy was customised exclusively for every personnel. The strategy was formulated based on overall company goals. The survey found that the employees saw the company's evaluating system and way of managing employee development in positive light and were motivated by the system.

Bhartiya (2015) studied the hypothetical models and framework associated with development of employee and its effect on employee performance. The paper also developed a model that elucidates on the association between employee development and employee performance. The employee development variables that were studied were employee exploring, skill development, self-managed and employee attitude. The paper emphasized on the significance of investment in human capital, employee developmental activities and experiments in employee development.

Studies establish that employee development affects many elements of an organisation including job satisfaction, organizational commitment, effective compensation, employee turnover and employee performance. The studies also found that most of the development activities were conducted with organisational goals in view.

STUDIES RELATED TO JOB SATISFACTION

Taylor (1911) the father of scientific management adopted the most prestigious and pessimistic philosophy approach to define the term job satisfaction. He argued the man has been motivated by money alone. He defined workers as stupid and phlegmatic and emphasized that to satisfy workers with their jobs, higher economic benefits should be provided. But with passage of time a more humanistic approach has replaced Taylor's solely money approach. This approach is more realistic from a simple explanation based on money,

but the complex approach is based on job satisfaction.

Morge (1953) studied job satisfaction of white collar employees. The study found that thirty five per cent of women were not satisfied with their job and fifty five per cent men were satisfied with their job. Hence, the study suggested women were relatively more contented as compared to male employees and that gender affected job satisfaction.

Gardon (1955) studied workers of human needs industries and industrial concern. The study found that job satisfaction increases if personal wants are met. Hence, the study suggested that personal satisfaction has a significant relation with job satisfaction.

Bidwel and Charles (1956) examined job satisfaction in management of school and found that to build worthy image of the school, effective education is necessary. The study found that perfect management increases teachers' job satisfaction.

Prasad (1964) studied relative elements of job satisfaction and personality. The research found that age did not affect job satisfaction of professionals. However, the study stated that job satisfaction improves with experience, inferring that experience has a positive influence on job satisfaction.

Anjaniyulu (1968) examined job satisfaction among 1000 teachers of secondary school from 102 Secondary Schools of Andhra Pradesh and its effectiveness on student's education through Random Sampling Method. Data analysis was done using mean, median and standard deviation. The researcher found that of the teachers studied, thirty seven per cent were unsatisfied with their work. The factors found responsible for dissatisfaction were parental co-operation, lack of accommodation facility and physical facility.

Singhal & Mayank (2015) studied the impact of North India academicians' job satisfaction on employee loyalty. Questionnaire survey method was used to collect sample of 100 academicians. The research found that employee loyalty among academicians was significantly impacted by job satisfaction. Amongst the underlying factors of job satisfaction that surfaced from research were work place environment, career growth, self-satisfaction and motivation.

Shaju & Durai, Subhashini (2017) studied employees of automobile industry to find how job satisfaction dimensions are related to job performance. It was found that for both, supervisors and workers, positive correlation was found between the dimensions of job satisfaction and performance of employees.

Studies suggest that money affects job satisfaction, along with fulfilment of personal goals and job performance. Authors also studied the association of job satisfaction with the demographic profile. Some authors felt that job satisfaction further influences employee loyalty and organisational performance.

STUDIES RELATED TO EMPLOYEE DEVELOPMENT AND JOB SATISFACTION

Bowley (2007) studied the impact of employees' training and development on job satisfaction. One thirty five frontline staff members of bakery retail franchises in Australia were surveyed. The study found evaluation of course design, learning experience and training quality effected efficiency and ability of a training program. The study also found that environment of work, job responsibilities and company values influenced employee satisfaction.

Shelton (2011) investigated the impact of programmes of employee development on job satisfaction, business success and employee retention. Researcher analysed two studies, that by the Gallup Organization and the American Society for Training and Development and the Society for Human Resource Management and found employee satisfaction and retention is increased by training and development. The study also found that if the culture of the organization supports employee in the development process the effect of training increases.

Jehanzeb and Rasheed (2013) studied the effect of training and development on job satisfaction and turnover intentions. The data was collected from fast food franchises of Saudi Arabia through a structured questionnaire. The study found positive relationship between effective training and development program and job satisfaction.

Rahman & Ali (2015) researched to find the interdependence of employee development, employees' commitment, job satisfaction and their influence on intention to quit. The study was conducted in universities in Khyber Pakhtunkhwa on a sample of 329. CFA using (SEM) was used to validate these interdependence relationships.

Chaudhary and Bhaskar (2016) in their paper found strong correlation between job satisfaction and training and development in education sector. The survey found that faculties believed they were able to enhance their expertise by undertaking Training and Development Programs. They also believe that they can get more recognition from their colleagues and top management. Faculties also feel that after undertaking development activities they have career growth, improved opportunities, along with financial benefits like salary hike, incentives and promotion.

Authors found significant relationship between job satisfaction and employee development. While some studies (**Rahman & Ali (2015)**) focused on the interdependence of the relationship, others (**Bowley (2007)**, **Shelton**

(2011), Jehanzeb and Rasheed (2013)) emphasised on the effect and impact of employee development on job satisfaction. Studies (Chaudhary and Bhaskar (2016)) also suggest that undertaking development activities increase job satisfaction as employees experience career growth, improved opportunities and financial benefits like salary hike, incentives and promotion.

OBJECTIVES OF THE STUDY

The main objectives of the study are:

1. To study employee development among journalists of Punjab and Chandigarh in relation to socio-demographic variables namely age, gender, marital status, years of experience and designation.
2. To study the relationship and impact between employee development and job satisfaction among journalists of Punjab and Chandigarh.
3. To suggest possible solutions to improve employee development and job satisfaction among journalists of Punjab and Chandigarh.

HYPOTHESIS OF THE STUDY

H1: There is association of demographic variables of employees with employee development among journalists under study.

H1a: There is association of age of employees with employee development among journalists under study.

H1b: There is association of gender of employees with employee development among journalists under study.

H1c: There is association of marital status of employees with employee development among journalists under study.

H1d: There is association of years of experience of employees with employee development among journalists under study.

H1e: There is association of designation of employees with employee development among journalists under study.

H2: There exists a significant relationship between employee development and job satisfaction among journalists under study.

H3: There exists a significant impact of employee development on job satisfaction among journalists under study.

RESEARCH METHODOLOGY

RESEARCH DESIGN

The research design of the study comprises of one independent variable (employee development) and one dependent variable (job satisfaction). Besides this; it has five demographic variables: age, gender, marital status, years of experience and designation.

SAMPLE DESIGN

189 journalists have been surveyed from different media houses of Punjab and Chandigarh. Judgemental sampling has been used.

METHODS OF DATA COLLECTION

Instruments used for data collection in this study are one self-structured and one structured questionnaire. These are: Employee Development Scale and Job Satisfaction Scale, respectively.

Section A contains the demographic information of the respondents, which includes: age, gender, marital status, years of experience and designation.

Section B of the questionnaire is self-structured questionnaire and comprises 15 questions.

Section C of the questionnaire is based on 36 items from the job satisfaction survey developed by **Spector (1985)** The job facets included promotion, pay, supervision, benefits, contingent rewards, nature of work, co-workers, operating procedures and communication.

RESULTS AND HYPOTHESIS TESTING

The target respondents in the study are journalists who are currently serving in media houses in Chandigarh and Punjab. Total sample size is 189.

Table-1: Descriptive Statistics of Socio-demographic variables

Variables	Frequency	Percent
Gender		
Male	44.44	84
Female	55.55	105
Age (yr)		
Under25	38.6	73
25-35	28.57	54
35-45	12.6	24
45-55	07.40	14
55-65	12.69	24
Marital Status		
Married	53.96	102
Single	46.03	87
Designation		
Trainee Reporter	37.03	70
City Staff	21.69	41
Principal Correspondence	21.16	40
Bureau	07.93	15
Coordinator	12.16	23
Experience (yr)		
0-5 years	37.03	70
5-10	23.80	45
10-15	21.16	40
15 years and above	17.98	34

Table 1 shows the characteristics of the respondents of the study. Within the sample, 44.4 % are male respondents and 55.5 % are females. 38.6.5 % respondents are quite young and under the age group of 25 years, 53.96 % of respondents are married, 37.0 % of the respondents come in the category of trainee reporters and 37.03 % respondents are having experience of 0-5 years. The data collected for the study has been found to be distributed normally and the tests applied are parametric in nature.

Table-2: ANOVA Analysis of Socio-Demographic Variables

		Sum of Squares	Df	Mean Square	F	Sig.
Age	Between Groups	626.924	4	156.731	3.127	.016
	Within Groups	9221.436	184	50.117		
	Total	9848.360	188			

Experience	Between Groups	148.048	3	49.349	.941	.422
	Within Groups	9700.312	185	52.434		
	Total	9848.360	188			
Designation	Between Groups	534.717	4	133.679	2.641	.035
	Within Groups	9313.643	184	50.618		
	Total	9848.360	188			

One way ANOVA analysis has been used to check the significant difference between socio-demographic variables (age, marital status, designation, and experience) and employee development.

Table 2 shows that there exists statistically significant difference between group means of age and designation. However, no statistically significant difference is found between group means of experience with employee development, as determined by one-way ANOVA.

Table-3: Independent T-Test of Gender and Employee Development
Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Employee Development	Male	102	54.1176	7.41325	.73402
	Female	87	53.9885	7.0859	.75783

Table-3.1

		Employee Development	
		Equal variance assumed	Equal variance not assumed
Levene's test for equality of variance	F Sig.	.217 .642	
t-test for equality of means	T df Sig.(2 tailed) Mean difference Std. error difference 95% confidence interval of the difference Lower Upper	.122 187 .903 .12914 1.05905 -1.96007 2.21836	.122 184.663 .903 12914 1.05503 -1.95233 2.21061

The results of independent-sample t-test (Table 3.1) show no statistically significant difference between the scores for male and female in the media houses. Thus H_{1b} of the study stands rejected.

Table-3.1: Independent T-Test of Marital Status and Employee Development
Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Employee Development	Single	102	54.1176	7.41325	.73402
	Married	87	53.9885	7.06859	.75783

Table-3.2

		EMPLOYEE DEVELOPMENT	
		Equal variance assumed	Equal variance not assumed
Levene's test for equality of variance	F Sig.	.217 .642	
t-test for equality of means	T df Sig.(2 tailed) Mean difference Std. error difference 95% confidence interval of the difference lower Upper	.122 187 .903 .12914 1.05905 -1.96007 2.21061	.122 184.663 .903 12914 1.05503 -1.95233 2.21061

The results of an independent-sample t-test (Table 3.2) show no statistically significant difference between the scores for married and single employees in the media houses. Thus H_{1c} of the study stands rejected.

Table-4: Correlation between Employee Development and Job Satisfaction

Variables	r	P	N
Employee Development	.168	.021	189
Job Satisfaction			

*Correlation is significant at the 0.05 level (2-tailed)

The research findings from the Table 4 indicate that the correlation coefficient between employee development and job satisfaction $r = 0.168$ is significant at ($p=.021$). In other words, there exists a statistically significant relationship between employee development and job satisfaction. Hence, the findings support our 2nd hypothesis that is, *there exists a significant relationship between employee development and job satisfaction among selected journalists of Punjab and Chandigarh.*

Table-5: Brief Regression Model, Analysis of Variance and Statistical Regression of Employee Development and Job Satisfaction

Model	B	SE	Beta	t
Constant	123.886	8.129		15.241
Employee Development	.348	.149	.168	2.336
R= .168				
R2= .028				
Adjusted R2=.023				

Predictor variable (Constant): Employee Development

1. Dependent Variable: Job Satisfaction

The third hypothesis of the study H_3 is, *There exists a significant impact of employee development on job satisfaction among selected journalists of Punjab and Chandigarh.* Results, as shown in table 5, indicate a statistically significant positive impact of employee development on job satisfaction with ($\beta 0.168$, $p < .05$). So these findings support the 3rd hypothesis of the study which is that *there exists a significant positive impact of employee development on job satisfaction among selected journalists of Punjab and Chandigarh.*

DISCUSSION & CONCLUSION

The purpose of the present research was to explore the relationship between employee development and job satisfaction among journalists of Punjab and Chandigarh.

Hypothesis 1 in the study is partially supported as some socio-demographic variables are found significantly different with respect to employee development. In the study, gender, marital status and experience are not found to be significantly different from employee development.

Hypothesis 2 which states a significant relationship between employee development and job satisfaction is supported by the findings of the study. The results indicate that journalists who experienced employee development reported more job satisfaction.

Hypothesis 3 stating that employee development positively impacts job satisfaction is found to be supported by the results. It means journalists with high level of employee development experienced high-level of job satisfaction

IMPLICATIONS OF THE STUDY

This study presents empirical findings about relationship of employee development and job satisfaction among journalists of Punjab and Chandigarh. Since, employee development was found to be one of factors leading to job satisfaction among journalists, the media houses just engage in more employee development activities.

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PRIORITY SECTOR LENDING IN INDIA IN THE REFORMS ERA: NEED FOR REMEDIAL STRATEGIES TO MAKE THE SYSTEM MORE INCLUSIVE

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ABSTRACT

Priority sector Loans (PSL) have become less significant in India in the ongoing era of economic reforms. In the reforms regime, all banks are concerned with profit motive and their concerns on social banking have come down. Even the Government-owned banks viz. public sector banks (PSBs) are thinking are profit-motivated. The new generation private sector banks (NGPBs) which were granted license during the reforms era are not even coming under the purview of PSL lending norms. In this context, this paper looks into the implications of reforms on the PSL advances and suggests strategies for making the system more inclusive.

Keywords: Social Banking, Priority Sector Loans

1. INTRODUCTION

In the ongoing era of economic reforms, the relative significance of social banking as envisaged by the Priority Sector Loans (PSL), otherwise called as Special and Preferred Sector Finance, has come down drastically. This is because of the fact that in the ongoing regime all commercial banks in India including the public sector banks (PSBs) are supposed to function on commercial lines, and profit-motive is not an option but an imperative for their survival and growth. The new generation private sector banks (NGPBs) which were granted license during the ongoing reforms era are not even coming under the purview of PSL lending norms. Hence, NGPBs are functioning purely on commercial lines, by focusing on customer segments that offer with the highest levels of profitability. This paper makes a critical study of the relevance of social banking in India in the ongoing reforms era.

2. OBJECTIVES OF THE PAPER

- (i) To study the banking sector reforms and its impact on India's banking sector;
- (ii) To study the impact of banking sector reforms on social banking, and the significance of Priority Sector Loans (PSL) in the ongoing reforms regime;
- (iii) To suggest strategies for effective PSL lending or its alternatives like financial inclusion for inclusive and sustainable development of Indian economy.

3. METHODOLOGY

The methodology involves analysis of the data relating to commercial banking as are available in RBI publications, IBA Bulletin and other reputed research journals using tools of statistical analysis and accordingly draw meaningful conclusions.

4. ANALYTICAL SIGNIFICANCE

The analysis throws light on the vital issue of the balanced and equitable development of the economy based on sound principles of social justice; while at the same time ensuring its market competitiveness as is essential in a liberalized environment. PSL lending ensures social justice in bank lending and accelerates equitable and balanced development of the nation. Hence, a critical study of the relevance of PSL lending in the current regime with so as to suggest remedial strategies is analytically significant.

5. SOCIAL BANKING IN INDIA: A HISTORICAL PERSPECTIVE

It may be stated that the Banking Regulation Act, 1949 provided some level of homogeneity and coherence to the banking system and gave it some sense of direction in the field of deposit mobilization and credit dispensation. Even then it was believed that there was a need for closer dovetailing of credit with the priorities of economic planning. As the banking sector is a key constituent of country's economy, it should serve the basic social and economic goals and prevent monopolistic tendencies, concentration of power and improper use of resources. The V V Pai Anandikar's Report to the government of India highlighted the fact that new entrepreneurs had not been able to secure adequate credit from the banking system. The report also highlighted the fact that the banks had failed to cater to the requirements of agriculturists and small industrialists. To overcome these defects the report recommended social control of banks. Social control of banks was expected to:

- (i) Improve the position of agriculturists and small industrialists.

- (ii) Enable the government to effectively implement the Five Year Plans.
- (iii) Bring about wider representation in the boards of Directors of banks and in the actual decisions with respect to advances.

To realize these objectives the Banking Laws (Amendment) Bill, 1967 was introduced in the Parliament that received the assent of the President in December, 1968 and implemented with effect from first week of February, 1969. But it was soon realized that the social control over banks could not realize the objectives as visualized in the Act. Consequently, 14 major Indian commercial banks were nationalized to fulfil the requirements of a developing economy in conformity with national priorities and objectives. After nationalization Mrs. Indira Gandhi announced the banking policy of the Government of India. The highlights of the policy were:

- o These banks will meet only genuine requirements of large scale organized industries and would give preference to those industries which provided essential goods and services for mass consumption.
- o They would not extend any credit facilities to any trader or industrialist who would use such facilities for anti-social and anti-national activities and also not for hoarding stocks of essential commodities.
- o The nationalized banks would give more and more credit facilities to the enterprises in the public sector.
- o They would invest an increasing amount of their resources in the backward areas of the country to ensure their speedy economic development.
- o They would coordinate their activities with the specialized financial institutions with a view to meeting the short and long-term credit needs of the industries.
- o They would make continuous efforts to promote cordial relations with their staff.
- o These banks would give due share to the business connected with the government treasury which had hitherto been exclusive monopoly of the State Bank of India.
- o Every bank would be free to evolve its own procedures for its efficient functioning within the broad framework of government policy.

After nationalization Indian banking system witnessed several developments as wide-spread branch expansion especially in rural and semi-urban areas, Lead bank scheme, Service Area Approach etc. All these developments primarily stemmed from the socialization of banking. While these developments made banking services easily accessible to the masses, especially the weaker sections of the society, there was a growing concern regarding the deterioration of the banking services. Further, the insistence of higher CRR and SLR ratios by the RBI coupled with the directed credit policy of the government adversely affected the profitability of the banks.

As part of the New Economic Policy, 1991 the Government was forced to have a rethinking on the banking sector policies and the government appointed Narasimham Committee to suggest measures to revamp the functioning of the banks. Implementation of the recommendations of the Narasimham Committee resulted in a paradigm shift in banking operations. As a result, there has been a distinct change in the way in which banking business is being done in India. One of the most significant outcomes of the deregulation in the banking industry has been the cut-throat competition. Further, because of the change in governmental policies, profit making is no longer a dirty word even for the Public Sector Banks (PSBs) which were expected to function as instruments of social banking, especially after nationalization of a number of private sector banks in 1969. Accordingly, unlike in the past, sustained profitability has become an imperative for survival and growth for any bank; whether it is public sector or private sector, old or new, domestic or foreign. As such, following the adoption of the said reforms “social” banking (or “mass” banking) is sought to be replaced by “profit” banking (or, “class” banking). Efficiency, competitiveness and quality have emerged as key success factors in the changed environment. In the above context, because of the paradigm shift in the way of functioning of banks, it is worthwhile to examine the consequences of banking sector reforms on the social banking.

6. BANKING SECTOR REFORMS IN INDIA

In India major private sector banks were nationalized in two phases. First in 1969 (14 banks) and then in 1980 (6 banks). Even after nationalization, private sector banks and foreign banks were also allowed to function side by side with nationalized banks. However, they were stringently regulated by the government. During the pre-reforms period, the nationalized banks extended their branch network many times particularly in rural areas. This lowered population per office and increased bank deposits as a percentage of national income from 15.5%

to 50%. Further, the credit extended to the weaker sections of the society (priority sector) also increased from 14% to 37.7%. PSBs had pumped enormous amount of credit into the priority sector. Financial sector reforms were initiated in India in the year 1992 following the report of the Committee on the Financial Systems (CFS). The recommendations of the CFC were framed with the broad objective of consolidating the quantitative progress achieved in Indian financial system after nationalization of the major private sector banks and arresting the qualitative deterioration of services that had accompanied the quantitative growth. As pointed out earlier, the base of the reform measures in the banking sector were the recommendations of the Narasimham Committees I and II. But it is to be mentioned that the government has implemented these recommendations only on a selective basis.

7. PRIORITY SECTOR LENDING IN BANKS IN INDIA

Traditionally priority sector advances occupy a special status in Indian financial system. The evolution of priority sector lending can be traced back to the days of Nationalization (1969), which aimed, inter alia, at (i) meeting the needs of production oriented activities of the economy and in particular those of farmers, SSIs and self-employed professionals in an increased manner (ii) creating fresh opportunities in hitherto-neglected and backward areas and (iii) curb through public ownership, the use of bank credit for speculative and other unproductive purposes. Priority sector lending include such lending activities as short term loans for agriculture and allied activities, marketing of agriculture produce etc., medium and long term loans provided to farmers for financing production and development needs; indirect finance to agriculture, financing SSIs, financing Small Road & Water Transport, Retail Trade, Small Business, Professional and Self-employed persons, SC/ST organizations sponsored by the State, Educational & Housing loans, Consumption loans, funding RRBs, loans to SHGs / NGOs, subscribing to special bonds issued by NHB, NABARD, HUDCO etc. The government has fixed some minimum target for lending towards priority sector. In the case of domestic commercial banks this is 40 percent of the net bank credit, in the case of foreign banks it is 32 percent and in the case of urban co-operative banks it is 60 percent.

Banking sector reforms initiated in India with Narasimham Committee – I, have been giving lesser significance to priority sector advances, primarily because of the focus of the reform measures was on improving the profitability of the banks and hence to equip them to become globally competitive. Narasimham Committee – I, for instance had recommended for reduction of the minimum target for priority sector lending to the level of 10 percent from the present level of 40 percent. (This recommendation, however, was not accepted by the government).

In this era of economic liberalization and globalization, banking business is being driven by the principles of maximization of profits and not by the principles of social justice and equity. Banks in India provide finance to economic activities of the economically and socially downtrodden section of society at a concessional rate of interest. The transaction cost of such advances tend to be high. Moreover, the possibility of turning these accounts into NPAs is perceived to be very high. However, studies suggest that out of total NPA only 50 percent accounts belong to this category of lending. Therefore, the perception that all advances to the economic activities of weaker sections of society (Priority sector), invariably turn into NPA is a myth. This myth needs to be unravelled and the perception of the banking community needs to be changed. Retail banking is considered to be viable business activity for the banking institutions world over and micro-credit is one of the important constituents of the retail banking. Moreover, in a developing country like India, where 35 percent of population live below poverty line, and basic infrastructure facilities are grossly underdeveloped, banks can hardly afford to neglect their developmental role with social responsibility.

8. IMPACT OF BANKING SECTOR REFORMS ON SOCIAL BANKING IN INDIA

Regarding the impact of banking sector reforms on social justice, the following points deserve mention:

(1) Because of the enhanced focus on profits, banks find it less attractive to maintain their rural branches. This is because of such factors as the relatively low amounts of loans, higher transaction costs etc. The following statistics relating to the distribution of bank offices (branches) of commercial banks point out that during the ongoing era of financial sector deregulation the number of rural branch offices has been constantly on the decline while the same in respect of all the other categories of branches viz. semi-urban, urban, metropolitan has been showing a constant increasing trend.

Table-II: Distribution of Scheduled Commercial Banks' Offices.

Year	Rural	Semi-Rural	Urban	Metropolitan	Total
1969	1833	3342	1584	1503	8262
1975	6807	5598	3489	2836	18730

1980	15105	8122	5178	4014	32419
1985	30185	9816	6578	4806	51385
1990	34791	11324	8042	5595	59752
1991	35206	11344	8046	5624	60220
1992	35269	11356	8279	5666	60570
1993	35389	11465	8562	5753	61169
1994	35329	11890	8745	5839	61803
1995	33004	13341	8868	7154	62367
1996	32995	13561	9086	7384	63026
1997	32915	13766	9340	7529	63550
1998	32878	13980	9597	7763	64218
1999	32857	14168	9898	8016	64939
2000	32734	14407	10052	8219	65412
2001	32640	14571	10304	8489	66004
2002	32481	14723	10447	8557	66208
2003	32303	14859	10693	8680	66535
2004	32200	15023	10917	8922	67062

Source: Reserve Bank of India, Handbook of Statistics on the Indian Economy 2004

- (2) Agriculture sector is not getting its due share in bank credit and its share is hovering around 15% as against the stipulated minimum share of 18%. Worse is the case with SSI sector in which case, there is gradual and considerable fall in the share over the last few years. On the other hand, largely because of the dilution of the definition of priority sector advances by inclusion of such advances as housing finance, education loans etc. within its ambit (ie. the so called 'Other priority advances') the total credit to the priority sector is maintained by the banks at about 43% - higher than the stipulated minimum share of 40%.
- (3) Another noteworthy feature is that while 'indirect' advances to Agriculture sector is often very near to or exceeding the maximum sub-limit of 4.5% (ie. 25% of the minimum limit of 18% for agriculture sector), the 'direct' advances to agriculture is the one which is always suffering from short representation. The gradual decrease in the share of SSI sector, gradual increase in the share of 'Other Priority sector' and somewhat steady and under-represented (about 15.5%) status of Agriculture sector undoubtedly points to the fact that "Other priority sector" advances are increasingly 'eating away' the share of SSI sector and preventing the growth of otherwise under-represented Agriculture sector. The statistics relating to PSBs shown in Table III points to the above facts and are self-explanatory.

Table-III: Advances to the Priority Sector by Public Sector Banks.

Sector	Amount Outstanding (Rs. Crore)				
	June 1969	March 2001	March 2002	March 2003	March 2004 (P)
1. Agriculture	162 (5.4)	53,571 (15.7)	63,082 (15.9)	73,507 (15.4)	86,187 (15.4)
i) Direct	40 (1.3)	38,137 (11.2)	44,908 (11.3)	51,799 (10.8)	61,957 (11.1)
ii) Indirect	122 (4.0)	15,434 (4.5)	18,174 (4.6)	21,708 (4.5)	24,230 (4.3)
2. Small Scale Industries	257 (8.5)	48,400 (14.2)	49,743 (12.5)	52,988 (11.1)	58,278 (10.4)
3. Other Priority sector advances	22 (0.7)	40,791 (12.0)	53,712 (13.5)	71,448 (15.0)	94,959 (17.0)
4. Total priority sector advances	441 (14.6)	1,49,116 (43.7)	1,71,185 (43.1)	2,03,095 (42.5)	2,45,672 (44.0)
5. Net Bank Credit	3,016	3,41,291	3,96,954	4,77,899	5,58,849

Source: Reserve Bank of India, Trend and Progress of Banking in India 2004.

- (3) In respect of private sector banks, the predominance of 'Other priority sectors' is much more prominent as is evident from statistics given in Table IV.

Table IV: Advances to Priority Sector by Private Sector Banks
(Amount in Rs. Crore)

Sector	March 2002		March 2003		March 2004	
	Amount	%	Amount	%	Amount	%
Priority Sector Advances Of which,	25709	40.9	36705	44.4	52861	47.4
I. Agriculture	8022	8.5	11873	11.2	17652	12.3
II. Small-scale industries	8613	13.7	6857	8.2	7897	7.1
III. Other Priority sectors	9074	14.4	17602	22.1	25834	23.1

Source: Reserve Bank of India, Trend and Progress of Banking in India 2004.

(4) Many PSBs were not able to achieve the stipulated minimum share of 18% in respect of agricultural credit as at the end of March, 2004. Out of the twenty-seven PSBs, only nine PSBs, seven Nationalised Banks and two State-Bank Group banks, could achieve the minimum target stipulated under Agriculture advances of 18%. These are Indian Overseas Bank, Punjab National Bank, Indian Bank, Dena Bank, Allahabad Bank, Central Bank of India and Punjab & Sindh Bank from Nationalized Banks and State Bank of Indore and State Bank of Patiala. Of these nine banks PSBs which have achieved the minimum total target of 18%, only as many as six banks viz. the two State Bank Group banks (viz. State Bank of Patiala and State Bank of Indore) and four Nationalised Banks (viz. Allahabad Bank, Indian Bank, Indian Overseas Bank and Punjab National Bank) could achieve the target in the strict sense i.e. after fulfilling the inner limits of 13.5% (minimum) in respect of Direct Agricultural advances and 4.5% (maximum) in respect of indirect Agricultural advances. The following figures are self-explanatory (Table V):

Table-V: Advances of PSBs to Agriculture and Weaker Sections

Sl. No.	Name of the bank	Direct agricultural advances		Indirect agricultural advances		Total agricultural advances		Weaker Section		Total Priority sector advances	
		Amt.	%	Amt.	%	Amt.	%	Amt.	%	Amt.	%
1	Allahabad Bank	2169.96	13.93	721.28	4.63	2891.24	18.56	1575.24	10.11	7032.50	45.16
2	Andhra Bank	1806.38	14.38	285.41	2.27	2091.79	16.65	1242.63	9.89	5198.23	41.38
3	Bank of Baroda	2801.51	11.53	1147.05	4.72	3948.56	16.24	1914.96	7.88	11774.33	48.44
4	Bank of India	3859.00	13.84	859.00	3.08	4718.00	16.92	2393.00	8.58	13271.00	47.60
5	Bank of Mahar.	855.85	7.57	471.93	4.17	1327.78	11.74	530.15	4.69	4538.33	40.12
6	Canara Bank	4727.00	10.61	1818.00	4.08	6545.00	14.69	2626.00	5.89	19580.00	43.93
7	Cent. Bank of India	2655.53	11.82	1671.22	7.44	4326.75	19.25	2090.08	9.30	11031.53	49.09
8	Corporation Bank	591.09	5.08	524.02	4.50	1115.11	9.58	329.62	2.83	5080.68	43.63
9	Dena Bank	619.40	6.58	1124.23	11.94	1743.63	18.52	343.07	3.64	4204.33	44.65
10	Indian Bank	1801.55	14.71	412.45	3.37	2214.00	18.08	1230.78	10.05	5971.11	48.75
11	Indian Ov. Bank	2575.60	14.18	790.93	4.35	3366.53	18.53	1971.64	10.86	8283.45	45.61
12	Oriental Bank	1244.00	6.32	1166.00	5.92	2410.00	12.25	765.87	3.89	8423.73	42.80
13	Pun. National Bank	6490.39	13.94	2856.82	6.14	9347.21	20.08	5036.30	10.82	22964.49	49.33
14	Punj & Sindh Bank	799.31	12.77	407.09	6.51	1206.40	19.28	379.13	6.06	3104.69	49.62
15	Syndicate Bank	2405.77	14.38	318.60	1.90	2724.37	16.29	1692.13	10.12	7373.94	44.09
16	Union Bank of In	3139.64	10.88	1419.14	4.92	4558.78	15.80	1906.72	6.61	13727.01	47.57
17	United Bank of In	786.00	9.23	520.00	6.11	1306.00	15.34	475.00	5.58	3292.00	38.67
18	UCO Bank	1509.00	7.80	867.00	4.48	2376.00	12.29	831.00	4.30	8103.00	41.90
19	Vijaya Bank	863.12	8.22	566.18	5.39	1429.30	13.62	656.96	6.26	4709.12	44.87
Nationalized Banks		41700.10	11.38	17946.35	4.90	59646.45	16.27	27990.28	7.64	167663.47	45.74
20	SBI	12529.93	9.43	4462.96	3.36	16992.89	12.79	9572.16	7.20	51406.51	38.69
21	SBBJ	1211.68	14.39	164.55	1.95	1376.23	16.35	577.10	6.86	4130.80	49.07
22	SBH	1298.36	11.62	305.82	2.74	1604.18	14.36	488.93	4.38	4559.95	40.82
23	SBInd.	1030.35	15.71	166.03	2.53	1196.38	18.24	416.50	6.35	3146.25	47.97
24	SBM	755.37	13.26	111.00	1.95	866.37	15.21	571.82	10.04	2303.45	40.43
25	SBP	1762.00	14.12	605.00	4.85	2367.00	18.97	1251.00	10.03	5690.00	45.61
26	SBS	832.51	15.30	140.28	2.58	972.79	17.88	227.65	4.18	2341.38	43.04
27	SBT	836.82	8.41	327.66	3.29	1164.48	11.70	493.20	4.95	4429.86	44.50
State Bank Group		20257.02	10.52	6283.30	3.26	26540.32	13.78	13598.36	7.06	78008.28	40.50
Public Sector Banks		61957.12	11.08	24229.65	4.33	86186.77	15.41	41588.64	7.44	245671.75	43.94

Source: Reserve Bank of India, Trend and Progress of Banking in India 2004

- (5) Considering the minimum sub-limit for Direct advances to Agriculture sector (13.5%) and also the maximum sub-limit for Indirect advances to Agriculture (4.5%), it is worth pointing out that in general there is full or nearly full achievement of the sub-limit for indirect advances. On the other hand, achievement under direct lending is lagging behind. While the average indirect advances of 4.33% is above 96% of the upper ceiling stipulated for the same viz. 4.5%, the same in respect of direct advances (11.08%) is only 82% of the minimum level stipulated. In the case of the block of Nationalised banks, this is quite prominent where the indirect advances has exceeded the upper ceiling while minimum sub-limit for direct advances is not achieved (only 84.3%).
- (6) If the bank-group wise performance under priority sector lending shows that private sector banks are far lagging behind the public sector banks. Table -6 given below shows the above fact; giving the connotation that variations in vision and mission are considerably affecting the lending to priority sector.
- (7) The aggregated statistics in respect of all the thirty Private sector banks (both old private sector banks and new generation private sector banks) are given below in Table – 7. This shows that private sector banks are lagging far behind the PSBs in respect of lending to Weaker sections (1.34% as against 7.44% in respect of PSBs), SSIs (7.1% as against 10.4) and Direct Agriculture sector (7.81 as against 11.08%). However, primarily because of the substantially high exposure to Indirect Agriculture (8%, as against 4.33% in respect of PSBs) as well as ‘Other Priority sectors’ (23.1%, against 17% in respect of PSBs) the total share of priority sector advances in the case of private sector banks is higher at the level of 47.35% (as against 43.94% in respect of PSBs).

Table-VI: Bank-Group wise Performance in PSL Lending (31.03.2004)

Target /Sub-target	No. of Public Sector Banks			No. of Private Sector Banks		
	Achieved	Not Achieved	Total	Achieved	Not Achieved	Total
Priority Sector Lending	24 (88.89)	3 (11.11)	27 (100)	13 (43.33)	17 (56.67)	30 (100)
Agricultural Advances (18%)	5 (18.52)	22 (81.48)	27 (100)	2 (06.67)	28 (93.33)	30 (100)
(I) Direct (13.5%)	11 (40.74)	16 (59.26)	27 (100)	4 (13.33)	26 (86.67)	30 (100)
(II) Indirect (4.5% Max.)	12 (44.44)	15 (55.56)	27 (100)	15 (50)	15 (50)	30 (100)
Weaker Section Advances (10%)	7 (25.93)	20 (74.07)	27 (100)	4 (13.33)	26 (86.67)	30 (100)

Source: Compiled from, RBI, Trend and Progress of Banking in India, 2004

Table VII: Private Sector Banks – Loans to Agriculture and Weaker Section.
(Rs. Crore)

Direct Agricultural Advances		Indirect Agricultural Advances		Total Agricultural Advances		Weaker Sections		Total PSL Advances	
Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
8717.77	7.81	8934.00	8.00	17651.77	15.81	1495.49	1.34	52860.86	47.35

Source: Reserve Bank of India, Trend and Progress of Banking in India 2004.

The above analysis shows that banks in general and private sector banks in particular are increasingly becoming reluctant to lend to Agriculture (direct advances), SSI sector, Waker sections etc. and are choosing alternate avenues to achieve the minimum aggregate limit of 18%. Thus, the share of Agriculture (Indirect) as well as ‘Other Priority sectors’ are on the rise where as that of Agriculture (Direct), SSI sector and Weaker sections is on the decline. This disparity, as noted earlier, is very high for the private sector banks than PSBs.

- (1) Share of ‘Other Priority sectors’ is increasing at a fast rate
- (2) Detailed study of the behaviour of direct and indirect agricultural banks are points out to the state of affairs

9. SIGNIFICANCE OF PSL ADVANCES IN INDIA IN THE REFORMS REGIME.

Let's consider these aspects one by one. Accordingly, firstly we may examine as to why the Priority Sector advances are still relevant in the ongoing deregulated economic environment characterized by ‘LPG’. Then we may consider the new concept called ‘financial inclusion’ which is getting substantial public attention in the contemporary centrality.

- (1) Unlike in the case of established market economies, where banks can directly focus on the customer's need first, in an emerging economy like ours the banking system should reflect the needs of the society as well as reflect the values of the society in which it operates. This is because of the fact that, in spite of significant differences existing in the social structure of the market economies of the world, these economies share in common certain essential structures. The most important among these common structures is "a banking system that makes available capital for those economic activities valued by the market place and which regulates the cyclical flow of funds in the economy from consumers to producers".
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- (2) The power of retail credit with rural bias lies in the fact that it can distribute the risk among millions of borrowers and simultaneously fulfil the financial needs of an agrarian economy. Nowhere in this world could one find such a phenomenon successfully demonstrated and that too since more than three and a half decades.
- (3) This is probably the most important policy initiative to counter the prevailing socio-economic and region-specific disparities existing in the Indian economy.
- (4) Rural India has got the largest arable land in the world. The large domestic consumption base of rural India has witnessed steep rise in income levels since 1990s and a growing demand for processed food, and is also emerging as an attractive export market. This underlines the need for enhanced credit flow into rural India and priority sector credit is most effective means for this.

CHALLENGES TO PRIORITY SECTOR ADVANCES:

- (i) In spite of directions from the RBI to the contrary, many banks insist on collaterals as additional security from poor people. As many of them are asset-less, they cannot provide such collaterals. So they fail to get credit from banks.
- (ii) Further, attaining the minimum lending targets under priority sector is often bypassed by making investments in permissible securities issued by institutions like NABARD, NHB, HUDCO etc.

10. EMERGENCE OF THE CONCEPT FINANCIAL INCLUSION:

The RBI has been seriously concerned with regard to the banking practices that tend to exclude vast sections of population. The All-India Debt and Investments Survey (2002) has suggested that the dependence of households on the institutional finance declined from 64 percent in 1991 to 57 percent by 2002 in rural areas, while it has increased from 72 percent to 75 percent in the urban areas. Rural landlords and moneylenders accounted for over 30 percent of the household debt compared with 18 percent in 1991. Thus, in spite of the vast rural net work of bank branches in India, the formal banking system has not been able to adequately penetrate into informal financial markets. not withstanding Financial Inclusion is one of the buzz words of the world financial system. It is in the above context that in the past few years the RBI has been advising banks to review their existing practices with a view to aligning them with the objectives of financial inclusion. Accordingly, banks were advised

- ☐ to make available a basic banking 'no frills' account either with 'nil' or very low balances as well as charges that would make such accounts accessible to vast sections of the population.
- ☐ to give wide publicity to the facility of such 'no frills' accounts.

As of FY 2005-06, the statistics available with the RBI shows that so far 5,00,000 number of 'no frills' accounts have been opened, of which nearly two-third are with the PSBs and the remaining one-third with the private sector banks. As per the policy announcements made by the RBI in its mid-term review of Annual Policy for the FY 2006-'07, the broad policy guidelines in respect of financial inclusion are:

- ☐ For opening small accounts, banks need to seek only a photograph of the account holder and self-certification of the address.
- ☐ Outstanding balances in these accounts at any time will be limited to Rs.50,000/- and the total transactions limited to Rs.2,00,000/- in one year.

As part of promoting financial inclusion, the following measures have been initiated by the RBI recently.

- (1) With the objective of ensuring greater financial inclusion and increasing the outreach of the financial sector, banks have been allowed to use the services of Non-Government Organizations (NGOs), Self-Help Groups (SHGs), Micro Finance Institutions (MFIs) and Civil Society Organizations as intermediaries in providing financial and banking services.

- (2) Special attention has been given to the issues relating to the farmers. Accordingly, a Working Group has been constituted to ensure greater outreach of banking facilities to rural areas and to ensure availability of bank finance at reasonable rates. The conveners of SLBC in all States/Union Territories have been advised to identify at least one district in their respective area for achieving 100 percent financial inclusion by providing 'no frills' account and a general purpose credit card.

11. SUGGESTIONS FOR MAKING INDIAN FINANCIAL SYSTEM MORE INCLUSIVE

In view of the foregoing discussions, some suggestions have been set forth for making the financial system in India more inclusive and socially responsive:

- (1) Design and delivery of new rural credit products. For instance, banks and micro-credit institutions may be encouraged to extend credit to community-based projects (e.g. those catering to basic infrastructure needs like water, sanitation and housing). Hence, they can move up in the value chain.
- (2) Of late, initiatives for financial inclusion initiatives are often seen to be profitable business propositions too. More and more business houses are taking up this segment with their innovative business models that are based on inclusiveness as the cornerstone. The Government may encourage such businesses through budgetary provisions and other fiscal measures with a view to ensure rapid, but balanced and equitable economic development.
- (3) Higher level of advances to the agricultural sector and SSI sector is advisable. Greater credit to agriculture is a vital need as it ensures balanced and sustained economic growth. It is high time that benefits from industry and trade go beyond industry and urban areas. Rather, they must be extended to agriculture. Similar is the growing significance of promotion of SSIs, as the balanced economic development of the nation depends on the healthy growth of SSIs; with due thrust on promoting competitiveness of their products and processes. Hence, conducive policy initiatives are urgently required to promote these vital sectors of the economy.
- (4) Micro-finance initiatives have to be encouraged more aggressively as a model for faster economic development of the rural populace, particularly the women. The 'Grameen Bank' project of Prof. Mohammed Yunus has revolutionised the rural credit scenario in Bangladesh and it has proved that unsecured credit to the poor could be an effective weapon to fight against poverty. Today, over 6 million poorest of the poor in Bangladesh alone have become credit worthy based on the above model. Worldwide, this model is increasingly being replicated. As of now, not less than 100 countries have adopted this model. In India also, this model appears to be quite workable and also extremely relevant as it makes the poor bankable and hence ensures financial inclusion in letter and spirit.
- (5) New and innovative approaches for promotion of financial inclusion to be developed and promoted. The recent initiative by the RBI to use post offices for channelising credit to rural areas is one such welcome initiative. So, through 1.39 lakh post offices in India, access to credit by rural populace can be greatly enhanced. Similar is the case of utilizing the services of NGOs, SHGs, MFIs, JLGs etc. in enhancing the outreach of the banking sector.

12. CONCLUDING REMARKS

Banks function on the twin principles of liquidity and profitability and accordingly they have to satisfy the profitability principle. So they have to be extra cautious while extending loans and have to ensure that their advances are secure. However, in view of the peculiar characteristics of Indian economy and hence the need for socially inclusive banking policies, there is equal significance for social banking and financial inclusion. Hence, PSL advances have got high significance even today. There should be concerted efforts for promoting PSL advances and those of similar nature like the efforts in the direction of financial inclusion – the one that emerged in the reforms era.

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COST COMPETITIVENESS AND INDIAN ECONOMY: A MACRO PERSPECTIVE OF THE NEED, RELEVANCE AND POLICY OPTIONS

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ABSTRACT

World over the significance of productivity and quality in industrial production has reached its peak today, as a result of the ever-growing competition in the wake of globalization pressures sweeping across the world. There is a heightened need to improvise the cost effectiveness of manufacturing processes, while at the same time maintaining quality, in order to withstand the pressures of competition. It has become imperative for businesses to constantly seek new and innovative means to production processes and manufacturing techniques, and new frontiers of technology for enhanced competitiveness of operations. In the above context, this paper makes an analysis of the new manufacturing scenario in the developing world with special reference to India, appraises the need for enhanced cost competitiveness for the manufacturing sector in India, and suggests macro level strategies for enhanced cost competitiveness of Indian industry.

Keywords: Manufacturing Competitiveness, Benchmarking, Production Function, ROI.

1. INTRODUCTION

World over the significance of productivity and quality in industrial production has reached its peak today, as a result of the ever-growing competition in industry and business—primarily because of the ongoing measures of Liberalization, Privatization and Globalization of the economies. There is a heightened need to improvise the cost effectiveness of manufacturing processes, while at the same time maintaining quality, in order to withstand the pressures of competition. Accordingly, it has become imperative for businesses to constantly seek new and innovative means to production processes and manufacturing techniques, and new frontiers of technology for enhanced competitiveness of operations.

2. OBJECTIVES OF THE PAPER

- (i) To study the new manufacturing scenario in the developing world with a focus on India;
- (ii) To apprise the need for enhanced cost competitiveness of India's manufacturing sector;
- (iii) To suggest strategies for enhanced cost competitiveness of India's manufacturing sector.

3. METHODOLOGY OF THE STUDY

The study is descriptive-analytical in nature. It is based primarily on secondary data that are available from authentic sources, like, the publications of the Govt. of India and various governmental bodies like NMCC, and also those of RBI, World Bank etc.

4. RELEVANCE AND SIGNIFICANCE OF THE STUDY

Growing interest in industrial competitiveness has now currently become a global phenomenon prominent across all economies—developed and developing, though it initially originated in the developed world. Wignaraja (2001) has observed, "Concerns about the process of industrial restructuring in an integrated world economy have sparked widespread interest in the concept of competitiveness as applied to national economies and enterprises within them. This interest originated in the developed world but has recently spilled over into developing countries and economies in transition". The central issue of competitiveness of developing countries is "the creation of efficient industrial capacity"

A new manufacturing context is fast emerging in the developing world because of a number of factors, like, falling trade barriers, increasing technological progress particularly because of revolutionary growth in ICT, declining costs of transportation and communication, extremely mobile multi-national enterprises (MNEs) seeking out new investments etc. While knowledge and technological progress have always been important, five mutually reinforcing processes are found to be vitally significant, viz. (i) revolutionary changes in ICT, (ii) emergence of globally integrated value chains, (iii) increasing global competition associated with falling trade barriers, (iv) new rules of the game (introduced through WTO and by foreign buyers of output), and (v) changing consumer demands. In view of the growing interest in competitiveness worldwide, especially the developing world, Wignaraja has pointed out the following five key questions relevant for developing economies, including India:

- (i) What is the meaning of competitiveness particularly in relation to capability building in the manufacturing sector?
- (ii) What are the respective roles of the state and private sector in enhancing industrial competitiveness?,
- (iii) What specific policies and institutions work better than others?,
- (iv) What is the optimal way to design and implement an industrial competitiveness strategy?
- (v) What are the necessary conditions for success?

5. STAGNANCY IN INDIAN MANUFACTURING AND SECTORAL IMBALANCES

In the specific case of India, enhancement of manufacturing competitiveness has got added significance in the ongoing LPG regime, particularly in the later years of globalization (viz. 2000s) because of intensified competition. In fact, even before LPG era the existence of a 'relative stagnation' was conclusively demonstrated by an elaborate statistical exercise by Ahluwalia (1985). Accordingly, there was a relatively slower growth of registered manufacturing net value added at constant prices between FY 1967 and FY 1980, and further this 'relative stagnation' continued even after FY 1980. In the context of relative stagnation as above, Nagaraj (2006) has examined this sector in the eighties as a continuation of the work of Ahluwalia (1985) and has found that the growth rate between 1980-81 and 1986-87 is higher than that during 1966-67 to 1978-79, and is comparable to that during 1959-60 to 1965-66.

However, the already existing stagnation problem has been continuing in the ongoing LPG era also, in spite of an upturn in the eighties. The problem has in fact worsened owing to growing imbalance between major sectors of the economy, characterized by fast growing share of services sector, constantly declining share of agriculture sector and stagnating industry sector (particularly the manufacturing sub-sector within it). This has prompted the Central Government to take up the matter very seriously and to make policies for enhancing the competitiveness of Indian industry, particularly manufacturing. Accordingly, a specialized body, 'National Manufacturing Competitiveness Council' (NMCC) has been set up to initiate measures to improve competitiveness of Indian manufacturing. As of FY 2008, the share of agriculture, industry and services are respectively 17.6 percent, 29.4 percent and 53 percent. As the imbalance between the three major sectors grows, it is imminent to chalk out urgent policy measures to correct the imbalance (Table I)

Table-I: Sectors of the Economy and the Share of Overall GDP (Percentage)

Financial Year	Agriculture	Industry	Services	Total GDP
FY 1950-51	59.60	14.50	25.90	100
FY 1960-61	55.10	17.30	27.60	100
FY 1970-71	48.50	20.70	30.80	100
FY 1980-81	41.50	21.60	36.90	100
FY 1989-90	33.90	27.00	39.10	100
FY 1991-92	26.70	31.30	42.00	100
FY 2002-03	21.90	25.90	52.20	100
FY 2003-04	22.20	25.80	52.00	100
FY 2004-05	20.80	26.00	53.20	100
FY 2005-06 ^{QE}	19.90	26.10	54.00	100
FY 2006-07 ^{RE}	18.50	26.40	55.10	100
FY 2007-08 ^{ES}	17.60	29.40	53.00	100

Source: (1) *Economic Survey* (various years till 2006-'07) MOF, GOI.

- (2) Statistics of Central Statistical Organization (CSO),GOI.

[Note: QE: Quick Estimates, RE: Revised Estimates, ES: Early Estimates.]

Further, the more recent developments (FY 2008 and after) show that the momentum picked up by manufacturing since FY 2005 is difficult to be sustained in the future, because of the growing inflationary pressures and interest rates resulting in rising input costs, turbulent macro economic scenario, including the impact of global financial crises like US Sub-prime etc.

5. ENHANCED COMPETITIVENESS OF INDIAN MANUFACTURING: AN IMPERATIVE

From Table I, it is noted that the share of industries sector to the national GDP has been at about 27 percent for the last two decades or more. Of this, the share of manufacturing sub-sector has been roughly about 17 percent throughout. However, going by international standards, this share of manufacturing sector may be observed to

be quite low. (Table II). Iyer, A., Kandaswamy, K., et. al. have pointed out, “Without a doubt, manufacturing is the backbone of the economy in most countries, especially so in fast growing emerging markets. It is clear that for the Indian manufacturing to successfully distribute wealth across its population, manufacturing has to grow from its current 17 percent of GDP to a number closer to 30 percent (which is the standard for most developed economies).”

Table-II: Composition of GDP in BRIC Countries (as of 2006)

Country	Agriculture	Industry	Manufacturing	Services
Brazil	5	31	18	64
Russia	6	38	19	56
India	18	28	16	54
China	12	47	33	41

Source: *World Development Indicators 2008*, The World Bank, Washington, USA., 2008.

Indian manufacturing grew only at 6.3 percent during 1991 to 2003 as against 12 percent in China. NSM (2006) formulated by NMCC estimates that to attain the targeted GDP growth rate of 8 to 10 percent, India should target a minimum manufacturing growth rate of 12 percent per annum. Also, the share of manufacturing should be raised to 30 to 35 percent by 2020.

6. CHALLENGES OF INDIAN MANUFACTURING: THE COST COMPETITIVENESS IMPERATIVE

For Indian economy to exhibit a balanced, stable and sustainable growth it is highly imperative that Indian manufacturing, most importantly the segment comprising of small and medium enterprises (SMEs), to grow phenomenally primarily through improving its competitiveness in terms of costs and quality. In the emerging scenario of global competition, the need for enhancement of productivity and competitiveness of manufacturing enterprises need not be overemphasized. Robust growth in manufacturing is an imperative for creation of better employment possibilities and overall economic development. Besides, competitiveness is central to robust growth of the manufacturing sector.

One of the vital means of enhancing productivity and improving quality is through proper cost management. It is widely recognized that what Indian manufacturing needs the most today is improvement in cost competitiveness. Regarding cost competitiveness, Nakagawa (2008) has observed, “it refers to the edge that the domestic manufacturers need to have in providing quality products at a certain cost”. Many progressive organizations have adopted cost competitiveness as the central theme of business strategy. MUL (Maruti Udyog Ltd.) seeks to attain higher cost competitiveness through enhanced localization, higher productivity etc. It is worth noting here that, regarding the challenges faced by Indian manufacturing in the emerging scenario, NSM (2004) points out, inter alia, the following cardinal factors, (i) ensuring cost competitiveness and stimulating domestic demand, (ii) investing in innovations & technology, (iii) enabling SMEs to achieve competitiveness etc.

There are evidences for the declining competitiveness of Indian firms vis-à-vis their international counterparts in the LPG era. A study by *The Economic Times* (ET) in 2002 has revealed that the competitiveness of 202 Indian companies over the period FY 1997 to 2001 has been constantly coming down, from 23.51 (FY 1997) to 20.92 (FY 2001). On the other hand, 42 MNCs (Multi-National Corporations) has been gradually on the rise during the said period, from 21.47 (FY 1997) to 23.18 (FY 2001). Table III gives the comparativeness of 202 Indian firms in terms of net value added as a percentage of value of output with that of 48 foreign MNCs having Indian operations. It is seen that while Indian firms are finding it difficult to compete globally, the foreign MNCs are enhancing their global competitiveness year after year.

Table-III: Competitiveness of Indian Companies and MNCs—a Comparison

Particulars	FY2001	FY 2000	FY 1999	FY 1998	FY 1997
Indian Companies (202 Nos)	20.92	21.71	22.17	22.87	23.51
MNCs (48 Nos)	23.18	22.47	21.78	21.97	21.47
Total (250 Nos)	21.32	21.85	22.10	22.70	23.11

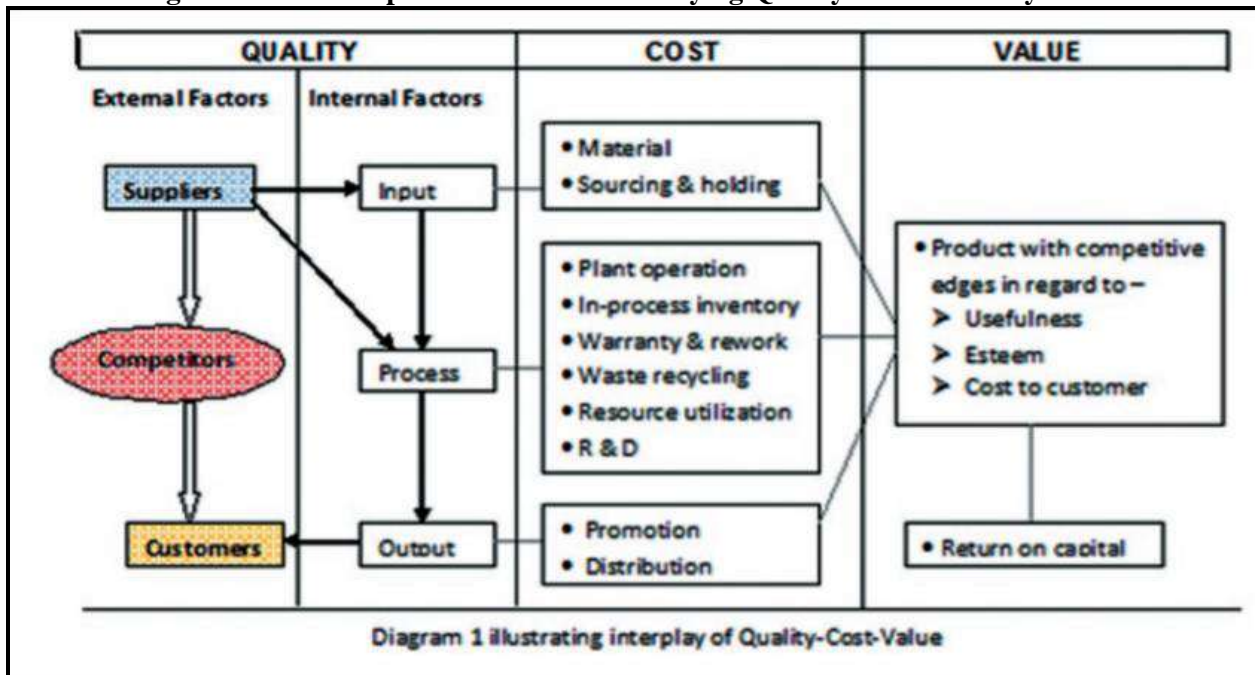
[Source: *The Economic Times* (2002), cited in Ajitabh, *Global Competitiveness*, Excel Books, New Delhi, First Ed., 2008.]

Gorden & Kato (2006) have observed that the profitability of domestic manufacturing firms has been adversely affected with the increase in import penetration during the reforms regime (FY 1992 to FY 2002 period) and also that this negative effect has been lesser in respect of firms with larger size. All the above developments

point to the enhanced need for cost-effectiveness in manufacturing operations. Consequently, there is a growing need for embracing modern manufacturing-friendly cost management systems, like Target costing (TC), Activity Based Costing (ABC) etc. Moreover, the significance of world renowned management practices like Toyota Production System (TPS) is vital in modern cost management. TPS would ensure avoidance of wastes of all sorts, promote cost-effectiveness in manufacturing, and enhance productivity and competitiveness of operations. This dissertation seeks to study the areas of effective cost management that are available to a typical Kerala State owned manufacturing company viz. Kerala Agro-Machinery Corporation (KAMCO).

In the ongoing era of globalization, cost competitiveness is central to business success for any industry. In this regard, management of costs should be done in a way that ensures the interplay between quality, cost and value. Hence, any decision on cost competitiveness should take into account the 'Quality-Cost-Value' dynamics, and the reduction in cost should not be at the expense of the quality expectations of the customers and the ultimate value that they seek from the products that they purchase. (Figure I).

Figure-I: Cost Competitiveness – the underlying Quality-Cost-Value Dynamics



Source: Adapted from, Dey, D. (2016).

Enhanced competitiveness may result from technology adoption, like, for instance ICT adoption or technology upgradation etc. and this in turn give rise to innovation on an ongoing basis. Because of the above reason, added thrust on research and development (R&D) is becoming all the more important in every industry. The Quality-cost strategy should emphasise the following aspects: (i) Quality remaining the same, cost is reduced, (ii) Quality is improved with additional cost, and (iii) Quality is improved with reduced cost.

7. ENHANCED COST COMPETITIVENESS OF INDIAN MANUFACTURING SECTOR: SOME STRATEGIES

- Innovation holds the key to increasing productivity, and productivity gains hold the key to improved economic growth and standard of living. For cost competitiveness too, innovation can play a vital role. By improving productivity alone we can think of maintaining competitiveness of manufacturing, including cost competitiveness. While, new inventions provide a leap forward in technology, the other ones (incremental) arise from steady improvements in products and processes. Both these forms of innovations improve the competitiveness of manufacturing and the economy as a whole. Investing in innovations is one of the most essential steps towards attaining global competitiveness and in Indian scenario this has got added significance in the present context.
- It is essential that increased investment in R&D is made to facilitate technological innovations by the industry and the Government. While world over 02 percent of their annual budget is earmarked for R&D, the same is only 1 percent in India. Hence it needs to be enhanced urgently to at least 2 percent with immediate effect.

- ❑ One priority issue before the Government should think of encouraging Advanced Technology Products (ATPs) because these are having a sizeable world market. Another priority of the Government is to be that of supporting Advanced Manufacturing Technologies (AMTs) and design innovations. At the individual firm level efforts are to be taken for embracing AMTs or producing ATPs as far as possible.
- ❑ Above all, the Intellectual Property Rights (IPR) framework in the country needs to be strengthened further, because the contemporary trends in manufacture and technology are being driven by the forces of competition. In the new patent regime, it is vitally important for firms to acquire new knowledge not only for innovation but for attaining adequate level of competitiveness in a TRIPS-compliant IPR environment. Accordingly, in a globalized environment it is essential to effectively utilize IPRs, particularly patents for technology upgradation and growth, wealth creation etc. In this context, it may be stated that in India there is an imminent need for a policy environment which is more conducive to innovation and IPRs.
- ❑ For any knowledge-driven industry, particularly the manufacturing industry, it is desirable to embrace a network model innovation and R&D, according to which industries go for collaboration with research institutes, universities and other counterparts for innovating their products and processes.
- ❑ Though innovation at the economy level is really important, the same has to start from the respective industry level and ultimately from the firms comprising the industry. A firm's competitiveness is significantly influenced by its ability to understand and embrace new product and process technologies. Thus, technological innovation within firms is all the more important strategically and so also, is the creation of new knowledge for (and from) innovation. This in turn may necessitate reformulation of its policies, reconfiguration of competencies and re-engineering of operations.
- ❑ It is highly advisable that India also administer a specialized society or institute to promote innovation. It is a fact that there are 106 countries in the world which have got some mechanism like the like the above. Currently, India is an exception in this regard.
- ❑ For successful technological innovation, it is not technology itself that matters. Rather, external factors like the market conditions as well as internal factors like organizational climate and human factors are equally important. On the one hand, firms have to constantly search potential market segments and on the other hand, they have to chalk out appropriate strategies to make their own internal staff abreast of the developments. Accordingly, an environment conducive for technological innovation should be created. Ongoing training in advanced and emerging technologies as well as IPR related issues should be at the centre of such initiatives.
- ❑ Apart from the manpower development as suggested above, whatever is important is an array of visionaries and leaders in the field of manufacturing who are capable of effectively leading the Indian manufacturing firms in the days to come. It is heartening that a few IITs in India have already launched such programmes as per the directives of the Central Government for moulding high profile manufacturing visionaries.
- ❑ Last, but not the least, is the utmost significance of clustering and networking. SMEs tend to concentrate in the vicinity of large industries or in metros and big cities. This spatial concentration of SMEs of a certain product is called industrial clusters. A cluster provides the unit with a comprehensive facility to research and development. Clusters are based on various factors like product name and location, product manufacturing etc.

9. CONCLUDING REMARKS

In the ongoing era of globalization, to survive and prosper and also to take advantage of the emerging opportunities, it is imperative that manufacturing units in India have to improve their cost competitiveness. This in turn calls for innovation of technology, products and processes on an ongoing basis and also productive R&D which can deliver patentable innovations. The focus of industrial research should target on acquisition of more complex knowledge base that can support innovation. At the macroeconomic level, the focus should be on creation and management of knowledge as strategic asset rather than accumulation of minimum knowledge levels of innovative capability. In the India, adoption of clustering and networking model with modern manufacturing strategies like lean manufacturing appears to be quite meaningful for the SMEs – the backbone of Indian industry. Concluding this paper, it may be stated that because of the cut-throat competition in the industry in the wake globalization pressures, and also the recessionary situation that is persisting in the Indian economy, meticulously planned and well articulated cost management strategies have become an imperative for survival and growth for any manufacturing company.

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CHALLENGES OF INDIAN ECONOMY

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ABSTRACT

Everybody must be able to fulfill minimum needs such as food, health care and shelter, basic education etc. So that poor people can get jobs and earn income. The growth momentum had enabled growth of the economy in multiple dimensions, enabled reduction in the poverty level and improvements in both economic and social indicators. The country's GDP growth rate was the second highest in the world next only to China and with the benefit of the demographic dividend, experts had predicted that the Indian economy was poised to grow at over 9 per cent and achieving 10 per cent growth was within possible reach.

Keywords: Indian Economy, India

INTRODUCTION

The Indian economy which was growing at a slow pace at around 2 to 3 per cent termed as the Hindu rate of growth picked up momentum after the freeing up of controls ushered in by the process of liberalization, privatization and globalization. While agriculture in India has always been a gamble based on the monsoon, the country had achieved self-sufficiency in many of the major crops and exports of agricultural products began to increase. Industrial growth rate had picked up with newer capacities increasing at a quick pace, improvements in technology and cost efficiencies enabling industrial products to gain better acceptance in global markets.

The services sector became the dominant player in terms of contribution to the national income and services exports, especially in terms of software and IT enabled services rose exponentially. Indian was being touted as the destination for outsourcing of services and many of the global corporations began to set up base in India. The growth momentum had enabled growth of the economy in multiple dimensions, enabled reduction in the poverty level and improvements in both economic and social indicators. The country's GDP growth rate was the second highest in the world next only to China and with the benefit of the demographic dividend, experts had predicted that the Indian economy was poised to grow at over 9 per cent and achieving 10 per cent growth was within possible reach. Though there were several challenges in the social sector, the sustained growth was expected to have a trickle-down effect resulting in overall growth.

OBJECTIVES OF THE STUDY

- To study the challenges of Indian Economy

REVIEW OF LITERATURE

M.L.Shingam: He had explained the Indian economic development and some economic development models also explained in his theory. The development models are use full to take for example of development of any nation.

Miss Ambhure H.M.: She has explained the service sectors importance in Indian economy. Now days what is the position of service sector in Indian economy. The service sectors are Banking and Finance, Industrial sectors, Information technology, Software these are the important to Indian economy and increasing of national income and higher standard of living in India.

Chandrashekher Prasad: He has explained the Indian economy through the five year plan period. The sixty five years of the Indian Economy development and its prosperous of the various sectors like agriculture, industry and service sectors. The progress of Indian economy explained through the five year plan period. An exhaustive description and review of development in the Indian economy since independence in 1947. The contemporary account of problems, policies and strategies. Achievements and future prospects of the Indian economy.

Mishra R.S. has explained the economics of development the development included the developed, underdeveloped and developing countries characteristics. The problems of under developed nation details explained in their theories. The author has given more priority to natural resource, human development, population these things are very important to nation development. The level of per capita income is different in different under developed countries. The rate at which per capita income is increasing in different from one underdeveloped country to another.

Dr. Krishnmurthy H.R. Hosabecdu, has studied the economic development nation wise and regional wise. The economic development in India on the basic concepts and indicators of development and economic growth and

economic growth development theory detail explained in his theory. The importance of Human resource to development to nation economic development.

Next he has explained agriculture sector and industrial sectors importance to Indian economy. The main factor of economic development is infrastructure road transport, railway transport, air transport are also important to Indian economic development.

Causes of unemployment in India: The problem of unemployment in India is deep-rooted and complex. It is a result of interaction of a number of forces which are following reason.

- Excessive growth of population
- Slow growth production.
- Backwardness of Agriculture
- Lack of manpower planning
- Increase in labor force
- Defective Education System
- Inappropriate technology
- Neglect of small Scale and cottage industries
- Immobility of labor

POOR EDUCATIONAL STANDARDS

Although India has benefited from a high % of English speakers, (important for call centre industry) there is still high levels of illiteracy amongst the population. It is worse in rural areas and amongst women. Over 50% of Indian women are illiterate. This limits economic development and a more skilled workforce.

POOR INFRASTRUCTURE

Many Indians lack basic amenities lack access to running water. Indian public services are creaking under the strain of bureaucracy and inefficiency. Over 40% of Indian fruit rots before it reaches the market; this is one example of the supply constraints and inefficiency's facing the Indian economy.

BALANCE OF PAYMENTS DETERIORATION

Although India has built up large amounts of foreign currency reserves, the high rates of economic growth have been at the cost of a persistent current account deficit. The current account reached a peak of 6% of GDP. Since then there has been an improvement in the current account. But, the Indian economy has seen imports grow faster than exports. This means India needs to attract capital flows to finance the deficit. Whilst the deficit remains, there is always the fear of a further devaluation in the Rupee. There is a need to rebalance the economy and improve the competitiveness of exports.

HIGH LEVELS OF PRIVATE DEBT

Buoyed by a property boom the amount of lending in India has grown by 30% in the past year. However, there are concerns about the risk of such loans. If they are dependent on rising property prices it could be problematic. Furthermore, if inflation increases further it may force the RBI to increase interest rates. If interest rates rise substantially it will leave those indebted facing rising interest payments and potentially reducing consumer spending in the future

LARGE BUDGET DEFICIT

India has one of the largest budget deficits in the developing world. Excluding subsidies, it amounts to nearly 8% of GDP. Although it has fallen a little in the past year. It still allows little scope for increasing investment in public services like health and education.

RIGID LABOUR LAWS

As an example Firms employing more than 100 people cannot fire workers without government permission. The effect of this is to discourage firms from expanding to over 100 people. It also discourages foreign investment. Trades Unions have an important political power base and governments often shy away from tackling potentially politically sensitive labour laws.

INEFFICIENT AGRICULTURE

Agriculture produces 17.4% of economic output but, over 51% of the work force are employed in agriculture. This is the most inefficient sector of the economy and reform has proved slow.

CONCLUSION

India is the under developed country, even though the general characteristic of underdevelopment are not a common are not common to all the under developed countries. Yet abroad answer to the question why 'a poor country is poor' is implies in there characteristic. A number of characteristic are causes and consequence of poverty, unemployment, education, health care, price control, agriculture, industry, service sector. Each and every citizen of the country has a right to lead a decent life. Everybody must be able to fulfill minimum needs such as food, health care and shelter, basic education etc. So that poor people can get jobs and earn income. Hence eradication of poverty and unemployed is possible to avoided or protected, similarly higher quality of life is achieved by getting proper education and health care facilities.

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PROMOTION OF HEALTHCARE APPS

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1.1 ABSTRACT

With an increase in adoption of smartphones in healthcare industry, there is a huge business opportunity for mobile health (mHealth) applications. The number of mHealth apps in the app market has significantly increased. However, only a few apps are identified and rest of them remain unknown in the market. Marketing plays a huge role in creating awareness, educating and influencing people to use the product. The purpose of this research paper is to study the marketing mix and marketing communication strategies for mobile health (mHealth) applications. The study shows how several marketing strategies discussed in the literature can be applied to marketing of the mHealth applications.

1.2 INTRODUCTION

The Information Technology revolution has dramatically changed people's lifestyle, their buying behaviour and the use of internet, smartphones etc. Rapid use of smartphones in every facet of life is also transforming the needs of the individuals. From booking a cab to ordering food online, everything is possible in a single blink. Companies like Zomato, Swiggy, Uber, Amazon etc. have successfully established their business online where people can avail the services provided by the companies through their websites or by using their mobile applications. Companies have identified the importance of smartphone applications as they are handy and customers don't need to visit their website every time. Simply, you are just one install away from availing their services. Today, smartphone applications offer various features to make life easier for the user. According to the records published by Statista as of the third quarter of 2019, there were 2.47 million apps in Google Play store making the app store with biggest number of available apps. Apple app store was the second-largest app store available for IOS with 1.8 million apps (Clement, 2019). Information technology in the healthcare sector has also benefited from the use of electronic service devices. A dramatic change has taken place in the healthcare industry where companies have started providing various e-healthcare services to the customers. This transformation has led to advent of numerous unique forms of offerings to the customers in the healthcare sector. This applies to aspects of prevention and training, treatment, therapy and care provided by digital technology, regardless of time and place. Today, people want to receive healthcare with the same ease and comfort they enjoy in other services in their lives. Growing numbers of patients seem to be attracted by the convenience provided by the mobile health (mHealth) apps. Number of medical apps available at Google play store has significantly increased from 23,955 in first quarter of 2015 to 41,377 in third quarter of 2019 (Mikulic, 2019). Mobile health applications such as mfiner, Medlife and various fitness apps provide users information, communication and health suggestions. Also, these apps perform the job of tracking and managing user health. In addition to the mobile health applications, Doctor Consulting apps such as Practo, Docsapp, JustDoc, 1mg, Lybrate etc. are surely some of the most talked about smartphone applications which help patients contact medical professionals anywhere and at any time via text or video chat through their smartphones. These applications provide consultation services in several key disciplines such as general medicine, dermatology, paediatrics, gynaecology, psychiatry, and sexology and weight management. Along with doctor consultation, these apps also provide non-prescription drug purchasing and delivery functions. However, if we look into the data, there are a number of health apps available in the market but only few of them are successful in their business. Anyone can develop an application and publish it to the app store, but are all the applications equally successful? The challenge is getting your users find the application in the app store. While some of the applications have made great fortunes, but the most of them still struggle to break even. Similarly, numerous health apps are available in the app stores but only a few of them are popular.

Marketing of smartphone applications is equally important as marketing of a product to the target customers. Mobile app marketing is about designing marketing campaigns which will connect with the users at every stage i.e. from the first time they install the application, to the moment when they are regular users of the application. A lot of factors are responsible for success of an application and marketer should make use of these factors. Marketing of health applications is not an easy task as a large population is still not comfortable with the idea of mHealth services. However, governments of various countries are taking initiatives for making healthcare services accessible to all through the concepts of eHealth and mHealth. The following section of this paper is devoted to understand how mobile health applications can be marketed and what all strategies are critical for the success of these applications. The purpose is also to get help for mHealth app's marketing from global marketing point of view.

1.3 THEORETICAL FRAMEWORK

1.3.1 Marketing mix of mobile application

It isn't only important to have a great idea and value proposition to differentiate your product from the competition but from the very beginning you need to develop a rock-solid marketing strategy. McCarthy's 4P classification of marketing mix has been used as a theoretical framework to have an insight of the Product, Place, Price and Promotion strategy for the mHealth applications. This has been discussed in the table below:

Product	Place	Price	Promotion
<ul style="list-style-type: none"> Developing an app that satisfies the needs of the target users. i.e. addressing their health needs. App should perform the function it is expected to perform. Quality is an integral part of the mobile application. Pratt (2011a) Easy to understand user interface. Apps having complex features should guide user how to use it. (Pratt 2011a). Apps should be valuable for users and should remain to be valuable in future by constantly upgrading the existing features as per new needs of the users and also to respond to the competition. 	<ul style="list-style-type: none"> Mobile apps are installed from mobile app distribution platforms. For instance, Android devices install apps from Google Play Store and IOS apps are installed from Apple's app store. Some big companies also own their own app stores such as Amazon App store or Samsung Galaxy App. Users generally install the apps from trustworthy app stores. Use of apt keywords to ensure easy discovery of apps on app stores. App Icon is also important as it supports the app to distinguish it from other apps. Also, screenshots and videos should be associated that help users to take advantage of when they open app details on the distribution platform. (The Secrets to App Success... 2014) App developers should also consider the geographic location. For example, in countries where alcohol is banned, alcohol related applications would not be successful. Localization of app to different languages, if needed. 	<ul style="list-style-type: none"> Source of revenue from the application. In-app advertisements. In-app purchases. The model of monetization can also be changed. For instance, if users don't shop in-app in a few earlier days, this user may receive ads (App Annie & IDC 2014, 6). Freemium model: limited usage on free version and full features with premium. Subscription-based model: full usage for a limited time period and subscription charged after the expiry of the period. Apps can drive interest to particular websites or blogs and may be used without a charge (Reynolds 2014). 	<ul style="list-style-type: none"> Internet ads, blogs, social networking websites etc. Links may lead to the app store if the aim is to get consumers to download the app instantly and to share more images and information on the website of the company. Happy users' reviews. Mobile app listing and review websites (paid or unpaid).

All the four components of marketing mix should be clearly defined for successful product offering in the form of smartphone applications to the target users. In the scope of mobile apps, product prices and performance updates are considered to be very relevant. Nevertheless, App market developers can easily change prices and features with lower costs and efforts compared to traditional software markets. However, the sales performance is positively related to the free apps offerings, higher initial popularity, investment in less popular classes, price

changes and higher user reviews of the applications. These characteristics thus lead to increased consumer demand and longevity of life of the apps.

1.3.2 Determinants of success of mHealth applications

Some of the mobile health applications have been highly successful in the market however, most of them lag behind. Mobile health applications need to focus on the perceived value. The intention of mHealth app users to use these types of services depends heavily on perceived value (Aishwarya A, 2019). Health apps are recommended to ensure information accuracy and reliability of data to ensure that end-users benefit more from services provided. The trust rate of the users towards the service provider will be significantly improved if they operate on Perceived Value and Response efficacy (Aishwarya A, 2019). Therefore, it is essential to constantly update data on applications to increase the number of users and the rate of use.

Apps can retrieve content and information from the web in the same way as a website, but the major advantage is that it can also import content so that it can be accessed later when there is no internet connection (Venkata N Inukollu, 2014). Applications that can be accessed in the absence of internet connection are more desirable. Mobile Health applications require little effort to operate and are able to provide 'on-the-go' advice and information. However, People don't like the context-sensing apps or the functionality of social media in health apps (Wei Peng, 2016).

Marketers should keep in mind barriers in adoption of health apps such as Lack of app literacy, Low Awareness of health apps, Lack of need for health apps and cost involved. Also, Lack of motivation and discipline, large storage space and battery drainage are the Barriers to Continued Use of Health Apps. Low awareness of the app and low literacy are two factors leading to non-adoption that indicate that greater public awareness and awareness of health applications are necessary in order to generally make mHealth appropriate (Wei Peng, 2016). In order to make mHealth widely accepted, it is crucial to impart more knowledge and awareness to the general public. The most important feature liked but the users is personalised information. Users prefer personalisation in health applications where they get their own updates, recommendations etc.

1.3.3 Promotion strategies for mHealth apps

According to Vranesovic et al. (2006) the basic purpose of promotion is to educate, convince and influence the decisions of the consumers. Various marketing and promotional strategies can be designed to inform, persuade and influence the public to use mHealth services. The literature indicates that appropriate advertising may change consumers' perceptions towards a certain product (Petty et al., 1983). Both direct and indirect marketing are important in customer decision making but direct marketing may have a greater influence in purchase determination than media strategies (Brown and Reingen, 1987; Chikweche and Fletcher, 2010). Recently, social media has come up as a fascinating tool for several marketing campaigns by the businesses to build brand awareness and persuade the people to buy their brands. Social media platforms such as Facebook, Instagram, twitter, Pinterest, YouTube etc. have become essential components of marketing and business promotion (Siam, 2017). Many smartphone applications have taken advantage of social media platforms before, at the time of and after launch of the application that has generated a huge user base ready for them. Smartphone application Instagram shared lots of pictures on twitter before its launch to generate curiosity among the public. Founders of Instagram by creating an account on twitter announced the application 1.5 months before its launch and kept posting about it to create a buzz among the people (Latvala, 2015). In order to generate a "buzz" for a product or Brand, this approach called *buzz marketing* utilizes the recipient's e-mail, social media network or mobile phone network. This can be an event or an occurrence that creates anticipation, attention, curiosity and the need to find out more about the product which contributes to brand building (Ahuja, Michelis, Walker, & Weissbuch, 2007). The product has to be both unique and highly visible for a great buzz marketing result. Mobile health applications can also be promoted by creating a buzz among the people. A good product markets itself therefore, marketers should create an application that actually addresses the needs of the individuals.

People generally get influenced by their idols and imitate their choices. Angry Birds got a viral boost in Sweden from a famous skier, claiming that she was playing Angry Birds. It began to gain popularity in other countries in Europe and captured American gamers' attention (Cohen 2011). Another way to market your mobile health application is to get others speak and write about your product. ProtoGeo attempted to have good relations with journalists who had shown interest in the Moves app to allow them to write more about the application (Tikkanen 2013). After the launch, articles in software sites help applications grow. Also, personal email promotions and word of mouth campaigns help attract more users. A big boost is shown for most users when applications are featured on App Stores. The marketing strategies should be aligned with the target audience, for example, if an entrepreneur sells his brand through in-app ads in the market where people do not use smartphones, it will fail because the approach is intrinsically wrong. Therefore, a preliminary market study is necessary to gain the insights of technology

acceptance and usage by the customers in the market. Other than that, many smartphone applications provide rewards to attract the people towards their application. Rewards can be short term (on first install/use, specific occasion or limited period) or long term (on every use or rewards on referrals) that motivate people to use or keep using your application.

1.4 CONCLUSION

As the app market is constantly expanding, the marketing aspect of it needs effort and resources. Mobile health applications are not that new to the market but people are still not comfortable about them. It is important to market mHealth applications like any other product to make people aware, educate and persuade for the same. The main focus of marketing interaction is to increase consumer engagement through social media marketing. McCarthy's 4P classification of marketing mix is discussed in respect of mHealth applications. Good media coverage, social impacts, and viral marketing make the app more readily available to users.

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PROMOTION OF RETAIL BANKING WITH A FOCUS ON HOUSING FINANCE: AN IMPERATIVE FOR BANKS IN INDIA AND ALSO THE WHOLE ECONOMY

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Abstract

As Indian economy is passing through an economic downturn, there is a vital need for suitable anti-cyclical economic policies which are capable of kick-starting this recession-hit economy. Coupled with the above need, India is committed to attain the national goal of 'Affordable Housing for All by 2022'. In the above context, construction of houses and other residential buildings needs to be promoted which in turn underlines the relevance for promoting housing finance. Housing finance denotes one of the most important segments of retail credit. Given the economic slowdown in general and crisis in banking sector in particular, this paper studies the need for aggressive promotion of retail banking in India, particularly housing finance, for the faster growth of the Indian economy; primarily because of the vast linkages of housing industry with nearly 269 other industries, and also its high employment potential. The paper offers strategies in the above direction.

Keywords: Retail Credit, Housing finance, Risk diversification, Linkages, Employment, ICT.

1. Introduction

It is well recognized in the literature that housing and residential real estate sector has huge potential for economic development of any nation, apart from the social development role of this vital sector of an economy. This is particularly true in respect of developing nations like India. In the present context when Indian economy is passing through an economic slowdown which is characterized by crisis in the banking sector as well, need for promotion of housing development becomes more meaningful. Coupled with the above logic, the fact that India is already committed to the national goal of 'Affordable Housing for All by 2022' makes the strategy for promotion of housing finance more meaningful in the Indian context. The case of promotion of retail banking products with a focus of housing finance as strategy for revival of India's banking sector which is under crisis now, and also kick-starting Indian economy which is passing through a slump, needs to be considered in the above backdrop.

2. Objectives of the Study

- (i) To make an overall study of the present status of Indian economy as it passes through an economic slowdown, the status of its banking sector and also the housing situation;
- (ii) To study the relevance of promotion of retail banking products by banks in India with a focus on housing finance, for the sustained growth of the national economy; and
- (iii) To suggest strategies for the sustained growth of retail banking portfolio of banks, particularly housing finance, and hence sustained growth of the national economy.

3. Relevance and Significance of the Study

First, the vast forward and backward linkages of housing and residential real estate industry with 269 other industries enable it to promote faster and balanced economic development of a nation. This is especially relevant for developing nations like India where the housing shortage is severe. Housing and real estate industry has the potential to kick-start a recession hit economy too, because of the above linkage effects. Second, from a social perspective, housing is a primary requisite of human life and hence an essential ingredient in any welfare state. With the initiation of the economic reforms in India in the early 1990s, the housing sector has been getting more attention and conducive environment for its growth, notwithstanding the fact that successive Governments used to accord high priority to housing even before the reforms era, especially since the early 1970s. Third, in the ongoing regime 'Affordable Housing for All by 2022' is a national goal that India seeks to attain. Promotion of housing finance by commercial would benefit more people to have their own houses by availing financial assistance from banks. Thus, by promotion of housing finance banks seek to help the nation to attain its national goal. Fourth, the banking sector in India is facing a crisis, the first and foremost being the problem of NPAs. Housing finance being a relatively less risky loan, promotion of housing finance ensures higher credit off-take but at the same time lower NPAs/sticky loans. Fifth, retail credit products being relatively of lower amounts spread across very large number of customers across wide geographical areas, there is the benefit of risk diversification too. Sixth, housing construction sector is labour-intensive and hence has vast

employment potential. In view of the foregoing analysis, considering the clear benefits of housing loans and the peculiar economic environment in India, it is relevant to study the relevance of promoting housing finance for the sustained growth of the nation.

4. Literature Review and Research Gap

Kiran Keswani (1997) [11] in his paper, 'The contribution of building centres to low-cost housing in India' in *Building Research & Information* has studied the reasons for the slow growth in low-cost housing projects in India. The author has suggested that the Government should assume the role of a facilitator rather than a provider. A three-pronged strategy has been suggested for promoting low cost housing viz. (i) examining critically the archaic laws on housing, (ii) disseminating information on technical aspects of house building, and (iii) training in updated technologies on low-cost housing. Peer Smets (1999) [30], in his paper 'Housing Finance Trapped in a Dilemma of Perceptions: Affordability Criteria for the Urban Poor in India Questioned' in *Housing Studies* has argued that a definitional issue associated with formal housing finance and 'eligibility' for the same in terms of 'affordability criteria in one go' has resulted in exclusion of the vast majority of the urban poor from availing finance from formal sources of finance. The author has advocated the need for 'incremental housing' and also the need to assess the 'affordability in a phased in manner' and 'not in one go'. Manoj P K (2003) [13] in his research paper, 'Retail Banking: Strategies for Success in the Emerging Scenario' in *IBA Bulletin* has suggested strategies for the sustained growth of the retail credit portfolio of banks, that mainly comprises of housing finance, as a safer way of increasing business and also kick-starting the then recession-hit industry of India. 'Linkages' – both forward and backward – of housing with large number of other industries, and the positive effect of such linkages for bringing about faster economic growth have been pointed out in the paper. Manoj P K (2004) [14] in his another research paper, 'Dynamics of Housing Finance in India' in *Bank Quest* has pointed out the growing appetite of commercial banks (CBs) towards housing credit, the falling share of housing finance companies (HFCs) in the market, and allied aspects. Some macro level strategies for the sustained and balanced growth of housing finance in India are suggested. The relevance of promoting secondary mortgage market (like, RMBS), alternative models like Housing Micro Finance (HMF) etc. has been noted. In a Working Paper 19 titled, *Housing Microfinance: Designing a Product for the Rural Poor*, released by Institute for Finance Management and Research (IFMR) (2007)[7], has noted the utmost importance of promoting Housing Micro Finance (HMF) – an alternative model for housing finance for the poor – for addressing India's chronic housing problem, which in turn is primarily that of the poor and marginalized in the country, like the LIG (Low Income Group) and EWS (Economically Weaker Sections). Only models like HMF could cater to such deprived sections that are not served by the formal sector agencies. So, models like HMF are required to solve India's 'real housing problem'. The report seeks to design the suitable HMF model for the Indian poor. Manoj P K (2008) [15] in his paper, 'Learning from Cross-country Experiences in Housing Finance: A Microfinance Approach' in *Journal of Global Economy* has suggested suitable macro level strategies for promotion of housing micro finance (HMF) in the Indian scenario by appropriately replicating the successful and time-tested models like HMF or other similar alternative housing finance models prevalent elsewhere in the world. A research paper on HMF by Manoj P K (2010) [21], "Prospects and Problems of Housing Microfinance in India: Evidence from "Bhavanashree" Project in Kerala State" in *European Journal of Economics, Finance and Administrative Sciences* has studied in detail the utmost importance of HMF for balanced and equitable housing development in India, and hence rapid economic development of the country. Strategies for promotion of HMF in India have been suggested, along with specific and category-wise strategies for the HMF based in Kerala and sponsored by the state government namely 'Bhavanashree'. Manoj P K (2010) [18] in his paper, 'Benchmarking Housing Finance Companies in India: Strategies for Enhanced Operational Efficiency and Competitiveness' in *European Journal of Economics, Finance and Administrative Sciences* has made a detailed analysis of the relative competitive position of the leading housing finance companies (HFCs) in India and has suggested strategies for the enhanced operational efficiency and competitiveness of HFCs.

The management consultancy organization, KPMG (2010) [11], in its Industry Report (Advisory), 'Affordable Housing – A key growth driver in the real estate sector?' has sought to discuss the immense growth prospects of real estate players in the affordable housing market in India, given the huge demand and grossly under-penetrated market, very favourable Governmental policies etc. The demand and supply constraints, the relevance of PPP in the real estate sector etc. have also been dealt in detail. In a research paper by Manoj P K, (2010) [19] 'Determinants of Successful Financial Performance of Housing Finance Companies in India and Strategies for Competitiveness: a Multivariate Discriminant Analysis' in *Middle Eastern Finance and Economics*, has attempted to find the determinants of superior financial performance of HFCs. Using the tool Multivariate Discriminant Analysis (MDA), Discriminant Function having five distinct parameters (selected

from the total 21 parameters used for MDA) which significantly influence the financial performance of HFCs has been derived. Yet another paper by Manoj P K (2010) [17], 'Financial Soundness Housing Finance Companies in India and Determinants of Profitability: A 'CAMEL' Approach along with ROE Decomposition Analysis' published in *International Journal of Business Policy & Economics* has employed the methodology of 'CAMEL' ranking along with ROE decomposition analysis to identify the determinants of profitability of HFCs. A research paper by Manoj P K (2011) [22], 'Determinants of Profitability of Housing Finance Companies in India and Strategies for Competitiveness: a Multiple Partial Correlation Approach' in *International Journal of Business Intelligence and Management* has suggested competitive strategies for various groups of HFCs with the help of the basic parameters that significantly influence the respective groups of HFCs.

A joint research paper by Hrushikesh Mallick & Mantu Kumar Mahalik (2015)[5] 'Factors determining regional housing prices: evidence from major cities in India', in *Journal of Property Research* has sought to identify the factors determining the housing prices with respect to 15 major cities in India using data relating to 16 Quarters (4 years, 2010 to 2013). It has been noted that fundamental factors are more significant than speculative factors. In a research paper by Manoj P K (2015) [25], "Socio-Economic Impact of Housing Microfinance: Findings of a Field-based Study in Kerala, India", published in *International Research Journal of Finance and Economics*, the reasons for the failure of 'Bhavanashree' – the HMF initiative of the Government of Kerala have been studied in detail. The author suggests strategies for effective implementation of HMF projects based on the "learning from the failure of 'Bhavanashree' project" in Kerala. The research report by the agency IFMR (2015) [8] entitled as *Affordable Housing Finance Sector: Overview* makes a detailed analysis of the need, relevance and significance of affordable housing in India in the context when the national goal of 'Affordable Housing for All by 2022' is implemented by the Government of India. The crucial role that HFCs have to play in this context is specially noted in the IFMR report. The fact that there is a gradual re-emergence of HFCs since 2013, thus overtaking the CBs in growth rate and significantly improving their market share has been specifically pointed out. In a paper by Manoj P. K. (2015) [23], "Deterrents to the Housing Microfinance: Evidence from a Study of the Bankers to 'Bhavanashree' in Kerala, India", in *International Research Journal of Finance and Economics*, the major problems associated by the bankers in financing 'Bhavanashree', the HMF initiative of the Government of Kerala, has been dealt in detail. Various issues like the unclear land tenure, fragile institutional framework of the HMF and its parent (mentor) 'Kudumbashree' etc. have been studied in detail. Suggestions have been made to the Government based on the findings of the study, for the purpose of enabling more meaningfully implement HMF initiatives in the future, 'Bhavanashree' initiative being more or less a failure. In a research article by Manoj P K (2015) [24], "Housing Microfinance: A Study on Quality, Cost and Default Rate with Respect to 'Bhavanashree' in Kerala", in *International Research Journal of Finance and Economics*, a detailed and critical study of the asset quality, administrative (transaction) costs, and default rates in respect of the HMF initiative of the Government of Kerala ie. 'Bhavanashree' has been made. Suggestions are made for more effective implementation of HMF projects by the Government. Another paper by Manoj P K (2016) [26], "Real Estate Investment Trusts (REITs) for Faster Housing Development in India: An Analysis in the Context of the New Regulatory Policies of SEBI" in *International Journal of Advance Research in Computer Science and Management Studies* has made an exploratory study of the utmost relevance of REITs in a developing country like India for promotion of its housing and real estate sector and hence the whole economy. BCG (2018) [2] in its report, *Digital Lending* has sought to highlight the immense opportunity for digital lending in India. According to BCG, it is a USD 1 Trillion opportunity over the next 5 years and the stakeholders can utilize the same. Industry research agency, India Brand Equity Foundation (IBEF) (2018) [6] in its report on Real Estate industry in India has pointed out the tremendous growth prospects of the real estate industry in India which is estimated to attain the size of USD 1 Trillion by 2030. Its estimated size as of 2019 is 3.7 Million Square feet and it is the fourth largest sector in terms of FDI flows. Rapid urbanization, growing affordability, and Governmental commitment to attain 'Affordable Housing for All' etc. brighten the prospects of India's real estate sector.

In view of the foregoing discussions, it is noted that though there are a number of studies on housing finance, studies on retail banking by banks with a focus on housing finance are scarce; an exception being the study by Manoj P. K. (2003) [13] 'Retail Banking: Strategies for Success in the Emerging Scenario' in *IBA Bulletin*. This study is by and large a re-look into the study of Manoj P. K. (2003) [13], after a long period of 15 years.

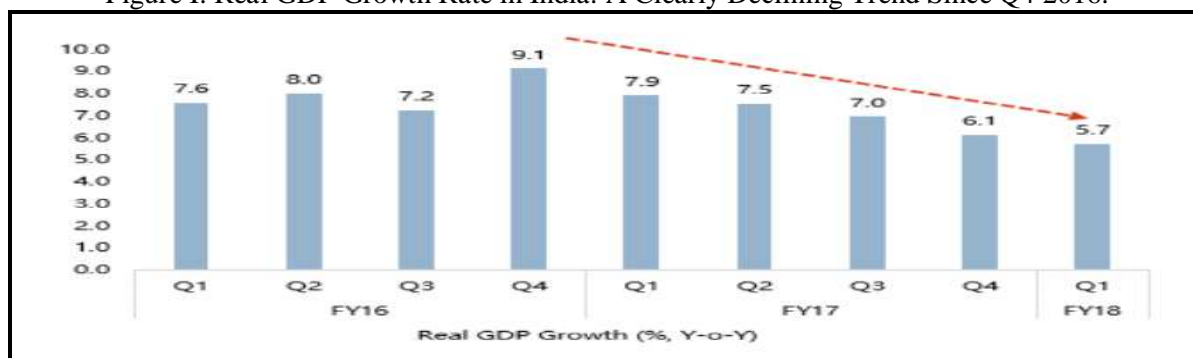
5. Methodology of the Study

The present study is descriptive-analytical as well as exploratory in nature. The study is descriptive to the extent that it describes the developments in the field of retail banking in India, with a focus on housing finance. The paper is analytical too as it seeks to analyze the need for focusing on retail banking, particularly housing finance segment within it, so as to tide over the present slump in the banking sector as well as the whole economy. The study is based primarily on secondary data from authentic sources like RBI, NHB, and CRISIL.

6. Current Status of Indian Economy, Housing Situation and Employment

There is a steadily falling trend in respect of GDP of India over the last few quarters and this is very prominent since the fourth quarter of 2016 (Q4, 2016) (Figure I) and this falling trend is likely to continue in FY 2019 also.

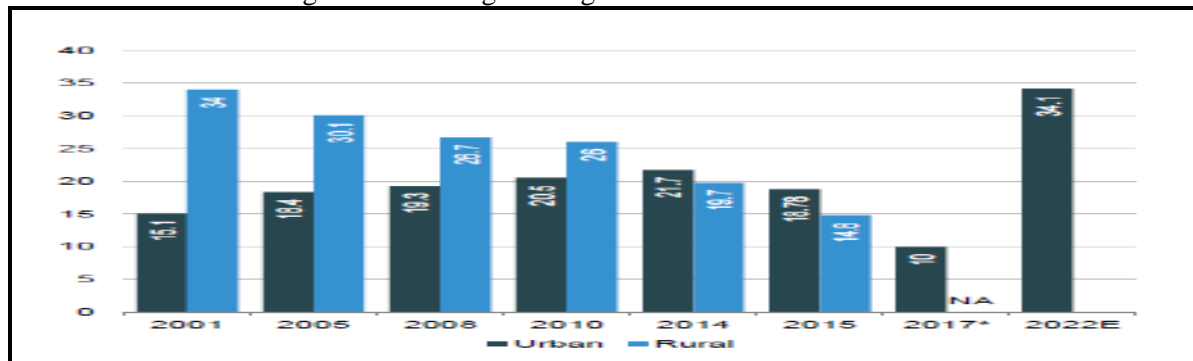
Figure I: Real GDP Growth Rate in India: A Clearly Declining Trend Since Q4 2016.



Source: CRISIL (Sept. 2018) [3]

Housing shortage is a reality in India even after 70 years of her independence. Though there is a gradually declining trend in housing shortage in rural India, it is still acute in urban areas of the nation and is showing a generally growing trend over the years. (Figure II).

Figure II: Housing Shortage in India – Rural and Urban.



Source: IBEF (July 2018) [9]

Urban housing problem in India growing because of the growing urbanization in the country. (Figure III). The national goal of 'Affordable Housing for All by 2022' gives another dimension to the urgent need for solving the growing urban housing problem.

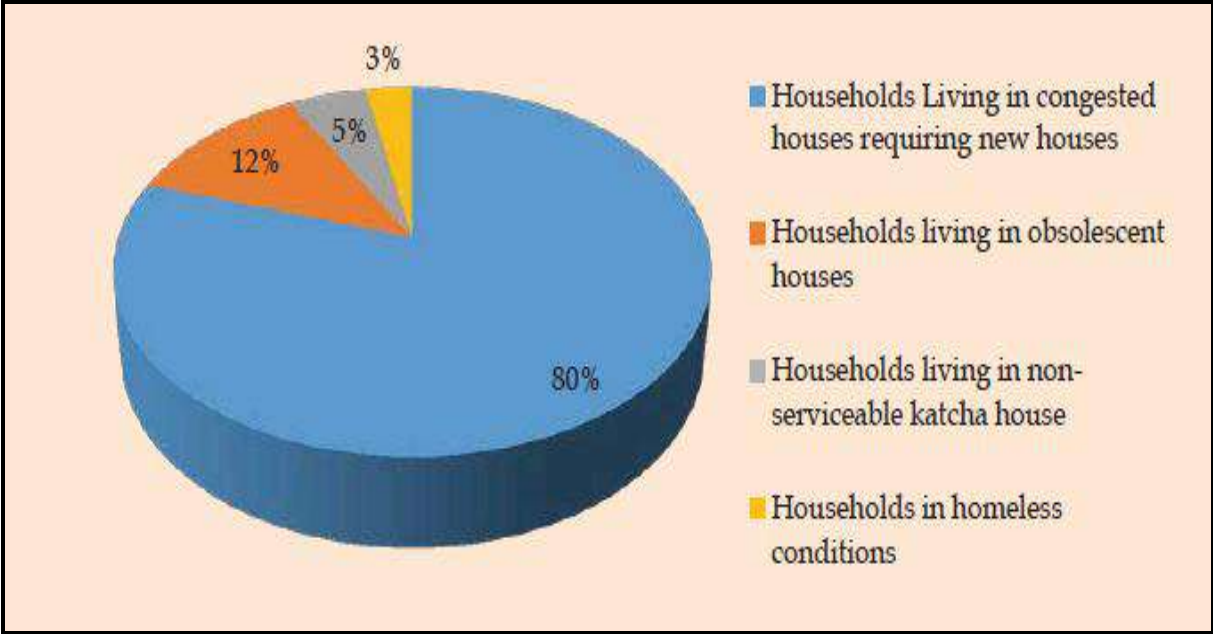
Figure III: Urbanization in India – Steadily Growing Trend.



Source: NHB (2018) [33]

Regarding the nature of urban housing shortage in India, it is noted that vast majority of those who require houses in the urban areas (as high as 80 percent) are suffering from congestion and hence they need new houses. Another significant group of 12 percent of them are living in obsolescent houses. Of the rest 8 percent, 5 percent are living in non-serviceable katcha houses and the balance 3 percent are in home-less condition. The above situation relating to the urban housing condition in India points to the need for special attention to solving problems associated with housing congestion in urban areas. (Figure IV).

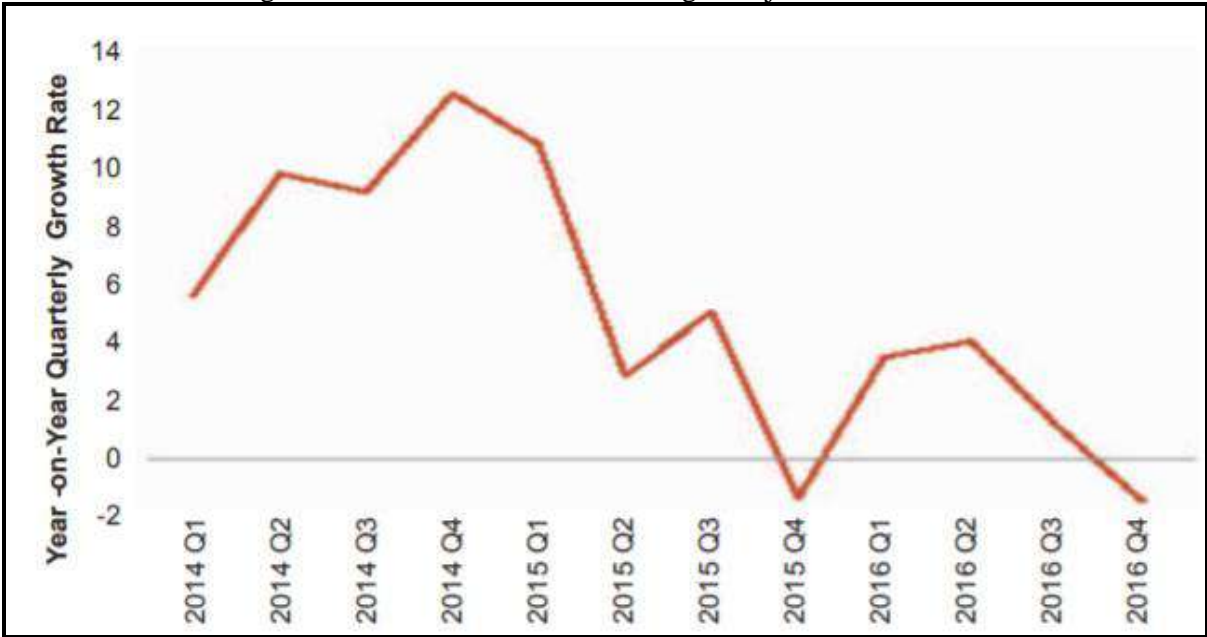
Figure IV: Real Estate Prices across Eight Major Cities in India



Source: NHB (2018) [33]

There is a constantly falling trend in the real estate prices across eight major cities in India (Figure V). This suggests that major cities in India have almost saturated as far as housing and residential real estate development is concerned.

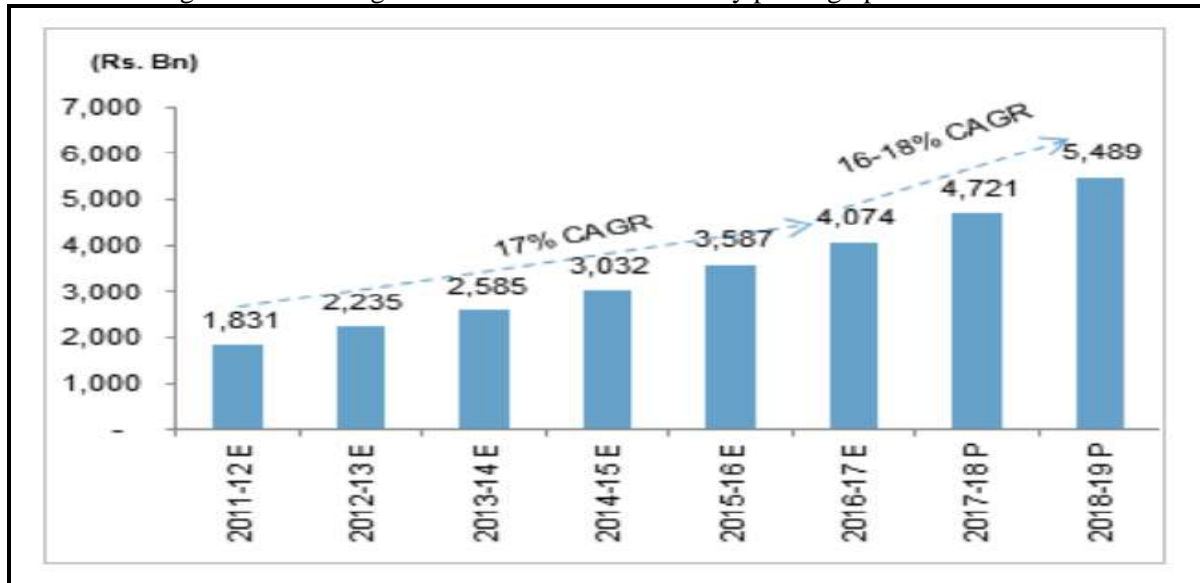
Figure V: Real Estate Prices across Eight Major Cities in India



Source: Knight Frank and Economic Survey 2016-17; Adapted from, NHB (2017) [33]

In spite of the general slump in the housing development sector in India, it is noted that there is slight improvement in the growth rate of housing loan disbursements, this being primarily because of the growing demand in Tier II and Tier III cities. This suggests that now housing projects focus more on suburban sites (Tier II and III cities, instead of Tier I) as there is growing demand and relatively lower costs. (Figure VI).

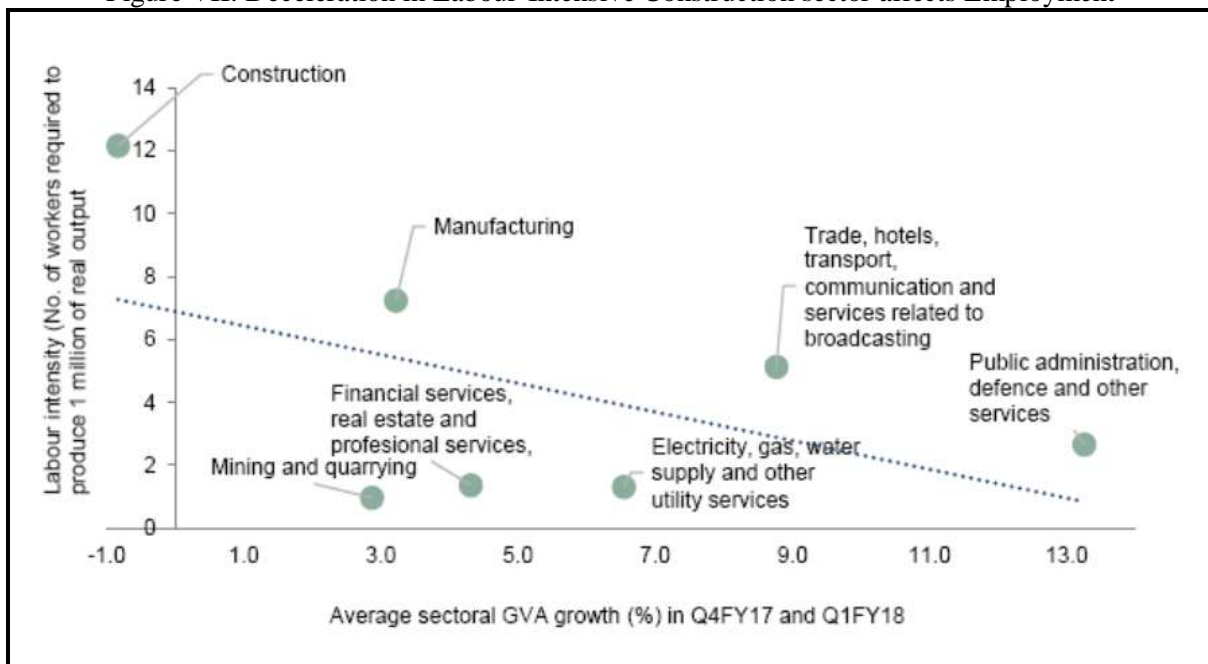
Figure VI: Housing loan disbursements are slowly picking up since FY 2017



Source: CRISIL (Sept. 2018) [4]

The general slump in the construction industry in India, which includes primarily the housing construction industry affects the employment creation in the country because construction is one of the most labour-intensive sectors and it requires as high as 12 workers to produce Rs. 1 million worth output. Deceleration in housing construction sector hence would adversely influence the employment generated in the country. Or, in other words, promotion of housing construction in India has a vital role (Figure VII).

Figure VII: Deceleration in Labour-Intensive Construction sector affects Employment

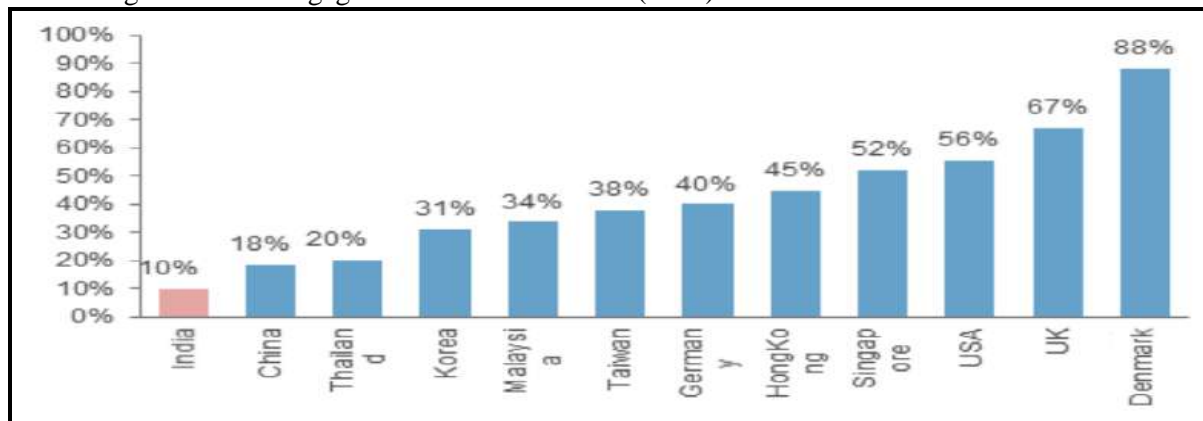


Source: CRISIL (Sept. 2018) [3]

7. Relevance of Promoting Retail Credit by Banks, particularly Housing Finance

The Mortgage to GDP ratio in India is still at a very low level of about 10 percent, though the same has been gradually growing over the years. The case of India in this regard is one of the lowest in the whole world. This fact points to the fact that there is enough scope for the housing and real estate sector in India to grow. In order to catch up with a nation like China also, India has to almost double its present mortgage to GDP ratio, as the current mortgage to GDP ratio in China is as high as 18 percent as against 10 percent in India. The national commitment towards attaining 'Affordable Housing for All by 2022' gives another impetus towards improving the very low mortgage to GDP ratio in India. In a period of economic slowdown as faced by India at present, banks and other players like NBFCs have the responsibility to focus on housing finance for their own growth as well as the wellbeing of the shelter-less masses and the national economic development. (Figure VIII).

Figure VIII: Mortgage to GDP Ratio of India (2012) vis-a-vis Selected Other Countries

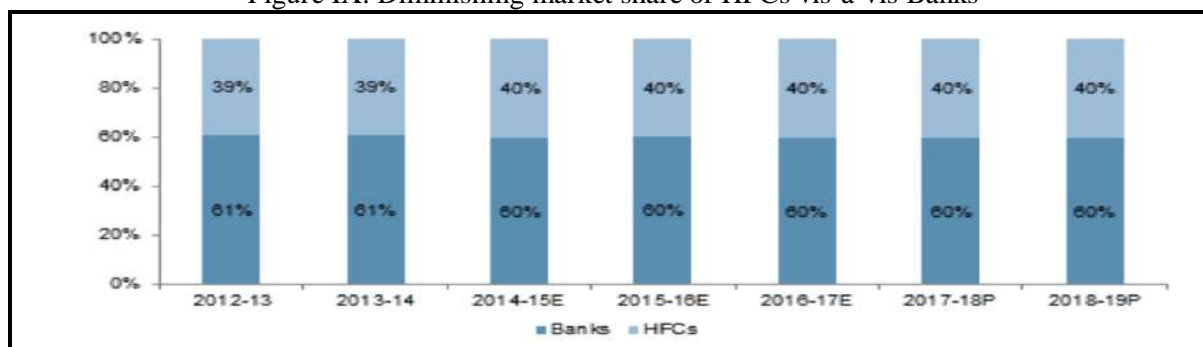


Source: CRISIL (Sept. 2018) [3]

Housing investments help not only the respective individuals directly but the socio-economic development of the whole nation as well. So, governmental policies on housing have vital impact on the national economic development besides the social and familial wellbeing of the citizens. Because of this fact housing is often called the growth engine for developing nations like India. Given the low mortgage to GDP ratio in India of about 10 percent which is one of the lowest in the whole world, there is enormous scope for the housing finance sector to grow in India. Retail credit, particularly housing loans portfolio within it, has got the capacity to generate more demand by way of creating multiplier effects because of its vast linkages with nearly other 300 allied industries. Besides a basic necessity of human life, housing is the most prominent activity under the construction sector which in turn accounts for over 50 percent of the developmental outlays of the government. A HUDCO-sponsored study to assess the impact of housing investments on employment and GDP has noted that housing sector ranks third among the major 14 sectors in India in terms of linkage effects with other sectors of Indian economy. It is reported that in respect of income multiplier housing sector ranks fourth and that it is ahead of other sectors like transport and agriculture. It is reported that unit rise in final expenditure on housing would create additional income of nearly 5 times. So, housing sector in India plays a major role by contributing to employment and income generation.

In India, the two major players in the housing finance market are Commercial Banks (CBs) and Housing Finance Companies (HFCs). The market share of HFCs in India is about 40 percent while that of banks (i.e. CBs) is about 60 percent. The chronic issues faced by Dewan Housing Finance Corporation (DFHL) – one of the prominent HFCs in India, and the mounting problems with Indiabulls Housing – another major HFC in India are just two examples to the multifarious issues that HFCs in India currently face. All the HFCs, both large sized as well as the mid-sized and small sized ones, face the problem of dwindling profitability because of growing cost of funding, deteriorating asset quality, lower growth rates and hence lower relative market share vis-à-vis the banks, and so on. The issues faced by HFCs, like growing borrowing costs, is more in respect of HFCs with ALM (Assets Liability Mismatch) issues and/or poor asset quality. Contrary to the case of HFCs, banks have better liquidity and hence can focus on lending more to retail credit, particularly housing finance. Moreover, in the present scenario of low credit off-take from the banking sector because of the looming economic slowdown, focus on retail credit makes better business sense. The relatively low repayment risks associated with retail credit products like housing finance makes the above strategy even more meaningful. The possibility of effective risk diversification is another advantage of focusing on retail credit. (Figure IX).

Figure IX: Diminishing market share of HFCs vis-à-vis Banks



Source: Adapted from CRISIL (2018) [3]

The growth prospects of the sector, especially in the Tier 2 and Tier 3 cities are high. However, a sudden increase is not anticipated in the near future (CY-2019 or 2020). Rather, a stable trend or marginal increase alone is estimated. This is because the sentiments of the buyers are yet to become positive. Given the mounting problems faced by the NBFCs in general and HFCs in particular, the presence of Commercial Banks (CBs) in the housing finance arena is going to be higher, and so also their market share. So, the responsibility of CBs towards attaining the national goal of 'Affordable Housing for All by 2022' too has increased. As already noted, it is widely recognized that Indian economy is facing a marked slowdown today. The vast linkage effects of housing investments result in investments in allied sectors through multiplier effects. This would help revival of this economy from the present slump. The ability of this sector to generate employment is vitally significant here.

8. Strategies for Sustained Growth of Retail Credit, particularly Housing Finance

Given the national goal of 'Affordable Housing for All by 2022' in India, let us now try to design the medium term strategy for the banks that can take care of the above national goal and at the same time help tide over the present situation of economic slowdown. Irrespective of the fact that whether the economic slump is cyclical or structural in nature, investment in housing can act as a suitable remedial strategy. So, promotion of retail credit by banks, particularly housing credit is meaningful, especially when we consider the vast linkages of housing industry with not less than 269 other industries. Investment in housing can kick-start many a recession-hit sector in the economy and is a top employment generator also. Hence, the medium term banking strategy should be that of 'retail credit with housing finance thrust'.

Another vital need for the banking strategy is that of ICT integration. ICT ensures better competitiveness, significantly improve operational efficiency by reducing cost, and can enable better customer service also. Modern ICT-based tools like data mining can be of immense use because of their ability to generate relevant knowledge from large amounts of unorganized business data. Moreover, given the imminent invasion by the financial technologies (Fin-Tech) companies and also the ever growing expectations of today's discerning customers, banks have to constantly innovate their products and services, particularly in respect of the retail banking portfolio. Here, ICT acts as the means (enabler) and also the end. So, from the viewpoint of competition too ICT integration at all levels, especially in respect of retail credit, is an imperative for the survival and growth of the banks.

Public sector banks (PSBs) and Old Private sector Banks (OPBs) have to pay more attention to ICT adoption because they often lag behind the New generation Private sector Banks (NPBs) and Foreign Banks (FBs) in ICT adoption. This in turn enables them to catch up with NPBs and FBs in customer service and operational efficiency; especially in respect of retail credit wherein customer service and control of operating costs are vitally significant.

There is another reason for the PSBs to take special interest in retail credit. As consolidation process is going on among the PSBs, the only feasible strategy that can 'keep them moving' in the short and medium terms is that of focusing on retail credit with due respect to ICT integration and constant product innovations. Focusing on large corporate or industrial advances or on project financing by these PSBs which are already heavily burdened with the issues of bad-debts (NPAs) and falling profitability and productivity will not at all be sensible in the short or medium term. Identifying their synergies and designing suitable business models would require some more time during which they can focus on retail credit.

Use of advanced ICT platforms that can support competitive tools like data mining and knowledge discovery is very desirable for any progressive bank for its survival and growth. Such platforms enable high level of customer engagement and facilitate targeting different customer segments with tailor-made products. Modern payment technologies like RFID (Radio Frequency Identification) need to be adopted to remain competitive in the market. ICT investments, further, should focus on improving responsiveness, resiliency and enterprise-wide collaboration. Strategic tie-ups and resource sharing among the banks can bring in enhanced efficiency in the use of technology. This is especially relevant for the PSBs which are undergoing consolidation.

Customer centricity has a vital role to play in banking industry in the future. Sustainable business models that ensure continued customer loyalty or long term relationships have to be followed consistently by all banks, including 'traditional' banks like PSBs and OPBs. Owing to their 'high-tech' nature, NPBs and FBs are ahead in this regard.

Because of the fast advances in ICT and also the discerning nature of modern customers, innovation of all types on an ongoing basis is a vital for retaining and attracting the customers. So, each and every product needs to be designed meticulously based on a clear understanding of the customer's quality value proposition. Banks need

to focus on specialized customer segments, as a 'one-size-fits-all' policy no longer appeals the customers of today's globalized markets. To identify the target customer segments banks have to adopt scientific market research studies and use advanced ICT tools like data mining.

Given the discerning nature of modern customers, provision of more high technology (Hi-Tech) products and delivery channels is an imperative for survival and growth of any bank, rather than a choice. The growing trend in computer literacy and the ever-growing affinity to modern products among the younger generation make the above strategy more meaningful. Also, it is essential to effectively defend the threat by specialized (niche) players, including the Fin-Techs which are growing fast.

With growing adoption of ICT-based applications, there are mounting trend in scams, information/cyber security issues, data leakages, frauds etc. So, setting up robust systems for risk management relating to information/cyber security should be a top priority for all banks.

From the part of the Government, it is advisable if it encourages a dynamic secondary market for housing finance, like, residential mortgage backed securitization (RMBS) is yet to emerge in India. The Government has to facilitate a vibrant RMBS market in India so that it acts as a new source of finance for the housing sector, particularly for the HFCs which are grappling with liquidity problems. Equally important is the need to promote the real estate investment trusts (REITs) in India. This in turn would promote the commercial real estate directly; and residential real estate too, but indirectly. Conscious efforts for encouraging the market innovations like RMBS and REITs are required in India for housing development. Special focus on residential REITs (those focusing on residential buildings) is an urgent need.

Whatever is the level of ICT adoption, any banking service needs to have a human touch in order to be holistic and comprehensive. This 'human factor' in banking services must ensure adequate customer touch points for all products by way of meticulous planning.

All the above strategies have direct impact on the technological platform of the respective banks. A few other relevant strategies that can ensure superior performance of banks include, inter alia, enhanced transparency and strict corporate governance, enlarged accountability, adoption of international standards in accounting and reporting etc. More flexibility in human resource management (HRM) policies is required, especially for the PSBs and OPBs. This enables low cost and more flexible labour options (like, off-shoring). Besides, provisions to attract and retain the talent are required, which in turn may need more functional autonomy for the banks.

Concluding Remarks

In spite of issues like growing NPAs, need for recapitalization etc., particularly for the PSBs in India, it may be noted that still Indian banking system is adequately stable, resilient and reasonably equipped to comply with global regulatory norms. When NBFCs (including HFCs) are grappling with problems of liquidity, asset-liability mismatch, falling profitability and so on, banks in India are still healthier and more stable. However, banks in India have to play a greater role in the current situation of the country that is characterized by economic slowdown. Almost every sector in Indian economy is facing a slump, and the growingly worsening case of NBFCs (including HFCs) is no exception here.

Notwithstanding the fast growth of digital transactions in India, regarding ICT adoption by banks in India, there appears to be good scope for improvement, particularly in respect of PSBs – still the backbone of the Indian banking system, in spite of their losing prominence. In fact, ICT upgradation and consolidation in banking industry are mutually reinforcing in nature and results in significant cost savings for the respective banks, which are mostly the PSBs. Need for restructuring the banks by adopting stronger customer orientation with robust technological platform assumes vital significance today. The recent governmental policies are all in the right direction. Focus on retail credit products like housing finance ensures better credit off-take during this slowdown phase and will also enable gradual recovery of the whole national economy because of the vast linkage effects. ICT adoption makes the whole process as above more cost-effective, transparent and customer-friendly.

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ICT IN EDUCATION

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ABSTRACT

The government has taken many initiatives for the development of education infrastructure which includes the development and implementation of ICT applications and it has been identified as a catalyst for country's transformation from a production based economy to a knowledge based economy. To successfully implement ICT in colleges need to consider many aspects. A well-designed teacher training program is essential to meet the demand of today's teachers who want to learn how to use ICT effectively for their teaching.

Keywords: ICT, Education

INTRODUCTION

In our country education system is also not an exception and it is witnessed a series of changes that have brought an increase in the market size of the education industry in India. The government has taken many initiatives for the development of education infrastructure which includes the development and implementation of ICT applications and it has been identified as a catalyst for country's transformation from a production based economy to a knowledge based economy.

ICT also can provide a way for dynamic and collaborative learning. By using internet our learning is not limited to the college hours, demographically where we are, and who our teachers are. We can access internet anytime and anywhere. As stated by Uhomoibhi (2006, p. 9) e-learning allows the students to get information faster from everywhere and anytime. Technology also enables us to cross the demography limits. Rural students can access information from urban areas, get information and share knowledge with other students or teachers in the same area or even different countries. Besides dynamic learning, ICT allows all the human components of schools; the principals, administrators, teachers, IT coordinators, and the students to get involved in the collaborative learning and forming learning communities.

The use of ICT not only can support the cognitive development of the students but also increase their motivation to learn and their interaction in learning. As noted by Davies and Birmingham (2002, pp. 19-20) identify three benefits of using storyboard program software, kar2ouche, to support the students' learning on Macbeth character. Those three kinds of benefits are cognitive, motivational, and interactional advantage. Cognitively, the students can retell what happen in the story without being told by the teachers. Motivationally, they enjoy and have fun with their learning process, so that learning is not painful and exhausted.

ICTs are making dynamic changes in society. They are influencing all aspects of life. The influences are felt more and more at schools. Because ICTs provide both students and teachers with more opportunities in adapting learning and teaching to individual needs, society is, forcing schools aptly respond to this technical innovation.

OBJECTIVES OF THE STUDY

- To study the importance of ICT in education
- To study the difficulties of implementing ICT in class

IMPORTANCE OF ICT IN EDUCATION

ICT referred to as the varied collection of technological gear and resources which are made use of to communicate. It is also made use of to generate, distribute, collect and administer information. It consists of the hardware, software, networks, and media for collection, storage, processing, transmission and presentation of information i.e; voices, data, text, images as well as related services.

- Access to variety of learning resources,
- Immediacy to information and access to the source of information,
- Learning - Anytime, Anywhere, and Collaborative Learning,
- Multimedia approach to education, authentic and up to date information,
- Access to Online Libraries, Repositories, access to Open Courseware and Open Educational Resources, Teaching of different subjects made interesting, and educational data storage,
- Distance Education, Online Education,

- Multiple communication channels, e-mail, chat, forum, blogs, etc.,
- Better accesses to children with disabilities, and
- Reduce time on many routine tasks.

DIFFICULTIES OF IMPLEMENTING ICT IN CLASS

College Level Barriers	Teacher Level Barrier
<ul style="list-style-type: none"> • Insufficient Time • Insufficient access to technological resources • Insufficient effective training • Problems in its technical operation 	<ul style="list-style-type: none"> • Insufficient time (overload work of the teachers) • Has little confidence • Technological refusal due to negative perceptions Do not believe on the potential benefits of ICT • Insufficient personal access to technological resources.

There is insufficient college support. When teachers find problems with the technology in class, they do not get immediate help from the IT-coordinators. This makes many teachers are reluctant to use technology since stuck technology/machine can interrupt the teaching-learning process.

CONCLUSION

A well-designed teacher training program is essential to meet the demand of today's teachers who want to learn how to use ICT effectively for their teaching. It is thus important for teacher trainers and policy makers to understand the factors affecting effectiveness and cost-effectiveness of different approaches to ICT use in teacher training so training strategies can be appropriately explored to make such changes viable to all.

To successfully implement ICT in colleges need to consider many aspects. It will waste a lot of time, energy, and money if before implementing it, we do not consider those aspects. Those are the schools' culture, leaders, ethics, and technological management system.

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CHALLENGES FOR E COMMERCE IN INDIA

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Abstract

Nowadays peoples of India are most likely to buy and sell products and services over the electronic system. The rapid growth of e-commerce in India is being driven by greater customer choice & improved convenience with the help of internet the vendor or merchant who sells products or services directly to the customer. The Internet offers unprecedented ease of access to a vast array of goods and services. The rapidly expanding arena of "click and mortar" and the largely unregulated cyberspace medium have however prompted concerns about both privacy and data security.

Keywords: e-Commerce, Internet

Introduction

The rapid growth of e-commerce in India is being driven by greater customer choice & improved convenience with the help of internet the vendor or merchant who sells products or services directly to the customer from the portal using a shopping basket system or digital cart & allows payment through debit card, credit card or electronic fund transfer payments. In the present scenario e-commerce market & its space is increasing in demand as well as an impressive display or range of a particular type of services. E-commerce is already appearing in all areas of business, customer services, new product development & design. E-commerce business is growing in India because of wide range of product with minimum price wide range of suppliers & customers internet. In this modern era every business units want to join online business because increasing ratio of internet users in India. E-commerce in India is still in growing stage but it offers considerable opportunity.

Nowadays peoples of India are most likely to buy and sell products and services over the electronic system, or in other words, we can say that now in Indian society, people are modernized using reliable and comfortable that using of e-commerce. Uses of e-commerce directly link to the customer with manufacturer, stakeholders, marketers, government, and service providers. That is called Electronic commerce (e-commerce). E-commerce in India is growing year by year, it's very soft and reliable junction for customer choice and convenient with the help of internet. The vendor or merchant who sells or buy products or services directly connect with the customer and allows payment through bank debit/credit cards or direct payment through online banking payment system. For the buyer, it is a new and friendly channel to buy and sell products through online. However, an e-commerce portal having the most freedom, and as well as privacy for customers to use the internet and do the window shopping for products, make reconciliation of different models, evaluate their prices and customer satisfactory comments comparison. As well as in India most of the government organization is using electronic communications technologies to connect with the customer, to fulfill their need and for solving the raising problems day by day. Nowadays in India various social e-commerce junction available for the customer. In last we can say that e-commerce is the powerful equipment in our busy lives to fulfill all the needs through fastest way and comfortably from the home or our working place.

Objectives of study

- To study the challenges for E commerce in India
- To study the key drivers in Indian e-commerce

Review of Literature

An attempt has been made to put forward a brief review of literature based on few of the related studies undertaken worldwide in the area of e-commerce as follows.

1. Elizabeth Goldsmith and Sue L.T. McGregor (2000) analyzed the impact of e-commerce on consumers, public policy, business and education. A discussion of public policy initiatives, research questions and ideas for future research are given.
2. Prithviraj Dasgupta and Kasturi Sengupta(2002)examined the future and prospects of e-commerce in Indian Insurance Industry.
3. Young Jun Choi1, Chung Suk Suh(2005)examined the impact of the death of geographical distance brought about by e-marketplaces on market equilibrium and social welfare.

4. Jackie Gilbert Bette Ann Stead (2001) reviewed the incredible growth of electronic commerce (e-commerce) and presented ethical issues that have emerged. Security concerns, spamming, Web sites that do not carry an "advertising" label, cyber squatters, online marketing to children, conflicts of interest, manufacturers competing with intermediaries online, and "dinosaurs" were discussed.

Enter drivers in Indian internet business are

- Large rate of populace subscribed to broadband Internet, prospering 3G web clients, and a late presentation of 4G the nation over.
- Explosive development of Smartphone clients, impending world's second biggest Smartphone client base.
- Rising ways of life as aftereffect of quick decrease in neediness rate.
- Availability of much more extensive item extend (counting long tail and Direct Imports) contrasted with what is accessible at physical retailers.
- Competitive costs contrasted with physical retail determined by disintermediation and decreased stock and land costs.
- Increased utilization of online ordered destinations, with more buyers purchasing and offering second-hand products.
- Evolution of Million-Dollar new businesses like Jabong.com, Saavn, Makemytrip, Bookmyshow, ZomatoFlipkart, Snapdeal Etc.

Challenges For e-commerce in India**Cash on Delivery**

Cash on Delivery (COD) has been touted as the innovation to counter the low credit card penetration and payment security issues on the internet. COD is a substantial proportion of the sales today contributing to anywhere between 11% to 60% in most of the cases.

The COD is unsustainable as it pushes up the cost of transaction by Rs 30-60 per transaction. Given the low profitability and small ticket size on e-Commerce sites, the entire gross margin gets erased by COD. On top of this the problem is that of high returns as the consumers often change their mind by the time the goods arrive. The returns are as high as 40-45% of all the COD shipments. COD also poses scalability issues for the e-Commerce sites in the long term as the logistics companies would find it hard to scale to the required levels.

High Cash Burn Rate

At a recent conference, a venture capitalist mentioned that a niche vertical e-Commerce venture needs \$50 million of funding over time while a horizontal player would need \$300-400 million funds. Leaders in the e-commerce space (ones that have raised money, have large teams and are aggressively pursuing growth) are spending \$1-2 million (Rs 5-10 crore) a month, including on marketing, overheads and salaries. At this rate of burn, smaller firms with scant capital are unable to cope.

High Inventory/ Poor Supply Chains

Most of the e-Commerce ventures are complaining of the excess inventory and absence of liquidation market in India. The poor supply chain compounds inventory problems due to unpredictability of the supply. The cost of carrying the inventory is very high and successful ventures would need to tackle the supply chain issues if they really want to run a scale business. The other problem is in unpredictability of delivery to the customers leading to higher returns.

Ethical issues:

Jackie Gilbert Bette Ann Stead (2001), reported the following ethical issues related to e-commerce.

Privacy

Privacy has been and continues to be a significant issue of concern for both current and prospective electronic commerce customers. With regard to web interactions and e-commerce the following dimensions are most salient:

- (1) Privacy consists of not being interfered with, having the power to exclude; individual privacy is a moral right.
- (2) Privacy is "a desirable condition with respect to possession of information by other persons about him/herself on the observation/perceiving of him/herself by other persons"

Security concerns

In addition to privacy concerns, other ethical issues are involved with electronic commerce. The Internet offers unprecedented ease of access to a vast array of goods and services. The rapidly expanding arena of "click and mortar" and the largely unregulated cyberspace medium have however prompted concerns about both privacy and data security.

Key drivers in Indian e-commerce

- Large percentage of population subscribed to broadband Internet, burgeoning 3G internet users, and a recent introduction of 4G across the country.
- Explosive growth of Smartphone users, soon to be world's second largest Smartphone user base.
- Rising standards of living as result of fast decline in poverty rate.
- Availability of much wider product range (including long tail and Direct Imports) compared to what is available at brick and mortar retailers.
- Competitive prices compared to brick and mortar retail driven by disintermediation and reduced inventory and real estate costs.
- Increased usage of online classified sites, with more consumers buying and selling second-hand goods.
- Evolution of Million-Dollar startups like Jabong.com, Saavn, Makemytrip, Bookmyshow, Zomato Flipkart, Snapdeal Etc.

Conclusion

The future of e-commerce in India would be bright in the upcoming years if all essential factors would be implemented, by establishing cyber & have their benefits as per people wish. The role of government is to provide a legal framework for e-commerce so that while domestic & international trade are allowed to expand their horizons, basic right such as privacy, intellectual property, prevention of fraud, consumer protection etc. are all taken care of. An e-marketplace can serve as an information agent that provides buyers and sellers with information on products and other participants in the market.

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ETHICAL ISSUES IN HUMAN RESOURCE WITH REFERENCE TO IT INDUSTRY, BANGALORE

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Abstract

Ethics refers to a system of moral principles, Code of Conduct – a sense of right and wrong, goodness and badness of actions and the motives and consequences of these actions. The global nature of competition, new and changing employee expectations, changing societal values and constant revisions of employment law have propelled Human Resource Management (HRM) as one of the vital business function for continued organisational competitiveness in contemporary times. In the business, businessmen must draw their ideas about 'what is desirable behaviour from the same sources as anybody else would draw. At present, this topic is enjoying its significance among the media and corporate India. It is not clear if the reason for all the attention is 'only for show' or if companies really believe in the substantive benefits, which can be attained by facilitating an ethical conditions. Hence, human resource and ethical corporate cultures has to be considered partners in the process of creating competitive advantage for organizations. This article offers insight into a detailed discussion of how ethical issues related to HR situations, which would help for people concerned and further research.

Keywords: Human Resource Management, Employee Expectation, Code of Conduct, Behaviour, Moral Principles.

Introduction

In 1990's ethics was not an agenda for many companies in India. But it has become one of the sizzling issues in recent years. Corporate ethics is believed to be the cornerstone of any business for building trust and confidence among its stakeholders. Human Resource managers tackle with the ethical issues frequently. Many a times the Human Resource manager takes the responsibility of providing ethical leadership to their Business. In recent times, instances of fraud at workplace are not hidden from us. It is even more alarming that frauds committed by employees are more common than those persons who are external to the organization. Such ethical violations in running the business may gradually manifest in many objectionable consequences. Frauds of Harshad Mehta, Ramalinga Raju of Satyam, Vijaya Mallya have shocked and disappointed the corporate world. The unethical issues is not only creates legal problems, but also tarnishes its image and loses its goodwill.

Today's corporate world is very much conscious about profits, revenues and market shares for its sustainability and therefore ignores ethics in the organization, where we already experienced by some major scams that have grabbed the global attention.

Ethical conduct in business practice and HR procedures is no longer a matter of choice for companies: public pressure and consumer demand for sustainable and ethical business has forced most companies to set standards, systems and processes for ethics and values. According to Professor Amanda Mellor (Group Secretary of Marks and Spencer plc.), at a recent conference on ethics in business 'developing standards and values frameworks are the easy part: it is how you engage employees in living up to organisation values in practice that is the leadership challenge'.

Companies have concentrated more on product turnover, returns, profits, innovations, competitive advantage which are more important for its success and they conflict with the ethical issues which ultimately takes a backstage. But they have forgotten that the goodwill and brand image of the company catches the attention of investors, shareholders, customers etc. Any organization with proper ethical standards leads to continuation of business with satisfied customers. Hence, high ethical standards are now increasingly recognised as an asset to ensure sustainability of a company and an unethical behaviour is considered a liability.

In today's corporate world, acting ethically has become a basic element to the very existence of a company. So they recognized the importance of ethics in corporate world. We can see many successful companies are paying more attention towards effective ethical education internally, i.e educating their staffs, as it makes the company internally more stable and contributes towards a responsible public image of the company, because the image of the company is mainly based on the staff and employee of the organization. Therefore, it is very important for the organization to realize the significance of ethics to the employees.

Ethics in HRM:

There are different schools of thought that differ in their viewpoint on role of ethics or ethics in human resource development. One group of thought leaders believes that since in business, markets govern the organizational interests and these interests are met through people, the latter are therefore at the highest risk. They believe that markets claim profits in the name of stakeholders and unless we have protocols, standards and procedures the same will develop into a demon monopolizing markets and crushing human capital; HR ethics are become mandatory.

There is another group of ethicists inspired by neo-liberalism who believe that there are no business ethics apart from realization of higher profits through utilization of human resources. They argue that by utilizing human resources optimally, there is more value creation for the shareholders, organization and the society and since employees are part of the society or organization, they are indirectly benefited. Nevertheless ethics in human resource management has become a perennial debate of late!

Discussions in ethics in HRD stem from employee relationships and whether or not there can be a standard for the same. Employee rights and duties and freedom and discrimination at the workplace are issues discussed and covered by most articles. Some argue that there are certain things in employment relationship that are constant others disagree with the same. For example, right to privacy, right to be paid in accordance with the work (fair compensation) and right to privacy are some areas that cannot be compromised upon.

In this paper, we have made an effort to bring out how the IT firms that operate in a globalised world have addressed the issues of HR (Human Resource) ethics and improper professional conduct, with a detailed discussion on the characteristics of ethics and the way in which ethical issues related to Human Resource scenario.

The Main ethical concerns are

- Increasing work stress
- Longer working hours
- Cash and Intensive Plan
- Performance Appraisal
- Race, Gender, Age and Disability
- Privacy Issues
- Health and safety

The very common unethical practice of HRM itself has also hit public attention.

HR Dilemmas

- Right v. Right “Selecting the best option”.
- Its right to tell the truth, but it is also right to be kind and considerate of peoples’ feelings and emotions.
- Its right to apply rules and procedures equally, without favouritism, but it is also right to give special treatment to hard-working, dependable, and productive employees.

Need of Ethics in HR

- Values: the cementing force
- Public image
- Facilitates decision making
- Ethics and profits walk hand in hand
- Low limits, Ethics stimulate
- Contribution to human welfare
- Protection of social interest
- Recognition of neighbours and competitions
- Respect to Employees

- Balancing all stake holders' interests

General measures to control unethical practices

- The establishment of ethics codes
- Improved remuneration
- Administrative reform
- Compulsory disclosure of assets and gifts
- Policy and programme rationalisation
- Introduction of core values and competencies
- Ethical conduct by public servants
- Senior managers increasing and enforcing ethical awareness and taking action against unethical conduct.

Statement of the problem

This paper aims to identify the ethical issues faced in an IT industry by HR, as it is evident that it is difficult to cope up with the ethics and profit or ethics and management together, there are lots of difficulties people in the organization face. Hence, this paper is an effort to minimise this issues and sustain the organisation with ethics.

Objectives of the study:

- To understand ethical issues faced by HR Department that IT Industry are facing in Bangalore.
- To analyse the impact of improper professional conduct in organizations.

Research Methodology

a) **Types of Research Design:** The study is based on descriptive research. This type of research deals with quality of responses from the respondents, attitudes, interests, technical skills, experience, behavioural, beliefs and values, emotions, personality, self-concept etc.,

b) Sources of data

- ✓ Primary data was collected by questionnaire survey method.
- ✓ Secondary data was collected from journals and articles available on internet.

c) Data Collection Procedure:

A survey study method was adopted for the present study. Questionnaire was used as an instrument for gathering data. It was constructed keeping in mind the objectives of the study.

d) Sample:

Primary data was collected with the help of the questionnaire which was distributed to Employees of IT industries in Bangalore city. The questionnaire consisted of close ended questions to analyze various ethical issues in HR. The sample consisted of 30 respondents. The sampling technique used was purposive and quota sampling. Also had a personal interview with the HR Managers.

Limitation of Study

The study was limited only around three companies of Bangalore city with a very small sample size of 30 respondents.

Data Analysis and Interpretation:

Table 1: Showing work overload stress faced by Employee

Particulars	No of Respondents	Percentage
Can't consult with others on projects	04	13
Co-workers' coordination	06	20
Often take work home to complete	06	20
Responsible for too many people/projects	11	37
Shortage of help at work	03	10
Total	30	100

Analysis: 37% of respondents feels stress because they are responsible for too many people, 20% each face lack in co-workers coordination and taking work home, 13% feels they can't consult with others on projects, and remaining 10% went with shortage of help at work.

Table 2: Showing work underload stress faced by Employee

Particulars	No of Respondents	Percentage
Too little responsibility at work	08	27
Overqualified for your job	07	23
Little chance for growth exists	13	43
Trying to "look" busy on job	00	00
Feeling unstimulated	02	7
Total	30	100

Analysis: 43% of respondents says they have less growth is the reason for underload stress, 27% says because of little responsibility at work, 23% feel they are over qualified for the job and 7% went with feeling unstimulated.

Table 3: Showing employee opinion about fair hiring and justified termination in organization

Particulars	No of Respondents	Percentage
Yes	18	60
No	12	40
Total	30	100

Analysis: 60% of respondents agree that there is fair hiring and justified termination and remaining 40% disagrees.

Table 4: Showing working condition in organizations

Particulars	No of Respondents	Percentage
Yes	22	73
No	08	27
Total	30	100

Analysis: 73% of respondents agreed on good working condition and rest of them have not.

Table 5: Showing workers opinion about bias in the appraisal process

Particulars	No of Respondents	Percentage
Yes	16	53
No	14	47
Total	30	100

Analysis: 53% of respondents have felt bias in the Appraisal process and 47% has not.

Table 6: Showing opportunities to enrich employees' skills in organizations

Particulars	No of Respondents	Percentage
Yes	09	30
No	21	70
Total	30	100

Analysis: 70% of respondents are feeling that they are not getting an opportunities to enrich their skill and remaining 30% were agreed.

Table 7: Showing honouring benefit provisions provided in organizations

Particulars	No of Respondents	Percentage
Yes	27	90
No	03	10

Total	30	100
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Analysis: 90% of respondents agreed that they are getting honouring benefit provisions and rest were not.

Table 8: Showing employees' opinion about equal opportunities for men and women in assigning the responsibilities without any bias

Particulars	No of Respondents	Percentage
Yes	12	40
No	18	60
-----	30	100

Analysis: 60% of respondents strongly felt that there is discrimination in assigning responsibilities and 40% did not feel so.

Findings:

- Many employees feel more stress because they are responsible for too many people.
- More number of the respondents feels that less chance for growth leads to work underload stress
- Many respondents agree that there is no fair hiring and justified termination, which reflects on employee morale.
- Majority of respondents strongly felt that there is discrimination in assigning responsibilities
- Employees are very happy about working condition
- Many employees are not satisfied with performance appraisal process as they felt bias.
- Employees are feeling that they is no opportunities to enrich their skill.

Suggestions:

- HR manager has to do some Continuing Professional Development (CPD) on ethics.
- Treat people with dignity, respect and compassion to faster a trusting work environment free of harassment, intimidation and unlawful discrimination.
- Laying down such policies and procedures which will ensure equitable treatment for all.
- HR department has to help employees to overcome the stress by providing counselling and reviewing their workload and responsibilities.
- The company should mention a proper job specification and job description in order to have a transparent process which satisfies the existing employees' ego.
- Discrimination issue is quite common in the mindset of the employees, so the company has to assign the responsibilities based on his/her ability, evident in the appraisal process, which will be a supportive and legal document for assigning the job for particular employee.
- The individual goals on an employee must be streamlined with the organizational goals, individual goals of an employee should not obstruct him to achieve the organizational goal.
- Based on standards the appraisal should be measured in a very transparent way. A HR manager should ensure that the performance appraisal system should be fair and should be communicated to the employees.
- The company should concentrate more on employees' skill enrich programmes like training, workshop, seminar etc., which will help for their career development, and also ensure that the program is benefitting every individual employees.

Conclusion

There is potentially a dark side to the ethical issues, the same process can leave us blind where we have an inability or an unwillingness to see the vital ethical problem. We may inadvertently support or turn a blind eye to the behaviour that others have deep concerns about and which may impact us. We believe it is time for HR to not only respond to those things which are its natural scope, but also expand its perspective and broaden its ethical awareness and sensitivity. At the core of these dilemmas is to judge a manager's 'latitude' in decision-making when it becomes unethical. But this is by no means straightforward. Our own moral codes have

different levels of experience in different HR and business contexts, which will affect our individual perspective. Those new to HR roles may assume that their judgement will develop through experience and mentoring: but extensive experience can sometimes result in the sharing of corporate blind spots. If you are not 100 per cent certain that you have taken the full range of relevant ethical issues into account for each dilemma stated above, then I suspect you are not alone. Ethics is one of those areas where discussion between colleagues with differing levels of experience and different perspectives, can be beneficial for all concerned in ensuring the range of potential solutions and their possible consequences.

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**A STUDY ON PROBLEMS AND DIFFICULTIES FACED BY MUSLIM SALARIED PEOPLE
TOWARDS INVESTMENT IN PRESENT SCENARIO**

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ABSTRACT

Indian banking laws do not explicitly prohibit Islamic banking but there are provisions that make Islamic banking an almost unviable option. Banks in India are governed under the Banking Regulation Act 1949, Reserve Bank of India Act 1934, Negotiable Instruments Act 1881, and the state and central Co-operatives Acts. One of the most distinguishable features of these Acts is that they define Banking in such a way that Banks can accept deposits from the public only for further lending. A number of sections such as section 5 (b) and 5 (c) of the Banking Regulation Act 1949 prohibit banks from investing on profit and loss sharing (PLS) basis. Further, section 8 of the Banking Regulation Act 1949 reads, "No banking company shall directly or indirectly deal in buying or selling or bartering of goods." Besides India is among the countries which explicitly provide deposit guarantee to banks' depositors up to a value of Rs. 0.1 million through the Deposit Insurance and Credit Guarantee Corporation (DICGC). Government also interferes on the assets side by asking banks to provide concessional credit to certain priority sectors. Some other factors that help in stealing the shine of Islamic banking are the Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR) requirements. These together eat up about 30 percent of the banks' total deposits. Adding to this priority sector lending leaves banks with very little capital, which they can invest in earning non-interest income. The absence of risk-free or high-grade investment securities and the dominance of trade-financed, asset-backed securities are of concern to regulators, as they threaten the payment system and increase its vulnerability to risk and illiquidity. In this context, it has been suggested that the concept of narrow banking be applied to Islamic banks. Fisher originally presented the concept of narrow banking, which is banking that specializes in deposit-taking and payment activities but does not provide lending services. Stability and safety are achieved if deposits are invested only in short-term treasuries or their close equivalents. In the context of the Islamic financial system, Islamic banks do not have access to relatively risk-free securities such as treasuries.

Keywords: Islamic investment, Islamic banking, Muslim salaried people, Islamic finance.

INTRODUCTION

Islamic finance has grown rapidly over the past decade, and its banking segment has become systemically important in a dozen countries in a wide range of regions. Islamic finance is projected to continue to expand in response to economic growth in countries with large and relatively unbanked Muslim populations. It is also fueled by the large savings accumulated by many oil-exporting countries that are seeking to invest in Shariah-compliant financial products. The growing reach of Islamic finance promises a number of possible benefits. However it is often argued that Islamic finance is inherently less prone to crisis because its risk-sharing feature reduces leverage and encourages better risk management on the part of both financial institutions and their customers. It is also argued that Islamic finance is more stable than conventional finance, because: (i) Islamic finance involves prohibitions against speculation; (ii) financing is asset-based and thus fully collateralized; and (iii) it is founded on strong ethical precepts. Moreover, Islamic financial institutions (IFIs) are considered to be a good platform for increasing access to financial inclusion, including access to finance for Muslims thereby supporting growth and economic development. Nonetheless, Islamic finance faces a number of challenges, despite the efforts of Islamic finance standard setters, in many countries the industry is governed by a regulatory and supervisory framework developed for conventional finance. Therefore, it does not fully take account of the special nature of Islamic finance. The industry is still largely a nascent one, lacking economies of scale, and operating in an environment where legal and tax rules, financial infrastructure, and access to financial safety nets and central bank liquidity are either absent or, if available, do not appropriately take into account the special characteristics of Islamic finance .

In spite of the growth potential in Islamic banking, there are several challenges facing Islamic Financial Institutions.

i) Shortage of experts in Islamic banking: The supply of trained or experienced bankers has lagged behind the expansion of Islamic banking. The training needs affect not only Arab domestic banks, both Islamic and non-Islamic, but foreign banks as well.

ii) Absence of accounting (and auditing) standards pertinent to Islamic banks: Uncertainty in accounting principles involves revenue realization, disclosures of accounting information, accounting bases, valuation, revenue and expense matching, among others. Thus, the results of Islamic banking schemes may not be adequately defined, particularly profit and loss shares attributed to depositors.

iii) Lack of uniform standards of credit analysis: Islamic banks have no appropriate standard of credit analysis. Similarly, there is a widespread training need involving related aspects such as financial feasibility studies, monitoring of ventures, and portfolio evaluation.

iv) Potential conflicts with central banks: Islamic banks have been established as separate legal entities; therefore, their relationships with central banks and/or other commercial banks are uncertain. Problems may be further aggravated when an Islamic bank is established in a non-Muslim nation, and is subject to that nation's rules and requirements.

v) Potential conflict between domestic banks, foreign banks, and Islamic banks: It appears that domestic banks and foreign banks will experience continuing difficulty in adopting Islamic banking practices until they can become more confident of the results of investing ventures.

vi) Instruments that meet the demand of specific investment requirements: One of the biggest challenges facing institutions is the provision of short-term investment instruments. Several institutions have tried to develop high quality short-term instruments, but have been hampered by their ability to generate assets, by their credit ratings, and by liquidity.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

A review of literature is a text of scholarly papers, articles which includes the status of knowledge of the research area including substantive findings as well as theoretical and methodological contributions in the study. This review of literature deals with past studies conducted on the subject, to generate understanding in the area, extensive review of literature was carried out by the researcher. All the sections of the study have undergone gradual change and evolved at present level. The study is conducted in the field of Islamic financial planning of Muslim salaried people and relevant literature is reviewed to find the gap in the literature and accordingly frames the problems, hypothesis and objectives for the research study.

Jabr (2003) concludes that the challenges and prospects of Islamic banks operating in the Palestinian territories are as follows: Lack of adequate banking law for Islamic banking; existence of unproductive money; lack of awareness; lack of operational difference between Islamic and conventional banks; Islamic banking lacks the ability to channel deposits into long-term investment; lack of experience in Islamic Shariah; excessive short-term financial instrument; inability to make use of Mudaraba and Musharaka financial institutions; inferior technical resources and technology; Islamic banks are compel to recruit staff trained in traditional banking; inability to differentiate ownership from management; and lack of financial innovations.

Njanike (2010) adopts descriptive analysis to explore the problems and challenges that the introduction of Islamic banking in Zimbabwe may likely face. The study finds that the major problems and challenges in introducing Islamic banking in Zimbabwe are political intervention in the selection of borrowers, financial instability, inability of the government to restore law and order in the country, resistance from the banking community, inadequate infrastructure for information dissemination, inconsistency in policy making and implementation of the fiscal and monetary authorities, Central bank control and supervision of Islamic banking with unqualified persons in Islamic finance, absence of Islamic interbank, misperception, current political and economic situation, and default culture.

Sanusi (2011) explores the issues and challenges of Islamic banking in Nigeria. The study finds that the challenges of Islamic banking in Nigeria are inadequate manpower, lack of Shariah – compliant liquidity management instruments, lack of Islamic insurance (Takaful), lack of knowledge of accounting and auditing standard require by Islamic financial institutions, inadequate legal framework, lack of Shariah scholars knowledgeable in conventional economics, law, accounting, banking and finance, problem of multiple taxation, lack of tax relief on Islamic banking profits, and misperception of Islamic banking in Nigeria.

Iqbal (2001) opines that the challenges facing Islamic financial industry are limited set of short terms financial instrument and inadequate medium – to long – term financial instruments, limited coverage of Islamic finance, concentration of Islamic banking, poor risk management and governance framework, and difference between Islamic finance in theory and in practice. The author recommends adequate risk management and diversification of the institution, provision of non – banking financial services, and development of capital markets that are Islamic inclined to improve its activities and functions, and be able to compete favorably.

Shaukat et al. (2011) are of the opinion that the lack of ultimate authority that governs Islamic financial industry, inadequate qualified human resource in both conventional banking and Islamic laws, illiquidity of Islamic long - term assets with short - term liabilities, lack of Shariah auditing standard personnel, and shortage of short - term investment products are the challenges of Islamic banking system. They further state that the other challenges facing Islamic banking system are lack of innovation, lack of adherence to local regulatory reporting and operational requirements, lack of transparency and accountability, operating manually, and lack of high quality services.

Osama (2012) can be controlled through fiscal measures as well, by issue of zakat certificate which allows proper distribution of income in accordance with the Debt ratio. Debt ratio is altered in order to discourage the interest system and excess money in the market, proper distribution of zakat allows prosperity in the poor income earners lives plus closes down the gap between the classes. In inflation in Islamic economy there is a significant role of the state to control the inflation which is mainly in the form of following ways; Price control, Buffer stock, Rationing, Confiscation stock holding, Liberal imports.

Shah foundation (2012) the first problem is that despite the growth of Islamic banks over the last 30 years, many people in the Muslim and non-Muslim world do not understand what Islamic banking actually is. The basic principle is clear, that it is contrary to Islamic law to make money out of money and that wealth should accumulate from trade and ownership of real assets. However, there does not appear to be a single definition of what is or not an Islamic-banking product; or there is not a single definition of Islamic banking. A major issue here is that it is the Shariah Councils or Boards at individual Islamic banks that actually define what is and what not Islamic banking is, and what is and what is not the acceptable way to do business, which in turn can complicate assessment of risk for both the bank and its customer. More generally, the uncertainty over what is, or is not, an Islamic product has so far prevented standardization. This is difficult for regulators as they like to know exactly what it is they are authorizing. It is also an added burden on the banks that have to educate customers in new markets.

Zukri Samat (2010) stated that Misconception against Islamic Banking many people still has a wrong understanding or misconception against Islamic Banking which among the thoughts are: Islamic Banking is only for Muslims Islamic Banking is not profitable because no interest is charged Islamic banking is only offered in the Middle East Thus better awareness shall be create among the customers that Islamic Banking is not only an alternative financial approach but also in some aspects provides better value propositions to the consumers.

Heiko Hesse (2008) examined that Liquidity risk management of Islamic banks is an important challenge and is constrained due to limited availability of tradable Islamic money market instruments and weak systemic liquidity infrastructure. At the moment, there is no Shariah-compliant short-term Islamic money market (less than one week maturity) in local currency or in US dollars, and Islamic repo markets have not yet developed. Islamic money markets with longer maturities.

Andreas A. Jobst & Juan Sole (2008) stated that Islamic banks also have a competitive disadvantage with conventional banks, as they deposit their overnight money with their domestic central bank interest free. The lack of liquidity and viable alternatives, combined with the competitive disadvantage, hamper the local Islamic banks and can even create a liquidity crisis.

Bhavin Shah (2017) states that Islamic banks are finding difficulties to cope up with the evolving global banking environment and making appropriate rules and regulations to cope with these changes while still remaining competitive with their conventional counterparts. Additionally, the industry lacks consistency in product structures and investment practices that adversely affects its credibility, reputation, perception and regulation capabilities.

Zurbruegg (2007) specifies that respondents who were interested in Islamic Banking products lacked appropriate information about their functioning. Majority of the respondents specified that they would require credit services in order to switch from conventional to Islamic Banking products. This is in contradiction with Shariah principles and indicates their lack of knowledge. Further, awareness and knowledge about Islamic Banking are not enough to ensure the successful implementation of an Islamic Banking system, willingness is a crucial element too. Simply understanding the products will not persuade customers to convert from a conventional system to an Islamic Banking system when the services are provided.

Taylor (2003) also stated that Islamic principles extend to all aspects of a Muslim's life so as a result each practitioner of Islam is necessarily implicated by Shariah principles.

Abdullah (2007) in their recent study in Malaysia highlighted that Islamic 10 bankers can no longer depend on a marketing strategy for attracting pious and religious customers. They also suggested that Islamic banking needs to enhance its service quality, which is now considered a critical success factor that affects an organization's competitiveness. The bank selection process is an important aspect for the Islamic banking industry to explore to attract customers.

OBJECTIVES OF THE STUDY

To study the problems and difficulties faced by Muslim salaried people towards investment in present scenario.

PROBLEMS OF THE STUDY

Muslim salaried people do not have enough awareness regarding financial market and financial planning while taking investment decisions.

HYPOTHESIS OF THE STUDY

Null Hypothesis (H_0): Muslim salaried people are not significantly considering the investment which based on Quran principles.

Alternate Hypothesis (H_1): Muslim salaried people are significantly considering the investment which based on Quran principles.

Therefore the researcher has justified the linkages between the title, objective, problem and hypothesis. The efforts taken on review of literature are worthwhile.

RESEARCH METHODOLOGY

"Research design is the conceptual structure within which research is conducted. Research design indicates the blue print for the collection, measurement and analysis of data. The design includes an outline of what the researcher plans and frames the research work. It explains how samples are selected, sample size determined, how data is collected and which statistical methods are used for data analysis".

Quantitative research approach is being used for the study as a quantitative research enables the researcher to examine association and differences among the variables. To carry out research effectively, Data is collected from primary sources and secondary sources.

Universe of the study: The study covers all the 52 railway station areas of Mumbai city dealing with Western line, Central line and Harbour line.

Sample of the study: To assess the quality of the study, the universe mentioned above is not possible for an individual to reach all areas of Mumbai city. Therefore, within Mumbai city there are 52 railway station areas, the researcher has purposely selected 40% of Western line, Central line and Harbour line viz. 20 areas for the research study. The researcher collects the filled questionnaire from 400 respondents including female/ male Muslim Financial planner in order to know the behavior of Muslims in Islamic financial planning and management. This research design fulfills the sample size determination suggested by R.V. Krejcie and D.W. Morgan.

DATA COLLECTION

Primary data collection involved Mumbai city, there are 52 railway station areas, the researcher has purposely selected 40% of Western line, Central line and Harbour line viz. 20 areas for the conducting the study. The researcher collects the filled questionnaire from female/ male Muslim salaried people from selected railway station, colleges, schools and companies. The researcher also visits to all Muslim minority institutions. The survey enumerators facilitated 20 respondents from each of the 20 areas selected of the Mumbai city in completing the questionnaire.

Table-1: Demographic Description of the Respondents

Demographic Variable	Demographic Categories	Number	(%)
Area	Western line	200	50
	Central line	140	35
	Harbour line	60	15
Gender	Female	152	38
	Male	248	62
Age	Less than 20years	4	1.0
	20-30years	112	28
	31-40years	174	43.5
	41-60years	110	27.5

Education	Graduation	208	52.0
	Post-graduation	129	32.3
	Professional	63	15.8
Occupation	Private	82	20.5
	Public	68	17
	Profession	250	62.5
Annual Income (in INR)	Less than 2 lakh	12	3.0
	2-3.5 lakh	88	22.0
	3.5 -5 lakh	285	71.3
	5 lakh and above	15	3.8
Annual Savings (in INR)	Less than 10,000	78	19.5
	10, 000-20,000	82	20.5
	20, 000-40,000	209	52.3
	40,000 and above	31	7.8
Savings Objective	Children's education	129	32.3
	Retirement	19	4.8
	Home purchase	180	45
	Children's Marriage	17	4.3
	Health care	52	13
	Others	3	.8

ANALYSIS AND RESULTS

In the present study researcher used this analysis for hypothesis testing. For testing the hypothesis or test of significance, following tests are performed.

i) 'z' test for two independent samples at 95% confidence level.

ii) **Kolmogorov-Smirnov** test for two independent samples at 95% confidence level.

For analysis researcher used statistical package SPSS version 21. In addition to this, excel add-in Mega Stat is also used. Depending upon the type of data statistical methods are chosen. Statistical analysis is categorized as descriptive analysis and inferential analysis, which is often known as statistical analysis.

Calculating the test-statistic:

The value of the test-statistic is

$$X^2 = \sum_{i=1}^n \frac{(O_i - E_i)^2}{E_i}$$

where

χ^2 = Pearson's cumulative test statistic,

O_i = an observed frequency;

E_i = an expected (theoretical) frequency, asserted by the null hypothesis;

n = the number of cells in the table.

Table-2: Descriptive statistics parameters related to problems and difficulties faced by Muslim salaried people towards investment in present scenario.

	Statistical tools	Shariah rules forbid you from making investment in conventional financial market.	Large family size is the biggest obstacle of Muslim salaried people in the path of investment.	Lack of awareness is the biggest obstacle of Muslim salaried people in the path of investment.	Inflation is the biggest obstacle of Muslim salaried people in the path of investment.
N	Valid	400	400	400	400
	Missing	0	0	0	0
	Mean	2.50	1.74	3.77	2.98

	Median	2.00	1.00	4.00	3.00
	Mode	2	1	4	3
	Std. Deviation	1.069	1.085	.813	.635

Interpretation

From the above table it is observed that

1. Mean value related to statement that Shariah rules forbid you from making investment in conventional financial market is 2.50 with low standard deviation value 1.069 indicates that most of the respondents agree with this statement. Median value 2 and Modal value 2 support this. Hence we may infer that Shariah rules forbid you from making investment in conventional financial market.
2. Mean value related to statement that large family size is the biggest obstacle of Muslim salaried people in the path of investment is 1.74 with low standard deviation value 1.085 indicates that most of the respondents agree with this statement. Median value 1 and Modal value 1 support this. Hence we may infer that large family size is the biggest obstacle of Muslim salaried people in the path of investment.
3. Mean value related to statement that lack of awareness is the biggest obstacle of Muslim salaried people in the path of investment is 3.77 with low standard deviation value 0.183 indicates that most of the respondents agree with this statement. Median value 4 and Modal value 4 support this. Hence we may infer that lack of awareness is the biggest obstacle of Muslim salaried people in the path of investment.
4. Mean value related to statement that Inflation is the biggest obstacle of Muslim salaried people in the path of investment is 2.98 with low standard deviation value 0.635 indicates that most of the respondents agree with this statement. Median value 3 and Modal value 3 support this. Hence we may infer that Inflation is the biggest obstacle of Muslim salaried people in the path of investment.

Table-3: Descriptive statistics parameters related to problems and difficulties faced by Muslim salaried people towards investment in present scenario.

	Statistical tools	Traditional belief is the biggest obstacle of Muslim salaried people in the path of investment.	Muslim salaried people face more inflation as compare to non-Muslim salaried people.	In present scenario Muslim salaried people faces more problems and difficulties towards investment opportunities.
N	Valid	400	400	400
	Missing	0	0	0
	Mean	1.91	1.89	2.02
	Median	2.00	2.00	1.00
	Mode	2	1	1
	Std. Deviation	.764	.919	1.315

Interpretation

From the above table it is observed that

1. Mean value related to statement that traditional belief is the biggest obstacle of Muslim salaried people in the path of investment is 1.91 with low standard deviation value 0.764 indicates that most of the respondents agree with this statement. Median value 2 and Modal value 2 support this. Hence we may infer that traditional belief is the biggest obstacle of Muslim salaried people in the path of investment.
2. Mean value related to statement that Muslim salaried people face more inflation as compare to non-Muslim salaried people is 1.89 with low standard deviation value 0.919 indicates that most of the respondents agree with this statement. Median value 2 and Modal value 1 support this. Hence we may infer that Muslim salaried people face more inflation as compare to non-Muslim salaried people.
3. Mean value related to statement that in present scenario Muslim salaried people faces more problems and difficulties towards investment opportunities is 2.02 with low standard deviation value 1.315 indicates that most of the respondents agree with this statement. Median value 1 and Modal value 1 support this. Hence we may infer that in present scenario Muslim salaried people faces more problems and difficulties towards investment opportunities.

Table-4: Chi-Square Tests results of investment behavior variable annual savings and annual income

Pearson Chi-Square value		Degree of freedom	P value	Difference
Calculated	Table (1% l.o.s.)			
241.591	21.67	9	0.00	Significant

OBSERVATIONS

From the table above it is observed that calculated Pearson Chi-Square value 241.591 is greater than critical Chi-Square value 21.67 (obtained from table at 1% level of significance with degree of freedom 9). Also p value is 0.00 which is less than significant value 0.01 i.e.1%.

INTERPRETATION

Hence null hypothesis is rejected at 1% level of significance with degree of freedom 9. Hence result is significant.

FINDINGS

Hence it can be concluded that there is significant association between investment behavior variable annual savings and annual income of Muslim salaried people.

Table-5: Chi-Square Tests results of investment behavior variable percentage of salary saved and annual income

Pearson Chi-Square value		Degree of freedom	P value	Difference
Calculated	Table (5 % l.o.s.)			
110.80	21.67	9	0.000	Significant

OBSERVATIONS

From the table above it is observed that calculated Pearson Chi-Square value 110.80 is greater than critical Chi-Square value 21.67 (obtained from table at 5% level of significance with degree of freedom 9). Also p value is 0.00 which is less than significant value 0.01 i.e.1%. Hence result is significant.

INTERPRETATION

Hence null hypothesis is rejected at 5 % level of significance with degree of freedom 9. Hence result is significant.

FINDINGS

Hence it can be concluded that there is significant association between investment behavior variable percentage of salary saved and annual income of Muslim salaried people.

SUB-HYPOTHESIS 3

Null Hypothesis (H₀): There is no significant association between investment behavior variable percentage of salary saved amount invested and annual income of Muslim salaried people.

Alternative hypothesis (H₁): There is significant association between investment behavior variable percentage of salary saved amount invested and annual income of Muslim salaried people.

To test the above null hypothesis we use nonparametric chi-square test of independence. The details are as follows.

Table-6: Chi-Square Tests results of demographic percentage of salary saved amount invested and annual income

Pearson Chi-Square value		Degree of freedom	P value	Difference
Calculated	Table (1% l.o.s.)			
22.55	16.81	6	0.001	Significant

OBSERVATIONS

From the table above it is observed that calculated Pearson Chi-Square value 22.55 is greater than critical Chi-Square value 16.81 (obtained from table at 1% level of significance with degree of freedom 6). Also p value is 0.00 which is less than significant value 0.01 i.e.1%.

INTERPRETATION

Hence null hypothesis is rejected at 1% level of significance with degree of freedom 6. Hence result is significant.

FINDINGS

Hence it can be concluded that there is significant association between investment behavior variable percentage of salary saved amount invested and annual income of Muslim salaried people.

OVERALL CONCLUSION

It may be concluded that, there is a significant relationship between incomes and investment behavior of Muslim salaried people.

DISCUSSION AND FINDINGS

1. Out of 400 respondent, 324(81%) of respondents give preference to religion for investment of money in Islamic Financial Market only, 76(19%) of respondents give preference to Shariah principles for investment in Islamic Financial Market only. Majority of the graduate male respondents with age category of 31-40 years give preference to religion for investment in Islamic Financial Market only.
2. Mean value related to statement that Shariah rules forbid you from making investment in conventional financial market is 2.50 with low standard deviation value 1.069 indicates that most of the respondents agree with this statement. Hence we may infer that Shariah rules forbid you from making investment in conventional financial market.
3. Mean value related to statement that large family size is the biggest obstacle of Muslim salaried people in the path of investment is 1.74 with low standard deviation value 1.085 indicates that most of the respondents agree with this statement. Hence we may infer that large family size is the biggest obstacle of Muslim salaried people in the path of investment.
4. Mean value related to statement that lack of awareness is the biggest obstacle of Muslim salaried people in the path of investment is 3.77 with low standard deviation value 0.183 indicates that most of the respondents agree with this statement. Hence we may infer that lack of awareness is the biggest obstacle of Muslim salaried people in the path of investment.
5. Mean value related to statement that Inflation is the biggest obstacle of Muslim salaried people in the path of investment is 2.98 with low standard deviation value 0.635 indicates that most of the respondents agree with this statement. Hence we may infer that Inflation is the biggest obstacle of Muslim salaried people in the path of investment.
6. Mean value related to statement that traditional belief is the biggest obstacle of Muslim salaried people in the path of investment is 1.91 with low standard deviation value 0.764 indicates that most of the respondents agree with this statement. Hence we may infer that traditional belief is the biggest obstacle of Muslim salaried people in the path of investment.
7. Mean value related to statement that Muslim salaried people face more inflation as compare to non-Muslim salaried people is 1.89 with low standard deviation value 0.919 indicates that most of the respondents agree with this statement. Hence we may infer that Muslim salaried people face more inflation as compare to non-Muslim salaried people.
8. Mean value related to statement that in present scenario Muslim salaried people faces more problems and difficulties towards investment opportunities is 2.02 with low standard deviation value 1.315 indicates that most of the respondents agree with this statement. Hence we may infer that in present scenario Muslim salaried people faces more problems and difficulties towards investment opportunities.
9. Out of total 400 respondents, 241(60.3%) of respondents are either strongly disagree or disagree with the statement that the Shariah rules forbid you from making investment in conventional financial market and 59(14.8%) of respondents are either strongly agree or agree.
10. Out of total 400 respondents, 323 (80.8%) of respondents are either strongly disagree or disagree with the statement that the large family size is the biggest obstacles of Muslim salaried people in the path of investment and 46 (11.6%) of respondents are either strongly agree or agree.
11. Out of total 400 respondents, 294 (73.6%) of respondents are either strongly agree or agree with the statement that the lack of awareness is the biggest obstacles of Muslim salaried people in the path of investment and 21 (5.3%) of respondents are either strongly disagree or disagree.
12. Out of total 400 respondents, 59 (14.8%) of respondents are either strongly agree or agree with the statement that the Inflation is the biggest obstacle of Muslim salaried people in the path of investment and 69 (17.3%) of respondents are either strongly disagree or disagree.

13. Out of total 400 respondents, 340(85%) of respondents are either strongly disagree or disagree with the statement that the traditional belief is the biggest obstacle of Muslim salaried people in the path of investment and only 20 (5%) of respondents are agree.
14. Out of total 400 respondents, 311 (77.8%) of respondents are either strongly disagree or disagree with the statement that the Muslim Salaried People face more inflation as compare to non- Muslim Salaried People and only 16(4.1%) of respondents are either strongly agree or agree.
15. Out of total 400 respondents, 280 (70%) of respondents are either strongly disagree or disagree with the statement that in present scenario Muslim salaried people faces more problems and difficulties towards investment opportunities and only 72(18%) of respondents are either strongly agree or agree.

Hence from the above findings it is revealed that **“because of lack of awareness Muslim salaried people faces more inflation, problems and difficulties towards investment opportunities in present scenario”**.

CONCLUSION

Financial arrangements constitute an integral part of the process of economic development. A growing economy requires a progressively rising volume of savings and adequate institutional arrangements for the mobilization and allocation of savings. These arrangements must not only extend and expand but also adapt to the growing and varying financial needs of the economy. Perhaps it is due to these reasons that the Government of India has asked the RBI to look into the matter of Islamic finance. A well-developed and efficient capital market is an indispensable prerequisite for the effective allocation of savings in an economy. A financial system consisting of financial institutions, instruments and markets provides an effective payment and credit supply network and thereby assists in making best use of a country's financial resources. Shariah risk is related to the structure and functioning of the Shariah boards at the institutional and systemic level. This risk consists of two types; the first is due to nonstandard practices in respect of different contracts in different jurisdictions and second is due to failure to comply with Shariah rules. Different adoption of Shariah rules results in differences in financial reporting, auditing and accounting treatment by Islamic banks. Banks are exposed to the risk of non-compliance with the Shariah rules and principles determined by the Shariah board or the relevant body in the jurisdiction. The nature of relationship between the bank and investors/depositors is not only of an agent and principal, but it is also based on implicit trust to fully comply with the Shariah where this relationship distinguishes Islamic banking from conventional. In case where the bank is unable to maintain this trust and the bank's actions lead to non-compliance with the Shariah, the bank is exposed to the risk of breaking the confidence of the investors/depositors. Breaching the trust and confidence of the depositors/investors will lead to serious consequences, including the withdrawal and insolvency risk. To some extent, a few Shariah scholars have suggested that if a bank fails to act in accordance with Shariah rules, the transaction should be considered null and void and any income derived from it should not be included in the profits to be distributed to the investors/depositors.

SCOPE FOR FURTHER STUDIES

Researcher has tried to evaluate the impact of Islamic financial planning on the investment behavior of Muslims such as investment in Shariah product, Awareness of Shariah rules and Quran principles, Shariah investment advice, Investment pattern and Savings pattern of Muslims, Investment objective and Financial literacy knowledge of Muslims. Further study can be conducted with reference to its impact on stock market performance, banking sector, growth rate, wealth creation and such other parameters.

LIMITATIONS OF THE STUDY

The geographical limitation of the primary data collection is confined to Mumbai city only. Respondents' opinion can be biased.

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STUDY ON QUALITY OF WORK LIFE AND JOB PERFORMANCE OF CONSTRUCTION WORKERS IN CHENNAI

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ABSTRACT

The better Quality of Work Life (QWL) is important for any industrial organizations to continue to absorb and hold workers. QWL is an inclusive programme designed to increase job performance of workers, improving learning process in workplace and facilitates workers to have better development and transition. The compensation, working conditions, development and social integration are the important quality of work life dimensions for construction workers. The results indicate that there is significant difference between socio-economic status of workers and quality of work life dimensions for construction workers. Besides, compensation, working condition, social integration and development are positively and significantly influencing job performance of construction workers. To improve the job performance of construction workers, they must be provided with better salary and safe and healthy working environment. The opportunities should be provide to them for their personal development and team work and social relationship among them must be encouraged.

Keywords: Construction Workers, Job Performance, Quality of Work Life

1. INTRODUCTION

Now-a-days, Quality of Work Life (QWL) is one of the most significant matters in almost all industries. No industrial sector is becoming successful with modern technologies only because for the adoption of technologies also, industrial sector needs to have quality workers Quality of Work Life is the idea that is begun in the late 1960s. From that time till now the concept is getting higher level of importance every industrial sector, at every work environment.

Primarily quality of work life is concentrating on the impacts of employment on healthiness and welfare of the workers. But at present its objectives have been altered. Every industry wants to give better working environment to their workers including all non financial and financial benefits, thus, they can keep their employees for the longer period and for the attainment of the objective of industrial organizations. The quality of work life believes workers as an advantage to the industrial organization rather than disadvantages. It considers that workers perform their jobs better when they are permitted to contribute in managing and involving in decision making process in their work.

The better Quality of Work Life (QWL) is important for any industrial organizations to continue to absorb and hold workers. QWL is an inclusive programme designed to increase job performance of workers, improving learning process in workplace and facilitates workers to have better development and transition (Walton, 2005). The rapidly growing construction industry provides employment opportunities for large number workers, at the same time, the construction workers are highly oppressed especially in cities. Therefore, it is necessary to study quality of work life and job performance of construction workers in Chennai city.

2. METHODOLOGY

The present study is carried out in Chennai city. The construction workers are chosen by using random sampling method. The data are collected from 200 construction workers through pre-tested and structured questionnaire. To study the socio-economic status of construction workers, the percentage analysis is carried out. The mean and standard deviation are calculated for quality of work life dimensions for construction workers. To study the difference between socio-economic status of workers and quality of work life dimensions for construction workers, the Analysis of Variance (ANOVA) test is used. To analyze the influence of quality of work life dimensions for construction workers on their job performance, the multiple linear regression is done.

3. RESULTS AND DISCUSSION**3.1. SOCIO-ECONOMIC STATUS OF CONSTRUCTION WORKERS**

The socio-economic status of construction workers was analyzed and the results are presented in Table-1. The results show that 65.50 per cent of workers are males and the remaining 34.50 per cent of workers are females. It is clear that 44.00 per cent of workers are in the age group of 31 - 40 years followed by 21 - 30 years (29.50 per cent), 41 - 50 years (18.00 per cent) above 50 years (8.50 per cent).

The results indicate that 48.50 per cent of workers are illiterates followed by secondary education (32.00 per cent) and higher secondary education (19.50 per cent). It is observed that 43.50 per cent of workers have work experience of 6 - 10 years followed by 1 - 5 years (30.50 per cent) and more than 10 years (26.00 per cent). The results reveal that 50.50 per cent of workers are in the monthly income of Rs.10,001- Rs.15,000 followed by less than Rs.10,000 (28.00 per cent) and more than Rs.15,000 (21.50 per cent).

Table-1: Socio-Economic Status of Construction Workers

Socio-Economic Status	Number of Workers	Percentage
Gender		
Male	131	65.50
Female	69	34.50
Age Group		
21 - 30 years	59	29.50
31 - 40 years	88	44.00
41 - 50 years	36	18.00
Above 50 years	17	8.50
Educational Qualification		
Illiterate	97	48.50
Secondary	64	32.00
Higher Secondary	39	19.50
Work Experience		
1 - 5 years	61	30.50
6 - 10 years	87	43.50
More than 10 years	52	26.00
Monthly Income		
Less than Rs.10,000	56	28.00
Rs.10,001- Rs.15,000	101	50.50
More than Rs.15,000	43	21.50

3.2. QUALITY OF WORK LIFE DIMENSIONS FOR CONSTRUCTION WORKERS

The quality of work life dimensions for construction workers was analyzed and the results are given as below.

3.2.1. COMPENSATION DIMENSION

The compensation dimension for construction workers was analyzed and the results are presented in Table-2.

Table-2: Compensation Dimension for Construction Workers

Compensation	Mean	Standard Deviation
I receive enough wage	3.32	1.16
I like to continue in the present work irrespective of wage	3.61	1.10
I am under paid in my work	3.68	1.15
I have fair chances for increment of wage	3.62	1.11
Wage in this work is as good as most other works	3.38	1.14

The results show that the construction workers are agreed with they like to continue in the present work irrespective of wage, they are under paid in their work and they have fair chances for increment of wage, while, they are neutral with they receive enough wage and wage in this work is as good as most other works.

3.2.2. WORKING CONDITION DIMENSION

The working condition dimension for construction workers was analyzed and the results are presented in Table-3.

Table-3: Working Condition Dimension for Construction Workers

Working Condition	Mean	Standard Deviation
My work place has a favourable work environment	3.65	1.07
The working environment in my work place is encouraging	3.41	1.14
The work environment puts emphasis on safety of workers	3.39	1.09
It is easier to receive materials for efficient work	3.66	1.10
Workers are given adequate facilities in work place	3.43	1.02

The results indicate that the construction workers are agreed with their work place has a favourable work environment and it is easier to receive materials for efficient work, while, they are neutral with the working environment in their work place is encouraging, the work environment puts emphasis on safety of workers and workers are given adequate facilities in work place.

3.2.3. DEVELOPMENT DIMENSION

The development dimension for construction workers was analyzed and the results are presented in Table-4.

Table-4: Development Dimension for Construction Workers

Development	Mean	Standard Deviation
Work carried in advanced ways are recognized	3.67	1.04
Changes are given to learn new methods	3.63	1.07
The work facilitates development of workers	3.70	1.16
The work helps the personal improvement of workers	3.69	1.19
It gives job security	3.33	1.20

The results reveal that the construction workers are agreed with work carried in advanced ways are recognized, changes are given to learn new methods, the work facilitates development of workers and the work helps the personal improvement of workers, while, they are neutral with it gives job security.

3.2.4. SOCIAL INTEGRATION DIMENSION

The social integration dimension for construction workers was analyzed and the results are presented in Table-5.

Table-5: Social Integration Dimension for Construction Workers

Social Integration	Mean	Standard Deviation
We have the sense of one community	3.72	1.07
We have no problem in team work	3.64	1.05
We share our feelings and ideas	3.71	1.12
We are mutually helpful	3.73	1.13
We share our workloads	3.61	1.06

The results imply that the construction workers are agreed with they have the sense of one community, they have no problem in team work, they share their feelings and ideas and they are mutually helpful and they share their workloads.

3.3. SOCIO-ECONOMIC STATUS OF WORKERS AND QUALITY OF WORK LIFE DIMENSIONS FOR CONSTRUCTION WORKERS

The difference between socio-economic status of workers and quality of work life dimensions for construction workers was studied by using Analysis of Variance (ANOVA) test and the results are presented in Table-6.

Table-6. Difference between Socio-Economic Status of Workers and Quality of Work Life Dimensions for Construction Workers

Particulars	F-Value	Sig.
Gender and Quality of Work Life Dimensions for Construction Workers	17.842**	.000
Age Group and Quality of Work Life Dimensions for Construction Workers	14.950**	.000
Educational Qualification and Quality of Work Life Dimensions for Construction Workers	19.364**	.000
Work Experience and Quality of Work Life Dimensions for Construction Workers	16.178**	.000
Monthly Income and Quality of Work Life Dimensions for Construction Workers	18.690**	.000

** Significant at one per cent level.

The results show that the F-values are significant at one per cent level revealing that there is significant difference between socio-economic status of workers and quality of work life dimensions for construction workers. Hence, the null hypothesis of there is no significant difference between socio-economic status of workers and quality of work life dimensions for construction workers is rejected.

3.4. INFLUENCE OF QUALITY OF WORK LIFE DIMENSIONS FOR CONSTRUCTION WORKERS ON THEIR JOB PERFORMANCE

To analyze the influence of quality of work life dimensions for construction workers on their job performance, the multiple linear regression is done and the results are presented in Table-7. The coefficient of multiple

determination (R^2) is 0.57 and adjusted R^2 is 0.55 showing that the regression model is good fit. It implies that 55.00 per cent of the variation in dependent variable is explained by the independent variables. The F-value of 17.235 is statistically significant at one per cent level revealing that the regression model is significant.

Table-7: Influence of Quality of Work Life Dimensions for Construction Workers on Their Job Performance

Quality of Work Life Dimensions	Regression Co-efficients	t-Value	Sig.
Intercept	1.102**	6.119	.000
Compensation (X_1)	.375**	5.480	.000
Working Condition (X_2)	.349**	5.106	.000
Development (X_3)	.273**	4.758	.000
Social Integration (X_4)	.291**	4.912	.000
R^2	0.57	-	-
Adjusted R^2	0.55	-	-
F	17.235	-	0.00

** Significant at one per cent level

The results reveal that compensation, working condition, social integration and development are positively and significantly influencing job performance of construction workers at one per cent level. Thus, the null hypothesis of there is no significant influence of quality of work life dimensions for construction workers on their job performance is rejected.

4. CONCLUSION

The foregoing analysis indicates that compensation, working conditions, development and social integration are the important quality of work life dimensions for construction workers. The results show that there is significant difference between socio-economic status of workers and quality of work life dimensions for construction workers. Meanwhile, compensation, working condition, social integration and development are positively and significantly influencing job performance of construction workers. To improve the job performance of construction workers, they must be provided with better salary and safe and healthy working environment. The opportunities should be provide to them for their personal development and team work and social relationship among them must be encouraged.

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EMPIRICAL STUDY ON TALENT MANAGEMENT OF ACADEMIA IN HIGHER EDUCATION

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ABSTRACT

After United States and China the Indian Higher Education is the third largest system in the world. Since independence the Indian education system has gone through tremendous advancement in terms of establishment of Universities, premium university level institutions and colleges. The initiative taken by the Government in last four years through introducing "Right to Education Act" has induced many students to enrol into the schools. The introduction of LPG has resulted into allowing many Private Universities to enter into the field of higher education and not only attract more number of domestic/local students but even paved way for more number of foreign students to migrate to India for attaining higher education. Despite of all these developments the Indian Universities have failed to register their presence at the global education platform and one of the reasons for the same is lack of Talent Management. This research paper focuses on identifying the need for and the practices adopted by the Universities for Talent Management.

Keywords: Higher Education, Talent Management, Academia, Universities

INTRODUCTION

After United States and China the Indian Higher Education is the third largest system in the world. Since independence the Indian education system has gone through tremendous advancement in terms of establishment of Universities, premium university level institutions and colleges. The initiative taken by the Government in last four years through introducing "Right to Education Act" has induced many students to enrol into the schools. The introduction of LPG has resulted into allowing many Private Universities to enter into the field of higher education and not only attract more number of domestic/local students but even paved way for more number of foreign students to migrate to India for attaining higher education. Despite of all these developments the Indian Universities have failed to register their presence at the global education platform and one of the reasons for the same is lack of Talent Management.

Talent Building, Engaging and Managing are the new mantras across the organisations. Simultaneously employee or talent building, managing and engaging also provides a competitive edge to the organisations. As a result, the educational institutions are more likely to realize improvement in overall financial performance due to sustaining the advantage. However it depends upon the institutions that how they strategize in building, managing, engaging and retaining the talent in the highly Volatile, Uncertain, Complex and Ambiguous (VUCA) world.

In the last two decades of the 20th century compared to educational institutions Business firms have started investing financial resources on high technologies to avail the competitive edge in the market. But somewhere the educational institutions are failing in investing, building, engaging and managing the knowledge assets, which in turn affects the quality and efficiency of the institutions as well as have a adverse effect on their stakeholders i.e. students at large. So it becomes very important for the educational institutions to build, manage, engage and retain their knowledge-based assets.

Talent management is fast gaining a top priority for organizations across the world. Trends for talent management, talent wars, talent raids and talent shortage, talent metrics retention and concerns for talent strategy are expressed in the literature, across various countries like the USA, the UK, Australia, Japan, China, India, and across Asia (Yeung, 2006; Ruppe, 2006; Dunn, 2006; Chugh and Bhatnagar, 2006; Lewis and Heckman, 2006; Lewis, 2005; Branham, 2005; Bennett and Bell, 2004). Talent management was initially designed to improve the process for recruiting and developing people with the required skills and aptitude to meet the current organizational needs. The various aspects of talent management are recruitment, selection, on-boarding, mentoring, performance management, career development, leadership development, replacement planning, career planning, recognition and reward (Romans and Lardner, 2006; Heinen and O'Neill, 2004; Scheweyer, 2004). Competition and the lack of availability of highly talented and skilled employees make finding and retaining talented employees' major priorities for organizations (Fegley, 2006). In order to attract and retain the best talent anywhere in the world, an organization must have a strong and positive employer brand (Brewster et al., 2005).

Talent management is replacing the concept of employee development to face radical changes in the market environment. Simultaneously, devising strategies for developing and managing employees' human capital also facilitates firms to achieve competitive advantage. As a result, educational institutions are more likely to realize improvement in overall financial performance due to sustaining the advantage. However, it depends on how institutions differentiate strategies implementation to manage and develop knowledge assets or human resources (HR) over tangible assets.

TALENT MANAGEMENT

Talent management is the science of using strategic human resource planning to improve business value and to make it possible for companies and organisations to reach their goals. The process of talent management includes recruiting, retaining, developing, rewarding and make people perform as well as strategic workforce planning. A talent-management strategy needs to link to business strategy to make the goals of the organization achievable.

The purpose of talent management is to ensure that a firm has the right talent with the right skills at the right time. However, what may have been the right skills in the past may not be all that is required in the future. Many things change presenting new challenges and requiring new skills.

Traditional human resource structures may not acknowledge the level of career capital focus that is required for the high performing employee to remain competitive, responsive and how institutions will make an effort to build as well as retain the employees by extending Flexible Work Arrangements and Employee Assistance Programmes.

Despite every attempt to follow effective selection practices, there is always a risk that new staff will not perform as expected. It is often said that while institutions select people on their competence and experience, they fire or lose them due to lack of cultural fit. A highly competent professional who is unable to fit the institutional culture is unlikely to be effective or remain for long.

SIGNIFICANCE OF THE STUDY

Talent management is widely practiced in the corporates to attract, develop and retain their knowledge assets. But still the importance of talent management is not realized by the educational institutions. This practice has yet to be completely migrating into the environment of higher education to determine as well as develop the future successors for the institutions.

Majority of the educational institutions are following wait and see or trial and error kind of approach when it comes to potential replacement of key personnel, whereas only few institutions have realized the importance and benefits of talent management in retaining high potential personnel. Despite the countless studies on the impending retirements of baby boomers, only a small number of these studies have analyzed talent management strategies in the context of higher education. Since little attention has been given to talent management by higher education leaders, the intention for this study was to serve as a framework for commerce and management colleges in Bengaluru to reviewing and determining their own strategies of talent management that align with their institution's culture and organizational values.

SCOPE AND LIMITATION OF THE STUDY:

Since the study is limited to four Private Universities in the city of Bangalore, so the canvas is narrow and scope of analysis is limited and its result may not be applicable to other Universities or premium University level educational institutions. As for future studies, more bodies of research should take place to identify how the various practices adopted by the Universities can help in retaining, engaging the skilled and knowledgeable academia can increase organizational know-how, profitability and competitive advantage.

OBJECTIVES OF THE STUDY:

The main purpose of this study is:

1. To study the talent management practices in higher education with special reference to Academia in Commerce and Management institutions.
2. To suggest different talent management practices to reduce attrition level in higher education

RESEARCH METHODOLOGY

This study is empirical in nature. This study is based on both primary as well as secondary data. The primary data was collected by using questionnaire from four different Private Universities in the city of Bangalore. The sample consisted of 100 faculties from four different Private Universities in the city of Bangalore. The elements

of the sample were selected through the random sampling plan. The percentage analysis method was used to analyze the data. Bar diagrams and Pie charts were used for better pictorial understanding.

REVIEW OF LITERATURE

1. (Powell 2010) has stated that, the retention of employees in higher education institutions (HEIs) is a serious concern as the high turnover rate of academic staff poses a major challenge to these institutions. High employee turnover has grave implications for the quality, consistency, and stability of academic enterprises. Turnover can have detrimental effects on students and remaining academic staff members, who struggle to give and receive quality services, when positions are vacated and then filled by inexperienced personnel (as cited in Selesho and Naile 2014, 295) .(Lucrecia and Glenn A. Daley 2006) in their research work found that universities and higher education institutions are at the crossroads in terms of their future development. Moving ostensibly from institutions that enjoyed heavy government subsidy, outdated and protected work practices that functioned on the quaint concept of collegiality, they have suddenly found that the structures and processes that served them so well in the past are no longer relevant in the new world order of e-commerce, street smart and fickle students who demand high quality and progressive and flexible teaching and learning practices that will provide them with the edge upon graduation. (as cited in Shikha 2012, 22)
2. (Bushe 2012, 279) has stated that, “Academic staff retention refers to the process of the ability of an institution to not only employ qualified academic staff, but also retain competent staff through the establishment of a quality work-life, motivated staff climate, best place of work, and being an employer of choice, depending upon dedicated formulation and execution of best practices in human resource and talent management”.
3. (Lynch 2007) has mentioned that research has shown that higher education institutions lag behind industry in talent management practices. (Cobb 2007) has stated that for many of the higher education institutions, talent management is a relatively new and untapped opportunity despite its importance in offering these institutions a proven and practical way for driving competitive advantage. (as cited in Rudhumbu 2014, 86).
4. (Rasheed and Sarwar 2010, 2) in their research work have stated that, “Universities are the center of higher education where teachers play an important role in ensuring high quality of education by developing their students as global citizens for the outside corporate world. This is possible when teachers in universities are motivated enough to accomplish their goals effectively. Teachers are the building blocks of universities and they are undoubtedly, the developers of positive and progressive society in any country. It is therefore, necessary to have highly motivated teachers particularly in universities where teachers’ motivation is extremely demanded. The rule of thumb in human resource management is that retaining employees is less costly than hiring new ones. When teachers in universities perform well, students are also high achievers and universities contribute more towards higher education.”
5. (Martin 1999) and (Pienaar 2005) have stated that, higher education institutions more than any other organisations are dependent on the intellectual abilities and commitment of academic staff. The intellectual and creative abilities of academic staff determine the survival and sustainability of higher education institutions. Consequently, in order to function effectively, higher education institutions are, to a large extent, dependent on the commitment of academics. (as cited in Pienaar and Bester 2008, 33)

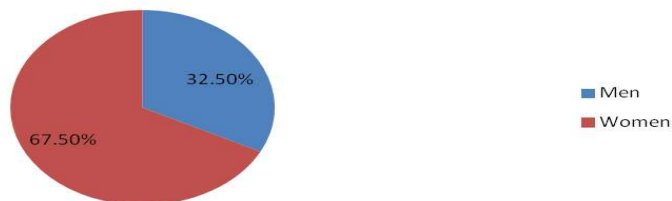
DATA ANALYSIS AND FINDINGS

The following analysis showcase the various Talent Management Practices adopted by the Universities in engaging and retaining their employees.

1. 32.5% of the respondents were Men and 67.5% are women as most of the faculties in educational institutions are women.

Table-1: Gender wise Breakup of Respondents

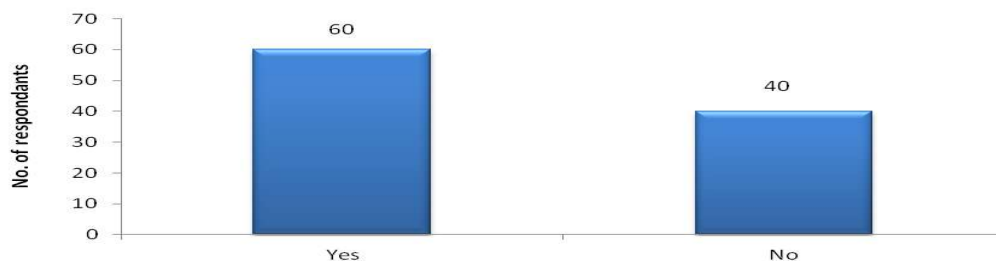
Sl.No.	Gender	No. of Respondents (%)
1.	Men	32.5%
2.	Women	67.5%

Figure 1: Gender wise Breakup of Respondents


2. 40% did not any Employee Assistance Programmes and 60% had Employee Assistance Programmes

Table 2: Employee Assistance Programmes Offered

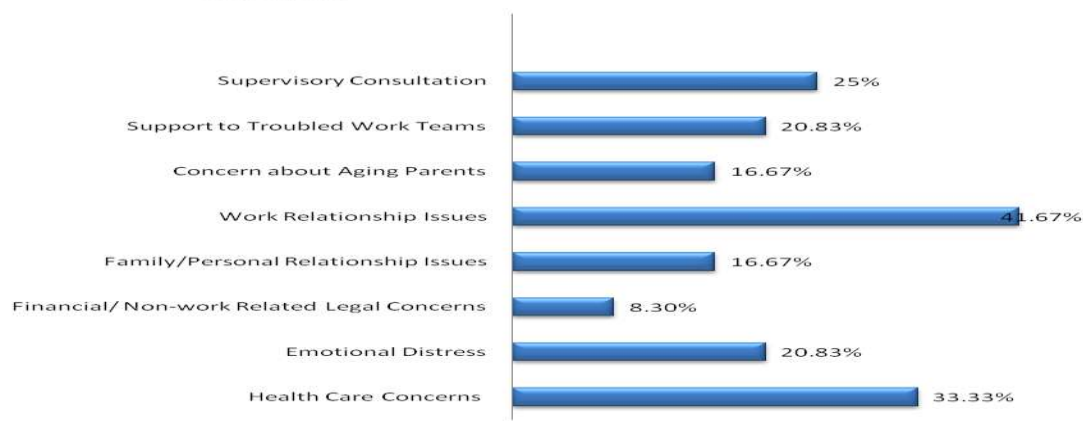
Sl.No.	EAP Offered	No. of Respondents (%)
1.	Yes	60
2.	No	40

Figure 2: Employee Assistance Programmes Offered


3. EPA's were offered mostly on Work Relationship Issues i.e.,41.67 % and the least on Financial/ Non-work Related Legal Concerns i.e.,8.3%

Table 3: Employee Assistance Programmes offered:

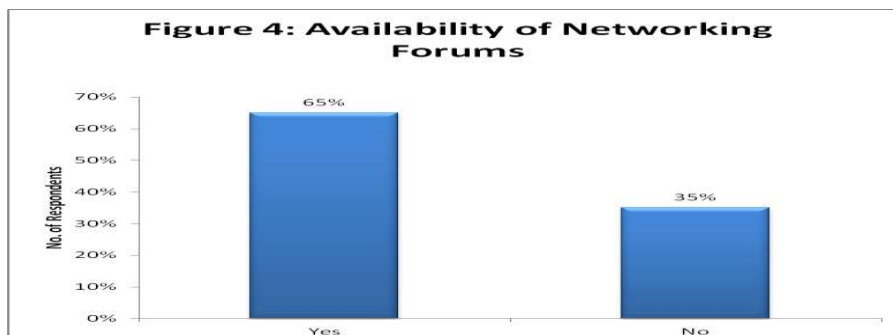
Sl.No.	Types of EAPs offered	Respondents (%)
1.	Health Care Concerns	33.33%
2.	Emotional Distress	20.83%
3.	Financial/ Non-work Related Legal Concerns	8.3%
4.	Family/Personal Relationship Issues	16.67%
5.	Work Relationship Issues	41.67%
6.	Concern about Aging Parents	16.67%
7.	Support to Troubled Work Teams	20.83%
8.	Critical Incident Services	16.67%
9.	Supervisory Consultation	25%

Figure 3:Employee Assistance Programmes Offered


4. 35% of the respondents do not have any Networking forums and 65% have the same.

Table 4: Availability of Networking Forums

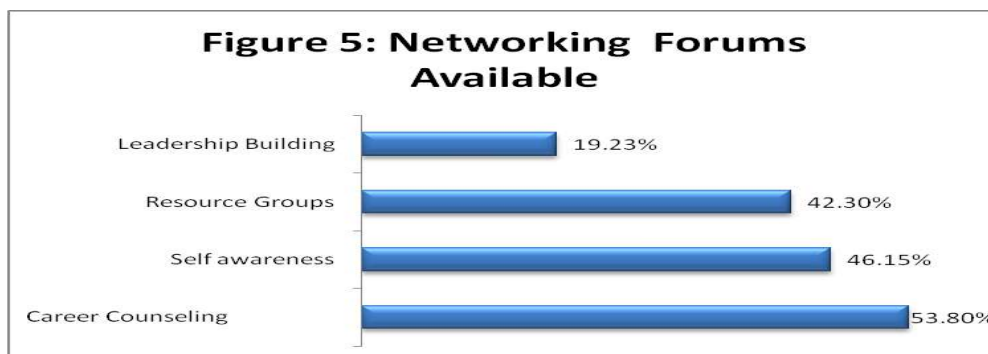
Sl.No.	NFs	Respondents (%)
1.	Yes	65%
2.	No	35%



5. 53.80% of the faculties were availed of Career Counseling forums, 46.15% of faculties were provided with Self Awareness and 42.30% faculties availed Resource Group. Least preference was given to Leadership Building i.e.19.23%.

Table 5: Networking forums available

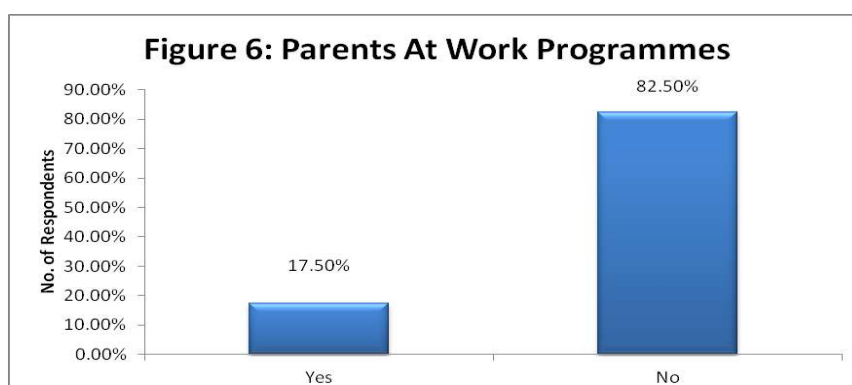
Sl.No.	Networking Forums Available	Respondents (%)
1.	Career Counseling	53.80%
2.	Self Awareness	46.15%
3.	Resource Group	42.30%
4.	Leadership Building	19.23%



6. 82.5% did not have Parents At Work Programmes and 17.5% have the same.

Table 6: Types of Parents At Work Programmes offered by Institutions

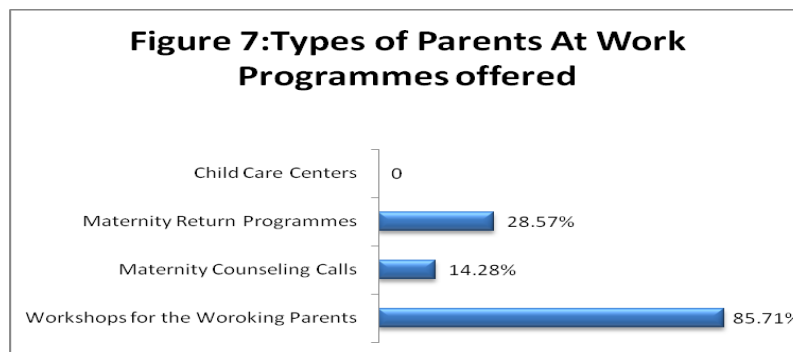
Sl.No.	Types of PAWPs offered	Respondents (%)
1.	Yes	17.5%
2.	No	82.5%



7. 85.71% of the faculties were offered workshops, only 14.28% women faculties were offered Maternity Counseling Calls and 28.57% were offered Maternity Return Programmes but none of the institutions are providing any Child Care facilities for their faculties.

Table 7: Parents At Work Programme offered to faculties are:

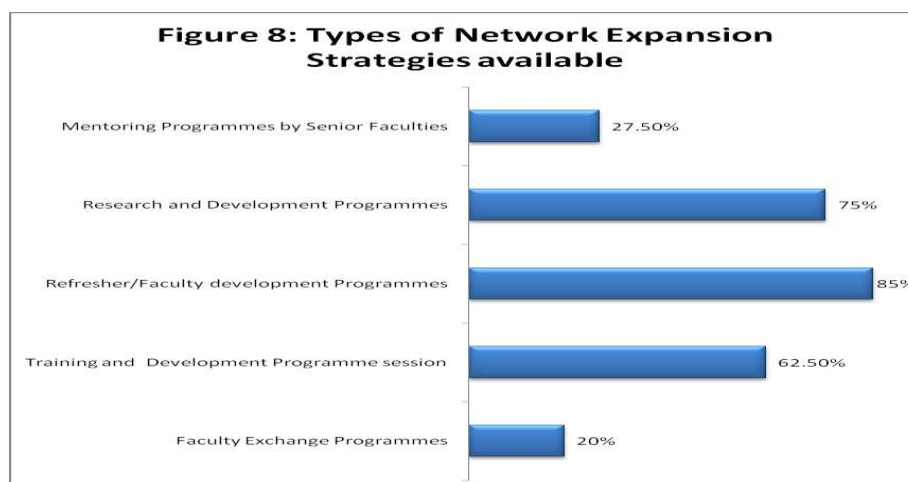
Sl.No.	Types of PAWPs offered	Respondents (%)
1.	Workshops for the Woroking Parents	85.71%
2	Maternity Counseling Calls	14.28%
3	Maternity Return Programmes	28.57%
4.	Child Care Centers	0



8. More preference was given to Refresher/Faculty Development Programmes i.e. 85%. 75% of the faculties were given scope to involve in Research and Development Programmes and a least preference of 20% was given to Faculty Exchange Programmes to extend **Network Expansion Strategies** in the institutions.

Tab le 8: Types of Network Expansion Strategies available

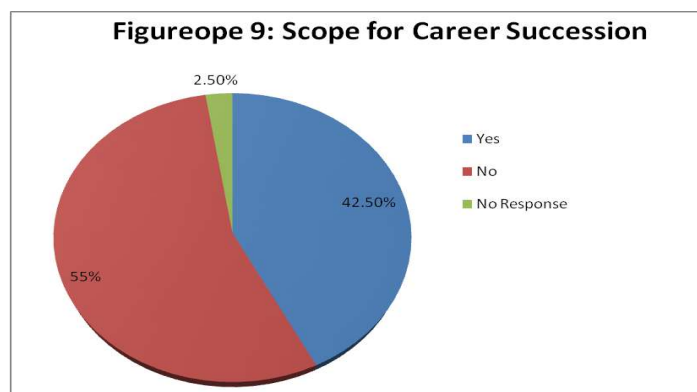
Sl. No.	Different NES available	Respondents (%)
1.	Faculty Exchange Programmes	20%
2.	Training and Development Programme session	62.5%
3.	Refresher/Faculty development Programmes	85%
4.	Research and Development Programmes	75%
5	Mentoring Programmes by Senior Faculties	27.5%



9. 55% of the respondents said there is no scope for career succession and 42.5% said there is scope for succession and 2.5% didn't answer.

Table 9: Scope for Career Succession

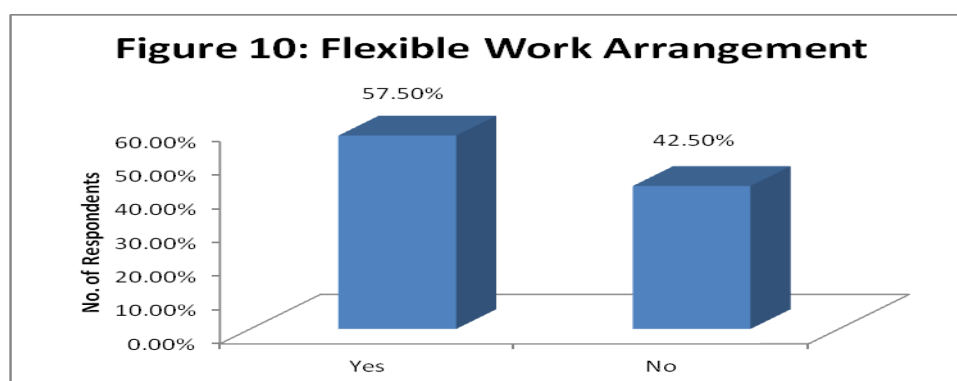
Sl. No.	Scope for Career Succession	Respondents (%)
1.	Yes	42.5%
2.	No	55%
3	No Response	2.5%



10. 57.5% were offered Flexible Work Arrangements and 42.5% were not offered Flexible Work Arrangements.

Table 10: Flexible Work Arrangements offered

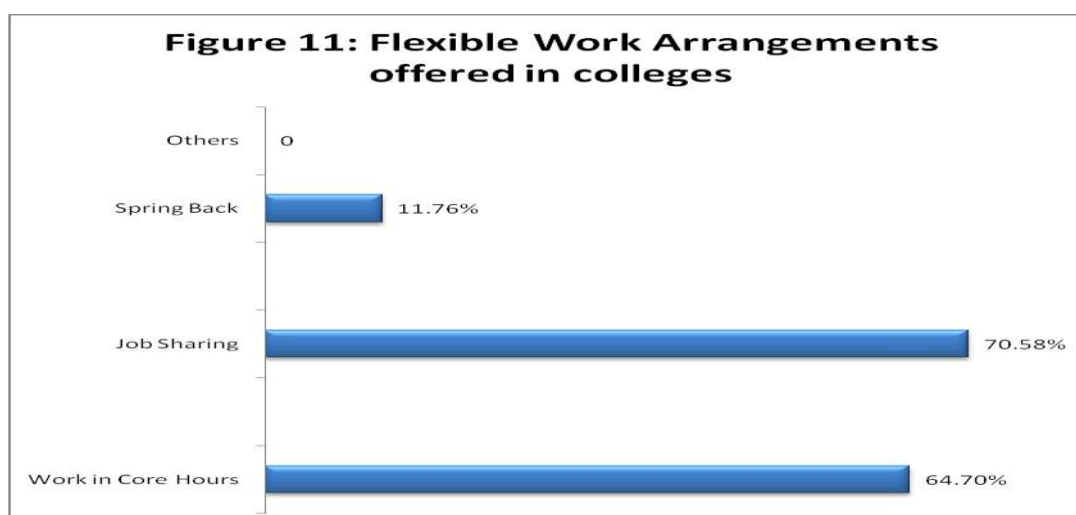
Sl.No.	FWAs offered	Respondents (%)
1.	Yes	57.5%
2.	No	42.5%



11. Flexible Work Arrangements are given only to those faculties who were presently working with the institute like, 64.7% of faculties were given the facility of working only during the core hours and hardly 11.76% faculties were allowed to Spring Back.

Table 11: Flexible Work Arrangements offered in colleges

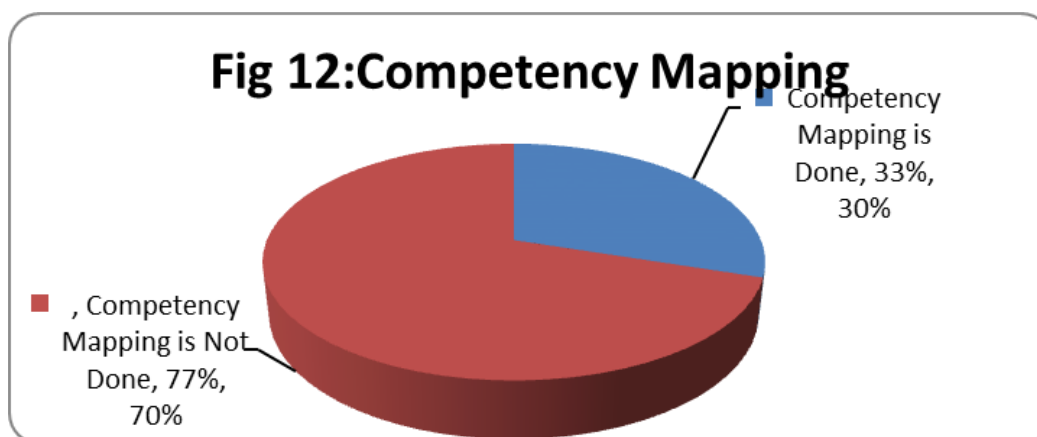
Sl. No.	Types of FWAs Offered	Respondents (%)
1.	Work in Core Hours	64.7%
2.	Job Sharing	70.58%
3.	Spring Back	11.76%
4.	Others	0



12. Nearly 33% of the employees said that competency mapping is done in their institution and rest of them said there is no such concept is seen in their institution.

Table 12: Availability Competency Mapping

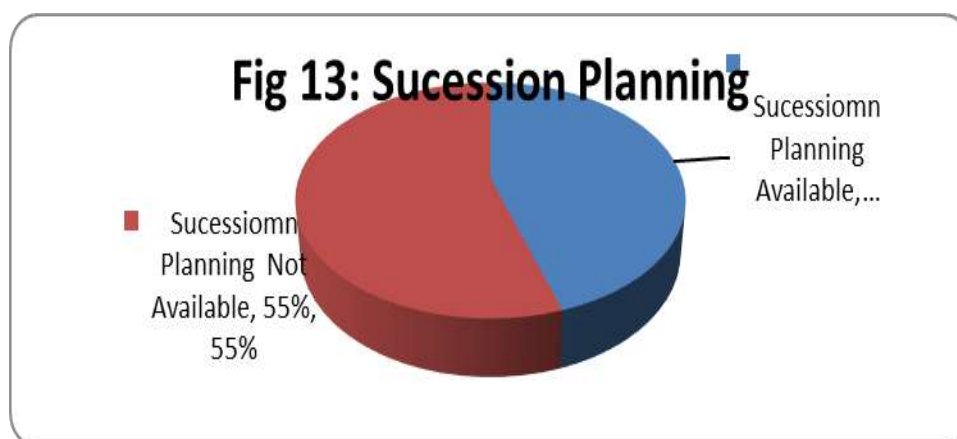
Sl.No.	Availability of Competency Mapping	Respondents (in%)
1.	Yes	30%
2.	No	70%



13. 45% of the respondents said that they have a competency mapping programs available in their institutions and rest of them were not provided with this facility.

Table:13 Sucession Planning

Sl.No.	Sucession Planning Available	Respondents(%)
1.	Yes	45%
2.	No	55%



SUGGESTIONS

1. More of Employee Assistance Programmes should be made available as 40% of the respondents did not have any of them.
2. Employee Assistance Programmes on Financial/ Non-work Related Legal Concerns, Family/Personal Relationship Issues, Concern about Aging Parents, Critical Incident Services and Support to Troubled Work Teams must be stressed on.
3. Networking forums especially on Leadership should be increased.
4. Most of the Universities did not offer "Parents At Work Programme" i.e., 82.5%. Initiation regarding the same should be taken especially regarding Child Care Centers
5. Flexible Work Arrangements options must be increased especially the Spring Back option as majority of employee in this sector are women.
6. A better competency mapping technique must be introduced to reward the capable and talented faculty members, so that to some extent attrition rate can be controlled.

CONCLUSION

This study helps us to understand that a lot of work relating to talent management practices has to be undertaken by the Universities to build a better knowledgeable and skilled talent pool, which in turn results into attaining organizational efficiency and effectiveness in the education sector. The Universities are required to focus on developing a standard practices of talent management like talent attraction, talent recruitment, talent development and talent retainment, which can help them in attaining better organizational performance.

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DIGITAL MARKETING IN INDIA: AN OVERVIEW

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ABSTRACT

Increase in internet penetration in the country has led to a substantial growth of other digital industries such as e-commerce, digital advertising and so on. Latest trends in digital marketing in India in web usage, mobile and search, social networking, shopping and online video are shaping the Indian digital marketplace and what it holds for the years to come. Today we all are connected through what's app and Facebook and the increasing use of social media is creating new opportunities for digital marketers to attract the customers through digital platform. Digital marketing is cost effective and having a great commercial impact on the business.

Keywords: Digital Marketing, India

INTRODUCTION

Digital Marketing is the use of digital channels to promote or market products and services to consumers and businesses. According to American Marketing Association, The performance of business activities which directs the flow of goods & services from manufacturer to consumers. In Present era, Manufacturers are using digital marketing as a tool to attract more & more untapped customers in urban area and rural area both. The term 'digital marketing' was first used in the 1990s. In the 2000s and the 2010s, digital marketing became more sophisticated as an effective way to create a relationship with the consumer that has depth and relevance. Digital Marketing is making use of various types of digital technologies to promote company business. There are many types of digital marketing. It is very important for company as a brand to understand what will and will not work in regards to their digital marketing efforts.

India is a fast moving nation towards digital economy and this movement has been accelerated with the demonetization of the Indian Currency in the last quarter of year 2016. With it various government digital payment promotion schemes has been launched. Digital market requires digital promotion and marketing strategies. The telecom sector is also playing an important role in the digitalization movement. Recent launch of reliance telecom Jio with the free & unlimited internet facilities has played a revolutionary roll. The other prominent companies like Airtel, Idea, Vadaphone & BSNL are also offering attractive internet plans. Indian banks are also providing more customer friendly & secure money transaction services. Now Indian consumer is spending more time on social media and internet surfing. Thus the visibility of any product is more through digital medium than traditional marketing techniques. Digital marketing techniques include Content Marketing, Marketing Automation, AdWords, SEO, Social Media, Email Marketing and Website Design.

Everyone in the country prefers digital marketing over everything else. Even the startups are launching their business via digital marketing. This platform eases the process of every business. The company doesn't have to deploy the manpower to go physically into the market and promote the product. It offers a wide range of economical, powerful and contemporary mechanisms and mediums of marketing. Every type of product and service is now opting for the option of digital marketing. Because they know that this is the proven platform. Right from tech giants to hoteliers are on the digital platform.

LITERATURE REVIEW

The digital revolution has impacted consumers and businesses alike. Over the past decade technology and the way it is used has changed drastically. The Internet, once purely a source of information has become a place where people meet to share their stories and experiences, a platform for discussion and debate, a source of entertainment and much more. Furthermore, the Web has several important marketing aspects that enable companies to boost their performance: 24 hours online; multimedia compatible; globally available; interactive; micromarketing compatible; integration ready. (Rowley, 2004, p. 26) Communication across continents now takes seconds, not weeks. When consumers experience your brand through the web (positively or negatively) the impact is immediate.

Nutella is a perfect example; when many passionate consumers began creating online communities around the brand the company intervened preventing consumers from using the Nutella name – and the company suffered as a result (Cova & Pace, 2006). Kiani (1998) also presents a set of guidelines for advertising on the web; attract users by making it easy to find your site, engage their interests by creating communities or linking to other sites they will find valuable, ensure they return by constantly updating your content and keeping it “fresh”, learn their preferences by tracking their activity on your site, and relate to them by taking the information gathered to

provide customized content. A similar study conducted by Parsons, Zeisser and Waitman (1998) delves deeper into these five guidelines, explains why they are important, the issues inherent in them, and how marketers began to implement them. The authors claim most marketers struggle in engaging their customers and present two key concepts marketers should understand in order to do so. First, understand that the web is an interactive medium and simply transferring.

DIGITAL MARKETING INDUSTRY IN INDIA

Digital Marketing industry in India is spread to almost all the business sectors. Some of the applications of E-Marketing are shopping and order tracking, online banking, payment systems and content management. The power of digital marketing allows geographical barriers to disappear making all consumers and businesses on earth potential customers and suppliers. It is known for its ability to allow business to communicate and form a transaction anywhere and anytime.

Digital marketing industry in India is a booming career today. In a country with a rapid growth economy, it is expected to have a very high significant growth in Digital marketing career. The growth in the digital marketing trends is making a very substantial impact on marketing and advertisement. The big picture of Digital Marketing industry in India cannot be complete if short preview of the past digital marketing statistics is not made. Going back to history, International Journal of Advanced Research Foundation reveals the following in 2016. Between 1971 and 1972, The ARPANET is used to arrange a sale between students at the Stanford Artificial Intelligence Laboratory and the Massachusetts Institute of Technology, the earliest example of electronics or digital commerce.

1979: Michael Aldrich demonstrates the first online shopping system.

1981: Thomson Holidays UK is first business-to-business online shopping system to be installed.

1996: India MART B2B marketplace established in India.

2007: Flipkart was established in India. Every E-marketing or commercial enterprises uses majorly digital means for their marketing purposes.

In 2011, the digital marketing statistics revealed that advertising via the mobile phone and tablets was 200% lower than that of the following years. During this year, the net worth was \$2 billion. The growth was in a geometric progression as it rose to \$6 billion in 2012. The competitive growth demands for more improvement in the career works and professionals are being added to the field. From 2013 to March 2015, the investment total increase was 1.5 billion dollars over the preceding years. There has been an impressive growth up till this present moment.

The report by the International Journal of Advanced Research Foundation revealed that summarized that India is getting to see the golden period of the Internet sector between 2013 to 2018 with incredible growth opportunities and secular growth adoption for E-Commerce, Internet Advertising, Social Media, Search, Online Content, and Services relating digital marketing. Total Media, Digital and Mobile Internet Ad Spending in India (2013-2019).

Today, digital marketing industry in India is growing at its peak, and is still continuous. Many factors are responsible for this growth. The use of communication tools has greatly changed in the year past. No one ever thought to have a credible deal online. The below figure indicates the digital marketing statistics.

Moreover, the developments in the digital marketing industry in India evident in the marketing shift from anonymity to identity. Interaction on the Internet now looks more physical as opposed to the anonymity of identity in the past. Also, marketing information's is moving along in the same line with entertainment. People of India needed an exciting spirit always. This targets their interest into the marketing information.

IMPORTANCE OF DIGITAL MARKETING

On the basis of above discussion we can summarize the importance of digital marketing to marketers as follows:

- Digital marketing is infinitely more affordable than traditional offline marketing methods. An email or social media campaign, for example, can transmit a marketing message to consumers for the merest fraction of the cost of a TV ad or print campaign, and potentially reach a wider audience.
- Conducting marketing digitally is the ease with which results can be tracked and monitored. Rather than conducting expensive customer research, companies can quickly view customer response rates and measure the success of their marketing campaign in real-time, enabling them to plan more effectively for the next one.

- It is easy to collect the feedback reports or number of readers instantly unlike the traditional media like T.V, radio or hoardings. In online advertising users can themselves search for any product and grab the information related to that product on any website and can give their feedback instantly. This eventually helps the entrepreneurs to upgrade themselves in a specific domain. Moreover you can make a long-lasting impact on your target viewers at a faster rate.
- It helps in promoting a business through digital medium like internet or mobile thus reaching millions of customers in a moment. Many small and large businesses are following the strategies of online marketing to endorse themselves globally. It includes tools like SEO, email, RSS, pay per click, blogging, instant messaging, social media, video streaming podcasting and many more.
- Digital marketers monitor things like what is being viewed, how often and for how long, sales conversions, what content works and doesn't work, etc. While the Internet is, perhaps, the channel most closely associated with digital marketing, others include wireless text messaging, mobile instant messaging, mobile apps, podcasts, electronic billboards, digital television and radio channels, etc.

EFFECTIVE WAYS OF DIGITAL MARKETING

In order to achieve success one supposed to move in the following manner

- Plan - Create a structured plan and roadmap by reviewing your current weaknesses and the opportunities to boost online leads and sales.
- Manage - Review your marketing activities, so that you know where to focus to get the Quick Wins which will make the biggest difference
- Optimise - Learn the best practices and success factors to help you compete to get better results It is no exaggeration that you live in a digital world and from that perspective it is imperative that your business has an impressive presence in the digital space.

In essence, digital marketing is the future of marketing in the world with the added advantages that it is cheaper than traditional marketing and is measurable. Let's list the different ways you can use the digital medium to popularize and drive conversions for any startup or business.

CONCLUSION

There is a need to change the marketing strategy of various companies from traditional marketing to digital marketing. If the companies does not use the digital marketing platform to market their products and services then they will lack the competition that exist in a perfect competition market, and hence the future of the company cannot be assured and the company will go in loss. Today, digital marketing industry in India is growing at its peak, and is still continuous. Many factors are responsible for this growth. The use of communication tools has greatly changed in the year past. The power of digital marketing allows geophysical barriers to disappear making all consumers and businesses on earth potential customers and suppliers.

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NEW CHALLENGES FOR LONG-TERM INVESTORS

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ABSTRACT

The current study aims to find out the scenario of new challenges for Long-Term investors and its significant perspectives and awareness about new challenges for Long-Term investors and its significant perspectives in different fields. It includes active economy of investment activities to improve organization satisfaction and gain an advantage over other terms. New challenges for Long-Term investors is done by several terms. For the organization record with the help of this term it can be manipulated for the position of investment to view the profit or net income with the help of Innovative funding strategies, but management will have to face some stress for this. There are many Innovative investment things like bank fixed deposit, saving account, money market account funding and funds from competition these strategies are considered in different organization. New challenges for Long-Term investors is an energetic, interesting process that relies on manipulation link -- from customers to organization and many more -- to function smoothly.

There are many students that are unaware about the New challenges for Long-Term investors and its significant perspectives and often innovate them with strategies. Hence, the researcher feels to study on the awareness of the new challenges for Long-Term investors and its significant perspectives & terminology.

INTRODUCTION

There are important factors in the innovation of investment and economy for the growth & manipulation of it according and for proper investment and prepossessing and function each entities in the most streamlined and cost-effective way possible. In this emerging market there are a lot of challenges that are being introduced due to growing rivalries, outsourcing, etc. Current study aims to study on the awareness about new challenges for Long-Term investors and perspective. There are many challenges one individual have to face because of new strategies, new patterns for the growth of economics. It gives idea to improve relationship between employees and organization, which are two interrelated factors that are important.

DEFINITION

Long-term investments are non-current assets that aren't utilized in operating activities to get revenues. In other words, LT investments are assets that are held for quite one year or accounting period and are wont to create other income outside of the traditional operations of the corporate.

A long-term investment is an account on the asset side of a company's record that represents the company's investments, including stocks, bonds, land, and cash. Long-term investments are assets that a corporation intends to carry for quite a year. The long-term investment account varies mostly from the short-period investment account therein short-term funds will apparently be vended, whereas the long-term funds won't be vended for years and, in some circumstances, may never be vended. Being a long-term investor means you're willing to simply accept a particular amount of risk in pursuit of probably higher rewards which you'll afford to twiddle my thumbs for an extended period of your time. It also suggests that you simply have enough capital available to afford to traffic jam a group amount for an extended period of your time.

A long-term investment is an account a corporation plans to stay for a minimum of a year like stocks, bonds, land, and cash. The account appears on the asset side of a company's record. Long-term investors are generally willing to require on more risk for higher rewards. A common sort of long-term investing occurs when company A invests largely in company B and gains significant influence over company B without having a majority of the voting shares. During this case, the acquisition price would be shown as a long-term investment. When a business or other establishments procures bonds or shares of mutual shares as funds, the optimal about whether to categorise it as short or long-term has some impartially significant inferences for the way those assets are valued on the record. Short-term investments are marked to plug, and any declines in value are recognized as a loss.

However, increases in value aren't recognized until the item is sold. Therefore, the record classification of investment – whether it's long-term or short-term – features a direct impact on internet income that's reported on the earnings report.

Held to Maturity Investments: If an entity intends to stay an investment until it's matured and therefore the company can demonstrate the power to try to so, the investment is noted as being "held to maturity." The

investment is recorded at cost, although any premiums or discounts are amortized over the lifetime of the investment.

For example, a classic held to maturity investment was the acquisition of PayPal by eBay in 2002. Once PayPal had significantly grown its infrastructure and user base, it had been then spun out as its own company in 2015 with a five-year agreement to continue processing payments for eBay. This investment helped PayPal grow and at an equivalent time allowed eBay the advantage of owning a world-class payment processing solution for nearly 20 years.

The long-term investment could also be written right down to properly reflect an impaired value. However, there might not be any adjustment for temporary market fluctuations. Since investments must have an end date, equity securities could also be not be classified as held to maturity.

Available purchasable and Trading Investments: Investments held with the intention of resale within a year, for the aim of garnering a short-term profit, are classified as current investments. A trading investment might not be a long-term investment. However, a corporation may hold an investment with the intention to sell within the future. These investments are classified as "available for sale" as long because the anticipated sale date isn't within subsequent 12 months. Available purchasable long-term investments are recorded at cost when purchased and subsequently adjusted to reflect their fair values at the top of the reporting period.

What Does Future Investments Mean?

Notes receivable, stocks, and bonds are typically considered to be long-term investments if management plans to stay them for quite one year. None of those assets are traditionally utilized in operating activities. For instance a corporation doesn't typically purchase bonds as a part of its operations unless it's an investment company. Sale of bonds would be considered an investment for a manufacturer.

Companies also can invest in assets that would be utilized in operations but are held as an investment.

Conventionally, a categorized balance sheet separates overall non-current resources into:

- Long-term funds,
- Plant assets or fixed assets, and
- Intangible assets.

These way stockholders can see how much the establishment is capitalizing in its set-ups paralleled with other actions.

The Main Objectives New Challenges for Long-Term investors

- a. To know the concept of a New challenges for Long-Term investors and its significant perspectives procedures across the country in the country.
- b. To improve a lot of innovation
- c. To replace a lot of other investment management to comprehend with most of the techniques.
- d. To ensure the cascading effect of manipulation will be eliminated.
- e. To improve the competitiveness of the original new challenges for Long-Term investors and its significant perspectives.
- f. To ensure the availability of input for the growth of economy
- g. To reduce the complications in investment.

What is the concept of New Challenges for Long-Term investors & long term investment?

In the pursuit of holding for more than 3 years investment taking a certain amount of business by an investor is called as new challenges for Long-Term investors. It can be controlled for the investment by market funds. Because of potential for capital appreciation it tends to be the investment.



Image-1: Concept of New challenges for Long-Term investors

For in process developing and emerging market of countries long-Term Investment is very include stocks and mutual funds. For the New challenges for Long-Term investors these type includes funding and expertise for their growth like certificates of deposit, and Long-term bonds.

Types of New challenges for Long-Term investors with high returns

- Investment with fixed deposits in bank
- Investment with savings account.
- Investment with money market accounts.
- Investment with gold or silver.
- Investment with mutual funds.
- Investment with equity funds.

What are facts about short term investments?

A New challenges for Long-Term investors with life time investment, marketable security, is a equity security.

Which will be sold or converted into cash in the future?

Where should benefits, New challenges to invest for Long-Term investors?

Importance of New challenges for Long-Term investors in developed countries is now transferring to developing countries also. As domestic investment and different facilitates improvements in human capital and institutions in their own countries is done by investment. Fixed deposits, company deposits, post office term deposits can be used for long-term. Some of the market-linked investments include liquid funds, equity funds, and money market funds.



Image-2: Benefits FOR New challenges for Long-Term investors

What Is a Fund of New challenges for Long-Term investors?

Investment of funding with high quality and low risk. One of the most Conservative investments in the investment market of funding into is considered for the protection of capital this type of funding is used by Investors. Higher returns are expected in new challenges for Long-Term investor's funds than a standard personal savings account. Liquid investments considered to be new challenges for Long-Term investor's funds.

CONCLUSION

Thus, there is always a problem when a new approach or new method is introduced in any sector. Even it is experienced that there is no one who can understand any innovation with fully desired expectation. Even not of those who are working in the legal and finance professions such as Lawyers, Chartered Accountants, Company Secretaries, etc. if such a scenario is there for any innovation, how one can expect that New challenges for Long-Term investors and its significant perspectives at initial stage should be understood by common people who are the users of product and manipulating these strategies for those positions of company which they require for their finance. Innovation for investors and its significant perspectives which manipulated against all previous consumers will take time to understand.

It is not as hard as to understand. Strategies there were different innovation of investors which were divided as per users. As New challenges for Long-Term investors and its significant perspectives is by rules, it will take some time to understand by the consumers about its system, pattern benefits and application. They will be aware about it when will start to use it by practically through fields. It needs only proper counseling.

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AMBITION FOR POWER IN SHAKESPEARE'S MACBETH

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ABSTRACT

An ambition is cause of success and even some times cause of loss. The loss is due to over ambitions of individuals.' Shakespeare is the one who always touch to several human tendencies and approach towards life. Macbeth is one of dramas in which he touched to human behavior and nature. Over ambition of lady Macbeth is major issue that he discussed in the Drama "Macbeth." This paper aims to describe the ambition of a king's servant in Shakespeare's, 'Macbeth' who had lots of influence of his wife Lady Macbeth. The three witches (astrologer) adviced to become a king later, fulfill his ambition, he must kill his king and his close friend-Banquo. In other words he must use all way to reach his goals at any cost. In the end of the play, he himself got killed because his action to fulfill his goals goes in wrong way. Ambition is the root cause of all evils this fact is best proved through Macbeth, one of the world famous tragedies of Shakespeare.

Keywords: Macbeth, Lady Macbeth, ambition, over ambition, tragedy treachery, and conspiracy etc.

INTRODUCTION

Literature is an art which always deal with several object exciting in the nature i.e, human, incident, place, things etc. There are many genres of literature such as Fiction, non-fiction, drama, poetry epic etc. Shakespeare is wrote dramas, poetry. He is called as the Father of English Literature due to his notable work in literature. There are main four popular tragedies of Shakespeare in which Macbeth is one. The tragedy causes due to the mistake of a hero. In this drama, overambitious lady Macbeth and her influence on her husband Macbeth is the cause of Tragedy.

Over Ambition –The Major Theme of Macbeth: The desire for personal achievement is known as Ambition. An ambitious person desires to be the best at what they choose to attain-, power, or superiority. 'Macbeth' is known as a tragedy of ambition. Why 'Macbeth' is called a tragedy of ambition. Is there any relation with ambition for power in "Macbeth" with ambition for power at all high official this era. What we see that, all politicians at trying to grab sympathy from people to be able to sit as high officeholder.

Ambition of Power: As a tragedy of ambition, Macbeth deals with his ambition to be a king, his rise to power, and his downfall. One can focus on Macbeth's ambition for power (being a king) in relation with other characters' ambition. In discussion of Macbeth's ambition several questions arise in our mind the To examine the ambition for power this paper is also useful in providing information about ambition for power in Shakespeare's 'Macbeth'.

PLOT OF THE DRAMA MACBETH

In the Drama Macbeth is the Hero but the Drama is influenced under the ambition of Lady Macbeth. Macbeth is the most important character in developing the plot. He is dominates the drama. His rise to power (being a king) and his downfall is the main plot. He is shown as a brave and noble Scottish general, one of the generals of the king's army in the first half. He is called 'valiant cousin' and 'worthy gentle' by the King. People love him as a brave leader. Though he has been honored by the king as Thane of Glamis he lusts for power to a great extent. He is declared to be Thane of Cawdor and King of Scotland later on. The ambition of King became the main cause of tragedy for Macbeth that is because of influence of Lady Macbeth. It is the main theme of Macbeth.

Meet With Three Witches: Once while returning from the war, Macbeth is taking rest in a deep forest where he meet three witches and these three witches talks about the future of Macbeth. Though he is one of the king's trusted lords, belonging to the same family like the king of Scotland- King Duncan due to Witches, he has become curious about their words. As an ambitious man he has lust for power; as a soldier wants to get a high position. The witches are an image of the evil forces. His meeting with witches instigates his ambition. The prediction made by witches can be neither good nor bad for him. If they are bad, it was not possible so soon to begin to come true? On the other hand if good, then why thoughts so soon turn into the idea of murdering King Duncan and taking the king's place on the throne of Scotland? Prophecies of two of the witches have turned to reality. He has been honored as Thane of Glamis and Thaneof Cawdor. , He lusts for being honored as the king, his great ambition.

Macbeth's Seriousness about the Words of Witches: When Macbeth listen the words o witches, he become curious about his dream to be a king. He discusses everything about these three witches to his wife Lady Macbeth. She is the over ambitious lady. She motives Macbeth to continues think with seriousness on the thought to the moral aspects of his actions, and he is into sense, an unfeeling villain without conscience or sense of nobility throughout the play. This is seen when he wishes to talk with his friend, Banquo, the prophecies of the witches.

The Plan to Murder the King: Macbeth and Lady Macbeth both know that until and unless, they will not kill the King, they cannot fulfill their dream and future informed by Witches. Now, he ponders over the possibility to murder the king. The reason is that in early history of Scotland, as a matter of course the crown did not pass from father to son. He might get the throne when king die. The possibility of appointment of Duncan's son as a mighty air forces Macbeth to an expression on the condition of damnation which means thinking of consequence of his crime, expressing his mind that it doesn't matter what might happen to him in the next world if he is granted peace of mind.

Macbeth achieved his great ambition in a wrong way because he immediately thought of it as a hindrance to his own ambition. He began to think of the evil way to ensure that the possibility of prophecies by witches come true. He feels unable to do the idea of murdering the king. As the king is his own family; Macbeth's mother and the king's mother were sisters, and in addition to that, the king is his honorable quest.

Feeling of Insecurity by Macbeth from Banquo: Macbeth is a kind of person being a new king- this can be a picture seen by Audience. He always feels unsecured and suspects the people around him especially his close friend, Banquo, whose 'royalty of nature', bravery and wisdom recommend him as more suited to kingship than Macbeth as the witches prediction of Banquo becoming the father of many kings later.

Murder of Banquo: As per the words of witches, the next generation of Macbeth will not have the crown as a king. That will be on the next generation of Banquo. Thus, Macbeth planned to betray his close friend just for making his position as a king safer very easily because, Banquo is a great danger to him both for his nobility of character and the witches prophecy on him. Therefore, due to insecurity, Macbeth plans to murder Banquo for being a obstacle to his position as a king and thinks to hire some murderers for it. Banquo is murdered by Macbeth's order.

Risk of Banquo's Remain Same after Banquo's Murder: Though, Macbeth murdered to Banquo, his insecurity of future because Florence- son of Banquo, has escaped from them murder and he will be a trouble for Macbeth; as he can continue his line ,being the father of many kings later The witches prophecies have turned to reality, Macbeth understands that their promises have deceived him. It happens because he has trusted much on them. Already they have warned him against one of the Scottish noble men, Macduff, who will be a source of trouble to him. In addition to that that, they encouraged him that 'none of woman born' can harm him and no one will defeat him 'till Birnamwood shall come to Dunsinane'. He was aware of all the time that he is dealing with evil forces. Moreover, he lives longer to see how bad they were. When Birnamwood appears to move which is actually Malcolm's army by covering their bodies with leaves, something seems impossibility, he begins:

MACBETH

....

To doubt the equivocation of the fiend

That lies like truth: 'Fear not, till

Birnam wood (V.v. 221)

The Murder of Lady Macduff: The act of murder of Lady Macduff and her children is more horrible as compared Macbeth's other crimes. It proves the worst cruelty of Macbeth. This is having murdered serious of the innocent people just for the sake of power. The first evil promise of the witches has proved unimportant; but he continues his fight, only to meet his enemy, Macduff's family has been murdered by him. He was aware that he has put his faith in evil ,and has been betrayed.

LADY MACBETH- THE MAN CAUSE OF TRAGEDY

Lady Macbeth is more ambitious than her husband. After reading a letter from him and informing about the witches prophecy of Macbeth being declared to be a king later on, she become alert for the murder of the king. She cannot tolerate even to mention the kingship directly; she can say only. Lady Macbeth is a strong-

minded woman having strong confidence as well as a witch mind. She prepares her mind that the fulfillment of her husband's ambition (being a king), must be through the murder of King Duncan and this depicts her ambition in helping her husband to fulfill his ambition to be a king. For that her husband will take the throne; as the most powerful man in the kingdom and she herself will be the queen. Thus we can also say that Lady Macbeth is a woman who also has a greed of power.

Every Action has Equal and Opposite Reaction: It is the law of Science that each and every action has an equal and opposite reaction. It is a fact that a person who does something evil will get an evil result finally. Lady Macbeth is unable to sleep well due to her part in committing the crimes. In the beginning of Act V, scene i, she is seen with a taper in hand, walking in her sleep and reliving her experience and thoughts at the murder of King Duncan. This reveals undoubtedly who is responsible for the crime and proves that Lady Macbeth is no more free from her conscience than her husband is. At last she also meets her death as a result of her parts in committing the crimes, in other words, Lady Macbeth has destroyed her own life because of her evil ways in fulfilling her husband's ambition.

MALCOLM'S FEAR ABOUT HIS LIFE INSECURITY

King Duncan's eldest son Malcom is appointed as the rightful King of Scotland later, after his father. He also proves as a source of trouble for Macbeth in achieving his great ambition as his father, King Duncan, declares him as his heir, and as Duke of Cumberland. Macbeth thinks this as an obstacle to his own ambition. Here he finds that thinking of evil ways to ensure that the witches' prophecies come true. Here is shown about King Duncan's decision in appointing his eldest son, Malcom, as the rightful heir of Scotland. After knowing about King Duncan's death, Malcom Donalbain - his brother, prepare themselves to avoid from their land in order to share their own, for, their lives must be in danger too.

Malcolm a Feeling Less Man: We come to know that Macduff is a person without the natural feelings of humanity. All his family, his wife and children, are murdered by Macbeth's order by hiring murderers to do it because of his flight. Macduff is a careless man who dares to leave his wife and children without thinking their safety in this case. After having known about the murder of his family, Macduff cannot believe that a crime so purposeless is possible.

Malcolm's Fight to Kill Macbeth: To return in peace to his own country, Malcom has organized an army with English assist to fight against the evil, Macbeth. Macduff, one of the Scottish noblemen, has also ran to England to help his army to take revenge against Macbeth, who has murdered all his family after his leaving from Scotland. Macduff, the chief of the instrument which Malcom can obtain the throne of his father, King Duncan, and he behaves with good sense, bravery, and nobleness of nature. He doubts Macbeth as the murderer of King Duncan, for, Macbeth has admitted that he has murdered the king's guards in king's room.

Due to his suspicion to Macbeth, Macduff leaves his own land and then goes to England. He has left his wife -Lady Macduff and children in Scotland and his wife cannot understand his flight. Rose, one of the Scottish noble men, tries to convince her that her husband has left for the noble reason of the country and implies that he is in England to allocate forces to oppose the tyrant, Macbeth and this is Macduff's ambition.

Finally, Macduff meets Macbeth in a hand-to-hand fighting, to show that the words of witches concerning Macbeth's safety are worthless. Finally, Macduff was able to kill Macbeth in a hand-to-hand fighting and the king's eldest son Malcom, is declared the rightful King of Scotland. Malcom has succeeded to fulfill his ambition in this case. As the new king, we come to see that Malcom goes on to give some examples of the things, which are to be carried out; by this way, he shows that he intends to rule wisely and well. Macduff tells Macbeth that his mother did not 'bear' him, for, he was taken from his mother's womb before the due time of birth, and they fight until Macbeth is killed.

CONCLUSION

Thus, ambition for power is the main theme of Shakespeare's Macbeth. A person with a great ambition to fulfill but using evil ways to reach will destroy his or her own life finally. The same happens to Macbeth and his wife, Lady Macbeth. Macbeth with great ambition to be a king as the witches prophecies and encouraged by his natural event (his rise to power as a soldier). However, he was unable to find the best way in reaching his ambition except doing an evil way, through a murder. His wife, Lady Macbeth, is also ambitious like her husband. She always forced him to behave in the evil way, for there is no other good chance for them. Then, they did the crime together by murdering the king and Macbeth succeeds as the new

King of Scotland. Because of their evil way to achieve their ambition, they were forced to live in fear and suffering.

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SUPPLY CHAIN MANAGEMENT

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ABSTRACT

The current study aims to find out the scenario about the supply chain management. Supply chain management or SCM is the technique or list of techniques that is used to manage the flow of goods and services and includes all processes that transform raw materials into final products. It includes active rationalizing of a business's supply-side activities to enlarge customer's satisfaction and gain an advantage over other competitors. Supply chain management is an expansive, complex process that relies on each link -- from suppliers to manufacturers and many more -- to function smoothly. Because of this, effective supply chain management also needs change management, collaboration and risk management to establish alignment and communication between all the units. In SCM it is necessary to co-ordinate the logistics of all aspects of the supply chain which consists of five parts: the plan or strategy, the source (of raw materials or services), manufacturing (focused on productivity and efficiency), delivery and logistics, and the return system (for defective or unwanted products).

There are many students that are unaware about the effective management of the supply chain and often confuse them with Logistics. Hence, the researcher feels to study on the awareness of the supply chain management.

Keywords: raw materials, rationalizing, expansive, risk management, alignment, communication, supply chain etc.

INTRODUCTION

There are so many different stages of Supply Chain Management and for proper alignment and function each entities in the most streamlined and cost-effective way possible. In this emerging market there are a lot of challenges that are being introduced due to growing rivalries, outsourcing, etc. Current study aims to study on the awareness about supply chain management.

Supply chain management is that the organization of the movement of goods and services and comprises all methods that alter raw materials into finished products. It includes the lively rationalization of a business's source side actions to exploit consumer worth and improvement a modest benefit within the market. SCM represents an attempt by suppliers to develop and implement supply chains that are as efficient and economical as possible. Supply chains cover everything from production to development to the knowledge systems needed to direct these undertakings.

HOW SUPPLY CHAIN MANAGEMENT WORKS?

Typically, SCM attempts to centrally control or link the assembly, shipment, and distribution of a product. By managing the availability chain, companies are ready to cut excess costs and deliver products to the buyer faster. This is frequently done by observance snigger control of inner records, internal manufacture, supply, trades, and consequently the inventories of company sellers. SCM is predicated on the thought that almost every product that involves market results from the efforts of varied organizations that structure a supply chain. Although supply chains have existed for ages, most companies have only recently paid attention to them as a value-add to their operations. In SCM, the availability chain manager coordinates the logistics of all aspects of the availability chain which consists of 5 parts:

- The plan or strategy
- The source (of raw materials or services)
- Manufacturing (focused on productivity and efficiency)
- Delivery and logistics
- The return system (for defective or unwanted products)

The supply chain manager tries to attenuate shortages and keep costs down. The work isn't only about logistics and buying inventory. Consistent with Salary.com, supply chain managers, "make recommendations to enhance productivity, quality, and efficiency of operations." Improvements in productivity and efficiency go straight to rock bottom line of a corporation and have a true and lasting impact. Good supply chain management keeps companies out of the headlines and faraway from expensive recalls and lawsuits.

Supply Chains: A supply chain is that the connected network of people, organizations, resources, activities, and technologies involved within the manufacture and sale of a product or service. SCM oversees each touchpoint of a company's product or service, from initial creation to the ultimate sale.

LITERATURE REVIEW:

There are several studies on Supply Chain management and its implications in India. Few of them are highlighted as:

1. **Burgess, K., Singh, P. and Koroglu, R.** in SUPPLY CHAIN MANAGEMENT: A STRUCTURED LITERATURE REVIEW AND IMPLICATIONS FOR FUTURE RESEARCH explains that the field is a relatively “new” one; several disciplines claim ownership of the field; consensus is lacking on the definition of the term; contextual focus is mostly on the manufacturing industry; predominantly “process” conceptual framing prevails; research methods employed are mostly analytical conceptual, empirical surveys or case studies; the positivist research paradigmatic stance is prevalent; and theories related to transaction cost economics and competitive advantage dominate.
2. **Beske, P. and Seuring, S.** in PUTTING STABILITY INTO SUPPLY CHAIN MANAGEMENT explains five key categories which are of high importance for the sustainable management of supply chains: orientation toward SCM and sustainability, continuity, collaboration, risk management and proactively. In a second step, the authors describe distinctive practices which allow organizations to follow the goals formulated in the five key categories. Finally, they highlight issues preventing companies that follow a rather “conventional” approach to SCM to reach the level where it can be called SSCM, i.e. how to reach sustainability performance in SCM.
3. **Varsei, M., Soosay, C., Fahimnia, B. and Sarkis, J.** in FRAMING SUSTAINABILITY PERFORMANCE OF SUPPLY CHAINS WITH MULTIDIMENSIONAL INDICATORS explains that Development and assessment of sustainability in supply chains are being increasingly incorporated as part of supply chain management today. This paper presents a multidimensional framework which can serve as a tool for research scholars and supply chain practitioners in identifying and assessing various economic, environmental and social performance indicators.
4. In the year 2016, after understanding the importance of Supply chain management to its business, Walgreens Boots Alliance Inc. placed focused effort on transforming its supply chain. The company functions as one of the largest pharmaceutical chains in the United States of America and needs to effectively manage and amend its supply chain so it stays ahead of the changing trends and continues to add value to its bottom line.

AIMS AND OBJECTIVES OF THE STUDY

- a. To provide a precise explanation about Supply Chain Management.
- b. To study about the elements of SCM.
- c. To study about the basic scenario in which an effective SC can bring tremendous change.

HYPOTHESIS

- a. There is not clear picture of about Supply Chain Management to the all sectors.
- b. Students, employees are not having proper knowledge of about the basic ideas and their implications on SCM.

METHODOLOGY

Data was collected from several books and Internet. The list of the papers is mentioned in the references.

RESULTS OF THE STUDY

The Supply Chain Management or SCM is a strategic plan on how to invest in your venture and produce the result that is desired by the market. There are FOUR elements of SCM and they are discussed below.

The FOUR Elements of Supply Chain Management are

Element One: Integration

Like all the ventures, planning is essential for prolonged success. Part of good planning is setting up incorporation, which means that everyone involved in the manufacturing process communicates and collaborates. Instead of functioning in separate splits, integrated teams work alongside to make sure the product gets to the distribution phase. This improved communication reduces errors that cost time and money. Since

everyone is working together, leaders can also monitor the entire operation and easily locate areas along the supply chain that can be improved.

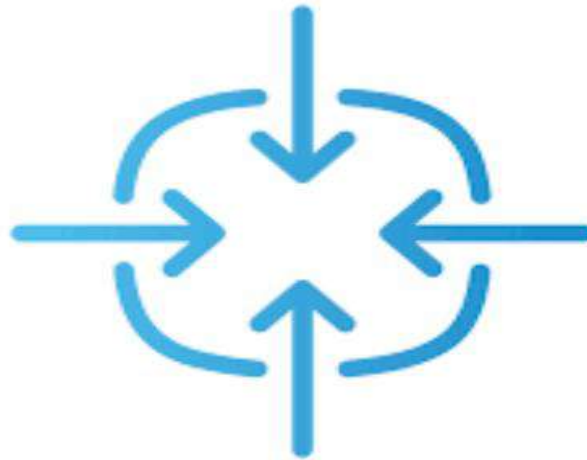


Fig-1: Interactive diagram of Integration

Element Two: Operations

Like strategy is important to keep a strong supply chain, everyday operations are the pillars of the work manufacturers. Managers monitor the work being performed and make sure everything goes as planned. Many of today's manufacturers operate using lean manufacturing strategies, which means that processes are constantly evaluated to identify where things can be done more efficiently. Whether it's monitoring equipment to make sure you're getting the most out of it or cutting back work hours when production slows down, the operations team can bring major improvements to the supply chain.

Element Three: Purchasing

The purchasing area of supply chain management ensures a company has everything it requires to manufacture products, including raw-materials, supplies, tools and equipment. This means often staying ahead of the process so that you have everything you need on hand well before you need it. Without the purchasing personnel fit for role, you could find that you end up running out of the materials you need, delaying production, or that you overbuy and strain the company's budget.



Fig-2: Process of purchasing

Element Four: Distribution

The supply chain ends when the product lands on store shelves where customers can purchase them. But getting products there means having a well-planned shipping process. Most companies today use logistics software to manage their shipments, whether they handle it on their own or outsource shipping to a third-party vendor.

When handled correctly, products are moved expeditiously from the warehouse to the consumer.

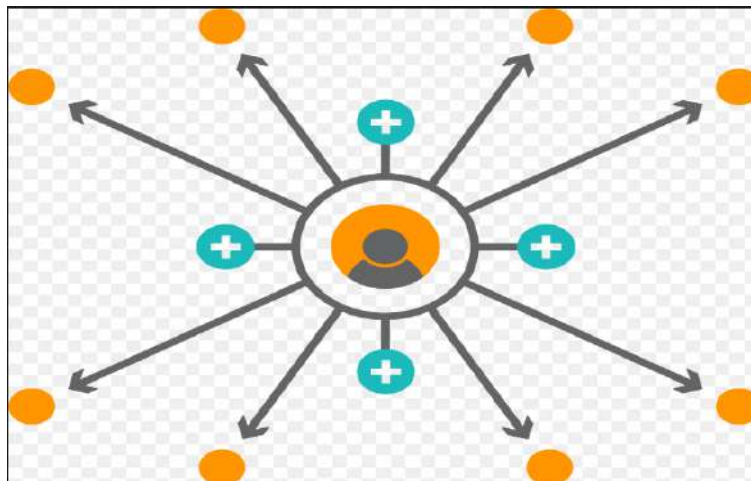


Fig-3: Distribution of goods and services

FINDINGS

1. The SCM framework offers help to managers in their choice of sustainability performance measurement and management approaches.
2. The SCM framework helps industrialist in initial exploration of trade-offs among economic, environmental and social performance of supply chains, which, in turn, could assist them in creating a business for sustainability.
3. The SCM Framework helps an upcoming Industry to identify its shortcomings as an institution and helps them to overcome that.
4. In many cases the upcoming firms don't take SCM into account and face a setback.
5. A clear picture of what SCM is and how it affects the industry as well as the market.

CONCLUSION

The current study resulted that supply chain management in an organization needs to work for the enhancement of the utilization of their all sources. There are several cases in which the students as well as upcoming industries are not sure about the various strategies that they should implement in order to boost the revenue along with minimizing the costs. But it has been a matter of study and experience that has led to success. SCM helps in understanding the market needs and enhances the chances of profit for the industry. Therefore, everyone knew solely that there are some of theories required for the supply chain to individual or group at work

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DEVELOPING READINESS IN FUTURE GENERATION ABOUT SUSTAINABLE LIVING THROUGH VARIOUS ACTIVITIES

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ABSTRACT*“We have a single mission to protect and hand on the planet to the next generation.”**By - Francois Hollande.*

Rightly mentioned in quote given by Francois Hollande that our planet need to be protected and handed it over to the next generation for which the educators of today's should develop a sensitivity of climate change in the future generation for sustainable living. The researcher is a teacher in the secondary school and work with the NGO Srushtigyan on the sustainable living projects and uses these various activities for the students from grade 6th to 9th. The present study involves developing readiness in future generation about sustainable living due to climate change. The total number of students involved in the study is 460. The researcher includes these activities in the school curriculum. Month wise the themes are decided and the activities are planned accordingly for every grade. Community and parents involvement is also a part of these activities. The various themes are as follows- 1) Water Conversation. 2) Bio-diversity. 3) Energy conservation 4) Waste Management 5) Our weather station. 6) Organic Farming. 7) Climate Friendly Food 8) Field visits. 8) Celebration of important days related to environment or climate change. The various activities are E- waste bank, celebrating of various festivals, Dramatization, workshops and talks and many more. The sense of responsibility among the students towards the planet earth is the main aim of planning these activities which brings about change in the society. This will help students to think globally and act locally.

Keywords- Sustainable living, climate change activities.

INTRODUCTION

In 21st century Science & Technology plays a vital role in the development of the countries at the same time it has also created threat for 'The Mother Earth' due to climate change. Climate change refers to change in the earth's climate, especially the gradual rise in temperature caused by high levels of carbon dioxide and other gases. The increase in the level of carbon dioxide and other gases is due to human activities like industrialization, deforestation, burning of plastic and other waste and many more such activities for their own progress.

So to save our planet and for sustainable living of the future generation the researcher finds the need to develop readiness among the future generation about sustainable living by including various activities in the curriculum. The activities are planned keeping in mind the following **objectives** –

- 1) Students will be able to understand the effect of climate change on Global Platform.
- 2) Students will be able to develop the readiness for sustainable living and fight against the climate change.

Learning Outcomes of these activities are following-

- 1) Students will apply their knowledge to create sustainable environment.
- 2) Students will apply their knowledge to create awareness among the communities and societies.

Skills that will be developed in the students through the activities are the following-

- 1) **Critical thinking & Problem Solving** – Students starts thinking on the environmental issues critically and try to find the solution on the problems faced by them due to climate change.
- 2) **Communication & Collaboration** – Students learns to discusses, research various things related to environment and global warming and share them with their friends and others which help them to communicate and even collaborate with others.
- 3) **Creativity & Imagination** – Students used their creativity and imagination while making best out of the waste product and recycle the waste and reusing them again in their day to day life.
- 4) **Digital Literacy** – students while collecting information and while conducting research make use of the ICT.

5) Student Leadership & Personal Development – Students while performing various activities work in the group and develop leadership quality among themselves.

6) **Citizenship** – As a responsible citizen their every steps or act is for the betterment of the society and the world as a whole towards the environment.

7) **Readiness to develop sustainable living** – Students always shows the readiness to develop sustainable living and fight against climate change.

The researcher tries to co-relate every possible lesson with the environment as she is a Math & Science teacher. The school is also the part of the project which is headed by NGO Srustigyan ‘ The Climate Action And Young People Mumbai Stockholm’ and the researcher is also a part of it since 5 yrs. The researcher also went for the teachers training workshop organized by the NGO Srustigyan. The activities are planned with the help of NGO Srustigyan , colleagues, students and with the concern of school authorities. The parents, Teachers & the nearby community is always a part when such activities are conducted. Even the students, Teachers from other schools were also invited for the workshop, Exhibitions, Talk shows and various other competitions. These help to spread awareness among the community about the steps taken for the sustainable living and to save ‘The Mother Earth’.

The main themes for the year are planned in the beginning of the year and then month wise the activities are conducted in the school. Some of the common activities which can be conducted under all the main themes are- Dramatization, Poster making, Wall Paintings, Research on any particular theme or sub-theme, Talk show, Songs & poems writing & reciting, Rally, Road show, Visits to various Places, Workshops, Powerpoint presentation and many more.

The main Themes and the activities under the Sub-theme are as follows-

1) Water Conservation

a) Water Festival-The theme was decided to celebrate water festivals like Disaster Management due to water logging and the clouds which bring rains in the country or States. The 3D- models were made and displayed & also explained by the students. b) Creating Artificial Rain. c) Mythological stories related to monsoon arrival (Kalidas story on arrival of monsoon). d) Small tips to save & conserve water. e) Do's and Don'ts during monsoon. f) Water Games and Quiz. g) Rain water harvesting plants visit in nearby areas and to understand it's working.

2) Bio-Diversity

1) Bio-Diversity Week Celebration- During this week various common activities were conducted as mentioned above & along with that many more activities were done they are as follows-

a) Leaf Munchers- The leaves of different plants are collected and which insect dependent on the particular leaf for the food is found. b) Life Cycle of various insects, birds & animals. c) Identifying the different types of leaves. d) The students researched about “The Migratory birds” and problems faced by them due to climate change. e) The list of Endangered & rare species of animals, plants & birds was made by the students. f) Visit to Botanical or Butterfly gardens & nearby National parks was done .g) The ecosystem of various Flora & Fauna on the earth was discussed by the students. h) Terrarium- Students learnt to make the open or close Terrarium to save some plant species.

3) Energy Conservation

a) Celebrating “Earth Hour Day” by keeping lights off in the school & in the house for an hour b) Students learnt to make Solar Lamp, Chargers, Vehicles, Robots and many more things using solar panels. b) The study of ” The Light Pollution” and its effects on environment & human health was studied by the students and the mind maps were made on the same. c) The Best Energy Saver Child or Class Award- The electricity bills of each individual child for the year is collected and then one who has spent less electricity is awarded as ‘The Best Energy Saver Child’ and the class who saves electricity when there is no need in the school is also awarded as “The Energy Saver Class” d) The Individual Energy Calculator- each individual can calculate on its own how many watts of electricity spend by them daily by using the chart of appliances and the watts used per hour. The students calculated the electricity used by them in a day using the chart.

4) Our Weather Station

The various instrument like Thermometer, Barometer, Hygrometer & Rain Gauge are used by the students in the school and they keep the record of maximum and minimum temperature of everyday, The humidity and air pressure of a particular place at a particular time are recorded and during monsoon by using rain gauge they

record the daily rainfall. All the records are maintained and presented graphically and then the comparative studies of the same is carried out by the students to know the effect of climate change on the environment

5) Waste Management

a) E- Waste Bank- All the electronic waste was collected by the students and given to the companies who dispose E- waste safely. b) Best out of waste-Students made articles like flower vase using plastic bottles, book binding, door danglers, mattresses and many more. c) Preparing Manure out of wet garbage and by using tiffin waste in the school. d) “Eco- Friendly Models “ from the waste and E-waste were made by the students. e) Students prepared birdfeeder and hanged them in front of their class for the bird

6) Organic Farming

a) Kitchen Garden- Students grew various plants of vegetables like tomatoes, coriander , curry leaves and many more in small unwanted jars or containers and kept them in their house. b) Layered Farming- Students grew vegetables or leafy vegetables in the three layered arranged containers. c) Seed Bank- Students collect seeds of various fruits, vegetables & crops and exhibit it, also learnt how to preserve seeds in the seed bank. d) soilless planting – Students grew pulses crop without soil in a small container and even observe the changes in their growth. e) Soil- Students learnt about the various types of soil, its water holding capacity & type of crops grown in the soil. f) Farm visit- Students visited to nearby farm and talked with farmers about organic fertilizers, organic pesticides and also learnt the method of Grafting. g) Terrace Garden- The school is having terrace garden where students grow many plants and take care of them.

7) Climate Friendly Food

a) Wild vegetables Festival – Students researched about the wild vegetables that are grown in the monsoon season, their nutritive & medicinal values. The traditional recipe of cooking these vegetables and then giving it modern touch and preparing various dishes out of it were discussed with the parents and the teachers. b) Millets – Students learnt about the various millets, its nutritive & medicinal value and discussed it with their friends. The various recipes made out of it were shared by the parents and the teachers. c) Carbon Foot Prints- The carbon foot prints of the various eatables consumed by the students were calculated. d) Cooking Competition – The recipes made out of wild vegetables or Millets or any healthy food with its nutritive value were presented for the competition the best recipe was awarded. e) Healthy Week – In school the students brought healthy food for a week in their tiffin and celebrate the whole week.

The above activities has develop among the students the following things

- 1) Student develops the habit of conserving water resources and try small steps at their own level to save water.
- 2) Students understood the importance of ecosystem and started respecting the flora and fauna on the earth. They started growing plants and trees.
- 3) Students learnt to conserve the energy resources and started making use of solar energy.
- 4) Students through their own weather station understood the change in the climate its cause and effect on human life.
- 5) Students learnt the concept of 3R's (Reduce, Reuse & Recycle) and made the best use of the resources available.
- 6) Students learnt about the method of Grafting and to make use of organic fertilizers for growing crops. They even learnt the concept of kitchen garden and also learnt to identify the seeds.
- 7) Students develop the habit of eating healthy food which will help them to increase their immunity and fight against the climate change.
- 8) Students develop a love for the nature and act as responsible citizen to save the planet earth.

The researcher believes that every single step or act of an individual child or Teacher will bring about the change in the community, society and the world. All these activities will bring about the change in the outlook of the students and individual towards the environment and help them to develop the readiness to fight against the climate change and develop a sustainable environment for living.

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AN INTEGRAL PART OF TEACHING: E-LEARNING

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ABSTRACT

The field of e-learning is new and developing fast. The advantages are clearly laid down, and therefore, it is obvious for academic institutions around the world, including corporate private organizations to take plunge in the e-learning bandwagon. This article covers the importance of e-learning in teaching, relation between ICT and e-learning and it also covers barriers of e-learning.

INTRODUCTION

In 21st century, competencies in education are seen more in line with Information Communication Technology (ICT). According to Dr. Abdul Kalam, the whole purpose of education in a country is to develop and enhance the potential of human resources and progressively transform it into a knowledge society. Every nation wants to produce students who ultimately become the knowledge workers in their own economy to be global citizens. There is a need for change in each and every sphere of the society in tune with ICT. It has the ability to enhance every type of development in the society. Education is the only means to incorporate ICT in the developmental aspects of the society. ICT can be used as a tool to improve the quality of education for preparing the society and its manpower to face the challenge of future. It requires the proper manpower to handle and use ICT in the schools in a proper way. The emerging technologies have the potential to radically transform the education system in India. Only a creative and enthusiastic teacher can incorporate the modern developments of ICT in the classroom very successfully.

The field of e-learning is new and developing fast. The advantages are clearly laid down, and therefore, it is obvious for academic institutions around the world, including corporate private organizations to take plunge in the e-learning bandwagon. However, the field is yet to mature and have its own theoretical basis (Michaelson, 2003; Nichols, 2003). There are many different connotations of e-learning, and individual researchers define the subject in their own context. To some, e-learning is electronic learning, and thus, covers learning through all electronic media including audio, video, radio, television, etc. For others, it is the use of computer, the Internet and the web. Some of the definitions of e-learning and its related terminologies are as follows :

Web-based Instruction

It is a “hypermedia based instructional programme which utilizes the attributes and resources of the World Wide Web to create a meaningful learning environment where learning is fostered and supported” (Khan, 1997).

Virtual Learning

The educational process of learning over the Internet without having face-to-face contact is known as virtual learning (French, Hale, Johnson and Farr, 1999). However, for some virtual learning may also include tele-learning.

Online Learning

It is synonymous to web-based learning where learning is fostered via the WWW only, in an Intranet or Internet. Mishra (2001) calls it as the new generation in the evolutionary growth of open, flexible and distance learning.

E-Learning

The term e-learning covers a wide set of applications and processes including computer-based learning, web-based learning, virtual classroom, and digital collaboration (WR Hambrecht Co, 2000). However, the term e-learning is becoming widely accepted as a substitute for online learning and web-based learning

E-LEARNING AND ICT

The question posed was how ICT relates to e-learning. UNESCO uses the term *ICT* or information and communication technologies to describe: the tools and the processes to access, retrieve, store, organise, manipulate, produce, present and exchange information by electronic and other automated means. These include hardware, software and telecommunications in the forms of personal computers, scanners, digital cameras, phones, faxes, modems, CD and DVD players and recorders, digitilised video, radio and TV programmes, database programmes and multimedia programmes.

In so far as ICT include hardware, software and telecommunications, ICT is seen to be the means to support student learning via electronic media. E-learning, then, is the growth in students' understanding and knowledge when they utilize ICT in instructional settings. Thus in the context of teacher development – both the initial training of teachers and their continuing professional development – e-learning for teacher development includes all the courses, workshops and other activities, formal and informal, where student and practicing teachers learn about integrating ICT across the curriculum to support student learning.

E-learning, then, is a useful term because it places the focus where it should be – jointly on pedagogy and the new information and communication technologies. It embraces learning by ,with and through ICT. The term itself – *e-learning*, or learning via electronic media – nicely combines in its name all these concepts.

E-learning is also called Web-based learning, online learning, distributed learning, computer-assisted instruction, or Internet-based learning. Historically, there have been two common e-learning modes: distance learning and computer assisted instruction.

Distance learning uses information technologies to deliver instruction to learners who are at remote locations from a central site. Computer assisted instruction (also called computer-based learning and computer based training) uses computers to aid in the delivery of stand-alone multimedia packages for learning and teaching. Multimedia uses two or more media, such as text, graphics, animation, audio, or video, to produce engaging content that learners access via computer. Blended learning, a fairly new term in education but a concept familiar to most educators, is an approach that combines e-learning technology with traditional instructor-led training, where, for example, a lecture or demonstration is supplemented by an online tutorial. Faculty, administrators, and learners find that multimedia e-learning enhances both teaching and learning. These advantages can be categorized as targeting either learning delivery or learning enhancement. Learning delivery is the most often cited advantage of e-learning and includes increased accessibility to information, ease in updating content, personalized instruction, ease of distribution, standardization of content, and accountability. Accessibility refers to the user's ability to find what is needed, when it is needed. Improved access to educational materials is crucial, as learning is often an unplanned experience. Updating electronic content is easier than updating printed material: e-learning technologies allow educators to revise their content simply and quickly. Learners have control over the content, learning sequence, pace of learning, time, and often, media, which allows them to tailor their experience to meet personal learning objectives.

How to make e-learning more effective:

Provision of the listed points will improve E-learning effectively.

- Availability of hardware (particularly computers)
- Faster Internet connectivity/improved bandwidth
- Improved software
- Appropriate policies favoring e-learning
- Provision of technical support for e-learning at a range of scales
- Lower prices for connectivity
- Availability of reliable electricity
- Appropriate content in appropriate languages
- Awareness raising about the value of e-learning
- Improved training for teachers in e-learning at all levels.

Benefits of e-learning

1. E-learning is important for education because it can improve the quality of the learning experience, and extend the reach of every lecturer and tutor.
2. E-learning can help remove barriers to achievement, by providing new and creative ways of motivating and engaging pupils and learners of all abilities, enabling and inspiring every one to attain their educational potential.
3. E-learning can support learning by offering differentiated learning, particularly for those who need support in literacy, numeracy and ICT.

4. E-learning offers a wide range of tools to enable teachers and learners to be innovative, creative and resourceful in all learning activities. Teachers and learners can easily customize digital learning resources to suit pace and level, appropriate to any learning style and ability.
5. E-learning creates on-line communities of practice. The Internet can bring learners, teachers, specialist communities, experts, practitioners and interest groups together to share ideas and good practice.
6. E-learning can provide an individualized learning experience for all learners, including those who are disadvantaged, disabled, exceptionally gifted, have special curriculum or learning needs or who are remote or away from their usual place of learning.
7. E-learning can facilitate wider participation and fairer access to further and higher education by creating the opportunity to start learning and to choose courses and support according to the learners' needs.
8. E-learning provides personalized learning support through information, advice, and guidance services. It can help learners find the course they need, with a seamless transition to the next stage of their learning, including online application or enrolment and an electronic portfolio of their learning to take with them.
9. E-learning provides virtual learning worlds where learners can take part in active and creative learning with others through simulations, role-play, remote control of real-world tools and devices, online master classes, or collaboration with other education providers.

E-learning is a large and growing market with great potential in education. (Means et al, 2009). In his empirical study from 1996 and 2008 concluded that students using e-learning performed better than students who did not use e-learning. The students who performed best were those who received blended learning.

BARRIERS TO E-LEARNING

E-Learning has steadily grown since its inception in the 1990s. Many students have attested to the benefits of e-learning such as the convenience and accessibility to online learning resources and communities. However, the growth rate of e-learning has been slower than expected despite these benefits. Certain obstacles were underestimated during the inception of e-learning that has some students thinking twice about going through an e-learning program.

People - According to a study done in the United Kingdom in 2009, the most significant barrier to successful implementation of e-learning has been the overall reluctance of people to use the service. For professors, they are reluctant to pick up this technology because online-course professors are effectively quarantined in their own homes or offices as they teach. Courses tend to also be made for a mass audience that forces professors to broaden and generalize their content. Students indicated they preferred the traditional versions of classes due to the lack of adequate learning support online; there can still be a lack of one-on-one sessions with professors or customized materials for each course.

Cost - During the 1990s, online costs were relatively low as the Internet was rapidly growing in popularity and use. Based on this idea, universities thought that the e-learning business model was a highly distributable, low-cost option for distance learning. However, universities later found out that the upkeep of this technology was relatively higher than other online tools. Constant 24/7 support had to be given to students studying in different time zones, and buying research material for mass distribution to students was very expensive. Schools are now more hesitant to adopt e-learning courses because of these expenses.

Technology - The technology for e-learning is not yet perfect. Certain e-learning suites have compatibility issues with some browsers. E-learning program access is also restricted in certain countries where networks are not as advanced or are highly privatized and monitored. Lastly, the IT structure of e-learning suites is not yet mainstreamed--the user interface is constantly upgraded and varies greatly across different suites, which makes a high learning curve for potential users.

Credibility - The issue of credibility is a psychosocial barrier in the minds of students and professors. Academia as an industry is traditionally hesitant in adopting frontier technologies such as e-learning; academics have questioned dependability of these new methods and the accuracy of the people behind content. Although there is a growing acceptance rate, instructors and students remain cautious toward schools that deliver rapid changes to their curriculum.

CONCLUSION

The teaching- learning technology has progressed from classroom lectures to seminars to video discs and CD-ROMS to web-based training and wireless communication through various learning objects. Learning objects

include CDs, electronic books and electronics journals: audiovisual aids etc. The development in computer technology has resulted in e-learning. E-Learning is considered a more effective way of teaching to a large group of students, there by providing consistency in educated qualities.

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A CRITICAL LITERATURE REVIEW ANALYSIS ON FACTORS AFFECTING EMPLOYEE RETENTION STRATEGIES IN IT FIRMS

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ABSTRACT

Information Technology has become the foundation to all the branches of knowledge. Be it Health, Education, Technology, Planning, Finance, Legal Domain, name any field it has relationship with IT. Education and Employment are directly under the influence of IT. Employees are the back bone of any industry or organisation and more so in particular IT Industry. The performing employees have to stay in the organisation and then only it is possible to attain the targets and goals. Otherwise it will have devastating effect on the organisation due to high attrition rate and hence enterprises have to retain the performing employees through suitable retention strategies. But retaining the employees depends on so many factors such as salary, growth, learning, autonomy and so on. In the present article efforts are made to investigate the factors that are affecting strategies for retention of employees' and also providing solutions to overcome the problem. The methodology adopted for this article is "Literature Review Analysis" that is discussion and consolidation of views of certain scholars and IT professionals from which inferences are drawn.

Keywords: Key Performers, Retention Strategies, Employee Turnover, Influencing factors.

INTRODUCTION

The Information Technology Sector occupies strategic place in Indian Economy. The IT Sector is actually instrumental in placing the name of India amongst developing countries. But the IT sector is facing serious problem due to high attrition rate. There are number of factors influencing the employees such as unfair salary, lack of career development opportunities, poor appraisal system, lack of employees engagement, insufficient training and development, job dissatisfaction, lack of motivation, low morale, lack of team building, poor employer-employee relationship, lack of adequate autonomy and so on. The Employees are quitting at the slightest temptations, but before analysing the factors affecting the 'Employee Retention Strategies', it is essential to know the role played by IT Sector in India. Here is a bird's eye view of the achievements, contributions and market size of the IT Sector.

During 2017-18 about 200 Indian IT firms were functioning across 80 countries and it generated \$167 billion revenue representing a growth of 7.8 per cent for export revenues and 10 per cent in domestic revenues. Contribution of IT Sector to Indian GDP has risen from 1.2% in 1997-98 to 7.8% in 2017-18. ITeS and IT Companies have set up over 1000 global delivery centres in about 80 countries across the world. India's IT and ITeS industry grew to \$181 billion in 2018-19. Exports from Industry increased to \$ 137 billion in F Y 2018-19 while domestic revenues (including hardware) advanced to US \$ 44 billion. Highest ever revenue generated by Indian IT firms at US \$ 181 billion in 2018-19. (India Brand Equity Foundation, June 2019)

The business organisations are employing Recruiters to hire the employees. They use all their skills to recruit the best of the talents and the organisation gets good employees and makes a new entrant to become fit for the job or the position. Does it mean to say that organisation has achieved its goal? Definitely not, it is now the real struggle starts. The people who have worked in the supervisory Roles know the problems. At the slightest temptation or pull the employee is ready to desert the present organisation. Once a good and performing employee quits, heart burning starts in that organisation. If a good worker comes to lime light by virtue of his hard work and talent, all the members in that particular industry wants to have that particular worker in their organisation. The words such as pulling, dragging and poaching have been used for creating impulses and tempting such employees. In a majority of cases the employees who get tempted and go to other organisation realises at a later stage that not much of a difference exists between the old and new job, but both employers and employees suffer from these moves (K Balaji Mathimaran & A Anandkumar, 2017).

The Information Technology Sector is facing a serious problem on account of employees. The employees who are young and do not have much experience change their jobs very often. The rate of turnover with respect to this group of employees having less than six months of service is around 80%, while the turnover rate is around 13.7% for employees having ten years or more of experience. Now an attempt has been made to analyse various

factors that influence employees' who have short experience. Before initiating the exercise it is important to understand the reviews given by the various experts and authors who published articles in this regard. (IBEF)

An article published in **'The Hindu' dated July 23, 2018** titled **"High attrition rate continues to be a bane for companies"** authored by Amritha Nair-Ghaswala reveal that "75-90 per cent of new employees will decide whether or not to stay in the job within the first six months of employment. Although high turnover costs may not produce recordable associated losses, many employers and HR professionals underestimate the high impact of hidden costs". According to experts and various authors, IT professionals who are working in Tier –II cities such as Mysuru, Hubballi and such other places are always looking to switch over to Tier –I cities due to various benefits. The purpose of this study is to analyse the various prominent factors which greatly influence in formulating retention strategies.

METHODOLOGY

The methodology used for this study is based on Secondary data published in various National and International journals and each article is thoroughly reviewed and inferences are drawn. However adequate discussions have been conducted with the experts, Heads of HR wings of big Information Technology Organisations and the retention strategies practised by them are gathered and analysed critically. Impetus is given to understanding of central ideas. Efforts are also made to identify points of differences. The common factors used for the various studies have been taken in to consideration for the purpose of analysis. Following table depicts the details of articles considered for this study.

REVIEW OF LITERATURE

1. Minu Zachariah (NOV 2012) A Study On Employee Retention Factors Influencing IT Professionals Of Indian IT Companies And Multinational Companies In India: The objective of the author is to compare the different aspects that impact the retention of IT professionals in Indian IT companies and Multinational Companies. On the basis of this, developing strategies to manage and retain the employees. The study is empirical in nature. In order to obtain the relevant information the author has suitably structured questionnaire. The different factors that influence workers to continue in the firm are congenial working atmosphere, utilization of modern technology, security for the job, compensations which are attractive, scope for learning, career development, and care for worker's needs. The author has concluded with the findings that there is no difference in the impact of factors that influence the employees of Indian IT companies MNC's. It clearly goes to show that the status of Indian IT companies is on par with MNC's.

2. E. Deepa & M. Stella (2012): 'Employee Turnover In IT Industry With Special Reference to Chennai City-An Exploratory Study' The objective of the study is to evaluate the provisions made for the safety of the employee, conditions of working available, whether the employees are satisfied from the employment? Find some ways to decrease attrition and thereby extend the services of the employees to the organisation. The methodology adopted descriptive wherein both primary and secondary have been utilised. The primary data consists of the facts and figures collected by simple random technique from both executive and nonexecutive employees numbering 250 through questionnaires. The different factors considered by the author are the economic conditions of the organisation, the activities carried out, the social behaviour and customs practised, the strengths and weaknesses associated with work, the targets are realistic or not, demographics practised, individual employee as a human being. The author concludes that if these factors are correctly implemented will help in reducing attrition.

3. Vibha Gupta (2013) :An Analysis of Attrition: Retention strategy for IT/BPO Industry : The objective is to analyse various elements that cause high rate of employee turnover. To find the ways to decrease the rate of employee turnover. The nature of study is exploratory and is directed towards reducing employee turnover in respect of IT and BPO sector. The employees who have left the organisation within one year in respect of IT sector and In respect of BPOs who are working for the organisation with less than one year job duration were being interviewed. Weightages are attached for measuring the importance of-different factors affecting retention. Better Remuneration and Career Prospects was assigned 20% weightage, Perceptions of training and resources were assigned 20% weightage, Shift Timings & Week-offs was also assigned 20% weightage and Organizational culture-was assigned 40% weightage. The outcome of the study shows that thirty per cent of the new employees who are young and have an experience of less than one year leave the organisation with an intention of pursuing further studies, the analysis has also revealed that it is essential to retain new comers because lot of money is spent for recruitment and training.

4. Sneha Mankikar (2013): The author opines that infant attrition is an indicator showing recent trends in IT Industry. The objective of the author is to elicit the nexus between infant attrition and the satisfaction of

employees, to find out what deficiencies cause the infant attrition, to establish correlation customs practised and infant attrition, to find the link between stress and infant attrition, to find the negative relationship between infant attrition and discrimination. The methodology adopted was Analytical and Descriptive, the plan of action was identification of features of the institution and community or the issue. In the study quantitative facts and figures are analysed. The factors dealt by the author are analysis of stress due to deficiencies in the job, mapping of competency, allotting of the jobs on rotation basis, giving training, not treating employees on par with each other, unrealistic targets. The author concludes that these aforesaid factors are the causes for infant attrition; however the job description discrepancy influences the infant attrition to a great extent.

5.Saakshi Kaushik & HarshitaVerma (2015)‘Attrition in “IT” Sector’: The objective of the author is to find the reasons for a high rate of employee turnover in Indian IT Sector, to examine the various factors that are responsible for employee turnover and to find some solutions for reducing the same. The author has administered the questionnaire comprising of twenty-one questions and data has been collected from seventy three respondents. Further the data has been tabulated and analysed with the help of SPSSversion.20. The factors considered for the study are congenial working conditions, career development opportunities, and bearable work pressures. The author has concluded that for reducing employee turnover the organisations are required to provide amenities where employees can reduce stress, recognise good work, congenial atmosphere to work, employees are to be treated with respect, career development opportunities. Besides this employees will be motivated to work in an organisation where the individual and organisational goals march hand in hand.

6. Nirmala.(2015) The employee retention strategies mainly deals with determining human behaviour and identification of apprehensions associated with it. It is a process by which workers are made to stay with organisation for longer durations. Low employee turnover is a sign of company’s prosperity and it lures skilled and efficient worker. If the performing employees leave the organisation it entails spending for recruiting and training them on board the most important thing here is time which is lost and company incurs losses. The objective is to find best retention practices for making employees stay with organisation for longer period of time. The methodology adopted by the scholar is as follows, in the first place permission is sought from employers and thereafter employees are informed about the purpose of study and then eliciting their opinion of the employees through questionnaire. The different strategies enunciated by the author are, management of performance, strategies relating to Motivation, strategies relating to job satisfaction, strategies relating to engagement of employees , strategies relating to career development, strategies relating to compensation, strategies relating to team building, , strategies relating to Employer-employee relationship. The scholar concludes that, with the constraints of time the organisations cannot afford to lose skilled employees and incur losses hence it is better to adopt good strategies and retain employees.

7. Manisha Purohit (2016): The objective of the author wants to describe the impact of high rate of attrition on the employers due to various factors and different strategies by which the employers can reduce high employee turnover in order to decrease the expenditures owing to attrition. The methodology is analysis of research articles of other authors and connected publications in journal. The explanation given is that high employee turnover is bad to the progress of the company and when skilled and experienced workers move away, the organisation has to manage the affairs with inexperienced newcomers. As for this analysis the factors that influence employee turnover in Wipro are economic condition, culture, features of job, unrealistic targets, demographics practiced by organisation. As for Infosys is concerned the factors that influencing the employees are incompatible remunerations, not having well defined career development programs. The author has concluded that the organisations are required to carefully implement the strategies relating to recruitment, training and development.

8. S.Vijayalatha(2016): The objective of the author is to inquire into the reasons for deterioration of the company, plan of action for retaining employees, to understand the skills adopted by the company for hiring and for giving compensation, to give ideas to ameliorate the strategies for retaining the employees. The different factors that are enunciated by the author for retaining the employees are Compensation, work/life balance,- foster trust and confidence in senior leaders ,provide growth opportunities benefits, encourage referrals, campus selection, feedback, Lower stress. The company is carrying on the business with the performing and skilled worker who is the real treasure; with the increase in their service they become more valuable, it is better to retain the experienced workers for making progress.

9. VandanaSharma (2016): The process where the employees are made to stay for a longer duration in the firm or till the end of the project is employee retention and in the present situation it is very essential. IT sector occupies a special place throughout the world. The new generation of employees is tech savvy and gives more importance to knowledge, they know how the market works, objectives to be achieved, with a lot of scope to

jump from one firm to other. Employees quit the job when the salary is not satisfactory, working environment is not congenial, the working hours are not flexible, not enough of freedom, unfavorable family conditions, limited opportunities for career growth, and an unfriendly peer group, superiors not cooperating with the employees. The scholar has concluded that IT companies are giving more impetus to salary and giving promotions, whereas the more attention is required to be given to career development.

10.Tamrisha Patnaik (2016): The objective of the study is to analyse the influence of employee turnover on the productivity and to find ways of reducing the same in software industry. The methodology adopted is collection of information from eighty eight respondents of IT organizations Situated in Bhubaneswar and is the same as that of Dash et Al (2008). The data was collected from a questionnaire suitably evolved for eliciting the opinion of employees on factors such Challenging Jobs, Empowerment/Autonomy Team, Incentives, Job Variety & Rotation, Cafeteria. The outcomes of the study show deviation from original Hertzberg theory. It shows that awards and recognition have become hygienic factors in respect of IT Industry. The important aspects for retention are team performance and hygienic factors.

11.R.Anbu Ranjith Kumar (2016):The objective is classified as primary and secondary. The primary objective is evaluation of the different aspects that impacts employee turnover. Secondary objective consists of apprehension of those factors, to learn about the different features that facilitate working atmosphere. Again the study focuses on various ways of reducing the employee turnover. A closed form of questionnaire is used for collecting primary data. The different factors considered by the author that influence employees are job expectations, work life balance, compensation and working hours. The author finally concludes that proper options are to be provided to the employees for growth in career, fair salary, challenging jobs for utilising the skills of employees, managerial counselling. The present circumstances do not give opportunities to take risk of losing working employees.

12. Raminder Kaur (2017): The objective is to study the prevailing retention strategies practiced by the IT firms, find the different models available for preventing the employee turnover, to find the various aspects that cause employee turnover, to study the different factor that controls the turnover. The methodology adopted by the author is qualitative research by putting strong question to a small number of respondents, sometimes individuals and sometimes to groups. The author has concluded that the important elements that prompt retention are making provisions for career development and giving good salary.

13.Syed Mansoor(Pasha-2017): The objective of the study is to analyse of talent and employee retention strategies prevalent IT Sector in India. The nature of the study is descriptive and secondary. Creating a culture, Framing Employees competency levels, employee engagement, reorganization, aligning employees with mission and vision Reward, Alternative work schedule, Training.The author opines that if the above strategies areimplemented properly it will boost the morale of the employees and reduce the turnover of employees thus helping the organisation to prosper.

14. M. Manoj kumar (2017): The objective of the researcher is to establish that if, practical knowledge of the different employers for controlling attrition are implemented properly, that can help in reducing the attrition level and thereby bring down the expenditures associated with it. The researcher has retrieved the information from the Financial Express which shows that retention strategies implemented by TCS are better when compared to Infosys. The methodology used by researcher is “retain” with three parameters i.e, Predict Modelling, Skill Development and Analytics. The factors considered for analysis are Assignment of Projects, Profile Relating to Career, Details relating to Education, Data related skills of employees. The author has finally compared the financial performance of TCS and Infosys with facts and figures establishing the supremacy of TCS.

15.SaketRungta(2018): The objective of the researcher is to verify the fact whether there is any difference in opinion about quitting the job between fresher's and employees having higher designations, to find the various reasons for employee turnover, to investigate the different factor that are responsible for employee attrition. The methodology adopted by the author is to obtain information in two ways that is by questionnaires one relating to Demographics, the second one is about the factors that cause attrition in IT Sector. The various factors considered for analysis are organisational culture, specification regarding job, relationship with peers, career development. The author concludes that there is change in the opinion between fresher's and the employees at higher levels for leaving the job.

RESULTS & FINDINGS

After examining the opinion and views of different authors the researcher has found that the following factors are very prominent in influencing the employees for employee retention as these factors are commonly verified by majority of the authors. These factors are briefly discussed as follows:

Unfair salary: The most important requirement is salary or remuneration which is very essential. The organisations have to take care and see that salary is on par with other organisation in the same industry .The organisations have to devise the salary inconformity with legal provisions.

Performance appraisal system: In the present working system appraisal of performance is an important tool in the hands of employer. The performance appraisal is important because on the basis of this employee get their promotions and other benefits. There are numerous ways of assessing the work of an employee. For government officials ACR is prescribed “Annual Confidential Report” the most important thing in the life of an official which can bring a laurel or catastrophe to an official.

Career development: Every individual wants to grow in their career and for this the organisation has to provide opportunities of growth. The connotation given to career development is multifaceted and multidimensional. The employee talents are to be given encouragement, the employee may be good at sports and the organisation should encourage this trait also, if the employee is good at learning, amenities are to be given to peruse further studies. In a nutshell the employee skills and talents should not be wasted.

Employee Engagement: It is generally considered as factor of top priority. Some authors consider employee satisfaction with their job as an indication of employee engagement .But employee satisfaction and engagement are two different aspects. The important attributes of employee engagement are good communication systems, learning and career development opportunities, empowerment, job rotation and so on.

Training and development: In order to keep pace with the advancement of technology the employees are required to be trained with latest know how and should be on par with other organisation in the same industry this aspect deserves utmost attention.

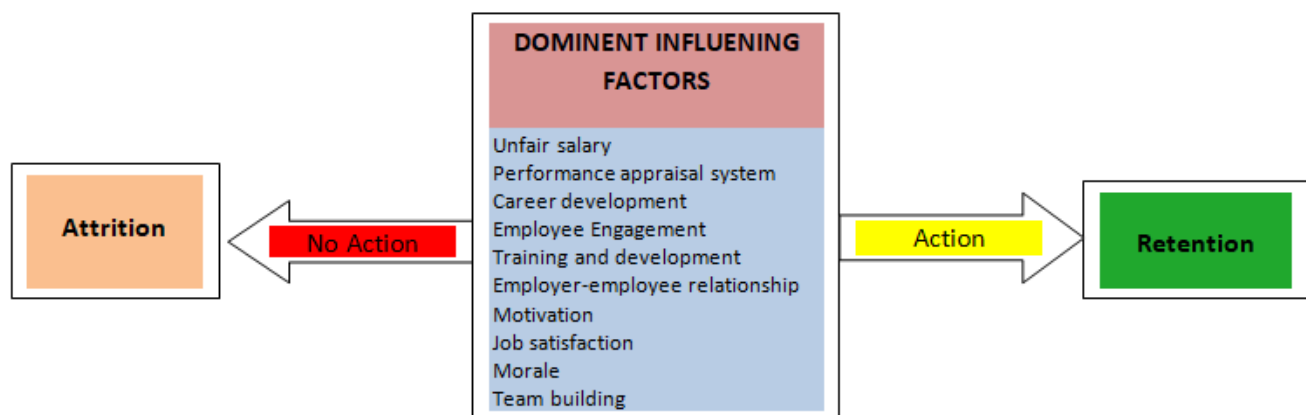
Employer-employee relationship: It is said in reputed organisation the employee is not leaving the job but leaving the boss. All the authors are unequivocal about this aspect. If the company wants to make progress the attitude towards workers is to be good. In any organisations the top brass becomes the role model and sets an example for others. At the same time the employees are also required to exercise maximum diligence in performing their duty.

Motivation: Inducing interest and an ambition to do the duty makes the employee continually committed to job, role. Motivation becomes the output of combination of conscious and unconscious factors. Employees get motivated due to various factors such as desire or need, compensation or reward set against a goal, to fulfil the desires of the individual as well as that of his peers.

Job satisfaction: Job satisfaction is another influencing factor, as an individual does the job or work with an intention of getting satisfaction. It has got two facets one positive, the other being negative. The employee gets satisfied when his work is appreciated by the superiors, gets satisfied when he gets commensurate compensation, gets satisfied when he is completely engaged. There are numerous wants which the employee wants to satisfy but the organisations have to fulfil some of them to keep the employee with the organisation.

Morale: The concept is more akin to the mental state of person which finds its expression in the form of confidence level, enthusiasm to work, being faithful to a cause or organisation. Morale flows from peoples understanding of righteousness or the values enshrined in their vision and mission of the organisation. When employees work gets recognised, when their work is rewarded the morale of the employees gets boosted. The top echelon should always make it appoint to improve the morale of employees.

Team building: It is imperative on the part of management always to encourage cooperation amongst the employees by treating everyone one on par with each other and dignity. IF the organisation is to make strident progress the top brass should build oneness among employees, they must encourage the allocation of projects to groups. Any achievement the group is to be praised and not the individual heading the team.

Graphical representation of Research Outcome

The various factors that make employees to stay connected with organizations or companies have been dealt with at large in this article. Each individual employee is unique. The psychoanalysis of each of the employee is to be kept as a dossier and the first aspect is to understand the mental orientation and interpret the same. If hiring is done without proper estimation of the employee's orientation or caliber it becomes a futile exercise because the new hire utilizes this opportunity as a dashboard to jump to another organization. Besides this, the people who are engaged in recruitment are required to be careful while giving more importance to talent and skill, they should also identify whether that talent and skill that stays with the organization with the available and affordable packages, failing which the company or the organization has to suffer.

CONCLUSIONS

The analysis of the important factors that affect "Employee Retention Strategies" made by some of research scholars and heads of HR divisions of some noted IT firms have been discussed in the previous part; it can be summed as follows. 'Employee Retention Strategies' are supposed to remove job stress. The job stress may be due to unfair salary, lack of career development opportunities, poor appraisal system, and lack of employees' engagement, insufficient training and development, job dissatisfaction, lack of motivation, low morale and lack of team building, poor employer and employee relationship. Benchmark industries give optimum benefits to their employees, other industries should take steps to be on par with Benchmark Industry. Sustained development and productivity are the two factors that help India to emerge as an economic power, it should be scrupulously followed. Challenging work assignment and favourable work environment are equally essential for retention. It is better to elevate someone in the organisation whenever a vacancy occurs from among performing employees. It is equally important to check whether new hires are culturally fit for the organisation. The Communication Effective Strategies are to be managed properly because communication is the key to management. Counseling and patronage, Diversification and Incorporation, World Class Training and Versatility, Continuous Improvement, Active Team Based Feedback are the most important tools and some are to be used in a proper manner for employee retention.

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HOLY QUR'AN AS FIRST AND FOREMOST SOURCE OF MUSLIM PERSONAL LAW

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INTRODUCTION

Holy Qur'an is the first and foremost source of Muslim personal Law. It is the last book of Allah (the most merciful) besides Vedas, Torah, Zabur and Injil. It is the eternal, uncreated, direct word of Allah (the most merciful) sent down for human being. It is revealed to the Prophet Mohammad (PBUH) as a guide for mankind. Holy Qur'an has a divine origin to be a direct revelation from Allah (the most merciful). It is actual word of Allah (the most merciful) in literal sense. That is why the Holy Qur'an describes itself in Arabic as Kalamullah, i.e. 'the Speech of Allah (the most merciful)'. Therefore, when quoting from the Holy Qur'an, a Muslim will say that 'Allah (the most merciful) says' so and so.

As Allah (the most merciful)'s Speech, the Holy Qur'an is linked to the Arabic language. Although there are many translations of the Holy Qur'an into other languages, they are not treated to be the Holy Qur'an itself. This is due to these reasons. Firstly, as per Islamic tradition, Allah (the most merciful) chose to reveal His last message in Arabic so, it is untranslatable. Secondly, translations do not capture the exact meaning and nuance conveyed in the Arabic language. The Holy Qur'an refers to it in this manner, 'Indeed, We have revealed it as an Arabic Holy Qur'an that you might understand'¹

1. Understanding the Holy Qur'an

The dictionary meaning of the word Holy Qur'an is 'worth reading'. It signifies 'the text which is read'.² The root word may also mean 'recitation', and/ or 'reading aloud'. The root from which Holy Qur'an is derived is qara'a means read or the text which is recited. In this light, to realise that the word ilqra or read, is the first word of the Holy Qur'an while revealed.

The Holy Qur'an consists of 114 chapters known as surahs. The actual number of sentences 6,236 Ayat for which capital 'A' is used in this article. The sentences/ verses are also known as ayah, which literally means 'sign' which were revealed to prophet Mohammad (PBUH) in piecemeal in a period of about 23 years from his 40th year of life.

Holy Qur'an teaches monotheism. The whole universe is created by a single divine power. It refuses to acknowledge 'deity' in anything else. It says- 'He is Allah, there is no Deity except Him, Knower of the unseen and the visible'.³

The Holy Qur'an informs that prophets have been sent to every human nation.⁴ Some of these prophets are known by name such as Adam, Noah, Abraham, Ismael, Isaac, Jacob, Israel, Moses, Aaron, David, Solomon, Aad, Hud, Thamud, Salih, John, Jonah, Jesus and last prophet Mohammad (PBUH) is seen by the Holy Qur'an as the Last Prophet⁵. This thing may unite the major communities of the world.

Holy Qur'an also talks about the Day of Judgement which is also known as the Hour (al-Sa'a);⁶ the Day of Judgement (Yaumuddin); The Day of Resurrection (Yaumul Qiyamah); The Day (al-Yaum); The Day of Decision (Yaumul Fasl); The Day of Distress (Yaumul Asir); The Overwhelming Event (al-Ghashiyah). The entire religious books talk about this. In case this concept is widely spread the entire Indian society may be united and pure.

Spreading good and denouncing evil is another crucial religious concept and urgent requirement of Islamic ideas regarding society and its functioning. It is based on a number of Holy Qur'anic dictum, such as e.g. 'And there must be among you a group calling to goodness, communicating the right and forbidding the wrong. Those are the real successful'.⁷

¹ Holy Qur'an S 12 : A 2² Wahiduzzama, 'Alqamusul Jadid' (Deoband: KH,2006) Arabic Urdu Dictionary³ Holy Quran S 59 A 22; S 3 A 18; S 2 A 225; S 112 A 1-4⁴ Id S 43 A 6⁵ Id S 4 A 163 ; S 45 A 16; S 3 A 84, S 7 A 65, S 7 A 773; S 6 A 64; S 33 A 40⁶ Id S 6 A 31; S 1 A 4; S 2 A 13; S 69 A 13-37; S 77 A 7-15; S 74 A 9⁷ Id S 3 A 104

2. Importance of the Holy Qur'an

Holy Qur'an is a divine revelation, representing Allah (the most merciful)'s speech. Its every word is considered infallible well as miraculous. The literary and linguistic style of the Holy Qur'an is believed to be without compare and miraculous. Thus, the Holy Qur'an occupies a unique position. It is the basis of the entire system of Islamic religion. For credible acceptance of religion and religious concepts and values must be present in the Holy Qur'an. Holy Qur'an also provide ethical, moral and spiritual concepts to Muslims in their every walk of life.

The Holy Qur'an contains unprecedented authority within the domain of Islamic Law. The interpretation of legal verses or ayatul ahkam is an important area for Muslim world the theoretical aspects in the field of law is widely accepted in non-Muslim domain.

3. Writing Style

Stylish writing which is known as Qur'anic calligraphy is most often used to beautify and decorate passages of the Holy Qur'an. One may see the Qur'anic calligraphy in mosques and Muslim structures e g at famous Taj Mahal at Agra each gate arch at its marble has the calligraphy of Holy Qur'an. Physically passages of the book collected and binded just after prophet's (PBUH) death. To avoid any controversy in future a single authorised version produced under caliph 'Uthman Ghani the 3rd Caliph, after 20 years of prophet's death. Text of the holy book remained unchanged since then as textual modification was prohibited.

5. Topics of the Chapters

In general, makkan chapters consist of small sentences but are full of enthusiasm, poetical, lofty and brilliant stressing the Unity and Majesty of Allah. The almighty is louded as the Most Exalted, Most High. These sentences denounce idol worship, promise paradise for the righteous and warn wrongdoers from hell and hellfire. These sentences confirm the prophethood of Mohammad (PBUH), and remind humanity of some past prophets and also events of their time. The madinan chapters are little lengthy and the verses are unpoetical. They contain ritualistic matters of Islam such as Zakah, Fasting, and Hajj, lay down moral and ethical codes, criminal laws, social, economic, and state policies. They also guide for foreign relations, rules and regulations for battle and the captives of war. They condemn hypocrites, give emphasis on the unified basic message of all the past prophets, and confirmation that the process of prophethood and revelation of God is complete. Thus no Prophet will come after Mohammad (PBUH) and no new book will be revealed after the Holy Qur'an so the followers of truth are to make Holy Qur'an as their only guide.

The teaching of the Holy Qur'an is universally addressed to all people throughout the nations regardless of their sex, race, colour, creed and race. They enlighten human's soul, purify his morals, condemn all wrongs, orders good deed and call for the establishment real justice and fraternity by obeying Allah as the supreme authority. The Holy Qur'an regulates and create the proper relations between man and its creator and amongst men and women also. It leads how to use natural resources. Thus, the Holy Qur'an provides all the guidance that humanity needs. It is also preserved by God.

The other important topic of this book is history¹. References to events in Mohammad (PBUH)'s own life occur². Simile is also a stylistic feature of the Holy Qur'an. Simile is used in a variety of ways, though one of the main purposes seems to be to explain particular truths.³ Holy Qur'an prohibits alcohol, immorality and gambling.⁴

6. Style of Address

At number of places Holy Qur'an uses oaths and oath-like expressions to support an argument. It is due to dispel doubts in the minds of the listener. The Arabic text often begins such statements with 'wa' or 'la' 'Indeed, I swear' or making non-obstante clause⁵. Where the Holy Qur'an swears by Allah (the most merciful)

¹ It contains the struggles of former prophets e g Adam, Noah, Abraham, Ismael, Isaac, Jacob, Israel, Moses, Aaron, David, Solomon, Aad, Hud, Thamud, Salih, John, Jonah, Jesus and last prophet Mohammad (PBUH). It also refers some events e g 'Sleepers in the Cave', Zulqarnain etc

² Holy Qur'an regarding Battles of- Badr S 3: A13, 121-128; Uhud S 17: A 1.

³ Id S 16: A 75-76.

⁴ They ask you about wine and gambling. Say, 'In them is great sin and [yet, some] benefit for people. But their sin is greater than their benefit'. Id S 2 A 119

⁵ Id S 86 A 1, 11, 12; S 89 : A 1-4; S 90 : A 1

or He swears by Himself).¹ Similarly earth, soul, fig, olive, Mount Sinai, Mecca, horse, day of judgement etc were also used in oaths which shows the importance of these things²

7. Summary

Holy Qur'an is the eternal miracle. It is the last Book of Allah sent for the guidance of humanity through the last Prophet, Mohammad (PBUH), peace be upon him (PBUH). The Holy Qur'an was revealed piecemeal throughout a period of about 23 years. The Prophet received the first revelation in 610 CE, in the Cave of Hira in the Mountain of Light (Jabale-Noor), two and a half miles away from the House of Allah in the city of Makkah in Arabia. The first revelation was the first five verses of Surah (chapter) Al-Alaq :

"Iqra bismi rabbikallazi khalaq. Khalaqal insana min alaq. Iqra wa rabbukal akram. Allazi 'allama bil qalam. 'Allamal insana malam ya'lam, " which means "Read in the name of your Lord who created, created man from a clot. Read, for your Lord is most Generous, Who teaches by means of the pen, teaches man what he does not know."³

The last revelation was the third verse of Surah Al-Maidah, which was sent down to the Prophet in 632 CE

"Al yawma akملتu lakum dinakum wa atmamtu alaikum ni'mati wa razitu' lakumul islama dinan", which means "Today I perfected your religion for you and completed my favour to you and have chosen for you Islam as your religion."⁴

Surah Al-Fatiha (The Opening Chapter) was the first complete chapter to be revealed and Surah An-Nasr was the last.

The Holy Qur'an is divided into thirty equal divisions, which are called juz in Arabic and para or sipara in Urdu. There are 114 chapters, of varying length. The longest chapter is Al-Baqarah consisting of 286 verses and the shortest chapter is Al-Kawthar consisting of three verses only. The whole Holy Qur'an has 6,236 verses.

The chapters revealed before the migration of the Prophet to Madina are called Makkan, whereas those sent down after the migration are called Madinan.

8. Miracle

Holy Qur'an is the only ever living miracle given to the prophet unlike other miracle of any prophet which does not exists. A number of persons who have memorized the whole Holy Qur'an today is more than 10 million. Millions of copies has been printed and handwritten as well as translated into most of the languages of mankind in almost every part of the globe. Since the Holy Qur'an's revelation which has passed over 1400 years, not a single letter was changed which is considered the greatest miracles of the Holy Qur'an. The Holy Qur'an is the backbone of Islamic system on which state, society⁵ and the civilisation of the Muslim world exists. The preservation of the Holy Qur'an against all attempts to destroy or corrupt it is being guarded by creator Himself⁶ meaning thereby it will always remain pure. There does not exist a single copy with any variation from the recognised text.

9. Conclusion

Holy Qur'an is not only a religious or sacred book but also a complete code of life. Allah (the most merciful) revealed this book for all people of the world, and he also sent prophet Mohammad (PBUH) in the world for implementing the Holy Qur'an in his life. A companion of the prophet who are known as Sahabi asked to prophet's wife, termed as ummul mominin, Ayesha to tell him something about Prophet then she answered

¹ Id S 4 A 65. By thy Lord, they can't be real faithful until they make you (prophet) judge in all disputes between them and find in their souls no resistance against your decisions but accept them with fullest conviction.

² Id S 91 A 1-7; S 96 A 1-4, S 100 : A 1-5; S 101: A 1

³ Id S 96 A 1-5

⁴ Id S 5 A 3

⁵ Dr Badre Alam Khan, 'Economic Rights of Women' (Delhi:APD, 1999) ISBN 81-7435-173-6 p 42

⁶ Id S 15 A 9 - Verily, it is We Who have sent down the Zikr i.e. the Holy Qur'an and surely, We will guard it (from corruption).

asking had he not read the Holy Qur'an. The Holy Qur'an revealed on the world as a guide book for the people, people mean not only Muslims, even non-Muslims also. The Holy Holy Qur'an is open for all, anybody may take benefit. To Muslims, Holy Qur'an is their main resource of religion, guide book, solution provider of any problem¹. So they turn back to the Holy Book. They believe if they follow the rules of The Holy Qur'an, they will be benefitted in worldly life as well as in life here after.

¹ Dr Badre Alam Khan, 'ADR for Muslim Personal Law" (Jaipur:UBH, 2018) ISBN 978-81-8198-952-4

JOB INTENTION AND PUBLIC SERVICE MOTIVATION

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INTRODUCTION

Public service has also contained the attitude element. Public service motivation also has a significant presence. Perry (1996) has referenced about public service motivation which affects job choice, performance, and organizational effectiveness. Public functions includes planning, execution and controlling at various level. The public officials may have some attitude to support various Govt functions. Hurt, Joseph, and Cook (1977) concentrated on personal interest to work for change. This is personality based approach. Study done by Carmeli and Spreitzer (2009) presented that innovative work done by is the base of high-performance organization. This type of work behavior promotes organizational competitiveness. Present studies give sufficient push to the existence of attitude in Public works. The psychological contract also plays a role. Jansen(2008) has worked on this aspect. This paper aims to present the role of public servant's

Intention about success of any public programme. How does influencing factors play an important role in determining the attitudinal status of any public official. Organisational culture has some role in this regard. Shook (2008) had presented the role of organizational culture and satisfaction in this regard

There can be various facts for joining Govt service. Christopher(2003) has sighted various reasons. He has also discussed about holistic situation joining civil service. Public awareness and civic awareness may work as a joining factor as per study of Ward(2013). Perry(1997) has written about the concept of motivation in Public service via organizational environment, culture and organizational membership. Goal theory of motivation and organizational mission plays an important role in public servant's motivation. Locke and Latham (1990, 2002) had presented about this.

Sternberg(1988,97) has mentioned about thinking styles for any profession. These styles are for civil services also. The joining system and promotion system are also key to decide civil servants. Ferguson(2013) has written about specialization in Indian civil services. Career dynamics is also an important factor. The values and attitude works. Mills(1974) has written about these. The ethics and attitude has a role to decide for civil servants. Pandikar (1966) has written about these.

Baron (2010) written about the unlocking of minds of civil servants for any reform. Job commitment plays an important role. That can also work as organizational commitment. Steers(1974) stated this fact. Age has a commitment role. Meyer and Allen(1984,1991) had mentioned these aspects. Liking local needs plays an important role. The linkage with local needs also has an interest to join civil service. Davison(2015) has conceptualized that. Local needs are important for individual to join civil service. The joining of leadership programme can also change individual youth. Self leadership can be developed in leadership programme to join civil service. Caring quality can be developed in individual. Service leadership also comes. Lin, Li(2016) had conceptualized these facts.

Community services also play an important role. Gau(2013) had presented this. The mindset of the participating in social programme can be useful. This will be chance to learn, Jacobs(2009) has stated about changing behavior. Youth can work in civil service through soft attitude. The environment friendly, knowledge and attitude role also create motivation to work for society. Bolong (2013) has stated these facts. Intrinsic benefit may be helpful to become civil servants. Achievement status is the cause for joining civil service. The values to work for society can also be other factor. Lewis and Frank (2002) had stated these facts. Prosocial attitude can work. This assist to join civil services. The social needs exist in individual due to these factors youth can join civil service. Burman(2012) has concluded that civil service may be joined through pro social approach. Client service and apathy was the face of bureaucracy. The inflexibility was also an important course. Alienation was also a problem. Pollitt (2000) Had stated these facts. Every level intrinsic value can affect civil servants.

Wright and Christensen(2002) had stated t facts. There are always internal and external motivational behaviours in governance. These factors may influence individual. Garcia(2013) had stated these aspects as policy interventions.

Self determination theory may play an informative roles. An individual may be work with self determination. Appreciation can be live form. Deci and Ryan (1985) have elaborated these facts.

Task variety also is an attractive point of learning for youngsters. Task variety gives challenges. Task identity also a cause of recognition for youngsters in society. Task significance is also likable factor. Depre (2015) has stated these facts. Having a knowledge and sharing with others gives status to others. Being a civil servant this can be motivational factor. Davenport (1997) has written about this. Attitude of knowledge sharing also an important status. Civil servant may have this status. Lin (2007) has stated this fact. The motivation may help the civil servants to help in the career performance. Perry and Wisc(1990) have stated these facts. These situations also work for employee performance and job satisfaction. Governance also plays an important role to motivate. Gore(1998) has published this fact. The founding value works to great extent. Richardson(1997) has done work on this.

Public recognition only goes to public employees not to private employees.

Romzk (1985) had given publication on public recognition and involvement intensity to organization. The continuous proactive strategy of job design, social participation and variety of working places also attracts to join civil services. Robin (1982) had stated these facts –

Public and Trust plays an important role. The society may have trust in the minds of public. Friel (1998) had stated the factors which may improve the attitude of civil servants. The civil servants may develop the feeling of help in others.

Gawthrop (1990) had stated that the action of civil servants may develop feeling to help for neighbors. Feeling of patriotism also plays an important role. Rainey (1982) had stated please facts Self endorsement of the goals and feeling of competence may also be reason to join public service. Working in higher order category and feride offers goal also may be useful to motivate an individual

An individual can also have the feeling of enfogment to work public organization Ryan (2000) had stated these facts.

An Individual may also have the feeling of competency, a sense of autonomy and expression of motivational letaviewr. Ryan (1989) had stated these facts.

Attraction to work for public policy also work as motivational variable. Feeling of public interest and social justice also work as joining factor. Civic duty and self sacrifice also work for motivation in civil service. Kim(2009) had stated these facts. Corruption can be anti motivational reason for youth to join civil service. Trust in civil service can be a reason to join. Anderson (2003) had stated these facts. The civil servants may have an attitude for problem solving mind set. Campbell(1982) has researched on this aspect. The role in public life can work in a positive manner. Self concept

Can work as a tool of motivation. Public service motivation can play importantly in this regard. Wright (2007) had presented this research. Civil servant may have feeling of task completion. Within the organization civil service may create mood to join. Upper level commitment may also attract youngster to join. Brown(1996) had presented these facts.

Primary level commitment also plays an important role. Goal theory may also be workable for employee to join civil service. Barnard (1938) had research these facts. Work motivation may also play an important fact to join. Balfour and Wechsler (1990) had explained these facts.

Job goals difficulty may also play an important role. Rainey and Steinbauer (1999) had done work on this aspect. They have also focused on task commitment and job difficulty.

Individual commitment may also play an important role for civil service. Govt service can boost this confidence. Khatri (2017) had stated these facts about youth mentality. Civil Servants are for implementing public and development oriented vision, and keeping law and order in control. They act as a link between the masses and the government. They remain with position and power. They keep others in order. They are highly paid, get good house. In addition to this, they are highly status oriented and get care taker. These factors lead young minds to join civil service in Govt. Youngsters may have power centric approach and they want to lead from front.

The selection of civil servants are tough and hard nuts and only and only few are selected. Jagran kosh(2019) have stated some The civil servants are having diversity of work in the career level.

Diversity of work in the career level. Many appears every year but only few gets selected. The civil servants are having diversity of work in the career level.

Existence of motivation is there in the civil servant aspirants. The paper aims to study that civil servant may work in different assignments with their motivational spirit. The performance level may impact due to motivational level of individual civil servant.

Selection of civil service career

Some variables work in the selection of career. Mitchel (1976) had mentioned some specific variables for the selection of job career. Genetic Endowment and special abilities can be the useful basis for joining any job career. Environmental conditions may also act useful basis for the career selection. Observing successful people in the career may also be the way to decide career. It can be an easy way to follow the determination. Shenton(2003) had discussed these variables for job selection. This helps to decide the skills in individual. Nature of aspirations also plays an important role for youngsters. Bourke(2003) had written about this.

Some time guidance and others experience also plays an important role. Mentor can be a good choice for career. Fedork(2001) has presented research on this. Money and financial factors can also be a factor of career selection. Research among medical students by Regehr,(2009).has done research on this .Why mentor will help?

How much help should be expected? Broadbridge (1999) had considered this as management tool. Mentorship can be helpful to promote skills and determination to join challenging careers. Mentor helps in career identification. This may also be including introduction of strength and weakness also. This also involve job organizational and professional development. .Carson(1994) had presented facts on this aspect. Watt(2007) has given job selection factors which are as follows

Perception- The generation keeps of coming with new ideas and approach but they have to work with constraints in existing system. Mannheim (1952) had mentioned this in his work. Perception which are related stimuli which is the sensory surface. Neumann(1990) had explained that concept of objective psychology is the perception. The functional aspect had been related to the assessment of performance.The perception covers for action control. It will propose different level of action control. This can be development of construct of information processing model. Psychophysical judgements take care on judgement and performance level.Sensory information can work as control function. It does not work as mediating stage. Stimuli work as guidance function. Perception cant be taken as mediating stage but it is a class of action that establish the internal representation of environment.Perceived barriers plays important role for some decisions. For the last couple of years many researchers have successfully worked on the research area of perceived barriers which work as import ant barriers in career decision making. Luzzo(1993) had worked on this. Mcwhriter (1997) had also done work in this direction. The career related barrier can work as an individual beliefs. These barriers may have direct impact on career decision making.

Tokar(1996) had worked on this direction. Daniel (1994) had also done work in this regard Favourableness of Job conditions work in the important manner.Percieved organizational support also plays an important role. Whether organization has given freedom or not to deal with the situation?

Job conditions play an important role. Job conditions may influence candidate to decide own perception.

Cummings (1997) has given following points to consider

Opinion of employees

Caring approach

Goals and values

Help at the time of problem

Forgiveness on sincere mistake

Various opportunities

Satisfaction for joining

It has been an observation that employee respects those organization who value the contribution and care for well being.Sowa (1986) revealed that employee counts social identity and self respect are necessary to work in the organization. Khawaja(2006) had elaborated some observations for joining civil services. There is a craze being in a in civil service. There can be a chance to visit foreign country on specific assignment. The civil service gives chance to be in public sector at senior level position. Social status also plays an important role . Social interest presents professional interest also. There is a authority to make decision lies with an individual.

At a time assured pension is also an important role. Comparitively higher salary also plays an important role for joining civil service. Quality life is also an assured feature to join civil service.

Social perception and reality also plays an important role. Jussim(2012) had explained this phenomenon in terms of perception development.

Harpham(2004) had found that chance events can be contributing factor to decide any career. Salomone and Slaney (1981) stated that contingency factors may change career perceptions.

Determination

Every Job requires to have an aptitude alongwith an attitude. Corno(2002) had defined an aptitude as level to accept the learning and ready to perform in a given situation. The candidate should have an acceptability to work and learn in a given system. Aptitude has some supporting contents. Jackson (1996) had explained the role of cognition(take notice), Affect(emotion) and Conation(action). Individual take motivation out of these

Aptitude requirement is highly required in today's context. Kim(2000) has written about the application of an Aptitude in Govt functioning. Sims (1983) had shown utility of an aptitude assessment before joining any career.

Job importance plays an important role. Job specification gives chance to prove ability. Job difficulty gives courage. Job Goal is an individual aspect. Wright(2007) has explained these factors. Candidates believes that they can apply the knowledge in national interest.

Job targets with perception- End goals affect the perception of Employee. Cohen (1976) had explained this. Observation of Goals may also create perception. .Satisfaction of goals give perception. Claiborne(2013) had explained this

Job requirements- Kaplan (1991) defined information as per job need is specificity.

Job distinguish features are also important feature for giving any perception. Kanwisher (2000) had given this clue. Specificity promotes sensitivity which promotes perception. Shapiro (1994) had explained this.

While applying specificity plays an important role. Mason (1986) had mentioned this situation.

Grooming- self grooming can have perception. Self grooming may have different dimensions. Phillips(2015) had explained this.. Behavioural roots plays an important role.

Kraut(1980) had proposed this aspects

Perception and attitude- Perception gives awareness to attitude. Joordens (1997) had mentioned this situation. Attitude may has some relation with stimulus. Stimulus has a role to decide about creation of attitude, Fazio,(1994) had written about this aspect.

CONCLUSION

Civil servant joining may be an individual choice. The life do not remains individual after joining. The civil servant choice will be only public. Every Public work may not be of choice. The civil servant will have to work even in that situation where perception of individual do not match with the job perception. Attitude plays an important role for decision making. An aspirant must be having all the matching attitude towards challenges and goals of civil service. Public service motivation is important feature before joining not after joining

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HAPPINESS MODEL IN ORGANIZATIONS WITH SPECIFIC REFERENCE TO INFORMATION TECHNOLOGY INDUSTRY

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ABSTRACT

The key to measuring employees' happiness is based on a number of different factors. It is important to know what factors could affect employee happiness in order to effectively enhance happiness at the workplace. Happiness have been conceptualized and measured at multiple levels, including transient experiences, stable person-level attitudes, and collective attitudes, and with respect to multiple focuses, such as separate events, the job, and the organization. The paper aims at proposing a theoretical model for Happiness in Organizations. The employees' responses were sought on determinants of happiness which includes Organization culture, Job characteristics, Performance, Leadership Behavior, Relationships, Positive experience at work and Personal factors in developing the happiness model in organization.

Keywords: Happiness, Employee Satisfaction, Organization, Work-Life Balance

INTRODUCTION

In recent years, the "happiness" has become one of the most discussed topics in academia around the world; meantime some governments view it as measure of development. One of the most important conclusions of happiness research is that there are many variables that play an important role in people's happiness. Personality, living standards, activities and cultural factors have proven to be significant. It is important to consider that nearly all these studies were conducted in Western countries. The results cannot be reliably generalized to all countries and cultures. Happiness has been not extensively used in academic research on employee experiences in organizations. The research on employee happiness in organizations is limited. For many years researchers have studied a number of indicators that appear to have considerable overlap with the broad concept of happiness. The most frequently used is job satisfaction. There is no universally acceptable measurement of happiness.

The key to measuring a dimension as complex as employees happiness is based on a number of different factors. Happiness includes a large number of constructs ranging from transient moods and emotions to relatively stable attitudes and highly stable individual dispositions at the person level to aggregate at the unit level. In the organization, happiness is influenced by both short-lived events and tasks and other organizational factors. It is also influenced by individual's personality, expectations, needs and preferences. It is understood that if each person will define and pursue happiness in her or his own way there will be a few components that will be present for virtually everyone. Measuring happiness in organizational setting can be in the form of an index. It is very useful test of the environment and the success of policies and practices in the organization.

REVIEW OF LITERATURE

Jan-Emmanuel De Neve George Ward (2017) conducted a study to provide some empirical guidance to employees, employers, and policy-makers. Given the importance of employment for happiness, it is evident in this study that more weight should be given to fostering employment. Equally, policies aimed at helping people to manage the non-monetary as well as the monetary difficulties associated with being unemployed, in addition to helping them back into work, will likely help to raise societal wellbeing. In addition to the quantity of jobs, policy instruments can be used to encourage employers to improve the quality of jobs. Generally, the analyses reported in this study provide additional empirical evidence for the merit of policies that focus on both the quantity and the quality of employment to support worldwide wellbeing.

Eunice Stoia (2016) founds that the main determinant factors of happiness in organizations are: employee performance, job characteristics, use and development of strengths, positive relationships and positive leadership behavior, positive feedback, positive experiences at work and organizational culture. The study shows that positive emotions are related to factors as positive experiences at work, positive relationships, recognition, positive feedback and positive leadership behavior.

Santoso Januwarsono (2015) conducted a study to find the factors which are determinant of happiness at work. The study used confirmatory factor analysis. The results formed six main factors, which includes Employee Performance, Organizational Culture, Organizational Trust, Job Satisfaction, Leadership Behaviour and Individual Characteristics.

Phathara-on Wesarat, Mohmad Yazam Sharif and Abdul Halim Abdul Majid (2015) states that happiness at the workplace refers to how satisfied people are with their work and lives. The idea of happiness is related to individual's subjective well-being. Happiness at the workplace is critical for refining productivity in any organization. Happy people are productive people while those people who are not happy may not pay full attention to any task. Therefore, it is important to know what factors could affect employee happiness in order to effectively enhance happiness at the workplace. This paper presents a potential conceptual framework of happiness at the workplace.

Henrique Pereira, Samuel Monteiro, Graça Esgalhado, Rosa Marina Afonso and Manuel Loureiro (2015) studied a cross-sectional survey of Portuguese people by using Covilhã's Happiness Questionnaire (CHQ) which uses 41 items to measure a person's happiness. Exploratory factor analysis revealed a well-fitting 5-dimensional factor structure includes positive emotions, socially gratifying interactions, self-caring, participation in meaningful activities, and socio-economic structure engagement.

Wariya Suphaphun (2014) conducted a study aimed to apply routine to research or R2R to create happiness in the workplace of an automotive parts company at Amata Nakorn Industrial Estate Chonburi, Thailand. R2R refers to making routine jobs to a research, using a systematic process to gain knowledge and to change problems to be a research result for development. This study was done in a selected organization with 254 employees at every level of employment in the organization. The main findings that emerged is that welfare and friendliness are the main keys of a happy workplace. It also offered suggestions for Happy Activity Programs; and Employee perspectives for the organization in the future.

Mohammad Hossein Forghani, Vahid Hamidi Pouyandeh, Ali Nasr Esfahani (2013) found that increasing individual and social happiness is one of the most important goals and priorities of today's organizations. Planning for increasing organizational happiness requires recognizing happiness and its effective factors. The results reveal that there are significant relationships between perceived justice and organizational happiness. Also another part of the results indicates that there is a significant negative relationship between employees' age and educational level with their organizational happiness.

Vibhuti Gupta (2012) found that Happy people work better with others, are more creative, fix problems instead of complaining about them, have more energy, are more optimistic, are way more motivated, get sick less often, learn faster, worry less about making mistakes and consequently make fewer mistakes, and make better decisions. Importance of being happy at work may be seen from three different angles; from organisation's point of view, management and of course from individual employee's point of view. It has different benefits for different category viz organisation, management and individual employee.

Kemakorn Chaiprasit, Orapin Santidhirakul (2011) studied factors which are affecting the happiness of employees in SMEs and measures the level of happiness at work. A total of 300 employees were investigated by structured questionnaires. The conceptual framework was developed by five factors of happiness in the workplace which includes job inspiration, organization's shared value, relationship, quality of work life and leadership. The results have shown that the level of happiness of SMEs employees in Chiang Mai was at the high level and the level of opinion towards the 5 factors affecting happiness at work was also at the high level. Relationship, quality of work life and leadership were 3 factors that led to happiness at work.

Cynthia D. Fisher (2010) has reviewed the definition, causes and consequences of happiness at work, drawing also on insights from the expanding positive psychology literature on happiness in general. Many discrete organizational behaviour constructs arguably belong to a larger family of happiness-related constructs, and share some common causes and consequences. Happiness at work includes, but is far more than, job satisfaction. A comprehensive measure of individual-level happiness might include work engagement, job satisfaction, and affective organizational commitment. Aspects of happiness have been (and should be) conceptualized and measured at multiple levels, including transient experiences, stable person-level attitudes, and collective attitudes, and with respect to multiple foci, such as discrete events, the job, and the organization. At all levels, there is evidence that happiness has important consequences for both individuals and organizations.

Dibyoyoti Bhattacharjee, Maumita Bhattacharjee (2010) developed a composite index for employees of an organization on the lines of the existing happiness index. The research mostly concentrated on converting the happiness index that is used to measure the satisfaction of the citizens of a country, to a tool for measuring the happiness of employees in an organization.

Charles D. Kerns, Kenneth Ko (2010) explored that the relationship between happiness and performance using an established leadership development program designed to increase the number of happy high performers in a company within a large global corporation. Business outcome measures are assessed including customer satisfaction, employee performance and employee happiness. Both statistical and qualitative analysis are used retrospectively on data collected over three years. Trends in the statistical data, leadership feedback and responses from a "Happiness Index" establish several themes including happiness and performance tend to move in the same direction, high performing employees produce satisfied customers and happy employees result in satisfied customers.

Yang Hongjuan LI Jia proposed the concept of employees' happiness index with the idea of Gross National Happiness Index. And the factors that influence employees' happiness index have been analyzed here. It also discussed the measuring scale and the various indicators of the employees' happiness index. At the same time, the model of employee happiness index has been constructed.

According to Maenapothi (2007), happiness at the workplace means a situation at the workplace when personnel are happy working and not feeling like it is work, are efficient and achieve targeted goals, both at the personnel and organizational levels. Five factors account for happiness at the workplace includes Job inspiration (employees are satisfied with their assigned job, and are able to achieve goals), Organization's shared value (collective behaviors and culture of the organization), Relationship (there are interaction, group bonding and acceptance among co-workers), Quality of work life (the relationship between three elements, namely work environment, employee participation, and humanization of work) and Leadership (executives or heads of the organization promote and create happiness for personnel when they work by creating motivation, awareness, two-way, transparent communication and dedication in their subordinates).

OBJECTIVE

The main objective of the study is to develop a theoretical model for Happiness in Organizations.

TYPE OF RESEARCH

The study is basically exploratory in nature as it attempts to develop a theoretical model for happiness in organizations. The happiness model will be developed based on the identified happiness factors.

SAMPLING

The employees who are working in Information Technology companies in Karnataka were selected as respondents for the study. Convenient sampling technique was used to select the respondents. Total one hundred and twenty employees were included for the purpose of the study.

DATA COLLECTION

The primary data were collected from the respondents who are employees working in Information Technology Industry. A structured questionnaire is used and data were collected through survey method. A 5 point Likert scale was used which includes statements under seven determinants of happiness. Online form of the questionnaire was used to collect the data. Secondary data were collected from various websites and published articles both online and offline sources in which includes journal articles and happiness reports.

DATA ANALYSIS AND DISCUSSION

The employees' responses were sought on determinants of happiness which includes Organization culture, Job characteristics, Performance, Leadership behavior, Relationships, Positive experience at work and Personal factors. Cronbach's Alpha was used to test the reliability of the statements used in the tool. ANOVA with Friedman's test was carried out to find if there was any significant difference among the items measuring the determinants.

Table 1: Cronbach's Alpha Values

Factors	Cronbach's alpha
Organizational Culture	0.806
Job Characteristics	0.794
Employee Performance	0.706
Leadership Behaviour	0.794
Professional Relationships	0.722
Positive Experiences at Work	0.851
Personal Factors	0.802

It was found that the organization culture had an alpha value of 0.806, Job Characteristics had value of 0.794, Employee Performance had an alpha value of 0.706, Leadership Behaviour had a value of 0.794. The construct Professional Relationships was having an alpha value of 0.722, Positive Experiences at Work had score of 0.851 and Personal Factors had an alpha value of 0.802. From the above table, it can be seen that all the reliability statistics for the factors under study were very good as the reliability score was seen to be above 0.7. Hence there was inter-item consistency and the scale was used to measure the factors intended to measure.

Table 2: ANOVA with Friedman's test

Factors	No. of Sub-Factors	Friedman's Chi-Square	Sig. ANOVA with Friedman's test
Organizational Culture	9	10.567	0.026
Job Characteristics	8	4.269	0.034
Employee Performance	3	13.536	0.046
Leadership Behaviour	5	5.859	0.024
Professional Relationships	2	7.973	0.029
Positive Experiences at Work	8	11.175	0.019
Personal Factors	10	11.596	0.017

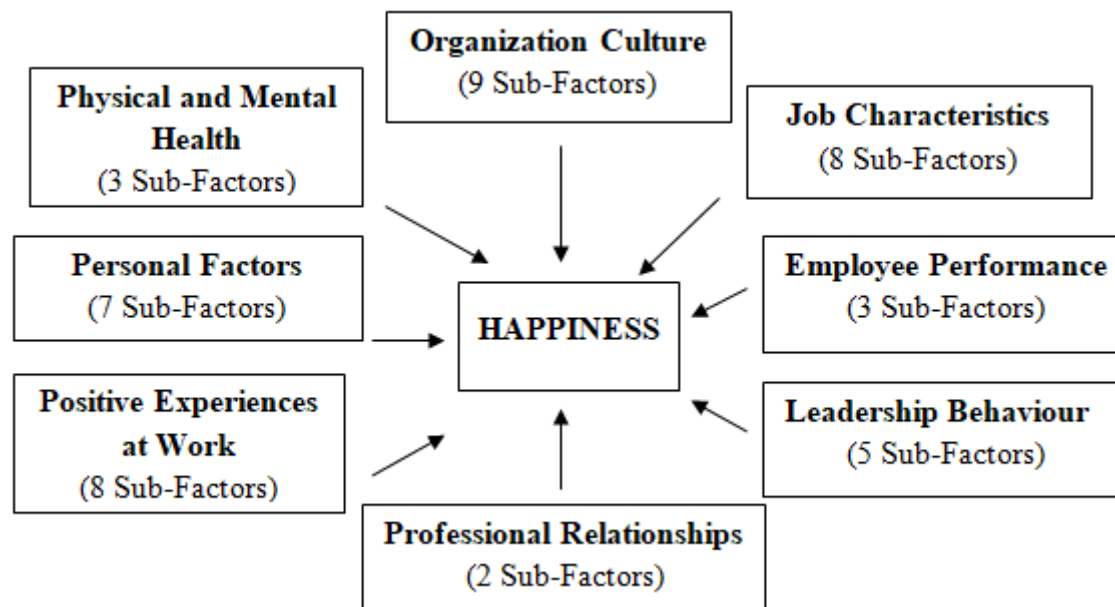
The ANOVA with Friedman's test had a significance value 0.026 for Organisation culture, 0.034 for job characteristics, 0.046 for employee performance, 0.024 for leadership behavior, 0.029 for professional relationships, 0.019 for positive experiences at work and 0.017 for personal factors. It is found that all the factors had a significance value which is less than 0.05 which reveals that there was significant difference among the items measuring the factors.

The factors were further processed and based on literature support three factors from Personal factors which are related to Physical and Mental Health were separated while developing theoretical happiness model. Accordingly the 45 sub-factors under 8 factors which determine happiness are presented in the table below.

Table 3: Happiness Factors

Sl. No.	Sub-Factors	Sl. No.	Sub-Factors
Factor 1: Organisation Culture		Factor 5: Leadership Behaviour	
1	Relationship with Peers	1	Empathy
2	Relationship with Leaders	2	Appreciation
3	Equal Opportunities	3	Transparency
4	Grievances Handling	4	Feedback
5	Employee Safety	5	Supportive Supervision
6	Harmony	Factor 6: Positive Experiences at Work	
7	Trust on Employees	1	Remuneration
8	Organisation's values	2	Role Identity
9	Communication	3	Work Environment
Factor 2: Job Characteristics		4	Learning Atmosphere
1	Autonomy	5	Organisational Policies
2	Job Enrichment	6	Rewards and Recognition
3	Work load	7	Employee Engagement
4	Career Management	8	Job Security
5	Empowerment	Factor 7: Physical and Mental Health	
6	Job Profile	1	Physical Health
7	Challenging Tasks	2	Emotional Stability
8	Job Responsibility	3	Spiritual Life
Factor 3: Employee Performance		Factor 8: Personal	
1	Training	1	Work-Life Balance
2	Empowered Decision Making	2	Life Experiences
3	Performance Reward	3	Contribution to the Community
Factor 4: Professional Relationships		4	Social Identity
1	Relationship with Peers	5	Value System
2	Relationship with Leaders	6	Relationship with Family members
		7	Relationship with Friends

The theoretical happiness model is developed based on existing literature and analysis of primary data collected from the sample employees who are working in Information Technology Industry. These factors determine happiness in the context of organization. It should be noted that workplace happiness cannot ignore personal factors as it influences on happiness of a person irrespective of employment. Hence the model has identified and grouped the determinants of happiness under eight factors which contribute to happiness of an employee.



Happiness Model in Organizations

CONCLUSION

In the organization, happiness is influenced by both short-lived events and chronic conditions in the task, job and organization. It is also influenced by stable attributes of individuals such as personality, as well as the fit between what the job or organization provides and the individual's expectations, needs and preferences. Understanding these contributors to happiness offer some potential scope for improving happiness at work. And there is reason to think that improving happiness at organization is a worthy goal. Happiness at the person and group level is related to core and contextual performance, customer satisfaction, safety, attendance, and retention.

The happiness model suggested in this paper is a theoretical model with statistical validity for factors selected based on review of literature and primary data from employees of Information Technology Industry. It is necessary to conduct further qualitative and quantitative analysis to build more dynamic and comprehensive model. This model has implication for researchers and practitioners as it suggests to use a range of happiness factors in measuring happiness instead of narrow measures of happiness.

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B.R. AMBEDKAR AND HIS MORAL PHILOSOPHY

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ABSTRACT

This article can provide various aspects of Ambedkar's moral philosophy. According to him, it is important to maintain justice for Dalit and the downtrodden. Fraternity, equality, and liberty are controlled by him. B.R. Ambedkar is treated as an effective social reformer; his speech can help oppressed people to learn about self-confidence and self-dignity. Origins and the impact of the caste system are identified by him. Dalit people faced various problems due to the discrimination of caste. Satyagraha's activity was led by him to assert human rights. Along with this Hindu social order is justified by B.R. Ambedkar. According to him, the caste system is conducted with the principle of division of labor.

Keywords: Self-confidence, Fraternity, Dalit, Satyagraha activity, Hindu social order

INTRODUCTION

This paper explains the moral philosophy of B.R. Ambedkar. Bhimrao Ramji Ambedkar was a popular social reformer, politician, jurist, and economist. B.R. Ambedkar was the first Ministry of Law and Justice of India, which is described in this paper. Moral thinkers and philosophers of India and the world are inspired by Ambedkar. The social, economic, and political equality of India is maintained with the help of B.R. Ambedkar, which is included in this paper. This paper explains the contribution of B.R. Ambedkar on positive discrimination and treating unequal. According to B.R. Ambedkar, technical education is important for students, which is more effective than general education. The emancipation of Dalits and their empowerment is initiated by Ambedkar. National perceptions and aspirations of the downtrodden are synthesized by B.R. Ambedkar to articulate the concept of nationalism.

B.R. Ambedkar's life

B.R. Ambedkar can maintain economic, social, and political justice for all classes of people. Suffering, sacrifice, and struggle were three great sagas of his life. He faced many odds, humiliation, and problems as a student, politician, and lecturer (Kumar 2017). From childhood, he faced many problems due to the discrimination of caste. However, he is always trying to fight against these inhuman facets of Hindu society. Along with this, few effective qualities were present in B.R. Ambedkar such as dedication, devotion, sacrifice, hard work, discipline, courage, conviction, and selfless services. These factors can make him so popular and Messiah for surprised and downtrodden people. He can help millions of people in the Indian continent to raise their voice for rights. Along with this to assert human rights satyagraha is led by B.R. Ambedkar. Three effective traits are advocated by Ambedkar such as agitate, organize, and educate. To provide rational thought was the first principle of Ambedkar, on the other hand, the second principle was to provide physical and mental strength towards suppressed people.

Along with this fight for human rights was the third and main principle of B.R. Ambedkar. With the help of various resources, it is easy to state that the constitution and social life are impacted by the concept of B.R. Ambedkar. After Buddha, Ambedkar can raise his voice against traditional and conservatism in India. According to him, it is important to stop differentiating between Hinduism, Muslim, and others, which directly has an impact on the development of nationality. According to Rodrigues (2017), to maintain the emancipation of people his life was dedicated and sacrificed for downtrodden people.

In his marathon struggle, he never tried to create any unwanted activities, the right attitude and decision were always taken by him. Along with this, it is observed that will power and fearlessness can improve his personality. He can maintain complex questions in a simple manner, which is treated as the main characteristic of his personality. Clever and logical thinking can help him to maintain various unwanted situations. Proper courage and determination help him to conduct the struggle for downtrodden people (Chakrabarty 2018). On the other hand, he can play a crucial role in the maintenance of social ostracism and economic oppression. His capacity for clear expression and sincerity helps him to improvise his fight for suppressed people of society.

Command, respect, and attention were three effective points of view of B.R. Ambedkar. Along with this, it is observed that B.R. Ambedkar was an effective thinker, which can increase his knowledge. The honorary degree of L.L.D and D. Litt was conferred by Ambedkar from Columbia University and Osmania University (Sinha 2017). To maintain the liberty of people, fraternity of individuals and nation, and equality of human beings he sacrificed his knowledge. According to him, to solve problems with social evils and religion it is important to

increase the quality of education. Downtrodden and oppressed people can improve self-dignity, self-confidence, and self-respect by maintaining speeches, ideas, statements, and messages of B.R. Ambedkar. Among depressed classes, he was treated as an inauguration of the self-respect movement and regenerator for their spirit.

B.R. Ambedkar's critique of the Hindu social order

The twofold attempt is taken by B.R. Ambedkar to critically evaluate Hindu social order. He can provide information about the involvement of social order and protect human rights and powers of brahmins. According to him, human values and rights are disrupted by both Hindu philosophy and the social order of Hindus; along with this it is observed that this Hindu philosophy and social order are created to maintain the welfare of the Brahmin community. Jogdand et al. (2016) stated that Ambedkar can identify permanent inequalities in social classes due to social order and Hindu philosophy, which directly has an impact on human rights. Along with this, it is easy to state that these factors can increase difficulties for downtrodden and oppressed people in India. B.R. Ambedkar evaluated that the essential nature of Hindu religion is religious and social inequalities, Hindu social order is also conducted by this nature. On the other hand, it is noticed that the principle of liberty is not maintained by Hindu religion. Economic security, availability of knowledge, and social equality are treated as effective factors of the principle of liberty (Jilova 2019).

The moral philosophy of B.R. Ambedkar

Moral philosophy against the caste system

Origin and genesis of the caste system are elaborated by B.R. Ambedkar to critically evaluate this factor. According to him, the caste system is conducted with the involvement of an essential trait which is endogamy (Sampath 2020). Along with this, it is observed that discrimination of the caste system is increased due to rules of endogamy, which can be left an impact on the suppressed people of India. Since Manu, marriage rules of the Hindu religion are too rigid, which is pointed by B.R. Ambedkar. Besides, various rules and regulations are codified in Manu, which is treated as a religious sanction. Inter-caste marriage was treated as a sin, as well as proper punishment was identified due to the broken codes. If any excommunicated people broke this rule then these people were segregated from society.

According to Ambedkar, the caste system is treated as a selfish intention of brahmins. The feeling of fraternity is not maintained by the Hindu social order, as well as the self-centered attitude of Brahmins is revealed in this social order. To maintain these factors strong arguments are made by B.R. Ambedkar (Saikia 2020). In Hindu social order relation among family members is determined and mixed, with the help of caste system social, religious, and economic status determined in Hindu social order. Positive human value to play any role is not allowed by Hindu social order, which is noticed by him. On the other hand, it is observed that due to this caste system Indian society is conducted without any mobility, unity, progression, and integration; this factor can have an impact on the development of the nation.

B.R. Ambedkar is trying to fight against the principle of the caste system to maintain these factors. It is observed that the caste system is conducted by the principle of division of labor, which can decrease the importance and necessity of the caste system. The opportunity to develop the quality and skill of people is denied by this principle of the caste system. Stroud (2018) stated that the development of Hindu society faced various problems due to the caste system. The caste system is conducted with a characteristic of disintegration and division, which can help to create social unrest. According to B.R. Ambedkar efficiency of the Hindu religion is impacted by this caste system, thus religion is unable to provide social space for people due to the caste system.

Due to a lack of feeling of brotherhood and friendship Hindu religion is conducted without unity in diversity, which is identified by B.R. Ambedkar. Along with this, it is observed that unity in diversity is not created by similarity in thoughts, customs, and physical proximity. Varna vyavastha is not agreed by B.R. Ambedkar. According to him, Varna Vyavastha is created to serve a particular class such as Brahmins. On the other hand, it is observed that liberty, fraternity, and equality are not maintained by this Varna Vyavastha. Along with this entire philosophy of varnashrama dharma is rejected by B.R. Ambedkar, this factor can have an impact on social justice.

Importance of philosophy of life

According to him, everyone needs to create standards that can help to measure one's efficiency and target of life. To maintain this factor it is important to maintain the philosophy of life. B.R. Ambedkar stated that philosophy is treated as an effective parameter of life, which can reflect the personality of people. Practical application of philosophy can maintain conflicts and problems of life, which is pointed by him. According to him, philosophy is not a theory and concept of life, which is treated as an effective moral of B.R. Ambedkar. To maintain the structure of society it is important to justify the component of religion, which is maintained by

philosophy (Bompilwar 2018). To maintain the justice of people three effective values are maintained by B.R. Ambedkar such as liberty, equality, and fraternity.

His effective struggle for human rights can maintain the philosophy of society in India. Due to these factors, B.R. Ambedkar is treated as an effective social reformer of India where it is observed that extreme passion and extreme hatred are evoked by Ambedkar. The effectiveness of religious literature is maintained with the involvement of the philosophy of Ambedkar. B.R. Ambedkar fought against democracy, nation, economy, politics, and social structure to maintain human rights. In literature, Ambedkar is trying to maintain aspects of three religions such as Hinduism, Buddhism, and Jainism. He can provide a radical thought towards human life and welfare, as well as he is treated as an emancipator for Dalit. Political, social, and education factors are evaluated by B.R. Ambedkar to make the Indian constitution. Injustice against Dalit and the downtrodden are maintained with the involvement of B.R. Ambedkar. Pragmatism philosophy was the point of view of Ambedkar. Usefulness, the practicality of ideas, and workability are emphasized by this ideology. With the help of B.R. Ambedkar Buddhism is reconstructed in India, which can provide liberty towards people (Mukerji 2020).

With the help of various researches, it is observed that Ambedkar was a true democrat; according to him political democracy is important to develop a nation. He can provide an effective effort to maintain the reconstruction of society. On the other hand equality in labor is maintained by Ambedkar. According to him, a free country depends on social consciences, which are treated with democracy. As per LópezArenu (2017), high-performing thought, vision, and implementation are observed in his ideas, by maintaining this factor it is easy to state that he was a great idealist. Along with this justice for humankind was treated as an ultimate target of his philosophy. He can be made a connection between analysis and interpretation of experience to maintain injustice of Dalit and downtrodden.

According to Yesapogu (2016), love and compassion for the masses are observed in his speech. Rational thought is generated by philosophy and education which is stated by B.R. Ambedkar. He can maintain social, political, and educational utility by maintaining human experience. To maintain these factors it is important to learn about pragmatism action which is more beneficial than thoughts and ideas. Along with this, he can maintain his libertarianism by evaluating rationalism and pragmatism. This factor helps to maintain social order in society. Besides, individual human interest is ignored by B.R. Ambedkar. According to him, people are essentially free human beings, however, the truth of nature is not denied by him. With the help of this information, it is easy to state that he was a modern human rights thinker and practitioner (Singh 2017).

CONCLUSION

Based on this paper it is observed that B.R. Ambedkar can provide a relentless effort to maintain justice for Dalits and downtrodden people. Dalit people faced various problems in the Hindu social order. The efficiency of the Hindu religion is impacted due to the caste system, which is concluded in this article. B.R. Ambedkar's moral philosophy is to maintain justice for people. Three effective factors are maintained by him such as liberty, fraternity, and equality, which is concluded in this article. The origin and genesis of the caste system are identified by Ambedkar. He can identify components of religion to reconstruct society. Based on this paper it is concluded that education is a key aspect that can maintain various problems in society.

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WOMEN: UNABRIDGED NATURE AS DELINEATED IN VANDANA SHIVA'S *STAYING ALIVE***Abdul Muqet**

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Abstract

In the globalized world man's self-centered behavior has produced a threat to the nature. At the center of eco-feminism is the concern for social justice that links the fight for the environment with fight for human rights. Women with their inherent expertise can play a vital role in resolving the issues of natural threats as well as global warming. Eco-feminism focuses on the ethics of our relation to the environment and to all those who find their place in it. Nature is the whole family in itself that supports each other. Nothing is waste in Nature. Mechanism of its working is interrelated, complex and beautiful. The patriarchal paradigms cannot be applied on nature. The role of women in balancing nature is universal. The holistic perspective of women towards the nature can bring the desired changes. In her work, Staying Alive, Vandana Shiva has effortlessly related the ecology with the feminine principle. She had broadened the relation of feminist movement and the environment. The objective of this paper is to present undivided attachment which is coherent in the women and nature. In the contemporary challenging environment human body's constitution is in danger. It can only be saved by empowered women voices having the inbuilt mechanism of Vedic knowledge along with advanced scientific knowledge.

Keywords: Eco-feminism, Patriarchal, Expertise, Maldevelopment, Colonialism

Content

In Hindu mythology, from Manusmriti-‘Yatra Naryastu Pujyante Ramante Tatra Devtah, Yatra itastuna Pujyante Sarvastrafalah Kriyah’, where women are honoured, divinity blossoms there, and wherever women are dishonoured, all action, no matter how noble it may be, remains unfruitful. Not only in Hindu mythology and literature but also in English and other world literatures the role of women is prominent. Worldwide the feminist writers like Aphra Behn, Mary Wollstonecraft, Jane Austen, Virginia Woolf, Doris Lessing, Toni Morrison, Chimamanda Ngozi Adichie, Maria Mies, Kamla Markandaya, Manju Kapoor and Shashi Deshpande have elaborated the role of women on world frontier.

Eco-feminism or ecological feminism is a coalescence of feminism and ecology. Eco-feminism activated in the 1970's as a political movement. Francoise d'Eaubonne augmented the term ecological feminism in 1974 in her book, *Feminism or Death* (1980) and officially established the term eco feminism. It emphasizes that the domination of women and the domination of nature are closely associated. Eco-feminists assert that patriarchy or andocentric is the base of the domination of both women and nature. The aim of eco-feminism is to liberate both women and nature from the clutches of patriarchy. Patriarchal domination over both women and nature has become the outcome in the oppression of women and the destruction of nature. In order to challenge the exploitation of women and the destruction of nature, eco-feminists focused on the abolition of patriarchal forms of domination from the society. Hence, eco-feminism is a threat to the patriarchal power and privileges. It focuses on holism, equality and interrelatedness of all life. It also insists on the preservation of non-human natural world.

The most sensitive and highly debated issue in the contemporary worldwide societies is the rigorous process of development. Development, at the cost of natural resources, life, health and ancient values. Here, to present and bedrock my opinion about the ecology and eco-feminism I am paying my gratitude to Vandana Shiva's, *Staying Alive: Women, Ecology and Development*. Vandana Shiva, a prominent writer on feminism, ecology, eco-criticism and eco-feminism. She has depicted a strong relationship between the nature and women in her works. Her philosophy of looking at the nature and world has inspired not only the East but also the Western world. She has been an ecology warrior since her early age. She cannot be labelled as an ecologist or author or physicist or thinker. She is much more than all these. She is recognized as one of the most influential environment activist and radical scientist in the world. Her solidarity produced a voice to the marginalized women of the world. Vandana Shiva has been awarded the Right Livelihood Award 1993, prestigious Sydney Peace Prize in 2010 in recognition of her works in social justice and many more awards. She is a strong pillar as a food sovereignty advocate and an anti-globalization author.

In her book *Eco-feminism* collaborated with German feminist writer Maria Miesshe evidently presented deep connection between women and nature. “Violence against women was indeed the first issue which mobilized women in the whole world. In spite of many feminist struggles against male violence, it has not disappeared. On

the contrary it has increased. It is still part and parcel of all institutions in our patriarchal societies. It is part of the economy, the family, religion, politics, the media, and culture. It exists in so called 'civilized' countries as well as in 'backward' countries. The form of this violence may differ but the core is the same". (Mies, Shiva, *Ecofeminism*, Kindle 415, 430) Now while living in 21st century, the age of enlightenment, it is vital to give recognition to the existence of women. But the deep rooted disease in all the so called modern societies of the world is advancement. Advancement in technology, sciences and cultures.

The modern development of the world is in fact a new form to dominate the world and it has spread poverty and hunger in the whole world. It is a type of development that has assorted the Nature, 'Prakriti' as considered in our Vedas. It is considered as the original substance of universe. It can bring change in the empirical universe and according to Bhagvad Gita it is the 'primal motive force'. All the activities of the universe and human being are controlled by the nature. If there is danger to our Nature then revenge must be taken back. It can be seen in many hazardous counter attacks on earth due to the ignorance of natural resources. The Tsunami attacks in oceans, earthquakes, hurricanes and many geological activities that caused destruction in the world are examples of nature's counter attacks. In recent years the Uttarakhand flood tragedy in India, where the climate change has destroyed life. The people became homeless, schools, roads, bridges everything got destroyed. Fire in the Amazon rainforest, which is called the purifier of the world. It is a vital carbon store that slows down the pace of global warming, bushfire in Australia that killed millions of animals with highest number of kangaroos and koalas. In recent, 2020, Corona virus horror in China and almost all the countries and many more unmentioned natural calamities, have created terror in human mind as well as governments of the world. After all who is behind such disasters? God? Nature? Of course Nature. But why nature? Why not humans? Checkout in News, Newspapers, National, International, Internet full of latest Why not humans? Checkout in News, Newspapers, National, International, Internet full of latest updates on these calamities. Answer is only one. Human. One and only human and human activities. Its human sin that is making Mother Nature react. According to Vandana Shiva, "we have perpetuated a war against our human bodies, which are made of the Earth. All the disease epidemics that were mentioned again and again and again, in every case are reflections of that war against the Earth, against human beings and against human bodies." (Shiva, *Staying*, pp. 43-44) His hunger for Maldevelopment. His hunger to rule over the nature. But why humanity fears? Why? The question is why they can't control nature with their so called advancement and high technological sciences. We are busy with nuclear deals with other nations. Jet planes, fighter planes, artificial intelligence based Technogym, simulation machines are the main hunger of the present society. Can't be the nuclear science or defense weapons solve these issues? After all the focus of governments and world organizations is only on artificial developments, not the real human life development.

This is the voice of Vandana Shiva, for the so called destructive development. It will gradually eat up all the humanity and natural resources and create an uncontrollable disaster. The human beings are taking a great risk in disturbing and trying to penetrate in the nature and its working. In *Staying Alive*, Vandana Shiva has depicted a strong and unbreakable relation among ecology, development and women. "The death of nature is central to this threat to survival, the earth is rapidly dying: her forests are dying, her soils are dying, her waters are dying, her air is dying. Tropical forests, the creators of the world's climate, the cradle of the world's vegetational wealth, are being bull-dozed, burnt, ruined or submerged." (Shiva, *Staying*, xii). What is considered as development today is actually Maldevelopment, which is blindly based on the idea of money making. In the name of money making, originality of the forest is being disturbed. Naturally the whole forest is a complete family that supports each other, in one or other way. Nothing is a waste there. All the medicinal plants, herbs and other trees are ready to serve the humanity. Mechanism of its working is interrelated, complex and beautiful. But the members of forest that can't make money for humans are being separated from their family and uniformity is introduced there with the reductionist mindset. And then the plantation of money making plans like eucalyptus, worsening the situation by ruining the soil quality. The uneducated, marginalized members of forests are forced to accept the luring offers of industrialists and governments.

Afforestation has a great impact on the lives of women as they are responsible for gathering foods from forest to feed their family. Actually this so called development process that has originated from western culture. It is completely biased. It is formulated in such a way that it considers only as contributors in the development process. It is based on the logic that as men are physically stronger, they can contribute more in the development process. Women spent their life in carrying water from rivers, feeding the family, giving birth to the children, a major responsibility of women is not considered significant in the Maldevelopment process. Feeding the family is not listed in the development parameters. Taking care of animals has no significance in the development process. Many revolutionary works are continuously going on to stop this money based development process. Around more than 300 members of Bishnoi Community of Rajasthan, led by a woman

called Amrita Devi sacrificed their life to save their sacred Khejri trees by clinging to them. Chipko Movement was also a significant move when people proved their love and care for forests. Vandana Shiva herself participated in the movement as a volunteer. The movement got international recognition. Narmada Bachao Andolan by Medha Patkar and native tribals, farmers, environmentalists and human rights activists against a number of large dam projects across river Narmada which flows through the states of Gujarat, Madhya Pradesh and Maharashtra. A recent protest of Mumbai locals in 2019 to save the trees of Aarey colony presents the awareness of people for their mother nature. The government was planning to cut 2,185 trees for a new metro rail project. The Aarey colony's protest is a fight to save Mumbai's last 'Green Lung'. Not only trees but also the rivers, natural resources that we get from earth need to be saved. (The Hindu)

A step ahead, in 2019 Indian Government has started Geotagging the plants under various new schemes under which the data of the plantation can be collected. This data will be encoded in the QR code and will be printed on the name plate along with tree name. But the question still remains the same. Is this data collection and record is only for global development and greenery reports only. Only at the international platform to prove the country eco-friendly and maintaining the standards of environment cleanliness. Many feminists are emerging in the society to recover the value of women. But most of them are focusing on the masculinization of women power. They want the women to do the things that men do as a contributor of the development process. But the solution lies in respecting the women in their inherent expertise that is proper management of natural resources their ability to infuse moral values in the family members, co-operation and selfless love. According to Shiva, women and nature have an intricate and intimate relationship, as well as a shared history on the grounds of a common experience of exploitation, degradation and domination by an androcentric attitude. Women need not to compare themselves to men and prove themselves better than men. They are far superior beings of nature. They have power to give birth, to nurture a life. But the western development and industrialization has made them marginalized on the work front where they are not aware about their innate attributes. They run after the success like patriarchal dominance made them. Their basic rights have been snatched. This led the foundation of exploitation, injustice and inequality towards women. Women are Nature, women are Prakriti that nurture humanity like a mother nurtures its children. They both are inseparable. Indian feminist writer, Kamala Markandaya has beautifully presented the love of Rukmani for her land and nature, in her novel 'Nectar in a Sieve'. She also portrayed, how satisfied her life was in the lap of nature, "While the sun shines on you the fields are green and beautiful to the eye, and your husband sees beauty in you which no one has seen before, and you have a good store of grain laid away for hard times, a roof over you and a sweet stirring in your body, what more can a woman ask for? My heart sang and my feet were light as I went about my work, getting up at sunrise and going to sleep content. Peace and quiet were ours. How well I recall it, how grateful I am that not all the clamour which invaded our lives later could subdue the memory or still longing for it. Rather, it has strengthened it: had there not been what has been, I might never have known how blessed we were". (Markandaya, Nectar 9). How beautiful and satisfied life one could live in the lap of nature!

In Indian Mythology, the universe has no difference between the poor and rich, men and women, secular and sacred, forest and rivers, field and forest, animals and crops and so on. It depicts that the question of transgender is not a question of exclusion. And especially for a woman who has given birth to a transgender, it's very difficult to leave her child. But in our patriarchal society women have to. They are forced to leave their transgender child. It is an abolition of rights of women. Transgender are also a part of the organic construction. Although in western science, the concept of dualism exists. Ultimately who had to survive? Women. The major victims of ecology crisis are women. According to Vandana Shiva, like nature, women produce and reproduce life not merely biologically but socially and economically also. Forests and women are interrelated from ancient times. Forests were worshipped considering as Goddess Aranyani in our ancient Aranya Sanskriti. (Shiva, Staying, p.53) Due to the introduction of western society, their values and colonization, the masculine view came in India. For western society forest are no more than their woody biomass that fulfill their demands of wood. In India also, British rule introduced scientific management of forests which resulted in reductionist approach and western patriarchy. The management of forest life and its blessings was in the hands of colonizers. They destructed forest life for the sake of Maldevelopment activities. Railways and industries were introduced and the commercial benefits got significance.

According to Vandana Shiva, the natural creation of rice and wheat have been monopolized by the industries due to which they have modified the seed and reduced its quality. She especially mentioned the USA based sustainable agriculture company, Monsanto that started to strengthen its monopoly through seed replacement and licensing agreements with the Indian companies. Here the questions arises that do we need modified genes of seeds? Is it whole creation is for sale? A seed in the world of freedom grows on its own terms. There is no external power or technology or computers that has to tell it. It's the ultimate expression of freedom. Shiva's

ultimate opponent Barun Mitra from liberty institute call her the “The Green Killer”, as she protested against the “Green Revolution” in India. In their view Vandana Shiva is actually going to perpetuate the poverty. They awarded her with ‘The Bullshit Award’ for sustaining poverty. Liberalization of trade and globalization causes harm to the nature and Earth. Human life can’t be made subservient to money and people cannot be made subservient to power. The structure of globalization in countries is going to take the ownership of life. In a documentary film on Vandana Shiva, BULLSHIT: Vandana Shiva- Environmental Activist Anti GM, the farming activities of her ‘Navdanya’ are presented. It’s like a voyage of discovery of the planet. ‘Navdanya’ farm at Dehradun at the foot of the Himalayas is the school of the nine seeds, started by Shiva 20 years ago. Today it has 20 thousands members, farmers from all over the India according to the documentary. Navdhanya is about recreating the biodiversity as knowledge and knowledge of nature as property. And this knowledge is not allowed to be a monopoly. At Navdanya there is a collection of different varieties of seeds with different qualities. The role of women in collecting the seeds and supervision of crops is prominent form ancient times. Women can create awareness and literacy about whatever we are fed away with. They have inbuilt expertise of sustained life.

In Indian cosmology, in both the outermost and abstruse customs and values, the world is produced and renewed by the dialectical play of creation and destruction, cohesion and disintegration. If there is creation then destruction is definite. Everything that is created in the nature will eventually find its way of destruction. The existence of the universe arises from this instinctive energy which is the substance of everything, controlling and governing everything. The manifestation of this power, this energy, is called nature (Prakriti). According to Shiva, “Nature as Prakriti is inherently active, a powerful, productive force in the dialectic of the creation, renewal and sustenance of all life. In Kulacudamim Nigama, Prakriti says:

There is none but Myself

Who is the Mother to create

Without Shakti, Shiva, the symbol for the force of creation and destruction, is as powerless as a corpse” (Shiva, Staying 37) Shiva the destroyer of evil and Shakti the creator or nature complement each other. Both are incomplete without each other.

The knowledge of nature and ecological ways of knowing nature are necessarily participatory. Without participating in the survival journey in the world, one can’t have the knowledge of it. Nature herself is the experiment and women, as sylviculturalists, having knowledge of all the forest life, agriculturists, with expertise in farming and related activities and water resource managers are the traditional natural scientists. The knowledge of women is ecological and plural. This multitasking aspect of their existence serves the humanity. In the entire world, the colonization of diverse peoples was, at its root, a forced subjugation of ecological concepts of nature and of the Earth as the repository of all forms, latencies and powers of creation, the ground and cause of the world Patriarchal system have disowned women and their inherent talent of productivity in the sustaining of life. The power of women is based on nature's productivity, the death of Prakriti is simultaneously a beginning of their marginalization, devaluation, displacement and ultimate dispensability. Eco-feminism and feminist movement is actually a struggle to emphasize the role of women in eccentric movements. Their actual position in the world and natural habitat. Women struggle at the home, workplace, in the neighborhood, educational institutions, industries and everywhere. Their relation with nature is completely different than that of man. The relation of man with nature is very dominating. It is based on property relation. They try to control the natural blessings. Women on the contrary are not the owners of their own bodies or of the earth. Since a tender age they are made to serve the male members of the family, whether it is brother or father. Their marriages are set up against their will. Thus they don’t own their life, ambitions or desires. After marriage they co-operate with their in laws family, take up the hold of productive works and give birth to the children. They nourish and nurture them and reproduce life. The patriarchal system of society had viewed the work and labour of women as unproductive. While in the cycle of survival and capital accumulation, man’s work is defined as productive. He has domination over the commodities that he produced using the nature’s blessings and women’s hard work. In this process nature and working to produce and reproduce life as declared ‘unproductive’.

With the introduction of economics on global level and the theories of famous economist, Adam Smith, the role of nature and women’s work completely disappeared. The hard work of peasants and tribal societies was no more creative and productive according to the modern economics theories. The poor and marginal people have no use of so called national growth. As their basic requirements are not fulfilled. Everything, all the natural resources are in the hands of industrialists and businessmen community. They only use these natural resources

for their personal business profits. Only on international level the government and other organizations show off their concern to the farmers and the marginalized. But in real these terms and contracts only remains on the papers. And women were doubly marginalized if they are uneducated in patriarchal society. Nature and women are organically interrelated. Women struggle to conserve the environment. They are the primary sufferers of imbalance in ecological system. Farmers are forbidden from their lands, their natural way of farming. Their rights have been snatched by the government rules and industrial policies.

In the 21st century with the advent of awareness and education as well as social media women are confirming their role in the ecological system. On International Women's day 2020, an article extract from newspapers with headlines "7 women who took over PM's social media" (The Hindu) that included water conservation activist in Hyderabad; Vijaya Pawar, a Banjara traditional craft expert from Maharashtra; Kalawati Devi who led efforts to build toilets for women in Kanpur and Veena Devi; a home farmer who became village sarpanch. Every woman in every house and in every village of rural India works invisibly to provide the life to nature and family. Her invisible work is linked to nature and needs, which conserves nature through maintaining ecological cycles and conserves human life through satisfying the basic need of humanity- food, nutrition and water. In spite all such contributions the mentality of oppressed is deep rooted in women. When they get married it is obvious for them to take the permission of her husband and in-laws, regarding any decision. She is not the owner of her own life. A woman in her mind keeps her duties first. For her she becomes the second subject of priority. While she is the center of all the activities in household around which all the relations rotate. According to Vandana Shiva, "the spirit of science inspired by the truth, conscience and compassion cannot be stopped by threats or media attacks. For me, science has always been about service, not servitude. My life of science is about creativity and seeing connections, not about mechanistic thought and manipulated facts". Finally she quotes Albert Einstein, the most inspiring person in her life, as she said in a documentary film on her.

The intuitive mind is a sacred gift and the rational mind is a faithful servant. We have created a society that honors the servant and has forgotten the gift. (Canon 413)

Conclusion

Hence, the issues behind the ecological imbalances and neoliberal policies can be resolved with our awareness. Women with their inherent expertise are able to rise to defend nature's gift and fight against difficulties in saving our environment. With the advent of new technologies it's necessary for humanity to maintain a sustainable life style. It can be made successful with the coordination and partnership between women's and nature's work. The voices of women's liberation can give birth to new thought pattern for nature.

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GLOBALIZATION AND IMPACT ON INDIAN SOCIETY AND CULTURE

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ABSTRACT

A catch line of a fortune 500 company in the 90's said; the world is becoming smaller and the market place bigger, it couldn't be truer. As the gates opened to international companies and institutions little did anyone think the effects and consequences that will pose as challenges. Undoubtedly there has been enormous progress in many fields, but the open markets and globalization has posed many adverse effects too. In relative terms when India opened itself to the outside world, it was only in terms of economic cooperation, industrialization development in fields of technology were the focus as thought commonly, but simultaneously it has led to influx of various small and big companies and institutions from various fields ranging from education, medical care, agriculture and what not. There has been tremendous influx of western technology know how since then, and notable to mention along with came western traditions, culture, ethics and morals which have largely influenced us since then. Globalization is not only limited to economic cooperation any more; it's more than that, its exchange of culture traditions between countries. At certain times it's shaking the very base of our culture, traditions our virtues and upbringing, it has loosened many of our core values. As the need for business, employment, new technology and robust economy is essential in any society, so are the fundamental ethics and culture of that society needed to be taken care off. This paper is an attempt to outline the impacts on our society post globalization.

Keywords: - Globalization, Ethics, Culture, Morals, Economy, Western, Traditions, Society.

INTRODUCTION

Globalization is the process of integration of economies and amalgamation of societies; and the confluence of different cultures. In other words, globalization is the process of the mobilization and distribution of resources from one geographic location to another. It leads to interdependence amongst countries on each other. Since the term globalization has been coined, it has been popularly used in the narrow context of economics only but it is not limited to this sphere alone. Social cultural integration and confluence is an important aspect and result of globalization. Globalization affects people in every walk of life from culture, food, fashion, preferences, etc and even thinking. It has led to both good and bad effects on the lives of the people. With the dream of great opportunities, people used to move from east to west and vice-versa (Migration). Indian culture is no bar to this transformation process. Culture and traditions of any geographic region hold a special significance with respect to its uniqueness. This uniqueness has been disturbed and negatively impacted to varying degrees in lieu of globalization. Due to the advent of the western culture in the country our precious culture and religion has been influenced in a negative way. From the social point of view, globalization has significantly impacted the national life of countries like India, such as life style, attitude, identity, work culture, family structure and values and cuisine etc. As far as the culture is concerned, globalization has impacted our festivals, literature, music and cinema and television etc. The aspects like equal opportunities, gender inequality, drugs and trafficking and other social and political values are some other important aspects that get affected in the process of globalization of economies and societies and India is not immune to these changes.

Globalization may also be defined as the phenomenon of reaching out globally. The word globe indicates the earth, so when something has gone global, it means that it has reached other countries. It may be anything that has reached out to a different country from the country of origin. There is no denying that globalization has certainly been a blessing for the modern world. For India the impact of the policy of globalization has brought forth both good and evil affects. Right from the environmental challenges to climatic influence, the air, water soil pollution etc., to the cyber crime; globalization has a huge contribution to all the ill-effects of scientific advancements. May it be business, trade, and work exposure or the economic and financial status of the country; no field is left untouched by the reach of globalization. Globalization is an international platform for maintaining evenness and equality in the living mode of the people all over the world. Globalization is the resultant of the interchange of worldly views, opinions and the various aspects of the culture everywhere around the world.

REVIEW OF LITERATURE

The effects and consequences post globalization are immense in a country like India, when the doors of our economy were opened to the international markets it was a perception that economic activity industrialization technology will bring about massive changes in our economy. Undoubtedly there have been wide scale

developments in these fields with western technology, but never the less the exchange of cultural moral and ethical views between India and other countries has massively transformed our society and core values. We shall try to explore the impacts on our culture and society to highlight the effects of globalization in India.

INDIAN SOCIETY AND CULTURE

India is a diverse country with many languages, religion, traditions and dialect. From north to south to east to west India differs with its taste of food and cultural habits, yet “Unity in diversity” is what binds us all together despite the differences. India is not only a Hindu religion based society many ancient religions like Buddhism, Jainism and Sikhism has roots in India. From art to architecture, from race to religion India is a diverse country, rich in its traditions a glorious past and deep rooted ethics and morals are the benchmark of the Indian Society. Tolerance and spirituality are other aspects of our society, post globalization our society has been adversely affected and have shaken up our very core roots.

(A) Social Changes

Indian culture is a joint family culture, where in parents children's and grandchildren live together. To the extent that near relatives of parents and their wards too reside jointly. The joint families have become a thing of the past to Indians, especially to those residing in the metropolitan cities. Small flats have cropped up where nuclear families are blooming up. People have lost the patience and the mindset to get adjusted into the joint family, Children have started welcoming grandparents like guests or visitors, and such an upbringing is one of the main reasons of increasing old age homes, as these children treat their own parents as burden in their state of adulthood. The joint families have been broken now and nuclear families are more predominant.

Globalization is affecting the marital space too; previously marriage was considered an eternal bond an union of souls, but the number of rising divorce cases and extra marital affairs a frequent change of sex partners are clear enough indications of the adverse affects that have pilfered into our society. The modern husband and wife mostly both work now a days, and both stay apart from each other for work purpose leaving kids behind. Sometimes, both are working in different locations. The husband or wife; neither is not willing or able to give up their employment. It's long-distance marriage for them. But what happens to these kids? Either they don't have kids till late in their married life, or the kids don't get to spend quality time with parents. They just have to stay with the dad or mom, or with the grandparents because of schooling compulsions. Many Indian schools are following an international curriculum to meet the demands of increasingly modernized parents. The sphere is not different in love life of young couples, what dominates mostly now a days is frequently changing partners, casual sexual encounters without any attachments or bonds what so ever.

Our elders have always taught the value of treating the guests as God, warm hearted welcoming, greeting elders with due respect and celebrating every small festival with enjoyment and togetherness. Such a wide gathering with full hue and light can hardly be seen today. People have highly restricted themselves in social interaction. The interaction in present generation is highly diplomatic or formal, taking into consideration the financial status and wealth. People have lost social values and cheerful blessing of togetherness. The present generations are happier celebrating Valentine's Day rather than Holi or Diwali. Almost every festival, now days are celebrated with liquor and sweets has been replaced with KFC and McDonald's. Our tradition of greeting with a Namaste has been replaced with Hi and Hello.

Indian food, traditional clothes and languages are different in almost all states. The food varies in its taste, and the basic ingredients differ too, including taste and flavours. Even the clothing varies in different states which is very much particular in maintaining the dignity of woman and man. The varies cuisines from all over the world though have different flavours to add, still the food ingredients that have flourished with much popularity are the junk food items which has increased the health disorders in the country like obesity, hypertension and diabetes. Again the dressings like the coat and suits for the males are an inappropriate match for the Indian type of climate and skimpy bare minimum dress for woman are not a pretty sight in our society, and are again a way of distraction to the minds.

Even Indians are not very much in favour of promoting their mother tongue or our national language. Instead the youth today shy off from speaking their mother tongue or national language. Instead foreign languages like French, German and Spanish, start right from the school level, is the example of how much we ignore our Indian languages in comparison to the foreign ones.

WALMARTIZATION

A term which refers to profound transformations in regional and global economies through their sheer size, financial powers, and big departmental stores all over the region like Wal-Mart. It can be seen with the rise of

big businesses which have nearly killed the small traditional businesses in our society like the small kirana shops.

CONSUMERISM

Consumerism has infiltrated and changed the fabric of contemporary traditional Indian society. Globalization has made Indians consumerist, the business houses treat individuals as potential customers and offer products specifically targeting individuals, and e-commerce giants leave no stone unturned to sell their goods. Easy access to credit cards and loans has been instrumental in making us consumerist as well. Buying unnecessary or indulging too much has led to severe climate impacts as we are buying more electronics, and there's a short of space to dump them in lieu of proper recycling guidelines and factories we are becoming dumping ground of the world.

Effects of globalization in Indian Industry are observed as this has brought in large amounts of foreign investments into the Indian industry; especially in the BPO, pharmaceutical, petroleum, and manufacturing industries, and education. As a result, they boosted the Indian economy quite significantly. The benefits of the effects of globalization in the Indian Industry are that many foreign companies set up industries in India, and this has created great opportunities for employment to Indian people. Also this has reduced the level of unemployment and poverty in the country. These countries have taken advantage of India's lower cost, but highly talented, and English speaking work force, and utilizes global communications technologies such as voice-over IP (VOIP), email and the internet, international enterprises have been able to lower their cost base by establishing outsourced knowledge-worker operations in India. On the contrary the Indian youths have suffered mostly, that a great number of young people have left education in middle to earn easy money. And now after working in BPO's for long strenuous hours and living same monotonous life a major part of them are quitting the lure. Having left education mid way and now leaving job these youths suffer the most and create a vacuum in their lives, and future workforce of the country. Apart from this most are addicted to drugs drinking and smoking due to the working conditions and it's an adverse effect we see every day. Multinational corporate companies have targets and goals on every day basis, and even the highest paid worker has to bear the brunt of the targets, as a result mental health issues are common among high salaried workers because of target pressures. They can hardly find time for friends and family and are almost un-social able and live an isolated life. The MNC's need a workforce that's skilled and educated and as a result the less educated unskilled has hardly got any chance to develop themselves amid globalization in India.

AGRICULTURE

International cool drink companies and factories earn huge profits, spend very little on safety of environment or hardly pay employees enough, but they market their products so well and have created a customer base in every nook and corner. This has resulted in too much use of ground water almost depletion and farmers not getting enough for their arable land farms and adversely affecting the environment. But they continue to do business despite flouting norms and rules with money and their contacts in government. And ultimately the small farmers are worst affected. This has not only affected the farmers, but also our food production, which is rapidly declining since the amount of arable land is either decreasing because of industrialization, or scarcity of water or use of chemicals in industries which is making farm lands parched. It's affecting the very sector that is responsible for the maximum GDP in India.

Highlights of India's problem with globalization are as follows:-

- The poor and rural people have not been benefited in any way, they remain as they are instead they are worse than what they were post globalization.
- Increasing gap between rich and poor has fueled social inequality and unrest and is responsible for social differences and terrorist activity.
- Ethics and morals of business are non prevalent as they used to be, achieving targets and doing business is foremost no matter whatever the costs.
- Price hike of daily consumables and essential commodities and corporatization of government businesses have resulted in severe pressure on middle class society.

On the economic front more influx of money into our system has generated a new era of corruption, like never before, for example the scam involving Suresh Kalmadi in Common Wealth Games, A. Raja is 2G scam and Citi Bank scam are a few. Needless to mention ones the FDI (foreign Direct Investments) has poured in our economy is driven by the FDI, they earn money from our stock markets and our markets rise and fall according to their wish and will, when the influx of money is more the market rises and visa versa. No doubt technology

has improved banking, telecom, information technology, telephonic services but the side effects can't be ignored either. Digital scams, blackmailing, pornography and banking frauds are on the rise every day, liberalization has lead to a situation where our identity is at stake today. Global warming is associated with climate change, and green house gas emission, dumping of non bio degradable materials and melting of Antarctic ice caps all are associated with this phenomenon of globalization. Rich countries shift production bases to poor countries, due to cheap labour and availability of natural resources and set up industries like wise in another country. So they set up industries in other countries use them as production facilities and use that region to dump unwanted products and get back finished goods at cheap rates, to the extent that those countries get carbon credit for polluting by emitting green house gas that is CO₂, but the rich countries pay nothing, they just get away with their products. So these unethical practices by rich countries are also responsible for devastation of poorer countries and destroying the environment and ecology with use of harmful chemicals and pesticides and other industrial wastes. Packaged food and adulterated products with severe pollution is taking a toll on the general health of the population in these poorer countries where the base manufacturing hubs are set up by the rich nations. A stark example of the same in China and India, where food adulteration is rampant, chemical hazards, toxicity in soil and water has lead to aggravated diseases like mental health conditions stunted growth neurological disorders and many more such diseases are affecting the general population.

(B) Cultural Changes

Our ancient culture is not only rich but also diverse, ranging from music to arts to different forms of dance and literature. Sadly we hardly get a peek into our arts and culture when we switch on television now a day, its only western program involving violence, sex and language that's hard to watch along with parents or kids at home. Never the less these are only the main attraction now a days, even traditional programs have taken the form of western culture, where in they copy and represent western thoughts and views in Indian way. Our songs dance texts stories now seem to have evaporated and replaced by westerners. Over The Top platforms have marketed themselves vigorously and mostly we get western contents, if we do get Indian content it's more or less westernized in concept and script. Sadly even radio stations don't play much of our songs rather every other fm channel churns out English numbers. The space is not different in theaters and multiplexes, where in abundant English releases are on show but quality Indian cinema is a scarcity.

It's evident from the number of foreign schools and university that have ties up with India to open shop here, that they are more interested to caste their culture influence and literature here. Every student in a big private school has a mobile phone and seamlessly enjoys adult digital content unrestricted. As prevalent in maximum schools one can find Shakespeare more than Rabindranath Tagore, one will have to study a play by this English Author but hardly a poem by the Noble Laureate is in the syllabus. Although e-learning has shown a new dimension in online education system but hardly the average student can afford the costs of it, so the fact remains that a selected few privileged can the knowledge and majority are left out to fend for themselves, which will further lead to gaps in the coming generations. And this will directly lead to employment for a selected few in coming future where as the majority without the knowledge base will be left out. And that's the reason globalization haven't uplifted the village folks in any way rather the urban people have reaped the benefits, in India. In the era of satellite television we often see pornography being streamed without any restrictions and its easily assessable from phones and laptops and the government seems to have turned a blind eye, rapes sex in school, filming sexual acts and all these are rampant in fact so much that now there's a cyber cell in every police station to address digital crimes. Our cinemas are made in line with western views and so are the characters dressed and act like wise without any regard for our culture taste and morals. Needless to say we haven't been much able to share our culture traditions with westerners as they have, but the day isn't far when we will forget our roots and step into theirs. To an extent Indian culture tradition is definitely popular in Europe and America and Middle East but we have adopted more from them and given them less of ours.

CONCLUSION

We are on the verge of a major transformation as a society in terms of how we represent ourselves to the world. Although adopting foreign culture tradition isn't bad at all but we are forgetting our core values. Cultural modernization, funded by the forces of globalization, encroaches upon or does not promote the core cultural values of our society, its language, social practices culture and styles of life. The vivacity of the renewed sense of self-awareness generated among the members of the local cultures and communities is such as to succeed in making adaptive reconciliation with the changes posed by globalization. Political motivation is utmost necessity to gauge the pros and cons before making any decisive actions; else rampant influx of westernized culture will uproot us from the very base. A great Saint foresaw the dangers that was looming over head and delivered a famous lecture "Swami Vivekananda" foresaw the dangers of Globalization as early as in 1893 when He spoke at the Parliament of World Religions in Chicago. To quote his soul-stirring words: 'Shall India die? Then, from

the world all spirituality will be extinct, all sweet souled sympathy for religion will be extinct, all ideality will be extinct; and in its place will reign the duality of lust and luxury as the male and female deities, with money as its priest, fraud, force, and competition its ceremonies, and human soul its sacrifice. Such a thing can never be'."

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ROLE OF INDIAN WOMEN IN FREEDOM STRUGGLE AND POST-INDEPENDENCE ERA

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ABSTRACT

During the surge of India's freedom movement Indian women, though they were subjected to various social, economic, cultural and political discriminations, participated in large numbers to put an end to nefarious foreign rule in India. Starting from the Bengal Partition Movement in 1905 to Quit India Movement in 1942, in every movement they left an indelible mark. Many women organisations in course of India's freedom movement came into existence and these organisations were not limited only to securing women's rights but kindled a passion in their hearts to dislodge alien rule from India. Indian women were profoundly influenced by Gandhian philosophy and preaching and also enchanted by the idea of Total Revolution of J. P. Narayan. Along with their male counterparts they went through a period of protracted hardships and atrocities by the police and British Army with the object of trouncing the symbol of British authority. Many women activists laid their lives to free India. After independence contrary to their expectations their status was further relegated. They have found it really difficult to carve out a niche in political, administrative and economic domains. In the wake of bride beating, dowry system, alcoholism, female infanticide and obnoxious custom of female infibulation they raised their voices and organised many movements and thus forcing the government authority to pass several legislations, viz. Dowry Prohibition Act, right to have equal share to parental property, right to divorce of women and right of maintenance, one thirds reservation of seats in all tiers of local self-government. Still their position is mere cog in the wheels. A lot needs to be done so that they can stand on equal footing with men in every walks of life.

Keywords: Indelible, Gandhian Philosophy, Trouncing, Obnoxious custom, Dowry Prohibition, Self-government.

In independent India there have been fundamental changes in the situation and position of women in the domain of law, politics, education and society. In the beginning of the 19th century, social reform movement had been organised in India. Among these movements the programmes of amelioration of the status of women was included as the main subject matter. In this regard relentless movement of Raja Ram Mohan Roy against religious orthodoxy, and securing women's rights were specially remarkable. The positive initiative and role of women in India's freedom struggle cannot be denied at all. In nationalist movement against the alien foreign rule the political role of the women was emphasised and highly praised. During India's freedom struggle it was proved that without the accompany of men, women participated in rally, organised procession, agitation movement and actively participated in Civil Disobedience Movement, Quit India Movement. So, they have every right to demand for voting rights, profitable government jobs and right to claim paternal property. In all trends of freedom struggle, such as, Gandhian movement, Communist and extremist movement women of contemporary India actively participated. They also joined peasant's and worker's movement.

The chapter of participation of revolutionary women in India's freedom struggle and their sacrifices to this noble cause is considered as the most important chapter in India's freedom movement against colonial British government. Contemporary Indian women could have restricted themselves to rendering indirect help and sympathy to the Indian revolutionaries and that would have been quite natural to the exploited and helpless women of Indian patriarchal social system. But the Indian women did not do this at that time. A remarkable section of women walked out of the safe family shelter and directly supported the revolutionary movement. They participated in revolutionary programmes actively and suffered a lot like their male counterparts at the hands of brutal British government.

Mahatma Gandhi formally launched non-cooperation movement in 1920's. The leadership of this movement in Bengal was vested in the hands of C.R. Das and his wife Basanti Devi. Basanti Devi gave leadership in boycott of foreign goods and promotion of indigenous cotton and khadi industries. Soon Basanti Devi was arrested along with Sunita Devi and Urmila Devi by the British government but was released soon. The incident of this arrest sparked off commotion in public mind. This incident of arrest of women politicians and freedom fighters created expected reaction among the women folklore and provided much required acceleration in nationalist movement of India. In 1921 Basanti Devi was appointed as the Chairman of Bengal Provincial Congress. One Bengali woman politician was established in the front row of leadership. This is a remarkable incident in the history of Indian nationalist movement. A conference was held at Chhatragram in 1922 and Basanti Devi performed the role of President of this conference. The historical significance of this conference is undeniable

as in this conference record number of women activists participated. According to many, dynamic and enchanting leadership of Basanti Devi attracted large numbers of women activists to participate in this conference.

In the history of India's independence movement another important name is Hema Prabha Majumdar. On the eve of establishment of Swaraj Party of C.R. Das there were only five active members and Hemprabha Mazumdar was one of them. General Council meeting of Swaraj Party was held in Mumbai in 1923. Hemprabha Mazumdar along with C.R. Das and Subhas Chandra Bose also jointed in this meeting. In 1937 Hemprabha Mazumdar was elected as the member of Bengal provincial legislature. Urmila Devi was in charge of governing 'Nari Karma Mandir' and Hema Prabha Mazumdar rendered necessary help to Urmila Devi in governing 'Nari Karma Mandir'. 'Nari Karma Mandir' popularised spinning and weaving among women. Within a short period of time "Nari Karma Mandir" was terminated. In 1922 by the initiative of Hemprabha Mazumdar "Mahila Karmi Samsad" was constituted. Through this body on one hand an attempt was made to inspire women in nationalist ideology and on the other hand professional training was imparted to women.

In 1915 Gandhiji returned from South Africa and he took up the cudgel for self-rule and non-cooperation movement. Non-cooperation movement heralded the participation of enlightened women like Sarala Devi, Rajkumari Amrit Kaur, Susheela Nair, Sucheta Kriplani, Vijaya Lakshmi Pandit and all of them made valuable contribution in this movement. Civil disobedience Movement opened up a new chapter in India's freedom struggle movement with the participation of Sarojini Naidu who was campaigning and leading from the front in Civil Disobedience Movement and Salt Satyagraha. Vijay Lakshmi Pandit was arrested multiple times for her active involvement in Civil Disobedience Movement.

All India Congress Committee adopted Quit India resolution on 8th August 1942 asking for the end of British rule in India and proposed the commencement of a non-violent mass struggle under the leadership of Gandhi to achieve this aim. But on the very next day Gandhi and other eminent leaders of the INC were arrested and Congress was declared as illegal by the British government. As soon as the news of arrest of Gandhi and other leaders of the Congress reached to the common masses, they became restless and people indulged in arson, murder, sabotage and attacked the symbol of British authority. It is at this juncture it is necessary to say that any discussion on Quit India Movement is insignificant and utterly incomplete without mentioning the contributions of women and specially by Aruna Asaf Ali. During the Salt Satyagraha in 1930 for the first time she got involved in a political agitation and for which she had been sentenced to a one-year long imprisonment. Aruna Asaf Ali is ever remembered for the daring act of raising the Tricolour at the Gwalior tank amidst police atrocities and brutality. The contribution of Matangini Hazra is a perfect example of the involvement of rural folk in the nationalist struggle of 1942. She was born in the village Hogla in West Bengal under Medinipur district. She was profoundly influenced by the ideologies and teachings of Gandhi and that earned her the name old lady Gandhi. In 1942 Matangini Hazra led a procession of 6,000 people, mostly women, to ransack a local police station. When they were nearing their destination, the police started indiscriminate firing and she lost her life in the process. She died with the Tricolour in her hands.

Women freedom fighter Sucheta Kriplani also left an unfading mark in Quit India Movement. Before the outbreak of Quit India Movement Kriplani had been instrumental in founding Women's department of the INC in 1940 with the aim to implant political consciousness among women. When Kriplani received the information of the arrest of Congress leaders following Bombay Resolution, she was entrusted with the onerous responsibility of coordinating efforts among participants groups. She travelled from place to place carrying messages between various local political leaders. Numerous other women displayed an act of valour during Quit India Movement. In Orissa Nandini Devi led a procession at a very young age and she was soon arrested. Sashibala Devi, on the other hand, carried out the clandestine mission of distributing pamphlet issued by underground organisations. In Assam, young girls like Kanaklata Baruah and Kahuli Devi died of police atrocities. Tileswari Mahanta was another brave woman who showed her aplomb amidst police brutality in hosting the Tricolour at the Behali thana in Assam.

After securing independence emphasis was given on the legal and constitutional rights of women and recognition of liberty and equality of women. Voting rights of women were also recognised. A Committee under the leadership of Law Minister, B.R. Ambedkar of independent India submitted a bill. In this bill increase in age of marriage, right to divorce of women, right of maintenance, property right of women, recognition of dowry as stridhana (woman's estate) etc. proposals were adopted. Conservative section of contemporary society and the President Dr. Rajendra Prasad opposed the bill. But the bill received unprecedented support from majority of members of INC, social reformers and the participants of women's movement. But the bill was

postponed. Four separate laws were enacted with some matters included in the bill. These laws are the Hindu Marriage Act (1955), The Hindu Succession Act (1956), the Hindu Minority and Guardianship Act (1956).

Colonial rule and the freedom movement have created political consciousness among the women of India. In the contemporary movement against feudalism and imperialism several trends were present. But the matter of women's emancipation and problems of women were more or less present in every trend. Naturally there was unanimity among all the parties in the matter of incorporation of justice, liberty, equality and dignity for women in the constitution in the field of forming free India. Accordingly, Article 16 of the Constitution of India assures the citizens of equality of opportunity in matters relating to appointment to any office under the state, irrespective of religion, caste, sex etc. Article 23 of the Indian Constitution prohibits traffic in human beings and use of women for immoral purpose. In the newly formed democratic system of independent India women who were included in different social groups became active in the matter of finding out the method of socio-economic mobility. During the Prime Ministership of Nehru, in the context of welfare-oriented objectives, some of the initiatives of women were recognised and accorded legal validity and protection. In this time there was one section of women who did not overcome the limitation of the social stratification of traditional patriarchal system. This category of women did not take advantage of changing situation. In this time there were many women's movements. But most of them were unorganised and scattered. As a result, matters concerning the general interests of women did not create sensation among the majority of populaces.

One positive aspect of women's movement is that women's organisations of contemporary India, main stream political parties and the movements at the grassroot level gave importance on the matters concerning women's interest. In this time atrocities and injustice faced by women were highlighted. In this regard we may cite the cases of dowry death, rape, oppression of women by licentious and drunkard family members. Different women's movement were organised from 1970's to till date. These movements were sometimes local and also spanned over the state boundaries. Naturally consciousness about the oppression of women was observed among the male folklore.

Women also played their parts in peasants, workers, tribal and environmental movements. Naturally the interests of women were merged with these movements. Leftist peasant movement was organised in Telangana region of Hyderabad from 1946-1950. Women participated in this movement and the leaders of this movement manifested the oppression of women. Active leftist women members organised the rural women. In rural areas "self-defence women samiti" was formed. Emphasis was given on curbing the incident of bride beating, bride burning and dowry deaths. In 1946-47, Tebhaga peasant movement emerged in Bengal. In this movement women organised themselves through "women's brigade". Women provided shelter to the agitators and maintained the link of communication. The matter of participation of women in secret guerrilla force was discouraged. Though few of them joined secret guerilla organisation yet they were not accepted with an open heart. Leftist women members of some regions also alleged of the pressure of marrying their male comrades and women mass organisations were forced to perform arduous responsibilities. In this movement women were kept apart from leadership position.

In 1954 Leftist women members left All India women's conference and joined National Federation of Indian Women. This organisation instead of growing into a big platform for women has turned into a party organisation. Many of the contemporary women leaders for the purpose of implementing various welfare oriented programmes of women engaged with projects undertaken by the government and other institutions. Among the programmes remarkable is rehabilitation of distress women refugees in the face of influx of refugees' problems, to arrange housing facilities for women working in urban areas, create employment training center for women.

Remarkable Women Movement: From 1973-75 communist and socialist women organised protest movement in urban areas of Maharashtra against rising prices of essential commodities. Thousands of housewives joined the rally. Those who were not able to come outside the house they also supported the movement from inside and rendered necessary help. This movement soon engulfed entire Gujrat. This movement in Gujrat influenced by the Total Revolution of J.P. Narayan, assumed the form of Nava Nirman Movement. In the meantime, women branch of Textile Labour Association was formed. In this time a Gandhian organisation SEWA [Self Employed Women's Association] came into existence and severed its relations with Textile Labour Association. This organisation of Women organised women employed in unorganised sectors and formed unions. This organisation arranged for training of unorganised women and provided them chief loan and opportunity of collecting bargaining. This movement of SEWA in course of time spread its tentacles to Delhi, Lucknow, Bhopal and Indore. This movement of women achieved unprecedented success. In recent time this movement is very active under the leadership of Ela Bhatt.

Another trend of women's movement was observed in 1970's. This trend is marked as autonomous women's organisation. By autonomous women's organisation is meant those organisations which are not related to any political party. There was mushrooming growth of autonomous women's organisations in the middle of 1970's. Among the members of this type of autonomous women's organisations most of them were active participants of Maoist and Naxalite movements. Some of these autonomous women's organisations are progressive Women's organisation of Osmania University in Hyderabad, "purogami stree sanghatana" in Pune, and "stree mukti sanghatana" of Mumbai. UN declared 1975 as the International Women's year. Eight March in every year is celebrated as International Women's day. Women's convention was held in Pune in October. In this Conference women of the entire state participated in large numbers. Most of the women participants were related to Maoist and Socialist groups or Republican Party, Lal Nishan Party or Marxist Communist Party. In shahada tribal belt under Dhulia district of Maharashtra, tribal women organised themselves against anti-arack movement. This movement in the preliminary stage was conducted by Sarvodaya workers who had faith in Gandhian philosophy and later on by the participants of Maoist Movements.

Firstly, this movement emerged for providing relief materials in drought prone areas. Women of Bhil tribal community played leading role in this movement. Soon this movement was converted into extremist movement against alcoholism. Tribal women have identified alcoholism as the main reason of wife beating and they unitedly destroyed alcohol containers. They publicly demanded stringent punishment for wife beating. This type of movement now and then emerged in different parts of India. In the middle of 1990's anti-alcohol movement was organised. Mainly poor women of rural areas participated in this movement.

Another remarkable example of women's movement is Chipko movement of Uttarakhand and that took place in 1974. In that region woodcutters and contractors destroyed large chunk of forest. Women proceeded to unitedly to preserve forest areas. They organised protest movement to save the trees. When woodcutters came women hugged the trees from felling. This movement clearly manifested that women had special active role in nurturing and protecting the environment. It is stated that the interests of women are related to the environment movement. Due to environmental degradation women suffer most. If the forest is destroyed then the women have to go far flung place to collect fuel materials and water.

In tribal belt of Chhattisgarh of Madhya Pradesh "Chhattisgarh Mining Labour Organisation" was established. This organisation was established for organising extremist movement against the decision of mechanisation of Bhilai Steel Plant. It was assumed that if the decision of mechanisation of Bhilai Steel Plant is implemented then the appointment of women workers would have been retrenched. For the purpose of protecting the interest of tribal job seeking women "Mahila Mukti Morcha" was formed.

Women organised agitation movement against dowry system and dowry death. Protest movement was organised by women against the oppression of women in connection with dowry system since 1979. Women under the banner of Janata Party formed "Mahila Dakshata Samiti". Most of the women of protest movement had faith in socialist principles and ideologies. They organised strong anti-dowry movement. The "Delhi Stree Sangathan" organisation actively participated in this movement. Anti-dowry road show, rally, road side dharna, drama etc. were organised. In different places dharna and agitation movements were also organised. Moreover, door-to-door anti-dowry awareness campaign was organised. In this regard active role of women organisation, such as, "Janwadi Mahila Samiti" of Marxist Communist Party, "All-India Democratic women Organisation" are remarkable. In the context of this movement a bill was introduced in Parliament for amending anti-dowry Act of 1961. The bill was sent to the Joint Parliamentary Committee. Various women's organizations submitted relevant information's in this Committee. In 1984 by amending previous Act of dowry related crime a new stringent Act was formulated. In 2012 brutal rape and murder of Jyoti Singh, (Nirbhaya case) a 23-year-old female Physiotherapy intern generated widespread national and international coverage and received condemnation both in India and abroad for such despicable crime. This gruesome incident led to countrywide protest by several women organizations' and responsible citizens of the country. Cumbersome judicial process and procrastination on the parts of judges and pleaders in delivering justice to the victim further added fuel to the fire and left a question mark on the tardiness of Indian Judicial system.

Concluding Observation: During the days of freedom struggle Indian women played an active role in dislodging foreign rule from Indian soil but still surprisingly they are subjected to various political, economic, cultural and social restrictions and discriminations. Government of India has adopted various ameliorative measures to uplift their conditions. Education is one such measure. Women should be given education. Education will enlighten their outlook and make them conscious of their rights, duties and responsibilities in the society. They should be encouraged to go in for higher education. Women should be encouraged and congenial atmosphere should be made available for them so that they can actively participate in domain of politics. Seats should be reserved for

women both in Parliament as well as State Legislative Assemblies and local bodies of self-government. In this regard an important step is reservation of one-thirds of seats in all institutions of local bodies through 73rd Constitutional Amendment in 1992. The Women's Reservation Bill (108th Amendment) Bill was passed in Indian Parliament (2008) which proposed to amend the Constitution in order to reserve one-third of all seats in the Lower House of Indian Parliament. Several Acts have been passed to protect women from perpetrators. These include the Dowry Prohibition Act, 1961, Indecent Representation of Women (Prohibition) Act, 1986, the Suppression of Immoral Traffic Act or SITA, 1956, The Sexual Harassment of Women at workplace (Prevention, Prohibition and Redressal) Act, 2013 (POSH Act) etc. Despite adoption of these measures position of women in our society is still bleak. A section of male populace is unwilling to shed rustic mentality of making derogatory comments against women, outraging their modesty and subjecting them to an inferior position in society. Mindset of such people is required to be changed. Unless we alter our mindset about women and provide them reasonable space in different walks of life their amelioration and our crusade of ending their subjugation to social, economic, cultural and political domains seems to remain ever perennial.

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A GENERAL OUTLOOK OF APPLICATIONS OF GRAPH THEORY

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ABSTRACT

In mathematics, graph theory is the study of graphs, which are mathematical structures used to model pairwise relations between objects. It is applied to areas of mathematics, science and technology. It is being actively used in fields of physics, chemistry, communication networks and coding theory, computer science (algorithms and computation) and operations research and also used in many application like radar, astronomy, circuit design, communication network addressing, data base management. This paper gives a general outlook of the applications of graph theory in heterogeneous fields to some extent, but mainly focuses on the computer science applications and coding theory that uses graph theoretical concepts.

Keywords: Graphs, network, application of graphs, graph algorithms, bipartite graph.

INTRODUCTION

A "graph" in this context is made up of vertices or node and lines called edges that connect them. A graph may be undirected, meaning that there is no distinction between the two vertices associated with each edge, or its edges may be directed from one vertex to another; see graph (mathematics) for more detailed definitions and for other variations in the types of graph that are commonly considered. Graphs are one of the prime objects of study in discrete mathematics. In the most common sense of the term graph is an ordered pair $G=(V,E)$ comprising a set V of vertices or nodes together with a set E of edges or lines, which are 2-element subsets of V (i.e., an edge is related with two vertices, and the relation is represented as an unordered pair of the vertices with respect to the particular edge)[1]. The origin of graph theory started with the problem of Koenigsberg Bridge, in 1735. This problem led to the concept of Eulerian Graph. Euler studied the problem of Koenigsberg bridge and constructed a structure to solve the problem called Eulerian graph. In 1840, A.F Mobius gave the idea of complete graph and bipartite graph and Kuratowski's proved that they are planar by means of recreational problems. The concept of tree, (a connected graph without cycles)[2] was implemented by Gustav Kirchhoff in 1845, and he employed graph theoretical ideas in the calculation of currents in electrical networks or circuits. In 1852, Thomas Guthrie found the famous four colour problem. Then in 1856, Thomas. P. Kirkman and William R. Hamilton studied cycles on polyhedra and invented the concept called Hamiltonian graph by studying trips that visited certain

PHYSICS AND CHEMISTRY

Graph theory is also used to study molecules in chemistry and physics. In condensed matter physics, the three-dimensional structure of complicated simulated atomic structures can be studied quantitatively by gathering statistics on graph-theoretic properties related to the topology of the atoms. Also, "the Feynman graphs and rules of calculation summarize quantum field theory in a form in close contact with the experimental numbers one wants to understand." [5] In chemistry a graph makes a natural model for a molecule, where vertices represent atoms and edges bonds. This approach is especially used in computer processing of molecular structures, ranging from chemical editors to database searching. In statistical physics, graphs can represent local connections between interacting parts of a system, as well as the dynamics of a physical process on such systems. Similarly, in computational neuroscience graphs can be used to represent functional connections between brain areas that interact to give rise to various cognitive processes, where the vertices represent different areas of the brain and the edges represent the connections between those areas. Graph theory plays an important role in electrical modeling of electrical networks, here, weights are associated with resistance of the wire segments to obtain electrical properties of network structures.[6]

Data Mining

Data mining is the process of observing interesting information from a huge data sets by using methods from machine learning, artificial intelligence, statistics and database systems. A key idea is to reveal patterns in the large data set and in general includes the following

- Anomaly detection (detection of change/ deviation) which is the recognition of strange data records that might be interesting or has data errors.
- Learning of association rule or modelling of dependence which discovers relationship between variables.
- Clustering that groups the objects which are similar.

- Classification which infers known structure to apply to new data.
- Regression that reveal a function which groups available data with smaller error.

Summarization which briefs about compress representation of data set including generation of report and visualization

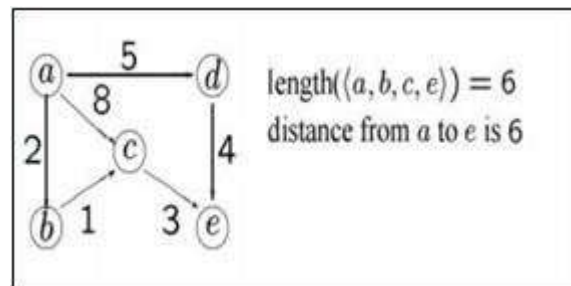
Clustering analysis is a important part of data mining. The aim of clustering algorithm is to group the objects based on the described information about them. In clustering of data are done based on the similarity of objects. Objects which are similar to each other are grouped into same clusters and objects which are dissimilar are grouped into different groups [7]

ALGORITHMS AND GRAPH THEORY

1. Dijkstra's Shortest Path Algorithm

This algorithm is for graph with no negative weights. The idea of the algorithm is to maintain the list of vertices at every stage of graph that we have discovered. In terms of path weight, we process the vertex that is closest to the source. We keep track of the minimum path weight among all the paths from the source we have found so far. We explore every edge $e = (v, u)$ that leaves v , when we process a vertex v and by using (v, u) as the last edge, consider the new path from source to u . we update the minimum path weight of vertex u , based on the weight of the new path. Let $G = (V, E)$ be a weighted digraph $\omega = E \rightarrow \mathbb{R}$ mapping edges of real-valued weights. The distance from u to v is denoted by

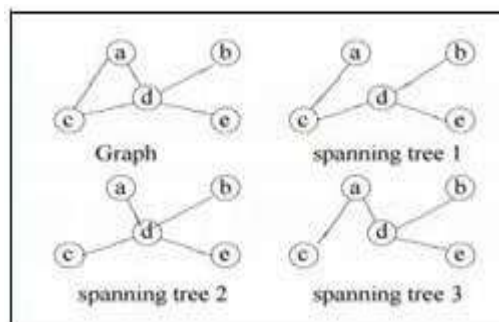
$\delta(u, v)$, is the length of minimum length path if there is a path from u to v and is as shown in the graph



Graph.1

2. Minimum Spanning Tree

A spanning tree of that graph is a subgraph that is a tree and connects all the vertices together, Given a connected, undirected graph. We can also assign a weight to each edge, which is a number representing how unfavorable it is, and use this to assign a weight to a spanning tree by computing the sum of the weights of the edges in that spanning tree. Spanning Tree is a subgraph T of undirected graph $G = (V, E)$ is a spanning tree of G if is a tree and contains every vertex of G . A minimum spanning tree (MST) or minimum weight spanning tree is then a spanning tree with weight less than or equal to the weight of every other spanning tree as shown in the graph 2. [8]

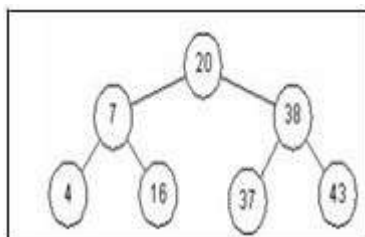


Graph.2

3. Algorithms for searching an element in a data structure

A binary search tree is a tree where each node has a left and right child. Either child, or both children, may be missing. Assuming k represents the value of a given node, then a binary search tree also has the following property: all children to the left of the node have values smaller than k , and all children to the right of the node have values larger than k . The top of a tree is known as the root, and the exposed nodes at the bottom are known

as leaves. In Figure below, the root is node 20 and the leaves are nodes 4, 16, 37, and 43. The height of a tree is the length of the longest path from root to leaf. For this example the tree height is 2 and shown in the following graph 3.



Graph. 3.

To search a tree for a given value, we start at the root and work down. For example, to search for 16, we first note that $16 < 20$ and we traverse to the left child. The second comparison finds that $16 > 7$, so we traverse to the right child [9]

GRAPH THEORY APPLICATIONS

In computer science, graphs are used to represent networks of communication, data organization, computational devices, the flow of computation, etc. For instance, the link structure of a website can be represented by a directed graph, in which the vertices represent web pages and directed edges represent links from one page to another. In condensed matter physics, the three-dimensional structure of complicated simulated atomic structures can be studied quantitatively by gathering statistics on graph-theoretic properties related to the topology of the atoms. In chemistry a graph makes a natural model for a molecule, where vertices represent atoms and edges bonds. This approach is especially used in computer processing of molecular structures, ranging from chemical editors to database searching.

In statistical physics, graphs can represent local connections between interacting parts of a system, as well as the dynamics of a physical process on such systems. Graphs are also used to represent the micro-scale channels of porous media, in which the vertices represent the pores and the edges represent the smaller channels connecting the pores. Likewise, graph theory is useful in biology and conservation efforts where a vertex can represent regions where certain species exist (or habitats) and the edges represent migration paths, or movement between the regions. This information is important when looking at breeding patterns or tracking the spread of disease, parasites or how changes to the movement can affect other species [10].

CONCLUSION

In this paper we overviewed applications of graph theory and research challenges have also been surveyed. The topics we reviewed include physics, chemistry, communication networks, algorithms, computation, circuit design, and data base management. There are many problems in this area which are yet to be solved. It is hoped that this outlook would attract many new researchers into graph theory.

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A STUDY ON INNOVATIVE BANKING POLICIES FOR DEPOSIT MOBILISATION AND ITS IMPACT

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ABSTRACT

Deposit mobilization is an integral part of banking activity. Mobilization of savings through intensive deposit collection has been regarded as the major task of banking in India. Acceptance of deposits is the primary function of commercial banks. As such, deposit mobilization is one of the basic innovations in current Indian banking activity. Hence, in this paper, an attempt is made to evaluate the innovative Banking policies and its impact on the trend and growth in deposit mobilization of scheduled commercial banks in Mumbai in the period from 20012-13 to 2017-18. Three different types of deposits, namely demand deposit, savings deposit and term deposit is considered for the study taking four types of banks, viz., public sector banks, private sector banks, foreign banks and co-operative banks. The total number of deposits accounts and total amount of deposits mobilized during the year from 20012-13 to 2017-18 in all scheduled commercial banks in India is gathered from RBI bulletin. The collected time series data are subjected descriptive statistics. Analysis is done taking primary data through a questionnaire to present different factors responsible for deposit mobilization of four types of banks, viz., public sector banks, private sector banks, foreign banks and co-operative banks in Mumbai city.

1. INTRODUCTION:

Money is compressed work, stored energy, which can be exchanged for goods and services. If exchange is delayed, money can be saved or invested so that it will create more money in the future, i.e. a penny saved is a penny earned. What happens in practice is that entities in need of money (such as individuals, households, businesses or government) access available savings (from households or other companies) through financial intermediaries (like banks, money market and capital market). Banks provide various loans and advances to industries, corporates and individuals. The interest received on these loans is their main source of income. Thus, banks thrive on savings and saving comes from idle cash or from those postpone, sacrifice or forego spending resulting into future assets or wealth.

The significance of banking has increased all over the world with the rise in income levels and growth in the volume of financial transactions. There has been a transition in the outlook of banking from class banking to mass banking. The role of commercial banks in this sphere is substantial. Currently, this is a zenith stage for Banking revolution showing economic success for the developing countries like that of ours, i.e. India. Indian banks have introduced innovative schemes like Differential Rate of Interest Scheme (DRI) and have come to finance new schemes such as Integrated Rural Development Programme (IRDP), Self-employment to Educated Unemployed Youth (SEEUY) and Prime Ministers Rozgar Yojana (PMRY). All these schemes need money which can be generated from mobilisation of savings of individuals and households.

As stated above, bank deposits are the main source of funds for banking sector. Banks are the intermediaries that direct the excess cash balances of individuals and households from unproductive to productive channels. In the post- liberalisation and privatization era, the competition among banks has intensified with the establishment of number of private sector banks and foreign banks in India. Also, the Indian households are becoming more of spending-oriented rather than saving-oriented. The direct effect of this is increasing competition for meagre savings of households intensifying the competition among banks to mobilise more and more savings. In this scenario, the banks are compelled to use innovative practices to mobilise limited household savings with a view to divert it to productive channels.

2. STATEMENT OF PROBLEM:

As stated above, the main source of finance for banking sector is deposits received by them through various deposit schemes such as saving deposits, fixed deposits and recurring deposits. Among various types of deposits, fixed or time deposits is the main source of finance for banking sector. Various initiatives on the part of government for financial inclusion, the prominent among them being Jan Dhan Yojana of Modi Government, are big leaps in giving boost to deposits mobilisation by banking sector in India. However, triangular competition among public sector banks, private sector banks and foreign banks necessitates the deployment of new and innovative methods of deposit mobilisations by banking sector. Against this background, the present study aims to study the various factors that affect the choice of banks by general public for saving their hard-

earned money and policies framed by banks to capitalise on these factors to mobilise deposits from general public under the title:

A STUDY ON INNOVATIVE BANKING POLICIES FOR DEPOSIT MOBILISATION AND ITS IMPACT

3. REVIEW OF LITERATURE:

The researcher has undertaken extensive survey of literature in order to build a theoretical foundation for the present research. A snapshot of the same has been produced here:

Sr. No.	Title of the Study and Authors	Summary
1.	Emmanuel Melvin O. Pesa (2015) Factors Affecting Deposit Mobilisation by Bank Agents in Kenya: A Case Study of National Bank of Kenya, Kissi Country	<ul style="list-style-type: none"> The main objective of the study was to assess factors affecting deposit mobilization by bank agents in Kenya. The specific objectives were to establish the extent to which fraud at agent level, customer satisfaction and branch network affect deposit mobilisation by bank agents.
2.	Helani Udara Gunasekara and Prasansha Kumari (2018)	<ul style="list-style-type: none"> The main objective of the study is to investigate the most effective factors affecting deposit mobilization by banks. The study reveals that, there is a significant and positive relationship between deposit mobilization and deposit interest rate, security, branch expansion, services, technology and awareness. Moreover, there is a significant relationship between living area and the amount of deposits and the demographic variables, such as, gender, occupation, education level and income significantly affect for deposit mobilization.
3.	Thangam Alagarsamy and Dr. S. Ganapathy (2017) Deposit Mobilisation	<ul style="list-style-type: none"> The study highlights the factors affecting deposit mobilization in the Western regions of Goa, Gujarat, Maharashtra, Dadra & Nagar Haveli and Daman & Diu. The study analyses the CAGR in deposit mobilisation of scheduled commercial banks in the Western Region of India during the period from 2005-2006 to 2014-2015.
		<ul style="list-style-type: none"> The study found that Maharashtra leads in the deposit mobilization in the Western parts of India.
4.	Seyte Zewde, Kenenisa Lemie and Ganfure Tarekegn (2018) Determinants of Deposit Mobilization in Ethiopian Commercial Banks	<ul style="list-style-type: none"> The main objective of the study is to identify the determinants of commercial banks deposit in Ethiopia. The research is based on secondary data collected for a period from 2002-2016 for the sample of seven commercial banks in Ethiopia. Hausman test was employed. Under this study, both internal and external factors affecting deposit mobilization.
5.	Narayana Maharana, Suman Kalyan Choudhury and Ashok Kumar Panigrahi (2015) Deposit Mobilization	<ul style="list-style-type: none"> This paper makes an attempt to evaluate the trend and growth in deposit mobilization of scheduled commercial banks in Bhubaneswar from a period from 2008-09 to 2013-14. Three different types of deposits, namely demand deposit, savings deposit and term deposit is considered for the study taking BOB and Axis Bank.

It can be seen in the above analysis that most of the above studies deals with deposit mobilisation in a number of foreign countries. There are some local studies which are either region-specific or bank-specific. But there is no extensive study which mainly focuses on the innovative deposit mobilisation strategies by Indian banks. Thus, there exists a research gap which the present study tries to fill up by undertaking a primary research in the city of Mumbai which is also a financial capital of India under the title:

A STUDY ON INNOVATIVE BANKING POLICIES FOR DEPOSIT MOBILISATION AND ITS IMPACT

4. PROFILE OF STUDY AREA:

Profiling the study area and its cannons for the research is an essential element of the research study. The profile of research area gives a proper idea about the physical, social, ethnic, political, economical and geographical features of the region where the study has been undertaken.

The present study is confined to the city of Mumbai. Mumbai is the capital city of the Indian state of Maharashtra. It is the most populated city in India and is the ninth most populated cities in the world. As per the Census 2011, the total population of the city stood at 18.4 million. Over the years, the city of Mumbai has expanded to its adjoining regions of Thane district and Raigad district. All these regions together constitute Mumbai Metropolitan Region (MMR). The total population of Mumbai city and its surrounding Mumbai Metropolitan Region (MMR) was 20.7 million in the year 2011. Mumbai city along with the neighbouring regions of the Mumbai Metropolitan Region (MMR) is one of the most populated urban regions in the world. Mumbai lies on the Western coast of India and has a deep natural harbour. It is also the wealthiest city in India. Mumbai has the highest number of billionaires and millionaires among all cities in India. The Gross Domestic Product (GDP) of the city is the highest among any city in South, West or Central Asia.

Mumbai is the financial, commercial and entertainment capital of India. It is one of the world's top ten centres of trade and commerce in terms of global financial flow, generating 6.16% of India's GDP and accounting for 25% of industrial output, 70% of maritime trade in India and 70% of capital transactions to India's economy. The city houses important financial institutions such as the Reserve Bank of India (RBI), the Securities Exchange Board of India (SEBI), the Bombay Stock Exchange (BSE), the National Stock Exchange of India (NSE), Multi-commodity Exchange of India Ltd. (MCX) and the corporate headquarters of numerous Indian companies and Multinational Corporations (MNCs). Many premier scientific and nuclear institutes of India like BARC, NPCL, IREL, TIFR, AERB, AECI and the Department of Atomic Energy are located in and around the city of Mumbai. India's Hindi (Bollywood) and Marathi film and television industry are located in Mumbai. Mumbai's business opportunities, as well as its potential to offer a higher standard of living, attract migrants from all over India, making the city a melting pot of many communities and cultures.

Owing to economic, commercial and financial hub, the city of Mumbai experiences large scale migration from different parts of the country. As a result, the city has expanded in all directions. During the last three decades, the population of the city has increased multi-fold, pushing demand for housing sector. Also changing life style, disintegration of joint family system, favourable government policy and increasing income have also contributed to the development of construction industry in the city. All these factors make Mumbai an ideal place for conducting research on banking industry.

5. CONCEPTUAL FRAMEWORK:

- (1) **Bank:** The word '*Bank*' comes from the French word '*Banque*', meaning, a bench. The Jews who lived in Italy in the olden days, used to sit on 'benches' to transact their businesses in the market places. It is interesting to note that the word '*Bank*' also finds its origin in the German language and was known as '*Banck*', meaning, funds that were held in joint custody. The Italians used the word '*Banco*' to represent the interpretation of the term 'piles of money'. Whatever the origin and connotation of the word, banks today are seen as structures and safe houses, wherein money is stored, deposited, borrowed or lent.
- (2) **Deposits:** Bank deposits are the main source of finance for any banking institution. Bank deposits are the surplus money at the disposal of individuals, households and business organisations which they keep in bank for safety and to earn returns in the form of interests. There are different types of banks deposits such as saving deposits, time deposits, term deposits, etc. The account holder can withdraw these money from bank at a short notice as per their requirements. There are certain restrictions on the withdrawal of certain types of deposits.
- (3) **Deposit Mobilisation:** Deposit mobilisation are the drives undertaken by banks to encourage people to

save their money. As stated above, there is a triangular competition between public sector banks, private sector banks and foreign banks in the Indian banking sector. In addition to that there is a large network of cooperative banks. All these banks compete for the meagre savings of the individuals and households. Therefore, banks have started conducting special drives for deposit mobilisations.

- (4) **Deposit Policies:** Deposit policies of the banks are influenced greatly by the guidelines issued by the Reserve Bank of India (RBI). The Reserve Bank of India declares base interest rates which provide guidelines to banks to decide their interest rates. Some interest rates such as interest rates on senior citizen bank deposits are regulated by the Reserve Bank of India. However, each bank is free to decide its own interest rate over and above base rate declared by the Reserve Bank of India. Banks are also free to formulate their own policies regarding mobilisation of deposits under their various schemes.

6. SCOPE OF STUDY

The present research study is limited to the four types of banks, viz., public sector banks, private sector banks, foreign banks and co-operative banks. Geographically, the study is restricted to the city of Mumbai. The data for the present study have been collected during a period from 2013 to 2018. The research study is constrained by the physical and financial limitations of the researcher.

7. RESEARCH OBJECTIVES:

Various research objectives which the present research seeks to achieve are as under:

- (1) To trace the origin, development, growth and role of banks in general and with respect to India in particular.
- (2) To understand the various components of balance sheets of banks with main focus on deposits and their implications on bank performance.
- (3) To analyse the relation between various factors affecting deposit mobilisation by different categories of banks.
- (4) To evaluate the impact of these factors on the deposit mobilisation by different categories of banks.
- (5) To suggest measures and methods to bring about greater alignment between deposit mobilisation factors and bank policies for deposit mobilisation.

8. RESEARCH HYPOTHESES:

Hypothesis - 1

H0 There is no significant relation between the factors that affect deposit mobilisation policies of different categories of banks.

H1 There is a significant relation between the factors that affect deposit mobilisation policies of different categories of banks.

Hypothesis - 2

H0 There is no significant relation between the factors affecting Deposit Mobilisation Policies of Banks and their Impact on Deposit Mobilisation by Banks.

H1 There is a significant relation between the factors affecting Deposit Mobilisation Policies of Banks and their Impact on Deposit Mobilisation by Banks.

9. RESEARCH METHODOLOGY:

The present research study is exploratory and descriptive in nature. An exploratory study is a valuable means of finding out 'what is happening; to seek new insights; to ask questions and to assess phenomena in a new light' (Robson 2002:59). The present study is an attempt to explore the factors that affect the deposit mobilisation capacity of various types of banks with reference to the city of Mumbai. The object of descriptive research is 'to portray an accurate profile of persons, events or situations' (Robson 2002:59). This may be an extension of, or a forerunner to, a piece of exploratory research or, more often, a piece of explanatory research. The present research tries to describe the factors that directly or indirectly impact the deposit mobilisation capacity of banks.

Universe:

The study is confined to the four categories of banks, viz., Public Sector Banks, Private Sector Banks, Foreign Banks and Co-operative Banks. Geographically, the study has been undertaken in the city of Mumbai, the financial and commercial capital of India and state capital of Maharashtra. Thus, all the

branches of Public Sector Banks, Private Sector Banks, Foreign Banks and Co- operative Bank situated in the city of Mumbai and their customers and employees constitute the sample for the purpose of the present study. Thus, the population under consideration is large and heterogeneous and cannot be defined precisely.

Sample:

Where the population is unknown, the sample size can be derived by computing the minimum sample size required for accuracy in estimating proportions by considering the standard normal deviation set at 95% confidence level (1.96), percentage picking a choice or response (50% = 0.5) and the confidence interval (0.05 = ± 5). The formula is:

$$n = \frac{z^2 pq}{e^2}$$

Where, n is the sample size, z is the selected critical value of desired confidence level, p is the estimated proportion of an attribute that is present in the population and $q = 1 - p$ and e is the desired level of precision or tolerable error.

Assuming the maximum variability, which is equal to 50% ($p = 0.5$) and taking 95% confidence level with $\pm 5\%$ precision, the calculation for required sample size will be as follows:

$$p = 0.5 \text{ and hence, } q = 1 - 0.5 = 0.5; \quad e = 0.05; \quad z = 1.96$$

$$n = \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2} = 384.16$$

Accordingly, the ideal sample size has been found to be 384.16. Therefore, the sample size has been selected as 475 in order to include some more elements of the population.

Table No. 1.1 Distribution of Sample

Type of Bank	Questionnaire			
	Distributed	Received	Valid	Selected for Analysis
Public Sector Bank	250	214	207	200
Private Sector Bank	250	226	211	200
Foreign Bank	50	32	26	25
Co-op Bank	100	58	52	50
Total	650	520	496	475

Source: Field Survey

Type of Data:

The research study is based on both primary as well as secondary data. The main source of secondary data has been the reports of Reserve Bank of India (RBI) and Annual Reports of selected commercial banks. Secondary data has also been sought from other published sources such as journals, magazines, newspaper articles, dissertations and theses. Primary data has been collected directly from bank customers through personal visits to various bank branches with the help of closed ended questionnaire.

Data Presentation:

The data so collected has been tabulated with the help of bivariate and multivariate tables. Simple bar diagrams, pie diagrams and multiple bar diagrams have been used for data presentation.

Data Analysis:

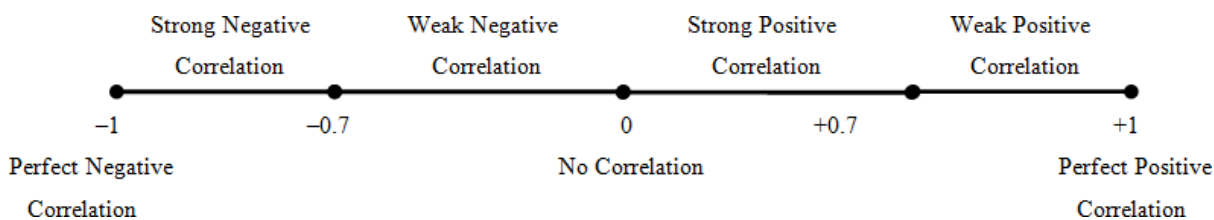
The data so tabulated has been analysed using simple statistical tools like mean and percentage. The researcher has made use of Spearman's Rank Correlation for the establishment of various research hypotheses. Rank Correlation studies the degree of correlation between ranks assigned to the same variables by two different rankers or respondents. It is one of the most frequently used tool for assessing the nature of relation and its degree between ranking of various parameters by two different entities.

$$\text{Spearman's Rank Correlation (R)} = 1 - \frac{6 \sum d^2}{n(n^2 - 1)}$$

Where,

d = different between ranks.

n = number of elements under consideration.



The results of the rank correlation always lie between $+1$ and -1 , which can be interpreted as under:

Research Report:

The researcher report has been presented in popular format.

10. DATA ANALYSIS AND CONCLUSION:

The snapshot of data analysis and conclusions derived thereof has been presented here:

Sampled Banks:

The researcher has considered the following four types of banks which are mainly situated in the urban areas:

- (a) Public Sector Banks.
- (b) Private Sector Banks.
- (c) Foreign Banks.
- (d) Co-operative Banks.

Deposit Generation Factors (From Customer' Perspective):

On the basis of available research studies and pilot studies, the researcher has identified the following factors that have direct or indirect bearing on deposit mobilisation capacity of banks:

Parameter 1 - Rate of Interest Parameter 2 - Location of Branch

Parameter 3 - Easy Documentation Facility Parameter 4 - Online Deposit Services Parameter 5 - Deposit Mobilisation Drives Parameter 6- Target Group Schemes

Parameter 7 - Customer Relationship Management (CRM) Parameter 8 - Shot Liquidity Option

Parameter 9 - Priority/Preferred Customer Status Parameter 10 - Varieties of Services Offered
Parameter 11 - Quality of Services Rendered Parameter 12 - Employees Competence Parameter 13 - Marketing Strategies of Bank Parameter 14 - Bank Charges

Parameter 15 - Bank Image

The banks have been found to be using combination of these factors to devise innovative methods for deposit mobilisation.

Likert's Five Point Scale:

In Likert-style rating scale respondent is asked how strongly she or he agrees or disagrees with a statement or series of statements, usually on a four-, five-, six- or seven-point rating scale (Dillman 2007). This is one of the best method of converting qualitative data like opinions or views into quantitative ones. The researcher has made use of the following five point scale to seek the opinion of respondents about various factors that influence deposit mobilisation capacity of commercial banks:

- (1) Most Significant (MS)
- (2) Significant (S)
- (3) Neutral (N)
- (4) Insignificant (I)
- (5) Most Insignificant (MI)

The responses so obtained have been multiplied with score points as under to convert qualitative views and opinions into objective scores for ranking – Most Significant (MS) = 5 points, Significant (S) = 4 points, Neutral (N) = 3 points, Insignificant (I) = 2 points and Most Insignificant (MI) = 1 point. The following example related to the first parameter, i.e. rate of interest, will make it clear.

Table No. 1.2: Ranking of Distribution of Sample

Rate of Interest						
	MS	S	N	I	MI	Total
Marks	5	4	3	2	1	
Public Sector Bank	142	47	7	3	1	200
Private Sector Bank	167	28	1	4	0	200
Foreign Bank	11	13	1	0	0	25
Co-operative Bank	33	16	1	0	0	50
Total	353	104	10	7	1	475

Source: Field Survey.

It can be seen in the above table that from 200 respondents from Public Sector Banks, 142 have rated Rate of Interest to be the most significant factor affecting deposit mobilisation by banks, 47 have rated it to be significant, 7 have rated it to be neutral, 3 have rated it to be insignificant and 1 has rated it to be most insignificant. The respective responses from 200 respondents from private sector banks is 167, 28, 1, 4 and 0, for foreign banks it is 11,13,1, 0 and 0 from a total of 25 respondents and 33, 16, 1, 0 and 0 from 50 respondents from cooperative banks. These responses have been converted into percentage so as to bring different sample sizes from different categories of banks at par in the following table.

	MS	S	N	I	MI	Total
	%	%	%	%	%	
Public Sector Bank	71.0	23.5	3.5	1.5	0.5	100.0
Private Sector Bank	83.5	14.0	0.5	2.0	0.0	100.0
Foreign Bank	44.0	52.0	4.0	0.0	0.0	100.0
Co-operative Bank	66.0	32.0	2.0	0.0	0.0	100.0
Total	264.5	121.5	10.0	3.5	0.5	400.0

Source: Field Survey.

These responses have been multiplied with the weights of 5, 4, 3, 2 and 1 for MS, S, N, I and MI respectively to get the aggregate score by the respondents of each banks for rate of interest as a factor affecting deposit mobilisation. Accordingly, rate of interest is the most important factor for clients of private sector banks, followed by co-operative banks, public sector banks and foreign banks respectively. Thus, in all the total score assigned to rate of interest as a factor affecting deposit mobilisation is 1846 as indicated in the total column.

	MS	S	N	I	MI	Total
	5	4	3	2	1	
Public Sector Bank	355.0	94.0	10.5	3.0	0.5	463.0
Private Sector Bank	417.5	56.0	1.5	4.0	0.0	479.0
Foreign Bank	220.0	208.0	12.0	0.0	0.0	440.0
Co-operative Bank	330.0	128.0	6.0	0.0	0.0	464.0
Total	1322.5	486.0	30.0	7.0	0.5	1846.0

Source: Field Survey.

Ranking of Parameters Affecting Deposit Mobilisation Policies of Banks:

Following the similar technique as discussed above, all 15 parameters affecting deposit mobilisation policies of banks have been quantified and ranked as indicated in the table below:

Table 1.3

Ranking of Factors Affecting Deposit Mobilisation Policies of Banks

Parameters	Public Sector Banks	Private Sector Banks	Foreign Banks	Co-operative Banks	Total	R1	R2	R3	R4	RF
1. Rate of Interest	463.0	479.0	440.0	464.0	1846.0	7	5	7.5	3.5	5
2. Location of Branch	478.0	455.0	432.0	434.0	1799.0	3	9	9	7.5	8
3. Documentation Facility	464.5	466.0	440.0	434.0	1804.5	6	6	7.5	7.5	7
4. Online Deposit Services	488.5	494.5	492.0	466.0	1941.0	1	1	2.5	2	1
5. Deposit Mobilisation Drives	267.5	266.0	192.0	350.0	1075.5	14	15	15	13	15
6. Target Group Schemes	461.5	449.0	288.0	432.0	1630.5	9	11	13	9	10
7. CRM	462.5	493.0	464.0	394.0	1813.5	8	3	5	11	6
8. Priority/Preferred Customer Status	341.5	451.0	388.0	376.0	1556.5	12	10	11	12	12
9. Short Liquidity Option	476.0	459.5	264.0	484.0	1683.5	4	7.5	14	1	9
10. Varieties of Services Offered	351.0	398.0	404.0	420.0	1573.0	11	12	10	10	11
11. Quality of Services Rendered	480.5	494.0	492.0	464.0	1930.5	2	2	2.5	3.5	2
12. Employees Competence	460.5	479.5	488.0	450.0	1878.0	10	4	4	6	4
13. Marketing Strategies of Bank	329.0	299.5	324.0	306.0	1258.5	13	14	12	14	14
14. Bank Charges	472.0	459.5	496.0	460.0	1887.5	5	7.5	1	5	3
15. Bank Image	259.5	308.5	452.0	298.0	1318.0	15	13	6	15	13

Source: Field Survey.

Ranking of Banks on the Basis of Effectiveness of various Factors Affecting their Deposit Mobilisation Policies:

Similarly the banks bank categories under consideration have been ranked on the basis of their total score on 15 parameters suggested above in the following table:

Table 1.4: Ranking of Banks on the Basis of Effectiveness of various Factors Affecting their Deposit Mobilisation Policies

Bank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	Rank
Public Sector Banks	3	1	2	3	2	1	3	4	2	4	3	3	1	2	4	38	2.5
Private Sector Bank	1	2	1	1	3	2	1	1	3	3	1	2	4	4	2	31	1
Foreign Bank	4	4	3	2	4	4	2	2	4	2	2	1	2	1	1	38	2.5
Co-operative Bank	2	3	4	4	1	3	4	3	1	1	4	4	3	3	3	43	4

Correlation between Effectiveness of various Factors Affecting Deposit Mobilisation Policies of Banks:

Using the Spearman's Rank Correlation, the correlation between ranking of these 15 parameters was found. The results of the same are shown in the following table:

Rank Correlation between R1 and R2	0.7589
Rank Correlation between R1 and R3	0.4571
Rank Correlation between R1 and R4	0.8642
Rank Correlation between R2 and R3	0.7089
Rank Correlation between R2 and R4	0.7357
Rank Correlation between R3 and R4	0.3723

Conclusions

- (1) There exists a strong positive correlation between the factors that affect deposit mobilisation policies of (1) Public Sector Banks and Private Sector Banks, (2) Public Sector Banks and Co-operative Banks (3) Private Sector Banks and Foreign Banks (4) Private Sector Banks and Co-operative Banks.
- (2) There exists a weak positive correlation between the factors that affect deposit mobilisation policies of (1) Public Sector Banks and Foreign Bank and (2) Foreign Banks and Co-operative Banks.

Impact Assessment of Deposit Mobilisation Policies of Banks and their Deposits:

It would also be interesting to study if there is any correlation between the deposit mobilisation policies of banks and their deposit mobilisation. For this purpose, there researcher has found out the incremental values of various types of deposits mobilised by banks during the preceding five years. The following table summarises the growth in deposits of various types of banks under considerations:

Table 1.4: Incremental Values of Growth in Deposits of Various Types of Banks under Consideration

	2013-14	2014-15	2015-16	2016-17	2017-18	Change (%)	Rank
Public Sector Banks	100	111.6	120.5	128.1	136.7	36.72	4
Private Sector Bank	100	117.4	140	166.6	193.7	93.65	1
Foreign Bank	100	114.4	136.6	159.2	146.6	46.62	3
Co-operative Bank	100	110.3	122.7	139.9	148.9	48.94	2
Total	100	111.3	123.5	135.9	147.1	47.07	---

Source: Handbook of RBI Statistics, 2018.

It can be seen in the above table that the incremental growth of deposits of private sector banks is the highest during the 1 last five years, followed by co-operative banks, foreign banks and public sector banks. Thus, these banks have been ranked in the descending order of their deposit growth as under:

Rank 1: Private Sector Banks (93.65%)

Rank 2: Co-operative Banks (48.94%)

Rank 3: Foreign Banks (46.62%)

Rank 4: Public Sector Banks (36.72%)

Correlation between Effectiveness of various Factors Affecting Deposit Mobilisation Policies of Banks and their Impact on Deposit Mobilisation by Banks:

Rank Correlation between the Effectiveness of various Factors Affecting Deposit Mobilisation Policies of Banks and their Impact on Deposit Mobilisation by Banks = 0.35

Conclusions:

There exists a weak positive correlation between the various factors affecting Deposit Mobilisation Policies of Banks and their Impact on Deposit Mobilisation by Banks

11. ESTABLISHMENT OF HYPOTHESES:

Hypotheses	Outcome
Hypothesis - 1 H0 There is no significant relation between the factors that affect deposit mobilisation policies of different categories of banks. H1 There is a significant relation between the factors that affect deposit mobilisation policies of different categories of banks.	(1) There exists a strong positive correlation between the factors that affect deposit mobilisation policies of (1) Public Sector Banks and Private Sector Banks, (2) Public Sector Banks and Co-operative Banks (3) Private Sector Banks and Foreign Banks (4) Private Sector Banks and Co-operative Banks. (2) There exists a weak positive correlation between the factors that affect deposit mobilisation policies of (1) Public Sector Banks and Foreign Bank and (2) Foreign Banks and Co-operative Banks.
Hypothesis - 2 H0 There is no significant relation between the factors affecting Deposit Mobilisation Policies of Banks and their Impact on Deposit Mobilisation by Banks. H1 There is a significant relation between the factors affecting Deposit Mobilisation Policies of Banks and their Impact on Deposit Mobilisation by Banks.	There exists a weak positive correlation between the various factors affecting Deposit Mobilisation Policies of Banks and their Impact on Deposit Mobilisation by Banks

12. ACHIEVEMENT OF OBJECTIVES:

Objective	Remark
(1) To trace the origin, development, growth and role of banks in general and with respect to India in particular.	Achieved
(2) To understand the various components of balance sheets of banks with main focus on deposits and their implications on bank performance.	Achieved
(3) To analyse the relation between various factors affecting deposit mobilisation by different categories of banks.	Achieved
(4) To evaluate the impact of these factors on the deposit mobilisation by different categories of banks.	Achieved
(5) To suggest measures and methods to bring about grater alignment between deposit mobilisation factors and bank policies for deposit mobilisation.	Achieved

13. SIGNIFICANCE OF THE STUDY:

The present study has been undertaken with a view to assess the role and significance of various factors that affect the deposit mobilization policies of the commercial banks with reference to the city of Mumbai. There are a number of factors that have implications on the deposit mobilization by commercial banks. These factors together constitute deposit mobilization policies of commercial banks. Different banks have different approach to these factors which are put together to form a unique deposit mobilization policy by the banks. The present study tries to study the relative importance of these factors in the deposit mobilization policies of commercial banks and if there exists any similarity or dissimilarity between the inter-bank deposit mobilization policies. The study also assesses the extent of the impact of these policies on deposit mobilization by different categories of the banks. The study is of immense importance for banks to blend various deposit mobilization factors together to devise a unique deposit mobilization policy.

14. SCOPE FOR FURTHER RESEARCH:

The present research study undertakes comparative evaluation of deposit mobilization policies of different categories of banks in India, viz., public sector banks, private sector banks, foreign banks and co-operative banks. The study can be extended to regional rural banks. A research can also be undertaken to understand the difference in deposit mobilization policies in rural areas and urban areas. The researcher can also evaluate the relative importance of various factors that affect deposit mobilization policies of commercial banks. At international level, the study can be used to compare and contrast the deposit mobilization strategies of banks in different countries and their impact on their deposit mobilization capacities.

CLIMATE CHANGE AND THE PROCESSES AND PATTERNS OF LANDFORM EVOLUTION IN THE HIMALAYAS: A REVIEW

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ABSTRACT

The signatures of interaction between tectonics, climate and earth surface processes are etched in the present day landscape in the Himalayas which is dominated by glacial and paraglacial processes. Many of the landforms reflect former climatic conditions and revealing the importance of climate as a major forcing mechanism of landform genesis. There are now definite indications of permanent and near permanent changes in the climate in several parts of Himalayas, tending towards desert conditions, advancing and retreating glaciers, dried up springs, erratic precipitation, rising temperatures and higher temperature regime. The work deals with landforms evolution in different environmental conditions and the relationship between physical and human environment resulting landscape modification in the Himalayan region.

Keywords: Climate Change, Himalaya, Upliftment, Glacial-fluvial processes, Landform Development

INTRODUCTION

The Himalayan Mountains, with one of the greatest relief on the earth, provides best opportunity to examine various earth surface process and landforms. The formation of landscape in the Himalayan region involves a number of different process domains, at a number of time scales, to reflect changing environmental conditions. Many of the landforms reflect former climatic conditions and emphasises the importance of climate as a major forcing mechanism of landforms genesis. Process geomorphology assumes that climate is the most important influence on the rate at which landforms are created. However, there is likely to be a time lag between the climatic changes and the creation of new landforms. This time lag will vary with the scale of the change in process energy and with the size and resistance of landscape under attack. It may be that the increase in process energy is too small to make visible change in the landscape (Thornes, 1985).

Probably the most notable geomorphic study of Himalayan-Tibetan region was under taken by Drew (1875) in the Indus valley, who noted numerous glacial, lacustrine, and alluvial fan landforms. Drew was the first to use the term “alluvial fan” (1875). His work focused on describing the morphology of the landforms and he discussed their likely origins and emphasized the important evidence for past glaciations throughout Kashmir.

Detailed study of the glacial chronology of the Himalayas including the Karakoram was initiated early in the last century (20th) by the pioneering work of De Fillipi's Italian expedition to the Himalayas, Karakoram and Chinese Turkistan (Dainelli, 1922).

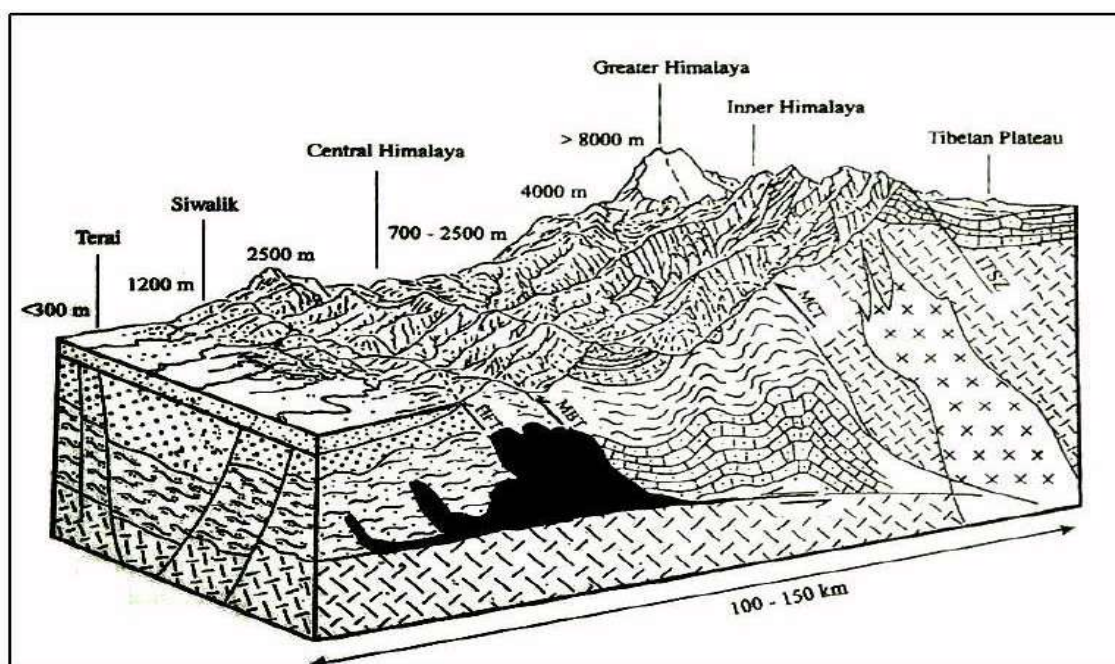


Figure 1: Tectonic Map of the Himalayas (Adapted from Sharma, 1996)

Recent research into global-climate modelling and the rate of mountains in the South-Asian monsoon circulation has suggested that uplift of the Tibetan Plateau and the Himalayas (Fig.1) may have altered regional climatic circulation (Molnar and England 1990, Ramyo and Ruddiman 1992, Molnar et al., 1993). The land forming processes are attitudinally distributed in the Himalayas. Rapid uplift and repeated glaciations have played an important role in increased denudation and land forming processes in the Himalayas (Sharma, 1996). Many of the landforms reflect former climatic conditions and revealing the importance of climate as a major forcing mechanism of landform genesis. The present day landscape of the Himalayas is dominated by glacial and paraglacial processes. During the period of glaciation, intensive glacial erosion generated an enormous amount of loose material on the slopes. Every glaciated valley contains many erosional and depositional features of glacial origin. In the outer valleys of the Himalayas, the side slopes are steep because of incision that landslides frequently occur. Glacial landforms in the Himalayas are intimately related to the total mass budget of glacier system. The tropical glaciers are considered repositories of environmental change indicators. Significant debate exists, however, over the importance of mountain glaciers versus other processes, such as fluvial erosion and mass movement, in shaping mountain landscapes and driving the tectonic aneurysm (Hallet et al. 1994). The interaction between tectonics, climate and geomorphological processes has resulted in the evolution of present day Himalayan landscape. Thus the major objective of the study is to examine environmental variations in micro, meso and macro level and possible similarity in environmental conditions over time and space across the Himalayas. Since the evolution of landscape and environment in the Himalayas is poorly understood issue, this work will focus on establishing a relationship of these two. Thus an attempt has been made to correlate absolute dates available till now across the Himalayas. Relative roles and magnitude of processes have been address to partially quantify the landforms.

RESULTS AND DISCUSSION

Interface between Climate-drainage-glaciers and resulted landforms

Advances and retreats of mountain glaciers and high-latitude ice sheets (continental glaciers) are among the most dramatic responses to climate change. The climatic interpretation from mountain glaciations is tentative because of the scarcity of numerical ages proving the glacier advances to the penultimate glaciation (Illinoian, Riss), before ~130,000 yr B.P. (Pierce et al., 1976). Moraines and other glacial deposits indicate the limits of glaciers at different times in the past; and is one of the most common bases for inferences of past climates.

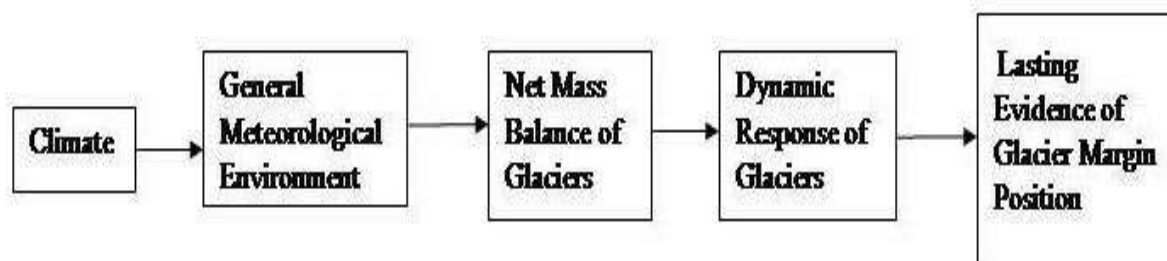


Figure 2a: Linear Relationship of Climate – Glacier interaction (Paterson (1969)).

The relationships between climate, glaciers and topography are scale and time dependent (Fig.2a), as a glacier grows it increasingly modifies its climate and the topography. Figure 2b summarizes some of these relationships by depicting three broad stages of glacierization (Sutherland, 1984). The left of the figure represent an area that is lightly glacialized in which the climate interacts with the topography to produce small glaciers on favourable sites. Such small glaciers are almost entirely dependent upon the other two variables and only have minor effects upon the local climate or topography. Area or times of more intense glacierization that are typified by the development of ice caps or transaction glacier complexes are represented in the central part of figure 2b. The ice bodies have a greater influence on the other variables by, for example, increasing the area above certain altitudes, changing the albedo of the area and having strong local cooling effects. The ultimate development of an ice sheet alters the relationships even further (Fig. 2b).

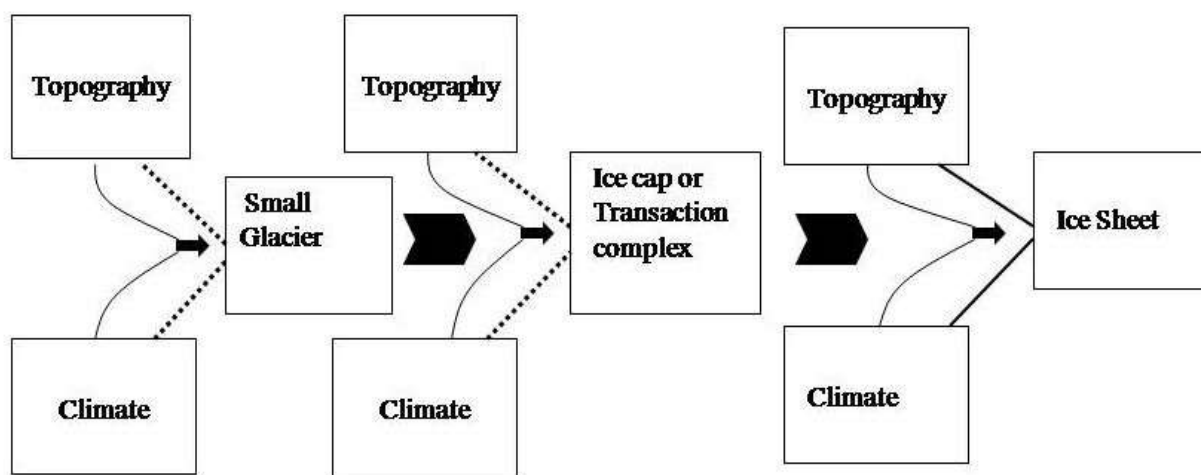


Figure 2b: Representation of the interdependence of glaciers, climate and topography. Heavy lines represent strong dependence; dashed lines moderate; and dotted lines weak (Adapted from Sutherland, 1984).

The beginning of the Quaternary stage possibly witnessed huge valley glaciers and in some areas, icecaps, which were more than $\frac{1}{2}$ a kilometre thick in places. The glacial events were followed by inter-glacial episodes when the temperature rose and ice melted to drain rivers which would have been responsible for evolving deep valleys and high terraces. An outstanding feature of Himalayan glaciers is that many of them are receding. However, on the other hand recent data collected from the few Himalayan glaciers which, are kept under annual observation, suggest that there has been a considerable slowing down in the recession of many glaciers.

On the basis of landforms and thick accumulations of glacial, glaciofluvial, mass movement, aeolian and lacustrine sediments, glacial chronologies have been produced for the Karakoram Mountains (Derbyshire et al. 1984; Shroder et al., 1989) and the Swat Kohistan (Porter 1970; Owen et al. 1992), Lahual (Owen et al. 1991, 1997) Garhwal (Sharma and Owen, 1996) and Nepal (Shiraiwa and Watanabe, 1991). Three Pleistocene glaciations, the Laikot, Gabral and Kalam stages are recognised in the Swat Himalayas Northern Pakistan (Porter, 1970). A TL age of between approximately 22 ka and 18 ka constrains the Gabral stage, while a TL age of approximately 3 ka to 7 ka constrains the Kalam stage (Owen et al., 1992). In the Karakoram Mountains, three major Pleistocene glaciations and five Holocene advances are recognised (Derbyshire et al., 1984) these are –

- i. The oldest stage the Shanoz is of unknown age.
- ii. The second stage, the Yunz, has a tentative TL age of more than 139 ka BP.
- iii. The third stage, the Borit Jheel, has a TL age of > 50-65 ka.
- iv. The fourth stage, the Ghulkin I, formed moraines that have a TL age of 47 ka BP.
- v. The fifth stage that was a late still stand in the retreat of the Ghulkin I advance. Three later stages are present: Batura; Pasu (800-325 ^{14}C years BP); and Pasu II (Fig.4b).

In the Lahual Himalayas three major glaciations and glacial landforms (Fig. 4c) are recognised (Owen et al., 1996). The oldest, the Chandra Glacial Stage, was a broad valley glaciation of unknown age. The second glaciation, the Batal Glacial Stage, has two phases, the Batal I and Batal II Glacial stage (Fig.4c). OSL dates the retreat to between 43.4 ± 10.3 ka and 36.9 ± 8.4 ka during the Batal Glaciation. The third major glaciation the Kulti Glacial Stage is constrained by an OSL date of 36.9 ± 8.4 ka. The two minor glacial advances the Sonapani I and Sonapani II are probably to early of mid Holocene age and little Ice age (Owen et al., 1997).

Sharma and Owen (1996) presented the first quaternary glacial history for North-West Garhwal in the Central Himalayas. On the basis of sediments and landforms they recognised one glacial stage, the Bhagirathi Glacial Stage, during which extensive valley glaciers advanced down the Bhagirathi valley to Jhalla, 40.5 km from the snout of the Gangotri Glacier. This Bhagirathi Glacial Stage (Fig. 4d) is constrained by OSL dates of approximately ca. 63 ka and 5 ka BP.

There are three possible causes for the glaciation becoming progressively less extensive with time in the Himalayas. These are:

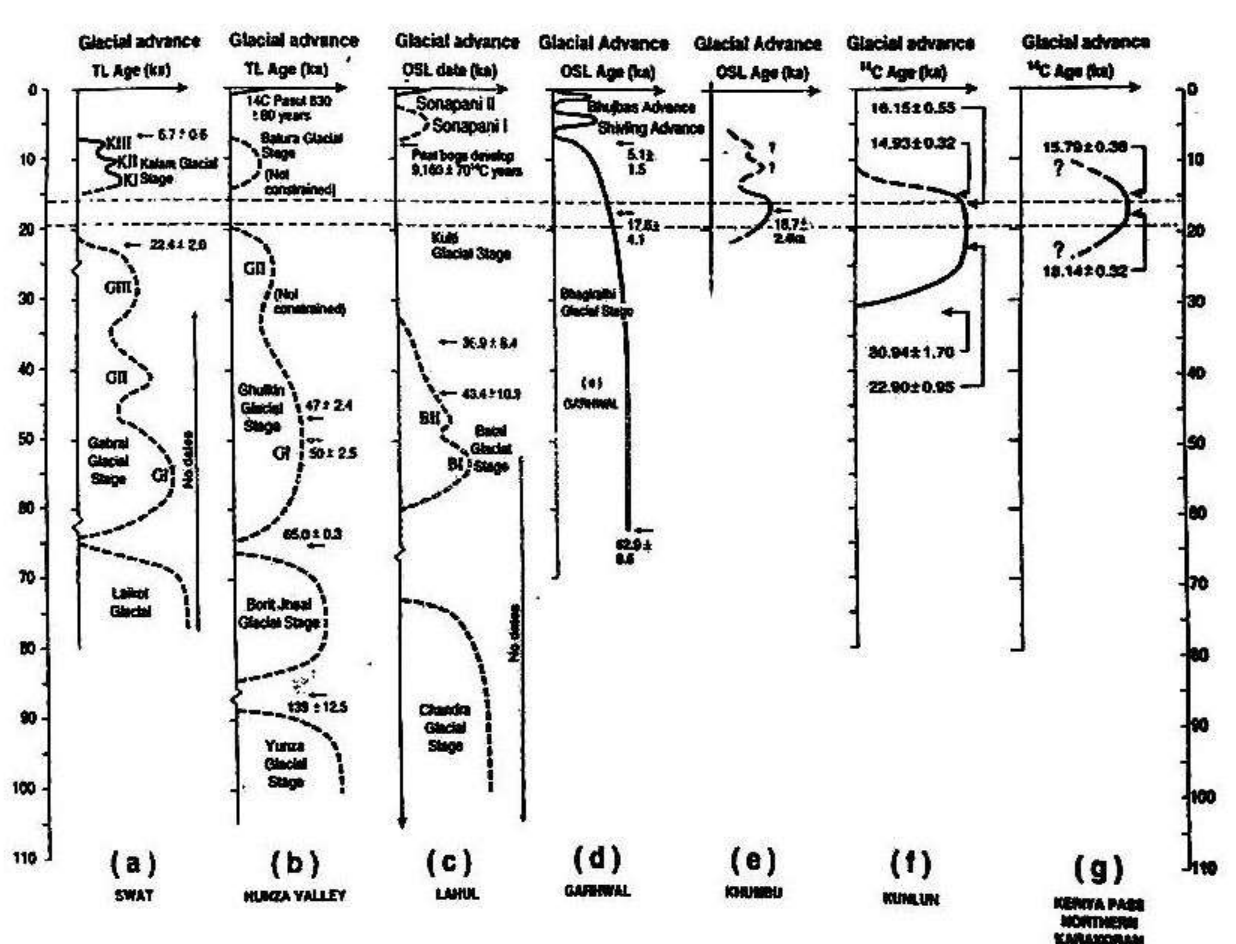


Figure 4 Correlation of glacial phases and climate changes across the Himalayas (Owen et al 1998)

Firstly, the style of glaciations may be controlled in such a manner that differential mountain uplift along the southern margins of the Himalayas may have resulted in the reduction in the transport of moisture deep into the Himalayas as moisture is lost during orographic forcing. Owen et al. (1996) suggest that this might explain the style of glaciation in Lahul where uplift of the Pir Panjal blocked the northward penetration of the monsoon into the Greater Himalayas.

Secondly, the changes in glacial style may be a result of topographic controls, such that early glaciations developed on broad extensive surfaces, whereas later glaciations were constrained within the valleys that were carved by the earlier glaciation. Although this may be important, that the volume of ice from one glaciation to the next should be similar and hence the extent of later glaciations should be greater.

The third possible cause may be the result of regional climatic variability, controlled by variations in the two main climatic system that dominate the Central Asia; the South Asia summer monsoon; and the westerly jet stream. Benn and Owen (1997) suggested that the relative role of these two systems is determining timing and style of glaciation has varied considerably during late Quaternary times. During the maximum insolation, the South Asian monsoon is strengthened and greater precipitation falls on the Himalayas. This results in positive mass balances for glaciers in the Himalayas, thus glacier advance. During minimum insolation, the monsoon weakens and the westerlies dominated, bringing moisture from Mediterranean and Caspian Sea and resulting in the glaciers advance in north Tibet (Owen, 1998). If the timing and style of glaciation is a function of changes in these climatic systems then there must be clear temporal and spatial trends in glaciation throughout the Himalayas and adjacent regions.

Understanding the interaction of climate, mass balance and glacier response is important not only in examining the response of glaciers to relatively minor climatic fluctuations but also to the more dramatic and long-term fluctuations associated with the onset of a glacial cycle.

Landforms owe their genesis to the climatic changes and create some related environmental effects. Besides the bedrock geology and tectonics, the climate infers different geomorphic processes and vegetation, which have an effect on the landforms. (Lehmkuhl 2000). The formation of landforms in the Himalayas requires addressing a

number of different process domains at a number of time scales to represent changing environmental conditions. Many of these landforms reflect former climatic conditions and emphasises the importance of climate as a major forcing mechanism on landform genesis. Dainelli (1922) documented four to five main phases of glaciations on the basis of glacial deposits and varves in the Karewas.

Glacial- Landforms

The erosional and depositional landforms of glacial geomorphic landscapes provide much of the information regarding the history of the Pleistocene glacier fluctuations, and thus the environmental episode in which these evolve. The advance produces distinctive depositional features which epitomise the changing times of landforms formation. The retreat of the glaciers produces distinctive interwoven morainic features linked with the sub-stages of glacier retreat. The volume of deposition is closely correlated with the intensity of weathering and erosion in a glacial environment.

The distribution of moraines reveals a close relationship between landform orientation, ice extent and flow direction. This in turn may be used as a yardstick to look into environmental change, locally and regionally. The first systematic study of the moraines in the Kashmir Himalayas has been conducted by Ahmad (1979), who distinguished the moraines of the longitudinal and transverse glaciers. Shroder et al (1989) reported that ‘several last glacial tills and moraines’ overlie lacustrine sediment yielding a thermoluminescence date of (TL) >41,000 yr B.P., near the town of Sassi, in the upper Indus valley upstream from the confluence with the Gilgit river. Examples of lateral moraines formed by subglacial processes can be rare, because these are rapidly modified by the slope processes in a dynamic environment such as the Himalayas. The best examples are found near the present glaciers in the upper Hunza valley (Fig.4b). Scattered remnants are present in the middle Indus and Gilgit valleys. Ancient examples of supraglacial lateral moraine are well displayed near the Batura glacier.

Owen and Derbyshire (1989) conducted a study on the Karakoram glacial depositional system and recognised two main types of lateral moraines which are dependent on supra-glacial debris fan formation. Lateral moraine aggradations may result from fluctuation in the position of the ice front in the upper Hunza area.

Sharma, (1996) identified well developed lateral moraine ~50-150 m above the present glacier surfaces in a terrace form in Upper Bhagirathi valley. The older lateral moraine landforms complexes have been found to resemble fluvial terraces in the upper parts of the Bhagirathi, Kedar, Rudugaira and Kalapani valleys. The lateral moraine of Gangotri glacier has been dated to be ~1.5 ka. A complex assemblage of lateral moraines is extended down valley from Tapovan to Bhujbas. Crest of the lateral moraines are ~150 m higher than the present glacier ice surface. The highest lateral moraine is clearly visible on the southern side of Bhagirathi River, near the snout, which rises ~260 m from the valley floor.

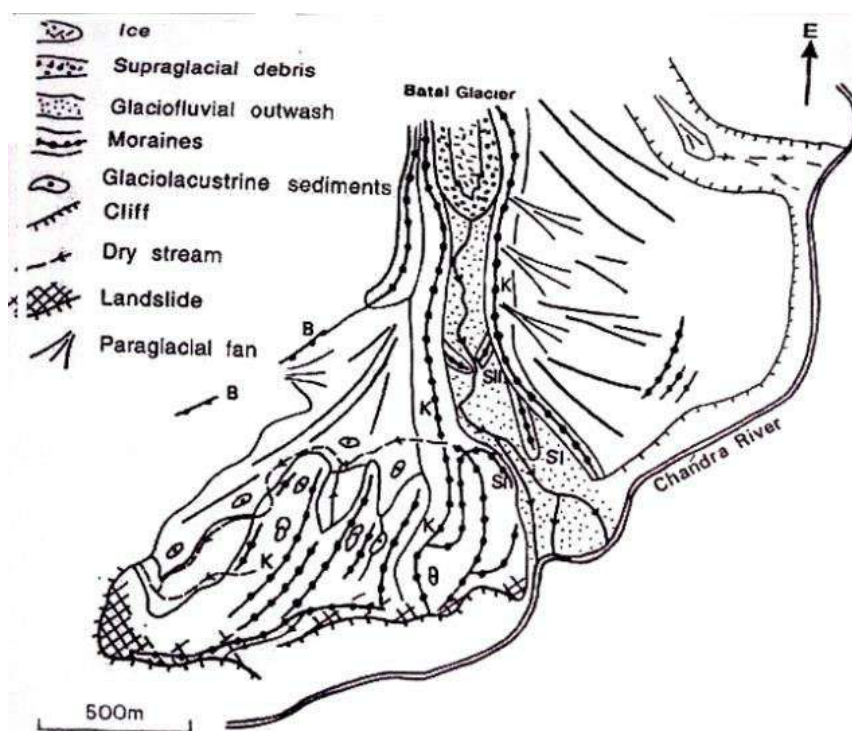


Figure 5 Quaternary Landforms of Batal Glacier, Himachal Himalaya (Own et al. 1996)

The End Moraines is one of the important geomorphic features formed by the movement of the glacier snout (Figure-5). The form and size are mainly related to the ice movement, the rate of surface ablation and volume of sediments contained in the ice. In the western Himalaya the majority of the end moraines were partly destroyed by the river, through widening of its flood plains. Some end moraines near Pahalgam (Figure 6) have been overridden by ice.

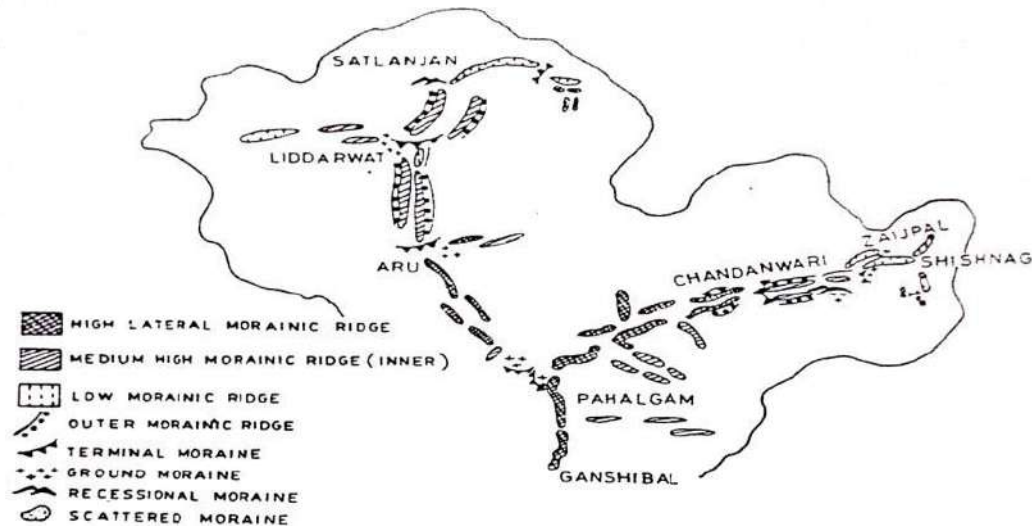


Figure 6 Glacial Depositional Landforms in Liddar Valley, Kashmir Himalaya (Kaul, 1990)

Kaul (1990) identified two types of terminal moraines viz., dumped moraines and push moraine in the Liddar valley,. In the Pahalgam – Gansibal basin three dumped moraines have been identified. Push moraine found in Kedar valley Garhwal Himalaya are small and terrace shaped, formed between the terminal limit of the cirque glacier and outermost later moraine i.e. identified by Sharma (1996). Ablation valleys are highly variable in character depending on ice marginal processes, with lateral moraines and Kame terrace development being important component (Owen, 1988; Owen and Derbyshire, 1989; Hewitt, 1989). Hewitt (1998) suggests that the formation of ablation valleys is dependent to varying degrees upon slope, snowmelt, lacustrine debris flow and glacial processes.

Sharma (1996) identified two types of ablation valleys in this section of North-west Garhwal Himalaya based on their size and form. He describes that ablation valleys are formed by sedimentation involving glacial, mass movement, periglacial and paraglacial processes. The first type is formed by a single lateral moraine. These are fairly long and narrow with associated lacustrine deposits within the valley. The second type is produced when the lateral moraines of two glaciers converge, forming relatively large ablation valley lakes as a triangular enclosed form.

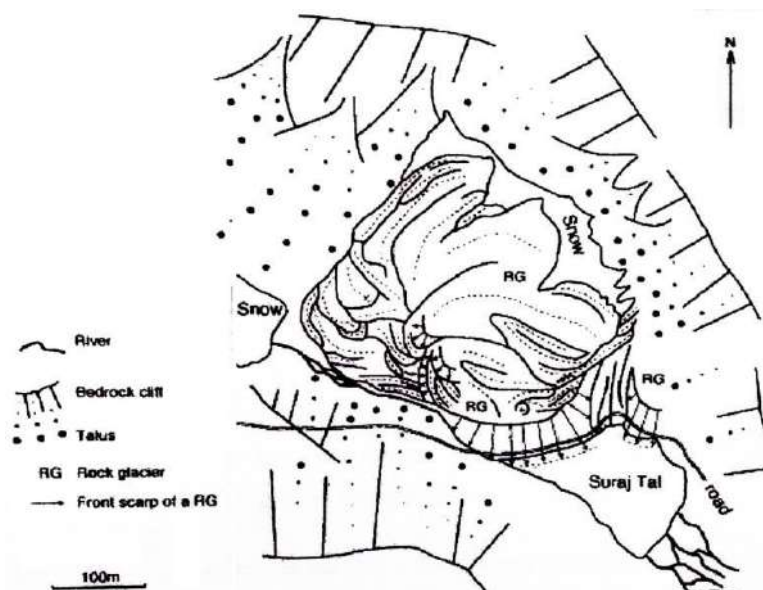


Figure 7 Rock Glaciers on the Zaskar Range (Mitchell and Tailor, 2001)

The cirques are universal in occurrence in the glaciated mountain regions and the most recurrent worldwide feature in glacial landscapes. These are confined to the areas of the present or former glaciations. Cirques which still have snow and ice filled have developed at different levels in different parts of the Himalayas. The highest cirque level is recorded from Sikkim and lowest from the Kashmir valley. However, within the same area, along other slopes the attitude between cirques on different slopes of a range may vary up to 600m. On the basis of the cirque levels two to three Pleistocene advances of the Himalayan glaciers have been proposed (Krenek and Bhawan, 1945; Vohra, 1981; Ahmed and Mayewaski, 1981).

Glacio-Fluvial Landforms

The valley glaciers which terminate on the valley basin release large quantities of melt water that drain broad outwash plain. The rivers which cross these plains erode and rework the previously deposited sediments and redeposit them as distinctive suits of glacio-fluvial lithofacies (Price, 1964). Eskers generally show a variety of form and internal composition associated with the contact glacio-fluvial deposits. Eskers are generally thought to form time transgressively, relatively close to the ice margin. Since eskers form obliquely to the glacier margin, towards the ice front or downslope from the lateral ice margin, they are very useful for reconstructing glacier-margin retreat. Eskers are reported from the Liddar valley and Zaipal in Kashmir (Kaul, 1990). Corte (1987) suggested that rock glaciers are semi-arid phenomena and might help as palaeoclimatic indicators. In the Himalayan region a number of active and inactive forms of rock glaciers have been reported from the Khumbu Himalaya, Nepal where four tongue shaped rock glaciers were studied in detail with source areas at altitudes of 5100-5400m extending down slope to 4950-5240m (Barsch and Jakob 1993, 1998). In the northwest Indian Himalaya these are widely distributed north of latitude 32°, where the influence of the southwest summer monsoon becomes attenuated leading to a high desert environment with an annual precipitation of c. 250 mma-1. Both talus derived and moraine derived forms can be observed at altitude above 3200m (Mitchell and Tailor, 2001; Fig. 7).

In the northwest Himalayas, there are excellent examples of both rock glacier types, with large talus-derived landforms that can be best exemplified by the Taksi rock glacier. The wide spread occurrences rock glaciers in association with former glaciers and the much reduced present day glaciers clearly indicates that there is a relationship between glacier and rock glacier development (Humlum, 1998b). Moraine derived types are clearly related to recent ice retreat, particularly of cirque glaciers, such that ice becomes buried by increasing amounts of supra-glacial debris. However talus-derived forms are also developed where there is a high sediment flux associated with mechanical disintegration of specific rock types. There is also a brief report of an active rock glacier from the high Himalaya of Kashmir, which has a length of 1 km and a terminal elevation at 4390m (Mayewski et. al., 1981, 1983) also described some possible rock glaciers from the Zanskar Range. Two extensive talus rock glaciers formed below the Bhagirathi group of peaks indicate a swift towards more arid climate in the region. Beheading of rock glacier from back-wall reflects a decrease in the supply of moisture to a great extent (Sharma, 1996). Evidence of flat topped Pleistocene terraces are found in the Kashmir valley on the slopes of the Pir Panjal Range and in the Dras and Kargil basins of the Upper Indus valley in the area north of Ladakh (Atkinson, 1986). The two series of deposition like lower Karewas and upper Karewas separated by an erosive unconformity are actually terrace surfaces and they are the result of past glaciations and episodes of uplift. The high level terraces have been observed in the Kashmir Himalaya. These terraces stand 300 to 350m above the present river bed. (Mawani and Khan, 1987). Dainelli (1922) traced relics of four main glacial stages in the terrace deposits in Kargil basin. Like the Kashmir basin, here also the terraces with remnants of lacustrine deposits bear witness to the great oscillations of four stages of Pleistocene climate.

In the Garhwal Himalayas, the last terraces of reported till deposits and the Pleistocene terraces, thereby, are found all along the valleys as on the Alaknanda at Pandukeshwar at a height of 1995m asl, on the Goriganga at Martoli at a height of 2000m asl and on the Kali river at Malpa at a height of 2150m asl (Pal, 1986). These all indicate the movements of the past glaciations during the Pleistocene period.

Relationship between Uplift and Change

The evolution of landforms in the Himalaya involves the relationship between uplift, erosion and variation in the rates at which these occur (Table-1). Theoretical considerations show that a balance between rate of erosion and typical rate of mountain uplift (1cm/yr) requires an initial altitude of over 50 Km (Ahnret, 1970). In general modern rates of uplift (~7 to 8 m/yr) are about eight times greater than average maximum denudation rate (Schumm 1963).

The higher rates in Gangotri as compared to Central Garhwal may be due to the greater relief, closer proximity to the eroding power of the glacial fronts (a few kilometers vs. tens of kilometers), weaker lithology (granite and gneiss vs. quartzite), and the time period represented (mid-Holocene vs. Late Pleistocene) (Barnarda et al.,

2004). Historical records from Gangotri show small advances during the LIA and significant glacier retreat during the last several hundred years.

In the Himalayas differences in the form of mountain slopes are the result of different rates of channel incision and slope erosion. Where rocks are very resistant, incision will be greater than erosion and narrow gorges will form such as the Gangotri, Alaknanda and Beas. The highest rates of erosion occur in the glacial regions. These areas have average erosion rates of about 0.6 mm/yr, whereas, mountain rivers show rates of about 0.4 mm/yr (Corbel, 1959).

In the last 10 million year the Western Himalaya has uplifted some 2 to 6 km regionally and over 10 km locally. Nanga Parbat (8125 m), Haramosh (7397 m), and Rakaposh (7790 m) have experienced uplift and erosion during the past seven million years at rates increasing from less than 0.5 mm/yr to over several mm/yr. In the past two million years alone, the uplift rate of the Nanga Parbat – Haramosh massif, across which the Indus maintains a great trench, has increased from 2.5 mm/yr to 5 mm/yr (Shroder, 1989).

Zeitler et al. (1989) and Winslow et al. (1994) estimated an uplift or exhumation rate of the Nanga Parbat area of 4 to 8 mm/yr⁻¹, on the basis of geochronologic evidence that the massif had been exhumed 10 km in the past 10 Ma, 6 km of that in the past 1.3 Ma of the Quaternary. Burbank et al. (1996) used cosmogenic-radionuclide exposure ages to estimate bedrock incision rates by the antecedent Indus River of 2 to 12 mm yr⁻¹ across the Nanga Parbat uplift. Catastrophic floods, resulting from the breaking of repetitive landslide dams, can result in rates of denudation as high as 12 mm yr⁻¹. Such rapid and localized, but still short-term and episodic, denudation at Nanga Parbat appears responsible for the extreme relief at a multitude of scales (Shroder et al., 1998; Shroder and Bishop, 2000). The once mature terrain of the Lesser Himalaya was rejuvenated during the Pleistocene. The three levels of terraces in all river valleys probably indicate three spurts of uplift. Where active faults cross the rivers, many more than three levels of terraces are seen, i.e. Bhagirathi, Alaknanda, Beas, Ravi etc. A study on the uplift and geomorphic rejuvenation of the Himalaya reveal that in the region of the Tehri Dam in Garhwal, six levels of terraces are well developed in the Bhagirathi Valley. This fact implies that at least three more spurts of uplift in the Holocene probably took place after the earlier three episodes in the Pleistocene (Validya, 1993). The extent of uplift varies region to region. The faulted blocks rose up more rapidly, particularly where there is intersection of longitudinal and transverse faults (Valdiya, 1976, 1988). The faulted Pir Panjal rose up at the rate of 3.5 – 10 mm/yr during the long period of the Karewa sedimentation (Burbank and Johnson, 1983). The maximum rate of uplift of the Lesser Kumaun Himalaya deduced by terrace revelling is 5 mm/yr (Rajal et al., 1986).

CONCLUSION

The environmental relationship of the landforms can be established looking at their morphogenetic characteristics, extent, shape and locations. The varied phases of glaciation due to cold climatic conditions in the Pleistocene might have evolved the deep and broad valleys in the Himalayas. Subsequent warming up of climate seems to have resulted in the evolution of incision of valley through increased melt waters from the glaciers. This increase in the volume of river discharge in turn may have been responsible for the formation of paired terraces that exists 100s of meters high and kilometres long from the present day river course; although the role of uplift in their evolution cannot be ruled out. This also might have affected the rate of denudation. The continued retreat of glaciers position in response to warming up of climate have given rise to sediment fans in the higher Himalayas where paraglacial processes dominate present day landscape. Glacial motion related landforms are mirrored in the forms of roche moutonnee in various deglaciated valleys across the Himalayas. Existence of rock-glaciers, palaeo-cirques and aeolian deposits are indicative of climate drifting towards aridity in the higher Himalayas. An examination of glacial deposited landforms reveals a close relationship between the landscape orientation and ice flow direction. The distinctive location of moraines at different altitudinal sites provides an evidence of separate phases of deposition during glacial stages. Similarly, the large number of river terraces might reveal the information about the volume of ice melt waters in their evolution. Rock glaciers in the higher regions of the Great Himalayan Range mirror the decrease in precipitation since the last major glaciation. These relict landforms may be considered as yardsticks for understanding the climate change towards aridity in such regions. It is now generally accepted that landscapes in the Himalayan-Tibetan orogen have been continuously readjusting to changing climatic and environmental conditions associated with the high frequency of the oscillations of glaciers (on millennial timescales) throughout the late Quaternary. Clearly, accurate reconstructions of the former extent and timing of glaciation is important for assessing and quantifying the tectonic-climate landscape models.

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FINANCIAL LITERACY AMONG WORKING WOMEN IN MUMBAI SUBURBS

¹Nikita Manjrekar and ²Dr. Arti Agrawal¹Research Scholar, Department of Commerce, Pacific University, Rajasthan, India²Associate Professor, Department of Management, Christ University, Pune, Maharashtra, India**ABSTRACT**

Financial literacy is becoming significant in achievement of financial inclusion in the economy. Financial Knowledge is important not only for an investor but also for the common man in the country. Awareness about various investment products is needed in various stages of life. This study is based on awareness level of the respondents i.e. working women in the Mumbai suburbs. Financial literacy is a knowledge related to financial instrument. In India women are equally earnable like men as and they financially independent. Financial literacy is an ability to manage and invest money on financial sources. Low financial literacy may cause financial loss in individual's life which affect family as well. The lower literacy levels of women has always been an issue in a country like India, and financial literacy, in particular, is no exception to it. Though with the increasing involvement of women on the working front, no doubt there is an improvement in the situation, but even today they face many challenges and hindrances for being financially literate.

Keywords: Financial Literacy, Working Women, Financial Attitude, Financial Behaviour.

1. INTRODUCTION

As the global financial markets are flooding with numerous new and advanced financial products and services, financial literacy is becoming even more vital for all. Financial literacy may be understood as the capability of an individual to understand the financial terms and concepts, be aware about financial products and services and apply that knowledge for their financial wellbeing. A financial literate individual has the potential to develop a relationship between his financial requirements and the best financial product suitable for him accordingly.

Ours has been a male dominating country since beginning. Earning and making financial decisions are considered to be the duties and tasks of males here. But with the passage of time, we have witnessed that women also stood up for themselves and came forward to share the responsibilities in the so called "male responsibilities" and prove their potential. Women can actually be independent when she is financially self sufficient. This financial self dependency is the biggest challenge in our nation as even today more than half of the women and girls in the country are deprived of their basic right to study. In a country where female literacy is low than the average standards, what could one expect for female financial literacy. Women empowerment, in true means, can be achieved only when the women will become independent and financial literate.

OECD defines financial literacy as "a combination of financial awareness, knowledge, skills, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial well being." Financial literacy is complicated as it not only involves awareness and knowledge about the financial products but also capability to make informed decisions for one's own financial health. To assess and evaluate the financial literacy of working women, we have prepared a structured questionnaire which evaluated the demographic information of the respondents and their financial knowledge, behaviour and attitude levels. The questionnaire has been designed on the lines of the OECD survey and it was given to women working in various fields in the city of Jaipur.

2. REVIEW OF LITERATURE

Lusardi and Mitchell (2008) said in their study that it is the women who are more on the suffering side due to the lack of financial literacy. His and other researchers' study advocated that since women are more subject to financial instability and dependence in their lives, hence they must be more focused on attaining financial literacy. Census 2011 report says that Rajasthan has the lowest female literacy rate, i.e. 52.66%, as compared to other states in India. It can be easily assumed that if the normal literacy rate is at such low, how miserable could be the status of female financial literacy levels. **Arora Bhaskar and et al. (2018)** emphasized on the fact that financial literacy can make a way for women's independence and build confidence in them to make a stand for themselves. They advocated that women not only need to be introduced to financial terms and concepts but they should also be made capable of making investments to earn money and safeguard their future. **Sebastian T. And Raju Middi A. (2016)** stated in their research study that most of the professional women have financial knowledge but they still remain incompetent when it comes to money management and financial planning or decision making. They also reported that most of the women investors have medium risk appetite and thus they prefer SIP, though they are not fully aware about the same. Agarwal **Priyanka and et al. (2015)** concluded in

their study that people love to earn money but are unaware about investing the same for future security and wealth creation. They also said that women should become more aware about financial matters and should participate actively in the financial decision making in their families. **Devi Anjali (2016)** conducted a study on financial literacy of women in the district of Assam in India and she found that though the financial literacy levels of women seems to be upgrading to a satisfactory level but there still exists a difference in the performances of women of different regions, income level, educational levels. Etc. For example, the financial literacy levels of working women and those from urban areas were better than those of non-working and rural women. Thus, there is a need to implement such programmes that could focus on the overall development of women. **Singh Chetna and Kumar Raj (2017)**, with the help of their study emphasized that there is an urgent requirement to educate women about various investment avenues and develop in them a habit of active financial planning and money management. They also drew attention to the finding that women do not actively keep a check on their financial portfolio due to lack of awareness and are mostly dependant on their male family members or friends for seeking assistance.

Priya Vasagadekar (2014), From ancient times, women have been managing homes and their activities. Hence they are called 'Home makers.' This situation has been changing. These days, in all sorts of fields, women are working efficiently and enthusiastically along with men or if it is said that women work more efficiently than their male colleagues, it wouldn't be an exaggeration. In the metro cities, the percentage of working women is more and Pune is getting transformed into metros. The present research has been done to know the investment awareness among Indian working women with reference to Pune region. Now- a- days, women want to be financially independent & secure their future with enough funds. This research is based on the study of investment behavior & patterns followed by working women in various sectors in Pune region. As most of the women are low in financial literacy, it becomes hardly possible for them to manage their portfolios on their own. Also the risk bearing capacity of working women in India is low. This is due to lack of sound financial knowledge.

Akshita Arora (2016), The lower level of financial literacy is one of the greatest concerns for Indian women since independence. To assess the financial literacy level of women, we conducted a survey for which, a questionnaire is prepared and distributed among the working women in the state of Rajasthan. The results of the survey show that the general awareness about financial planning tools and techniques among women remains poor even today, in 21st century. The findings suggest that women have performed comparatively better in terms of financial attitude and behaviour as compared to financial knowledge score. Also, the single women outperform married women in terms of their financial literacy score.

Abhishek Janvier Frederick et al.,(2017), Tax planning is important for every assessee to reduce their tax liability and compliance with the income tax rule. To enjoy the benefits of tax planning the assessee must know different provisions of tax savings schemes available in the law. This paper studies the awareness of working women, towards tax benefits schemes and the investment pattern towards tax benefits schemes in Allahabad. The matters of investment, future financial planning and investment for tax benefits are generally taken care by the male members of the family. But in the present scenario there is a need for understanding the complexities of finance by female study, therefore to target this need the present study is being conducted to measure the awareness of working women in related to Tax saving schemes. The study is all about understanding the customer's awareness to the tax benefit schemes. And also, to understand the investment pattern of customers towards these tax benefits schemes.

3. OBJECTIVES

- 3.1 To analyse the level of financial awareness about investment pattern among working women in Mumbai suburbs.
- 3.2 To know the most preferred investment instrument
- 3.3 To compare the educational qualification of the respondent and the most preferred investment instrument.

4 DATA ANALYSIS

Table 1: Level of awareness about investment pattern

Type of Investment	Not aware		Partly aware		Fully aware	
	Frequency	%	Frequency	%	Frequency	%
Shares	350	58.3	195	32.5	55	9.2
Debentures	337	56.2	186	31.0	77	12.8

Insurance policy	89	14.8	285	47.5	226	37.7
Bank deposits	64	10.7	221	36.8	315	52.5
Mutual funds	281	46.8	231	38.5	88	14.7
Post office savings	80	13.3	232	38.7	288	48.0
Real estate	327	54.5	171	28.5	102	17.0
Gold & silver	111	18.5	245	40.8	244	40.7
Govt securities	252	42.0	218	36.3	130	21.7

Table 2: Relationship between the demographic profile of the respondents and their awareness level of Income tax

Demographic factors	Options		Response		Total
			Yes	No	
Age	Below 25 years	Frequency	30	24	54
		Percentage	55.6%	44.4%	100.0%
	26 years – 35 years	Frequency	90	70	160
		Percentage	56.3%	43.8%	100.0%
	36 years – 45 years	Frequency	137	47	184
		Percentage	74.5%	25.5%	100.0%
	46 years – 55 years	Frequency	125	51	176
		Percentage	71.0%	29.0%	100.0%
	Above 55 years	Frequency	19	7	26
		Percentage	73.1%	26.9%	100.0%
Marital Status	Married	Frequency	350	156	506
		Percentage	69.2%	30.8%	100.0%
	Unmarried	Frequency	51	43	94
		Percentage	54.3%	45.7%	100.0%
Education	Upto HSC	Frequency	47	31	78
		Percentage	60.3%	39.7%	100.0%
	Degree	Frequency	78	59	137
		Percentage	56.9%	43.1%	100.0%
	Post Graduate	Frequency	199	79	278
		Percentage	71.6%	28.4%	100.0%
	Professional	Frequency	77	30	107
		Percentage	72.0%	28.0%	100.0%
Occupation	Government Employee	Frequency	288	96	384
		Percentage	75.0%	25.0%	100.0%
	Private Employee	Frequency	82	77	159
		Percentage	51.6%	48.4%	100.0%
	Professional	Frequency	13	14	27
		Percentage	48.1%	51.9%	100.0%
	Any others	Frequency	18	12	30
		Percentage	60.0%	40.0%	100.0%
Annual Income	Less than Rs 1 Lakh	Frequency	80	91	171
		Percentage	46.8%	53.2%	100.0%

This table shows the relationship between demographic profile of the respondents and their awareness level of income tax. In age factor, 66.8 percent of the respondents are aware of Income tax. In that, 74.5 percent of the respondents are at the age group of 36 years to 45 years. In marital status factor, 66.8 percent of the respondents are aware of income tax. In that, 69.2 percent of the respondents are married. In education factor, 66.8 percent are aware of income tax. In that 71.2 percent of the respondents have finished their post graduate. In occupation factor, 66.8 percent of the respondents are aware about income tax. In that, 75.0 percent of the respondents are government employee. While considering annual income of the respondents, 66.8 percent of the respondents are aware of income tax. In that, 87.1 percent of the respondents are earning Rs 4,00,000 to Rs 5,00,000. In type of family, 66.8 percent of the respondents are aware of income tax. In that, 67.6 percent of the respondents are

living in joint family. In six of family factor, 66.8 percent of the respondents are aware of income tax. In that, 72.0 percent of the respondents' household size is 3 to 5 members.

Table 3: Relationship between the demographic profile of the respondents and their awareness level about regulatory bodies

Demographic factors	Options		Response		Total
			Yes	No	
Age	Below 25 years	Frequency	23	31	54
		Percentage	42.6%	57.4%	100.0%
	26 years – 35 years	Frequency	60	100	160
		Percentage	37.5%	62.5%	100.0%
	36 years – 45 years	Frequency	63	121	184
		Percentage	34.2%	65.8%	100.0%
	46 years – 55 years	Frequency	66	110	176
		Percentage	37.5%	62.5%	100.0%
Marital Status	Married	Frequency	12	14	26
		Percentage	46.2%	53.8%	100.0%
	Unmarried	Frequency	184	322	506
		Percentage	36.4%	63.6%	100.0%
Education	Upto HSC	Frequency	40	54	94
		Percentage	42.6%	57.4%	100.0%
	Degree	Frequency	54	83	137
		Percentage	39.4%	60.6%	100.0%
	Post Graduate	Frequency	113	165	278
		Percentage	40.6%	59.4%	100.0%
Occupation	Professional	Frequency	38	69	107
		Percentage	35.5%	64.5%	100.0%
	Government Employee	Frequency	136	248	384
		Percentage	35.4%	64.6%	100.0%
	Private Employee	Frequency	56	103	159
		Percentage	35.2%	64.8%	100.0%
Annual Income	Less than Rs 1 Lakh	Frequency	9	18	27
		Percentage	33.3%	66.7%	100.0%
	Rs 1 – 2 Lakhs	Frequency	23	7	30
		Percentage	76.7%	23.3%	100.0%
	Rs 2 – 3 Lakhs	Frequency	54	117	171
		Percentage	31.6%	68.4%	100.0%
	Rs 3 – 4 Lakhs	Frequency	36	58	94
		Percentage	38.3%	61.7%	100.0%
	Rs 4 – 5 Lakhs	Frequency	28	44	72
		Percentage	38.9%	61.1%	100.0%
Type of family	Nuclear	Frequency	22	32	54
		Percentage	40.7%	59.3%	100.0%
	Joint	Frequency	22	40	62
		Percentage	35.5%	64.5%	100.0%

Size of family	Below 3 members	Frequency	24	46	70
		Percentage	34.3%	65.7%	100.0%
	3 – 5 members	Frequency	162	263	425
		Percentage	38.1%	61.9%	100.0%
	Above 5 members	Frequency	38	67	105

The above table describes the relationship between the demographic profile of the respondents and their awareness level about regulatory bodies. In age factor, 62.7 percent of the respondents are not aware of regulatory bodies. In that, 65.8 percent of the respondents are at the age of group 36 years to 45 years. In marital status, 62.7 percent of the respondents are not aware of regulatory bodies. In that, 63.6 percent of the respondents are married. In education factor, 62.7 percent of the respondents are not aware of regulatory bodies. In that, 75.6 percent of the respondents studied upto HSC. In occupation, 62.7 percent of the respondents are not aware of regulatory bodies. In that, 66.7 percent of the respondents are professionals. In annual income, 62.7 percent of the respondents are not aware of regulatory bodies. In that, 68.4 percent of the respondents are earning less than Rs 1,00,000. In type of family, 62.7 percent of the respondents are not aware of regulatory bodies. In that, 66.7 percent of the respondents are living in a nuclear family. In size of family factor, 62.7 percent of the respondents are not aware of regulatory bodies. In that, 65.7 percent of the respondents household size is below 3 members.

Table 4: Relationship between suggestions offered by working women with education & occupation

Demographic factors		Options		Suggestions					Total
				Special schemes for working women	Offering additional bonus	Additional Tax Incentives	Offering specific schemes for children's/ marriage etc	Attractive pension schemes	
Education		Upto HSC	Frequency	33	8	2	25	10	78
			Percentage	42.3%	10.3%	2.6%	32.1%	12.8%	100%
		Degree	Frequency	74	10	9	19	25	137
			Percentage	54.0%	7.3%	6.6%	13.9%	18.2%	100%
		Post Graduate	Frequency	116	14	18	73	57	278
			Percentage	41.7%	5.0%	6.5%	26.3%	20.5%	100%
		Professional	Frequency	48	14	6	29	10	107
			Percentage	44.9%	13.1%	5.6%	27.1%	9.3%	100%
Occupation		Government Employee	Frequency	162	20	26	107	69	384
			Percentage	42.2%	5.2%	6.8%	27.9%	18.0%	100%
		Private Employee	Frequency	81	19	4	24	31	159
			Percentage	50.9%	11.9%	2.5%	15.1%	19.5%	100%
		Professional	Frequency	16	3	3	3	2	27
			Percentage	59.3%	11.1%	11.1%	11.1%	7.4%	100%

The above table discloses the information that relationship between suggestion offered by working women with education and occupation. In education factor, 45.2 percent of the respondents suggest to announce special schemes for working women. In that, 54.0 percent of the respondents are degree holder. In occupation factor, 45.2 percent of the respondents suggest to announce special schemes for working women. In that, 59.3 percent of the respondents are professional.

5 FINDINGS

5.1 Majority of the respondents are not aware about shares, debentures, mutual funds, real estate, government securities. Major part of the respondents is partially aware of insurance policy, gold and silver, government securities. Most of the respondents are fully aware of bank deposits and post office savings.

5.2 Age, marital status, education, occupation, annual income and size of family influence awareness about income tax. It also concludes that type of family does not influence awareness about income tax.

5.3 Occupation and type of family influence awareness about income tax. It also concludes that age, marital status, education, annual income and type of family do not influence awareness about regulatory bodies.

5.4 Education and occupation of working women play an important role in suggestion offered by them.

6 SUGGESTIONS

6.1 Government should take some efforts to increase the financial awareness and investment awareness among the working women through organizing campaigns.

6.2 Working women can gather information from various sources like newspaper, TV Channels, magazines. They can take financial decision with the help of financial experts.

6.3 Companies can organise investment and financial awareness programmes by experts in their office premises especially for their women employees.

7 CONCLUSION

Financial literacy is one such issue which has gained great importance in the past few years. Not only men, but women also need to be able to understand financial matters and make informed choices for their sound financial health and future security. With the various initiatives and programmes being executed by the Government and other financial bodies, more and more people are becoming aware of the financial management practices. The study also reveals that women are becoming aware about financial terms and products, but their involvement in financial decision making is still limited. Factors like traditional belief of men handling the financial issues and lack of confidence in themselves is keeping them refrained from coming forward and take the decisions independently. This has to be encouraged to make women more strong and self-dependent.

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A COMPUTATIONAL STUDY WITH FINITE DIFFERENCE APPROXIMATION FOR SECOND ORDER HEAT EQUATION

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ABSTRACT

This paper presents Crank Nicolson method help for *Study* with Finite Difference approximation for Second Order HEAT Equation. Crank Nicolson method is a finite difference method used for solving heat equation and similar partial differential equations. This method is of order two in space, implicit in time, unconditionally stable and has higher order of accuracy.

Key words: Crank Nicolson, Explicit method, Finite Difference, Heat Equation, Partial differential equation

1. INTRODUCTION

The **Crank–Nicolson** technique is a limited contrast strategy finite difference method utilized for numerically solving the heat equation and similar partial differential equations. It is a second-order strategy on schedule. It is verifiable on schedule, can be composed as an understood Runge–Kutta technique, and it is mathematically steady. The technique was created by John Wrench and Phyllis Nicolson during the twentieth century.

2. FINITE DIFFERENCE METHODS

The finite difference methods attempt to solve partial differential equations by approximating the Differential equation over the area of integration by a system of algebraic equations. They are a means of obtaining numerical solutions to partial differential equations.

The most common finite difference methods for the solution of partial differential equations are:

- Explicit method
- Implicit method
- Crank Nicolson Method

In 1947 **CRANK** and **NICOLSON** suggested the method according to which $(\partial^2 u / \partial x^2)$ is replaced by the average value of its finite difference approximation on the j th and $(j+1)$ th rows implying,

3. PARABOLIC EQUATIONS

Consider the heat conduction equation viz. $\frac{\partial u}{\partial t} = \frac{\partial^2 u}{\partial x^2}$ Where, $u = u(x, t)$ (3.1)

t						$t = j + 1k$
						$t = jk$
						$t = 2k$
						$t = k$
						$t = 0$
0	$x=h$	$x=2h$	$x=3h$	$x=ih$	$x=(i+1)h$	

Fig. (a)

Let us divide the x - t plane into a number of smaller rectangles by means of the lines $x=0, x=h, x=2h$ (i.e. $x=ih, i=0,1,2,\dots$) and $t=0, k, 2k \dots$ (i.e. $t=jk, j=0,1,2,\dots$) then we readily obtain $\frac{\partial^2 u}{\partial x^2} = \frac{1}{h^2} [u_{i-1,j} - 2u_{ij} + u_{i+1,j}]$ and

$\frac{\partial u}{\partial t} = \frac{1}{K} [u_{i,j+1} - u_{i,j}]$. Putting these values of (1), we get

$$\frac{1}{K} [u_{i,j+1} - u_{i,j}] = \frac{1}{h^2} [u_{i-1,j} - 2u_{ij} + u_{i+1,j}]$$

$$\Rightarrow u_{i,j+1} - u_{i,j} = r [u_{i-1,j} - 2u_{ij} + u_{i+1,j}] \quad \text{where } r = (K/h^2)$$

$$\Rightarrow u_{i,j+1} = u_{i,j} + r [u_{i-1,j} - 2u_{ij} + u_{i+1,j}] \quad (3.2)$$

This formula (3.2) gives the value of the unknown function at the $(i, j+1)$ th interior point in terms of the known functional values and hence is known as explicit formula and remains valid only for $0 < r \leq (1/2)$. It is important to note here that for the approximation of $(\partial^2 u / \partial x^2)$, we have used the functional values along the j th row only.

$$\frac{\partial^2 u}{\partial x^2} = \frac{1}{2} \left[\frac{u_{i-1,j} - 2u_{i,j} + u_{i+1,j}}{h^2} + \frac{u_{i-1,j+1} - 2u_{i,j+1} + u_{i+1,j+1}}{h^2} \right]$$

Now putting this value of $\frac{\partial^2 u}{\partial x^2}$ and $\frac{\partial u}{\partial t}$ in equation (1), we get

$$\frac{1}{K} [u_{i,j+1} - u_{i,j}] = \frac{1}{2h^2} [u_{i-1,j} - 2u_{i,j} + u_{i+1,j} + u_{i-1,j+1} - 2u_{i,j+1} + u_{i+1,j+1}]$$

$$\Rightarrow -ru_{i-1,j+1} + (2+2r)u_{i,j+1} - ru_{i+1,j+1}$$

$$= ru_{i-1,j} + 2(1-r)u_{i,j} - ru_{i+1,j} \quad \text{where } r = (K/h^2) \dots (3.3)$$

On the L.H.S. of this equation we have three unknowns while on R.H.S. all the three are known. The implicit formula is known as **CRANK NICOLSON** formula and remains convergent for all finite values of r . If in each row, we have " m " interval mesh points the above formula gives " m " simultaneous equations for " m " unknowns in terms of known boundary values. On the same lines, one can calculate the internal mesh points on all rows.

3. NUMERICAL EXAMPLE

Example: Solve the heat equation $\frac{\partial u}{\partial t} = \frac{\partial^2 u}{\partial x^2}$ subject to the boundary and initial conditions as follows: $u(x, 0) =$

$$0, u(0, t) = 0, u(1, t) = t.$$

Solution: By relation (A), we have

$$-ru_{i-1,j+1} + (2+2r)u_{i,j+1} - ru_{i+1,j+1}$$

$$= ru_{i-1,j} + 2(1-r)u_{i,j} + ru_{i+1,j}, \text{ where } r = (K/h^2) \text{ and } u \equiv u(x, t) \quad (1)$$

(A) Let us choose $h = 1/2$ and $K = 1/8$ so that $r = 1/2$ then (1) can be written as

$$-u_{i-1,j+1} + 6u_{i,j+1} - u_{i+1,j+1} = u_{i-1,j} + 2u_{i,j} + u_{i+1,j} \quad (2)$$

Let $OA = h = 1/2$, $OB = K = 1/8$, then coordinates of P are given by $\left(\frac{1}{2}, \frac{1}{8}\right)$. Let the value of u and P be u_1 . Now

applying **CRANK NICOLSON** scheme (2) at P, we get

T	$u(o,t)=0$		
	B	P	C
	$K=1/8$	u_1	
		$1/2$	$1 \quad X$
0	$h=1/2 \quad A$	B'	$u(x,o)=0$

$$-u_B + 6u_P - u_C = u_O + 2u_A + u_{B'}$$

$$\Rightarrow -0 + 6u_1 - u(1, 1/8) = 0 + 2u(1/2, 0) + u(1, 0)$$

$$\Rightarrow -0 + 6u_1 - 1/8 = 0 + 2.0 + 0 \quad [u(x,0)=0]$$

$$\Rightarrow 6u_1 = 1/8 \Rightarrow u_1 = (1/48) = 0.02083$$

(B) Let us choose $K = 1/8$ and $h = 1/4$ so that $r = (K/h^2) = 2$. It is worth noticing that **C-N scheme** is convergent for all finite values of r . For $r = 2$, eq. (1), implies

$$-u_{i-1,j+1} + 3u_{i,j+1} - u_{i+1,j+1} = u_{i-1,j} - u_{i,j} + u_{i+1,j} \quad (3)$$

Applying this equation for the mesh point P in the diagram, we have

t					$u(1,t)=t$ $\Rightarrow u_5=(1/8)$
$u(o,t)=0$ P'		P	Q	R	S
	$K=1/8$	U_1	U_2	u_3	
			$2/4$	$3/4$	I X
$0h=1/4$	A	B	C	D	$u(x,o)=0$

$$-u_{p'} + 3u_p - u_Q = u_o - u_A + u_B \text{ where } u_{i,j+1} \equiv u_i$$

$$\Rightarrow -0 + 3u_1 - u_2 = 0 - 0 + 0 = 0 \Rightarrow 3u_1 = u_2$$

Again applying the same scheme at Q and R respectively, we obtain

$$-u_{p'} + 3u_Q - u_R = u_A - u_B + u_C = 0 \Rightarrow -u_1 + 3u_2 - u_3 = 0$$

Thus we have three unknowns and three equations. Solving these, one may get $u_1 = .00595$, $u_2 = 0.01785$ and $u_3 = 0.04760$.

(C) We now consider $K=1/16$ and $h=1/4$ so that $r=1$. For $r=1$, **C-N scheme** can be written as

t					
F		u_4	u_5	u_6	S_2
$u(o,t)=0$ E	$1/16$	P_2	Q_2	R_2	$u(1,t)=t$ S_1
		P_1 u_2	Q_1 u_3	R_1	
$K=1/16$	$h=1/4$		$2/4$	$3/4$	I X
O	A	B	C	D	$u(x,o)=0$
$1/4$	$2/4$	$3/4$	I		

$$-u_{i-1,j+1} + 4u_{i,j+1} - u_{i+1,j+1} = u_{i-1,j} + u_{i+1,j}$$

Applying this scheme at P_1 , Q_1 , R_1 , we get

$$-u_E + 4u_{p1} - u_{Q1} = u_o + u_B \text{ where } u_{i,j+1} \equiv u_i$$

$$\text{i.e. } -0 + 4u_1 - u_2 = 0 \quad (1)$$

$$-u_{p1} + 4u_{Q1} - u_{R1} = u_A + u_C = 0 \Rightarrow -u_1 + 4u_2 - u_3 = 0 \quad (2)$$

$$\text{and } -u_{Q1} + 4u_{R1} - u_{S1} = u_B + u_D = 0 \Rightarrow -u_2 + 4u_3 - u_{S1} = 0 \quad (3)$$

$$\text{But } u_{S1} = [t]_{t=(1/16)} = 1/16 \Rightarrow -u_2 + 4u_3 - 1/16 = 0 \quad (4)$$

Solving (1), (2) and (4) for u_1 , u_2 , u_3 ; we get

$$u_1 = \frac{1}{16 \times 56} = .001116, u_2 = \frac{1}{56 \times 4} = .004464$$

$$\text{and } u_3 = \frac{15}{16 \times 56} = .016740$$

Again applying the scheme at P_2 , Q_2 , R_2 , we get

$$-U_F + 4U_{P_2} - U_{Q_2} = u_E + u_{Q_1} \Rightarrow 4u_4 - u_5 = u_2 = \frac{1}{56 \times 4} \quad (5)$$

$$-u_{P_2} + 4u_{Q_2} - u_{R_2} = u_{P_1} + u_{R_1} = u_1 + u_3 = \frac{1}{16 \times 56} + \frac{15}{16 \times 56} = \frac{1}{56} \quad (6)$$

$$\text{and } -u_{Q_2} + 4u_{R_2} - u_{S_2} = u_2 + u_{S_1} = \frac{1}{56 \times 4} + \frac{1}{16} \Rightarrow -u_5 + 4u_6 - \frac{1}{8} = \frac{1}{56 \times 4} + \frac{1}{16} \quad (7)$$

$$\left(\because u_{S_2} = \frac{1}{8} \text{ and } u_{S_1} = \frac{1}{16} \right)$$

Now solving (5), (6), (7), we get

$U_4 = .005899$, $u_5 = 0.019132$ and $u_6 = 0.052771$

These are the fifth iterations due to Crank-Nicolson method

u_1	u_2	u_3	u_4	u_5	u_6
.001116	.004464	.016740	.005899	0.019132	0.052771

4. CONCLUSION

In this study, we successfully applied Crank-Nicolson method to solve a random component heat equation. Crank-Nicolson method has become a very popular finite difference method for solving Heat equation. Also, the variance in values of h , K and r are obtained the iteration results i.e U_4 , u_5 and u_6 . Numerical results show that this method is very effective and practical.

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USE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN HIGHER EDUCATION

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ABSTRACT

Information and communication technologies (ICT) have become commonplace entities in all aspects of life. ICT in education is any information technology that focuses on the acquisition, storage, manipulation, management, transmission or reception of data required for the educational purpose. Education is a very socially oriented activity and quality education has traditionally been associated with strong teachers having high degrees of personal contact with learners. The use of ICT in education lends itself to more student-centered learning settings. But with the world moving rapidly into digital media and information, the role of ICT in education is becoming more and more important and this importance will continue to grow and develop in the coming years. This paper highlights the general understanding of ICT in the field of education, its role and various trends in ICT in education.

"Globalisation and technological changes have created a new global economy powered by technology, fuelled by information and driven by knowledge."

MEANING AND ROLE OF ICT IN EDUCATION:

Information and communications technology (ICT) in education is "the processing of information and its communications facilities and features that variously support teaching, learning and a range of activities in education". Any educational programme that is purely delivered through ICTs or with ICT delivered content as the primary backbone of the teaching-learning process, such as online courses through the web, is ICT enabled education. In simple words, this form of education requires ICT access and requires that the learner use ICTs as a primary or basic medium of instruction. Information and Communication Technology (ICT) in education can contribute to universal access to education, equity in education, the delivery of quality learning and teaching, teachers' professional development and more efficient education management, governance and administration.

ICT in education is any educational technology that is applied in the educational process. It encompasses hardware approach like use of machines and materials, software approach like use of methodologies and strategies of teaching learning and Systems approach that uses the management technology that deals with the systematic organization of the hardware and the software. Different software packages are also used for use in different department of education; e.g. library software, administration software, software related to managing the entire teaching learning process. In brief, it may be said that the entire principle of ICT in education lies in:

1. Use of a broad range of resources
2. Emphasis on individualised learning
3. Emphasis on systems approach to education.

Need for ICT in Higher Education:

ICT can help strengthen democratic and transparent education planning and management. Communication technologies can expand access to learning, improve quality and ensure inclusion. Where resources are scarce, judicious use of open-source materials through technologies can provide the means to bypass the bottleneck of textbook production, distribution and updating. The quality of teachers and their continuing professional education and training remain central to the achievement of quality education. Yet today, the number and quality of teachers, teaching practice and teacher education are facing serious systemic challenges across the world. The situation must be redressed at a time when the world needs an estimated 9.1 million new teachers to reach internationally-agreed education targets by the end of 2015. These challenges can be addressed through a holistic, systematic approach to education and teacher development systems in the ways that also incorporate the enabling role of ICT.

Uses of ICT in Higher Education:

ICT is being utilised in every part of life. Due to the increasing importance of the computers, students – the future citizens cannot afford to keep themselves aloof from this potential medium. In education, use of ICT has become imperative to improve the efficiency and effectiveness at all levels and in both formal and informal settings. Education even at school stage has to provide computer instruction. Profound technical knowledge and positive attitude towards this technology are the essential prerequisites for the successful

citizens of the coming decades. Information and Communication technology in the field of education can be used for the following purposes:

1. To broadcast materials, online facility or CD-ROM can be used as sources of information in different subjects.
2. To facilitate communication for pupils with special needs
3. To use electronic toys develop spatial awareness and psychomotor control
4. To use the online resource like email, chat, discussion forum to support collaborative writing and sharing of information.
5. To facilitate video-conferencing or other form of tele-conferencing to involve wide range of students from distant geographic areas
6. For blended learning, by combining conventional classroom learning with e-learning systems
7. To process administrative and assessment data
8. To exchange and share ideas amongst teachers for their professional growth
9. To carry out internet based research to enhance educational process.

Trends in ICT in Higher Education:

1. **Mobile Learning:** It involves the use of mobile technology, either alone or in combination with other information and communication technology (ICT), to enable learning anytime and anywhere. People can use mobile devices to access educational resources, connect with others, or create content, both inside and outside classrooms.
2. **E-Learning:** Although, most commonly associated with higher education and corporate training, e-learning encompasses learning at all levels, both formal and non-formal, that uses an information network—the Internet, an intranet (LAN) or extranet (WAN) - whether wholly or in part, for course delivery, interaction, evaluation and/or facilitation.
3. **Blended Learning:** Blended learning refers to learning models that combine traditional classroom practice with e-learning solutions. For example, students in a traditional class can be assigned both print-based and online materials, have online mentoring sessions with their teachers through chat and are subscribed to a class email list.
4. **Screencasting:** It allows users to share their screens directly from their browser and make the video available online so that other viewers can stream the video directly. The presenter, thus has the ability to show their ideas and flow of thoughts. Combining, audio and video, the educator can mimic, the one-on-one experience of the classroom and deliver clear and complete instructions.
5. **Virtual Classroom:** A virtual classroom provides the opportunity for students to receive direct instruction from a qualified teacher in an interactive environment. Learners can have direct and immediate access to their instructor for instant feedback and direction. In addition, the virtual classroom provides a social learning environment that replicates the traditional "brick and mortar" classroom.
6. **Open and Distance Learning:** Open and distance learning is a way of providing learning opportunities that is characterised by the separation of teacher and learner in time or place, or both time and place; learning that is certified in some way by an institution or agency, the use of a variety of media, including print and electronic, two-way communications that allows learners and tutors to interact and the possibility of occasional face-to-face meetings.
7. **Learning Management Systems:** It is software used for delivering, tracking and managing training and education. Educators can post announcements, grade assignments, check on course activity and participate in class discussions. Students can submit their work, read and respond to discussion questions and take quizzes. LMSs range from systems for managing training/educational records to software for distributing courses over the Internet and offering features for online collaboration.
8. **Computer Aided Assessment:** Computer aided assessment (E-assessment) ranges from automated multiple choice tests to more sophisticated systems. With some systems, feedback can be geared towards a student's specific mistakes or the computer can navigate the student through a series of questions adaption to what the student appears to have learned or not learned.

CONCLUSION:

The ICT has become indispensable and will remain as such with the growth of higher education and civilisation in future. For the further growth and development of ICT in education, the policymakers should define a framework for the appropriate and effective use of the ICTs in the educational systems by first providing a brief overview of the potential benefits of ICT use in education and the ways by which different ICTs have been used in education thus far. Secondly, they should address the four broad issues in the use of ICTs in education – effectiveness, cost, equity and sustainability.

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SCHOOL READINESS: PREPARING FOR THE CHALLENGE OF DIVERSITY POST INCLUSION**Ms. Quazi Ferdoushi Islam*, Prof. Aejaz Masih and Prof. Najma Amin**

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ABSTRACT

Though the Right to Education (RTE) Act, 2009 mandates free and compulsory education for all children in the age-group 06 – 14 years the debate over where students with disabilities should receive education continues unabated. There is a school of thought which advocates inclusive education for children with disabilities in mainstream schools and the other argues for special schools where children with special needs (CWSN) learners because “without one-to-one specialized instruction would simply not learn and their futures would be sacrificed” (Ferguson, 2008). Now after more than two decades later since the Persons with Disabilities (PWD) Act, 1995 the recent landmark legislation Rights of Persons with Disabilities (RPWD) 2016 calls for greater inclusion of the disabled children in the country in regular mainstream schools. The canvas of inclusion grew larger with 21 disabilities finding a place in the recently enacted legislation of 2016. This calls for a massive change in the structure of education in our country in the elementary education scenario. Moreover, our government efforts under Rashtriya Madhyamik Siksha Abhiyn (RMSA) to make secondary education free for children with special needs renders the “newest challenge is to make inclusive practices available to everybody, everywhere and all the time (Ferguson, 2008).

This paper highlights the findings of a study of the strategies of inclusion as practiced in government schools of Delhi. The paper also discusses the schools' readiness (Sarva Sikshya Abhiyan SSA's 3- pronged strategy for inclusion) in trying to prepare for the new challenge of inclusion and what systemic school improvement efforts need to be met.

Keywords: inclusive education, school environment, classroom strategies

Education for the disabled in India may be traced back to early seventies, when the *Integrated Education for the Disabled (IEDC)* was introduced way back in 1974. But the scenario was one of segregation of such learners as disabled learners were always at the periphery in the absence of any policy for the differently abled. Now after more than two decades later since the Persons with Disabilities (PWD) Act, 1995 the recent landmark legislation Rights of Persons with Disabilities (RPWD) 2016 calls for greater inclusion of the disabled children in the country in regular mainstream schools. The canvas of inclusion grew larger with 21 disabilities finding a place in the recently enacted legislation of 2016. This calls for a massive change in the structure of education in our country in the elementary education scenario. Moreover, our government efforts under Rashtriya Madhyamik Siksha Abhiyn (RMSA) to make secondary education free for children with special needs renders the “newest challenge is to make inclusive practices available to everybody, everywhere and all the time (Ferguson, 2008).

Though the Right to Education (RTE) Act, 2009 mandates free and compulsory education for all children in the age-group 06 – 14 years the debate over where students with disabilities should receive education continues unabated. There is a school of thought which advocates inclusive education for children with disabilities in mainstream schools and the other argues for special schools where children with special needs (CWSN) learners because “without one-to-one specialized instruction would simply not learn and their futures would be sacrificed” (Ferguson, 2008).

Eighth All India School Education Survey (8th AISES): Statistics on CWSN

The main findings of the Eight All India School Education Survey (8th AISES) with reference date 30 September, 2009 regarding schooling facilities for children with disabilities are as under: Out of a total 12, 99, 902 schools in the country, only 2, 74,445 (21.11%) schools adhere to inclusive education for disabled children. Out of 2, 74, 445, the proportion of primary, upper primary, secondary and higher secondary schools adhering to inclusive education are 1, 65, 966 (60.47 %), 77, 757 (28.33%), 18, 084 (6.59 %) and 12, 638 (5.07 %).

- There are 8, 35, 287 differently abled (CWSN) students enrolled at all stages in the country. This comprises of children with different disabilities viz. visual impairment (29.16 %), hearing impairment (14.47 %), orthopedic (locomotor) disability (25.05 %), intellectual impairment (22.35 %), multiple impairment (4.20 %) and others (4.77%).

- Out of the total enrolment of differently abled students, 52.27 %, 28.78 %, 15.52 % and 3.45 % are enrolled at Primary, Upper Primary, Secondary and Higher Secondary stages respectively.
- There are 7,60, 327 students with visual, hearing, orthopedic and intellectual impairment. Out of this the degree of disability is known for 65.93 % students.

Research in India in inclusive practices in school is rudimentary and practice differs from school to school (Singh, 2011). Research has indicated that a school's leadership enterprise provides the direction to the policies and procedures to be followed and sustained at school. The role of a school head, based at each institutional level, is of a leader and acts as an agent of the state, is to further the cause of the government. The **sub-group report for the 12th plan, Elementary Education, Government of India identifies "the key focal areas for inclusive education of CWSN in the 12th plan would be identification of 'hidden CWSN', development of human resource for support services, and infrastructure and material support for inclusive education"**.

Keeping the above considerations in mind the researcher developed a school readiness information blank (SRIB – CWSN), in an attempt to understand the implementation strategy of the government schools in response to The RTE Act, 2009, calling for an inclusive agenda.

METHODOLOGY

Sample

The study was conducted as part of a doctoral thesis to study the process of implementation of inclusive education in schools of Delhi. 7 schools under the Directorate of Education, Delhi were part of the sample. Purposeful sampling was done to select the schools from a list of schools obtained from the office of the State Project Director, SSA Mission, Delhi. This list was also cross-checked with the list obtained from the Deputy Director Education (DDE) from the two districts – south-east district and central district in which the study was conducted.

The schools were selected on the basis of the following criteria:

- Only government schools under Directorate of Education (DOE) were considered for the study
- A sizable presence of CWSN (5-6) learners enrolled in the school.

Tool used

The school Readiness Information Blank (SRIB- CWSN) blank developed by the researcher focuses on 3 key areas of :

- Physical access
- Social Access
- **Leadership enterprise (The present article is based on this theme)**

Out of the many tools used in the study this paper presents the findings related to the self-developed **School Readiness Information Blank (SRIB- CWSN)** by the researcher. The tool has 3 themes with number of sub-themes. Out of the three themes framed in the tool discussion of the present paper is limited to the single theme of:

- **schools's leadership enterprise**

7 government school principals under DOE schools formed part of the sample.

Some of the findings under the sub-themes are presented as follows:

- **Principals views regarding inclusive education and the inclusion experience:**
- **Schools efforts to address the continuum of services required for CWSN learners**

Principals views regarding inclusive education and the inclusion experience:

A principal of a school in Delhi has rightly put it,

"Inclusive education is still in its initial stages, we are still figuring it out as how best to address the needs of CWSN learners amidst regular students. Adapting our school environments to student diversity is an ongoing challenge in the face of constraints of resources".

Another Principal of a school where a special education teacher (SET) has been in service since more than 3 years mentioned,

“ at the school and teacher level how can just one SET handle the pressure of CWSN learners, given a situation where CWSN enrolments are on the upswing”.

Yet another Head of school commented,

“SSA has more than one million school having all disability classrooms. With the recent legislation of Rights of Persons with Disabilities (RPWD), how does a single disability teacher handle such varied disability cases”.

Another interesting observation was put forth by a school principal was,

“Inequity exists in our educational system with regard to the general students among the urban and rural schools. Inclusion without the right resources will derail the government’s inclusive agenda”.

A comment by another head of a school as,

“For effective implementation of inclusive education, the whole school reform approach needs to be established –from top down to bottom up for scaling up inclusion”.

In yet another school, comment of a school principal,

“ Inclusive education is definitely a social good of the government but should only be limited to orthopedically handicapped (OH) cases or low vision (LV) cases, or of similar nature. Inclusive education is certainly not suitable for MR children. In fact placing them in mainstream set-up is equivalent to making baarbaad (wasted) of the whole process of education. It is barbaadi (wasteful exercise)for them also and for the regular students due to a lot of chaos associated with inclusion”.

From an analysis of the above perceptions of the heads of schools / principals towards inclusive education and the experience of inclusion, the following are reflected.

Training, professional autonomy and teacher collaboration

Many teachers are unaware of the aids and devices that can be used for special needs children. The teacher training programs need to upgrade and provide necessary training accordingly. If teachers have appropriate orientation and are provided training, time-to-time up gradation of skills for handling CWSN in inclusive classrooms, it may result in professional autonomy and speedy decision-making. General classroom teachers have to depend a lot on special education teachers for the education needs of CWSN learners. This will effect in the preparation and development of lesson plans. It will also empower teachers with knowledge about adapted curriculum and technical know-how.

CWSN Rights and peer social acceptance

While analyzing the statements in the context of access to students with disabilities, there is an underlying sense of assumption that emerges is that even though education for all children (06 -14 years) is 'rights based' but welcoming and accepting CWSN in mainstream schools, holistically, would depend to a large extent on the physical and social acceptance of CWSN by the mainstream segment. This is also corroborated by (Chib 2001 ; Kishore 1999, cited by Kalyanpur 2012), 'empowerment is not so much a matter of individual rights as much as a matter of individual access, both physical, in terms of a barrier-free environment, and technological, in terms of appropriate assistive devices'. In classrooms teachers attention and peer acceptance are twin boosters to inclusion as revealed by the consensual experiences of the heads of schools / principals.

Clearly, individual teachers and principals have a major role to play (Willms 2002). But among the lessons learned over the years is that inclusion is a multifaceted endeavour that requires collaboration among a variety of stakeholders, grounded in a holistic approach, backed up by a robust policy and systems architecture. Accordingly, it is not enough to look mainly to individual teachers or principals to take the risks and make the sacrifices needed to move inclusion forward (Crawford 2012)

➤ the continuum of services required for CWSN learners

Strategies used by schools for inclusion were analyzed under the continuum of services for CWSN learners

School level

It is significant to note that strategies for inclusion of CWSN learners are limited to the following:

1. Screening Procedures**• Screening**

Schools do not have an institutional - based screening framework in place to identify at risk learners

The CWSN learners are screened on the basis of the following:

- Parents inform the schools during admission of CWSN learners at the school
- Physical appearance of the CWSN learner. Instances of low vision, orthopedically handicapped (OH), Hearing impaired (HI) are easily visible. Problems arise as Learning disabled are difficult to diagnose and identify.
- The behavioural characteristics of learners such as with intellectual impairments as mental retardation (MR) and multiple disabilities(MD)
- Referrals of learners by general classroom teachers to special education teachers on the basis of class work, or work samples

2. Assessment camps

The CWSN learners are taken to the assessment camps as and when camps are held. It is a policy of some schools either the special education teachers take them or parents are informed in advance and they arrange for the visit to the assessment camps.

3. School engagement with parents of CWSN learners

The school informs the parents of CWSN learners regarding the orientation camps held for parents at the district level. Information to such events are provided well in advance to enable them to visit such camps organized at district level. The schools' leadership at 2 schools also tries to keep abreast with the development in inclusive education and disability issues with community linkages with resource experts by way of discussion and deliberations.

On a positive note, the schools have an inclusive vision and the schools' leadership hinted that they are guided by the vision, and not by the doubts that inclusion may detract.

Classroom level

Within the SSA Framework the focus on inclusion is on teacher training and designing of individualized education plans (IEP's) with the assistance of special education teachers of each school. SSA overlooks the CWSN learners requirements from classes I to class VIII.

1. Remedial teaching as well as teaching in resource rooms are practiced to facilitate CWSN inclusion.
2. The entitlements and support services provided to CWSN learners in inclusive schools are as given under SSA grants
3. Inclusion strategies by having provisions in place like special education teacher, individualized education programs, extra time during exams, writers, orientation camp visits, exposure visits, games and sports, capacity building, community linkages etc.

Systemic school improvement efforts

The systemic school improvement efforts needed to scale up inclusion were analyzed in terms of facilitators and barriers to inclusion. The responses of the 7 participants have been clubbed together which are as follows:

➤ Facilitators to inclusion

- Availability of minimum provisions for successful implementation of inclusive education.

The clubbing of responses of the 7 heads of schools/ principals indicate that this can be the best possible support towards inclusion. These include:

- ❖ Resources: resources in terms of teaching- learning materials, and assistive technology for classroom support in teaching a diverse category of learners
- ❖ Capacity building: general classroom teachers trained in cross disability approach and technical know-how of the assistive devices used by CWSN learners like Braille books, Hearing aids, Taylor frames, Stylus etc.,
- ❖ School stakeholder attitude- especially the attitude of general classroom teachers and peer group.
- ❖ Sharing success stories will allow revisiting and reviewing strategies by teachers, professionals in the field. Professionals will be enriched by the initiatives and experiences of the success stories. This will serve not

only as occasions of stock-taking of the nuances of implementation but also for sharing of the good practices and educational initiatives undertaken.

Triangulation

Being a qualitative study, triangulation was used to generate greater confidence in the findings and provide an accuracy to the research report. The focus group discussion with CWSN learners was used to supplement the findings of the leadership enterprise of the schools.

Along with the views of Principals the facilitating factors of inclusion was found out as a result of focus group inquiry on a sample of CWSN learners conducted by the researcher at a later time, reflects that teachers are the anchors in a CWSN's life. They go to their "Sir's or Maam's" in schools during their troubled times and also at regular times.

An anecdote may be shared:

Vinod, a CWSN learner, studying at class VII in a government boys school suffers from low vision. For the school outing - picnic his parents had given him money to buy chips and biscuits. Vinod wanted to share the chips and biscuits with his friends, regular students of his class. But his dream was cut short with the theft at school. When the researcher probed him, "*aap ne kisi ko baataya ya nahin (Did you inform anybody?)*", prompt came a reply that "*Teacher ko bataya tha (Informed the teacher)*".

In yet another anecdote when the CWSN learners were asked by the researcher,

"*School mein jab problem hoti hai toh kiske paas jaate ho (Who do you go to in case of any problems?)*". Majority of the learners chorused "*teachers*" and "*friends*" followed a close second.

The above finding reflects the significance teachers and peer group play in the social life of CWSN learners. Schools for effective inclusion must find ways and means to tap into these resources for creating enabling environments for CWSN learners to participate fully.

The above is also indicative that inclusive education is in stages of development and teething problems are expected. But till the attitude of the school stakeholders are changed accommodation measures for CWSN inclusion will be a barrier.

➤ Barriers to inclusion

Lack of resources in school

With the exception of a resource room and few sessions with the special education teachers (SET's) all the respondents opined that the schools are apparently not in a handsome position to accommodate the school environment meaningfully to cater to CWSN learners.

The reasons cited are, "*large class size, single special education teacher cannot handle varied special needs, teaching-learning materials, etc.*"

Lack of school – parental involvement

The "*how to*" of engaging family members as active partners in order to sustain inclusion meaningfully. Family members, especially parents, siblings can offer a lot of assistance in the way a child with disabilities functions.

This finding was a result of the conflict management school heads had to perform as a part of their routine school tasks. This was best reflected as a verbatim response of a principal of a school, "some parents do complain that teachers are not helpful towards their children with special needs". This was also clarified by the principal that on seeking clarification from the concerned teachers, teachers responded by saying that parents do not come to school when informed by teachers to visit such on a scheduled day. Rather they come when it is convenient to them. In such situations teachers are engaged with other school tasks. Taking out time for parents to accommodate them out-of-hand, when they come on a "flying visit" disturbs the general teaching-learning process.

The above is also a reflection of the 6 respondents who maintain that "parents usually do not come to schools when they are informed to visit schools by teachers".

CONCLUSION

Keeping the twin backdrops of RTE Act, 2009 and the landmark legislation of RPWD, 2016 school inclusive policies, practices and culture need to be planned in consonance with strategies for inclusion in Indian schools as per the resources, both existing and planned.

What emerges from the findings is that inclusion is a mixed bag- one that is fraught with challenges but also keeping with the spirit of the philosophy behind inclusion, schools will have to make efforts towards meaningful inclusion. As inclusive education is an inevitability (Executive Summary, UNESCO) considering the global changes and sustainability program of 2030.

From the findings it is evident that implementing inclusive education is a challenge. Studies of (Abrams and Gibbs, 2000) corroborate this finding that the current challenge is to reinvent schools with new assumptions and more effective practices rather than simply making additions or corrections to existing practice. The study of (Ferguson, Kozleski and Smith 2003; Kozleski, Ferguson and Smith 2005) also indicate real, fundamental change in social institutions (and inclusive education in inclusive systems *is* fundamental change) is complex, difficult work that requires significant time to accomplish and endure (cited by Ferguson in Ferguson, 2008) .

While access and presence in “mainstream” classrooms is a necessary step toward inclusive education for students with disabilities, it is clearly not enough. What happens in those classrooms is equally critical to achieving genuine inclusive education (Ferguson, 2008).

The above indicate that schools are at initial stages of catering to CWSN learners and a mammoth task remains as how to scale up effective inclusion, especially with the RPWD bringing 21 different disabilities into the fore. Another reason which is troublesome is the ability of mainstream school to provide quality inclusion to the rising curve of CWSN enrolment.

RECOMMENDATIONS

1. Schools can link with community to arrange for early identification to enable early intervention.

A principal of a school recommended the Delhi government’s Bhagidari system may be used to facilitate establishing links with the community for creating awareness about disabilities and for identification and interventions.

2. Schools to generate awareness among parents of CWSN regarding causes and myths associated with disabilities.

Parents are primary care-givers as research has indicated. However in the Indian context parents lack technical knowledge regarding disability and its causes.

A case in point as reflected by the following anecdote:

Sameer’s is a child with mental retardation. His classroom teacher tries to engage him in regular classroom activities through group work. But Sameer is behaviourally aggressive and fights with his peers. Most of his peers accept him just the way he is. However less than 2 per cent students of his class in a class size of about 50 students engage in verbal duels with him teachers when his teacher is attending to other tasks or during return to home. Sameer’s mother blames the class teacher for not taking care of Sameer. The class teacher tries to explain Sameer’s position and behaviour with the peers but his mother refuses to accept. She says Sameer’s behaviour is stable at home.

At best, they are familiar with the lay conditions and un researched realities associated with disabilities. This is a reflection that parents of CWSN view disability from the narrow, out-dated medical condition focusing on the impairment/s located within the child. Parents need to be apprised of the social model used in education where the limitations are inherent in the barriers of the society in failing to create conducive conditions for CWSN inclusion and not within the child. Such a measure may clear cobwebs in the minds of the primary care givers and may allow a parents of CWSN learners to view disability with a fresh perspective.

3. Schools to educate parents about the disability legislations with a view to empower parents of CWSN learners

Parental empowerment regarding disability legislations will enable them to reflect on the societal obligations of school stakeholders, especially to provide education of their child with disability in mainstream schools as a matter of rights and not charity.

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AGRO- TOURISIM: A NEW DIMENSION TO INDIAN AGRICULTURER

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ABSTRACT

High poverty level is one of the major developmental challenges facing India with over 21.9% percent of the population living below poverty line in 2011-12. Agriculture is the main occupation of Indian Economy. Around 65 percent of the population is directly or indirectly dependent on agriculture. Out of total GDP around 13 percent GDP comes from agriculture sector. The overall development of rural areas requires, among other things, the involvement of the non-agrarian sector. India exhibits diverse form of art and culture entrenched through a rich heritage, which makes India a hot global tourist destination. India has a thriving tourism industry, which contributes over 6% to national GDP and 8% of the total employment. The high incidences of poverty level calls for farmers to find alternative sources of livelihoods to generate additional income. .

The multi functionality of agriculture is evidenced, inter alia, by its conjunction with tourism and environmental protection. In this scenario agro-tourism is gaining increasing importance and can contribute to the development of rural communities.

From various literature review on agro-tourism of India ,as a strategy for poverty alleviation and livelihood improvement, by focusing on specific conditions and constraints that influence the progress of agritourism business initiatives as viable entrepreneurial solutions for self-sustainable rural communities

Keywords: Agro-tourism, Poverty Alleviation, Environmental protection

I. INTRODUCTION

The term **agro-tourism** is the form of tourism which capitalizes on rural culture as a tourist attraction. It has gained a new dimension as a potential income and job generating activity. The symbiosis between tourism and agriculture that can be found in agro-tourism is a key element of an environmentally and socially responsible tourism. It is estimated that one job in the core tourism industry creates about one and a half additional or indirect jobs in the tourism-related economy.

The diversion of core tourism to agri-tourism is expected to reinforce the employment potential of the sector with increased local hiring and sourcing and significant opportunities in tourism oriented toward local culture and the natural environment. The term agro-tourism emerged in the late twentieth century. It includes agricultural farms that are related to tourism. This concept was initiated and developed in Europe and North America, then developed in many countries. In India it was initiated in 2005 at Malegaon village, near Baramati, Maharashtra by Agri Tourism Development Company (ATDC). Agro tourism philosophy aims to increase farmers' incomes and the quality of life of rural society..The World Tourism Organization (WTO) defines rural tourism (Agro-tourism) as tourism that gives to visitors a personalized contact, a taste of physical and human environment of the countryside and as far as possible, allows them to participate in the activities, traditions and lifestyles of local people (Aref and Gill, 2009)..

Agriculture is considered to be the backbone of the Indian economy. This supplementary income for farmer from this sector may provide a partial contribution in India's Prime Minister's vision of doubling income of farmer by 2022.

Hence, adding on to the agricultural income with some touristic activities is bringing in new hopes and better lives by utilizing the local resources to its fullest potential. Governments and all stakeholders including the local communities and the relevant institutions in a country need to work together so that the utilization, development and management of tourist areas could be given serious attention (Nandi, 2008; Narayan, 2000).

1.1 RESEARCH OBJECTIVES

The present research paper includes the following objectives:

- To explore the concept of Agro-tourism.
- To highlight the Role of Agro-tourism in transformation of agri-sector
- To know about the various Agro-tourism destinations in India.
- To find out the major challenges of agro-tourism s

1.2 RESEARCH METHODOLOGY

The present research work is exploratory in nature and based on the secondary source of data collection.

The researchers has collected the secondary data from the reputed books, journals, newspaper and official websites of the tourism department and department and tourism boards of different states as well as of tourism ministry of India. To pace the study, the researchers have also used some observational facts by visiting frequently to some of micro agro-tourism sites.

II LITERATURE REVIEW

Literature has it that Agritourism started in the United States in the early 1800s (Karabati et al., 2009). A number of countries of the world have transformed their economies through agro-tourism activities. The Inter-American Institute for Cooperation on Agriculture (IICA) has been promoting agritourism in the Caribbean since 2005 to strengthen links between tourism and agriculture (IICA, 2011). In Thailand, it has been used as one of the main medium to attract tourists from all over the world. Since the advent of agritourism in Thailand in 2002, agro tourism has created a great impact by having a record of more than half a million tourists visiting farm areas in a national scheme (Taemsaran, 2005). In Europe, agritourism has become a way of life for Europeans as a large percentage of Europeans take farm holidays (Frater, 1983). Agro-tourism industry is gaining ground in Malaysia as the country has a wealth of products for visiting tourists (Hamzah, 2011). Main activities involved in the area entail farm visits and home stays. In Africa, agro-tourism has a short history and, in most countries, it is at the developing stages (Maumbe, 2012; Bernardo et al., 2007). Agro-tourism is improving South Africa 's economic performance as well as contributing to rural development and employment creation (Kepe et al., 2001). It is utilized as a means to alleviate poverty and create employment opportunities in rural areas. In Ghana, Fanteakwa District in 2007 attracted over 4,000 paying visitors who were interested in cocoa farms Cocoa (2006).

When it comes to Indian contexts, majority of literature seems to concentrate around the agro-tourism operations in western belt of Maharashtra and the activities of Agro-Tourism Development Corporation (ATDC).” Agro-ourism has not spread much across the states of India and is still concentrated in western belt of Maharashtra. Agro-tourism is still a small scale venture and has low impact on macro economy of India It is slowly growing in some states like Karnataka , Punjab and Rajasthan. Hamilpurka (2012) indicated that Agro-tourism in Karnataka,

India, has improved farmers 'income and also contributed to educating the tourists and local communities on sustainable agriculture. As Shembekar points that, “There needs to be a proper business model to promote and propagate the concept of agri-tourism as an easily adoptable and implementable venture for farmers in India. All challenges that researchers face can have solutions and agri-tourism can be ventured in gradually step by step. Shembekar pointed that “Agri-tourism as a concept does not have a concrete literature which encompasses the entire scope of it from a holistic point of view

Rather there are more specific studies which are either region specific or enlighten a particular part of it such as agri-tourism destinations or agri-tourism in a particular place such as a district in Rajasthan or Punjab. Recently a lot of research work has been done in this field and most of the suggestions made by the researchers indicate a great potentiality of the development of Agro-Tourism in India

Moreover, it is an Innovative practice which can be utilized by the famer and farm owners to harvest this opportunity, through a diversified approach in the core areas of agriculture sector in India. Vijay M. Kumbhar (2010) in his study of Maharashtra has pointed out that tourism is now well recognized as an engine of growth in the various economies in the world.

Therefore, tourism has great capacity to generate large-scale employment and additional income sources to the skilled and unskilled. . Consequently, the promotion of Agro-tourism would bring many direct and indirect benefits to the local people by generating new job opportunities in rural areas in the farming sector. N. G. McGehee, et. al. (2007) in their study has explained Agro tourism as rural enterprises which incorporate both a working farm environment and a commercial tourism component.

Thus, it can be observed that there is a wide scope for the concept to grow in all agricultural states of India as the market is not at all saturated and is in fact virgin in many of the states like Uttar Pradesh, Bihar and Andhra Pradesh which are prominently agri-driven states of India, but unexplored.

III. WHY AGRO-TOURISM

As majority of our country lives in the rural areas. and in these rural areas the activities such as agriculture, forestry, and fishery are the means of livelihood. Employment opportunities to the farmers including farm family

members and youth is increased many folds and the additional income source for the farmers act as shield to protect against income fluctuation.

Thus in the process It supports and further promotes rural and agricultural development process. Additionally, It brings cultural transformation between urban and rural people including social moral values. Farmers tend to improve their standard of living due to the contacts with urban people. (Duesenbery effect)

It also brings benefits to the urban people, they can understand about the rural life and know about the agricultural activities. Agro-Tourism has the potential to change the economic face of traditional agriculture.

IV POTENTIAL & IMPORTANCE OF AGROTOURISM IN AGRICULTURAL SECTOR IN CONTEXT OF INDIA

India has a long stretch of coastline and have several hill stations and water reservoirs with semi-evergreen and deciduous forests, also abounds in numerous tourist attractions ranging from ancient cave temples, unspoiled beaches, ancient forts and monuments, forests and wildlife, unique hill stations, pilgrimage, centers, and a rich tradition of festivals, art and culture There are many tourist centers in India which are the supporting natural environment for the agro- tourism centers .India exhibits diverse form of art and culture entrenched through a rich heritage, which makes India a hot global tourist destination. India has diverse agro-climatic conditions too. All these factors provides scope for promotion of all season, multi-location tourism spost. India has a thriving tourism industry, by introducing novel products like agro-tourism would only strengthen the competitiveness of Indian tourism industry in global market. Indian tourism industry is growing @10.1% -The World Tourism organization has estimated that the tourism industry is growing at the rate of 4% a year, hence 2½ times more that the growth rate at global level. Agritourism provides a number of economic, educational, and social benefits to producers, consumers/tourists, and communities. Furthermore, agritourism provides incentives for producers to remain in agriculture. The agriculture sector is also facing a growing number of challenges, such as market competition, rising land and input costs, encroachment from sprawl, and a complex regulatory environment. In order to stay in business, some operations have had to look for ways to add value to their products and create dependable revenue sources .Other “spillover” economic development opportunities occur when agricultural tourists shop, eat and lodge in the surrounding community. More importantly, agritourism operations are unique, local businesses, which cannot later be “outsourced” to other communities. Agritourism can provide in sustainable ways to care for rural working lands and scenic areas in potential areas if harnessed properly.. Hence, adding on to the agricultural income with some touristic activities is bringing in new hopes.

V. SOCIO-ECONOMIC PROSPECTS OF AGRO-TOURISIM

Agro-eco tourism is the economic activity that occurs when people link travel with agricultural products, services or experiences. The prospects of agro eco tourism depend on the agriculture and allied sectors.

It will be a potential business to improve the socioeconomic status of the rural people of all levels whether they are engaged in farming, cattle rearing, traditional food processing, preservation of local culture and tradition, specialist in art, craft and other indigenous skill or expert of local folk, dances and music etc in general and agriculture in particular.

VI CHALLENGES OF AGROTOURISM IN INDIA

However, Agro-tourism is a boon for the development of our rural society but there are some challenges as: India has a greater potential of the development of the agro-tourism centers due to the good natural and climatic conditions Although it is very likely that agritourism development can be successfully integrated into local communities without great disruption, there are some potential challenges.

General population is not much aware about the agro-tourism, till date. Farmers are having weak communication skill and lack of commercial approach which is prime important for running any enterprise. Lack of capital to develop basic infrastructure for the agro-tourism is another constraint for the poor farmers to develop.

Lakhs of farmers have small size holding, low quality land and little or no access to credit or irrigation. They have to negotiate with consistent drought. Though some agro- tourism enterprises can be launched with very little financial support but there is lack of financial awareness, as most of the sectors in agro tourism industry is unorganized. 80% farmers have small holdings and their job is hand to mouth cannot give more to visitors as per their expectations. The whole tourism concept is very indigenous in the rural areas.

Though initiative attempt has been taken by the local youths, yet the professionalism is lacking. They are lacking proper training to project in the manner from tourism perspective. Residents often have concerns about

the potential noise, traffic, and trespassers because these impacts have the potential to change the overall character of the community.

Different types of farms may also have different priorities. Communities must consider the local diversity in agriculture to ensure that all interests are taken into consideration so to achieve the optimum results.

VII CONCLUSIONS

India has unique climatic, cultural and historical features that create ideal conditions for the development of agro-tourism. Tremendous opportunities exist in the country to cultivate agritourism development through proactive policy and strategic investment of resources that alleviate constraints faced by farmers interested in providing on-farm recreational and educational activities to the public. However, in the administrative sense, agro-tourism is a concept that is still practically non-existent. India basically being a rural economy, rural tourism and agri tourism significantly can contribute to the GDP of the nation and could act as a crucial tool for employment generation, poverty alleviation and sustainable human development.

Though at present it is in nascent stage, with proper government incubation it can be promoted efficiently. To promote domestic tourism, thrust areas should be identified by the government of India for the development of infrastructure, product development and diversification. To make it a successful venture lot of research works needs to be encouraged.

The paper reveals that the potential socio-economic impacts for agritourism in India are great and largely untapped. Although it is a long way to go as the development and acknowledgement of the Agro-tourisms it's potential is seen and cultivated by only Maharashtra government and its supporting agencies. Rest of the nation is yet to understand its worth and move ahead on it. To convert it as best platform for the socio-economic development of the rural areas the government has to provide a full fledged policy support system for the rooting and strengthen of the Agro-tourism in India.

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ASSISTED REPRODUCTION: A CRITICAL REVIEW OF PROPOSED ART (REGULATION) BILL 2010

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ABSTRACT

Reproduction has been an issue of great concern among feminist discourses in modern times. Since the later decades of twentieth century the issue of reproductive health and rights overshadowed the movement of human rights all over the world. Adopting an all-inclusive approach, the agenda of reproductive health and rights inevitably address feminist critiques on abortion, infertility, childlessness, adoption, harmful contraceptives, genetic engineering, globalization of reproduction as well as the very latest issue of growing 'reproductive tourism' under assisted reproductive technologies in India and related social issues and stigma. The latest assisted reproductive technologies provide a wide market full of conceptive choices for those who are incapable to reproduce and wish to adopt assistance in reproduction through IVF/ART clinics, egg donation, commercial surrogacy, and other available methods. The most instrumental justification given for these conceptive technological choices is related to the societal stigma attached to infertility and childlessness, especially in Indian circumstances. The government, policy makers, medical and drug agencies, and other considerable pro-ART forums perceive that ART has brought 'choices' and 'options' to do away with childlessness. However, on the other side of the coin, human rights groups and feminist forums challenge the same idea, underlining the stigmatization caused by commercial surrogacy.

This paper, in lieu of the preceding discourse, reads the draft Assisted Reproductive Technology (Regulation) Bill 2010 of government of India with certain considerations as to whether this bill secures or takes care of the health and rights of the surrogates, and the child. So also, it investigates that if Reproductive health is a state of complete physical, mental and social well-being, as per the declaration of International Conference on Population and Development (ICPD), 1994, what position has been taken in this proposed act with regard to reproductive health rights particularly of the surrogates. This paper also explores whether surrogacy is an option to infertility and childlessness or it re-stigmatize the mental, social, and ethical position of the surrogate and the child born!

Key Words: Draft Assisted Reproductive Technology Bill 2010, Human Rights, Infertility, Reproductive Health, Surrogacy.

METHODOLOGY

This paper aims to explore as well as descriptively analyze the status of the Surrogate mother and child as laid in the Draft ART (Regulation) Bill 2010. It investigates the rights as well as duties of the surrogate and looks into the issue of the condition of the child as determined under the bill. The paper aims to underline the legal gaps and ethical complexities related to those provisions in the draft bill which address to the position of the surrogate and the child. For the purpose, a critical evaluation of the draft ART regulation bill 2010 has been made. However, for a comprehensive approach the draft ART regulation bill 2008 has also been consulted. Besides, relevant contemporary press releases and advocacy papers are traced to underline popular discourses on the issue.

INTRODUCTION

'A woman is a womb', as ironically expressed by Simone de Beauvoir during the mid of twentieth century, explicitly indicates the universal historical portrayal of woman's bodies as reproductive machines. The approval to womanhood, particularly in India, is deeply connected to the concept of motherhood and reproductive roles performed by the women. The pressure for reproduction and productive fertility status is something which has been acknowledged as very crucial in Indian social context. The Eighteenth Law Commission of India underlines that infertility is a 'huge impediment', which 'cannot be overlooked' in a 'patriarchal society like India' (Law Commission Report, 2009: 9). The report also articulates that 'a woman is respected as a wife only if she is mother of a child, so that her husband's masculinity and sexual potency is proved and the lineage continues'. The Indian Council of Medical Research (ICMR) has estimated that 15% of couples around the world are infertile, making infertility as one of the most prevalent medical problems with enormous social implications.¹

The development and proliferation of assisted reproductive technology (hereafter ART) industry in India has been justified on the preceding pretext. ICMR says that with the enormous advances in medicine and medical technologies, 85% of the cases of infertility can be taken care of through medicines, surgery and/or the new medical technologies such as in-vitro fertilization (IVF) or intra-cytoplasmic sperm injection (ICSI).² However, it has been acknowledged that assisted reproductive procedures are more than mere technology. They have deep roots in the existing social arrangements and power relations and their development, practice and propagation prevail in this social context (Sama, 2010: 2). The stigma associated with infertility, social pressure of achieving motherhood, and of having biological progeny are the motivational factors behind the development of the existing fertility industry.

The preceding two decades have quite witnessed the proliferation of assisted reproductive technologies in India, at a significantly faster rate than in the other countries of the globe. This 'new phase' in reproductive technology has been viewed by the feminists and women health rights advocates as the phase of 'contraceptive to conceptive' technologies. While, by contraceptive technologies it was claimed that human beings have a fundamental right to regulate their reproduction as per their choice and requirement; conceptive technology is addressing the whole question of reproductive choice and rights in a different way. The former includes the technology which contracepts pregnancy, the latter is the technology for assistance in conception.

ART industry is a thriving industry in India and has become a preferred destination for 'persons', foreign as well as domestic, opting for ART treatment as well as 'the destination' on the lookout for surrogates (Thapa, 2012). There are a number of conditions facilitating this industry in India, such as the easy availability of surrogates and donors on financial offers, cheaper medical services as compared to developed world, and flexible legal framework. It is to understand that while commercial surrogacy is illegal and banned in a number of western countries, the same is given a legal position in few countries including India. During the past decade this industry has bloomed quite rapidly in India and has achieved a significant position among those few industries which aim to serve the international customers besides domestic. However, with the booming of the business of 'reproductive tourism' the issue of the rights of those people involved with ART industry either as a customer (commissioning parent) or partner (surrogate) or in absentia without consent (child) has proved challenging.

Surprisingly, in spite of the formulation of various provisions, guidelines, and schemes at international and national level, reproductive rights in India is continued to be a complicated issue, particularly within the purview of women's rights. The existing Indian legal framework suggests that there is no uniform policy in this area. A huge gap is perceived in recognizing the rights of women even to safe pregnancy, sterilization, and abortion.³ The legal framework in India is very ambiguous and there is an urgent want of a well formulated act explicitly dealing with the reproductive rights of the people in general and women in particular. The attitude of the Indian judiciary, towards the issue of reproductive health rights has been observed as being gender insensitive (Hiremath and Kamayani, 2007: 127-38). In this connection, the Assisted Reproductive Technologies (Regulation) Bill, 2010 is a new legislation that aims to regulate ART services and surrogacy industry in India.

ASSISTED REPRODUCTIVE TECHNOLOGY BILL 2010: CRITICAL APPRAISAL

The Assisted Reproductive Technology (Regulation) Bill, 2010 is still in draft form and in the way to be tabled in parliament. This process was started in 2006, however a developed version of the Bill came up in 2008 for comments and suggestions after a long wait. The draft bill of 2008 was highly criticized on various grounds not only by those who reject ARTs but even by the pro ART groups. Consequently, based on the reviews, suggestions and recommendations, in 2010 an altered version of the bill has been drafted which includes specific provisions for surrogacy. This act has been proposed as 'An act to provide for a national framework for the accreditations, regulation and supervision of assisted reproductive technology clinics, for prevention of misuse of assisted reproductive technology, for safe and ethical practice of assisted reproductive technology services and for matters connected therewith or incidental thereto.'⁴ In the 2010 version of the draft bill significant and relevant improvements has been made, yet the same is not free from criticism based on existing loopholes.

Currently, ART services and industry is monitored by the guidelines provided by Indian Council of Medical Research. These guidelines are not stringent and leave various critical issues unaddressed. As a result, the unethical practice of ARTs, mushrooming up of ART and IVF clinics, and the commercialization and commoditization of reproductive functions and organs are increasing unregulated. The upcoming technologies in this field open up grave chances for unethical practices, affecting the recipient and the participants in many ways and causing human rights violation. The number of clinics is multiplying day by day as under the existing

laws there is hardly any strict regulation on the condition, eligibility, and procedure of the opening and running up of an infertility or ART clinic.

The women and health rights activists have considered the draft bill 2010 as 'a welcome step' taken up by the Ministry of Health and Family Welfare and Indian Council of Medical Research in light of the unregulated practice of these technologies and growing reproductive tourism. However, they have also consistently advocated for 'certain basic ingredients in ART legislation like safeguarding the health and rights of the women undergoing these technologies, along with highlighting the implications on children born through these techniques.'⁵ Sama, a Delhi-based resource group working on women's health rights issues and actively engaging with government bodies and policy makers with regard to the regulatory aspect of these technologies in India, says that reproductive tourism is driven by two factors - the inadequacy of laws on ART and the wide variation in costs across countries. For instance, the approximate cost of surrogacy in India is Rs 10 lakh compared to Rs 25-35 lakh in the US. Right now, the surrogates are in a vulnerable position while clinics and agents dictate terms (Ghosh, 2012).

Though the need for legislation to monitor these practices and services was advocated since beginning, yet the incident which created the urgency of the same was the case of the German surrogate twins for whose citizenship issue the laws of the two countries of India and Germany got confronted. The Supreme Court then pointed out the essentiality to develop some legal regulations for the sector. Again in 2008 another case of citizenship was highlighted in which a Japanese couple got divorced in the middle of the term (*ibid*).

MAJOR ISSUES OF CONCERN IN THE DRAFT BILL

ART Regulation Draft Bill 2010 is pending for approval of Indian Parliament and also for Presidential Nod. The bill occupies a significant position for discussion in circles concerned about Surrogacy laws throughout the globe and particularly in India. The guidelines regulating ART treatments including surrogacy were first published by Indian Council of Medical Research in 2005 and thereafter the relevance of ART treatments and surrogacy was realized at a higher level of concern. The draft bill 2010 in this regard is seen as one of the stepping stones and an initiative by government to regulate surrogacy treatment and other ART techniques in India. The position of surrogates has been quite crucial in the promotion and successful implementation of ARTs and a significant onus has already been imposed on them while making them the part of the industry. Therefore it becomes not only vital but challenging to determine the rights as well as roles of the surrogates.

THE SURROGATE: 'STATUS', 'RIGHTS', 'COMPLEXITIES'

The bill defines that 'surrogate mother', means a woman who is a citizen of India and is resident in India, who agrees to have an embryo generated from the sperm of a man who is not her husband and the oocyte of another woman, implanted in her to carry the pregnancy to viability and deliver the child to the couple / individual that had asked for surrogacy.'⁶ The bill also states that 'surrogacy', means an arrangement in which a woman agrees to a pregnancy, achieved through assisted reproductive technology, in which neither of the gametes belong to her or her husband, with the intention to carry it and hand over the child to the person or persons for whom she is acting as a surrogate.'⁷

Surrogacy in one form or the other, especially in Indian context is as old a phenomenon and practice as the culture itself. There are traces of surrogacy found in ancient texts of Mahabharata.⁸ In modern times, with the development of techno-legal complexities surrogacy has been defined in so many ways and types; traditional, gestational, altruistic etc.⁹ However, by the definition of surrogacy as laid in the draft bill 2010,¹⁰ all the other types of surrogacy arrangements, that does not follow the mandated track stated in the bill, in which the egg (oocyte) and the sperm should not belong to her (surrogate) and/or her husband respectively, are in a way has been considered as illegal and out of the purview of this bill. Thus, if a woman acting as a surrogate bears a child using her egg (oocyte) and the commissioning man's¹¹ sperm or a donor egg¹² and her husband's sperm, it is illegal. The bill provides the condition that the child should not belong to the surrogate or her husband genetically. To confirm the same it has been conditioned in the draft bill that a surrogate mother shall not act as an oocyte donor for the couple or individual, as the case may be, seeking surrogacy.¹³ The famous '*Baby M*' case,¹⁴ where long custody battle between the surrogate and the commissioning couple was experienced, has probably been inspirational for mandating this provision in the bill. Besides, to make it stricter this is also laid in the bill that a surrogate mother shall relinquish all parental rights over the child.¹⁵

It is quite evident that surrogacy, considered though as a method of assisted reproductive technology,¹⁶ always has severe psychological and emotional bearings particularly on the surrogate¹⁷ and also on the biological parents¹⁸ of the child born through surrogacy. The development of ART has pushed the concept of traditional surrogacy to a newer level where the method of impregnation of the genetic mother has changed from 'through

copulation' to 'artificial insemination' to the use of advanced ART techniques like impregnation through the implantation of fertilized embryo in the womb (Thapa, 2012). However, the question still remains that under the new mandates of the bill even if the child will not relate genetically to the surrogate, will gestational motherhood not have any bearing on the relationship between the child and the surrogate and would it not create the emotional anguish for the surrogate to part with the child! The provisions aiming to impose a disconnection between the surrogate and the child are an issue of severe human rights violation towards the both. The idea of 'womb for rent' is been reinforced with this approach. This poses serious questions about the concept of motherhood, mother-child relationship, the inborn's right to emotional security, and the reproductive rights of the surrogate.

Moreover, the idea of disconnection and/or detachment between the surrogate and the child as proposed through the bill by regulating only commercial gestational surrogacy¹⁹ seems vague under section 34/18 of the act, which provides that 'a relative, a known person, as well as a person unknown to the couple may act as a surrogate mother for the couple/ individual.' Though in a way this provision facilitates the traditional form of altruistic surrogacy it contradicts to the section 34/7 which provides that 'Individuals or couples may obtain the service of a surrogate through an ART bank, which may advertise to seek surrogacy provided that no such advertisement shall contain any details relating to the caste, ethnic identity or descent of any of the parties involved in such surrogacy.' Besides it also creates ambiguity about section 34/12 of the bill that '...all information about the surrogate shall be kept confidential and information about the surrogacy shall not be disclosed to anyone other than the central database of the Department of Health Research, except by an order of a court of competent jurisdiction.²⁰ Thus, it seems that the stand of bill on the status and obligations of the surrogate in this regard is not explicit, rather ambiguous and contradictory.

The bill positions 'surrogacy agreement' as a 'legal contract'²¹ which involves financial liabilities on the person(s) seeking surrogacy such as, ART and other medical expenses, insurance²² and monetary compensation²³ to the surrogate. When it comes to those expenses related to pregnancy achieved in furtherance of ART, during the period of pregnancy and after delivery, and till the child is 'ready to be delivered' to the biological parent(s), it is provided that the couple or individual seeking surrogacy shall bear the same. However there exists an ambiguity about the claim of the surrogate for issuance as laid in section 34/2 and 34/24. Section 34/2 leaves the issue of insurance under the category of 'if available', however, 34/24 makes it mandatory for the commissioning parent(s) that the surrogate mother and the child she deliver are 'appropriately insured' until the time the child is handed over to the commissioning parent(s) or any other person as per the agreement and till the surrogate mother is free from all 'health complications' arising out of surrogacy. It is also an issue of critique that after the delivery of the child her (surrogate's) insurance is suggested only in case of 'complications' and the idea and requirement of post natal care has been neglected in the bill.

The bill also mentions about the provision of 'monetary compensation' to the surrogate, which is excluding the insurance and other medical expenses. However, monetary compensation has not been formulated as mandatory in the bill, rather it is stated that the surrogate 'may also' receive monetary compensation from the couple or individual for agreeing to surrogacy, subject to the surrogacy agreement.²⁴ The bill does not deal, up to any extent, with the amount, nature, and quality of monetary compensation, insurance, and medical services before and during pregnancy and after delivery. The decisions in these regards are left between the commissioning parent(s) and the surrogate mother. Thus, the amount of compensation to be received by her depends on the bargaining power of the surrogate as well as the support which she can garner from the ART Bank to which she belongs (*ibid*). But since the Bank only acts as a 'surrogacy facilitator' or a 'surrogacy database' for the commissioning parents, the extent to which they might rally behind the surrogate both at the time of signing of the agreement or post-birth is questionable (*ibid*).

The ART industry looks the surrogates not as recipients whose safety and welfare is an issue of accountability for it, rather as partners, although with a 'no say' position in the total business. The Draft ART (Regulation) Bill and Rules 2010 also takes the similar stand and clearly declares that one of the concerns of all ART treatments is the safety of the patients and of their gametes and embryos (and not of the surrogates!) which constitute the very beginning of a new individual's life.²⁵ As defined in the bill a 'patient(s)', means an individual / couple who comes to an infertility clinic and is under treatment for infertility. It is acknowledged in the preamble of the draft bill that the patients are given priority as compared to those all whose rights are also an issue of concern.²⁶ It says that the bill 'details procedures for accreditation and supervision of infertility clinics ... ensuring that the legitimate rights of all concerned are protected, with maximum benefit to the infertile couples/individuals within a recognized framework of ethics and good medical practice'.²⁷

The draft bill is almost silent on the issue of providing counseling and proper information about the possible consequences and effects of surrogacy and related procedures to the surrogates. However, the draft bill as well as rule both include specific provisions of the same nature for the 'patients'. It mandates that the clinic must make sure that patients are well informed about the treatment being offered to them, the reasons of suggesting a particular form of treatment, and alternative therapies available, if any. The clinics are directed to provide professional counseling to patients or individuals about all the implications and chances of success of ART procedures in the clinic and in India and internationally, and shall also inform patients and individuals of the advantages, disadvantages and cost of the procedures, their medical side effects, and risks.²⁸

THE CHILD: VULNERABLE IDENTITY

The 'child', as defined by the bill means any individual born through the use of assisted reproductive technology.²⁹ As provided by the bill a child can be created through various processes and mechanisms under ARTs involving at times a number of individuals and /or their reproductive functions. However, the child thus created 'shall be presumed to be the legitimate child... having been born in wedlock... and shall have identical legal rights as a legitimate child ...'.³⁰ Conformity to the legitimacy though secures the legal status of the child to be born, yet the issue of lineage remains complicated and unresolved. To elaborate upon the same if a child is born through commercial surrogacy using a donor egg and sperm, however with the names of commissioning parent(s), as the biological parent(s) on the birth certificate, the question of identity will be an issue of concern. It is the question of one's right to natural birth, family, motherhood, and parental lineage, which are seen as on stake! Moreover, it challenges the law of natural emotions and bonding between the mother and child.

The right of the child to know about the identity of the people involved in his/her creation is very conditional in the bill. The birth certificate of a child born through the use of ART shall contain the name or names of the parent(s), as the case may be, who sought such use.³¹ Under the provisions of the bill all information about the surrogate shall be kept confidential and the child may, only upon reaching the age of 18, ask for any information, however excluding personal identification, relating to the donor or surrogate mother.³² Personal identification of the genetic parent or parents or surrogate mother may be released only in cases of life threatening medical conditions which require physical testing or samples of the genetic parent or parents or surrogate mother, provided that such personal identification will not be released without the prior informed consent of the genetic parent or parents or surrogate mother.³³

Section 34/19 of the bill indicates the vulnerability associated with the child's possession. In case if a foreign party fails to take delivery of the child, the child will be destined to end up with an adoption agency. It is an issue of grave concern that 'created' by multiple people and 'handed over' to the Adoption Centre how the bill is going to address the basic human rights of the inborn! The child's right to be nurtured by the birthing mother, breastfeeding, emotional bonding and belongingness, is under question. It is not stated in the bill that in case of any health issues for how long the child can be or is supposed to be associated with the surrogate. Qadeer states that surrogacy, as it is practiced, is heavily biased against the baby. It requires the surrogate mother not to get too involved with the growing baby in her body. The baby has no say in the matter and has to live the consequences of the social process. The baby's right to bonding and breast feeding for a minimum period of three to six months is denied (Qadeer, 2009: 30).

CONCLUSION

The bill aims to address the issue of infertility through latest medical technologies. To facilitate ARTs in India the bill legalizes commercial surrogacy, as surrogacy proves to be the backbone of the ART industry. The critique is not only related to the acknowledging of commercial surrogacy by the bill at a legal platform in a hurriedly manner and refusing and/or sidelining altruistic surrogacy in India, while many other countries are yet to take a decision in this regard, but also on those lines which not only neglect the most vital role of the surrogate in this venture, rather bluntly ignores their human rights issues. The bill gives a commercial status to their role, yet forgets to outline the size of financial benefit they are supposed to claim or expect. Moreover, the ethical challenges with regard to various provisions of the bill are quite high and unresolved. The bill hardly has any position and say with regard to the International definition of reproductive health, which is been acknowledged as 'a state of complete physical, mental and social well-being'. The bill stamps ARTs including surrogacy as 'a supreme savior' for the social stigma attached to infertility, however, after analyzing the status of the surrogate and the child as been determined under the draft bill it seems doubtful whether the bill will facilitate and promote the 'complete physical, mental and social well-being' of both the people.

NOTES

1. Preamble, The Draft Assisted Reproductive Technology (Regulation) Bill, 2010
2. Ibid.
3. For legal aspects of reproductive rights see, Hiremath Vijay, Kamayani Bali Mahabal, Reproductive Rights, in Health Care Case Law in India; A Reader, Desai, Mihir Kamayani (Eds.), Centre for Enquiry into Health and Allied Themes (CEHAT), India Centre for Human Rights & Law (ICHRL), pp. 127-138, 2007; Law Commission Report, "Need for Legalization to Regulate Assisted Reproductive Technology Clinics as well as Rights and Obligations of Parties to a Surrogacy" Report No. 228, August 2009, p. 6, Law Commission of India, Government of India.
4. Statement of objects and reasons, The Draft ART (Regulation) Bill, 2010.
5. Sama, Advocay Initiative, Campaign to regulate ARTs, www.samawomenshealth.org/adv_art.html
6. Section 2/bb, The Draft ART (Regulation) Bill, 2010
7. Section 2/aa, The Draft ART (Regulation) Bill, 2010
8. Mahabharata depicts the mythological story of the birth of *Balrama*, the brother of Krishna, where *Rohini* bore the child for *Vasudev* and *Devaki*, to save *Balrama* from *Kansa*.
9. In traditional surrogacy the surrogate carries the pregnancy using her own egg. The surrogate's egg is fertilized through artificial insemination with the sperm of the father or a sperm donor. Traditional surrogates are genetically related to the child because their own eggs are used in the process. A gestational surrogate become pregnant through the process of in vitro fertilization, where an embryo or embryos created from the eggs and sperm of the intended parents (or donor egg and donor sperm selected by the intended parents) are implanted in the uterus for the gestational period. Altruistic surrogacy means a practice whereby a woman agrees, for no financial gain, to become pregnant and bear a child for another person or persons to whom she intends to transfer the child after birth.
10. Section 2/aa, The Draft ART (Regulation) Bill, 2010
11. Section 2/g of the Bill, "Commissioning parents/couples/individuals", means parents, couples or individuals, respectively, who approach an ART clinics or ART bank for providing a service that the ART Clinic or the ART bank is authorized to provide.
12. Section 2/K,I of the bill "donor", means the donor of a gamete or gametes but does not include the husband who provides the sperm or the wife who provides the oocyte to be used in the process of assisted reproduction for their own use; "egg", means the female gamete (that is, oocyte)
13. Section 34 /13, The Draft ART (Regulation) Bill, 2010
14. 'Baby M' was the pseudonym given to the child Melissa Stern born in 1986 through traditional surrogacy method for the custody case filed in the Supreme Court, New Jersey between Mary Beth Whitehead, the surrogate, and William Stern, the Father of baby M (Whitehead was inseminated with Stern's Sperm). In this case the traditional surrogate did not relinquish her parental right in favour of Stern's wife, Elizabeth and claimed for custody. New Jersey court awarded Whitehead visitation rights. However, 'baby M' after reaching the age of 18 terminated Whitehead's maternal rights through legal procedure and formalized Elizabeth's parenthood through adoption.
15. Section 34/4, The Draft ART (Regulation) Bill, 2010
16. Section 2/a of the bill reflects that a surrogate mother is to be supplied by the 'ART bank' and Section 2/cc intends that surrogacy agreement is a part and parcel of ART. The ART Clinics have to maintain a central database which shall be a confidential record of ... surrogate mothers and which they are liable to disclose only to the Department of Health Research but with the permission of those to whom the information relates to or in cases of medical emergencies.
17. The experiences, feelings and stories of surrogate mothers are uncovered and shared through multiple medias. Some of the memoirs, stories, biographies and autobiographies are helpful in developing the insight for the plight. Eg. Elizabeth Kane's Birth Mother: The Story of Americas First Legal Surrogate Mother, Mary Beth Whitehead and Loretta Schwartz Nobel's A Mother's Story: The Truth about Baby M Case, Patricia Adair's A Surrogate Mother's Story.
18. Section 2/e, of the bill declares that 'biological parent(s)', means genetic parent(s).
19. Sections 2 /aa and bb, The Draft ART (Regulation) Bill, 2010

20. Section 32/3 The parents of a minor child have the right to access information about the donor, other than the name, identity or address of the donor, or the surrogate mother, when and to the extent necessary for the welfare of the child.
21. Section 2/cc, 34/1, The Draft ART (Regulation) Bill, 2010
22. Section 34/2 of the bill states that ‘All expenses, including those related to insurance if available, of the surrogate related to a pregnancy achieved in furtherance of assisted reproductive technology shall, during the period of pregnancy and after delivery as per medical advice, and till the child is ready to be delivered as per medical advice, to the biological parent or parents, shall be borne by the couple or individual seeking surrogacy.’ Section 34/24 says that ‘The commissioning parent(s) shall ensure that the surrogate mother and the child she deliver are appropriately insured until the time the child is handed over to the commissioning parent(s) or any other person as per the agreement and till the surrogate mother is free of all health complications arising out of surrogacy.’
23. Section 34/3 ...subject to the surrogacy agreement, the surrogate mother may also receive monetary compensation from the couple or individual, as the case may be, for agreeing to act as such surrogate.
24. Section 34/3, The Draft ART (Regulation) Bill, 2010
25. Part 4/4 ART Procedures, The Draft ART (Regulation) Rules 2010.
26. Chapter one 2 (x), The Draft ART (Regulation) Bill 2010.
27. Preamble, The Draft ART (Regulation) Bill 2010.
28. Chapter IV, 20/6, The Draft ART (Regulation) Bill 2010; Part 7/7, The Draft ART (Regulation) Rules 2010.
29. Section 2/f, The Draft ART (Regulation) Bill, 2010
30. Section 35/1, The Draft ART (Regulation) Bill, 2010
31. Section 35/7, The Draft ART (Regulation) Bill, 2010
32. Section 36/1, The Draft ART (Regulation) Bill, 2010
33. Section 36/3, The Draft ART (Regulation) Bill, 2010

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LEADING A WAY TO IMPROVE THE QUALITY OF WEB APPLICATION DEVELOPMENT BY TAILORING AGILE DEVELOPMENT

Yogesha T¹ and Dr. Swamy L N²^{1,2}Assistant Professor, Department of Computer Science and Engineering Visvesvaraya Technological University, Belagavi**ABSTRACT:**

The Web Application development is an important aspect of the today's environment. In modern information enabled organization, where speed is of essence, an iterative and Prototype development approach that follows the functionality to be delivered in parts has become a necessity and an effective way to manage the risk than Waterfall development approach. If we are developing a web application based on predictions there may be a maximum chances of failures in project to avoid the risk after decades from introducing and using agile methodologies, project managers realized that no methodology is sufficient by itself. Thus, merging their principles is the solution, yet, no formal solution has been proposed. It requires project managers to understand well the project requirements in terms of SDLC (software development life cycle) phases, and accordingly the new agile methodology is tailored.

This case study examines the implementation of the tailored agile-system approach. The case study data collection involves interviews and observations across three different levels: project managers, Web application programmers, and customers. The case study analysis synthesises the experiences of these managers, programmers and customers to produce an overall assessment of the usefulness of Web application delivery via tailored agile-system methods.

Keywords: Agile Software Development, Web Application, Object Oriented Approach, Project Management, Information System Management.

1. INTRODUCTION

Computers and Computer systems have become a significant part of our modern society. It is virtually impossible to conduct many day-to-day activities without the aid of computer systems controlled by Software. Today's applications are far more complex typically have graphical user interfaces and client-server architecture. They frequently run on two or more processors, under different operating systems, and on geographically distributed machines. Therefore there is an urgent need to adopt software engineering concepts, strategies, practices to avoid conflict, and to improve the software engineering process in order to deliver good quality maintainable software in time and within budget. As more reliance is placed on these Software's systems, it is essential that they operate in reliable manner, with best Software Quality and Cost effectiveness. Since then, the computer industry has progressed at a break-neck speed through the computer revolution, and recently, the network revolution triggered and or accelerated by the explosive spread of the Internet and most recently the web. Computer industry has been delivering exponential improvement in price-performance, but the problems with software have not been decreasing. Software still come-late, exceed budget and are full of residual faults. This situation was a 'Software Crisis', which made people think seriously about the software development processes, and practices that could be followed to ensure a successful, cost-effective system implementation, which could be delivered on time and used by the customer.

2. LITERATURE SURVEY

Web Application Development Methodologies.

Sequential Methodologies for web application development

a. The Boehm-Waterfall Model

This is the most common and classic of life cycle models, also referred to as a linear-sequential life cycle model. It is very simple to understand and use. In a waterfall model, each phase must be completed in its entirety before the next phase can begin. At the end of each phase, a review takes place to determine if the project is on the right path and whether or not to continue or discard the project.

Advantages of the Waterfall Model are: Simple and easy to use, Phases are processed and completed one at a time, Works well for smaller projects where requirements are very well understood etc.

Disadvantages of Waterfall Model are: Adjusting scope during the life cycle can kill a project, High amounts of risk and uncertainty, Poor model for complex and object-oriented projects, Poor model for long and ongoing projects etc

Iterative Methodologies for web application methodologies

- a. The Boehm- Spiral Model: The spiral model is an evolutionary software process model that couples the iterative nature of prototyping with the controlled and systematic aspects of the linear sequential model. It provides the potential for rapid development of incremental versions of the software. In the spiral model, software is developed in a series of incremental releases. The spiral model is divided into a number of framework activities, also called regions. Typically there are 3-6 task regions here: Customer communication, Planning, Risk analysis, Engineering, Construction and release, Customer Evaluation^[12]

Advantages of Spiral Model are: High amount of risk analysis, Good for large and mission-critical projects, Software is produced early in the software life cycle.

Disadvantages of Spiral Model are: Can be a costly model to use, Risk analysis requires highly specific expertise, Project's success is highly dependent on the risk analysis phase, doesn't work well for smaller projects.

- b. Rapid Application Development: RAD is a linear sequential software development process model that emphasis an extremely short development cycle using a component based construction approach. If the requirements are well understood and defines, and the project scope is constraint, the RAD process enables a development team to create a fully functional system with in very short time period. RAD model has the following phases, Business Modeling, Data Modeling, Process Modeling, Application Generation, Testing and Turn over

Advantages of RAD model are RAD reduces the development time and reusability of components help to speed up development. All functions are modularized so it is easy to work with.

Disadvantages of RAD model are that for large projects RAD requires highly skilled engineers in the team and RAD is based on Object Oriented approach and if it is difficult to modularize the project the RAD may not work well.

c. Agile web application development methodologies:

"Agile methods are a collection of models that attempt to offer lightweight, fast and nimble software development;" Agile web application development in general is characterized by the following attributes: Incremental, cooperative, straightforward, and adaptive^[16]. The agile models attempt to minimize project risk by dividing the project into short iterations (called time boxes) that normally last between a week and a month

d. SCRUM web application development methodologies

A lean approach to software development it is an agile software development framework, Is a tool you can use to find out what you need to do to build quality software faster is an Empirical process for managing the development and deployment of complex products. During each "sprint", typically a two to four week period (with the length being decided by the team), the team creates a potentially shippable product increment (for example, working and tested software). The set of features that go into a sprint come from the product "backlog," which is a prioritized set of high level requirements of work to be done.

3. METHODOLOGY

The objective of this research is to examine the use of tailored agile methods with "Client Downtime Tech Support Tracking System with SMS based alert" web application project and gain an understanding of the enabling and limiting factors associated with the usage of these agile methods. The research study has been carried out between June 2009 and September 2009. The software developer deploys a project team of 7 to 10 staff (plus one consulting customer representative) to produce software that is best characterized as web driven client service interfaces to back end database services.

The questionnaire mainly comprised of different queries about web application development models like considerable time to develop, considerable cost to develop, complexity, difficulty or challenges to implement the software development models etc. Primary data has been collected using questionnaire methods, which comprised of questions related to above parameters. These questionnaires were floated to three different chosen organizations five questionnaires were collected from each organization. In addition to the questionnaire various people associated with the computer related activities in these organizations were interviewed personally or contacted through telephonically. The data collected was analyzed using certain statistical tools for further investigations.

3. 1 Analysis

In this part most significant difference between Sequential and Iterative methodologies is described. The methods used were both primary and secondary. Then using the responded data analyzed using analysis tools like Static Analyzer etc, which is shown in following graphs.

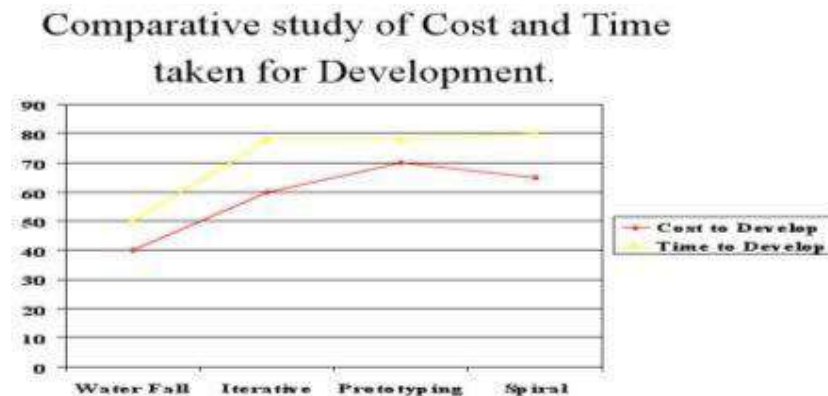


Figure1 shows Waterfall model takes less time to develop a solution.

But on the contrary Iterative, Prototype and Spiral models takes more time to develop a solution. Prototype model takes more cost to develop a solution than comes Spiral, then Iterative and from all less cost undertaken is by Waterfall model.

After analysis following two objectives are concluded. The objective of incremental development is to deliver a working system to end-users. The development starts with those requirements, which *are best understood*. The objective of throwaway prototyping is to validate or derive the system requirements. The prototyping process starts with those requirements, which are *poorly understood*.

Table1 Comparison of agile primary characteristics with other methodology

methodologies Parameters	Waterfall	Spiral	Iterative	Agile with OOA
Process	Required	Required	Required	Planning & Task breakdown only
Final Product	Known before Starting project	Should be known before Starting	Set during project	Set during project
Completion Date	Determined before Start	Variable	Set during project	Set during project
Team flexibility and creativity	Limited	Limited	Limited	Unlimited during iteration
Knowledge transfer	Training prior to project	Training before project	Training before Starting project	Team work during project
Probability of success	Very low	Medium low	Medium	High

Table 1 shows the comparison of methodology shows how the agile is flexible and successful during development.

Proposed best practices for tailoring the agile development during web application development

Risk-based prioritization of work: Do the riskiest work in the earlier iterations.

Aspects oriented: Catch the design decisions as earlier.

Architecture-based development: realize the basic architecture of the new system first, by implementing the most architecturally significant functions in the earlier iterations. Exercise architectural oversight on all planned design changes.

Verifying quality continuously: unit, system, load, and performance testing as well as usability testing.

Managing requirements: since each iteration is defined in terms of the requirements to be addressed in it, we need proper tracking of these requirements. Where the requirements are functional, they should be tracked as use cases

Combine the interaction design and goal oriented design: Agile is somewhat bottom up approach which keeps the user interface design until as it possible so combine both goal directed design and user directed design because in order to create a highly usable product that satisfies the goals of the user, try to design from the top down.

Important Steps during designing

Inputs are

- Find out how to solve context scenarios
- Boarding, prototype, demo, usability testing, iterate. Output should be a functional specification

Advantages of tailored agile methodology with object programming approach during web application development

Cleaner responsibilities of the individual module: allow a module to take responsibility only for its core concern; a module is no longer liable for other crosscutting concerns.

Higher modularization: Provides a mechanism to address each concern separately with minimal coupling. These results in modularized implementation even in the presence of crosscutting concerns. Such implementation results in a system with much less duplicated code. Because the implementation of each concern is separate, it also helps avoid code clutter. Modularized implementation results in an easier-to understand and easier-to-maintain system.

Easier system evolution: modularizes the individual aspects and makes core modules oblivious to the aspects. Adding a new functionality is now a matter of including a new aspect and requires no change to the core modules. Further, when we add a new core module to the system, the existing aspects crosscut it, helping to create a coherent evolution. The overall effect is a faster response to new requirements.

More code reuse: The key to greater code reuse is a more loosely coupled implementation. Implements each aspect as a separate module, each module is more loosely coupled than equivalent conventional implementations. In particular, core modules aren't aware of each other-only the weaving rule specification modules are aware of any coupling. By simply changing the weaving specification instead of multiple core modules, we can change the system configuration.

Improved time-to-market: Late binding of design decisions allows a much faster design cycle. Cleaner separation of responsibilities allows better matching of the module to the developer's skills, leading to improved productivity. More code reuse leads to reduced development time. Easier evolution allows a quicker response to new requirements. All of these lead to systems that are faster to develop and deploy.

Reduced costs of feature implementation: By avoiding the cost of modifying many modules to implement a crosscutting concern, make it cheaper to implement the crosscutting feature. By allowing each implementer to focus more on the concern of the module and make the most of his or her expertise, the cost of the core requirement's implementation is also reduced. The end effect is a cheaper overall feature implementation^[1].

4. Case study and Evaluation of results

Project title: Client Downtime Tech Support Tracking System with SMS based Alert

Description: This project provides an automation help for all sections of the employees for selling their products and keeping the records. But service is also very important after sales and maintenance of such a service center requires well-equipped and good software for accuracy and fast service. Hence the system is aiming to automate both the sales and service part of the business.

Snapshots:



Figure2: Scheduling CSE



Figure 3: Login Screen for Client

Using the tailored agile methodology it yields more productivity in web application development. It focus on design before starting coding ,spend time in doing finding out how to solve context scenarios , prototyping, demo, usabilitytesting , to get end goal of design as functional specification [2].

Table 2 Effort calculation

% of effort in each stage	Waterfall Model	Tailored Agile for web applications
Analysis	0.1	In development phase 0.75
Design	0.2	
Coding	0.45	
Testing	0.25	0.25 Integration & Testing

The above table 2 indicates the percentage of effort that each phase of development required

In the case study however this results accuracy of percentage remains same for the bigger projects too.

Table 3 Verification accuracy

methodologies	Waterfall	Tailored Agile
Stages		
Analysis	0.50	0.63
Design	0.55	
Coding	0.63	
Testing	0.90	0.90

Table 3 indicates the probability that a task with errors is identified during verification activities, the values are not based on any previous study based on the case study.

1st Stage identifying significant factors effecting productivity $a + b \cdot x_1 + c \cdot x_2 + \dots$. Where, a -> constant, x->is a productivity factor

2nd stage -> based on productivity effort are calculated $\text{Effort} = a + b \cdot \text{KLOC} + c \cdot p_1 + d \cdot p_2 + \dots$ a -> constant p->productivity factors [2]

Table4 Parameters studied:

Rework	less
Reiteration	no
Modularization and clarity	good
Handling tight coupling between modules	Good
Code reuse	38% enhanced

Risk mitigation	Quick
Support for OO and complex system	Very good
Support for future implementation	Good

Above table 4 shows the parameters associated with development and their importance with

The effectiveness of tailored agile

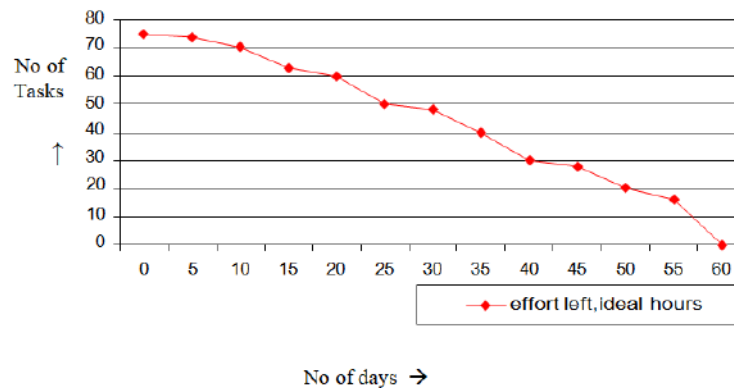


Figure 4 shows the Effectiveness of tailored agile methodologies

In the above figure 4 x-axis represents no of days and y-axis represents noOf task completed.

In our case study we had identified 75 tasks in the starting Tasks are identified by finding out external inputs, external output, external enquires, internal logical files, external interface files. We can conclude the project is moderately complex. Number of tasks can be developed in one day by the whole team. To complete 75 tasks in 4 months i.e. is 0.625 tasks per day. Assuming a 50% time spent in non productivity time associated with rework, validation tasks and identifying tough tasks. The development rate to finish in 4 months would be 1.25 tasks per day. Project has 22 Screens, 04 Reports, 30 Software components

The project is moderately complex. By using agile tailored methodology with OOP we get 35% of code reuse. Software Maturity Index also improved .we get an index of 0.93. Supporting system evolution indicating software is stable.

4. CONCLUSION

The major conclusions from the case study are that a 'default' agile-system approach may be tailored or fine-tuned to fit an individual organization's software process. This tailoring is based upon the developer's assessment of best practice from the overall agile-system methodology. This tailoring, however, delivers a software development process that exhibits efficiencies and risks. The efficiencies include a more fulfilling role for each development team member, greater richness and continuity in design, a simple management system that delivers key information on a timely basis to all stake-holders, and increased business and technical quality within the delivered application, and a relatively low cost for actioning changes to user requirements. The risks pivot upon experience levels, skills levels, and the quality of interaction within – and between - both the development team and customer organization.

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A SUSTAINABLE CHICKOO CULTIVATION: A CHALLENGE FOR THE ENTREPRENEURS OF DAHANU - GHOLVAD REGIONS IN PALGHAR DISTRICT OF MAHARASHTRA

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ABSTRACT

Gholvad Chickoo has high demand in domestic market such as Mumbai, Delhi, Jaipur and Udaipur as well as in International market. The environmental factors like soil, climate, the proximity of the sea and mountains around Dahanu and Gholvad, are favoring the growth of chikoo in this region. Dahanu and Gholvad villages lies in Palghar District of Maharashtra state and is declared as 'Ecologically Fragile area' by Central Government notification dated June 20, 1991. This declaration helps to protect 'chikoo wadies' in Dahanu tehsil and more particularly in Gholvad. In spite of favorable weather climate, soil texture and proximity of sea, the Entrepreneurs of this region face a big challenge in Chickoo cultivation. In this paper, an overview has been taken regarding the problems faced by Entrepreneurs in this region while cultivating Chickoos and also have suggested some measures to overcome these problems.

INTRODUCTION

Chikoo is nutrient tropical fruit. Chikoo is common name of Sapota which belongs to family sapotaceae. Botanical name of chikoo is Manilkara zapota. Chikoo is slow growing perennial, tall and evergreen tree which generally grows in warm and humid climate. Chikoo tree survives in warm and humid climate typically tropical environment. In Maharashtra state, chikoo is majorly observed in coastal part of Palghar district. Gholvad, Bordi, Kosbad, Borigaon and Dahanu are the highest chikoo producing areas of Palghar region. The economy of Dahanu, Gholvad and Bordi survives on its sapota (chikoo) plantations as seven out of ten species chikoo of the country grow here.

Gholvad is known as Chikoo bowl of cultivation of Kalipatti variety in Gholvad. Gholvad Chikoo has high demand in domestic market such as Mumbai, Delhi, Jaipur and Udaipur as well as International market. The environmental factors like soil, climate, the proximity of the sea and mountains around Dahanu and Gholvad, are favoring the growth of chikoo in this region. Dahanu is declared as 'Ecologically Fragile area' by Central Government notification dated June 20, 1991. This declaration helps to protect 'chikoo wadies' in Dahanu tehsil and more particularly in Gholvad.

The soil in this area is clay loamy which has high water retention capacity (inadequate drainage). The soil of Gholvad is also blackish and Calcium content of this soil is high. According to research paper (Combined Evaluation of Ground Water Of Khunwade and Bordi of Dahanu Taluka, Maharashtra, on the basis Of Electrical Conductivity And Sodium Adsorption Ratio), satisfactory chikoo plant growth is observed in this area due to good quality and quantity of ground water. Calcium rich soil of Gholvad is apparently responsible for its outstanding Gholvad chikoo taste. Sweetness of Gholvad Chikoo is much better than other varieties.

The sweet taste and most appealing colour and shape of Gholvad chikoo make this variety popular for more than one century. The colour of Gholvad Chikoo is light brown and appealing. The Gholvad chikoo are round in shape and medium sized i.e. 4-6 cm in diameter.

Abundant sunlight, warm and humid atmosphere of Gholvad region results into high yield of Gholvad chikoo. Approximately number of fruits per tree is 2400 while yield of other varieties are 1000 to 2000 Per tree. The Gholvad chikoo is heavier in weight than other varieties. Its weight is approximately 50-80 gm. while other varieties are 60-70gm. The Gholvad chikoo produces high quantity of pulp. The skin of Gholvad chikoo is soft and well-polished while other varieties are having rough skin. The important and widely adopted varieties of Chikoo in this region are Kali Patli and Cricket Ball (Calcutta Large). The other varieties are, pili patti, Bangalore, Baramati, Dwarapudi, Chhatra, etc.

The Gholvad chikoo cultivation is completely organic farming. Chikoo being a sturdy crop it does not require heavy doses of pesticide and fertilizers. Its around-the-year fruiting makes it a very viable high-income crop. Earlier, the Gholvad and Dahanu chikoo farmers had three crops of the fruit every year i.e. in November, April and September. Now, with environmental changes, which they blame upon the BSES' thermal plant on the Dahanu coastline, the chikoo season has become unpredictable. This year, they had a crop in July only.

Comparison of Dahanu Gholvad Chickoo with other varieties:

Parameters	Dahanu Gholvad Chickoo (Kalipatti variety)	Other varieties
Color of pulp	Light brown	Pala – Medium brown Cricket ball –Light brown
Taste	Sweetness is more	Sweetness is less
Shape	Medium in size and Fruit diameter: 4.60 cm Fruit length: 5.00cm Round in shape	Comparatively big in size (Cricket ball -Fruit diameter: 5.06cm Fruit length: 5.15cm)
Number of fruits per tree	2400	Cricket ball: 1150 Pala : 750
Yield (Kg per Tree)	158.8g	Cricket ball: 1150 Pala : 750
Weight of fruit	Heavy in weight. Approximately weight is 72.67 gm.	light in weight e.g Pala:65.67 gm.
Fruit skin	Well-polished, soft and appealing	Rough
Pulp Quality	Soft, sweet and more granular	Less sweetness and softness Pulp of other varieties are not much granular
Overall acceptability	Good	Medium
Quality of fruits	Good TSS : 22.70 (°B) Acidity: 0.195 (%)	Medium In Pala , TSS: 20.57(°B) Acidity :0.193 (%)

Major Hurdles in Cultivating Chickoos in this Region:

Thus, inspite of having favorable weather condition, abundant sunlight, warm and humid atmosphere, the Entrepreneurs of this region are facing so many difficulties while cultivating Chickoo fruit.

Growing Population:

Growing Population is the major hurdle in cultivating chickoos in this region. This is the common problem everywhere in India. Total population of Palghar District according to 2011 census is 29.90 lakh . The total male population is 15.15 lakh. and female population was 14.75 lakh. The density of Palghar Taluka 560 per Sq.km. Population has started increasing gradually in this Taluka due to which per capita cultivable land also started reducing every year. Thus average area under Chickoo cultivation is getting reduced.

Low Density Planting:

Chickoo trees are normally planted in this region at a distance of 8 x 8 spacing accommodating 156 trees per hectare. Under this system due to less number of trees, the productivity is also low. In order to increase the productivity of Chickoo orchards, high density planting has to be followed for the efficient utilization of land and other natural resources. But unfortunately due to increase in population, most of the areas are brought under the residential and the commercial use due to which high density planting has become a big challenge for the Chickoo entrepreneurs.

Lack of Irrigation Facilities:

Generally Palghar Taluka receives assured rainfall of about 2537 m.m. from south west Monsoon during the month of June to September. But rest of the year, the region always face a problem of water shortage. Lack of proper irrigation facility is also one of the reasons for the low production in this region.

Pests and Diseases:

It is estimated that, nearly 5% of the total horticulture production is getting destroyed by different insects, pests and diseases. The major pest and Diseases in case of Chickoo cultivation are as follows:

1. **Stem borer (*Isocrata tetraonis*)** : Under this type, The grub of this small beetle bores into bark of the Sapota trunk and feeds on the living tissue inside the bark. The chewed bark is seen on the hole.
2. **Leaf minor**: The tiny caterpillar of a greyish moth mines into the surface of young leaves. Affected leaves curl up, mines are seen on the surface of leaves and sometimes caterpillars are found inside the mines. Later on, affected leaves get destroyed, dry up and fall.
3. **Mealy bug**: It is sucking insect. It is a small, over in shape with a cottony white, waxy on the under surface of leaves and base of the fruit near the fruit stalks. They suck the sap and secrete large quantities of sugary sub stones. Leaves have a black coating which gives them a sickly appearance.
4. **Leafspot**: The causal fungus results in dark brown, the adjacent spots on leaves. When infection is severe, the adjacent spots become large irregular whitish patches. In severe cases, the defoliation of leaves may be noticed.
5. **Sooty mould**: The causal fungal disease develops on the honey like excretion by scale insects and mealy bugs.

Other Problems:

Though Chickoo is considered as a hardy crop which requires less attention, the average productivity of chickoo is becoming very less in this region i.e. 14.19t/ha which is due to the following field problems.

- a. Narrow genetic base
- b. Lack of technologies for rapid multiplication
- c. Lack of technologies for canopy management
- d. Problem in harvesting and storage

Suggested Measures for Sustainable Chickoo Production:

1. High density planting:

Chickoo trees are normally planted at a distance of 8 x 8 spacing accommodating 156 trees per hectare. Under this system due to less number of trees, the productivity is also low. In order to increase the productivity of Chickoo orchards, high density planting has to be followed for the efficient utilization of land and other natural resources. This can be possible by controlling the population expansion.

2. Training and pruning:

Chickoo is an evergreen tree and normally grows upto a height of 20 m. The different cultivars of Chickoo have four types of branching habit viz., erect, drooping, spreading, spreading but with fruits of inferior quality. Because of the unmanageable size of the trees and the different growing habits, the canopy management through training and pruning is very essential in Chickoos to increase the productivity. Further, training the trees by retaining 3 or 4 tiers and removal of 50 percent of its side growth (moderate pruning) will result in better yield and quality of fruits.

3. Proper Irrigation Management:

Excess irrigation may cause flower and fruit shedding and increase the number of mis-shapeden fruits. Young plants should be watered regularly during dry season and at an interval of 6-12 days during winter. The optimum level of irrigation lies around 0.5/1W/CPE ratio. Drip irrigation at the rate 20-30l/day/tree is recommended by Tamil Nadu Agricultural University. For the young trees which are in the pre bearing stage, 1/3 of the recommended dose of water may be given and slowly increased reaching the above level during full bearing stage.

4. Nutrient management:

In order to increase the productivity proper nutrient management should be followed. Being an evergreen tree liberal dose of fertilizers is required to maximize the productivity in Chickoo. In Gujarat, Maharashtra and Karnataka, for getting good response, the manures and fertilizers are applied in two splits. Under rainfed condition, it is advised that Chickoo trees should be fed at the rate of 1.5 kg N / tree/ year in the form of castor cake or urea. Fertigation studies with water soluble fertilizer indicates that fertilization with 80% of water soluble fertilizers at bimonthly intervals yielded 5800kg/ha as compared to 4300 kg with 100% normal fertilizers applied through soil. Fertigation economized the use of fertilizers and water to the extend of 20-25 percentage.

5. Harvesting and storage:

Sapota fruits are highly perishable and have a very limited shelf life. Under ambient condition fruits after harvest keep well only for 5 to 7 days and are spoiled within a few days after ripening due to rapid degradative metabolism. Hence, post-harvest losses are enormous particularly during peak season. In order to have equitable distribution and to avoid crop loss and market glut, it is necessary to slow down the process of degradative metabolism by controlling the rate of transpiration, respiration and microbial infection through proper harvesting, handling and storage methods.

6. Control over the Pests and Diseases:

Pests and diseases destroy maximum production. Thus by applying proper methods by controlling pests and diseases the average productivity of the fruit can be increased.

CONCLUSION:

Thus from the above discussion we can conclude that, Gholvad in Dahanu Tehsil is known as the 'Chikoo bowl of Maharashtra'. More than one century, Gholvad chikoo is gaining the attention of people due to its unique sweet taste, most appealing color and shape' Sweet' soft and granular pulp, Soft skin and good shelf life, are distinguishing unique characters which makes this variety superior than other varieties. But on account of increase in population day by day in this region, the average land brought under cultivation for the Chickoo production become lesser. Similarly, low density planting, lack of proper irrigation techniques, spread of pests and diseases are also other factors responsible for decrease in average fruit production. But by implementing certain suggested methods as above will definitely give rise to Chickoo production.

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LEGAL REGULATION OF DISASTER MANAGEMENT IN STATE OF KERALA - A COMPARATIVE APPROACH OF STATE LAWS

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The Kerala State¹ is traditionally vulnerable to natural disasters due to unique geo- climatic conditions. Kerala is classified as a multi-hazard prone state with regard to the earthquake vulnerability it falls in Zone III. 96.90% of the state is falling in coastal zone and as a result of it 3/4 of the land area is prone to cyclones, tsunami, floods etc. Apart from the natural disasters human induced disaster like chemical disasters, industrial disasters, epidemics, pest attack etc have affected the population in the state².

In order to reduce the risk of disasters it is effective to invest in mitigation than relief and rehabilitation expenditure. With this in mind UNDP and Government of Kerala (here in after referred as GOK) have undertaken the Disaster Management Risk Programme.

The key components of the UNDP programme are

- (i) Capacity building³
- (ii) Community based early warning system⁴
- (iii) Emergency Operation Centre (EOC)⁵
- (iv) IndisData –collection and collation⁶
- (v) Techno –Legal regime⁷.

Following the DMA, 2005⁸ the State of Kerala was asked to constitute state level rules for effective functioning of Disaster Management Rules, 2007.⁹ The objective of this rule is sustainable reduction of disaster risk in the Kerala State and develops the capacities of Government institutions, local self government and communities in disaster mitigation, preparedness and recovery.

The Government of Kerala has constituted the State Disaster Management Authority (KSDMA) with Chief Minister as its Chairman. The authority comprises members with experts and scientists from diverse fields. The Chief Secretary and Principle Secretaries of Revenue and Home are its members.¹⁰ The Authority would prepare the State's disaster management policy and co-ordinate the activities of various departments connected with disaster management. The Authority has been formed as mentioned in the National Disaster Management Act.¹¹ The term of the members of State Authority,¹² their qualification,¹³ resignation manner,¹⁴ the quorum of meeting¹⁵ etc are clearly mentioned in the rule.

Table No.6.1
Ministries Responsible for various Categories of Disasters in State of Kerala

Sl.n	Types of Disasters	Departments
1	Hydro meteorological and Geological Disasters	Department of Revenue and Disaster Management
2	Man-made and Human induced disasters including air and rail accidents	Department of Home
3	Chemical, (health related), Biological, Radiological	Department of Public Health
4	Industrial accidents	Department of Factories and Boilers
5	Pest attack	Department of Agriculture
6	Epidemics in cattle	Department of Animal Husbandry
7	Dam burst and major building collapse	Department of water Resources and Public Works
8	Forest Fire	Department of Forest

Source: Kerala State Policy, 2010 www.kerala.gov.in

The State Authority may also constitute an advisory committee consisting of experts in the field of disaster management.¹⁶ The statutory authority will be the nodal agency of plan, coordinate and monitor disaster management plan.

The first meeting of KSDMA was held on 5th July 2007. The following decisions were taken in the meeting.

- (i) 10% provision for purchase of disaster related equipment for Fire and Rescue services, police under CRF
- (ii) Steps shall be initiated to include disaster management as a subject in the school curriculum
- (iii) It was decided to initiate steps to setup an office and appoint necessary staff for the functioning of the Kerala State Disaster Management Authority
- (iv) Steps shall be initiated to set up District level Disaster Management Authority.

The Chief Secretary of the State heads a State Level Committee¹⁷ which is in overall charge of the relief operations in the state.¹⁸ The Secretary presides over the meeting¹⁹ and they shall meet at once in three months.²⁰ The Disaster Management Department within Revenue Department constituted immediately after the occurrence of Tsunami and coordinates the activities at the State level.

The Central Act purposes for the establishment of a network of early warning units Emergency control rooms, mobile hospitals, quick response teams etc. The Kerala Government has formed Rapid Action Force (RAF) to face any disasters. The state have also upgraded its emergency operation centre with modern equipments (with the help of UNDP programme).

Rule 14 (1) of the KSDM says about the constitution of District Level Disaster Management Authority (DDMA)²¹. It is headed by the collector who coordinates all activities pertaining to prevention to response and relief²². The collector has the power to preside over the meeting and also exercise and discharge his powers and functions as the District Authority may delegate to him²³.

The districts are further divided into sub-division each of which is under the administrative control of sub divisional officer. At their level these sub-divisional Officers are responsible. At the Taluk level activities are coordinated by Tahasildar as administrative head of Taluk, Village Officers are the Officers who directly communicate with the public and carry out the field level activities.

The local bodies can play a vital role in Disaster Management. Realizing this, the State Government has issued guidelines to local bodies to prepare decentralized disaster management plans²⁴ that can be integrated into the District level preparedness exercise. Local bodies will have identified prevention and mitigation measures for each type of disaster and prepare an action plan, based on the availability of resources.

At the grass root level Disaster Management activities are to be revamped by introducing Disaster Management Committee (herein after referred as DMC) at ward level with elected representative of local self government as Chairman and representatives of NGO's, Local authorities, Doctors, Primary School Teachers as other members of the committee. There is Disaster Management Team at the grass root level. This consists of members of youth organizations like Nehru Yuva Kendra Sangathan (here in after referred as NYKS) and National Service Scheme (here in after referred as NSS) and other NGOs as well as volunteers from the village are to be formed for better response. The community based Disaster Management Plan should be reviewed at least once in a year.

In 2010 the Kerala State purpose to constitute a State Disaster Response Force to carry out rescue and relief operations during natural and man-made disasters. It comprised of personals drawn from the police, home guard and fire and rescue services. This force consists of 20 well trained skilled persons in each district and each 5 persons in city corporations.

The State recommended to the Centre to recognize lightning as a natural disaster because the criteria fixed by the Central Government were make it difficult for the State to compensate the victims of disasters like lightning, which were not recognized as a disaster yet.

Financial Arrangements

The financial matter of the Disaster Management is regulated by the Kerala Famine Relief Fund in 1965. This fund was established for meeting expenditure on preventive and remedial measures related to famine and scarcity conditions or for relief of distress caused by serious draught, flood, fire or other natural calamities in the state.

The Central Government has also constituted National Calamity Contingency Fund and Calamity Relief Fund²⁵ for providing support during natural calamities.

The State of Kerala has constituted a State Disaster Relief Fund²⁶ by renaming the Calamity Relief Fund²⁷. This fund has been formed by framing the Kerala State Disaster Response Rules, 2010. It shall become into force with effect from the financial year 2010-11 and will be operative till the end of the financial year 2014-15. This fund shall be used only for meeting the expenditure for providing immediate relief to the victims of cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanches, cloud burst, and pest attack. In this fund the government of India shall contribute 75% of the total yearly allocation in the form of a non-plan grant and the balance 25% amount shall be contributed by the State Government.

The Kerala State has constituted State Disaster Mitigation Fund in 2011²⁸ as an exclusive fund for taking up disaster management mitigation projects in an effective and useful manner. It is visible step of paradigm shift from relief and response centric fund provisions of disaster management. Recently the State Government made recommendation for the contribution of 25% of allocation of fund by the Centre and 75% by the State respectively.

Dr. Shekar L. Kuriakose²⁹ opined that no other State in India has constituted Hazard, Vulnerability and Disaster Risk Cell except the State of Kerala³⁰. The Cell became fully operational in March 2012. They conduct and regularly update the hazard, vulnerability and risk assessment of the State; implement hazard early warning system; create and maintain the disaster database of the State; undertake research projects on topic relevant to disaster risk reduction etc. it could give comment and suggestions to the government directly.

Kerala is among the few states where electricity has reached every nook and corner of the state. Therefore the Kerala State Electricity Board takes necessary mitigation measures to deal with disasters. As a part of fine tuning of Disaster Management system, the Board has ordered the constitution of disaster Management cell in all electrical circles to meet any eventuality.

The Cell consists of an Assistant Engineer as Convenor and two other Assistant Engineers as Joint Convenors and five Engineers as members. The convenor on receipt of the intimation reach the spot and take steps to avoid any shock hazards (He shall call for an assistance of other members of the Cell if necessary³¹). The Cell shall act in close liaison with the police, personal and the District Administration. The members of the cell are undertaken their duty in addition to their normal duty without any additional payment, neither the Board nor its Employees shall be answerable for any lapse in their activities.

He also admits the reality of the scarcity of skilled persons in this field. More over there is lack of awareness programmes among the community at grass root level.

There is lack of coordination between the departments of police, fire force, forests, health when a disaster strikes. It is suggested that the department must be coordinated and equip them to tackle the situation effectively by providing human resources as well as equipments. In most cases the executive face lack of funds. So make a provision of fixed amount of money to handle the situation³².

For the effective disaster management the Kerala State has allocated 6 crores in state budget. With in the light of recent tremors in the vicinity of Mullaperiyar dam and the emergency situation existing in the area and downstream the Kerala State has proposed to implement a Mullaperiyar Crisis Management Plan (here in after referred as MCMP) under the auspices of the KSDMA³³. The plan consist of three components.

- (i) Technical Component
- (ii) Incident Response System and
- (iii) Community Plan

(i) Technical Component

Under the technical component, safe spots for evacuation in the event of a dam break have to be identified by utilizing the inundation map prepared by the Center for Earth Sciences (CESS). For this employment of technical staffs, purchase of equipments is necessary. The Revenue and Disaster Management Department ensure the availability of cameras, local deployment, capacity building etc is necessary. Procedure for early warning, construction of temporary shelters at safe spots and purchase of emergency equipments will also be looked into.

(ii) Incident Response System

It is intended to coordinate activities undertaken by various departments on field in the event of a disaster. Workshops have to be organized involving all stakeholder departments for orientation and preparation of departmental response plans as part of emergency support functions

(iii) Community Plan

The third component is community plan. The KSDMA purposes to implement a Community Based Disaster Risk Management (CBDRM) programme focusing on enhancing the capacity of the community in the event of earthquakes or flooding (in the case of dam failure). The State Government gives sanction to KSDMA to open a Flood Mapping Unit in the District Collectorate, Idukki and constitute a Purchase Committee ³⁴to purchase materials and equipments.

But these documents fail to implement and it only remains as letter³⁵.

Prior to the enactment of Disaster Management Act, 2005 some State like Gujarat,

Bihar, Uttar Pradesh, and Uttaranchal had passed legislations to deal with disaster viz

- (1) The Gujarat State Disaster Management Act, 2003
- (2) The Bihar Disaster Management Act, 2004
- (3) The Uttar Pradesh Disaster Management Act 2005 and
- (4) The Uttarachal Disaster Mitigation and Prevention Act, 2005

The Gujarat and Uttar Pradesh Acts have stunning similarities. It can be seen that the Uttar Pradesh Act is the replica of Gujarat Act. On the other hand Bihar Disaster Management Act is based on the model recommendation of High Power Committee. The Uttaranchal Act contemplates constitution of a Disaster Mitigation and Management

Centre.

Table No. 6.2
Comparison of State Disaster Management Laws

Sl No:	Parameters	Gujarat	Uttar Pradesh	Bihar	Uttaranchal
1	Name of the Act	The Gujarat State Disaster Management Act,2003	The UP Disaster Man- agement Act, 2005	The Bihar Disaster Management Act,2004	The Uttaranchal Disaster Management & Preven- tion Act, 2005
2	Definition of Disaster	An act or imminent event whether natural or other- wise occurring in any part of the state which causes, or threatens to cause all or any of the following sec- tion Sec 2(h) of the Act	Same of Gujarat Act Sec 2 (h) of the Act	See Sec 2 (i)	See Sec 2 (a)
3	Definition of Disaster Management	See Sec 2 (i)	Same of Gujarat Act. See Sec 2 (i)	No specific definition	Similar to Gujarat Act. See Sec 2 (e)

4	Authorities for Disaster Management	(a) The State Government, (b) The Gujarat State Disaster Management Authority, (c) Heads of Government Departments, (d) Commissioner, (e) Collector of a district, (f) Local authorities (Sec.3).	Same as Gujarat Act, except for substitution of Uttar Pradesh Disaster Management Authority in place of GSDMA, District Magistrate for Collector and addition of "Any agency, organization or body authorized by the Authority" (Sec.3)	(a) The State Government (b) Standing Technical Committee (STC) (c) State Relief Commissioner (SRC) (d) District Relief Commissioner (DRC) (Sec. 3)	(a) The State Government (b) Standing Technical Committee (STC) (c) State Relief Commissioner (SRC) (d) District Relief Commissioner (DRC) (Sec. 3)
5	Whether any provision for formation of 'Crisis Management Group' or such other entities?	Yes. [Sec.4(2)(b)]	Yes. [Sec.4(2)(b)]	No. It provides for constitution of a Standing Technical Committee for the purpose of facilitating procurements related to disaster management. [Sec.4 (3)]	No specific provision
6	Responsibility for data collection	Departments of the State Government to assist other Authorities (Sec.5(1)) GSDMA to take steps to collect data on all aspects of disasters and disaster management, to analyze such data and to cause and conduct research and study relating to effects of disasters (Sec.13) GSDMA to be repository of all information concerning disasters (Sec.14)	Same as Gujarat Act (same sections also)	No specific provision	Section 16 of the Act envisages the creation of a Disaster Mitigation and Management Center. One of the core functions of this Center is 'Data Collection and Research'. [Sec. 17(1)].
7	Responsibility for capability building and training	Departments of the State Government to assist other authorities [Sec.5(1)(a)] GSDMA to advise and train the community, and stakeholders with a view to increasing their capacity to deal with potential disasters [Sec.16(1)]	Same as Gujarat Act (same sections also)	No specific provision	Disaster Mitigation and Management Center has been assigned the responsibility. [Sec.17(4)].

8	Responsibility	GSDMA to promote general education and awareness on disaster management, emergency planning and response [Sec.12(2) (d)] . GDSMA to do so by publishing guidelines, facilitating access to its electronic database, coordinating the integration of methodologies for awareness and preparedness with development plans etc.[Sec.16(1)].Collector to facilitate community training, awareness programmes. [Sec.24 (1)(f)].	Same as Gujarat Act (same sections also)	No specific provision	Disaster Mitigation and Management Center has been assigned the responsibility. Sec. 17(4)].
9	Role of Collector/ District Administration	Collector to issue directions to the officers of the departments of the State Government and the local authorities in the affected areas to provide emergency	Same as Gujarat Act (same sections also)	To supervise, coordinate and discharge the responsibilities and perform functions as prescribed. To prepare disaster management	District Magistrate with the assistance of the local authorities shall prepare a disaster management plan for the district by anticipating the types of
		relief in accordance with the disaster management plans.[Sec.23(1) & (2)]		ment plan in accordance with the Rules and notify it for information of the general public, and implement it during the time of disasters. (Sections 6&7)	disaster that may occur and their possible effects and identifying the communities and properties at risk. He shall provide for appropriate prevention and mitigation strategies and promote capacity building. (Sec. 22). At the time of disaster, to conduct search and rescue operations, provide alternate shelters, food and medicines etc. [Sec. 19(2)]. To take action in accordance with prescribed guidelines. (Sec. 20).

10	Role of local bodies	Subject to directions given by GSDMA and under the supervision of the Collector, local authorities shall: (a) carry out relief operations in	Same as Gujarat Act (same section also)	Each Municipal Local Body and panchayat to prepare a Disaster Management Plan to meet adequately the requirements of the	To assist the district magistrate in preparation of disaster management plan for the district [Sec. 22(1)]. In disaster affected areas, local au
		the affected area subject to the directions of the Commissioner (b) carry out reconstruction and rehabilitation work in accordance with the guidelines framed by GSDMA (c) prepare a disaster management plan suitable for the local area, clearly defining the role and responsibilities of the local authority etc. [Sec. 25(1)]		locality concerned in their respective jurisdiction. They shall be responsible for effective implementation of the plan drawn up by them in this behalf. [Sec. 8 (1) & (3)].	authorities to assist the USDMA, the State Commissioner for Disaster Management and the District Magistrate. Also to provide training to the staff and ensure that all buildings in their local area comply with laid down specifications. [Sec. 21 (1)].
11	Role of general public	Citizens to assist the Commissioner and the Collector in prevention, response, warning, emergency operation, evacuation and recovery activities. (Sec. 31).	Same as Gujarat Act (same section also)	To assist the State and/ or District Relief Commissioner in prevention, mitigation, response, rescue etc. (Sec. 11).	No specific provision
12	Duties of private bodies	Community groups, youth organizations to assist the Authorities. (Sec. 28) Similarly, each Factory as defined under the Factories Act, 1948 shall assist the Commissioner and the Collector and prepare a disaster management plan. Each private and public sector entity shall provide assistance to GSDMA, the Commissioner and the Collector. (Sec. 29). All voluntary agencies, including non-governmental organizations, which desire to participate in disaster management activities may provide assistance to the Commissioner and the Collector. (Sec. 30).	Same as Gujarat Act (same sections also)	Each Factory as defined under the Factories Act, 1948, and each of the undertakings and enterprises, as may be prescribed shall have a disaster management plan in conformity with the plan of local authorities/ district administration. They shall be responsible for its effective implementation. [Sec. 8 (1) & (2)].	No specific provision

13	Whether any provision for issuing direction to a person or authority for purpose of a voiding and minimizing damage or for mitigation of effects of a disaster?	Yes.[Sec.4(3)]	Same as Gujarat Act (same section also)	Yes, general powers. [Sec. 4(6)].	Yes. [Sec. 4 (3)].
14	Whether any provision for suspending operation of any executive order which prevents, hinders or delays necessary action in coping with disaster?	Yes.[Sec.4(4)]	Same as Gujarat Act (same section also)	No specific provision	Yes. [Sec. 4(4)].
15	Relief works	Departments of the State Government to carry out relief operations under the supervision of the Commissioner and the Collector [Sec.5 (1) (b)]GSDMA to assist the State Government in formulation of policy relating to emergency relief notwithstanding that the implementation of the same shall be the responsibility of the Revenue Department and other departments of the State Government. [Sec.12(2)(b)]. Where GSDMA is of the opinion that relief provided by the Commissioner or the Collector is not adequate, it shall recommend modifications in the prescribed norms [Sec.18(2)]	Same as Gujarat Act (same sections also)	Responsibility of State Relief Commissioner and District Relief Commissioner. (Sec.6&7)	USDMA to assist the State Government in formulation of policy relating to emergency relief. Revenue Department and other departments of the State Government to implement emergency relief.[Sec. 11(1)(b)]. State Commissioner for Disaster Management to make arrangement for release and use of resources for providing relief [Sec. 14(2)] and to development and appropriate relief implementation strategy taking into account unique features of each district. [Sec.15 (1)(b)]. District Magistrate is responsible for relief works in the district. [Sec. 19].

16	Disaster Management Plans	GSDMA to develop or cause to be developed guidelines for the preparation of such plans and assist departments, local authorities and persons specified by it in preparation of such plans. [Sec.15(1)] Collector to ensure that district disaster management plans are prepared, revised and updated. [Sec.24 (1)(d)]. Each department of the State Government in a district shall prepare a disaster management plan for the district and the Collector shall ensure that these are integrated in to the plan for the whole district. (Sec.26).	Same as Gujarat Act (same sections also)	State Government may prepare a disaster management policy [Sec. 4 (2)(a)] .DRC may prepare a district management plan, and Local Bodies and other Agencies may prepare a Disaster Management Plan in accordance with the district plan (Sections 6 & 8).	USMDA to act as central planning body [Sec. 11(1)(a)]. State Commissioner for disaster management to prepare, review and update district or divisional level emergency
17	Whether any provisions for offences and penalties?	Yes. (Sec.38)	Yes. (Sec.38)	Yes. (Sections 13 and 14).	Yes. (Sec. 29 to 31).

Source- Third Report of Second Administrative Commission, 2006

Comparison of State Disaster Management Laws

The State laws like Gujarat State Disaster Management Act, 2003 the Uttar Pradesh Disaster Management Act, 2005, Bihar State Disaster Management Act, 2004 and Uttaranchal Disaster Management Act, 2005 is analysed. Most of the provisions of these laws were similar. Regarding the definition clause each State has their own definition especially the Uttar Pradesh Act has the same provisions of the Gujarat Act except for substitution of Uttar Pradesh in the place of Gujarat. The authorities which specified in the Act are State Disaster Management Authorities. There is a provision in the Acts for formation of crisis management groups except in Bihar and Uttaranchal laws. The Act specifies the responsibility for data collection by Department of State Government as the Gujarat and Uttar Pradesh Act and the Disaster Mitigation and Management Centre at Uttaranchal Act but there was no specific provision in Bihar Act. the role of collector/magistrate is specified in all Acts. The States like Gujarat, Uttar Pradesh and Bihar gave power to the district collector while the Uttaranchal Act gave provision to district magistrate. The role of local bodies is specified in Gujarat, Uttar Pradesh and Bihar Act. But the Uttaranchal Act silent about this provision. Disaster management plans and offences relating to disasters are specified in each Act.

CONCLUSION

In recent time, Disasters has emerged a serious threat to life on earth and human security due to their inherent devastating effect. Like any other country India has been a victim to various kinds of disasters from time immemorial. The destruction and devastation are very high compared to developed countries. This may be because of the systematic preventive and preparedness measures adopted by the developed countries. Though the subject has been given wide importance at the international level by providing an adequate legal coverage even long back, our national effort on the same topic was hardly any till very recently. Only a few years ago, the issue of disaster Management was regarded as a part of national legal regime, consequently the subject has got a momentum in the direction of a comprehensive legislation, which was so far a need greatly felt by the Government and a resultant factor of the traumas suffered by Indians.

A proper understanding of the consequences of disasters and their devastating impact is necessary to learn from our faults, minimize our weakness and to build on our strengths in order to develop an effective and time-bound

system for disaster management, to set out the legal, institutional and financial arrangement for disaster management.

India in recent years has made significant development in the area of disaster management through the enactment of Disaster Management Act. A New culture of preparedness, quick response, strategic thinking and prevention is being ushered. The entire process bill centre stage the community and will be provided momentum and sustenance through the collective efforts of all Government agencies. However these efforts are made to satisfy our national mission *to build a safer and disaster resilient India*. However the victims of disaster have to face human rights violation during this period. Internationally there was no regulation to deal with natural disasters. The existing human rights instruments and judiciary play a vital role in this situation.

End Note

1. Kerala, 'the God's own Country' is blessed with forests, rivers, backwaters and many other natural resources. Kerala is located between north latitudes 8 degree 18 and 12 degree 48 and east longitude 74 degree 52 and 72 degree 22, the State has a coast of length 580 km. the State of Kerala consists of 14 districts, 63 taluks, 21 revenue divisions, 152 rural blocks, 999 panchayats and 1452 villages. *see* www.sdma.kerala.gov.in accessed on 12th July 2012 at 12.57 pm.
2. The State experiences heavy rainfall and flood during the South West monsoon: in recent times drought condition have also become more frequent during the pre- monsoon period, sometimes due to failure of South West and or North East monsoon, coastal erosion is very severe. Incidents of biological disasters such as epidemics are also on the raise. Fatalities in road and rail accidents, man made accidents, death due to lightning strikes and tragedies due to capsizing of boats are very high in the State. Landslides or landslip is another hazard of the hilly region of the State. The tsunami that struck the Kerala coast in 2004 has added a new dimension to the hazard profile of the State. The State is also vulnerable to cyclones and experiences high winds due to the West ward movement of cyclone storms crossing the Tamil Nadu coast. The fact that Kerala falls under earthquake zone III makes the State vulnerable to earthquakes. Chemical and industrial disasters and disasters like dam burst cannot be ruled out. Global warming and its resultant climatic variations such as interseasonal variations in rainfall, environmental issue and rise in sea level intensify the vulnerability and risk of the State. *See* Kerala State Disaster Management Policy, 2010 www.kerala.gov.in accessed on 12 July 2012 at 11.10pm and also *see* Report of Institute of Land and Disaster Management, Kerala, 2008.
3. Capacity building means equip the people to mitigate against the disaster. It includes giving orientation programme to the politicians, SDMA members, PRI members, NGOS and giving training programme to the people at grass root level as a part of capacity building.
4. This includes strengthening early warning system and hazard mapping. The Kerala state had done it in four districts like Thiruvananthapuram, Kollam, Alleppey and Ernakulum to assist the risk and vulnerability.
5. This includes construct and strengthen the Emergency Operation Centres (EOC) and make linkage between the EOC and the district control rooms.
6. This includes collect and codifies the past disasters, and its losses for geospatially mapping disaster risk trends.
7. The Techno-legal regime the Kerala State have reaffirmed its early disaster management codes, shifted the Relief and Rehabilitation Department to Disaster Management Department. The Kerala Government have framed Kerala State Disaster Management Rules, 2007.
8. Sec 78 of DMA reads: "The state Government may, by notification in the official Gazette, make rules to carry out the provisions of the Act".
9. G.O (P) No 71/2007/DMD.
10. Rule 3 of KSDM reads "the KSDMA shall consist of the following members namely Chief Minister as Chairperson, Revenue Minister as Vice Chairperson, The Chairperson of State Executive Committee, Principal Secretary of Revenue Department, Principal Secretary of Home Department. One faculty from the Institute of Land and Disaster Management: Three scientists of Disaster Management as convenor. *see* also G.O (P) No 154/2007/DMD, G.O (P) 407/2010/DMD and G.O (P) 5/2011/DMD.
11. *See* Sec 14(1) of Disaster Management Act, 2005 and G.O (P) 154/2007/395/2007.
12. Rule 4 of KSDM reads: "The term of office of the members of State Authority other than ex-officio members, shall be three years, from the date of their assuming charge".

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- 13 Rule4 (1) of KSDM reads: “No person shall be a member of State Authority who (i) is or at any time has been adjudged insolvent or; (ii) declared to be of unsound mind by a competent court; (iii) is or has been convicted of an offence which in the opinion of the State Government involves more turpitude; (iv) is or has been removed or dismissed from the service of Government or body corporate owned or controlled by the state or central Government”.
 - 14 Rule 5 of KSDM reads: “Any member of the state Authority may, by writing under his hand, addressed to the Chairperson of the State Authority, resign from his office and such resignation shall take effect on the day the same is accepted by the Chairperson”.
 - 15 Rule7 of KSDM reads: “ The quorum of the meeting of State Authority will be one third of its members”.
 - 16 Rule 10 of KSDM reads: “The State Authority may as and when it considers necessary, constitute an advisory committee consisting of experts in the field of disaster management and having practical experience of disaster management to make recommendations of different aspects of disaster management”. *see* G.O(P) No.339/2007/DMD.
 - 17 Rule 11(1) of KSDM reads: “Government shall constitute a State Executive Committee (SEC) to assist the State Authority in the performance of its functions and to co-ordinate action in accordance with the guidelines laid down by the SDMA and ensure the compliance of directions issued by the State Government, under the Act”. The first meeting of the Executive Committee of Kerala State Disaster Management was held in 6th Nov 2007. The agenda items of the meeting were (i) Discussion on Draft of Disaster Management Policy and also *see* Sec 20 of Disaster Management Act, 2005 . (ii) Formulation of State level and District level plans.
 - 18 Rule11(2) of KSDM reads: “The State Executive Committee shall consist of
 - (i) Chief Secretary of the State Government, Chairperson
 - (ii) Secretary , Revenue Department
 - (iii) Secretary , Finance Department
 - (iv) Secretary , Home Department
 - (v) Secretary , Health Department
 - 19 Rule 12(3) of KSM reads:” The Chairperson of the State Executive Council shall preside over the meetings of SEC”. G.O.(P) 339/2007/DMD.
 - 20 Rule 12(5) of KSDM reads : “The state Executive Council shall meet as often as necessary, but at least once in three months”. *see* Natural Hazards, IInd Report, State of Environment 2(2007).
 - 21 Rule 14(1) of KSDM reads : “ Government may constitute a District Disaster Management Authority for each district in the State”. The Kerala Government has enacted 14 DMA in all over Kerala State. For more details *see* G.O (p) No.303/2008/DMP.
 - 22 Rule 14(2) KSDM reads : “The DA shall consists of the Chairperson and the following other members, namely:-
 - (i) The District Collector of the concerned district as Chairperson
 - (ii) President of District Panchayat as co-Chairperson
 - (iii) The Chief Executive Officer of the District Authority
 - (iv) The Chief Medical Officer of the district
 - (v) Two other district level officers are to be appointed by the State Government.
 - 23 *See* Rule 15 of Kerala State Disaster Management Rules, 2007.
 - 24 The preparedness plan includes an inventory of human resources, transport facilities for emergency deployment, workshops and fuel depots and a list of equipment and stores for rescue and relief operations.
 - 25 *See* G.O (Ms) No.284/2007/DMD.
 - 26 *See* Sec 48(1)(a) of Disaster Management Act, 2005 and G.O(P) No. 498/2010/DMD.
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- 27 A state level Committee to constitute Calamity Relief Fund. G.O (Ms) No. 178/2006/ DMD.
 - 28 *See* Sec 48(1)(c) of Disaster Management Act, 2005 and G.O(P) No 660/2011/DMD.
 - 29 An interview was conducted with Dr. Shekar L. Kuriakose, Associate professor, Disaster Management Centre; Head (Scientist), Hazard, Vulnerability and Disaster Risk Cell & Research Office, KSDMA, Department of Revenue and Disaster Management, Government of Kerala at Institute of Land and Disaster Management, TVM on 18th July 2012 at 1.30pm.
 - 30 It currently has staff in disaster management centres of five city corporations and sub office in Idukki district, where the disaster risk reduction programme has been implemented. G.O (Rt) No.2267/2011/DMD.
 - 31 The convenor shall have certain limitation to utilize the money. He have the owe to spend a maximum of Rs.2000/- for arranging the requirements necessary for the situation. The total expenditure so made for the circle shall not exceed Rs.10000/- annually.
 - 32 An interview was conducted with Sri Jose Prakash, IAS, Administrative Officer, Institute of Land and Disaster Management, PTP Nagar, TVM on 18th July 2012 at 3 pm.
 - 33 G.O.(Rt) No.5884/2011/DMD.
 - 34 This committee headed by the Commissioner of Land Revenue (ex-officio Sectretary, KSDMA) with representatives of Finance Department, Store Purchase Department, Senior Finance Officer of Commissionerate of Land Revenue, Director of the Institute of Land and Disaster Management shall be constituted for this purpose.
 - 35 An interview with Sri Shine.A.Haque, Section officer, Disaster Management (Revenue-K) Department, Kerala State Secretariat, TVM. This interview is conducted in 6th Aug 2012 at 11am.

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Khan, M. R., Islam, A. F. M. M., & Das, D. (1886). A Factor Analytic Study on the Validity of a Union Commitment Scale. *Journal of Applied Psychology*, 12(1), 129-136.

Liu, W.B, Wongcha A, & Peng, K.C. (2012), "Adopting Super-Efficiency And Tobit Model On Analyzing the Efficiency of Teacher's Colleges In Thailand", *International Journal on New Trends In Education and Their Implications*, Vol.3.3, 108 – 114.

- **Text Book:**

Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2007). *Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies* (3rd ed.). New York: McGraw-Hill.

S. Neelamegham," Marketing in India, Cases and Reading, Vikas Publishing House Pvt. Ltd, III Edition, 2000.

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Uddin, K. (2000). A Study of Corporate Governance in a Developing Country: A Case of Bangladesh (Unpublished Dissertation). Lingnan University, Hong Kong.

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Yunus, M. (2005, March 23). Micro Credit and Poverty Alleviation in Bangladesh. *The Bangladesh Observer*, p. 9.

- **Article in magazine:**

Holloway, M. (2005, August 6). When extinct isn't. *Scientific American*, 293, 22-23.

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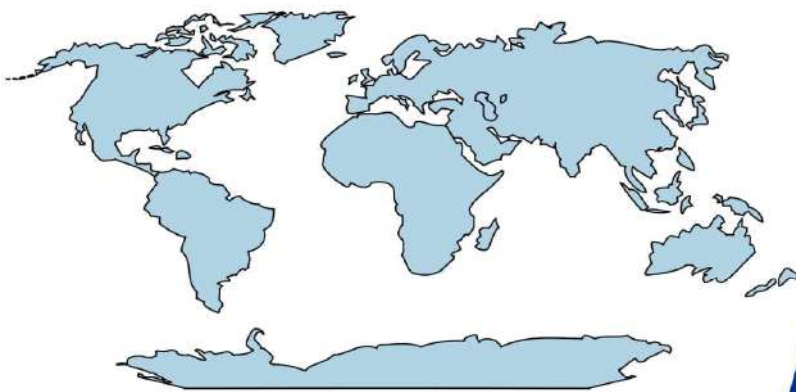
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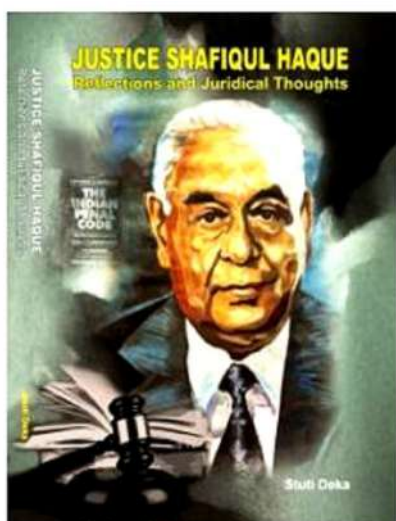


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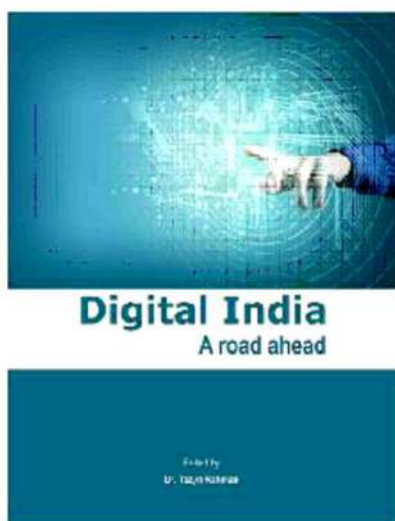
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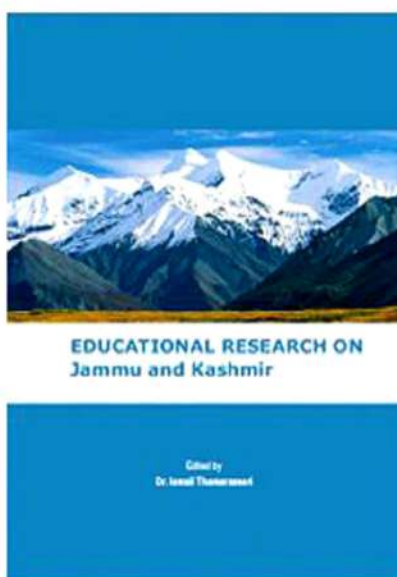
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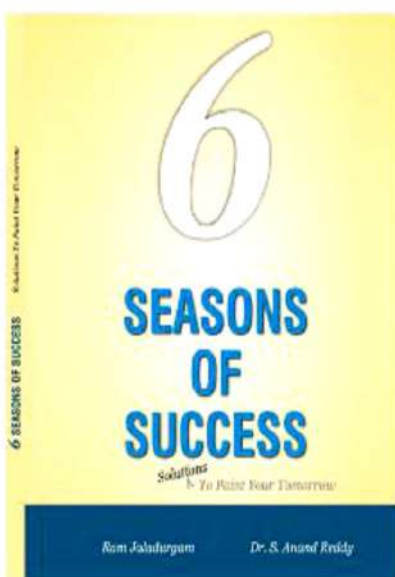
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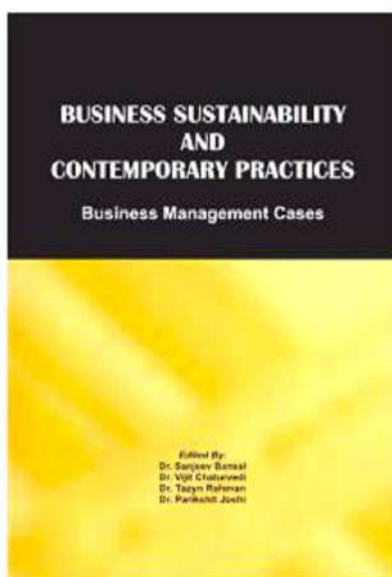
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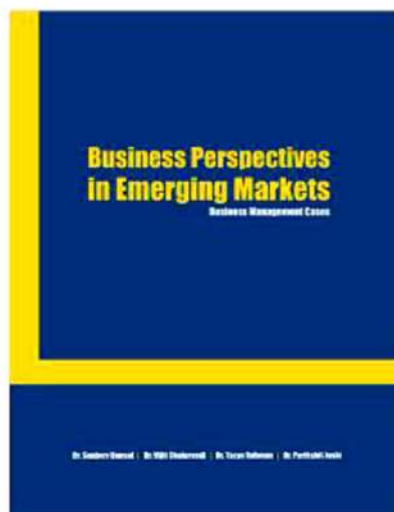
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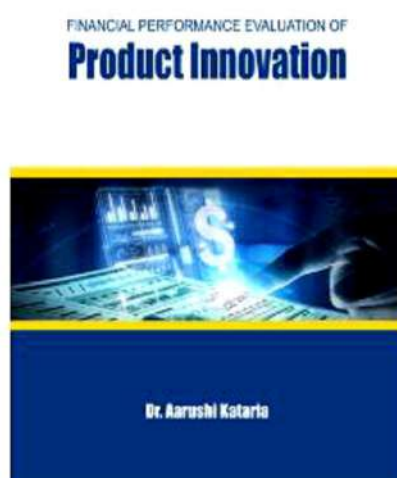
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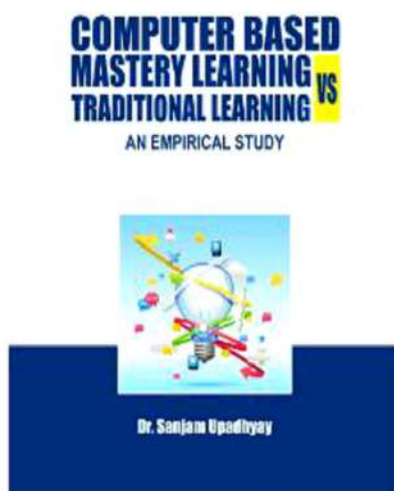
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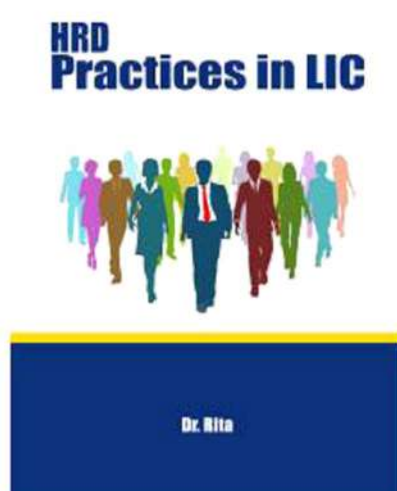
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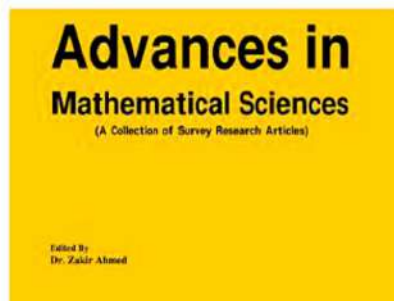
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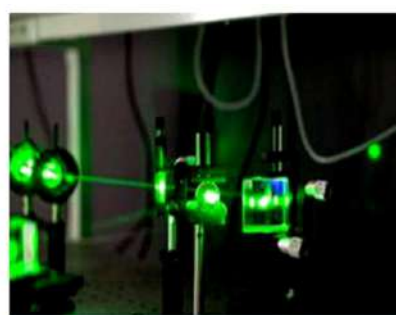


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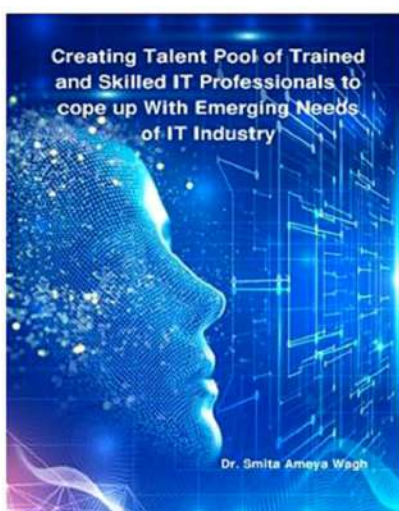
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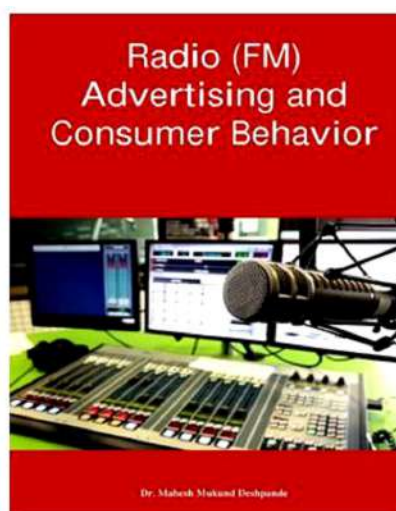
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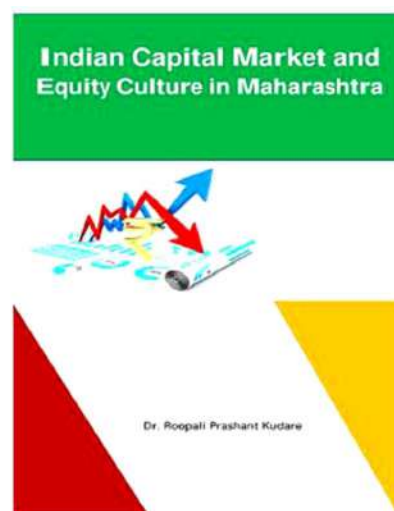
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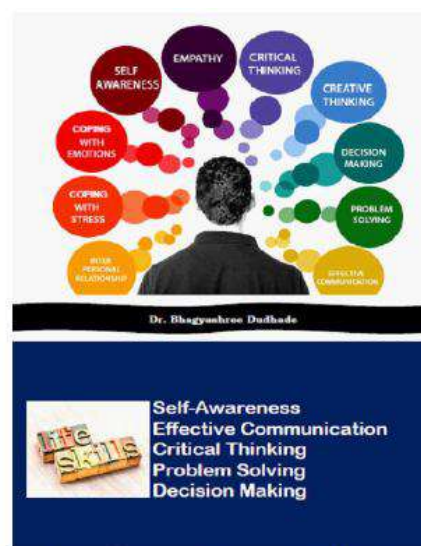
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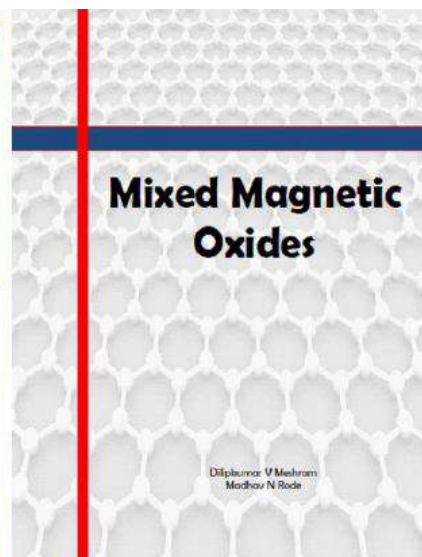
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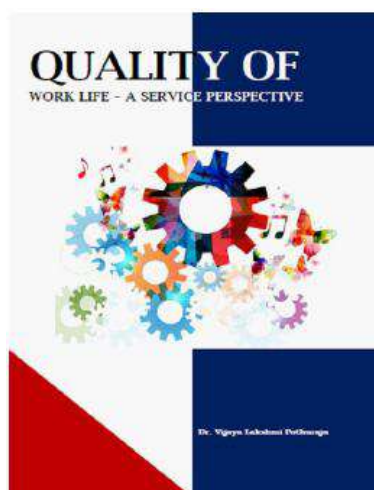
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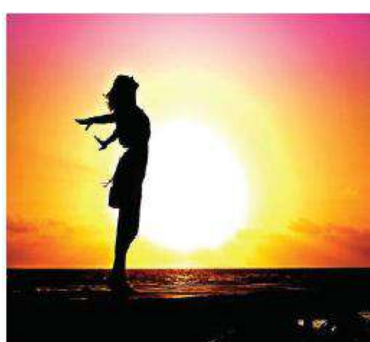
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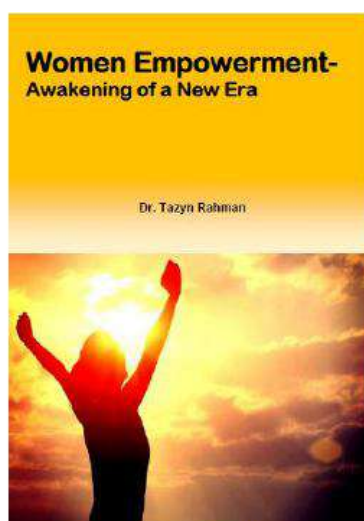


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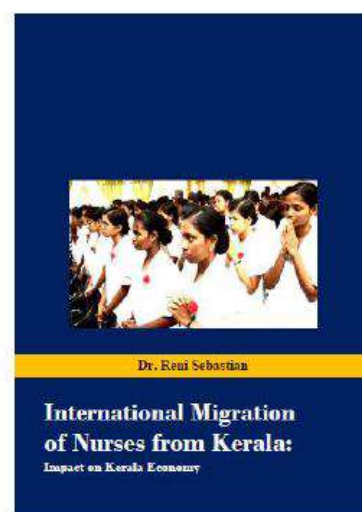


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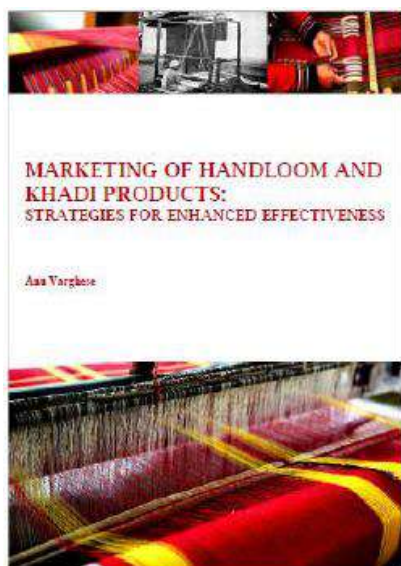
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