ISSN 2347-2839

International Journal of Applied Management Research

Vol. 4, No. 1, 2017

Department of Management, North- Eastern Hill University,
Tura Campus, Tura- 794002, Meghalaya, India

International Journal of Applied Management Research

Vol. 4, (No. 1), 2017

Published by:
Department of Management, North- Eastern Hill University, Tura Campus (India)

ISSN: 2347-2839

International Journal of Applied Management Research

Journal of Department of Management, NEHU, Tura Campus, Meghalaya (India)

Volume 4, Number 1

CONTENTS **PAGE NO.**

Cover

ISSN 2347-2839

International Journal of Applied Management Research

Vol. 4, No. 1, 2017

Department of Management,
North- Eastern Hill University,
Tura Campus, Tura- 794002, Meghalaya, India

Editorial Board

Guidelines for Authors

The Journal

International Journal of Applied Management Research (IJAMR) is a bi-annual, peer-reviewed international journal published by the Department of Management, North- Eastern Hill University, Tura Campus, Meghalaya (India) and is committed in providing a platform to the academicians and practitioners of the globe to present their academic understanding and development in management and its allied areas to their counterparts across the globe.

Publication Process

The manuscript (research papers/articles/case studies etc.) submitted by the authors for publication will be initially reviewed by a review committee for its suitability. The committee reserves the right to reject/return any manuscript if it is found not suitable for publication without specifically mentioning the reasons for doing so. Manuscript found suitable will be sent to two or more reviewers for blind review. The compiled comments of the reviewer will be sent to the first author (unless otherwise specified) to make necessary corrections and modifications. The revised paper should be resubmitted within one month for publication. On publication each author will receive a copy of the journal free of cost.

Submission Guidelines

1. The paper should be original and unpublished work of the author(s). The paper should not be under consideration elsewhere for publication
2. Paper should focus on management and its allied areas with sound and rigorous methodology and analysis. The paper should be either concept based or empirical with practical applicability or policy implications.
3. The author(s) should send a soft copy of the manuscript in MS Word to journalmbanehu2012@gmail.com
4. The manuscript with 1.5 spacing must be typed on a standard A-4 size paper, with 12 font size and in Times New Roman. The margin should be 2.5 cm on all sides.
5. The first page of the article should have only the title of the article; name, designation, affiliation, address and contact details of the author(s). Except first page author's reference should not be found on any other page.
6. Second page should have title of the article and an abstract (not exceeding 250 words) clearly depicting the theme, objective, methodology and key findings and policy implications of the research. Around 5- 6 key words of the article should be written below the abstract.
7. All tables, figures, pictures, illustrations should be clearly numbered and should be placed immediately below its reference in the text of the article.
8. For all bibliographical citations and references, APA style of referencing should be followed.

Copyrights

All the copyrights of the manuscript rest with the Department of Management, NEHU, Tura Campus. Authors are required to transfer all the copyrights of the manuscript to the department as well as certify that all the copyright requirements relating to the material used (directly and indirectly) in the manuscript have been duly met by them. The responsibility of the views expressed in the manuscripts (research papers/articles/case studies etc.) of this journal will lie with the respective author(s) and will not reflect the opinion of the department and the university.

International Journal of Applied Management Research

The Department

The Department aspires to be an eminent Institution in the field of Education and research in the Region, engaged in building and promoting contemporary Management knowledge, Development of Management skills and inculcating professional attitude among motivated individuals of North-East in particular and of other parts of country in general for preparing them to assume positions of responsibility and leadership in all walks of mercantile endeavors. This spirit is very much enshrined in its beautifully crafted mission. The Department is established with an objective to provide the students with an appropriate combination of conceptual framework and practical insight into managerial challenges and business opportunities for grooming Managers of 21st Century. The issues relating to faculty, research and quality education constitute the core of an educational process. Management Education is no exception. The competency and dedication of teachers, the constant upgradation of the syllabus, the level and quality of inputs, performance levels are some of the basic determinants putting litmus to our performance. Department continuously invites business academics and professionals from industries to update our students with the latest happenings in more holistic perspectives

In its continuous effort to enrich the management discipline, the department introduces IJAMR with the following objectives :

Objectives of IJAMR:

* To promote empirical research in various functional areas of management
* To provide a platform to researchers/practitioners of management and its allied areas to disseminate new management models and theories.
* To develop and reorient management thought process from inter and trans- disciplinary perspective.
* To encourage research towards developing culture and nation specific management interventions.

Address for Correspondence :

Managing Editor
International Journal of Applied Management Research (IJAMR)
Department of management,
North- Eastern Hill University, Tura Campus- 794002
E- mail : journalmbanehu2012@gmail.com

International Journal of Applied Management Research,
Vol. 4(No.1), Page : 1 - 10

Influence of Perceived Price Fairness on Buying Decision of Rural Consumer in India

M. K. Awasthi
Indian Institute of Management,
Prabandh Nagar, Off Sitapur Road Lucknow -226013 UP INDIA

Abstract :

Recent changes in national and global business environment have forced companies to re-evaluate their pre-conceived notions about profit opportunities in serving the relatively poor rural consumer located in remote and dispersed rural areas. In present rural marketing environment rural consumer do not have problem of limited choice but his limited exposure with agencies located outside their environment makes him vulnerable for charging very high prices by the retailers. In this context perception of reliability of retailer about price fairness is very critical for winning trust of rural consumer. Study attempt to analyses influence of perceived price fairness on buying behavior of rural Consumer.

Findings of the study show that six variables such as age of the respondent, quality of service, location of shop, preacquaintance with the shop keeper, and payment on credit basis and availability of parking variables affect price fairness perception of rural consumer significantly. The facility to buy on credit is the only variable that negatively affects consumers' fairness perception with the specific rural retailer. The study results also suggest that increase in consumer expenditures is positively related with the positive price fairness perceptions. Study results show that except education level, all other socio-economic variables such as age of the respondent, gender, household income and marital status have statistically significant influence over the level of consumer expenditure. Three contextual variables such as location of the shop, the ability to pay on credit and the parking availability variables are found to exert statistically significant and positively influence on the level of consumer expenditures.

INTRODUCTION :

Recent changes in national and global business environment have forced companies to re-evaluate their pre-conceived notions about profit opportunities in serving the relatively poor rural consumer located in remote and dispersed rural areas. Now it is a well accepted fact that the bottom of the consumer pyramid highlights the way to commercial success and societal improvement. In this context India's vast untapped rural market with 742 million prospective customer present a huge market growth potential for the companies, especially in a market landscape where competition is growing very fast.

However, extending the marketing activities in rural areas is not very easy as marketers are faced with entirely different set of business environment when marketing in rural areas as compared to urban areas. Though first movers in the rural market command consumer loyalty and retail shelf space but chances of failure of rural marketing strategy is also very high for these first movers. Discovering the distant market early with lowest probability of marketing failure is therefore critical. The marketers can not afford to wait, hoping to tap the potential at some future date. For late entrant, growing competition will make entry into rural markets very difficult. Marketing strategy formulators therefore needs better understanding of organized frame work that helps in developing better understanding of these markets.

In present rural marketing environment rural consumer do not have problem of limited choice but his limited exposure with agencies located outside their environment makes him vulnerable for charging very high prices by the retailers. In this context perception of reliability of retailer about price fairness is very critical for winning trust of rural consumer. Present paper therefore attempt to analyses influence of perceived price fairness on buying behavior of rural Consumer.

OBJECTIVES :

Study aims at following specific objectives -

1. To analyze the role of price fairness perceptions as a individuals' buying decision influencing factor.
2. To identify factors which influences price fairness perceptions.
3. To compare role of price fairness perceptions on individuals' buying decisions.

METHODOLOGY :

SAMPLING DESIGN AND DATA COLLECTION :

Multistage stratified random sampling technique has been used to collect primary data for this study. In the first phase, out of 29 States of India, State of U.P. has been selected purposively on the basis of highest concentration of rural population in the state. In the second phase, from 77 districts of the state 'Jalaun' didstrict has been selected randomly. In the third stage, a sample of 12 village markets (Seengpura, Bhadwan, Sahav, Jaggammanpur, Rampura, Hadrukh, Madaripur, Gopalpura, Ait, Shankarpur, Ata, Saidnagar and Akodi) have been drawn from various regions of Jalaun district, selected in first stage. Finally a sample of 15 buyers at three different time periods (morning, noon and afternoon) have been drawn on simple random basis from each village market selected in earlier stage. Primary and secondary data collection exercise was carried out during April, 2012 to March, 2013.

CONCEPTUAL FRAME WORK :

For studying impact of price fairness on buying decisions of rural consumer, allocation choice problem based analytical model (Irne and Anastasia, 2006) has been used. Fairness is very subjective concept and can very from customer to customer. Therefore we need to define fairness before we can take up fairness as a determinant of buying decision. For the present study fairness is defined as 'price fairness' and as perceived by the consumer in a buying process. For the purpose of simplicity, consumers' perceptions of price fairness is treated as an observed outcome (Baumol, 1982).

In the study consumers' buying decision has been treated as the outcome of an expenditure allocation problem (McFadden 1999). The expenditure allocation problem considered here is that of a rural consumer having to decide how much commodity he has to buy at a given rural shop. In order to elaborate analytical model used in this study, let us consider a set of N rural consumers facing the choice of shopping from a set of M rural retailshops in the village market.

Decision problem faced by ith rural consumer (i = I …….N) choice of shopping from the jth rural retail shop (j = 1, . .. , M) is formulated as the buying choice outcome ' yi' of ith rural consumer's allocation problem. This outcome yi may be presented in the following form.

$$Y_i = \beta' X + \delta EPF_1 + \varepsilon_i \qquad i = 1,.., N \qquad \ldots\ldots\ldots\ldots\ldots\ldots\ldots(1)$$

Where,

- * X is a vector containing contextual factors indicating the level of information that is available to a consumer i. In our case this vector refers to the characteristics of rural retail shop, and buyer specific characteristics.
- * PPF stands for consumers' perception of price fairness underlying their choice to buy a good from the jth rural shop.
- * is an error term.

However, defining a price fairness judgment indicates that an individual's perception of price fairness (PPF) is itself a function of a number of factors (Akerlof, 1982). Therefore, price fairness perceptions may be considered to depend upon number of contextual and individual specific factors (Eckel and Grossman, 1996, Rabin, 1993). That, in turn, indicates that the coefficient of the perceived price fairness variable in equation (1) does not actually measure the effect of price fairness perceptions upon the level of consumer buying. Equation (2) explains price fairness perceptions to be a function of number of determinats as explained below.

$$PPF_i^* = \gamma^{/} w_i + u_i \qquad \text{.....................(2)}$$

where PPF stands for rural consumers' perceptions of price fairness, y is a vector of contextual and individual specific characteristics indicating rural consumers level of information and their ability to process available information, and u is an error term.

In the case of fair/unfair judgments, as in the present study, equation (2) may be rewritten as:

$$\text{PPF1} = 1 \quad \text{if PPF} > 0, \qquad 0 \text{ otherwise} \qquad \text{..................... (3)}$$

Coupled with the expenditures equation, we find that :

$$E\left[y_i \middle| PPF_i = 1\right] = \beta^{/} x_i + \delta + E\left[\varepsilon_i \middle| PPF = 1\right] = \beta^{/} x_i + \delta + p\,\sigma_\varepsilon \lambda\left(-y^{/} w_i\right)$$

.....................(4)

Equation (4) indicates that price fairness perceptions relate to a self-selection problem where certain values of the dependent variable y are observed for specific price fairness judgments. Thus, the rural consumers' allocation choice problem is expressed through this equation as "level of buying realized at the rural retail shop j given the price fairness evaluation of a transaction with rural retail shop j.

Since, the perceived price fairness variable, PPF, takes up the form of a binary qualitative variable, fair/unfair, the appropriate empirical treatment effects model is one of a dummy variable that may take on the following form (Greene, 1997; Wooldridge, 2002) :

$$y_i = \beta^{/} X + \delta EPF_1 + \varepsilon_i \qquad \text{..................... (5)}$$

$$PPF_i^* = \gamma^{/} w_i + u_i \qquad \text{.....................(6)}$$

PPF = 1 if PPF* > 0 and PPF = 0 if PPF* 0 .... (7)

where the dependent variable y denotes rural consumer buying expenditures realized at given rural retail shop. We may use a two stage least squares method of estimating equation (5) using as the instrumental variable for PPF the predicted probabilities from the probit equation (7). This estimation technique provides consistent estimates of the associated parameters (Barnow, 1981).

Above approach provides us an analytical framework that can be used to empirically test the widely acknowledged relationship between price fairness perceptions and buying decision of rural consumer (Irne and Anastasia, 2006) in India.

PROFILE OF THE STUDY AREA :

India has a huge untapped rural market. According to a McKinsey survey, rural India will provide a market worth $500-600 billion by 2020 (CII, 2006). It is precisely due to this reason that in recent years, Indian rural markets have assumed critical importance in overall growth of the economy. Rising purchasing power in rural areas is facilitating increased consumption of large quantity of industrial and urban manufactured products. Table 1 indicate various rural market potential parameters. These parameters indicate attractiveness of rural market to various companies.

Table 1

What makes Indian Rural Markets Attractive?

Sl. No.	Parameter	Size
1.	Customer base	742 million people
	Estimated annual size of the rural market	
2.	FMCG	Rs 65,0 Billion
3.	Durables	Rs 5,0 Billion
4.	Agri-inputs (incl. tractors)	Rs 45,0 Billion
5.	2 / 4 wheelers	Rs 8,0Billion
6.	Credit Cards issued in rural areas	41 million Kisan Credit Cards
7.	Cumulative credit	Rs 977 billion
8.	Rural HHs availing banking services	42 million
9.	Number of rural HH Investing in savings instruments	6.6 million

Source : Awasthi, 2007

DATA ANALYSIS :

The analytical model developed above has been used for analysing a random sample data set of 240 cross-sectional questionnaires. Personal interviews with rural consumers were conducted at rural multi commodity shops. For the purpose of this study a wide range of information regarding consumers' perceptions over the attributes of rural shop (location of shop, size of shop, product varieties available in the shop, preacquaintance with the shopkeeper, availability of parking, payment on credit basis, etc.), their shopping pattern and their socio-economic profile (gender, age, educational status, marital status, income level, employment, etc.) have been collected.

Study used consumers' expenditures at a specific rural shop and their perceptions of price fairness underlying the transaction with that shop as two dependent variables.

Five point Likert type scale ranging from unfair to fair have been used to construct the perceived price fairness variable. Rural consumers in the study area were asked to indicate the level of price fairness that they would assign to the specific buying done by them.

Estimates of the system of equations (5) and (7) were obtained using two step procedure of estimation. First, a probit equation was estimated for the variable affecting the price fairness. The fitted values from this estimation were then included as an instrumental variable in the two stage least square estimation of equation (5).

The marginal effects analysis was carried out so as to measure the magnitude of the effect that the explanatory variables exercise upon the probability of consumers perceiving a transaction as price fair.

In the study, to check if the parameters associated with the explanatory variables are equal to zero, a joint X 2 test has been used. R2 values have been used to obtain results of goodness of fit of the model.

RESULTS AND DISCUSSION :

Determinants of price fairness perception

Results of the study presented in table 2 indicate significant and r2 values. These high values indicate a good fit of the model. Prediction accuracy of this model is found 68.65 percent.

Table 2

Estimated Model Results

Sl. No.	Variable	Coefficient Estimate	Asymptotic t-ratio	Marginal Effect	Asymptotic t-ratio
1.	Constant	-2.997	-3.109 * *	-	-
2.	Age	0.487	2.007*	0.220	2.234
3.	Service	0.534	4.103**	0..209	4.112
4.	location of the shop	0.423	2.663*	0.172	2.621

5.	Preacquaintance with the shopkeeper	0.485	3.925**	0.224	3.415
6.	Gifts	0.115	1.220		
7.	Variety	0.237	1.480		
8.	Payment on credit basis	-0.341	-2.511*	-0.425	-2.450
9.	Parking	0.560	2.663*	0.235	2.512
10.	Space	0.245	0.111		

Goodness-of-fit measures	Value
Number of observations	402
Log-likelihood	-242.30
Restricted log-likelihood	-268.34
X2(df)	111.53 (9)
McFadden's p2	0.194
Percentage of correct predictions	68.65

Notes : **Significantly different from zero (p <0.05); * *significantly different from zero (p <0.01)*

Results of the study reveal that among various socio economic variables which are assumed to influence price fairness perception of rural consumer, only one of the socio-economic variables, i.e., the age of the respondents, has emerged as statistically significant variable. This variable was carried forward in further analysis.

Results show that out of the nine explanatory variables, six variables such as age of the respondent, quality of service, location of shop, preacquaintance with the shop keeper, payment on credit basis and availability of parking affect perception of price fairness significantly. The facility to buy on credit emerged as only variable that negatively affects consumers' fairness perception with the specific rural retailer. Further probing on this finding revealed that rural consumer believe that when rural shop keeper allow them to buy commodities on credit, it is but natural that they will recover it by charging high unfair price.

Marginal effect of independent variables on fairness perception

In the study, effects of marginal increasing in one of the independent variables on the probability of price fairness perception of rural consumer have been estimated. The marginal effects analysis reveals extent of change in probability of fairness perception if the independent variable changes by a marginal amount from its sample mean. For dummy independent variables the marginal effects has been analyzed as discrete changes when the respective dummy takes its two different values, 0 and 1, respectively.

In the study, marginal effects are considered for only statistically significant variables. Results of the study indicate that variables such as the age of the respondent, quality of marketing service, preacquaintance with the shopkeeper and the parking availability near shop increase the probability that a consumer will view a specific transaction as fair by more than 21 percent. Study finding indicate that magnitude of the influence of location of the shop is smaller but significant as well. Location of shop increases the probability of price fairness, by 15.9 percent. The magnitude of influence of buying on credit was however; found decreasing on probability of fair evaluations since ability to pay on credit decreases the probability of evaluating the transaction as fair by 15.4 percent.

Results of the consumers' expenditures equation

Results of goodness-of-fit measures, measured through r2 are presented in Table 3. Results indicate a satisfactory fit of the estimated model. The likelihood ratio test is also highly significant. The model accounts for 29.90 percent of the expenditures variance in the sample. Results of the study reveal that eight explanatory variables have significant impact on buying expenditure of rural consumer. The perception of fairness is found to be positively related with the level of expenditure.

Table 3

Two stage least squares estimated results of the consumers' expenditure equation

Sl. No.	Variable	Coefficient	Estimate	t-value
1.	Constant	2.576	1.958*	
2.	PPF	0.485	2.112*	
3.	Age	-0.159	-3.421* *	
4.	Income	0.223	2.215 *	
5.	Education	-0.0624	-0.475	
6.	Gender	0.339	3.540* *	
7.	Marital status	0.402	2.354*	
8.	Store type	0.192	2.113*	
9.	Gifts	0.096	1.221	
10.	Credit cards	0.252	2.457* *	
11.	Parking	0.832	5.223 * *	

Goodness-of-fit measures	Value
Number of observations	402
Log-likelihood	-473.11
Restricted log-likelihood	-612.30

McFadden's p2	0.169
F [10, 391]	18.25
Adjusted R2	29.90

Notes : **Significantly different from zero (p <0.05), **Significantly different from zero (p <0.01)*

Study results revealed that except education level, all other socio-economic variables such as age of the respondent, gender, household income and marital status have statistically significant influence over the level of consumer expenditure. Study finding also suggest that the level of consumer expenditures is negatively affected by the respondent's age. This could be attributed to the fact that in a typical rural culture in India, expenditure needs of the people declines with the age and there is tradition of passing on house hold responsibilities to his son once he gets married. In such situation all actual buying is done by him in consultation with his elder /father who retain responsibility of a family head. Three contextual variables such as location of the shop, the ability to pay on credit and the parking availability are found to exert statistically significant and positively influence on the level of consumer expenditures.

CONCLUSION :

Results show that six variables such as age of the respondent, quality of service, location of shop, preacquaintance with the shop keeper, and payment on credit basis and availability of parking variables affect price fairness perception of rural consumer significantly. The facility to buy on credit emerged as only variable that negatively affects consumers' fairness perception with the specific rural retailer. The marginal effects analysis results indicate that the age of the respondent, service quality, offers and the parking availability variables increase the probability that a consumer will view a specific transaction as fair. Study found that location of shop increases the probability of price fairness, by 15.9 percent. The findings of the study also suggest that increase in consumer expenditures is positively related with the positive price fairness perceptions. Study results show that except education level, all other socio-economic variables such as age of the respondent, gender, household income and marital status have statistically significant influence over the level of consumer expenditure. Three contextual variables such as location of the shop, the ability to pay on credit and the parking availability variables are found to exert statistically significant and positively influence on the level of consumer expenditures.

References :

Akerlof, G.A. 1982. 'Labor contracts as a partial gift exchange', Quarterly journal of Economics, Vol. 97, pp. 543-69.

Awasthi Maya Kant. 2007.'Surging Indian Rural Market' Talk delivered in North Eastern Hill University Tura , India

Barnow, B., Cain, G. and Goldberger, A. 1981, 'Issues in the analysis of selectivity bias', in Stromsdorfer, E. and Farkas, G. (Eds), Evaluation Studies Review Annua4 Vol. 5, Sage, I3 everly Hills, CA, p. Sage.

Baumol, Wj. 1982. 'Applied fairness theory and rationing policy', American Economic Review, Vol. 72, pp. 639-51.

Confederation of Indian Industry (CII) Report. 2006, CII , New Delhi

Eckel, C.C. and Grossman, P.J. 1996, 'The relative price of fairness: gender differences in a punishment game', Journal of Economic Behavior & Organization, Vol. 30, pp. 143-58.

Greene, W. 1997. Econometric Analysis, Prentice-Hall International, London.

Irene D and Anastasia P. 2006. 'Consumers' expenditures and perceived price fairness', International Journal of Social Economics, Vol. 33 No. 11, 2006, pp. 766-780

McFaddea, D. 1999, 'Rationality for economists?', Journal if Risk and Uncertainly. Vol. 19, pp 73-105.

Rabin, M. 1993. 'Incorporating fairness into game theory and economics'. American Economic Review, Vol. 83, pp. 1281-302.

Wooldridge, J.M. 2002. Econometric Analysis of Cross Section and Panel Data, The MIT Press, Cambridge, MA.

International Journal of Applied Management Research,
Vol. 4(No.1), Page : 11 - 38

Relook Into the Spill over Relationship of Motivators, Hygiene Factors with Job Satisfaction: A Case of Public and Private Sector Telecom Organizations

Chayanika Senapati
Maniram Dewan School of Management, K K Handiqui State Open University, Guwahati
Rinalini Pathak Kakati
Department of Business Administration, Gauhati University

ABSTRACT :

Job Satisfaction in workplace is always viewed as an important aspect for better performance and productivity. The present paper mainly focuses on the motivator and the hygiene factors that lead to Job Satisfaction as discussed by Fredrick Herzberg (1959) and study also examines the direct and indirect spillover relationship among motivator and hygiene Factors with Job Satisfaction. Data for the present study were collected from 120 employees working in public and private telecom sector organizations located at Guwahati. After employing correlation analysis and structural equation modeling (SEM), the results revealed that there exists low to high correlation among Motivator factors and Hygiene factors leading to Job Satisfaction which contradict the findings of Herzberg's Two Factor Theory which states that hygiene factors do not motivate but its absence leads to Job Dissatisfaction. The new finding of this study is that all the motivator factors and hygiene factors have indirect spillover impact on Job Satisfaction for the employees of the Telecom sector.

Key Words : *Hygiene factors, Job Satisfaction, Motivator factors and Structural equation Modeling (SEM)*

INTRODUCTION :

The history of Job Satisfaction started in the early 1900's. Lawler (1973) states that, 'Overall Job Satisfaction is determined by the difference between all those things a person feels he should receive from his job and all those things he actually does receive'. According to Spector (1997) Job Satisfaction is 'the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs'.

It can be mentioned here that, the inception of the study on Job Satisfaction was the

Hawthorne study conducted by Elton Mayo during 1924-1933 revealed that any changes in working condition lead to temporarily increase in productivity. From the study, it was revealed that there are certain motivational factors that lead to Job Satisfaction namely communication, teamwork, decision making, wellbeing, interesting work and non repetitive work. The findings also suggest that 'pay' is not only the factor that leads to Job Satisfaction but there exists certain other factors for which the employees work in an organization. To find out the other factors there were many studies conducted by other research scholars that were investigated in order to examine the motivational factors that may lead to Job Satisfaction.

After that many theories and studies were done, out of which Frederick Herzberg's Two -Factor Theory's (1959) contribution on Job Satisfaction was one of the important research findings. Herzberg et al (1959) used Maslow's Need Hierarchy Theory to formulate the motivator/hygiene theory of employee motivation. Herzberg's findings revealed that Job Satisfaction and Job Dissatisfaction are caused by different and independent factors namely intrinsic or motivator factors and extrinsic or hygiene factors. Their findings and methods were criticized by Schiender & Locke (1971), Wall (1973), Locke (1976) and Maidani (1991) and they partially nullified Herzberg's Two factor Theory and stated that Motivator and Hygiene factors are different but interdependent.

REVIEW OF LITERATURE :

The research on Job Satisfaction of employees has been done in different organizations which were started in the early 1960's.From the literature review it has become apparent that, in most of the research which were conducted in India as well outside India applied the Model of Herzberg's Two-Factor Theory (1959) of motivation. The Two-Factor Theory of motivation has been mostly used to evaluate and examine the level of Job Satisfaction of the employees. Herzberg et al (1959) in their study found that Job Satisfaction results from two kinds of factors namely intrinsic or motivators and extrinsic or hygiene factors.

In India, more in-depth studies were done after 2000 in different types of organization to test the applicability of Herzberg's Two factor Theory of Motivation. In Lahiri and Srivastava (1967) study it was found that the motivating factors which give more satisfaction on job of middle level managers were responsibilities, domestic life, accomplishment in the job and utilization of abilities on job. Pathak (1983) findings suggested that the employees give more importance to decision making authority, opportunity for personal growth and development and recognition for good work done. Mishra (1992) in their study found significant difference between the Public and Private sector employees' perception with regard to climate satisfaction relationships and the results revealed that the factors that influence the organisational commitment and Job Satisfaction had been scope for advancement, monetary benefits, objectivity and rationality, recognition and appreciation, training and education and welfare facilities. Anitha R. (2011) mentioned in a study that the most important motivating factor that leads to Job Satisfaction are the grievance handling procedures of the organization, working conditions, welfare facilities, accident compensation and reward system. Singh and Sinha (2013) in their study examined the level of Job Satisfaction among 69 executives from various industries serving at junior, middle and senior levels. A high level of Job Satisfaction is found to be arises from nature of work, organizational culture and organizational climate among the executives.

Literature Review based on the studies carried out in different parts of the world:

Mullins et al. (1988) in their study found that the highest level of Job Satisfaction were found with working conditions and concluded that pay and salary and working condition found to be the important motivational factor for the employees. Nerison, Heidi A (1999) in their study using the Minnesota Satisfaction Questionnaire-short form (MSQ-short form) revealed that the employees found to be more satisfied with the motivator factors related to opportunities for advancement, recognition, and achievement and found to be less satisfied with the hygiene factors such as pay, company policies, supervision, working conditions, interpersonal relations, and security. Ramayah T et al (2001) in their study revealed that work itself was found to be the most important motivating factor followed by supervision and promotion. Co-workers support was ranked as a neutral motivating factor and pay regarded as the least important factor. Smerek R. E and Peterson M (2007) findings suggest that female employees were satisfied with working conditions but were dissatisfied with the 'salary'. The study found a difference between men and women in terms of growth opportunities, female employees were more satisfied with their work experience. In Ayub N and Rafif S (2011) study, it was found that employees were motivated by working environment, co-workers, interesting assignments and feedback. The study also revealed that compensation like money and the need for recognition and influence were important motivating factors. Cong NN and Van N D (2013) highlighted the effect of Motivation and Job Satisfaction on employee's performance and study revealed that pay and promotion are the important motivational factors followed by good working condition that leads to Job Satisfaction. The study also revealed that factors like interesting work and growth also found to be important factors that motivate the employees.

HYPOTHESIS FORMULATION FOR THE PRESENT STUDY :

After reviewing the important and relevant literatures, this study has concentrated on Herzberg's two factors Theory of motivation. The study wants to examine the direct and indirect spillover relationship among Motivator and Hygiene Factors with Job Satisfaction. Hypotheses 1 to 11 determine the direct and indirect spillover relationships among Motivator factors and Hygiene factors with Job Satisfaction which have been drawn from the model of 'Smerek & Peterson' (2007). These Motivator factors and Hygiene factors have been originally drawn from Herzberg but have been modified by Smerek & Peterson (2007).

Direct impact of the Motivator, Hygiene Factors and Job Satisfaction

As discussed earlier, Herzberg et al (1959) identified two distinct and independent variables namely Motivator and Hygiene factors. Motivator factor enhances Job Satisfaction and absences of Hygiene factors create Job Dissatisfaction. After that enumerable research has been carried out on the basis of this theory.

The following hypotheses have been proposed with respect to Motivator factors on Job Satisfaction.

H_{01} : 'Work Itself' has a positive relationship on Job Satisfaction
H_{02} : 'Responsibility' has a positive relationship on Job Satisfaction
H_{03} : 'Advancement' has a positive relationship on Job Satisfaction
H_{04} : 'Accomplishment' has a positive relationship on Job Satisfaction
H_{05} : 'Recognition' has a positive relationship on Job Satisfaction

Similarly, the following five hypotheses have been proposed with respect to Hygiene Factors:
H_{06} : 'Company Policy' has a positive relationship on Job Satisfaction
H_{07} : 'Working Condition' has a positive relationship on Job Satisfaction
H_{08} : 'Salary' has a positive relationship on Job Satisfaction
H_{09} : 'Job Security' has a positive relationship on Job Satisfaction
H_{10} : 'Social Status' has a positive relationship on Job Satisfaction

This holds true for the sector undertaken for the Study.

Indirect spillover impact of the Motivator, Hygiene Factors and Job Satisfaction

The following hypothesis has been formulated:
H_{11} : Significant spillover relationships of Motivator factors are more than that of significant spillover relationships of Hygiene factors leading to Job Satisfaction.

This holds true for the sector undertaken for the Study.

THEORETICAL BACKGROUND :

Job Satisfaction has been a topic for research from the early 1900's and many theories have been constructed to determine certain factors that lead to Job Satisfaction. One of the earliest studies of Job Satisfaction was Hawthorne study which was conducted by Elton

Mayo during 1924-1933 in order to examine the effects of various conditions on workers' productivity. After that Herzberg et al (1959) came out with an experiment with Engineers and Accountants to examine certain different and independent set of factors that makes them satisfied/dissatisfied with their job. According to Herzberg, employees are satisfied with their work when they associate their satisfaction with the 'Work Itself', and employees become dissatisfied when they are concerned about the external environment of the Job in which they work.

Herzberg came out with two kinds of factors namely Motivator factors which is intrinsic in nature and Hygiene Factors which is extrinsic in nature. Herzberg has identified the following Motivator factors which enhances and motivates employees for higher performance namely Work Itself, Achievement, Recognition, Responsibility, Advancement and Growth and the Hygiene factors that are external in nature and which prevent job dissatisfaction are identified as Company Policy, Supervisor Behavior, Relationship with Superiors, Working Condition, Salary, Relationship with Co-workers, Relationships with Subordinates, Social Status, Personal Life.

Herzberg et al (1959) states that Motivator factors appraise the level of Job Satisfaction and Hygiene factors prevent Job Dissatisfaction. According to Herzberg, Job Satisfaction is not through improving these Hygiene Factors alone but also by increasing the Motivator factors. However, it is important to mention here that, when Hygiene factors are at low level, the employees are dissatisfied but the reverse is not true.

Again, Kreitner, Kinicki and Buelens B (1999) cited by Manisera M et al (2005), underline that Herzberg's theory does not place dissatisfaction and satisfaction at 'opposite ends of a single, unbroken continuum' but it considers satisfaction and dissatisfaction as separate and distinct experiences. But, Schiender & Locke (1971), Wall (1973) and Locke (1976) cited by Manisera M (2005) confirmed that Motivator factors and Hygiene factors are separate but are interdependent. Again, Maidani (1991) conducted a study to examine the 'Two factor Theory' among Public and Private Sector employees, the study revealed that Motivator factors are found to be the source of satisfaction and Hygiene factors are also found to be the source of satisfaction indicating single continuum.

Accordingly, the study proposes to identify the presence of Motivator factors and Hygiene factors and its impact on Job Satisfaction by the following Model (Figure 1)

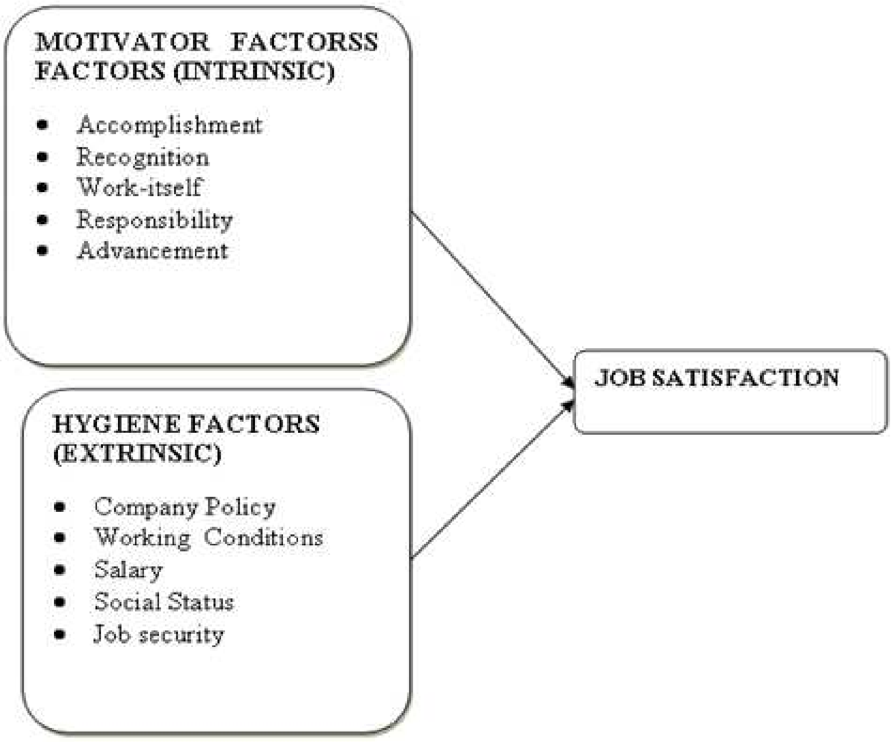


Figure 1 Model for Assessing Job Satisfaction adapted from Smerek and Peterson (2007)

RESEARCH METHODOLOGY :

RESEARCH DESIGN :

After reviewing the literatures for the present study, it has been found that almost all the studies confirmed certain relationship between Motivation and Job Satisfaction. Based on these findings of the reviewed literature, the present study has adapted causal research design as it wants to explicitly examine definite relationship among Motivator, Hygiene factors, Job Satisfaction among the employees working in Private and Public Telecom sector organizations located at Guwahati. As the causal research is based on highly structured form of analysis, the study at first identifies certain sets of dependent and independent variables to set up the research hypotheses.

SAMPLING FRAME :

The sampling frame includes the executive and managerial level employees (both male and female) of Telecom Industry belonging to Public and Private sector located at Guwahati, the premier city of North East. Both primary and secondary data has been used for the study. The sample size has been restricted to 120 executives and managerial level employees which have been stratified as 60 each from both private and public Telecom sector. Primary data has been collected through questionnaire survey by formulating appropriate sample and secondary data has been collected from different websites, journals and manuals.

QUESTIONNAIRE DEVELOPMENT :

The study used structured questionnaire to elicit Socio-demographic data and for Job Satisfaction Questionnaire, Minnesota Satisfaction Questionnaire (MSQ) has been used. MSQ uses a five-point Likert scale ranging from Highly Disagree (1) to Highly Agree (5). The MSQ conceptualizes satisfaction as related to either Hygiene or Motivators Factors of the job. For the present study, constructs have been slightly modified and narrowed down, the Motivators Constructs have been extracted from 13 statements and Hygiene Factors have been extracted from 12 statements from MSQ.

The Questionnaire has been divided into two parts.

Part I : The first part of the questionnaire has questions regarding demographic details of the respondents like Gender, Age, Relationship Status, Educational Qualification and Job and Promotion Tenure.

Part II : The second part of questionnaire has questions measuring Job Satisfaction. It contains 25 statements in a 5 point Likert scale which has been adapted from Weiss, D et al (1977) version of 'Minnesota Satisfaction Questionnaire'.

, make the different aspects of your job in the Likert Scale.

	1	2	3	4	5
I take pride for the job well done by me.					
I get full credit for the work I do.					
I enjoy the type of work I do.					
I take the full responsibility for planning of my work.					
I am happy with the way company policies are administered in this organization.					
I have a chance to build a definite place in the community.					
I am happy with the way my job provides security for my future.					
I am paid with a fair amount of pay for the work I do.					
I get full recognition I get from the work I do					
I like doing the things I do at work.					
I am always responsible for doing good/bad job					
I am satisfied with the promotions that are given out in the job					
I am happy with the company policies and the way they are put into practice					
I am satisfied with the physical surroundings where I work					
I am satisfied with the social position in the community that goes with my job					
My job provides steady employment					
I get fair pay compared to that of similar jobs in other companies.					
I am able to do something worthwhile.					
I am praised for doing a good job					
I have too much to do at work					
I have freedom to use my own judgment in the organisation					
I get a chance of getting ahead get promoted in the organisation					
The policies and practices toward employees of this company are fair					
I am satisfied with the pleasantness of the working condition					
This organisation provides me a status to be important in the eyes of others					

CONCEPTUAL FRAMEWORK OF STRUCTURAL EQUATION MODEL :

'Minnesota Satisfaction Questionnaire' 25 statements in a 5 point Likert Scale (Highly Agree - Highly Disagree) has been used to measure how the different Motivator factors and Hygiene factors effect Job Satisfaction. The following Structural Equation Model (SEM) has been evolved to evaluate the direct and indirect relationships among Motivator factors and Hygiene factors (See Figure 2).

The Structural Equation Model (SEM) specifies the relationship between latent or theoretical variables and is used to describe the causal effects and the amount of unexplained variance. To carry out SEM, firstly, the measurement model has been analyzed to ensure sufficient reliability and validity of constructs. In the second stage, the hypotheses of the relationship between the constructs have been tested. The study has employed the same model fit criteria recommended by 'Hu and Bentler' (1999) as 'Chi Square (?2)/df, Goodness of Fit Index (GFI), comparative fit index (CFI),Root Mean Square Residual (RMR) and acceptable models should have (?2)/df ? 3, RMR?0.1 and GFI and CFI greater than 0.90. '

At first, Cronbach's Alpha coefficients' have been used to examine the internal consistency of the constructs. Secondly, Confirmative Factor Analysis (CFA) with AMOS 20.0 graphics software for the measurement model with constructs has been performed. The measurement model uses the technique Confirmatory Factor Analysis (CFA) to specify the variables that will define each construct or factor. The constructs have been extracted from 'Minnesota Satisfaction Questionnaire' 13 statements relating to Motivator factors and 12 statements relating to Hygiene Factors. Five constructs relating Motivator factors are: 'Work itself, Responsibility, Advancement, Accomplishment and Recognition' have been identified from the 13 statements of Motivator factors and five constructs of Hygiene factors are: 'Company Policy, Working Condition, Salary, Security and Social Status' have been identified from the 12 statements of Hygiene Factors as given in Figure 2.The SEM tests the causal relationships among Job Satisfaction and the five Motivator factors and Hygiene factors and accordingly the hypotheses have been set up as given below separately each for Private and Public Sector employees for Telecom sector. Figure 2 shows the spillover equation modeling of relationship of Job Satisfaction and Motivator Factors & Hygiene Factors

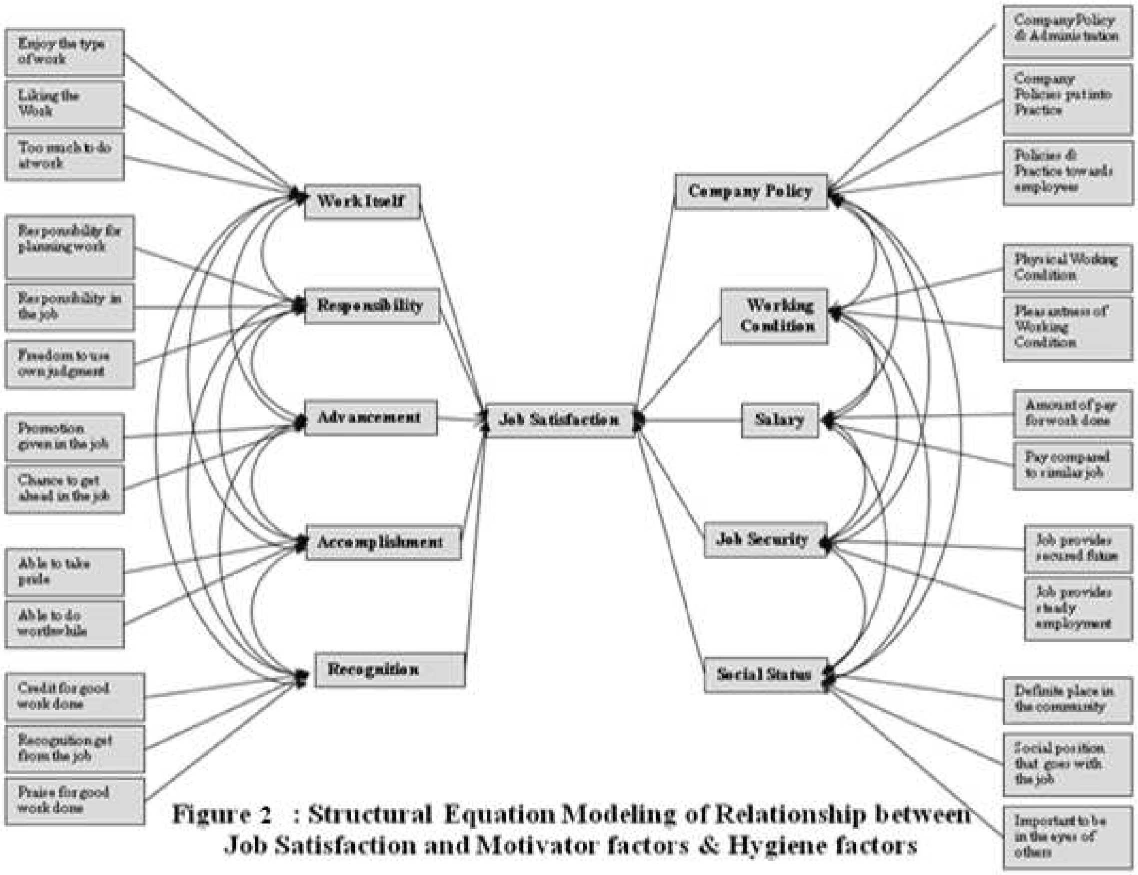


Figure 2 : Structural Equation Modeling of Relationship between Job Satisfaction and Motivator factors & Hygiene factors

APPLICATION OF STRUCTURAL EQUATION MODELLING FOR TELECOM SECTOR :

The SEM has been employed to evaluate the direct and indirect relationship of the five Motivator factors and five Hygiene factors with Job Satisfaction for both Private and Public Telecom sector. The constructs of the Motivator factors and Hygiene factors were already discussed above and a diagrammatical representation was also presented in Figure 2.

Confirmatory Factor Analysis for Motivator factors and Hygiene factors constructs for Telecom Sector

At first the Confirmatory Factor Analysis being performed to find the item to item correlation, which is represented by Cronbach's Alpha as shown in Table 1 and Table 2. The results of the Table 1 and Table 2 imply for further analysis of the data.

Table 1
Confirmatory Factor Analysis for Motivator factors for Private and Public Telecom Sector

Attributes	Standardized Factor Loadings for Private Telecom Sector	Cronbach's Alpha Value for Private Telecom Sector	Standardized Factor Loadings for Public Telecom Sector	Cronbach's Alpha Value for Public Telecom Sector
Factor 1				
Work Itself		.718		.766
Enjoy the type of Work	.744		.846	
Liking the Work	.729		.689	
Too much to do at work	.713		.836	
Factor 2				
Responsibility		.581		.807
Responsible for Planning the Work	.797		.812	
Responsibility in the Job	.757		.691	
Freedom to use own judgment	.549		.898	
Factor 3				
Advancement		.815		.698
Promotion Given				
In the Job	.890		.698	
Chance of getting ahead in the Job	.747		.765	
Factor 4				
Accomplishment		.644		.621
Able to take pride in job well done	.609		.851	
Being able to do something worthwhile	.604		.731	
Factor 5				
Recognition		.828		.558
Credit for good work done	.878		.772	
Recognition get from the Job	.719		.817	
Praise for good work done	.655		.914	

Table 2

Confirmatory Factor Analysis for Hygiene factors for Private and Public Telecom Sector

Attributes	Standardized Factor Loadings for Private Sector	Cronbach's Alpha Value	Standardized Factor Loadings for Public Sector	Cronbach's Alpha Value
Factor 1				
Company Policy		.661		.886
The way in which Company Policy are administered	.787		.770	
The way Company Policy are put into practice	.640		.883	
The policies and practices towards the employees	.673		.555	
Factor 2				
Working Condition		.509		.873
Physical Working condition of the Company	.581		.543	
The pleasantness of the working condition	.719		.699	
Factor 3				
Salary		.886		.666
The amount of pay for the work done	.683		.655	
Pay compared to that of other similar jobs in other companies	.820		.696	
Factor 4				
Job Security		.862		.875
The way job provides for secure future	.842		.832	
The way job provides for steady employment	.732		.742	
Factor 5				
Social Status		.691		.746
The chance to have a definite place in the community	.736		.809	

the social position in the community that goes with the job	.699	.673
The chance to be important in the eyes of others	.820	.847

ANALYSIS FOR PRIVATE TELECOM SECTOR :

Analyzing the data related to Part II of the Structured Questionnaire, the Mean scores of the five Motivator factors constructs and five Hygiene factors constructs have been evaluated and presented in Table 3.The individual items of the constructs have taken in a 5 point Likert scale with 1= Strongly Disagree and 5=Strongly Agree.

Table 3 shows the Mean scores of the Motivator factors and Hygiene factors among the employees of Private Telecom Sector.

Table 3

Mean Scores the Motivator factors and Hygiene factors for Private Telecom Sector

Motivator factors	Mean Scores	Hygiene factors	Mean Scores
Work Itself	3.4	Company Policy	3.3
Responsibility	3.4	Working Condition	3.3
Advancement	3.2	Salary	3.1
Accomplishment	3.7	Job Security	3.2
Recognition	3.6	Social Status	3.4

Table 4

Correlation among the Motivator factors and Hygiene factor in Private Telecom Sector

		Achieve-ment	Recog-nition	Work Itself	Respon-sibility	Advan-cement
Company Policy	Pearson Correlation	.543**	.625**	.478**	.606**	.544**
	Sig. (2-tailed)	.002	.000	.009	.000	.002
Working Condition	Pearson Correlation	.494**	.660**	.245	.683**	.400*
	Sig. (2-tailed)	.006	.000	.200	.000	.032
Social Status	Pearson Correlation	.637**	.497**	.521**	.432*	.378*
	Sig. (2-tailed)	.000	.006	.004	.019	.043
Security	Pearson Correlation	.429*	.281	.335	.382*	.507**
	Sig. (2-tailed)	.020	.140	.075	.041	.005

Salary	Pearson Correlation	.257	.093	.480**	.266	.567**
	Sig. (2-tailed)	.178	.631	.008	.163	.001

***. Correlation is significant at the 0.01 level (2-tailed).*
**. Correlation is significant at the 0.05 level (2-tailed).*

The result shows that both the Motivator factors and Hygiene factors are found to be present among the employees of Private Insurance sector and the overall Mean score of Motivator factors is 3.47 which is found to be higher than the overall Mean score of Hygiene factors which is 3.26.

Table 4 shows that, there exists low to medium correlation among most of the Motivator factors and Hygiene factors and as a result the path analysis under SEM has been constructed and hypothesized in subsequent Tables.

Diagram showing direct and indirect spillover relationship among the motivator factors and hygiene factors with job satisfaction Private Telecom Sector

Figure 3 shows the diagram of SEM that shows the 'Path analysis' which measures the direct and Indirect relationship between the five constructs of Motivator factors and five constructs of Hygiene factors with Job Satisfaction.

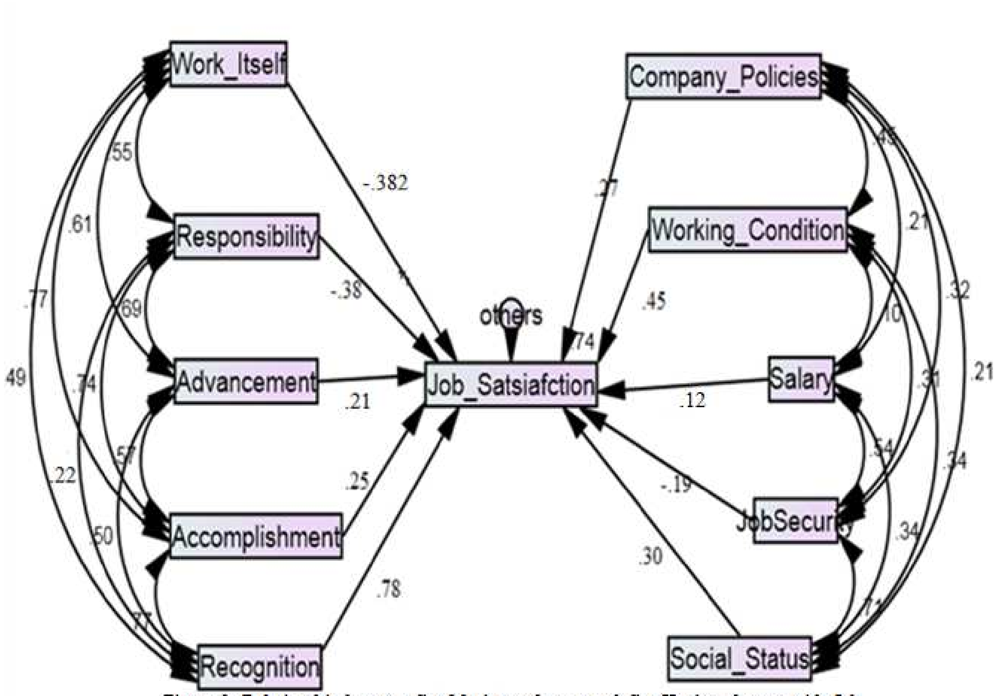


Figure 3: Relationship between five Motivator factors and five Hygiene factors with Job Satisfaction for Private Telecom Sector

Direct Path Analysis of Motivator factors with Job Satisfaction for Private Telecom Sector:

The direct path analysis has been carried out by performing SEM for the Private Sector Telecom employees and the following fit measures indicated acceptability of the SEM, with (?2)/df=2.45 (44 df) ,GFI=1.22,CFI= 1.1 being greater than 0.90 and RMR=0.08 being less than 0.1

Table 5

Measuring the direct effect of Motivator factors with Job Satisfaction for Private Telecom Sector

Hypothesis	Relationship	Standardized Coefficient	SE	p value
H_1	Job Satisfaction ← Work Itself	-.382	.219	.522
H_2	Job Satisfaction Responsibility	-.375	.171	.514
H_3	Job Satisfaction Advancement	.208	.217	.231
H_4	Job Satisfaction Accomplishment	.255	.256	.201
H_5	Job Satisfaction Recognition	.780	.224	.001*

**significant at the 5% level (2-tailed)*

Table 5 shows the path analysis which measures the direct relationship of the five constructs of Motivator factors on Job Satisfaction supports only one significant relationship. This model supports that, the impact of 'Recognition' (?=0.780, p? 0.001) is the important Motivator factor that directly contributes to Job Satisfaction.

Indirect Path Analysis of Motivator factors with Job Satisfaction for Private Telecom Sector :

Indirect path analysis has been done to know the indirect impact of the Motivator factors factor on Job Satisfaction for Private Telecom Sector. Table 6 shows the indirect relationships among the Motivator factors on Job Satisfaction for Private Telecom sector.

Table 6

Covariance Relationship among Motivator factors for Private Telecom Sector

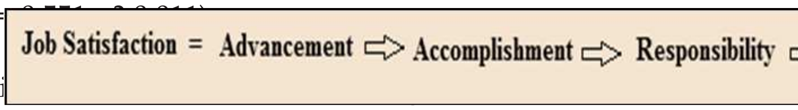
Relationship among the Motivator factors			Standard Coefficient	S.E.	P value
Accomplishment	<-->	Recognition	.771	.277	.001*
Recognition	<-->	Advancement	.497	.215	.019*
Recognition	<-->	Responsibility	.222	.361	.230
Recognition	<-->	Work Itself	.486	.232	.021*

Accomplishment	<-->	Advancement	.572	.183	.009*
Accomplishment	<-->	Responsibility	.738	.286	.002*
Accomplishment	<-->	Work Itself	.770	.217	.001*
Advancement	<-->	Responsibility	.691	.245	.003*
Advancement	<-->	Work Itself	.611	.176	.006*
Responsibility	<-->	Work Itself	.551	.249	.011*

**significant at the 5% level (2-tailed)*

Analyzing the indirect spillover relationship of the Motivator factors, the following interrelationships have been found to be significant at 5% level.

i. Accomplishment < ----- > Recognition (?= 0.771, p? 0.001)
ii. Recognition < ----- > Advancement (?=0.497, p? 0.019)
iii. Recognition < ----- > Work Itself (?=0.486, p? 0.021)
iv. Advancement < ----- > Accomplishment (?=0.572, p? 0.009)
v. Accomplishment < ----- > Responsibility (?= 0.738, p? 0.002)
vi. Accomplishment < ----- > Work Itself (?= 0.770, p? 0.001)
vii. Advancement < ----- > Responsibility (?= 0.691, p? 0.003)
viii. Advancement < ----- > Work Itself (?= 0.611, p? 0.006)
ix. Responsibility < ----- > Work Itself (?=



Taking into account of these significant indi
formulated:

The Total indirect effect of all the five Motivator factors on Job Satisfaction has been found to be 0.898.This has been calculated by the following formulae :

Job Satisfaction = $a_{acomp,recog}a_{acomp} + a_{acomp,recog}a_{recg} + a_{recog,adv}a_{recog} + a_{recog,adv}a_{adv} + a_{recog,wi}a_{recog} + a_{recog,wi}a_{wi} + a_{adv,acomp}a_{adv} + a_{adv,acomp}a_{acomp} + a_{acomp,resp}a_{acomp} + a_{acomp,resp}a_{resp} + a_{acomp,wi}a_{acomp} + a_{acomp,wi}a_{wi} + a_{adv,resp}a_{adv} + a_{adv,resp}a_{adv} + a_{adv,wi}a_{adv} + a_{adv,wi}a_{wi} + a_{resp,wi}a_{resp} + a_{resp,wi}a_{wi}$ ………………. equation (i)

Total contribution of direct and indirect relationship of Motivator factors with Job Satisfaction for Private Telecom Sector

From the path analysis, only one Motivator factor (Recognition) has been found to lead to Job Satisfaction. However, all the five Motivator factors have been found to have indirectly contributing to Job Satisfaction as shown in the Equation (i).

The direct effect of 'Recognition' on Job Satisfaction is 46% and the contribution of spillover relationship of the five Motivator factors to Job Satisfaction is 54% (Annexure II).

Motivator factors		**Total Percentage**
Recognition	0.780	$\frac{0.780}{1.678} = 46\%$
Total Indirect effect of Motivator factors with Job Satisfaction	0.898	$\frac{0.898}{1.678} = 54\%$

Direct Path Analysis of Hygiene factors with Job Satisfaction for Private Telecom Sector

The direct path analysis of the five Hygiene factors with Job satisfaction has been analysed for the Private Telecom sectors. The study has taken five Hygiene factors namely 'Company Policy', 'Working Condition', 'Salary', 'Job Security' and 'Social Status' for the analysis.

Table 7 shows the direct effect of the five Hygiene factors with Job Satisfaction Private Telecom Sector.

Table 7

Measuring the direct effect of Hygiene factors with Job Satisfaction Private Telecom Sector

Hypothesis	Relationship		Standard Coefficient	SE	p value
H_1	Job Satisfaction ←	Company Policy	.273	.132	.028*
H_2	Job Satisfaction	Working Condition	.450	.166	.001*
H_3	Job Satisfaction	Salary	.124	.128	.096
H_4	Job Satisfaction	Job Security	-.187	.230	.230
H_5	Job Satisfaction	Social Status	.304	.208	.044*

**significant at the 5% level (2-tailed)*

The direct path analysis which measures the direct relationship of the five constructs of Hygiene factors on Job Satisfaction supports only three significant relationships. This model supports that, the impact of 'Working Condition' (?=0.450, p? 0.001) is found to be the important Hygiene factor than 'Company Policy' (?=0.273, p? 0.028) and Social Status (?=0.304, p? 0.044) with Job Satisfaction.

Indirect path analysis of Hygiene factors with Job Satisfaction for Private Telecom Sector

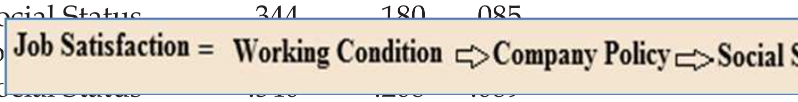
Five Hygiene factors have been taken to study the indirect spillover relationship among the Hygiene factors on Job Satisfaction. Analyzing interrelationship among the variables is a major part of Structural Equation Modeling and this interrelationship are generally hypothesized to generate specific observed covariance pattern among the variables.

Table 8 shows the indirect spillover relationships among Hygiene factors with Job Satisfaction.

Table 8

Covariance Relationship among Hygiene Factors for Private Telecom Sector

Relationship among the Hygiene factors			**Standard Coefficient**	**S.E.**	**P value**
Working Condition	<-->	Company Policy	.450	.242	.030*
Company Policies	<-->	Salary	.212	.261	.272
Company Policy	<-->	Job Security	.320	.205	.107
Company Policy	<-->	Social Status	.209	.198	.279
Working Condition	<-->	Salary	.100	.226	.598
Working Condition	<-->	Job Security	.306	.180	.121
Working Condition	<-->	Social Status	.344	.180	.085
Salary	<-->	Jo[illegible]	[illegible]	[illegible]	[illegible]
Salary	<-->	So[illegible]	[illegible]	[illegible]	[illegible]
Job Security	<-->	Social Status	.709	.184	.002*



*significant at the 5% level (2-tailed)

Again, by analyzing the indirect spillover relationship of the Hygiene factors, the following interrelationships have been found to be significant at 5% level.

i. Working Condition < ----- > Company Policy (?= 0.450, p? 0.030)
ii. Job Security< ----- > Salary (?= 0.542, p? 0.012)
iii. Job Security< ----- > Social Status (?= 0.709, p? 0.002)

Taking into account of the above significant indirect relationships the following path has been formulated :

The Total indirect effects of all the five Hygiene factors on Job Satisfaction have been found to be 0.419.This has been calculated by the following formula :

Job Satisfaction $= a_{wc,.cp}\, a_{wc} + a_{wc,.cp}\, a_{cp} + a_{js,salry} a_{js} + a_{js,salry}\, a_{salry} + a_{js,ss}\, a_{js} + a_{js,ss} a_{js}$ ……… equation (ii)

Total contribution of direct and indirect relationship of Hygiene factors with Job Satisfaction for Private Telecom Sector

From the path analysis, three Hygiene factors (Working Condition, Company Policy and Social Status) have been found to lead to Job Satisfaction. However, all the five Hygiene factors have been found to have indirectly contributing to Job Satisfaction as shown in the Equation (ii).

The direct effect of 'Company Policy' on Job Satisfaction is 19% and that of 'Working Condition' and 'Social Status' is 31% and 21% respectively and the contribution of indirect spillover relationship of the five Hygiene factors to Job Satisfaction is 29%.

Analyzing the indirect spillover relationship among the Motivator factors and Hygiene factors, it has been found that for Private Telecom Sector employees, significant spillover relationships of Motivator factors are found to be more than that of significant Spillover relationship of Hygiene factors leading to Job Satisfaction.

Hence, the finding shows that indirect spillover relationship of Motivator factors is found to be more than spillover relationship of Hygiene factors in creating Job Satisfaction among the employees of Private Telecom Sector.

ANALYSIS OF PUBLIC TELECOM SECTOR :

After analyzing the data related to Part II of the Questionnaire, the Mean scores of the five Motivator factors and five Hygiene factors have been evaluated and presented in Table 9. The individual items of the constructs have taken in a 5 point Likert scale with 1= Strongly Disagree and 5=Strongly Agree.

Table 9 shows the Mean scores of the Motivator factors and Hygiene factors among the employees of Public Telecom Sector.

Table 9

Mean Scores of Motivator factors and Hygiene factors for Public Telecom Sector

Motivator factors	Mean Scores	Hygiene factors	Mean Scores
Work Itself	3.8	Company Policy	3.3
Responsibility	3.4	Working Condition	3.5
Advancement	3.5	Salary	3.7
Accomplishment	3.7	Job Security	3.6
Recognition	3.7	Social Status	3.4

The overall Mean score of Motivator factors is 3.61 which is found to be higher than the overall Mean score of Hygiene factors which is 3.50.

To know whether there exists any correlation between Motivator factors and Hygiene factors, the following analysis of correlation among the Motivator factors and Hygiene factor have been identified.

Table 10 revealed that there exists low to medium correlation among most of the Motivator factors and Hygiene factors and as a result the path analysis under SEM have been constructed and hypothesized in subsequent Tables.

Table 10

Correlation among the Motivator factors and Hygiene factors in Public Telecom Sector

		Achieve-ment	Recog-nition	Work Itself	Respon-sibility	Advan-cement
Company Policy	Pearson Correlation	.302	.194	.269	.356	.132
	Sig. (2-tailed)	.105	.303	.151	.054	.488
Working Condition	Pearson Correlation	.340	.518**	.478**	.498**	.362*
	Sig. (2-tailed)	.066	.003	.008	.005	.049
Social Status	Pearson Correlation	.432*	.216	.475**	.134	.144
	Sig. (2-tailed)	.017	.251	.008	.479	.448
Security	Pearson Correlation	.585**	.420*	.704**	.426*	.327
	Sig. (2-tailed)	.001	.021	.000	.019	.078
Salary	Pearson Correlation	.657**	.411*	.393*	.072	-.012
	Sig. (2-tailed)	.000	.024	.032	.706	.950

***. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).*

Diagram showing direct and indirect spillover relationship among the motivator factors and hygiene factors with job satisfaction for Public Telecom Sector

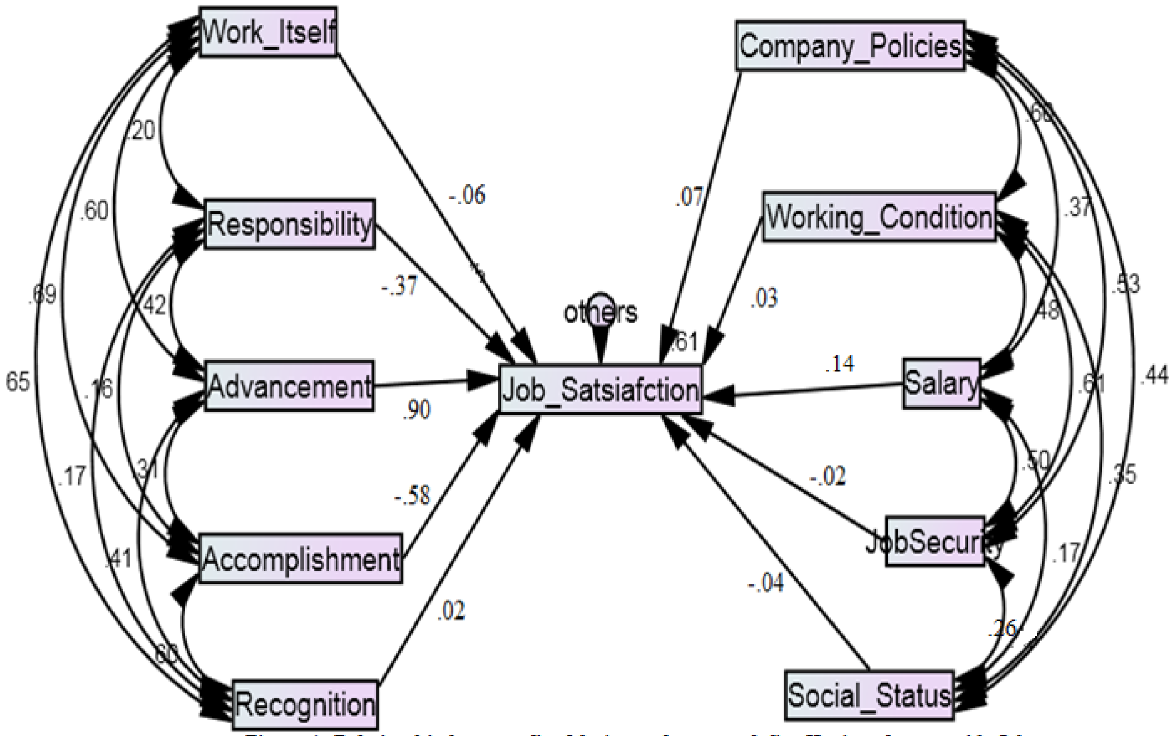


Figure 4: Relationship between five Motivator factors and five Hygiene factors with Job Satisfaction for Public Telecom Sector

Figure 4 shows the diagram of SEM shows the 'Path analysis' which measures the direct and indirect relationship between the five constructs of Motivator factors and five constructs of Hygiene factors with Job Satisfaction for Public Telecom Sector.

Direct Path Analysis of Motivator factors with Job Satisfaction for Public Telecom Sector

The direct path analysis has been employed to know the effect of Motivator factors on Job Satisfaction. By performing SEM for the Public Telecom Sector employees the following fit measures indicated acceptability of the SEM, with (?2)/df=2.91(44 df) ,GFI= 1.78,CFI=1.35 being greater than 0.90 and RMR=0.09 being less than 0.1

Table 11 shows the direct path analysis which measures the direct relationship of the five constructs of Motivator factors with Job Satisfaction. The model does not found any of the Motivator factors to have direct effect on Job Satisfaction.

Table 11

Measuring the direct effect of Motivator factors constructs with Job Satisfaction for Public Telecom Sector

Hypothesis	Relationship		Standard Coefficient	SE	p value
H_1	Job Satisfaction ←	Work Itself	-.057	.090	.590
H_2	Job Satisfaction	Responsibility	-.169	.094	.453
H_3	Job Satisfaction	Advancement	.102	.136	.498
H_4	Job Satisfaction	Accomplishment	-.182	.139	.442
H_5	Job Satisfaction	Recognition	.018	.132	.870

Table 12

Covariance relationship among Motivator factors for Public Telecom Sector

Relationship among the Motivator factors			Standard Coefficient	S.E.	P value
Accomplishment	<-->	Recognition	.597	.117	.006*
Recognition	<-->	Advancement	.410	.120	.041*
Recognition	<-->	Responsibility	.169	.149	.370
Recognition	<-->	Work Itself	.653	.204	.003*
Accomplishment	<-->	Advancement	.310	.091	.111
Accomplishment	<-->	Responsibility	.162	.116	.390
Accomplishment	<-->	Work Itself	.695	.163	.002*
Advancement	<-->	Responsibility	.419	.138	.037*
Advancement	<-->	Work Itself	.595	.172	.006*
Responsibility	<-->	Work Itself	.202	.200	.286

**significant at the 5% level (2-tailed)*

Indirect Path Analysis of Motivator factors with Job Satisfaction for Public Telecom Sector :

In this section the indirect spillover relationship among the Motivator factors have been identified. The indirect relationship among the five Motivator factors namely 'Work Itself ', 'Responsibility', 'Advancement', 'Accomplishment' and 'Recognition' with Job Satisfaction have been identified. The Table 12 shows the indirect relationships among the Motivator factors with Job Satisfaction for Public Telecom Sector

Analyzing the indirect spillover relationship between the Motivator factors, the following interrelationships have been found to be significant at 5% level.

i. Accomplishment < ----- > Recognition (?= 0.597, p? 0.006)
ii. Recognition < ----- > Advancement (?=0.410, p? 0.041)
iii. Recognition < ----- > Work Itself (?=0.653, p? 0.003)
iv. Accomplishment < ----- > Work Itself (?= 0.695, p? 0.002)
v. Advancement < ----- > Responsibility (?= 0.419, p? 0.037)
vi. Advancement < ----- > Work Itself (?= 0.595, p? 0.006)

Taking into account of these significant indirect relationships the following path can be formulated :

The Total indirect effects of all the five Motivator factors on Job Satisfaction have been found to be 0.302.This has been calculated by the following formulae :

Job Satisfaction = $a_{acomp,recog}a_{acomp} + a_{acomp,recog}a_{recg} + a_{recog,adv}a_{recog} + a_{recog,adv}a_{adv} + a_{recog,wi}a_{recog} + a_{recog,wi}a_{wi} + a_{acomp,wi}a_{acomp} + a_{acomp,wi}a_{wi} + a_{adv,resp}a_{adv} + a_{adv,resp}a_{adv} + a_{adv,wi}a_{adv} + a_{adv,wi}a_{wi}$

………………equation (iii)

Job Satisfaction = Advancement ⇨ Accomplishment ⇨ Responsibility ⇨

Total contribution of direct and indirect r Satisfaction for Public Telecom Sector

From the direct path analysis, none of the Motivator factors have been found to lead to Job Satisfaction. However, all the five Motivator factors have been found to have indirectly contributing to Job Satisfaction as shown in the Equation (iii).

It has been found that, there is no direct effect of any of the Motivator factors on Job Satisfaction but there is 100% contribution of indirect spillover relationship of the five Motivator factors with Job Satisfaction.

Direct Path Analysis of Hygiene factors with Job Satisfaction for Public Telecom Sector

After analyzing the direct path analysis of the Hygiene factors, again the indirect path analysis of the Hygiene factors have been employed to know the effect of it on Job Satisfaction.

Table 13 shows the path analysis which measures the direct relationship between the five constructs of Hygiene factors and Job Satisfaction for Public Telecom Sector. The model does not found any of the Hygiene factors to have a direct effect on Job Satisfaction.

Table 13

Measuring the direct effect of Hygiene Constructs with Job Satisfaction for Public Telecom Sector

Hypothesis	Relationship		Standard Coefficient	SE	p value
H_6	Job Satisfaction ←	Company Policy	.067	.108	.534
H_7	Job Satisfaction	Working Condition	.031	.107	.773
H_8	Job Satisfaction	Salary	.135	.124	.560
H_9	Job Satisfaction	Job Security	-.024	.090	.809
H_{10}	Job Satisfaction	Social Status	-.036	.090	.701

Indirect Path Analysis of Hygiene factors with Job Satisfaction for Public Telecom Sector

In this section, the indirect spillover relationships among the Hygiene factors with Job Satisfaction have been examined. As discussed in Section 4.2, the indirect relationship among the five Hygiene factors namely 'Company Policy', 'Working Condition' , 'Job Security', 'Salary' and 'Social Status' with Job Satisfaction have been identified. Table 14 shows the indirect spillover relationships among the Hygiene factors with Job Satisfaction for Public Telecom Sector

Table 14

Covariance Relationship among Hygiene Factors for Public Telecom Sector

Relationship among the Motivator factors			Standard Coefficient	S.E.	P value
Working Condition	<-->	Company Policy	.605	.200	.005*
Company Policy	<-->	Salary	.372	.149	.060
Company Policy	<-->	Job Security	.533	.213	.011*
Company Policy	<-->	Social Status	.438	.193	.031*
Working Condition	<-->	Salary	.482	.154	.019*
Working Condition	<-->	Job Security	.609	.219	.005*
Working Condition	<-->	Social Status	.354	.187	.072
Salary	<-->	Job Security	.503	.171	.016*
Salary	<-->	Social Status	.168	.146	.372
Job Security	<-->	Social Status	.259	.205	.099

**significant at the 5% level (2-tailed)*

By analyzing the indirect spillover relationship between the Hygiene factors, the following interrelationships have been found to be significant at 5% level.

i. Working Condition < ----- > Company Policy (?= 0.605, p? 0.005)
ii. Company Policy < ----- > Job Security (?= 0.533, p? 0.011)
iii. Company Policy < ----- > Social Status (?= 0.438, p? 0.031)
iv. Working Condition < ----- > Salary (?= 0.482, p? 0.019)
v. Working Condition < ----- > Job Security (?= 0.609, p? 0.005)
vi. Job Security< ----- > Salary (?= 0.503, p? 0.016)

Taking into account of the above significant indirect relationships the following path has been formulated :

The Total indirect effects of all the five Hygiene factors on Job Satisfaction have been found to be 0.309. This has been calculated by the following formulae:

Job Satisfaction = $a_{wc,.cp}\, a_{wc} + a_{wc,.cp}\, a_{cp} + a_{cp,js} a_{cp} + a_{cp,js} a_{js} + a_{cp,ss} a_{cp} + a_{cp,ss} a_{ss} + a_{wc,salry}\, a_{wc} + a_{wc,salry} a_{salry} + a_{wc,js}\, a_{wc} + a_{wc,js}\, a_{js} + a \quad a \quad + a \quad a$

Job Satisfaction = Working Condition ⇨ Company Policy ⇨ Social S

Total contribution of direct and indirect relationship of Hygiene factors with Job Satisfaction for Public Telecom Sector

From the direct path analysis, it has been found that none of the Hygiene factors have any direct effect on Job Satisfaction. However, all the Hygiene factors have been found to have indirectly contributing to Job Satisfaction as shown in the Equation (iv)

It has been found that, there is no direct effect of any of the Hygiene factor on Job Satisfaction but there is 100% contribution of indirect spillover relationship of the five Hygiene factors on Job Satisfaction.

Analyzing the indirect spillover relationship among the Motivator factors and Hygiene factors, it has been found that for Public Telecom Sector employees, significant spillover relationships of Motivator factors are found to be equally significant as the spillover relationship of Hygiene factors leading to Job Satisfaction.

Hence, the finding shows that indirect spillover relationship of both Motivator factors and Hygiene factors are found to be equal in creating Job Satisfaction among the employees of Public Telecom Sector.

CONCLUSION OF THE FINDINGS :

The study revealed that the employees of Telecom sectors experience low to high level of Motivator factors and Hygiene factors which indicate that the employees are influenced by Motivator factors as well as by Hygiene factors. This study finds low to high correlation between the Motivator factors and Hygiene factors, thus supporting the other research findings of Brenner, Carmack & Weinstein (1971), Hill (1986). This findings negates the Herzberg's Two Factor Theory stating that Motivator and Hygiene factors to be independent. The study supports the findings of the other researchers like Schiender & Locke (1971), Wall (1973), Locke (1976) and Maidani (1991) that Motivator and Hygiene factors are different but are interdependent. The study found that in case of Private Telecom sector only one motivator factor that is 'recognition' is found to have a direct impact on Job Satisfaction but in case of Public Telecom sector there is no direct impact of any motivator factors on Job satisfaction.

The new finding of this study is that almost all the motivator factors are found to have indirect spillover impact on Job Satisfaction for the employees of both private and public telecom sector. This study finds the following Hygiene factors namely 'Working Condition', 'Company Policy', and 'Social Status' contributing directly to Job Satisfaction for private telecom sector employees like other researchers Prasad L (1979), Dhawan (2001), Mullins, Nelson, Busciglio & Wiener (1988), Hoque M E (1990), Yankelovich Partners(1998), Okpara J (2004) and Velnampy T & Sivensan S (2012).Again, it is found that, all the Hygiene factors are found to have indirect spillover impact on Job Satisfaction for employees of both private and public telecom sector. The result also shows that indirect spillover relationship of both Motivator factors and Hygiene factors are found to be equal in creating Job Satisfaction among the employees of Private and Public Telecom Sector.

REFERENCES :

Anitha R., (2011). A Study on Job Satisfaction of Paper Mill Employees with Special Reference to Udumalpet and PalaniTaluk. Journal of Management and Science, Vol. 1, No.1, 36-47.

Ayub N. & Rafif S. (2011). The relationship between Work Motivation and Job Satisfaction. Pakistan Business Review, 332-347

Brenner, V, Carmack, C, & Weinstein, M. (1971). An Empirical Test of the Motivation-Hygiene Theory, Journal of Accounting Research, Vol. 9(2) 359-366,

Dhawan Sunil K. (2001). Variations In Job Satisfaction With Age: Some Empirical Findings. Productivity, Vol. 42(1) April- June, 151- 155

Herzberg, Frederick (1959). The Motivation to Work, New York: John Wiley and Sons.

Hill, M. D. (1986). A theoretical analysis of faculty job satisfaction/ dissatisfaction. Educational Research Quarterly, Vol. 10(4), 36-44

Hu, L. & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, 6, 1-55.

Lahiri, D.K. & Srivastava, S (1967). Determinants of satisfaction in middle management personnel. Journal of applied Psychology, Vol. 51 (3), 254-265.

Lawler, E.E. III. (1973). Motivation in Work Organizations, Monterey, California: Books Kole publishing Company.

Locke E A (1976). The nature and causes of job satisfaction. In M.D Dunnette (Ed.) Handbook of Industrial and organizational pshychology (pp1297-1349).Chicago:Rand McNally College Publishing Company.

Maidani, E. (1991). Comparative study of Herzberg's two-factor theory of job satisfaction among public and private sectors. Public Personnel management, Vol 20(4), 441-448

Manisera, M., Dusseldorp, E., van der Kooij, A.J. Component structure of job satisfaction based on Herzberg's theory. Retrieved February 20, 2010, from http://www.datatheory.nl/pages/fullmanuscript_final_epm.pdf.

Mishra, P K (1992). Does Organisation Climate Help Improving Commitments? Social Sciene International, Vol 81(1-2), 37-43

Mullins, L.C., Nelson, C.E., Busciglio, H., & Weiner, H. (1988). Job satisfaction among Nursing home personnel: The impact of organizational structure and supervisory power. The Journal of Long-term care Administration, Vol. 16, 12-18.

Nerison, H.A (1999). A Descriptive study of Job Satisfaction among vocational Rehabilitation Councellors in a Midwestern State. A research paper for Master of Science, University of Wisconsin-Stout

Okpara O John (2004). Personal characteristics as predictors of job satisfaction: An exploratory study of IT managers in a developing economy. Information Technology & People, Vol. 17 (3), 327 - 338

Pathak R. D. (1983). Job involvement and need satisfaction of Bank officers in India. Vikalpa, Vol. 8(4).

Prasad, L. (1979). What workers want from their jobs. Integrated Management, Vol 14(9), 30-37.

Ramayah, T., Jantan, M., & Tadisina, S.K. (2001). Job satisfaction: empirical evidence for alternatives to JDI. 32nd Annual Meeting of Decision Sciences Institute Conference, Track OB2, San Francisco: USA

Schneider, J. and Locke E A (1971). A critique of Herzberg's incident classification system and a suggested revision'. Orgnazatioanl Behavior and Human Performance, Vol 6, 441-457

Singh, M P and Dr Jyotsna Sinha (2013). Job Satisfaction in Organizational Executives. International Journal of Scientific and Research Publications, Vol 3(4) April 2013 Edition [ISSN 2250-3153]

Spector PE (1997). Specifications of Job Satisfaction: Application, Assessment, Causes, and Consequences. Sage Publications (I) P. Ltd.-New Delhi.

Velnampy,T., & Sivesan,S. (2012). Determinants of Employees' Job Satisfaction: A Study of Banking Industries in Sri Lanka. Global journal of management and business research, Vol 12(22), 23-29.

Wall,T D (1973). Ego-defensiveness as a determinant of reported differences in sources of job satisfaction and job dissatisfaction. Journal of Applied Psychology, Vol 58, 125-128

Weiss, D., Dawis, R., England, G., & Lofquist, L. (1977). Manual for the Minnesota Satisfaction Questionnaire' Minneapolis, MN: University of Minnesota Press of Industrial Relations Center.

Yankelovich Partners (1998). Workers around the world share similar attitudes toward jobs. Houston Business Journal, Vol 29, 39-43.

International Journal of Applied Management Research,
Vol. 4(No.1), Page : 39 - 59

Financing Working Capital Practices of Small Scale Industries in Chittagong-An Evaluative Study

Suraiya Nazneen
Department of Finance, University of Chittagong, Chittagong-4331, Bangladesh

ABSTRACT :

Bangladesh despite an important integral part of economy are facing financing working capital problems due to both internal and external factors.The study has found almost same scenario of SSIs in many developing countries like Bangladesh. The study has found that this problem of financing working capital of SSIs remains as a big trap for long. So far knowledge goes, no effective study has been so far made specially over the problem of financing SSIs in Bangladesh. In view of this, the study has been an attempt to evaluate the working capital financing practices of SSIs of Chittagong, Bangladesh. In this regard, the study has conducted interview of 32 samples out of the attempted 97 samples randomly selected. It has used both primary and secondary data. The data thus collected have been analysed by employing percentage, mean, standard deviation, weigted mean score, etc. The study has found inconsistency in financing policies such as approaches, techniques and operating cycle across sample small scale enterprises. Besides, sample small scale enterprises have been found to have used shadow and very common sources of financing which involves high cost and liquidity risk. The study has also identified problems of financing working capital such as loan at exorbitant rate of interest, complicated time consuming procedure and inaccessibility to the institutional loans due to collateral and accounting information and non-preferences of commercial bank. The study has suggested some important prudent measures such as trade off approach, use of adjusted scientific technique for projection of working capital, provisions of providing loans to SSIs as a part of loan portfolio of commercial banks, fiscal benefits etc. for addressing the problems of financing working capital.

Keywords : *Working Capital, Financing, SSIs, Approaches, , and Forecasting.*

INTRODUCTION :

Working capital financing of SSIs remains a big trap of its development ionn Bangladesh. Finance has been found to be as one of the main barriers to SMEs' growth, and many governments have attempted partial solutions through the creation of specific financing schemes. There are various traditional sources of financing for SMEs ranging from bank loans, bank overdrafts, own funds/savings, loans from family or friends, and equity funding. Working capital is a significant and important issue during financial decision making because it is a part of the investment in total assets that requires an appropriate financing investment (Bhunia, 2010).

Source of financing working capital depends on what financing working capital policy a firm does follow. Generally, working capital (WC) is financed by a combination of long-term and short-term funds. Long-term sources of funds consist of capital (equity from owners) and long-term debt, which only provide for a relatively small portion of the WC requirement (finance theory dictates that only the permanent portion of WC should be supported by long-term financing (Gitman, 2000)). This portion is the net WC; that is, the excess of the current assets over the current liabilities. On the other hand, the short-term sources of WCF consist of trade credit, short-term loans, bank overdrafts, tax provisions and other current liabilities that can be used to finance temporary WC needs. Sometimes, a WC deficit exists if the current liabilities exceed the current assets. In such a situation, short-term funds are used to also finance part of the non-current assets and the firm is said to be adopting an aggressive WC policy (Bhattacharya, 2001). No doubt, the easy accessibility of finance is an important factor when selecting the source of financing, but its impact on the risks and returns cannot be ignored (Gitman, 2000).

LITERATUREREVIEW :

The few studies that have addressed the financing and capital structure of SMEs are mostly for developed countries (Hughes, 1997; Watson & Wilson, 2002; Zoppa & McMahon, 2002; Hussain & Matlay, 2007); only a few address developing countries (Peterson & Shulman, 1987; Aidis, 2005; Abor, 2005; Bhaird & Lucey, 2011). Various surveys and studies conducted in Bangladesh have identified access to finance as the main problems facing the SMEs. For example, in one recent private enterprise survey, Daniels (2003) identifies that as many as 58% of the surveyed businesses reports the problem of lack of investment funds, whereas 35% mentions the problem of lack of operating funds. Another study conducted in 1996, by the Federation of Bangladesh Chambers of Commerce and Industry (FBCCI) finds out the following constraints to industrial sector growth and investment as perceived by industrial entrepreneurs and businessmen of different classes, such as (1) industrial credit; (2) power supply; and (3) administrative reforms (Mintoo, 2004). However, the Job Opportunities and Business Support (JOBS) program of the Institutional Reform and the Informal Sector (IRIS) finds electricity, credit, and law and order are respectively the three top ranked problems followed by legal barriers, intense competition, and dearth of technical assistance (Meagher, 1998). The Report of the Task Forces on Bangladesh Development Strategies for the 1990s (Policies for Development) identified that SMEs face constraints on both supply and demand sides as well as in respect of policies (Task Force Report, 1991).

Hossain (1998) has also identified some constraints in developing SMEs in Bangladesh. Why commercial banks are so reluctant to extend loans to this sector? That is because of the high risk and supervision cost associated with this type of financing. Hossain (1998), Bhattacharya, et. al. (2000) and Sia (2003) identified that banks are shy to lend to SME activities, as they do not consider them as attractive and profitable undertakings. SMEs are also regarded as high risk borrowers because of their low capitalization, insufficient assets, and high mortality rates (Sia, 2003) and consequently, they are not offered any attractive deals in terms of loans and interest rate. Banks charge high rate of interest from SME loan because of high cost of supervision. For example, in secured credit transactions, interest rates vary from 14% (subsidized in cases defined by Bangladesh Bank policies) to 22% or more (Meagher, 1998). Furthermore, the loan application forms for investment financing from banks are long, tedious, and redundant (Hossain, 1998).

For small enterprises access to bank credit is even very limited. For 'term loan' it is almost impossible; for 'working capital', it is somewhat better. Cookson and Forrest (1999) estimate that 20% - 25% small enterprises have working capital relationships and probably 50% of medium size firms have working capital relationships. On the other hand, 3% - 7% of the small enterprises have term loans compared to 20% for medium size establishment. That is why small enterprises turn most often to moneylenders and other informal sources. Islam, et. al. (2005) have found that bank is the mostly used (identified by 54% of the respondents) source, followed by self-finance (46%) and family and friends (21%). Another such study has revealed that within the non-institutional sources, friends and relatives were the dominant contributors followed by the local lenders. The relatively high incidence of borrowing from friends and relatives may not be surprising given that it might have been easier for the borrowers to approach such lenders and to obtain loan from them on more flexible terms than those received from other lenders (Ahmed, 1984).

On the other hand, one of the major obstacles that have impaired the flow of institutional finance into SMEs is banks' pre-occupation with collateral based lending. Traditionally banks have used fixed asset ownership, particularly land ownership as the basis for judging credit-worthiness of a customer. This puts SMEs at a relative disadvantage, as large entrepreneurs are often able to get around the problem because of their influence and contacts by putting up collateral of dubious valuation. Real estate security, required in nearly every case, is normally taken in the amount of 200% of the loan amount (Meagher, 1998). Bhattacharya, et. al. (2000) also confirmed this high collateral requirement, which many SMEs are not capable to provide. Research into this area for small scale industries is scant, particularly research investigating the financing working capital practices of small scale industries. Therefore, this paper has examined the financing working capital practices of small industries in Bangladesh.

OBJECTIVE OF THE STUDY :

The principal objective of the study is to evaluate the financing working capital practices of SSIs of Chittagong. To accomplish this objective, following specific objectives have been covered :

a) To examine the financing working capital policies and their practices of sample SSIs;
b) To examine the sources of financing working capital of sample SSIs;
c) To identify the problems facing the sample SSIs in financing working capital ; and
d) To suggest some prudent policy measures for making financing working capital practices of SSIs more pragmatic and effective.

SCOPE OF THE STUDY :

The Study has covered financing working capital practices of following SSIs of Chittagong :

a) Food and Allied Products;
b) Textile, Apparel, and Leather.
c) Wood, Wood Products and Furniture;
d) Metal Fabrication, Machinery, etc.
e) No-Metallic Mineral Products;
f) Chemical, Rubber, Plastics, etc. and
g) Paper, Printing and Publishing.

The study has also covered financing working capital practices of sample SSIs for five years from 2009 to 2013.

METHODOLOGY OF THE STUDY :

The study has been both empirical and theoretical one. Both primary and secondary data have been used in the study.

POPULATION AND SAMPLING :

The researcher has collected a sources list of SSIs located in Chittagong from Chamber and Commerce Industries and SME Foundation. Accordingly, the researcher has found population size of 128 actively operating. The study has determined sample size of 97 small scale units of seven SSIs by applying scientific techniques. The study small scale units of seven industries proportionately first and then randomly out of randomized block sample second. The researcher despite vigorous efforts has been able to conduct interview of 32 small scale units successfully.

SURVEY INSTRUMENT AND COLLECTION OF PRIMARY DATA:

The study has prepared a structured questionnaire on the basis of three times pilot survey. Researcher has followed direct method of conducting interview for collecting opinions of sample respondents. Finally researcher has been able to conduct interview of 32 sample respondents successfully, indicating success rate of 32.93%.

COLLECTION OF SECONDARY DATA :

The study has collected secondary from the following :

Sources:

a) Annual Reports of SSIs;
b) Existing Journals and Magazines;
c) Websites;
d) Government Publications; and
e) BBS.

ANALYSIS OF DATA :

The data thus collected have been tabulated first to make them amenable to the analysis. Then the study has classified the data and analyzed the data by applying financial techniques such as percentage; statistical technique such as mean; and legend for stratifying the responses of the sample respondents.

ORGANIZATION OF THE STUDY :

The study has been organized into three sections. The first section covers statement of the problem, objective, scope, methodology, and limitations of the study. The second section has dealt with the findings over approaches. Sources, and financing working capital practices of SSIs. The final section has covered policy measures and conclusion.

LIMITATIONS OF THE STUDY :

The Study has suffered from data constraints, time constrains , as well as coverage with regard to the area of the study

FINDINGS AND THEIR ANALYSES :

The study has critically examined the approaches, techniques of forecasting working capital, sources of financing working capital, preferences of management with respect to sources, and finally problems associated with the financing working capital of SSIs by employing relevant financial and statistical techniques in the following sub-sections:

EXAMINATION OF WORKING CAPITAL FINANCING POLICIES OF SAMPLE SSIS

The study has examined approaches, operating cycle and techniques of forecasting working capital as follows:

Approaches to Financing Working Capital of SSIs

One of the most important ingredients of the theory of working capital management is determining the financing mix. This theory suggests, how current assets be financed. There are three approaches to financing working capital of a business firm irrespective of sizes, ages, and forms. They are conservative approach, hedging/matching approach, and trade-off approach (Khan and Jain, 1997). The modes and sources of financing working capital differ from firm to firm depending on the financing working capital policy being practiced by small scale industries.

Table 1

Approach to the Financing Working of Small Scale Industries

	Approaches	Percentage of Response
i)	Conservative Approach	0.00
ii)	Hedging Approach (Moderate Approach)	84.37
iii)	Trade-off Approach	15.03
iv)	Any other approach (Please mention)	0.00
	Total :	100%

Note : Data have been compiled by the researcher.

It has been observed from the perusal of Table-1 that 84.37 of the sample respondents follow hedging approach in financing current assets. This indicates that they use long terms funds for financing fixed portion of current assets and short term funds for financing variable proportion of current liabilities. On the other hand, only 15.03% of the sample respondents use trade-off approach. This indicates that they use long term funds for financing average amount of working capital, and short-term funds financing the excess of working capital over average amount of working capital during a particular period. No sample firm is found to have used conservative approach in financing current assets. It can be said that most of the sample small scale enterprises follow hedging approach which involves high risk and high profit; and least number of sample small scale enterprises follow trade-off approach which offers relatively higher risk adjusted return being efficient approach. This has led the researcher to conclude that approach to financing working capital of most sample small scale enterprises is not efficient. This is again checked by the overall policy being practiced in financing working capital of sample small scale enterprises as follows:

Table 2

Overall Policy of the Sample Small Scale Firms regarding Financing Working Capital

Financing Mix		Percentage of Response
a)	All variables need with short term sources and only for the period needed	78.12
b)	A portion of the variable need with long-term source; and Inventories only from long-term source	0.00
c)	A portion of the permanent need from short term sources	0.00
d)	Only half of current Assets financed by long-term source	21.88
e)	Any others	0.00
Total :		100%

Note : Data have been compiled by the researcher.

From the perusal of Table-2, it has been found that 78.12% of sample respondents finance variable proportion of current assets with short-term funds and fixed proportion of the same with long-term funds. 21.88% of the sample respondents finance half of current assets with long-term sources and other half of the same with long-term sources of funds. This has matched the findings over financing current assets of sample small scale enterprises to the larger extent.

2.1.2 Forecasting Working Capital Requirements-Techniques, and Operating Cycle

Forecasting working capital requirements is influenced by both intra-firm factors and environmental factors. Besides, the forecasting depends on approaches and policies being followed by small scale industries during operating periods. This sub-section has examined the methodologies followed in forecasting working capital requirements of sample small scale enterprises.These have been discussed in the following paragraphs :

Table 3

Methods for Forecasting Working Capital

Method of Forecasting Working Capital		Percentage of Response
a)	Informal / Judgment	100.00
b)	Formal / Statistical	0.00

Note: Data have been compiled by the researcher.

It has been found from the analysis of Table-3 that all the sample respondents (100%) project the working capital requirements on the basis of experience of the past. Researcher has also observed that they are not even aware of statistical techniques to be used in forecasting working capital requirements for the firms. There are statistical techniques for forecasting working capital requirements (Pradhan, 1988). The techniques are :

A) Judgmental Forecasting: Delphi Technique and Panel of Experts;
B) Technical Forecasting: Moving average, Exponential smoothing,Trend Adjusted Exponential smoothing,and Trend Projection; and
C) Fundamental Forecasting: Regression Method, Econometric Model, and Input-Output Analysis.

The use of past experience for forecasting working capital requirement is not scientific in the context of volatile market as well as unfavorable variation in production and sales. So, this has caused unfavorable deviation in actual working capital requirement from forecasted working capital requirements.

All the sample respondents were asked whether they experienced any situation that actual working capital deviated from forecasted working capital. All 100 sample respondents are of the opinion that they have experienced unfavorable deviation in actual working capital from expected/forecasted working capital value due to both controllable and uncontrollable factors as is shown in Table-4 as follows :

Table 4

Reasons for Deviation in Actual Working Capital from Forecasted Working Capital Value

Reasons for Deviation in Working Capital	Percentage of Response
i) Controllable Factors	100
ii) Uncontrollable Factors	100

Note : Data have been compiled by the researcher.

Researcher has identified some reasons/factors for deviation on the basis of opinion of sample respondents. The controllable factors are fluctuation in size of inventory due to straddle price situation, , mounting accounts receivables due to failure to realize in time, decrease in production volume sometime in operating years, etc. The uncontrollable factors are volatility in prices of materials, high inflation rates, higher interest rates, political risk, supply constraints, etc.

Operating (Working Capital) Cycle

Forecasting working capital requires working capital management to consider working capital cycle. The major elements of current assets are inventories, accounts receivables and cash (in hand and at bank) while that of current liabilities are accounts payable and bank overdrafts. According to Atrill (2006), working capital represents a net investment in short term assets. These assets are continually flowing (circulating) into and out of the business, are essential for day-to-day operations. The various elements of working capital are interrelated, and can be seen as part of a cycle. it can be seen that Cash is used to pay suppliers when raw materials are obtained on credit or raw material are bought with cash, the raw materials are turned into finished goods which are either sold for cash or credit. Credit sales create account receivables which are subsequently collected as cash (Yiadom and Agyei, 2007).

Among the various factors which influence working capital policies of firms include nature of business, market/demand conditions ((Ben-Horim and Levy,1983), Technology and manufacturing policy (Wood, 1993), credit policy of the firm (Walia,1977), payable management (Gitman, 2005) operating efficiency (Rahman and Ali, 2006; Fairchild, 2005; and Sehgal, et al, 2006) (Hossain and Akon, 1997)), competition (Filbeck and Krueger, 2005), conditions of supply, size, agency problem, growth and profitability, (Kolay, 1991) industry (Hawawini, et al,1986; and Nunn (1981)). Marfo-Yiadom (1996) concluded that nature and size of business, business fluctuation, growth and expansion activities, availability of credit facilities from suppliers, and price level changes influence working capital decisions greatly. Moyer et al (2001) considered sales level, credit policies and the length of the operating cycle. The extant literature reveals the components of working capital as consisting of current assets less current liabilities. The working capital is affected by a number of factors including the nature of the business, credit policy, conditions of supply, price level changes.

Although all sample respondents have responded positive to the change in the components of operating cycle due to change in both controllable and uncontrollable factors, even though only 56.25% of the respondents consider the operating cycle while forecasting working capital value of the firm (see Table-3). Non-consideration of operating cycle in forecasting working capital leads to greater variation in actual working capital from forecasted working capital value. This variation in working capital can therefore be attributed to the factors such as nature of business, market/ demand conditions ((Ben-Horim and Levy,1983), Technology and manufacturing policy (Wood, 1993), credit policy of the firm (Walia,1977), payable management (Gitman, 2005) operating efficiency (Rahman and Ali, 2006; Fairchild, 2005; and Sehgal, et al, 2006) (Hossain and Akon, 1997)), competition (Filbeck and Krueger, 2005), conditions of supply, size, agency problem, growth and profitability,

Table 5
Operating Cycle in Forecasting Working Capital

Operating Cycle	Yes Response: Percentage of Response
a) Does operating cycle vary across year?	100%
b) Is operating cycle incorporated in forecasting working capital?	56.25%

Note : Data have been compiled by the researcher.

Sample respondents (56.25%) who consider operating cycle in forecasting working capital have been found to have taken very basic components of operating cycle. The basic components are credit for suppliers, inventory of raw materials & finished goods, accounts receivables & payables, production, price fluctuation, growth & expansion, etc. The remaining sample respondents (43.75%) who do not consider operating cycle in forecasting working capital value have shown the following reasons against consideration :

Table 6

Reasons against Consideration of Operating Cycle in Forecasting Working Capital

Reasons against consideration of Operating Cycle		Percentage of Response
i)	Irregular demand	64.28
ii)	Irregular production	50.00
iii)	Irregular payment from debtors	91.86
iv)	Irregular delivery by Creditors	57.14
v)	Fluctuation in the policy of Government	00.00
vi)	Any Other	00.00

Notes: a) Data have been compiled by the researcher.
b) Percentage of responses exceeds 100% due to multiple responses of sample Respondents

The reasons shown by 43.75% of total sample respondents appear to be all right in the context of markets and businesses of small scale enterprises. But failure to capture risk arising out of these variables would have made working capital management of small scale enterprises inefficient.

SOURCES OF FINANCING WORKING CAPITAL

The study has examined the financing practices of sample small scale enterprises in this sub-section. First, it has identified sources of financing working capital of sample small scale enterprises; and second, it has examined priority of different sources of financing working capital on five point likert scales.

Identification of Sources of Financing Working Capital of Sample Small Scale Enterprises

The study has identified source of financing working capital of sample small scale enterprises on the basis of opinions extracted from conducting interview of sample respondents through structured interview guide. The responses have been presented in Table-7 as follows:

Table 7

Identification of Sources for Financing Working Capital

Sources for Financing Working Capital	**Percentage of Response**
a) Long-Term-External	
i) Ordinary Share	100
ii) Preference Share	0.00
iii) Debenture	0.00
iv) Loan from financial institutions	100
b) Long- Terms: Internal	
i) Retained Earnings	100
ii) Provisions for various contingencies/Depreciation Reserve	71.87
c) Temporary Working Capital	
i) Short Term External	
* Goods on credit	100
* Bank Loan	100
* Discounting of Bills receivables	0.00
* Bank overdraft	21.87
* Loan from Sister Concern	25.00
ii) Short Term: Internal	
* Gratuity	0.00
* Dividend Contingencies	0.00
* Pension Fund	0.00
* Unclaimed Dividend	0.00
* Outstanding Liabilities for Expenses	56.25
* Provisions for Taxation	0.00

Note : a) Data have been compiled by the researcher.
b) Percentage of responses exceeds 100% due to multiple responses of sample respondents.

From the perusal of Table-7 it has been observed that sample enterprises have used both long-term and short-term sources for financing working capital. The sources of financing working capital of sample small scale enterprises are ordinary share, loan from financial institutions, retained earnings, and depreciation reserve of Long-term sources; and trade credit, bank loan, bank overdraft, sister concern loan, and liability for expenses/ salaries of short-term sources. But the frequency of using different sources of financing working capital does vary. It has been found from the examination of Table-7 that all sample small scale enterprises have used ordinary share, loans from financial institutions, retained earnings, trade credit and bank loans during the study periods. But depreciation reserves, outstanding liabilities for expenses, bank overdraft, sister concern loan, and bank overdraft have been used for financing working capital during study periods by 71.87%, 56.25%, 25%, and 21.87% of the sample respondents respectively. It has also been observed that small scale could not utilize many sources for financing working capital. This situation can be attributed to many reasons such as shallow funding sources, poor credit rating, lack of adequate collateral, poor financing plan, regulatory problem of raising funds by means of issuing bond/debenture / commercial paper, and non-availability of money market products.

The study has also examined the major forms of financing working capital requirements. These responses have been summarized in Table-8 as follows:

Table 8

The Major Forms of Financing Working Capital Requirement

Forms of Financing Working Capital	Percentage of Response
a) Current Liabilities	100
b) Cash credit	75
c) Deferred credit	56.25
d) WC loan from Banks / Fls	100
e) Equity / Long Term loan	100
f) Any other (Pls. specify)	0.00

Note : a) Data have been compiled by the researcher.
b) Percentage of responses exceeds 100% due to multiple responses of sample respondents

According to the responses of sample respondents, all basic components of operating (working capital) cycle constitute the forms of financing working capital. This implies that sample small scale enterprises are financing current assets by using trade credit, deferred credit, bank loans, equity, etc.

Sources of Financing Working Capital Required by Small Scale Enterprises for Effective Operations

Financing working capital requires effective and optimal working capital financing decision on the basis of minimum cost of alternative to different sources of financing working capital. Alternatives to financing working capital of small scale enterprises are relatively lower as compared to that of medium and large scale enterprises in Bangladesh. Small scale enterprises face toughest crisis in accommodating funds for financing working capital either from external source or from internal sources because of different inherent difficulties. So, they prioritize available sources of financing working capital on the basis of minimum cost and accessibility. The study in this sub-section has attempted to examine the requirements /preferences of sample respondents on the basis of five point likert scale. The study has measured descriptive measures -mean and standard deviation of opinions of sample respondents on likert scales and shown in Table-9.

Table 9

Mean Responses of Respondents on Sources of Financing Working Capital Required by Small Scale Enterprises for Effective Operations

	Sources of Financing Working Capital	Mean	SD	Decision
1	Equity finance as a source of financing working capital by Small Scale Enterprises for effective operations	4.20	1.15	Highly required
2	Long-term debt as a source of financing working capital for the retained earnings of Small Scale Enterprises	4.50	1.10	Highly required
3	Asset-based financing as a source of funding working capital for effective operations of Small Scale Enterprises	2.75	1,40	Required
4	Accounts payable as a valuable source of financing in working capital to meet short-term obligations of Small Scale Enterprises	4.10	1.10	Highly required
5	Accruals as a discretionary source of financing in working capital for optimal resource utilization of Small Scale Enterprises	3.80	1.05	Highly required
6	Bank loans stands as a source of financing working capital for the liquidity of Small Scale Enterprises	4.20	0.90	Highly required
7	Promoters fund as a source of financing working capital by Small Scale Enterprises for effective operations	3.57	1.25	Highly required
8	Borrowing from friends and family constitute as a vital source of financing in working capital for the profitability of Small Scale Enterprises	4.25	0.90	Highly required
9	Thrift as a source of financing working capital for effective operations of Small Scale Enterprises	4.30	0.65	Highly required

10	Unsecured financing as a source of financing working capital for the solvency of Small Scale Enterprises	2.80	1.45	Required
	Combined Mean	3.85	0.96	Highly required

Sources: Survey Instrument.

Note: Data have been compiled by the researcher.

It has been found from the analysis of Table-9 that sample small scale enterprises in Chittagong highly require financing their working capital through: equity finance (Mean=4.20), long-term debt (Mean =4.50), accounts payable (Mean =4.10), accruals (Mean =3.80), bank loans (Mean =4.20), promoters' fund (Mean =3.57), borrowing from friends and family (Mean =4.25), and thrift (Mean =4.3o). However majority of them (SMEs) require financing their working capital through: asset based financing (Mean =2.75), and unsecured financing (Mean =2.80).

The findings of the study have revealed sources of financing working capital as highly required by Small Scale Enterprises for effective operations in Chittagong. The results have showed that the major sources of financing the working capital of small scale enterprises in Chittagong for their effective operations are: equity finance; long term debt; accounts payable; accruals; bank loans ; promoters fund; borrowing from friends and family; and thrift, which are in consonance with the views of Pfohl, Elbert & Hofmann (2003). They have deposed that the major sources of financing the working capital of businesses vis-à-vis Small and Medium Scale Enterprises are: supplier's credit, bank loans, promoter's fund, equity finance, long-term debt, off-balance sheet financing, asset-based financing, accounts payable, accruals and unsecured financing.

Empirically, Fisman (2001) showed that short-term credit; particularly supplier credit is positively correlated with capacity utilization because firms lacking credit face inventory shortages leading to lower capacity utilization. Petersen and Rajan (1997) argue that even in the United States, with extremely well developed financial markets, trade credit is the largest single source of short-term financing. Fisman, particularly claims in developing countries where formal lenders are limited, trade credit plays an even more significant role in funding firm's activities. According to researchers, such as: Van Horne and Wachowicz (2000); Moyer, Mcguigan & Kretlow, (2004), the working capital financing logic is that, temporary current assets are financed with short-term loans and the permanent current assets with long term debt or equity capital. However, the actual investment and financing mix match-up depends on management's approach towards risk and profitability. In the words of Keown, Martin, Petty & Scott (2005) finance sources of working capital management acts as a guiding principle to the manner that working capital should be managed in order for SMEs to attain efficiency in their operations.

Problems Associated with Working Capital Financing

The most important problem of small scale enterprises is access to credit amongst important problems. The study has chalked out some problems peculiar to Small Scale Enterprises with regard to financing working capital on the basis of available existing literatures and talking to the professionals. Accordingly, the study has extracted opinions of sample respondents over problems, and tabulated in Table-10 as follows :

Table 10

Problems peculiar to Small Scale Enterprises with regard to financing Working Capital

Problems Peculiar to Small Scale Enterprises With Regard to Financing Working Capital	Percentage of Response	Degree of Importance on Percentage Weight of Frequency
a) Complicated procedures	65.63	Important
b) Time consuming	78.13	Most Important
c) Difficult terms and conditions	65.63	Important
d) Collateral Problems	100.00	Most Important
e) Exorbitant Rate of Interest	68.75	Important
f) Inadequate supply of working capital	100.00	Most Important
g) Restricted Use	59.38	Important
h) Low money market base	9.38	Least Important

Note : a) Data have been compiled by the researcher.
b) Percentage of responses exceeds 100% due to multiple responses of sample respondents

Legend :	Degree of Importance	Percentage Frequency
	Most Important	70-100
	Important	50-69
	Least Important	00-49

It has observed and found from examination of financial status of small scale enterprises that Small scale enterprises can't even utilize its installed capacity for lack of sufficient working capital. Sometimes small firms cannot even reach breakeven level due to inadequate amount of working capital despite huge demand for product in the market. It is evident from the analysis of Table-5.4 that the most important problems of financing working capital of small scale enterprises in order of magnitudes are collateral problems

(100%), inadequate supply of working capital(100%), and time consuming (78.13%); important problems of financing working capital are exorbitant rate of interest(68.75%), difficult terms and condition, (65.63), complicated procedure (65.63%), and restricted use; and least important problem is low money market base (9.38%). Respondents of small scale enterprises have made most important problems responsible for not being able to get adequate working capital loan from banks and financial institutions. The problems identified as important are systematic and can be diversified. These findings have reflected real financing working capital problems facing the sample small scale enterprises in Chittagong.

SUMMARY, POLICY IMPLICATIONS, AND CONCLUSION OF THE STUDY :

The study has examined the working capital financing practices of SSIs in Chittagong. Bangladesh by employing scientific techniques. The findings of the study have been summarized as follows :

a) Findings Relating to Approaches to Financing Working Capital of SSIs:
   I. Most of the sample small scale enterprises follow hedging approach which involves high risk and high profit; and least number of sample small scale enterprises follow trade-off approach which offers relatively higher risk adjusted return being efficient approach. This has led the researcher to conclude that approach to financing working capital of most sample small scale enterprises is not efficient
   II. 78.12% of sample respondents finance variable proportion of current assets with short-term funds and fixed proportion of the same with long-term funds. 21.88% of the sample respondents finance half of current assets with long-term sources and other half of the same with long-term sources of funds. This has matched the findings over financing current assets of sample small scale enterprises to the larger extent.

b) Methodology of Forecasting Working Capital
   I. The study has found that all the sample respondents (100%) project/forecast the working capital requirements on the basis of experience of the past. Researcher has also observed that they are not even aware of statistical techniques to be used in forecasting working capital requirements for the firms.
   II. All sample respondents are of the opinion that they have experienced unfavorable deviation in actual working capital from expected/forecasted working capital value due to both controllable and uncontrollable factors.
   III. The controllable factors are fluctuation in size of inventory due to straddle price situation, , mounting accounts receivables due to failure to realize in time, decrease in production volume sometime in operating years, etc. The uncontrollable factors are volatility in prices of materials, high inflation rates, higher interest rates, political risk, supply constraints, etc.

IV. Sample respondents (56.25%) who consider operating cycle in forecasting working capital have been found to have taken very basic components of operating cycle. The basic components are credit for suppliers, inventory of raw materials & finished goods, accounts receivables & payables, production, price fluctuation, growth & expansion, etc. The remaining sample respondents (43.75%) who do not consider operating cycle in forecasting working capital value have made some reasons/causes accountable against consideration. The reasons as identified in order of magnitudes are irregular payment from debtors, irregular delivery by suppliers, and irregular production. But failure to capture risk arising out of these variables would have made working capital management of small scale enterprises inefficient.

C. Sources of Financing Working Capital :

I. All sample small scale enterprises have used ordinary share, loans from financial institutions, retained earnings, trade credit and bank loans during the study periods. But depreciation reserves, outstanding liabilities for expenses, bank overdraft, sister concern loan, and bank overdraft have been used for financing working capital during study periods by 71.87%, 56.25%, 25%, and 21.87% of the sample respondents respectively. It has also been observed that small scale could not utilize many sources for financing working capital. This situation can be attributed to many reasons such as shallow funding sources, poor credit rating, lack of adequate collateral, poor financing plan, regulatory problem of raising funds by means of issuing bond/debenture / commercial paper, and non-availability of money market products.

II. Sample small scale enterprises in Chittagong highly require financing their working capital through: equity finance (Mean=4.20), long-term debt (Mean =4.50), accounts payable (Mean =4.10), accruals (Mean =3.80), bank loans (Mean =4.20), promoters' fund (Mean =3.57), borrowing from friends and family (Mean =4.25), and thrift (Mean =4.3o). However majority of them (SMEs) require financing their working capital through: asset based financing (Mean =2.75), and unsecured financing (Mean =2.80).

III. The findings of the study have revealed sources of financing working capital as highly required by Small Scale Enterprises for effective operations in Chittagong. The results have shown that the major sources of financing the working capital of small scale enterprises in Chittagong for their effective operations are: equity finance; long term debt; accounts payable; accruals; bank loans ; promoters fund; borrowing from friends family; and thrift.

d. Problems Peculiar to Small Scale Enterprises with regard to financing Working Capital

The study has found that the most important problems of financing working capital of small scale enterprises in order of magnitudes are collateral problems (100%), inadequate supply of working capital(100%), and time consuming (78.13%); important problems of financing working capital are exorbitant rate of interest(68.75%), difficult terms and condition, (65.63), complicated procedure (65.63%), and restricted use; and least important problem is low money market base (9.38%). Respondents of small scale enterprises have made most important problems responsible for not being able to get adequate working capital loan from banks and financial institutions. The problems identified as important are systematic and can be diversified. These findings have reflected real financing working capital problems facing the sample small scale enterprises in Chittagong.

The Study has suggested following policy measures for professionals, financing working capital authority, and policy makers in order to making working capital financing practices of SSIs most pragmatic tand productive:

a) SSIs should follow trade off approach to finance working capital being efficient one.
b) SSIs should start using effective and adusted scientific techniques for projecting required working capital. In this regard, they should consider relevant quantitative and qualitative determinants of working capital.
c) SSIs should keep on monitoring the price volatility of factors of production in order to exploit the benefits of price changes.
d) SSIs should have an effective plan of utilizing funds with least costs from different sources as much as possible.
e) Bangladesh Bank being regulator of commercial banks can make a provision to include a particular share of loan portfolio as Loans to SSIs. This would ease problems of obtaining institutional loans for financing working capital of SSIs to a larger extent. Besides, it can offer a loan of window at a bank rate of interest for SSIs through commercial banks in Bangladesh.
f) The Government should address the problem of financing working capital of SSIs through fiscal benefits and other institutional arrangements like credit programs of NGOs and Specialized banks -Bangladesh Krishi Bank, and Rajshahi Krishi Unnayan Bank, etc.

SSIs can be said to be buffer of Bangladesh economy for its contribution to the employment, value generation for the society, and finally to the eradication of poverty. The policy measures suggested on the basis of findings can be expected to solve the major problem of financing working capital of SSIs and thereby enabling SSIs work as buffer of the economy on a continuous basis.

References :

Abor, J. (2005). The effect of capital structure on profitability: an empirical analysis of listed firms in Ghana. The Journal of Risk Finance, 6(5), 438?445.

Ahmed, M. U. (1984). Financing Rural Industries in Bangladesh, The Bangladesh Development Studies, Vol. XII, No. 1 and 2, Special Issue on Rural Industrialization in Bangladesh.

Aidis, R. (2005). Why don't we see more small- and medium-sized enterprises (SMEs) in Lithuania? Institutional impediments to SME development. Journal of Small Business Economics, 25(4), 305?317.

Atrill, P. (2006) Financial Management for Decision Makers. London: Pearson Education Ltd.

Ben-Horim, M and Levy,H (1983) "Management of Accounts Receivable under Inflation" Financial Management, Vol. 12, No. 1, pp 42-48.

Bhattacharya, H. (2001). Working capital management: Strategies and techniques. New Delhi: Prentice Hall.

Bhattacharya, D., Faiz, N., and Zohir, S. (2000). Policy for Employment Generation in the Informal Sector of Bangladesh - A Study Prepared for the International Labour Office, Centre for Policy Dialogue, Dhaka.

Bhaird, C., & Lucey, B. (2011). An empirical investigation of the financial growth lifecycle'. Journal of Small Business and Enterprise Development, 18(4), 715?731.

Bhunia, A. (2010). A trend analysis of liquidity management efficiency in selected private sector Indian steel industry. International Journal of Research in Commerce and Management, 1(5), 618-628.

Cookson, F. (1999), . Credit Information in the Bangladesh Financial System, Job Opportunities and Business Support (JOBS) Program, Institutional Reform and the Informal Sector (IRIS), University of Maryland at College Park, USA, Retrieved from (http://www.jobsproject.org/content/publication/Credit%20Information%20in%20the%20Bangladesh%20Financial%20System.pdf)

Daniels, L. (2003). Report on the National Private Sector Survey of Enterprises in Bangladesh, International Consulting Group, Melbourne, Australia, Retrieved from http://adb.org/Documents/RRPs/BAN/rrp-ban-35225.pdf

Filbeck, G and Krueger,T. (2005). Industry Related Differences in Working Capital Management. Mid-American Journal of Business 20(2): 11-18.

Gallinger, G.W. (1997). The Current And Quick Ratios. Do They Stand Up To Scrutiny? Business Credit, 99 (5), 24-28.

Gitman, L.J. (1997). Principles Of Managerial Finance. New York: Harper Collins College Publishers.(7th Ed.).

Gitman, L. J. (2000). Principles of managerial finance, (9th Ed.). Reading, MA: Addison Wesley & Longman.

Gitman, L.A. (2005). Principles of Managerial Finance (11th Edition). New York: Addison Wesley Publishers.

Hill, M.D., Kelly, G.W. & Highfield, M.J. (2010) Net Operating Working Capital Behavior: A First Look. Financial Management Summer. 783-805 17

Hossain, S. Z., and Akon, M. H. R. (1997). Financing of working capital: case study of Bangladesh textile Mills Corporation. Journal of Financial Management and Analysis, 10(2), 37-42.

Hossain, N. (1998). Constraints to SME Development in Bangladesh, Job Opportunities and Business Support (JOBS) Program, Retrieved from (http://scholar.google.com/url?sa=U&q=http://128.8.56.108/iris-data/docs/bd1.pdf)

Hussain, J., & Matlay, H. (2007). Financing preferences of ethnic minority owner/managers in the UK, Journal of Small Business and Enterprise Development, 14(3), 487?500

Hughes, A. (1997). Finance for SMEs: A UK perspective. Small Business Economics, 9, 151?166.

Islam, M. N., Arefin, K., and Hossain, M. M. (2005). Small Business Financing: Problems Analysis and Overcome Strategies, Journal of Business Research, Vol. 7, June, pp. 91-102.

Keown, A. J., Martin, J. D., Petty, J. W. & Scott, D. F. (2005).Financial Management: Principles and Applications 10th Edition. New Jersey: Pearson Prentice Hall

Khan, M.Y. and Jain, P.K. (1997), Financial Management-Text and Problems, New Delhi: Tata McGraw Hill Publishing Limited, India, pp. 609-614.

Kolay, M. K. (1991). Managing working capital crises: a system dynamics approach. Management Decision, 29(5), 46-52.

Meagher, P. (1998). Secured Finance for SMEs in Bangladesh, Job Opportunities and Business Support (JOBS) Program, Institutional Reform and the Informal Sector (IRIS), University of Maryland at College Park, Retrieved from (http://www.iris.umd.edu/download.aspx?ID=4e2062e9-a64b-4868-8823-7d638b4810e1)

Marfo-Yiadom, E. (1996) An empirical study of working capital management practices of selected firms in Ghana, Unpublished MBA Thesis, University of Ghana.

Marfo-Yiadom, E. (2002) "A survey of cash management practices of selected firms in Accra- Tema Metropolitan Area" The Oguaa Journal of Social Science Vol. 3 (June): 165-182.

Mintoo, A. A. (2004). SMEs in Bangladesh, Asia-Pacific Tech Monitor, September- October, pp. 44-56.

Moyer, R.C, Maguigan, J.R. andKretlow, W.J (2001) Contemporary Financial Management. Ohio: South Western Publishing

Pfohl, H. C., Elbert, R. & Hofmann, E. (2003). Financial Supply Chain Management. Logistic Management. 5, 10-26

Pradhan, R.S. (1988),Management of Working Capital, New Delhi: National Book Organization, India, pp.200-215.

Rahman, A. R.,and Ali, F. H. (2006). Board, audit committee, culture and earnings management: Malaysian evidence. Managerial Auditing Journal, 21(7), 783-804.

Sia, M. T. (2003), "SME Finance", Paper Prepared for the Asian Development Bank, mimeo. Asia Region, Colombo, Sri Lanka, Retrieved from (http://www.ifc.org/ifcext/southasia.nsf/AttachmentsByTitle/SMEFinalAgenda/$FILE/SME+Symposium-+Final+Agenda.pdf)

Task Force Report on Bangladesh Development Strategies for the 1990s, Policies for Dvelopment (1991), Volume 1, University Press Limited, Dhaka.

Van Horne, J. C. & Wachowicz, J. M. (2000). Fundamentals of Financial Management, 11th Ed. New Jarsey: Prentice Hall Inc.

Watson, R., & Wilson, N. (2002). Small and medium size enterprise financing: A note on some of the implications of a pecking order. Journal of Business Finance and Accounting, 29(3/4), 557?578.

Wood, A. (1993). Efficient consumer response. Logistics Information Management, 6(4), 38-40

Yiadom, Marfo, E. and Agyei, S. K. (2007), Working Capital Management Practices of Small Scale Enterprises in the Central Region of Ghana, Asian Journal of Business and Management Sciences Vol. 1 No. 4 [29-47] (http:/ www.ajbms.org)

Zoppa, A., & McMahon, R. (2002). Pecking order theory and the financial structure of manufacturing SMEs from Australia's business longitudinal survey. Research paper series: 02-1, The Flinders University of South Australia.

International Journal of Applied Management Research,
Vol. 4(No.1), Page : 60 - 77

Corporate Social Responsibility vis-à-vis Beneficiaries' Satisfaction

Kasturi Saikia
Department of commerce, NEHU, Shillong.

ABSTRACT :

Corporate Social Responsibility (CSR) plays a pivotal role in many aspects but very few studies have concentrated on the other side of the coin. Hence, in order to dwelve into the area, an attempt has been made to study the role of CSR on social well-being by gauging the satisfaction level of community members of the two refineries (Numaligarh Refinery Limited and Bongaigaon Refinery) situated in Assam, in relation to their perception regarding general CSR and satisfaction on the initiatives that both these refineries are carrying out. A schedule was used for collection of data, which is further analyzed using descriptive analysis and ANOVA. The findings revealed that beneficiaries are satisfied to an extent, but the ones of NRL seem to be happier than those of BGR.

Key Words : *Corporate Social Responsibility, Beneficiaries, Satisfaction.*

INTRODUCTION :

Business and society are integrated in a way that it cannot be separated or carried out without the help of each other. Though, business firm aims at earning profit, however as it keeps growing in wealth, size, and impact it realizes its responsibility towards society and in that direction begin to share some part of profit towards improving the quality of life of people, which in simple words can be referred as Corporate Social Responsibility (CSR). The roots of business lies in sole proprietorship where it was carried out only for private gain, but with time, sole proprietorship took the form of corporate entity which involved managers and directors for decision making and it was expected that corporate managers should voluntarily fulfill certain responsibilities towards employees, consumers and general public (Dodd, 1932) which paved the way for business responsibilities towards the various stakeholders.

Out of all the stakeholders, the members of the society or community in which business operates to carry out CSR practices are the direct recipients of CSR benefits who can be referred as beneficiaries'. They are the ones for which CSR is carried out and hence they determine the efficiency of organization's CSR activities. CSR is not about spending huge sum of money, but it is being able to bring a change and deeper impact in the society.

Thus, organizations need to consider the beneficiaries, their demands and expectations while deciding the CSR activities.

Keeping this in mind, the amendment in the Companies Act, 2013 related to the CSR clause (Clause 135) requires the companies to include issues of social concern so that it contributes towards a better and developed nation. Even after 70 years of independence, India is still faced with various socio-economic problems, which Government alone cannot handle; hence it decided to take help from the private sector. The main activities to be included under CSR practices are related to eradication of extreme hunger and poverty; promotion of education, gender equality and empowering women; reducing child mortality and improving maternal health; combating various types diseases; ensuring environmental sustainability; employment enhancing vocational skills; social business projects and socio-economic development and funds for the welfare of the various tribe, classes, minorities and women. The Act also provides that the company shall give preference to the local areas around its operation and the activities should be undertaken within India. Companies may collaborate with other companies to undertake activities or implement its CSR programs through not-for-profit organisations that are not set up by the company itself. Thus, the future of CSR is expected to change in the Indian scenario which makes it important to study CSR from the point of view of stakeholders in the form of satisfaction of beneficiaries.

LITERATURE REVIEW :

CONCEPT :

CSR, in simple word, is business's respond to society's expectation by considering their needs. Philanthropic giving is no more a part of CSR, but organizations focus on activities for all round development. The issue of social orientation to business became critical for the companies only in 1960s and 1970s, which led to structural change in the companies to integrate social concerns into the operating mechanism (Buehler & Shetty, 1976). CSR has evolved over time with the contributions of various academicians and researchers (Carroll, 1979, 1991, 1999; Davis, 1960, 1973; Drucker, 1984 Friedman, 1962, 1970; Porter & Kramer, 2002, 2006; Sethi, 1975, 1979; Wood, 1991a, 1991b, 1991c, 2010) which has led to the different views - i) Classical and socio-economic view; ii) CSR as motivation; iii) Pyramid of CSR; iv) Corporate Social Performance (CSP) to measure the outcomes of CSR; v) linkage between CSR and financial performance; vi)strategic CSR..The history of CSR, its transformation from concept to a process, how it became a part of business decision making, and how it changed the lives of people are worth noting. And it still has a long way ahead of it. Its meaning will get its true value only when the organisations sincerely work whole heartedly for the upliftment of the underprivileged lot and improve their standard of living, and not just out of compulsion.

SOCIETY AS A STAKEHOLDER

The success of an enterprise not only depends on management practices and policies or economic conditions, it also depends on the responses of its stakeholders like employees, government, media, customers and society in general (Cochran, 2007). Thus, it is important to study CSR from the point of view of stakeholders. But very few studies have concentrated in knowing the effect of CSR activities on the stakeholders hence Wood (2010) advocates for studying CSR effect on its beneficiaries.

Society is one of the very important stakeholders of CSR which is a direct recipient of the CSR initiatives of an organisation. CSR provides direct and indirect benefits to the community (Ismail, 2009) and also makes the community self reliant through different types of community development initiatives (Ismail, 2009; Pradhan & Ranjan, 2010; Shah & Bhaskar, 2010). In fact, it can be said that CSR is a major tool for community development (CD). Whatever corporations are doing as part of CSR initiatives are ultimately resulting in CD. The role of CSR in CD can be very well understood if we dwelve deep into the annual reports and sustainability reports of various organisations.

CSR IN INDIA

In India, community development is the most prioritized area in case of CSR activities (Kansal & Singh, 2012). It is considered to be a part of national building process carried out voluntarily and in synergy with business activities (Mitra, 2012). Corporations work with the local communities, and collaborate with civil societies and NGOs to perform their CSR activity (Joseph, 2009; Shastri & Singh, 2012). Thus, CSR has been playing a major role and indeed it is contributing and benefitting the rural population of India to a great extent (Pradhan & Ranjan, 2010). Singh & Agarwal (2013) identified that most companies in India work near the area of operations, beneficiaries being the local population giving more importance to community welfare followed by education, health, environment, rural development

All the Maharatna companies have been actively involved in CSR activities and as suggested by Nash (2012), they should be used as an ideal example by other corporations for CSR activities. Even the Fast Moving Consumer Goods (FMCG) companies of India are doing well in the field of environment, health care, education, community welfare, women's empowerment and child care (Khan, 2009). The financial sector is also doing its parts in carrying out CSR in India (Das, 2012). Thus, most of the organisations in India are seriously taking up the activities of CSR, making it a part of their business strategy (Nihalani & Mathur, 2011).

The literature review clearly indicates that CSR indeed plays a pivotal role in development of society in particular and economy in general. It has been noticed that CSR is studied from different perspectives and especially from organisation point of view in the field of management. But the very fact remains that CSR exists for the sole development of the community which may include various facets of society. And this is not possible by ignoring the beneficiaries of CSR. A gap was clearly visible, in the literature, between the direct relationship of CSR and satisfaction of the beneficiaries, which forms a very important part in CSR research.

MEASUREMENT OF CSR

CSR measurement is a topic which has been discussed by researchers from various view points with the help of both primary and secondary data.

Secondary data based measurement

CSR is usually measured by preparing index through certain database (Graves & Waddock, 1994; Turban & Greening, 1997; McGuire et al., 2003) based on secondary information using content analyses of annual report, pollution indices, expert evaluations (Cochran & Wood, 1984; Maignan & Ferrell, 2000; Igales & Gond, 2005; Marquez & Fombrun, 2005). But such index was not considered to be adequate to measure CSR (Cochran & Wood, 1984). The most commonly used and accepted database to create CSR index by scholars (Graves & Waddock, 1994; Turban & Greening, 1997; Backhaus et al, 2002; McGuire et al, 2003) is the Kinder, Lydenberg, Dominic & Co. (KLD) database which rates organisations on the basis of approximately 80 indicators covering seven major qualitative aspects i.e. community, corporate governance, diversity, employee relations, environment, human rights, quality of products (Risk Metrics Group, 2010). Reputation index is also developed to assess the social performance of firms based on major areas like community, diversity, workplace, and environment (Albinger & Freeman, 2000) and also to measure CSR perception of stakeholders (Dilling, 2011). The rating agencies also use external information about the company, questionnaire method and interview to develop assessment and rating (Marquez & Fombrun, 2005). Social Involvement Disclosure (SID) scale was formed from secondary data through content analysis (Abbott & Monsen, 1979). An attempt has been made to develop CSR index in India as well to measure CSP through content analysis (Kansal & Singh, 2012; Singh & Agarwal, 2013).

But all these database and indicators are based on secondary data providing information from the point of view of companies. Along with such information, direct views of the stakeholders on CSR are also required for the measurement of CSR. Hence, Cochran and Wood (1984) rightly pointed out that it is difficult to measure CSR objectively, thus research should focus to measure CSR through perception.

Primary data based measurement

Primary data method such as questionnaire based survey was used to measure CSR in certain cases (Aupperle et al, 1985; Fitzpatrick, 2000) to know CEO views on CSR. CSR has also been studied through perception of the employees at an individual level, where researchers have developed their own scale (Al-Khater & Naser, 2003; Brammer et al., 2007; Valentine & Fleishman, 2008; Turker, 2009a, 2009b) to study perception of different CSR users related to various aspects. CSR was also measured through corporate citizenship based on Carroll's four components (Maignan & Ferrell, 2000) which was also used by Peterson (2004) to study the perceptions of corporate citizenship and later used by Lee et al (2008) to measure employees' perception on CSR.

In such similar cases, many scholars used scale designed by others to measure CSR (Riordon et al,1997; Carmeli et al., 2007; Ali et al., 2010) based on corporate image i.e. reputation in the community, reputation in the industry, active involvement in the community, good overall image, good place to work, good reputation among customers; quality of products, services and programs; development of new product, services and programs; ability to retain essential employees; relations between management and other employees. McDonald and Leibenberg (2006) used qualitative research techniques through in depth interviews to study CSR perception of employees.

No major variables could be identified to measure CSR from the literature review, except a few-Records of philanthropic involvement, view of the stakeholders, reputation of the company within the community, compliance with laws and regulations, employee retention and financial performance. But these measures of CSR cover a wide scope as it is studied from different perspectives. Moreover CSR also encompasses various activities according to different studies in respect to the various stakeholders which includes employees needs and wants, environment, sustainability, consumer rights, tax payment, quality and development of new products, services and programs etc. (Brammer et al, 2007; Carmeli et al, 2007; Turker, 2009a). Hence, the measurement of CSR is broad covering the various aforementioned aspects. So, despite measures being available for CSR, there is lack of valid and reliable instrument to measure perception on CSR (Baltazar, 2011) which makes it difficult to adopt a particular scale. Thus, for this particular study scale is developed with the help of pilot survey and after factor analysis and reliability test, the scale was adopted to measure CSR through perception of the beneficiaries.

NEED AND SIGNIFICANCE OF THE STUDY :

It can be observed from the literature review that studies on CSR so far have been limited to the concept, meaning, employees' attractiveness, organizational commitment and its relationship with financial performance. These studies have considered CSR from the organization's viewpoint. While, it is important to see CSR as a part of company, it is also important to know the efficiency of CSR initiatives through the views of the community in which they are dealing with. Arli and Zappala (2009) stated that companies ignore measuring social impact of the corporate community programs due to lack of time and resources, lack of interest, and lack of standardized frameworks and measures. Measurements are focused primarily on inputs and outputs, and not on the social impacts (Veleva, 2010). A knowledge gap also lies in the conduct of research at an individual level of analysis addressing the various mechanism of CSR, which can also be done through qualitative studies (Aguini & Glaves, 2012). Thus, through this study, an attempt is made to understand how CSR efforts are being translated into outcomes and the factors which determine its effectiveness or otherwise. It presents an effort to examine the level of satisfaction as perceived by the beneficiaries on CSR initiatives.

It is interesting to see if CSR could serve as the catalyst of change especially for a developing country like India, which is an abode to some of the world's big corporate giant having been listed in Forbes 2000 and Fortune 500. Oil and Gas sector plays an important role in the economy of the nation vis-à-vis, North-East India. In this light, a look into published literature on CSR in this sector reveals that oil refineries have not been studied through primary data, though cases have been done on PSUs such as ONGC, BPCL, etc. Having gone through the related literature and arriving at above mentioned gaps in the published work, this study of two refineries (NRL and BGR as sample units) on the basis of perception of beneficiaries as to know how do they feel about it, is justified.

OBJECTIVES :

The study is carried out with the objective to measure CSR satisfaction of the beneficiaries of two refineries, viz., Numaligarh Refinery Limited (NRL) and Bongaigaon Refinery (BGR) (under IOCL) operating in the state of Assam.

METHODOLOGY :

IDENTIFICATION OF VARIABLES

The scales that are available to measure CSR are not suitable for the study, as the present study not only deals with the various CSR perceptions but also the satisfaction derived by the respondents from the CSR activities. Hence, an extensive pilot survey is planned before the actual survey is carried out which provided the base for the current work (Turker, 2009a). Both the refineries have been visited number of times to collect the details about the policies, the nature of CSR activities being carried out by the refineries, which guided in deciding the variables to be studied.

Based on the literature (Turker, 2009a; Davis, 1973) and surveys, items to measure CSR were identified after which a pilot survey was conducted, the results of which were first put to Spearman's Correlation test to exclude correlated items from the scale. Factor analysis is then performed on the remaining items and the five major activities of CSR, which gave the following variables :

i. Business & society co-exist for the welfare of nation & its citizens (Relationship between Business & society)

ii. The Refinery is concerned about society & it's well being (Organisation concern of society)

iii. CSR has become prominent within the refinery in last five years (Prominence of CSR)
iv. I am aware of the CSR initiatives that this refinery is carrying out (Awareness among community members)
v. The refinery engages community in allocating CSR expenses to different activities (Involvement of local community)
vi. The refinery regularly monitors its CSR activities in the area (Monitorisation of activities)
vii. The financial assistance by the refinery has been utilized for the required purpose as desired (Optimum Utilization of Assistance)
viii. The refinery's CSR initiatives have contributed in the development of the local area (Development of Local Area)

The five major activities as identified from the CSR expenditure details from both the refineries were also put to factor analysis that resulted in Factor 2 measuring satisfaction on initiatives. The activities are as follows :

i. Agriculture & allied income generating activities
ii. Education
iii. Infrastructural development
iv. Health
v. Promotion of sports, arts & culture

Based on the results, it can be summarized that CSR can be measured from two dimensions – (i) Perception of the beneficiaries in relation to general CSR and (ii) beneficiaries' satisfaction on CSR initiatives. Perception is measured through the feelings of respondents about their views on CSR in general and CSR activities in particular.

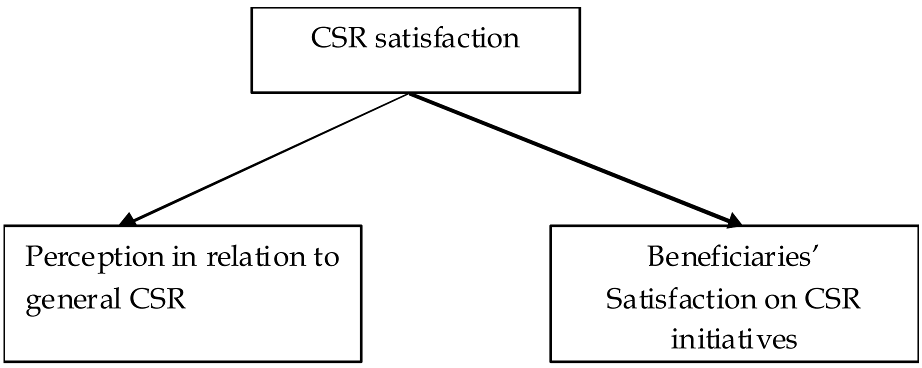


Figure 1 : Dimensions of CSR measurement

The pilot survey, thus, facilitated the present study with valuable inputs and provided a framework to carry out the work.

The study is spread over a period of five years (2008-09 to 2012-13) in both the refineries based on both primary and secondary data. Secondary data are obtained from the records of refineries. Primary data have been collected through perception based on structured questionnaires consisting of three parts viz., Personal information, perception in relation to General CSR and satisfaction on CSR initiatives. Seven point (1 being strongly disagree and 7 being strongly agree) Likert Scale has been used to gather the responses.

RELIABILITY TEST

After collection of responses, the same was codified and tabulated systematically to make it comparable and reliability test as presented in Table 1 was carried out using Cronbach's alpha, which produced satisfactory results.

Table 1

Cronbach's Alpha of the Variables

Reliability Statistics	Beneficiaries	
	Coefficient	No. of items
Perception in relation to general CSR	0.761	8
Beneficiaries' Satisfaction on CSR initiatives	0.716	5

5.3 Sampling :

Beneficiaries have been divided into institutions and individuals, the list of which is obtained from the respective refineries. The sample for institutions is selected by going through a process of filtering them. Those institutions which are in receipt of the benefits of CSR initiatives for a continuous period of 4 years or more have been considered at first. Second, those beneficiary institutions who ceased to exists at the time of data collection, were reduced. Third, institutions having key personnel in common are combined into one and reduced accordingly. Finally the list of institutions studied reduced from 64 to 39 in NRL and similarly 23 to 21 in BGR, representing the five major activities. The, data have been collected interviewing the head of institutions like Secretary, President, Chairman, Principal, Headmaster or Executive member.

For drawing individual beneficiaries, it was neither feasible nor practical to identify and approach them personally. Based on expense records, most benefited 10 villages within the vicinity of 10 km from the respective location of refineries have been selected. The populations of these villages are assumed as beneficiaries. Individuals from these villages were approached on convenience basis for the study and requisite data are obtained through a schedule. A sample of 181 individuals and institutions (107 in NRL and 74 in BGR) has been drawn (Table 2).

Table 2

Profile of Beneficiaries

	NRL		BGR		Total	
Age(in years)	**(n = 107)**	**%**	**(n = 74)**	**%**	**(n = 181)**	**%**
25 and below	4	3.74	1	1.35	5	2.76
26 to 50	82	76.64	59	79.73	141	77.90
51 and above	21	19.63	14	18.92	35	19.34
Male	71	66.36	45	60.81	116	64.09
Female	36	33.64	29	39.19	65	35.91
Institutions	39	36.45	21	28.38	60	33.15
Individuals	68	63.55	53	71.62	121	66.85

Source : field work

TOOLS FOR ANALYSIS :

Spearman's correlation and Factor analysis (Turker, 2009a) is used to identify the items to measure CSR with the help of pilot survey, which has already been discussed in details. Reliability test such as Cronbach's Alpha is applied thereafter. The analysis of the same is done with the help of descriptive statistics such as Mean, Mode, Median and Standard Deviation and quantitative method such as one way analysis of variance (ANOVA). The individual items to measure perception in relation to general CSR have been analyzed using median, mode and frequency, as responses on individual Likert items are considered to form an ordinal scale and hence needs to be described using frequencies or percentage of responses on each category (Jamieson, 2004; Boone, Jr. & Boone, 2012). Top 3 Box is calculated as the percentage of sum of responses on the particular Likert item with the top three options of "strongly agree", "agree" and "slightly agree". Whereas Net Top 3 Box is calculated by subtracting the bottom three options from the responses of the top three options, which shows the net percentage of beneficiaries' that are in agreement in excess of those that are not in agreement.

But in case of Likert scale, where responses are summed up on the basis of Likert items, mean and standard deviation is used as Likert scale contains multiple items and can be treated as interval scale (Albaum, 1997; Jamieson, 2004; Carifio & Perla, 2007; Brown, 2011; Boone, Jr. & Boone, 2012). On the basis of demographic variables, ANOVA is used to test the differences on beneficiaries' satisfaction on the basis of organisation and categories i.e. institutions and individuals.

FINDINGS

A firm being a social system has significant influence on the members of the society (Elbing, 1970), thus actions of companies should be directed towards benefit of the public

(Grunig, 1979). Their views and perception relating to CSR initiatives is crucial. They are the ones getting the benefits and hence they can only bring out the positive and negative aspects of such activities.

Both NRL and BGR focus on community development initiatives as part of their CSR activities which adds to a better relationship between company and local communities (Roy, 2009). Localizing such activities with the help of community members also helps in ensuring that CSR initiatives are relevant and effective (Shaw, 2007). The satisfaction of the beneficiaries in relation to the types of activities being carried out can also determine the effectiveness of such programmes.

Satisfaction is an emotional response, the meaning of which can be discovered only by the process of introspection i.e. an act of conceptual identification directed to ones mental contents and processes (Locke, 1976). There may be various factors which affect the satisfaction level of an individual; one may perceive one factor to be more important than the other. An individual's satisfaction depends on the aspirations and such aspirations are a result of perception i.e. how a person perceives a particular situation in comparison to others (Stagner, 1970). Hence, CSR satisfaction is measured by perception of the beneficiaries in relation to general CSR and satisfaction on CSR initiatives. The beneficiaries of both the refineries are thus approached by grouping them in two categories, institutions and individuals.

Table 3 shows the overall CSR perception and satisfaction of the 181 beneficiaries, which does not show a satisfied picture of the community, as the average ranges between 4.33 and 4.98, in case of all the variables. Promotion of sports, arts, & culture and Education are two categories where people have ranked their satisfaction level on a higher side compared to infrastructural development and Agriculture-allied activities. Educational activities have reached out and touched the lives of many people as almost every household having children have got the various benefits of free textbooks, prize-money for scoring well in exams through the various schemes, better facility at school with mini library and drinking water facilities. Even the refineries fully supports in organizing various types of cultural programmes in the local area which clearly promotes arts and culture in the region.

Table 3

CSR satisfaction of External Beneficiaries

	NRL						BGR						Total					
	Instit-utions (N=39)		Individuals (N=68)		All (N=107)		Instit-utions (N=21)		Individuals (N=53)		All (N=74)		Instit-utions (N= 60)		Individuals (N=121)		All (N=121)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Perception on general CSR	5.13	0.361	5.05	0.262	5.08	0.303	4.25	0.247	4.30	0.299	4.29	0.285	4.83	0.533	4.72	0.464	4.75	0.489

Satisfaction (on activities)																		
Agriculture & allied income generating activities	5.23	0.460	4.94	0.740	5.05	0.664	3.55	0.531	3.73	0.472	3.68	0.492	4.64	0.938	4.41	0.876	4.49	0.901
Education	5.35	0.475	5.03	0.351	5.15	0.428	4.50	0.350	4.51	0.377	4.51	0.367	5.05	0.595	4.8	0.443	4.89	0.511
Infrastructure Development	4.46	0.525	4.22	0.420	4.31	0.472	4.34	0.353	4.32	0.246	4.33	0.278	4.42	0.472	4.27	0.356	4.33	0.393
Health	4.98	1.023	4.97	0.473	4.98	0.719	4.65	0.477	4.70	0.472	4.69	0.471	4.87	0.882	4.85	0.490	4.86	0.644
Promotion of sports, arts and culture	5.16	0.461	5.04	0.420	5.08	0.438	4.83	0.382	4.82	0.330	4.82	0.343	5.05	0.460	4.94	0.397	4.98	0.421

Source : Field work responses

As regards, refinery-wise satisfaction, it can be said that – (i) the beneficiaries of NRL are more satisfied than their counterparts in BGR except on infrastructural development where the mean indicates equal satisfaction; (ii) institutions in NRL seem to be more satisfied than the individuals, as institutions of different types like School, Self Help Groups, Health Centre have received benefits every year from the refinery, thus, they are happy; (iii) highest satisfaction is on education and least on Infrastructural development in case of the beneficiaries of NRL (iv) Low satisfaction is seen in case of agriculture and allied activities for BGR which may be due to insufficient budgetary provision. BGR mainly concentrates on women centric activities (like weaving), hence, satisfaction is expected to be low for want of inclusion of more such income generating activities.

A glance at Table 4 reveals beneficiaries' perception regarding general CSR, which is higher in case of NRL. The beneficiaries' perception in relation to general CSR has been gathered through 8 statements. In case of NRL, beneficiaries seem to agree with most of the statements as median and mode value ranges between 5 and 6 except in case of prominence of CSR, where the mode value is 4. It seems that beneficiaries of NRL are in agreement with all the eight statements as at least 64 % of them have agreed, rest being neutral.

Table 4

Statement wise response to Beneficiaries' Perception on General CSR

		NRL			BGR			Overall		
		Institutions (N=39)	**Individuals (N=68)**	**Total (N=107)**	**Institutions (N=21)**	**Individuals (N=53)**	**Total (N=74)**	**Institutions (N= 60)**	**Individuals (N=121)**	**All (N=181)**
Relation-ship between business & society	Median	5	5	5	6	6	6	6	5	5
	Mode	6	5	5	6	5	5	6	5	5
	Top 3 box	90%	82%	85%	100%	100%	100%	93%	90%	91%
	Net top box	87%	82%	84%	100%	100%	100%	92%	90%	91%

Organiz-ation's concern of society	Median	5	5	5	5	5	5	5	5	5
	Mode	5	5	5	5	4	4	5	4	5
	Top 3 box	79%	62%	68%	67%	55%	58%	75%	59%	64%
	Net top box	79%	62%	68%	67%	55%	58%	75%	59%	64%
Prominence of CSR	Median	5	5	5	5	5	5	5	5	5
	Mode	5	4	4	5	5	5	5	4	5
	Top 3 box	69%	60%	64%	71%	64%	66%	70%	62%	65%
	Net top box	69%	60%	64%	67%	64%	65%	68%	62%	64%
Awareness among community members	Median	5	5	5	3	3	3	5	4	4
	Mode	5	4	5	3	3	3	5	4	5
	Top 3 box	79%	62%	68%	5%	15%	12%	53%	41%	45%
	Net top box	79%	62%	68%	-71%	-51%	-57%	27%	12%	17%
Involve-ment of local community	Median	5	5	5	4	4	4	5	5	5
	Mode	6	5	5	4	3	4	4	5	5
	Top 3 box	77%	82%	80%	19%	25%	23%	57%	57%	57%
	Net top box	74%	81%	79%	-14%	-15%	-15%	43%	39%	40%
Monitori-sation of activities	Median	5	5	5	4	4	4	4	4	4
	Mode	5	4	5	4	4	4	4	4	4
	Top 3 box	67%	63%	64%	0%	0%	0%	43%	36%	38%
	Net top box	64%	63%	64%	-33%	-32%	-32%	30%	21%	24%
Optimum Utilization of Assistance	Median	5	5	5	5	5	5	5	5	5
	Mode	5	6	6	5	6	6	5	6	6
	Top 3 box	85%	76%	79%	76%	74%	74%	82%	75%	77%
	Net top box	82%	76%	79%	76%	74%	74%	80%	75%	77%
Develop-ment of Local area	Median	5	5	5	3	3	3	5	4	4
	Mode	5	6	5	3	4	4	5	4	4
	Top 3 box	85%	65%	72%	0%	0%	0%	55%	36%	43%
	Net top box	85%	65%	72%	-71%	-57%	-61%	30%	12%	18%

Source : Compiled from field work responses

The beneficiaries of BGR chose to have otherwise views. They are in agreement with four statements - i) relationship between business and society, ii) organization's concern of society, iii) prominence of CSR, and iv) optimum utilization of assistance and are in disagreement with other four statements - i) awareness among community members, ii) involvement of local community, iii) monitorisation of activities, and iv) development of local area. The beneficiaries respond that they are less aware of CSR initiatives and also not being involved in concerned decision making by BGR, thus not contributing towards the development of local community.

Again, ANOVA test was also carried out to find if there is statistical difference in CSR satisfaction between the respondents of NRL and BGR, with the exception of infrastructural satisfaction which showed no significant difference. Similarly, no significant difference was found between the satisfaction of beneficiaries on the basis of categorization, institution and individuals, except for education and infrastructure (Table 5). That may be because the activities directed towards education and infrastructure are basically large scale and carried out by institutions rather than individuals.

Table 5

ANOVA test for CSR variables

	CSR Satisfaction					
		CSR initiatives				
ANOVA test	Perception on General CSR	Agriculture &allied income generating activities	Education	Infrastructural Development	Health	Promotion of Sports, Arts & culture
Organization wise						
F statistics	314.245	227.132	108.694	0.122	9.365	18.228
p value	0.000	0.000	0.000	0.728	0.003	0.000
Category wise						
F statistics	1.889	2.682	10.139	5.607	0.024	2.560
p value	0.171	0.103	0.002	0.019	0.877	0.111

CONCLUSION

Both the organization, NRL and BGR, have been carrying out CSR practices for over 20 years. BGR is a 42 year old organisation, while NRL has completed 20 years in 2013. Both the organisation have been spending considerable amount of money for CSR activities, for the all round development of the community. But people are moderately satisfied as they have very high expectations from the organization and hence they are not satisfied, they want more to be done. But nevertheless, the role played by CSR in the development of the community cannot be neglected as can be seen from the condition of the people residing in the nearby areas. It has undoubtedly changed owing to better roads, improved health condition and education system. A more detailed and in depth discussion about the relationship between the CSR initiatives and satisfaction of the beneficiaries needs to be carried out in order to get a better picture through qualitative study by means of interview.

REFERENCES :

Abbott, W. F., & Monsen, R. J. (1979). On the Measurement of Corporate Social Responsibility. Academy of Management Journal, 22(3), 501-515.

Aguini, H., & Glaves, A. (2012). What We Know and Don't Know about Corporate Social Responsibility: A Review & Research Agenda. Journal of Management, 38(4), 932-968.

Albaum, G. (1997). The Likert Scale Revisited: An Alternate Version. Journal of the Market Research Society, 39(2), 331-348.

Albinger, H. S., & Freeman, S. J. (2000). Corporate Social Performance and Attractiveness as an Employer to Different Job Seeking Populations. Journal of Business Ethics, 28(3), 243-253.

Ali, I., Rehman, K. U., Ali, S. I., Yusaf, J., & Zia, M. (2010). Corporate Social Responsibility influences employee commitment and organisational performance. African Journal of Business Management, 4(12), 2796-2801.

Al-Khater, K., & Naser, K. (2003). Users' perceptions of Corporate Social Responsibility and accountability: Evidence from an emerging Economy. Managerial Auditing Journal, 18, 538-548.

Arli, D., & Zappala, G. (2009). Why do companies ignore measuring the social impact of their corporate community involvement programs? The Centre for Social Impact. CSI Briefing Paper No. 4. Retrieved from https://www.researchgate.net/publication/265119210_The_Centre_for_Social_Impact_Why_do_companies_ignore_measuring_the_social_impact_of_their_Corporate_Community_Involvement_programs

Aupperle, K. E., Carroll, A. B., & Hatfield, J. D. (1985). An Empirical Examination of the Relationship between Corporate Social Responsibility and Profitability. Academy of Management Journal, 28(2), 446-463.

Backhaus, K. B., Stone, B. A., & Heiner, K. (2002). Exploring the Relationship between Corporate Social Performance and Employer Attractiveness. Business & Society, 41(3), 292-318.

Baltazar, A.P.P.D. (2011). Corporate Social Responsibility from an Employees' Perspective: Contributions for Understanding Job Attitudes. (Doctoral Dissertation, ISCTE-IUL, 2011.

Boone, Jr. H. N., & Boone, D. A. (2012). Analyzing Likert Data. Journal of Extension, 50(2). Retrieved from www.joe.org/joe/2012april/tt2p.shtml.

Brammer, S., Millington, A., & Rayton, B. (2007). The Contribution of Corporate Social Responsibility to Organisational Commitment. International Journal of Human Resource Management, 18(10), 1701-1719.

Brown, J. D. (2011). Likert items and scales of measurement. SHIKEN: JALT Testing and Evaluation SIG Newsletter, 15(1), 10-14.

Buehler, V. M., & Shetty, Y. K. (1976). Managerial Response to Social Responsibility Challenge. Academy of Management Journal, 19(1), 66-78.

Carifio, J. & Perla, R. J. (2007). Ten Common Misunderstandings, Misconceptions, Persistent Myths and Urban Legends about Likert Scales and Likert Response Formats and their Antidotes. Journal of Social Sciences, 3(3), 106-116.

Carmeli, A., Gillat, G., & Waldman D. A. (2007). The role of perceived organizational performance in organizational identification, adjustment and job performance. Journal of Management Studies, 44(6): 972-992.

Carroll, A. B. (1979). A Three Dimensional Conceptual Model of Corporate Performance. Academy of Management Review, 4(4), 497-505.

Carroll, A. B. (1991, July-August). The Pyramid of Corporate Social Responsibility: Towards the Moral Management of Organizational Stakeholders. Business Horizons, 34(4), 39-48.

Carroll, A. B. (1999). Corporate Social Responsibility Evolution of a definitional Construct. Business & Society, 38(3), 268-295.

Cochran, P. L. (2007). The Evolution of Corporate Social Responsibility. Business Horizon, 50(6), 449-454.

Cochran, P. L., & Wood, R. A. (1984). Corporate Social Responsibility and Financial Performance. Academy of Management Journal, 27(1), 42-56.

Das, S. K. (2012). CSR Practices and CSR Reporting in Indian Financial Sector. International Journal of Business and Management Tomorrow, 2(9), 1-12.

Davis, K. (1960). Can Business Afford to Ignore Social Responsibilities? California Management Review, 2(3), 70-76.

Davis, K. (1973). The Case for and against Business Assumption of Social Responsibilities. Academy of Management Journal, 16(2), 312-322.

Dilling, P. F. A. (2011). Stakeholder perception of Corporate Social Responsibility. International Journal of Management and Marketing Research, 4(2), 23-34.

Dodd, E. M. (Jr). (1932). For Whom are Corporate Managers Trustee? Harvard Law Review, 45(7), 1145-1163.

Drucker, P. F. (1984). The new meaning of Corporate Social Responsibility. California Management Review, 26(2), 53-63.

Elbing, A. O. (Jr.) (1970). The Value Issue of Business: The Responsibilities of the Businessman. Academy of Management Journal, 13(1), 79-89.

Fitzpatrick, K. (2000). CEO views on Corporate Social Responsibility. Corporate Reputation Review, 3(4), 292-302.

Friedman, M. (1962). Capitalism and Freedom. Chicago: University of Chicago Press.

Friedman, M. (1970, September). The Social Responsibility of Business is to Increase its Profits. The New York Times Magazine, 32(13), 173-178.

Graves, S. B., & Waddock, S. A. (1994). Institutional Owners & Corporate Social Performance. Academy of Management Journal, 37(4), 1034-1046.

Grunig, J. E. (1979). A new measure of Public Opinion on Corporate Social Responsibility. Academy of Management Journal, 22(4), 738-764.

Igales, J., & Gond, J. P. (2005). Measuring Corporate Social Performance in France: A Critical and Empirical Analysis of ARESE Data. Journal of Business Ethics, 56(2), 131- 143.

Ismail, M. (2009). Corporate Social Responsibility and its role in community development: An International Perspective. The Journal of International Social Research, 2(9), 199-209.

Jamieson, S. (2004). Likert Scales: How to (ab)use them. Medical Education, 38(12), 1217-1218.

Joseph, A. V. (2009). Successful Examples of Corporate Social Responsibility. Indian Journal of Industrial Relations, 44(3), 402-409.

Kansal, M., & Singh, S. (2012). Measurement of Corporate social Performance: an Indian Perspective. Social Responsibility Journal, 8(4), 527-546.

Khan, S. (2009). Corporate Social Performance of Indian FMCG Companies. Issues in Social and Environmental Accounting, 3(2), 180-201.

Lee, T. Z., Ho, M.H., Wu, C. H., & Kao, S. C. (2008). Relationships Between Employees' Perception of Corporate Social Responsibility, Personality, Job Satisfaction and Organizational Commitment.

Locke, E. A. (1976). The nature and causes of Job Satisfation. Locke, E. A. "The Nature and Causes of Job Satisfaction" in Dunnette, M. D. (Ed) Handbook of Industrial and Organizational Psychology. Chicago: Rand McNally.

Maignan, I., & Ferrell, O. C. (2000). Measuring Corporate Citizenship in Two Countries: The Case of The United States and France. Journal of Business Ethics, 23(3), 283-297.

Marquez, A., & Fombrun, C. J. (2005). Measuring Corporate Social Responsibility. Corporate Reputation Review, 7(4), 304-308.

McDonald, F., & Leibenberg, J. (2006). The Perceptions of Employees in a Private Higher Education Institution Towards Corporate Social Responsibility. SA Journal of Human Resource management, 4(1), 27-35.

McGuire, J., Dow, S., & Argheyed, K. (2003). CEO Incentives & Corporate Social Performance. Journal of Business Ethics, 45(4), 341-359.

Mitra, R. (2012). "My Country's Future": A Culture- Centered Interrogation of Corporate Social Responsibility in India. Journal of Business Ethics, 106(2), 131-147.

Nash, D. R. (2012). CSR: Contributions of 'Maharatna' Companies of India. Asian Journal of Research in Business, Economics and Management, 2(4), 105-112.

Nihalani, M., & Mathur, A. (2011). Corporate Social Responsibility in the Modern Economy: A Way to Sustainable Business Practices. International Journal of Business Economics and Management Research, 2(2), 33-45.

Peterson, D. K. (2004). The Relationship between Perceptions of Corporate Citizenship and Organizational Commitment. Business & Society, 43(3), 296- 319.

Porter, M. E., & Kramer, M. A. (2006). Strategy and Society: The Link between Competitive Advantage and Corporate Social Responsibility. Harvard Business Review, 84(2), 78-92.

Porter, M. E., & Kramer, M. R. (2002). The Competitive Advantage of Corporate Philanthropy. Harvard Business Review, 80(12), 56-68.

Pradhan, S., & Ranjan, A. (2010). Corporate Social Responsibility in Rural Development Sector: Evidences from India. School of Doctoral Studies (European Union) Journal, 2, 139-147.

Riordon, C. M., Gatewood, R. D., & Bill, J. B. (1997). Corporate Image: Employee Reactions and Implications for Managing Corporate Social Performance. Journal of Business Ethics, 16(4), 401-412.

Risk Metrics Group. (2010). How to Use KLD STATS & ESG Ratings Definition. Retrieved from cdnete.lib.ncku.edu.tw/93cdnet/english/lib/Getting_Started_With_KLD_STATS.pdf

Roy, A. (2009). Successful Experiments of Corporate Social Responsibility. Indian Journal of Industrial Relations, 44(3), 418-425.

Sethi, S. P. (1975). Dimensions of Corporate Social Performance: An analytical framework for Measurement and Evaluation. California Management Review, 17(3), 58-64.

Sethi, S. P. (1979). A Conceptual Framework for Environmental Analysis of Social Issues and Evaluation of Business Response Patterns. Academy of Management Review, 4(1), 63-74.

Shah, S., & Bhaskar, S. A. (2010). Corporate Social Responsibility in an Indian Public Sector Organisation: A Case Study of Bharat Petroleum Corporation Ltd. Journal of Human Values, 16(2), 143-156.

Shastri, R. K., & Singh, A. (2012). An Empirical Study on Corporate Social Responsibility Practices of Indian Public Sector Companies. Paper presented at National Conference on Emerging Challenge for Sustainable Business. Roorkee, IIT: India. Retrieved February 25, 2013, from http://domsiitr.info/allpaper/05%20An%20Empirical%20Study%20on%20Corporate%20Social%20Responsibility_Rajesh%20Kumar%20Shastri_GM023.pdf

Shaw, H. J. (2007). The Role of CSR in Re-Empowering Local Communities. Social Responsibility Journal, 3(2), 11-21.

Singh, R., & Agarwal, S. (2013). Corporate Social Responsibility for Social impact: Approach to measure Social Impact using CSR Impact index. Working Paper Series, WPS No. 729/ June 2013. Retrieved from https://www.researchgate.net/publication/237637826_Corporate_Social_Responsibility_for_Social_ImpactApproach_to_Measure_Social_Impact_using_CSR_Impact_Index

Stagner, R. (1970). Perceptions, Aspirations, Frustrations and Satisfaction: An Approach to Urban Indicators. The Annals of the American Academy of Political and Social Science, 388, 59-68.

Turban, D. B., & Greening, D. W. (1997). Corporate Social Performance and Organizational Attractiveness to Prospective Employees. Academy of Management Journal, 40(3), 658-672.

Turker, D. (2009a). Measuring Corporate Social Responsibility: A scale Development Study. Journal of Business Ethics, 85, 411-427.

Turker, D. (2009b). How Corporate Social Responsibility influences Organizational Commitment. Journal of Business Ethics, 89, 189-204.

Valentine, S., & Fleishman, G. (2008). Ethics Programs, Perceived CSR and Job Satisfaction. Journal of Business Ethics, 77, 169-172.

Veleva, V. (2010). Toward Developing a Framework for Measuring the Business Value of Corporate Community Involvement. Applied Research Quality Life, 5, 309-324.

Wood, D. J. (1991a). Corporate Social Performance Revisited. Academy of Management Review, 16(4), 691-718.

Wood, D. J. (1991b). Social Issues in Management: Theory & Research in Corporate Social Performance. Journal of Management, 17(2), 383-406.

Wood, D. J. (1991c). Toward Improving Corporate Social Performance. Business Horizon, 34(4), 66-73.

Wood, D. J. (2010). Measuring Corporate Social Performance: A Review. International Journal of Management Reviews, 12(1), 50-84.

International Journal of Applied Management Research,
Vol. 4(No.1), Page : 78 - 93

Women Empowerment and Microfinance: The Case Study of SHGs Micro - Credit Beneficiaries in Rural Khunti District, Jharkhand

Priyanka Sahu
School of Economics, University of Hyderabad, India
V. Nirmala
Pondicherry Central University, Pondicherry, India

ABSTRACT :

The paper examines the role of SHG micro-credit scheme in empowerment of women in rural areas of Khunti district of Jharkhand state. The study is mainly based on the primary survey conducted from a random sample of 118 poor tribal women during June 2016 - August 2016. The study aims to examine the socio-economic background, besides the changes in the employment activity, income, borrowing and saving habits of the sample respondents before and after the micro-credit loan. It also over-views their perceived benefits post-SHG participation and changes in their role in household decision-making. The methodology employed for studying the objectives are simple averages, percentages, ratios and Garret Ranking Technique. The findings reveal that the sample respondents belong to socially and economically backward category. However, post-SHGs they have started saving and borrowing with banks, rather than depending on their relatives and friends. This has resulted in their financial inclusion. Their income levels have also improved. Further, although majority of the decisions are still made by their spouse, the decision on spending their own earnings are largely done by the women themselves. Whereas, in the case of voting, child birth, social visits and gifts, borrowing and savings, and medical expenditure, decisions are made by both the husband and wife. Their major perceived benefits from the scheme are improved social status, bought new assets, better housing and increased food expenditure respectively. In sum, the SHG programme has led to their social, economic and political empowerment, though slow but a steady march towards Gandhian perception of women empowerment, which had not been experienced by the rural poor women of the study area in Jharkhand. Improving their awareness and capabilities would go a long way in achieving the Gandhian dream of women empowerment.

Key Words : Tribal Women Empowerment, Bank -linkage, Self-help groups, Micro-credit and Rural area.

INTRODUCTION

The economic growth and development of the country lies in the proper utilization of its both human and non-human resources.The development of India lies in the progress of rural village and enhancing the skills of rural people for employment generation activities. At the time of independence, India had stagnant economic growth, low productivity and low national income, due to which the main objectives of the government during the First Five Year Plan (1951-1956) was to strengthen the economy by directing focus on the agriculture sector. Agriculture and allied activities have always been the focus of the policy-makers in the progress of rural village and employment generation (Government of India) Mahatma Gandhiji believed that status of women in the society is an index of its civilization. Both women empowerment and the concept of ideal village are the two sides of same coin with which the development process should go parallel. The over-all development and growth of a country is possible only when they participate equally in the development of country. It requires effective empowerment of women by integrating them to the mainstream of economic development. Empowerment is the process of creating a social environment which enables an individual to think, act and work independently, and make decisions and choices individually or collectively. Women's empowerment enables them to be confident, courageous and self-assertive to make decision within and outside home.

Economic empowerment refers to economic independence through employment, control over means of production, besides redistribution of resources and power. It helps in building confidence, self-assertion and courage. The Government of India has launched several women welfare programmes through various development centres, rural agencies and banks, including National Bank for Agriculture and Rural Development (NABARD), to uplift their status. Empowerment of women was one of the nine primary objectives of the Ninth Five Year Plan (1997-2002) and efforts were made to create a free environment for women where they can exercise their right within and outside the home and can be an equal partner as men (GOI 2000).

The Self-help groups (SHGs) scheme, launched in April 1999 in India, has grown into a major source of women empowerment. Women, who form small voluntary groups operating at non-political level (NABARD 2002), dominate these SHGs. The Tenth Five Year Plan (2002-2007) adopted women's component plan under which not less than 30 percent of the fund/benefits are to be earmarked for women related sectors and women specification programmes (GOI 2003). The Eleventh Five Year Plan (2007-2012) attempted to further strengthen Self Help Groups and community based organizations for the empowerment of women (GOI 2008). Special focus was given to increase employment opportunities and productive resource for them through special schemes and programme of financial intermediaries and increase competiveness and economic exchange among women entrepreneurs. These groups of women undertake both farm and non- farm activities like dairy farming, fisheries, tailoring and embroidery, small shops, food stalls, handicrafts, cultivation, etc. Given the vulnerability and powerlessness of women, the formation SHGs women's groups will provides visibility to these women's groups through sharing of credit, skills and productive capacity. It helps them in cutting across social and economic barriers of caste and religion and work together harmoniously for economic development.

Several researchers have conducted studies assessing the impact of SHGs on empowerment of women and confirmed it. Studies by Kumaran (1997), Manimekalai and Rajeswari (2000), Vijayanthi (2000), Datta and Raman (2001), Madheswaran and Amita (2001) Nirmala (2003), and Nirmala, Bhat and Bhuvaneshwari (2004) revealed that despite the short period of its launching, the SHGs programme has been performing much better by improving the socio-economic status of its beneficiaries. Khandker (2005) found that access to microfinance had contributed to overall poverty reduction, at village level, and especially among females. A study by Swain and Wallentin (2007) of the Self Help Bank Linkage Program in India across five states for 2000 and 2003 indicated significant increase in empowerment of the SHG women.

More recently, studies across India by researchers like Minimol and Makesh (2012), Alam and Nizamuddin (2012), Poornimaa (2013), Mula and Sarker (2013), Bashir, et al. (2013) and Kondal (2014), have also confirmed that SHGs scheme have contributed to the social and economic empowerment of women.

In the light of these studies, the present paper tires to make another attempts to examine rural women's empowerment through SHGs micro-financing in Khunti district of Jharkhand. The following objectives are examined by the study :

i) To survey the socio-economic background of the sample respondents during the survey.
ii) To examine the changes in the employment activity, income, standard of living index, labour supply, and borrowing and savings of the sample respondents before and after the micro-credit loan,
iii) To study the decision-making and perceived benefits of the SHGs scheme among the sample respondents.

The paper is organize as follows. After the brief introduction and objectives of the study in section - I, data source and methodology are outlined in section - II. Section - III discusses the empirical results, while the concluding remarks are given in section - IV.

DATA AND METHODOLOGY :

The research study is conducted in the rural areas of Khunti district of Jharkhand, which included field survey of a randomly selected three blocks, viz., Murhu, Torpa and Karra. The respondents of the research study are mainly tribal women. The data for the study have been collected during June 2016 - August 2016, using pre-tested schedules, with the help of officials of the Bhartiya Samruddhi Investments and Consulting Services Ltd. (BASIX). The research study mainly targets women because most of the microfinance programme focus on women, as they are considered as less credit risk, and who are engaged in income generation activities which contributes to a better standard of living of their family. For the study, primary has been collected from a random sample of 118 poor women belonging to Guyu, Tati and Kurki villages.

The methodology employed for studying the objectives are simple averages, percentages, ratios Standard of Living Index (SLI - Roy, Jayachandran, and Banerjee (1999) and Garret Ranking Technique (Garret and Woodworth 1969).

Garret ranking technique (1969) has been adopted to rank the perceived benefits of the SHG respondents on a priority basis. The ranks assigned by the sample respondents to each item have been converted into percentage scores using the Garret table. The total scores of each item thus obtained have been converted into mean scores by dividing the former by the number of respondents who had responded to each item. These mean scores have been arranged in a descending order and the ranks assigned. The percentage position of each item has been calculated using the given formula :

Per cent position = 100 [(Rij - 0.5)/Nj]
where,

R_j = rank given to the i^{th} item by the j^{th} respondent; and
N_j = total number of items ranked by the j^{th} respondent.

RESULTS AND DISCUSSION

The social background of the sample women is given in table - 1. The respondents were asked about their family status, size of family, caste and community, health and marital status. Out of 118 sample respondents, 37.7 per cent live in nuclear family and the remaining majority (62.3%) live in joint family. In the study area, mostly there is a concept of joint family which includes father-in-law, mother-in-law, sister-in-law and brother-in-law and others. The joint family is consists of more than five members. In the nuclear family, the male member is the earning member, while the women were engaged in household work, looking after their children as well as were seen working in the agriculture field. In the joint family, the male members were engaged only in income earning activities, while the women were engaged in both income earning and household activities.

In the sample, the maximum number of family size was 15 in a joint family, while the minimum number is three in a nuclear family. About 37.7 per cent of the respondents belong to nuclear family More than one-third of the families have 10 - 15 (39%) and 6 - 10 (38.1%) family members. The respondents belong to the Munda tribes. Only Hindu (29.7%) and Christian (70.3%) religion communities could be found in the study areas. Those who belong to the scheduled tribes are from Christian community, whereas the rest belong to other backward caste of Hindu community.

Table 1

Social Background of the Sample Respondents

Sl. No.	Particulars	Number of Respondents	Percentage
A)	**Family Type**		
i)	Nuclear Family	44	37.7
ii)	Joint Family	74	62.3
	Total	**118**	**100**
B)	**Family Size**		
i)	2-4	27	22.9
ii)	6-10	45	38.1
iii)	10-15	56	39.0
	Total	**118**	**100**
C)	**Religion**		
i)	Hindu	35	29.7
ii)	Christian	83	70.3
iii))	Others	-	-
	Total	**118**	**100**
D)	**Caste**		
i)	Scheduled tribes	83	70.3
ii)	Other backward caste	35	29.7
iii)	Others	-	-
	Total	**118**	**100**
E)	**Marital Status**		
i)	Married	106	89.8
ii)	Widow	5	4.2
iii)	Separated	7	6.0
	Total	**118**	**100**
F)	**Health Status**		
i)	Normal	112	95
ii)	Bad	6	5.0
	Total	**118**	**100**

Source : Field Survey

Regarding marital status, 89.8 percent were married and 4.2 percent respondents are widow. About 6.0 percent were separated from their husband because of their over-addiction to drinking alcohol and creating domestic violence at home. Further, as regards their health status, only few are suffering from asthma and diabetes, while the rest claimed to be normal.

Table - 2 shows the household facilities of the sample respondents. All the respondents live in their house, but a vast majority (89.8%) live in thatched house. Only 8.5 percent of them live in tiled house and just 1.7 percent in concrete house. Further, electricity was found in only quarter of the houses during the field survey. In all the three blocks, electricity was available but not reachable to many of the house. Hence, the remaining 5.3 percent of the respondent households reported that kerosene was only the source of lighting for them.

Majority of the respondents (81.86%) do not have a separate room for cooking. Kerosene, wood and coal are the fuels used for cooking by all the respondents.

About 85 percent of the sample households use public toilets, while the rest use open space. As regards drinking water facility, all households depend only on public well. In sum, the living condition of the sample respondents are quite poor in the study area.

Table 2

Household Facilities of the Sample Respondents

Sl. No.	Particulars	Number of Respondents	Percentage
A.	**House Ownership**		
i)	Own	118	100
ii)	Rented	-	-
	Total	**118**	**100**
B.	**Type of House**		
i)	Concrete	2	1.7
ii)	Tiled	10	8.5
iii)	Thatched	106	89.8
	Total	**118**	**100**
C.	**Source of Lighting**		
i)	Electricity	35	24.7
ii)	Kerosene	83	75.3
	Total	118	100
D.	**Separate Room for Kitchen**	22 (yes)	18.14
	Total	**118**	**100**

E.		**Fuel Used for Cooking**		
	i)	Electricity	-	-
	ii)	LPG	-	-
	iii)	Kerosene, coal and wood	118	100
	iv)	Others	-	-
		Total	**118**	**100**
F.		**Toilet Facilities**		
	i)	Public toilet	110	85
	ii)	Own toilet	-	-
	iii)	Open space	8	15
		Total	**118**	**100**
G.		**Source of Drinking Water**		
	i)	Well (Own/Public)	118 (Public)	100
	ii)	Hand Pump (Own/Public)	-	-
	iii)	Pipe (Own/Public)	-	-
		Total	**118**	**100**

Source : Field Survey

Table - 3 illustrates the ownership of land details of the sample household during the survey. More than half the sample respondents were found landless during the interview. Among the rest who own land, 43.2 percent of the total sample respondents are largely marginal farmers, owning a land size of up to 2.5 acres. Only 3.4 percent of them belong to the small land owner group, with 2.5 acres to 5.0 acres of land. With respect to actual registered ownership of land, none of the sample women were found to own land in their own name.

Table 3
Ownership of Land by the Sample Households

Sl. No.	Particulars	Number of Respondents	Percentage
A.	**Total Land Holdings**		
i)	Landless	63	53.4
ii)	Marginal Land Holdings (up to 2.5 acres)	51	43.2
iii)	Small Land Holdings (2.5 acres- 5 acres)	4	3.4
Total	**Total**	**118**	**100**

Source : Field Survey

Table - 4 shows the distribution of age and education level of the respondents. Social empowerment is gained through education. Women can gain access to their rights only when they are educated. An educated woman can wisely plan for future and engage in productive activities. They can avoid unnecessary expenditure and educate their children as well.

During the field survey, majority of the sample respondents belonged to 30 - 40 age groups. About 20 percent were between 20- 30 years, while the rest were between 40-50 years old.

Education level reveals that majority of the respondents (94%) are illiterates, who have not attended any school. Only few of them (6.0%) reported that they had attended primary school up to class one or two, but could not continue their studies because they had to go to another village for studying.

Table 4

Age and Education Level of the Respondents

Sl. No.	Particulars	Number of Respondents	Percentage
A.	**Age of the Respondent**		
i)	20-30	24	20.34
ii)	30-40	84	71.19
iii)	40-50	10	8.47
	Total	**118**	**100**
B.	**Level of Education**		
i)	Up to Primary School	7	6
ii)	Illiterate	111	94
	Total	**118**	**100**

Source : Field Survey

Table 5

Details of Self Help Groups

Sl. No.	Particulars	Number of Respondents	Percentage
A.	**Knowledge about SHG?**		
i)	Non-Government Organization	72	70
ii)	Bank Officials	-	-
iii)	Government Officials	-	-
iv)	Friends	24	20
v)	Relatives	12	10
	Total	**118**	**100**

B.		**Source of Loan**		
	i)	SHG-Bank linkage	118	100
		Total	**118**	**100**
C.		**Type of Self Help Group Members**		
	i)	Own Caste	63	53.4
	ii)	Neighbours	1	0.8
	iii)	Relatives	6	5.1
	iv)	Family Members	48	40.7
		Total	**118**	**100**
D.		**Nature of Cohesion**		
	i)	Strong	-	-
	ii)	Weak	31	26.3
	iii)	Moderate	87	73.7
		Total	**118**	**100**

Source : Field Survey

Table - 5 presents details of the Self Help Groups (SHG). The sample respondents reported that Non-Government Organization (NGO) had recommended them to form Self Help Groups. Field coordinator of the concerned Non-Government Organization (NGO) helped them in the formation and nurturing of the groups. The self-help group was linked up with State Bank of India and the concerned Non-Government Organization (NGO) was serving as a mediator between them.

Majority of the Self Help Groups members belong to their own caste (53.4%) and family members (40.75), followed by relatives (5.1%) and neighbours (0.8%) respectively. The respondents mainly belong to the Munda tribes of Jharkhand. As regards the nature of cohesion among the sample SHG respondents, since most of them belong to the same caste, moderate cohesion was reported by 73.7 percent of them. Whereas, the rest (26.3%) reported weak cohesion.

Table - 6 shows the occupational activities of the sample respondents before and after taking the microfinance loans. Before joining the SHG, more than half of the respondents were housewives (59%). About 39 percent of the respondents were agriculture labourers, while the remaining 11 percent were working in their own farm. But after taking SHG loans, all those who were self-employed and about half of those who were housewives, engaged themselves as agriculture labourers because they are unskilled. They get training through non-government organization (NGO) in activities, like maintaining coordination among the group members and training in cultivation of paddy crops.

Table 6
Occupational Distribution of Sample Respondents

Sl. No.	Particulars	Number of Respondents	Percentage
A)	**Occupation before Microcredit Loan**		
i)	Agriculture labourer	46	39
ii)	Own farm labour	13	11
iii)	Housewife	59	59
	Total	**118**	**100**
B)	**Occupation after Microcredit Loan**		
i)	Agricultures labourer	82	70
ii)	Housewife	36	30
	Total	**118**	**100**

Source : Field Survey

Table - 7 furnishes information on income distribution of the sample households before and after microcredit loans. Majority of the households were under the average family income less than Rs. 10,000 per annum. Only 43.22 percent belonged to the range of Rs. 10, 000 - 20,000. But after joining the self-help groups, a significant change in their income levels has been observed.

Table 7
Income Distribution of Sample Respondents

Sl. No.	Amount in Rupees	Respondents	Percent
A)	**Average Family Income Per Annum Before Micro-Credit**		
i)	Less than 10,000	67	56.78
ii)	10,000-20,000	51	43.22
iii)	20,000 and above	-	-
	Total	**118**	**100**
B)	**Average Family Income Per Annum** After Micro-Credit		
i)	Less than 10,000	-	-
ii)	10,000-20,000	56	47.46
iii)	20,000-30000	43	36.44
iv)	30, 000-40,000	19	16.10
	Total	**118**	**100**

Source : Field Survey

None of the households came under the income level below less than Rs.10,000 per annum. About 47.46 percent were in the range of Rs. 10,000 - 20,000 per annum, 36.44 percent in the range of Rs. 20,000 - 30,000 and 16.10 percent in the range of Rs.30, 000 - 40, 000. Thus, the sample households are observed to have witnessed a double level rise in their annual income, indicating a definite economic empowerment. The better coordination among the group members and systematic work, and the SHG training programme were reported to have led to the increase in both productivity and income as compared to the previous year by the respondents.

Table - 8 records the change in standard of living of the sample households. The table shows that all the sample households have very poor standard of living. Although their SLI improved a little, they still remained in the low SLI category.

Table 8

Standard of Living of Sample Households

Sl. No.	Categories of SLI	Before SHG	After SHG
1	Low SLI - 0 - 9	4.88 (118)	7.88(118)
2	Medium - 10 - 19		
3	High SLI - 20 and above		
	Total	**118(100%)**	**118(100%)**

Source : Field Survey

Table - 9 shows the sources of borrowings and savings of the sample households before and after the SHG microcredit loans. A significant change in sources of borrowings and savings has been observed between the two periods. Before the microcredit loan, the households had been borrowing mainly from their relatives (79.66%). Some of them had been borrowing from their friends (15.24%) and the rest few from their employers. Money lenders were found to be a visibly absent source during the field survey. This was because earlier they had had very bad experience with the money lenders, who had grabbed their land when they were unable to repay the loans in time then. This made the villagers not to take loan from the money lenders ever after. After the launch of SHG scheme in the village, all the sample households started taking micro-credit loans from the bank, due to the training and awareness generated among them by the NGO and bankers. During the training programme, they were also educated about the importance of

As regards savings, before the SHG scheme as much as 80.55 percent of the sample households had not saved at all. Of the rest who saved, only 5.90 percent saved with the banks, while the rest did so with relatives (10.16%) and friends (3.39%). But after the scheme, 52.5 percent of them had started saving, and all of them did so with bank under the SHG norms. They started saving either in the name of their SHG group or with head of the group. In the latter case, each and every member has the record of the saved amount. Thus, the SHG scheme has led to financial inclusion among the rural poor in the study areas.

Table 9

Borrowings and Savings Before and After Microcredit Loans

Sl. No.	Source	Before Microcredit Loans (%)	After Microcredit Loans (%)
A	Borrowings		
1	Bank	-	118(100)
2	Chit fund	-	-
3	Relatives	94 (79.66)	-
4	Friends	18 (15.24)	-
5	Employers	6 (5.10)	-
6	Others	-	-
	Total	**118 (100)**	**118 (100)**
B	**Savings**		
1	Bank	7 (5.90)	62 (52.5)
2	Chit fund	-	-
3	Relatives	12 (10.16)	-
4	Friends	4 (3.39)	-
5	Employers	-	-
6	Others	95 (80.55) No saving	56 (47.5) Head of the Group
	Total	**118 (100)**	**118 (100)**

Table - 10 records illustrates the decision-making role of sample respondents after the SHG scheme. In order to understand the role of women in household decision-making, twelve aspects have been considered wherein women can assume equal role as a decision-maker as their male counterpart. Active participation of the women in decision making was observed in the study area post-SHG. Males of the household assumed full role in deciding about spending their own income, followed by household expenditure (85.6%). Whereas, 82.2 percent women took decisions on spending their own income, which is empowering. However, on issues of voting (100%), childbirth (86.5%), social visits/gifts (86.5%), borrowings and savings (83.1%), and education expenditure, both the respondent and male head made joint decisions. The role of other family members are observed to be limited on household matters. Other family members include their in-laws, elder son and daughter. It is a little more only in the case of entertainment expenditure (22.9%), and minimum in the case of borrowings and savings, education, medical expenditure and child birth. In sum, the SHG scheme has increased the degree of involvement of the sample respondents in household decision-making, reflecting socio-economic and political empowerment.

Table - 11 presents the perceived benefits of joining SHG by the sample respondents. the four major benefits reported by them are better social status, bought new assets, better housing and increased food expenditure respectively. This was followed by repaid old loans, better education, reduced work load, participation in social service and organized action, better decision making, better access to credit facilities, received new skill and increased in income. Thus, the table indicates that the SHG scheme has led to women's empowerment in the study areas.

Table 10

Decision Making

Sl. No.	Particulars	Husband	Wife	Both Husband and Wife	Others	Total
i)	Household Expenditure	101(85.6)	-	17 (14.4)	-	118 (100)
ii)	Medical Expenditure	33 (28)	-	82 (69.5)	3 (2.5)	118 (100)
iii)	Education Expenditure	82 (69.5)	10 (8.5)	21 (17.8)	5 (4.2)	118 (100)
iv)	Child Birth	2 (1.7)	2 (1.7)	112 (94.9)	2 (1.7)	118 (100)
v)	Wife's income	7 (5.9)	97 (82.2)	14 (11.9)	-	118 (100)
vi)	Husband's income	118 (100)	-	-	-	118 (100)
vii)	Borrowings and Savings	12 (10.2)	-	98 (83.1)	8 (6.8)	118 (100)
viii)	voting	-	-	118 (100)	-	118 (100)
ix)	Social visits/gifts	11 (9.3)	5 (4.2)	102 (86.5)	-	118 (100)
x)	Entertainment	42 (35.6)	37 (31.4)	12 (10.2)	27 (22.9)	118 (100)
xi)	Others specify	-	-	-	-	-

Table 11

Perceived Benefits after Joining the SHG

Sl. No.	Particulars	Number Responded	Mean Score	Rank
1	Increased in income	118	4.21	12
2	Received new skill	118	12.61	11
3	Better access to credit facilities	118	21.01	10
4	Better decision making	42	36.48	9
5	Participation in social service and organized action	45	42.41	8

6	Repaid old loans	57	63.03	5
7	Reduced work load	93	44.14	7
8	Better education	57	44.95	6
9	Increased food expenditure	63	71.44	4
10	Bought new assets	74	88.25	2
11	Better housing	93	79.83	3
12	Better social status	110	96.65	1

CONCLUDING REMARKS :

The study examines the role of SHG scheme in empowering rural poor women of Khunti district of Jharkhand state. The study is mainly based on the primary survey conducted from a random sample of 118 poor women during December 2013-January 2014. The findings show that the sample respondents belong to socially and economically backward class. However post-SHG micro-credit loans, they have started saving and borrowing with banks, rather than depending on their relatives and friends. This has led to their financial inclusion. Their income levels and standard of living have also improved. Further, although majority of the decisions are still made by their spouse, the decision on spending their own earnings are largely done by the women themselves. Whereas, in the case of voting, child birth, social visits and gifts, borrowing and savings, and medical expenditure, decisions are made by both the husband and wife.

The perceived benefits of the sample respondents from the scheme are social, economic and political empowerment. The main benefits ranked were better social status, bought new assets, better housing and increased food expenditure respectively. Thus, the SHGs programme appears to be a slow but steady march towards Gandhian perception of women empowerment in the study areas, to which the poor sample women had not been so far exposed to in Jharkhand. Further improving their awareness and capabilities would go a long way in achieving the Gandhian dream of women empowerment.

REFERENCES :

Alam, Perways and Mohammed Nizamuddin (2012), "Role of Micro Finance and Self Help Groups In Women Empowerment: A Case Study of District Mewat", International Journal of Entrepreneurship and Business Environment Perspectives, Vol. 1, No. 2, October-December, pp. 94-101.

Bashir, Aadil, Unjum Bashir, Ufera Nabi and Zahoor Ahmad Ganie (2013), "Empowerment of Women Through Self Help Groups (SHGs) in Kashmir", International Journal of Advanced Research, Vol. 1, Issue 10, pp. 795-801.

Datta, K. Samar and M. Raman (2001), "Can Heterogeneity and Social Cohesion Coexist in Self-Help Groups: An Evidence from Group Lending in Andhra Pradesh in India", Indian Journal of Agriculture Economics, Vol. 56, No. 3, July - September, pp. 387 - 400.

"Empowermnent through SHGs (2005)," shodhganga.inflibnet.ac.in/bitstream/10603/9526/.../05_chapter%201.pdf?., Accessed on 20-03-2014.

"Gandhi and Women's Empowerment", http://www.mkgandhi.org/articles/Jaya%20Jaitly.htm, Accessed on 24-03-2014.

Garret, Henry E. and R. S. Woodworth (1969), Statistics in Psychology and Education, Vakils, Feffer and Simons Private Limited, Bombay.

Government of India (2000), Ninth Five Year Plan: 1997-2002, Planning Commission, Planningcommission.nic.in, Retrieved on 25-03-2013.

Government of India (2003), Tenth Five Year Plan: 2002-2007, Planning Commission, Planningcommission.nic.in, Retrieved on 25-03-2013.

Government of India (2008), Eleventh Five Year Plan: 2007-2012, Planning Commission, Oxford University Press, New Delhi. 2008.

Khandker, Shahidur R. (2005), "Microfinance and Poverty: Evidence Using Panel Data from Bangladesh", World Bank Economic Review, Vol. 19, No. 2, pp. 263 - 286.

Kondal, Kappa (2014), "Women Empowerment through Self Help Groups in Andhra Pradesh, India", International Research Journal of Social Sciences, Vol. 3, No. 1, January, pp. 13-16.

Kumari Sarma, Bina (2009), "Relevance of Gandhian Ideas for Human Rights and Empowerment of Women", Orissa Review, orissa.gov.in/e-magazine/Orissareview/2009/October/.../october-2009.pdf.?, Retrieved on 20-03-2014.

Kumaran, K.P. (1997), "Self-Help Groups - An Alternative of Institutional Credit to the Poor: A Case study in Andhra Pradesh", Journal of Rural Development, Vol. 16, No. 3, January-March, pp. 515-530.

Madheswaran, S. and Amita Dharmadhikary (2001), "Empowering Rural Women through Self-Help Groups: Lesson from Maharashtra Rural Credit Project", Indian Journal of Agriculture Economics, Vol. 56, No. 3, July - September, pp. 427 - 443.

Manimekalai, N. and G. Rajeswari. (2000), "Empowerment of Women through Self-Help Groups", Margin, Vol. 32, No. 4, July - September, pp. 74 - 87.

Minimol, M. C. and K. G. Makesh (2012), "Empowering Rural Women in Kerala: A Study on The Role of Self Help Groups (SHGs)", International Journal of Sociology and Anthropology, Vol. 4, No. 9, November, pp. 270-280.

Mula, G. and Sarker, S. C. (2013), "Impact of Microfinance on Women Empowerment: An Economic Analysis From Eastern India", African Journal of Agricultural Research, Vol. 8, No. 4, November, pp. 5673-5684.

NABARD (2002), Ten Years of SHG-Bank Linkage: 1992-2002, NABARD and Microfinance, Mumbai.

Nirmala, V. (2003), "The Impact of Micro-Credit on Income Generation and Poverty Alleviation: A Case Study of SHGs in Rural Pondicherry", 39th Annual Conference of the Indian Econometric Society, M. S. University of Baroda, Baroda, 8-10 February.

Nirmala, V., K. Sham Bhat and P. Bhuvaneshwari, "SHGs for Poverty Alleviation in Pondicherry", Journal of Rural Development, Vol. 23, No. 2. April-June 2004, pp. 203-215.

Poornimaa, K. (2013), "Women Entrepreneurship and Empowerment through Self Help Group in Tumkur District", International Journal of Current Engineering And Technology, Special Issue 1, September, pp. 79-83.

Roy, T.K., V. Jayachandran, Sushanta K. Banerjee (1999). Economic Condition and Fertility: Is there a Relationship. Economic and Political Weekly, Vol. 34, Nos. 42s & 43, October 16-23, pp. 3041- 3046.

Singh, Savita (Ed.) (2001), Empowerment of Women: Miles to Go, Eastern Book Corporation. New Delhi, http://www.mkgandhi.org/articles/Jaya%20Jaitly.htm, Retreived on 24-03-2014.

Swain, Rajule Bali and Fan Yang Wallentin (2007), Does Microfinance Empower Women? Evidence from Self Help Groups in India", Working Paper 24, Department of Economics, Uppsala University, Sweden, 24 August, pp. 1-30.

Vijayanthi, N. (2000), "Women's Empowerment through Self-Help Groups: A Participatory Approach", Social Change, Vol. 30, No. 3 & 4, September - December, pp. 68 - 87.

International Journal of Applied Management Research,
Vol. 4(No.1), Page : 94 - 115

Demographic Factors and Availing of Financial Services: A Study on Tea Garden Workers of Dibrugarh District

Ujjal Bhuyan
Department Of Commerce, Dibrugarh University

ABSTRACT :

The Indian constitution expresses India as a welfare state. A welfare state, by definition, is based on the principles of equality of opportunities, equitable distribution of wealth and public responsibility for those unable to avail themselves of the minimal provisions of a good life. So, adhering to these principles of a welfare state would require an inclusive system, which reduces the gaps in existing inequalities by ensuring equal participation of all. The tea plantations in Assam assume a special importance not only as a major foreign exchange earner of the state but its contribution is also significant in terms of employment that it provides. There are around 850 tea gardens in the state employing around 10 Lakh workers. But the socio-economic condition of these workers is quite deplorable. Inability to access financial services is one of the major reasons behind it. There are various demand and supply side factors contributing to this ability. The paper discusses the role of demographic factor of Tea workers in availing of various financial services. For the study, tea gardens in Dibrugarh district were selected and data was collected with the help of a well structured schedule. The demographic variable selected for the study were gender, age, nature of employment, education, family size and decision making capacity of the respondents. The findings show that demographic factor plays a crucial role in availing of financial services by the tea garden workers.

KEYWORDS : *Welfare state, inclusive, deplorable, growth, demographic etc.*

INTRODUCTION :

Previous studies by classical economists reveal that there exists a direct relationship between savings and economic growth of a country. They believe that a necessary and sufficient condition for investment creation in an economy is the existence of savings. So if investments in the economy have to increase, than savings have to increase go up. It is thus implied that financial exclusion can be seen as the loss of an enormous potential for economic growth. The need of the hour is for an inclusive financial system which would put the economy of a country on a high growth trajectory. The tea plantations in Assam assume a special importance not only as a major foreign exchange earner of the state but its contribution is also significant in terms of employment that it provides. There are around 850 tea gardens in the state employing around 10 Lakh workers. But the socio-economic condition of these workers is quite deplorable. Inability to access financial services is one of the major reasons behind it. Inclusion is considered crucial for individuals/households to manage their incomes, to exploit opportunities and thereby, improving their socio-economic position and absence of which makes them more susceptible to exploitation and deprive them of various incentives and subsidies from the government. Making availability of financial services at an affordable cost especially to the poor can be considered to be an effective tool in putting a check to this long discussed issue of poverty and freeing the disadvantaged sections of the society from its shackles. The two terms 'Poverty' and 'finance' are considered as highly interrelated. Inability or limited access to formal financial services fend off consumption smoothening and also curbs investments in education, health and other activities that lead to income generation.

LITERATURE REVIEW :

Rangarajan Committee (2008) defined financial inclusion as "the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost". Leyshon and Trift (1995) held financial exclusion as the main cause behind uneven development and defined it as a process that prevents poor-disadvantaged sections of the society from being a part of the formal financial system. Mohan (2006) , stressing on the financial inclusion as a key policy concern, defined financial exclusion as "the lack of access by certain segments of the society to appropriate ,low cost ,fair and safe financial products and services from mainstream providers. Honohan P. (2004) also emphasized the important linkage between finance and economic growth. His study pointed out that there is a negative relationship between financial deepening and poverty headcount. Prahlad C. K. (2005) also emphasized on including the poor in the nation's development process by saying that "if we stop thinking of the poor as victims or as a burden, and start recognizing them as resilient and creative entrepreneurs and value conscious consumers, a whole world of Opportunity will open up". Lokho C. and Saurav M. (2013) presented a paper at National seminar on "Factors Affecting Access to Financial Services in North East India" in 2013 at Dibrugarh University, where they asserted that geographical and infrastructural factors, economic factors, policy issues, law and order issues and socio-economic factors play a crucial role in access to financial services in Northeast region. Clamara N. et al. (2014) in his study attempted to identify the determinants of financial inclusion in Peru. The outcome of the study highlights that women, people residing in rural areas and other vulnerable groups face greater difficulties in accessing to financial services more. For those excluded from the formal financial system such as age, gender, education and income level act as major obstacles to financial inclusion. The study also put forth that more the savings product, loans and mortgages seems to be more attractive financial products in the context of financial inclusion.

SIGNIFICANCE OF THE STUDY :

The study will be a significant endeavor in promoting financial inclusion among tea garden workers in Dibrugarh district, who are still outside the ambit of the formal financial system. Their reliance on informal sources put them in hands of exploitative moneylenders, who charge them exorbitant interest. Also, staying aloof from formal sector banking, deprives them of various government incentives and subsidies.

OBJECTIVE OF THE STUDY :

The objectives of the study are stated below:

* To determine the association between the demographics of tea garden workers and their availing of financial services.
* To determine the demographic wise awareness of various financial services.

HYPOTHESES OF THE STUDY :

The following hypothesis is set forth for the study:

H_{01} : There is no statistically significant association between the demographics of tea garden workers and their availing of financial services.

H_{a1} : There is a statistically significant association between the demographics of tea garden workers and their availing of financial services.

METHODOLOGY :

DATA SOURCES AND TOOLS USED FOR ANALYSIS

The study is basically based on primary data. The primary data collected with the help of a schedule. However, to study the state-of-affairs around the globe and in India, secondary data from various journals, websites etc was used. In the study, chi-square test of independence, which is a non-parametric test, forms the basis of the researcher's decision to accept or reject the null hypothesis. To determine the effect size of the demographic variables on the availing of financial services by the respondents such as bank account, insurance and credit, Cramer's V and Eta coefficient are used. Cramer's V is used for the nominal variables and Eta squared coefficient for ordinal or interval variables.

Table 1.6.1

Categorization of Effect size

Effect size	**Small**	**Medium**	**Large**
Cramer's Va	0.1 (1 df), 0.07 (2 df), 0.06 (3 df)	0.3 (1df), 0.21 (2df), 0.17(3df)	0.5(1df), .35(2df) 0.29 (3df)
Eta squaredb	0.01	0.06	0.14

SAMPLING DESIGN AND SCOPE OF THE STUDY

Target Population :

The target population in the present study was the tea garden workers in Dibrugarh District. The daily wage workers were the respondents of the study. There are 177 tea gardens in Dibrugarh district, with total number of daily wage workers engaged are 94,920 (51,919 permanent worker and 43,001 as temporary workers). This data has been collected from the office of the Assistant Labour Commissioner, Dibrugarh district . For selection of primary data for the survey, the sampling technique used was multistage sampling.

Scope of the Study :

The study caters to determine the association between demographics of the respondents and their availing of financial services. In the study, in the ambit of financial services, only bank account and insurance is considered. Also, the study pertains to tea workers of Dibrugarh district only.

FINDINGS AND DISCUSSION :

DEMOGRAPHIC PROFILE OF THE RESPONDENTS

A total of 400 respondents were surveyed in the selected 20 tea gardens in Dibrugarh District. The demographic profile of the respondents in the primary survey is given below.

A) **Gender :** Out of the 400 respondents surveyed, 200 respondents belonged to the male category and 200 belonged to the female category.

B) **Age :** Age profile of the respondents showed that out of the 400 respondents, 100 of them belonged to the age group of '20-30, 132 of them belonged to the age group of '30-40', 120 of them belonged to the age group of '40-50' and remaining 48 respondents fell in the age group of 50-60.

C) **Educational qualification :** Out of the 400 respondents included in the sample, 127 of the respondents were illiterates, 182 of them fell in the category of 1-4th class education, 82 belonged to the category of 5-7th class and remaining 8 had education up to class 8 or beyond.

D) **Family size :** Considering the family size of the respondents under two categories- '5 or below' members and 'above 5' members. 213 respondents belonged to the former category while remaining 187 fell in the later category. The following figure (3.4) gives the family size profile of the respondents.

E) **Nature of employment :** Nature of employment of the respondents as a demographic factor showed that out of the 400 respondents, 254 of them were permanent workers whereas the remaining 146 were casual/temporary workers. The same is shown in the following figure.

DEMOGRAPHIC FACTORS AND BANK ACCOUNT

The study showed that out of the total 400 respondents in the survey, 168 had bank accounts i.e. 42 percent of the total respondents and the remaining 232 did not possess one. The association between demographic factors of the respondents and their availing of bank accounts is given below.

GENDER AND BANK ACCOUNT

The study showed that out of the 200 male respondents in the study, 106 (53%) of them had bank accounts and rest 94 (48%) males did not open any account. Whereas in comparison to the male respondents, only 62 (31 %) out of the total 200 female respondents had bank accounts. Remaining 138 (70 %) of the females surveyed did not have one. To determine the association between the gender of the respondent and their availing of bank account, chi square test of independence (table no.1.8.1) has been applied.

Table 1.8.1

Chi Square Test of Independence between Gender and Bank Account

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	19.869a	1	.000		
Continuity Correctionb	18.976	1	.000		
Likelihood Ratio	20.055	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	19.819	1	.000		
N of Valid Casesb	400				

(Computed value)

The above table gives the Pearson's chi-square value of 19.869 (degree of freedom 1). The asymptotic significance in the above table is the 'p value', which is 0.000. The level of significance assumed to be 5 percent in the study. As the 'p value' is less than 5 percent, we have enough evidence to reject the null hypothesis. So there exists a statistically significant association between the gender of the respondent and their opening of bank account. To determine the effect size, Cramer's V has been applied. The Cramer's V value computed was 0.223, which is close to 0.3, which determines the effect size. So, with reference to table (1.6.1), gender as a demographic variable has a medium effect on opening of bank account by the respondents.

GENDERWISE AWARENESS REGARDING VARIOUS SAVINGS PRODUCTS AN OTHER FACILITIES BY BANKS :

On the basis of gender, the awareness level regarding savings bank account, fixed deposit account, ATM and other facilities has been tabulated below (1.8.2). In case of savings bank account, the awareness level of male respondents was more the female respondents. As, 67 percent males were aware of the same against 51 percent in case of female respondents. Similar is the case with awareness level with respect to fixed account, ATM facility, zero balance account, cheque book, pass book and PMSBY (Prime Minister Suraksha Bima Yojana).

Table 1.8.2

Gender Wise Awareness of Various Savings and Other Facilities

Demographic variable		Savings A/c	Fixed Deposit	ATM	Zero Balance Account	Cheque book	Pass Book	PMSBY
	Male							
	Yes	133	87	84	88	101	132	6
	Somewhat	14	33	38	34	20	11	10
	No	53	80	78	78	79	57	184
GENDER	**Total**	200	200	200	200	200	200	200
	Female							
	Yes	102	56	48	33	42	102	0
	Somewhat	19	17	18	39	16	16	2
	No	79	127	134	128	142	82	198
	Total	200	200	200	200	200	200	200

Source : Field study

EDUCATIONAL QUALIFICATION AND BANK ACCOUNT

The study showed that out of the 127 respondents belonging to the 'illiterate' category, only 22 of them had bank account. Whereas 79 out of 182 respondents falling under the category of those attending classes from '1-4'had bank accounts. Similarly 59 out of 82 respondents having education between '5-7' and 8 respondents out of 9 attending class 8 or above, respectively had bank accounts . To determine the association between the educational qualification of the respondents and their availing of bank account, chi square test of independence has been applied.

Table 1.8.3

Chi Square Test of Independence between Education Qualification and Bank Account

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	70.216a	3	.000
Likelihood Ratio	74.417	3	.000
Linear-by-Linear Association	69.707	1	.000

(Computed value)

The Pearson's chi-square value is 70.216 (degree of freedom 3). The asymptotic significance in the above table is the 'p value' which is 0.000. The level of significance assumed to be 5 percent. As the 'p value' is less than 5 percent, we have enough evidence to reject the null hypothesis. So there exists a statistically significant relationship between educational qualification and opening of bank account. To determine the effect size Eta squared value is used. The Eta coefficient value computed to be 0.419. So, the eta squared value is 0.175 or 0.18. So, with reference to table (1.6.1), educational qualification as a demographic variable has a large effect on opening of bank account.

EDUCATIONAL QUALIFICATION WISE AWARENESS REGARDING VARIOUS SAVINGS PRODUCTS AND OTHER FACILITIES BY BANKS :

On the basis of educational qualification of the respondent, the awareness level regarding savings bank account, fixed deposit account, ATM and other facilities is given below. In case of savings bank account, the awareness level of respondents in the 'illiterate' category was 36 percent, in '1-4' category was 62 percent, in '5-7' category was 83 percent and 100 percent in case of '8 or above category'. So, a positive relationship was found between the awareness level of various products offered by banks and the educational qualification of the respondents. Similar is the case with awareness level of the respondents with respect to fixed account, ATM facility, zero balance account, cheque book, pass book and PMSBY (Prime Minister Suraksha Bima Yojana).

Table 1.8.4

Educational qualification wise awareness of various savings and other facilities

Demographic variable		**Savings A/c**	**Fixed Deposit**	**ATM**	**Zero Balance Account**	**Cheque book**	**Pass Book**
EDUCATIONAL QUALIFICATION	**ILLITERATE**						
	Yes	46	10	19	4	20	44
	Somewhat	12	18	7	18	5	11
	No	69	93	101	105	102	72
	Total	127	127	127	127	127	127
	1 – 4						
	Yes	112	19	60	58	68	110
	Somewhat	14	7	37	42	25	10
	No	56	101	85	82	89	62
	Total	182	182	182	182	182	182
	5 – 7						
	Yes	68	53	48	50	48	71
	Somewhat	7	7	11	13	6	6
	No	7	22	23	19	28	5
	Total	82	82	82	82	82	82
	8 or above						
	Yes	9	6	6	9	7	9
	Somewhat	0	2	1	0	0	0
	No	0	1	3	0	2	0
	Total	9	9	9	9	9	9

Source : field study

AGE AND BANK ACCOUNTS

Out of the total 400 respondents selected for the study, 100 belonged to the age group '20-30', 132 belonged to the '30-40' age category, 120 in the '40-50' category and 48 respondents in the '50-60' category. The study revealed that 28 (28 percent) respondents in the age group of 20-30 had bank accounts, while 64 (48 percent), 64 (53 percent) and 12 (25 percent) respondents falling in the age groups 30-40, 40-50 and 50-60 respectively, had bank accounts. This shows that the respondents in middle age groups 30-40 and 40-50 showed more positive response to formal savings habits than the other two age groups.

Table 1.8.5

Chi square test of independence between Age and bank account

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.347a	3	.000
Likelihood Ratio	22.968	3	.000
Linear-by-Linear Association	1.377	1	.241
N of Valid Cases	400		

(Computed value)

The Pearson's chi-square value is 22.347 and the degree of freedom is 3. The asymptotic significance in the above table is the 'p value' which is 0.000. The level of significance was assumed to be 5 percent. As the 'p value' is less than 5 percent, we have enough evidence to reject the null hypothesis. So there exists a statistically significant relationship between the age of the respondents and their possessing of bank account. To determine the effect size Eta squared value is used. The Eta coefficient value computed to be 0.236. So, the eta squared value is 0.056 or 0.06. So, with reference to table (1.6.1), age as a demographic variable has a medium effect on opening of bank account.

AGE WISE AWARENESS REGARDING VARIOUS SAVINGS PRODUCTS AND OTHER FACILITIES BY BANKS :

On the basis of age of the respondent, the awareness level regarding savings bank account, fixed deposit account, ATM and other facilities is given below (table 1.8.6). In case of savings bank account, the awareness level of respondents in the '20-30' age group was 43 percent, in the '30-40' age group was 73 percent, in '40-50' group was 66 percent and 33 percent in case of the '50-60' age group. So, the awareness level of various products offered by banks was found to be higher among the middle age groups (30-40 and 40-50) than the relatively younger (20-30) and elder age group respondents (50-60). Similar was the case with awareness level of the respondents with respect to fixed account, ATM facility, zero balance account, cheque book, pass book and PMSBY (Prime Minister Suraksha Bima Yojana).

Table 1.8.6

Age wise awareness of various savings and other facilities

Demographic variable		Savings A/c	Fixed Deposit	ATM	Zero Balance Account	Cheque book	Pass Book	PMSBY
	20 - 30							
	Yes	43	23	28	22	32	46	0

	Somewhat	10	17	13	17	10	8	4
	No	47	60	59	61	58	46	96
	Total	100	100	100	100	100	100	100
	30 - 40							
AGE	Yes	97	63	52	56	54	93	3
	Somewhat	10	8	18	26	13	9	6
	No	25	61	62	50	65	30	123
	Total	132	132	132	132	132	132	132
	40 - 50							
	Yes	79	46	45	36	44	77	3
	Somewhat	5	17	19	23	12	5	2
	No	36	57	56	61	64	38	115
	Total	120	120	120	120	120	120	120
	50 - 60							
	Yes	16	6	7	7	13	18	0
	Somewhat	8	7	6	7	1	5	0
	No	24	35	35	34	34	25	48
	Total	48	48	48	48	48	48	48

Source : field study

NATURE OF EMPLOYMENT AND BANK ACCOUNT

The survey revealed that out of the total 400 respondents, 254 were engaged as permanent workers in their respective tea gardens, while 146 respondents were engaged as casual workers. Out of the 254 permanent workers, 131 had bank accounts (52 percent) while only 37 out of the 146 casual workers had bank accounts (25 percent). So, permanent tea garden workers showed more positive response towards formal sources of savings than the casual workers.

Table 1.8.7
Chi square test of independence between Nature of employment and bank account

	Value	**df**	**Asymp. Sig. (2-sided)**	**Exact Sig. (2-sided)**	**Exact Sig. (1-sided)**
Pearson Chi-Square	26.189a	1	.000		
Continuity Correctionb	25.123	1	.000		

Likelihood Ratio	27.075	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	26.124	1	.000		
N of Valid Casesb	400				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 61.32.
b. Computed only for a 2x2 table

(Computed value)

The Pearson's chi-square value is 26.189 and the degree of freedom is 1. The asymptotic significance in the above table is the 'p value' which is 0.000. The level of significance was assumed as 5 percent. As the 'p value' is less than 5 percent, we have enough evidence to reject the null hypothesis. So there exists a statistically significant association between the nature of employment of the respondents and their possessing of bank account. The Cramer's V value of came out to be 0.256, which determines the effect size. So, with reference to table (1.6.1), nature of employment as a demographic variable has a medium effect on opening of bank account. The same has been tabulated below.

NATURE OF EMPLOYMENT WISE AWARENESS REGARDING VARIOUS SAVINGS PRODUCTS AND OTHER FACILITIES BY BANKS :

On the basis of nature of employment of the respondents, the awareness level regarding savings bank account, fixed deposit account, ATM and other facilities is given below. In case of savings bank account, the awareness level of permanent workers (66 percent) was more the casual workers (45 percent). Similar was the case with awareness level with respect to fixed account, ATM facility, zero balance account, cheque book, pass book and PMSBY (Prime Minister Suraksha Bima Yojana). The same has been tabulated (1.8.8) below.

Table 1.8.8

Nature of employment wise awareness of various savings and other facilities by banks

Demographic variable		Savings A/c	Fixed Deposit	ATM	Zero Balance Account	Cheque book	Pass Book	PMSBY
NATURE OF EMPLOY-MENT	**PERMANENT**							
	Yes	169	108	90	92	101	167	4
	Somewhat	20	29	42	43	25	17	9
	No	65	117	122	126	128	70	241
	Total	254	254	254	254	254	254	254

CASUAL							
Yes	66	30	42	29	42	67	2
Somewhat	13	20	12	30	11	10	3
No	67	96	90	87	93	69	141
Total	146	146	146	146	146	146	146

Source: field study

FAMILY SIZE AND BANK ACCOUNT

Out of the 400 respondents, 213 respondents had a family size of '5 or below' members while there were 187 respondents with family size 'above 5' members. Out of the 213 respondents with a family size '5 or below' members, 70 respondents (32 percent) had bank accounts and rest 143 respondents (77 percent) did not possess one. While among the 187 respondents with a size of more than 5 members, 98 (52 percent) respondents did possess a bank account.

Table 1.8.9

Chi square test of independence between Family size and bank account

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	26.189a	1	.000		
Pearson Chi-Square	15.612a	1	.000		
Continuity Correctionb	14.820	1	.000		
Likelihood Ratio	15.682	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	15.573	1	.000		

The Pearson's chi-square value is 15.612 and the degree of freedom is 1. The asymptotic significance in the above table is the 'p value' which is 0.000. The level of significance was assumed to be 5 percent. As the 'p value' is less than 5 percent, we have enough evidence to reject the null hypothesis. So there exists a significant relationship between family size as a demographic factor and possessing of bank account by the respondents. The Cramer's V value was computed to be 0.198, which determines the effect size. So, with reference to table (1.6.1), family size as demographic variable has a small effect on opening of bank account.

FAMILY SIZE WISE AWARENESS REGARDING VARIOUS SAVINGS PRODUCTS AND OTHER FACILITIES BY BANKS :

On the basis of family size of the respondents, the awareness level regarding savings bank account, fixed deposit account, ATM and other facilities is given below in table (1.8.10). In case of savings bank account, the awareness level of respondents with a family size of 'above 5' was 68 percent which was more than those with a family size of '5 or below' (51 percent). Similar was the case with the awareness level with respect to fixed account, ATM facility, zero balance account, cheque book, pass book and PMSBY (Prime Minister Suraksha Bima Yojana).

Table 1.8.10

Family size wise awareness of various savings and other facilities

Demographic variable		Savings A/c	Fixed Deposit	ATM	Zero Balance Account	Cheque book	Pass Book	PMSBY
	5 Or Below Members							
	Yes	108	51	52	44	54	104	1
	Somewhat	14	16	26	43	18	13	2
FAMILY	No	91	146	135	126	141	96	210
SIZE	**Total**	213	213	213	213	213	213	213
	Above 5 Members							
	Yes	127	87	80	77	89	113	5
	Somewhat	19	33	30	30	18	14	10
	No	41	67	77	80	80	43	170
	Total	187	187	187	187	187	187	187

Source : field study

DEMOGRAPHIC FACTORS AND INSURANCE

Insurance is another important element in bringing about financial inclusion. In a growing economy like India, still a large segment of the total population and the marginalized section in particular do not have access to any kind of insurance cover. The study presented a gloomy picture of insurance penetration among the selected tea garden. Out of the total 400 respondents, only 98 of them had insurance i.e. only 25 percent.

The study also highlighted that among the respondents availing insurance service, number of respondents with life insurance policy was highest i.e. 96 respondents, followed by 12 respondents with accidental insurance and only 1 of them with vehicular insurance.

GENDER AND INSURANCE :

The study revealed that out of the total 200 male respondents in the survey, 61 (31 percent) of them had insurance service. While in case of the 200 female respondents, only 37 (19 percent) of them responded to have an insurance policy. To determine the association between the two variables, chi square test has been applied (Table 1.9.1).

Table 1.9.1

Chi square test of independence between gender and insurance

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.785a	1	.005		
Continuity Correctionb	7.150	1	.007		
Likelihood Ratio	7.847	1	.005		
Fisher's Exact Test				.007	.004
Linear-by-Linear Association	7.765	1	.005		
N of Valid Casesb	400				

(Computed value)

The Pearson's chi-square value is 7.785 and the degree of freedom is 1. The asymptotic significance in the above table is the 'p value' which is 0.005. The level of significance assumed to be 5 percent. As the 'p value' is less than 5 percent, we have enough evidence to reject the null hypothesis. So there exists a statistically significant relationship between the gender of the respondent and their availing of insurance service. To determine the effect size, Cramer's V is computed which came out to be 0.140. So, with reference to table (1.6.1), gender as a demographic variable has a small effect on availing of insurance.

GENDER WISE AWARENESS REGARDING VARIOUS INSURANCE PRODUCTS

On the basis of gender of the respondents, the awareness level regarding various insurance products: life insurance, vehicular insurance and accidental insurance are given below (table no. 1.9.2). In case of life insurance, the awareness level of male respondents was 35 percent whereas among the female respondents it was just 20 percent. So, the study revealed that the male respondents were more aware regarding life insurance service than their female counterparts. Similar was the case with awareness level of the respondents with respect to other two insurance products i.e. vehicular and accident insurance.

Table 1.9.2

Gender wise awareness level of various insurance products

Demographic variable		Life insurance	Vehicular insurance	Accidental insurance
GENDER	**Male**			
	Yes	70	47	61
	Somewhat	57	56	56
	No	73	97	83
	Total	200	200	200
	Female			
	Yes	40	28	29
	Somewhat	59	38	21
	No	101	134	150
	Total	200	200	200

Source : field study

AGE AND INSURANCE :

Out of the 100 respondents in the age group of 20-30, only 17 (17 percent) of them had insurance service. While in the age groups: 30-40, 40-50 and 50-60, the number of respondents who had insurance were 36 (out of 132), 38 (out of 120) and 7 (out of 48) respectively. So the respective percentage of respondents with insurance was 27 percent in case of the age group 30-40, 32 percent for the age group 40-50 and 15 percent for the age group 50-60. This indicates that the respondents in the middle age groups (30-40 and 40-50) availed insurance service more than the relatively younger (20-30) and elder (50-60) age groups. To determine the association between age and insurance, chi-square test has been applied (table 1.9.3)

Table 1.9.3

Chi square test of independence between Age and insurance

	Value	Df'	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.473a	3	.024
Likelihood Ratio	9.832	3	.020
Linear-by-Linear Association	.617	1	.432
N of Valid Cases	400		

(Computed value)

The Pearson's chi-square value is 9.473 and the degree of freedom is 3. The asymptotic significance in the above table is the 'p value' which is 0.024. The level of significance assumed to be 5 percent. As the 'p value' is less than 5 percent, we have enough evidence to reject the null hypothesis. So there exists a statistically significant relationship between the age of the respondents and their availing of insurance service. To determine the effect size Eta squared value is used. The Eta coefficient value computed to be 0.154. So, squaring it would give the Eta squared value of 0.02. So, with reference to table (1.6.1), age as a demographic variable has a small effect on availing of insurance.

AGE WISE AWARENESS REGARDING VARIOUS INSURANCE PRODUCTS :

On the basis of age of the respondents, the awareness level regarding various insurance products: life insurance, vehicular insurance and accidental insurance are given below. In case of life insurance, the awareness level of respondents in the '20-30' age group was 19 percent, in the 30-40' age group was 32 percent, in the '40-50' group was 34 percent and 17 percent in case of the '50-60' age group. So, the awareness level regarding various insurance products was found to be higher among the middle age groups than the relatively younger and elder age group respondents. Similar is the case with awareness level of the respondents with respect to other two insurance product i.e. vehicular and accidental insurance.

Table 1.9.4
Age wise awareness level of different insurance products

Demographic variable		Life insurance	Vehicular insurance	Accidental insurance
AGE	**20 - 30**			
	Yes	19	14	18
	Somewhat	30	21	16
	No	51	65	66
	Total	100	100	100
	30 - 40			
	Yes	42	28	31
	Somewhat	38	34	26
	No	52	70	75
	Total	132	132	132
	40 - 50			
	Yes	41	30	35

Somewhat	35	29	18
No	44	61	67
Total	120	120	120
50 - 60			
Yes	8	3	6
Somewhat	13	10	17
No	27	35	25
Total	48	48	48

Source : field study

EDUCATIONAL QUALIFICATION AND INSURANCE :

One of the important associations between educational qualification of the respondents and their availing of insurance is given below (table no. 1.9.5). Out of the total 127 respondents falling in the illiterate category, only 15 respondents (12 percent) had an insurance policy. Whereas in the category of those attending classes from 1-4, only 30 out of 182 respondents (16 percent) had an insurance policy. In the categories of 5-7 and 8 or above, 47 (out of 82) and 6 (out of 9) respondents had insurance accounts.

Table 1.9.5

Chi square test of independence between Educational qualification and insurance

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	73.771a	3	.000
Likelihood Ratio	66.884	3	.000
Linear-by-Linear Association	56.811	1	.000
N of Valid Cases	400		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 2.21.

(Computed value)

The Pearson's chi-square value is 73.771 and the degree of freedom is 3. The asymptotic significance in the above table is the 'p value' which is 0.000. The level of significance assumed as 5 percent. As the 'p value' is less than 5 percent, we have enough evidence to reject the null hypothesis. So there is a statistically significant relationship between educational qualification as a demographic variable and availing insurance service by the respondents. To determine the effect size Eta squared value is used. To determine the effect size, the Eta coefficient value is used, which is computed to be 0.429. So, squaring it would give the Eta squared value of 0.184. So, with reference to table (1.6.1), educational qualification as a demographic variable has a large effect on availing of insurance.

EDUCATIONAL QUALIFICATION WISE AWARENESS REGARDING VARIOUS INSURANCE PRODCUTS

On the basis of educational qualification of the respondent, the awareness level regarding life insurance, vehicular insurance and accidental insurance is given below (1.9.6). In case of life insurance, the awareness level of respondents in the 'illiterate' category was 12 percent, in '1-4' category was 21 percent, in '5-7' category was 59 percent and 67 percent in case of '8 or above category'. So, a positive relationship was found between the awareness level regarding various insurance products and the educational qualification of the respondents. Similar was the case with awareness level of the respondents with respect to vehicular insurance and accidental insurance.

Table 1.9.6
Educational qualification wise awareness level of various insurance products

Demographic variable		Life insurance	Vehicular insurance	Accidental insurance
EDUCATIONAL QUALIFICATION	**ILLITERATE**			
	YES	16	12	14
	SOMEWHAT	39	21	23
	NO	72	94	90
	TOTAL	127	127	127
	1-4			
	YES	39	18	25
	SOMEWHAT	58	57	41
	NO	85	107	116
	TOTAL	182	182	182
	5-7			
	YES	49	39	46
	SOMEWHAT	17	15	11
	NO	16	28	25
	TOTAL	82	82	82
	8 OR ABOVE			
	YES	6	6	5
	SOMEWHAT	2	1	2
	NO	1	2	2
	TOTAL	9	9	9

(Computed value)

NATURE OF EMPLOYMENT AND INSURANCE :

With respect to the nature of employment as a demographic factor, the study revealed that out of the total 400 respondents, 254 were engaged on permanent basis and the remaining 146 respondents were engaged on casual/temporary basis. Out of these 254 permanent workers, 77 had insurance (30 percent) while only 21 out of the 146 casual workers had insurance (14 percent).

Table 1.9.7

Chi square test of independence between Nature of employment and insurance

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	12.721a	1	.000		
Continuity Correctionb	11.874	1	.001		
Likelihood Ratio	13.493	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	12.689	1	.000		
N of Valid Casesb	400				

(Computed value)

The Pearson's chi-square value is 12.721 and the degree of freedom is 1. The asymptotic significance in the above table is the 'p value' which is 0.000. The level of significance assumed as 5 percent. As the 'p value' is less than 5 percent, we have enough evidence to reject the null hypothesis. So there exists a statistically significant relationship between the nature of employment of the respondents and their availing of insurance service. To determine the effect size, the Cramer's V value is used, which is computed to be 0.178. So, with reference to table (1.6.1), nature of employment as a demographic variable has a small effect on availing of insurance.

NATURE OF EMPLOYMENT WISE AWARENESS LEVEL REGARDING VARIOUS INSURANCE PRODUCTS

On the basis of nature of employment of the respondents, their awareness level of various insurance products (life, vehicular and accidental insurance) is given below (Table 1.9.8). With respect to life insurance, the awareness level of the permanent workers was found to be higher than the casual workers. The study revealed that 33 percent of the permanent workers were aware of the life insurance policy as compared to only 18 of the casual workers were aware of the same. Similar was the case with the other two insurance products.

Table 1.9.8

Nature of employment wise awareness of various insurance products

Demographic variable		**Life insurance**	**Vehicular insurance**	**Accidental insurance**
	PERMANENT			
	YES	84	59	70
	SOMEWHAT	75	59	53
NATURE	NO	95	136	131
OF	**TOTAL**	254	254	254
EMPLOYMENT				
	CASUAL			
	YES	26	16	20
	SOMEWHAT	41	35	24
	NO	79	95	102
	TOTAL	146	146	146

(Computed value)

FAMILY SIZE AND INSURANCE :

In case of family size and insurance, out of the total 400 respondents, 213 respondents had a family size of '5 or below' members while there were 187 respondents with family size of 'above 5' members. Out of these 213 respondents with a family size '5 or below' members, only 31 members (15 percent) had availed insurance service and rest 182 respondents (85 percent) did not possess one. While among the 187 respondents with a size of 'more than 5' members, 67 respondents (36 percent) did possess an insurance policy.

Table 3.40

Chi square test of independence between family size and insurance

Chi-Square Tests

	Value	**df**	**Asymp. Sig. (2-sided)**	**Exact Sig. (2-sided)**	**Exact Sig. (1-sided)**
Pearson Chi-Square	24.366a	1	.000		
Continuity Correctionb	23.229	1	.000		
Likelihood Ratio	24.667	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	24.305	1	.000		
N of Valid Casesb	400				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 45.82.
b. Computed only for a 2x2 table

(Computed value)

The Pearson's chi-square value is 24.366 and the degree of freedom is 1. The asymptotic significance in the above table is the 'p value' which is 0.000. The level of significance assumed to be 5 percent. As the 'p value' is less than 5 percent, we have enough evidence to reject the null hypothesis. So there is a statistically significant relationship between family size and availing of insurance service. Cramer's V has been applied to determine the effect size, which came out to be 0.247 (close to 3). So, with reference to table (1.6.1), family size as a demographic variable has a medium effect on availing of insurance.

FAMILY SIZE WISE AWARENESS LEVEL REGARDING VARIOUS INSURANCE PRODUCTS

On the basis of family size of the respondents, those with a family size of 'above 5 members' showed a more positive response towards availing insurance service than those with a family size of '5 or below'. In case of life insurance, the respondents belonging to the 'above 5 members' category, 39 percent of them were aware of it whereas only 17 percent of the respondents belonging to the category '5 or below members' were aware of the same. It was similar in case of other insurance products i.e. vehicular and accidental insurance too.

The following table (1.9.9) highlights the same.

Table 1.9.9
Family size wise awareness level regarding various insurance products

Demographic variable		Life insurance	Vehicular insurance	Accidental insurance
	5 OR BELOW MEMBERS			
	YES	37	24	28
	SOMEWHAT	71	48	43
FAMILY SIZE	NO	105	144	142
	TOTAL	213	213	213
	ABOVE 5 MEMBERS			
	YES	73	54	62
	SOMEWHAT	45	46	34
	NO	69	87	91
	TOTAL	187	187	187

Source : field study

CONCLUSION :

The study reveals that although the government and the central bank are taking concerted efforts to promote financial inclusion but still a large chunk of the Indian population is outside the ambit of formal financial services. One of the prime reasons being limited focus on the demand side factors and more on the supply side factors. The findings of the study clearly put forth that there is an important nexus between the demographic factors of the tea workers and their availing of financial services. An important derivation made from the study was that lack of awareness about various financial services stands in the way of demand for such services. So to foster financial inclusion, it is important to make the 'less privileged' ones aware about the importance of the concept and how it is going to address the socio-economic problems faced by them. Financial literacy would play a major role in this regard, as people are not aware of the advantages of financial inclusion. One of the efficient tools that can be leveraged to impart financial education is the use of technology.

REFERENCES :

Honohan, Pattrick. (2004). Financial development, Growth and poverty: how close are the links?. The World Bank policy research working paper 3203. pp.1-31.

Leyshon A. & Thrift N. (1995). Geographies of financial exclusion: financial abandonment in Britain and US. Transactions of the Institute of British geographer.pp.312-341.

Acharya D. & Parida T.K. (2013). Research report on Financial inclusion in India: Why not happened?. Indian Institute of Banking & finance. Mumbai. (Retrieved from www.iibf.org.in>research>macro>no.33)

Rangarajan C. (2008). Report of the committee on financial inclusion. Government of India.

Ayyagari, M., Demirguc-kunt, A., & V. Maksimovic (2008). How important are financing constraints? The role of finance in the business environment. World Bank Policy research working paper- no. 3820. pp. 1-47.

Beck T. & Torre A. (2006). The basic analytic of access to financial services, World Bank policy research working paper 4026. pp.1-58.

Clamara N., Pena X. & Tuesta D. (2014), Factors that matter for financial inclusion: evidence from Peru, BBVA research working paper no, 14/09, pp. 1-26. (Retrieved from http://www.bbvaresearch.com/wp-content/uploads/migrados/WP_1409_tcm348-426338.pdf) (Accessed on 17th July 2016)

Lokho C. & Saurav M. (2013), Factors affecting access to financial services in North East India, National seminar on Financial Inclusion for economic development in North east India-Issues and challenges at Dibrugarh University, Assam, March 17th. (Retrieved from https://www.researchgate.net/publication/248706961_Factors_affecting_access_to_financial_services_in_North_East_India_IIT_Bombay?enrichId=rgreq-caf30bc9-c17e). (Accessed on 22nd July 2016)

International Journal of Applied Management Research,
Vol. 4(No.1), Page : 116 - 122

Determinants of India's Agricultural Trade after World Trade Organization: Policy Dilemma

Sanjay Tupe
Dept of Banking and Finance
B.Y.K. College of commerce, Nashik 422005, India
(Affiliated to Savitribai Phule Pune University)

ABSTRACT :

Present paper uses OLS regression methodology for understanding the impact of joining WTO by India as member on Indian agricultural trade, For this task, we divide present study into two distinct periods: pre membership period of WTO (1987-88 to 1994-95) and post membership period of WTO (1995-96 to 2005-06). We run Cobb Douglas production function for the period 1995-96 to 2005-06 to track down the impact. This exercise allows us to understand the structure and direction of Indian agricultural trade for the period under the study. The conclusion of the present paper suggests for undertaking pro-active steps to promote our agricultural export in abroad market along with not bargain with subsidy given to farm sector in India. Otherwise we may lose our competitiveness of export in the foreign market. India's stand on negotiations of WTO should be protective for saving competitiveness of Indian farm sector.

Key words : India, Trade, WTO, OLS model, policy

INTRODUCTION :

India's trade relation with several countries has a long legacy. India's basket of export is dominated by agro based commodities. However, from the year 1991 the composition of trade basket has changed slightly. The rise of ICT firms in the decade 1990's in India has altered the export basket. The formation of WTO and its working since 1992 has changed the trends in export and import composition of various countries. Since that, researchers and policy makers are curious to know whether WTO has been fostering world export in general and total trade of developing countries as special are the focal issues of the study across the globe.

India was in forefront in the formation process of WTO and joined WTO in 1992. It is therefore, inevitable to know the impact of WTO membership on agricultural trade in general and textile product export as special case for the period 1993-2008. This kind of

International Journal of Applied Management Research,
Vol. 4(No.1), Page : 116 - 122

Determinants of India's Agricultural Trade after World Trade Organization: Policy Dilemma

Sanjay Tupe
Dept of Banking and Finance
B.Y.K. College of commerce, Nashik 422005, India
(Affiliated to Savitribai Phule Pune University)

ABSTRACT :

Present paper uses OLS regression methodology for understanding the impact of joining WTO by India as member on Indian agricultural trade, For this task, we divide present study into two distinct periods: pre membership period of WTO (1987-88 to 1994-95) and post membership period of WTO (1995-96 to 2005-06). We run Cobb Douglas production function for the period 1995-96 to 2005-06 to track down the impact. This exercise allows us to understand the structure and direction of Indian agricultural trade for the period under the study. The conclusion of the present paper suggests for undertaking pro-active steps to promote our agricultural export in abroad market along with not bargain with subsidy given to farm sector in India. Otherwise we may lose our competitiveness of export in the foreign market. India's stand on negotiations of WTO should be protective for saving competitiveness of Indian farm sector.

Key words : India, Trade, WTO, OLS model, policy

INTRODUCTION :

India's trade relation with several countries has a long legacy. India's basket of export is dominated by agro based commodities. However, from the year 1991 the composition of trade basket has changed slightly. The rise of ICT firms in the decade 1990's in India has altered the export basket. The formation of WTO and its working since 1992 has changed the trends in export and import composition of various countries. Since that, researchers and policy makers are curious to know whether WTO has been fostering world export in general and total trade of developing countries as special are the focal issues of the study across the globe.

India was in forefront in the formation process of WTO and joined WTO in 1992. It is therefore, inevitable to know the impact of WTO membership on agricultural trade in general and textile product export as special case for the period 1993-2008. This kind of study has not been documented in the previous studies devoted to trends in agro export and import because the talk regarding export subsidies, domestic support, agriculture tariff, Non-Agriculture Market Access (NAMA) and access to agriculture sector are underway at the conference level and agreed and acceptable consensuses are not yet emerged to reach at conclusive stage.

To understand the impact of joining WTO as member on Indian agricultural trade, present paper uses OLS regression methodology. For that, we divide present study into two distinct periods: pre membership period of WTO (1987-88 to 1994-95) and post membership period of WTO (1995-96 to 2005-06). We run Cobb Douglas production function for the period 1995-96 to 2005-06 to track down the impact of India's membership of WTO viz viz on the export of agro product and its import.. This exercise allows us to understand the structure and direction of India's agricultural trade for the period under the study.

LITERATURE REVIEW :

Pattnayak and Nayak (2012) found that in Orissa, benefits of economic reforms did not reach to all the classes of the society and inter-district variation in the agricultural productivity is observed due to institutional factors and inputs use variations. Center for Trade and Development (2008) concluded that surge in food prices in the developing countries was transmitted from developed countries; hence many countries are witnessing rising price level of food articles. For example prices of Maize in Tanzania was increased by 81 percent during the period 2003-2008, in Philippines price of rice increased by 50 percent and in China and in India, inflation rate of food article was observed as 90 percent and 20 percent in 2007-08 receptively.

Mathur and Das (2006) concluded that growth rate of Indian agriculture has declined consistently after 1990 compared to 1980. Growth rate of Indian agriculture was 4 percent in 1980, which felled to 3.2 percent in 1990 and recently it went down to below 2 percent. The real value of food grain production declined from -3 percent to -5 percent during the period 1999-2003. Kumar and Muraleedharan (2007) pointed out that India's share in the world spices market declined from 18.9 in 1995 to 12.8 percent in 2002 due to loosing of competitiveness in the world market.

Mittal (2007) concluded that reduction in the subsidies by OECD countries and rising food prices in the world, would decline production of food crops in the OECD countries. However, its impact on production of India's major crops rice and wheat would be minor and marginal increase in the production of cash crops cotton and sugar is possible. The adverse impact would be seen on the welfare level of the farmers of developing countries. NAAS (2006) reported that since WTO inception in 1995, the price level of cereals, fish, shrimp, sugar, cotton and beverages have declined by 15 to 44 percent during the period 1995-2005, which were lower than the prices prevailing before the WTO, due to this decline, the farmers of developing countries like India were severally affected in terms of income, employment, and livelihood security.

METHODOLOGY :

Introduction of New economic regime and joining of WTO as member to India made obligatory for Indian government to slash the tariffs rates on non- agricultural product to a certain extent. However, the tariff reduction issue of agricultural products is still hanging and remains at discussion level at various forum of WTO secretariat and ministerial conferences. Since then, the pattern of total export and import and in the total export, agricultural export from and import to India might have been changed.

Hence, this paper tries to seek answer of these questions. We use dummy variable to find out the impact of India's WTO membership on total export and import in general and agricultural export as a special case. In the present paper, we compiled data from on line Handbook of Statistics on Indian Economy for 2006-07. We design the following variable to examine the relationship between agricultural gross domestic product (AGDP) and its sub set and total export earning of India.

1. Agriculture product export earnings (PAEXGDP): This variable is constructed as ratio of agricultural export earning to AGDP. This ratio shows contribution agricultural export in total AGDP of India.
2. Textile product export earning (PTEXAGDP): the share of textile product export in total AGDP is represented as ratio of textile product export to AGDP.
3. Total export earnings to gross domestic product (PTEXGDP): the contribution of export earning is depicted by this ratio. This shows the direction of export and policy impact of export promotion strategy.
4. Total import spending to gross domestic product (PTIMGDP): the openness of the economy is depicted by this ratio. Large the value of this ratio shows less the restrictions on import and vice versa. This ratio points out the leakage from the flow of GDP.
5. Agriculture product export earning to total export (AEXTEX): this ratio is constructed to find the contribution of agricultural product export in the total export. This enables us to check the importance of agriculture sector.
6. Textile product export to totals export (TEXTX): this ratio is framed to know the contribution of textile export in the total export. Multi fiber agreement provisions lift the restriction on export of textile product to developed countries from developing countries from 2005.in the light of this provisions it is necessary to take the stock of the status of textile export in the regime of new economic policy and WTO membership.
7. Dummy variable (dummy)is used to know the structural break in the trading pattern of India after 1995 in export and import is captured by using dummy variable. This is represented in binary value 1 and 0. India has joined WTO is denoted by value 1 and otherwise 0.

8. Agricultural Gross domestic product (AGDP): this variable is used as dependant variable in the Model II. We used old price series of 1993 of AGDP at constant prices in rupee crore available at the source of data.
9. Gross domestic product (GDP): this variable is used as dependant variable in the Model III. We use old price series of 1993 of GDP at constant prices in rupee crore available at the source of data.
10. Total export earning (TEX) this variable is used as dependant variable in the Model IV.

Model is also framed to find out the relationship of agricultural gross domestic product (AGDP) with total export earning of country, export earnings of agricultural products, export of textile products. Generally, OLS regression is used to see the impact of new economic policy on the behavioral pattern of trade. Present study uses OLS methodology for finding out the impact of India's membership of WTO from the year 1995 on the direction of export of agricultural trade.

To explore the impact of policy regime, analysis has been carried out for pre membership period and after the membership of WTO. For that we introduce dummy variable to see structural change occurred if any in the trade direction form the year 1995. Log values of the variables covered in the present study are taken to minimize the noise in the regression.

$Y_t = \alpha + \beta_t + \mu_t$ -------------------I

$\text{Log}\,(AGDP_t) = \alpha + \beta_1 \log\,(PAEXADGP_t)\ \alpha + \beta_2 \log\,(PTEXAGDPt) + \text{Dummy} + \mu_t$ -------------------II

AGDP = Agricultural GDP at 1993 old price series at constant prices in rupees, PAEXAGDP = proportion of agricultural produce export earnings to the agricultural gross domestic product in Indian rupees, PTEXAGDP= proportion of textile product export earnings to agricultural gross domestic product in Indian rupees.

$\text{Log}(GDPt) = \alpha + \beta_1 \log\,(PEXGDP_t) + \alpha + \beta_2 \log\,(PIMGDP_t) + \text{Dummy} + \mu_t$-------------------III

GDP = GDP of India at 1993 old price series at constant prices in Indian rupees, PEXGDP = Proportion of total export earnings by way of exporting all kind of commodities to GDP, PIMGDP = Proportion of total import spending made on importing all types of commodities to GDP.

$\text{Log}\,(EXE_t) = \alpha + \beta_1\, \text{Log}\,(PAGEXEXP_t)\ \alpha + \beta_2 \text{Log}\,(PTEXEX_t) + \text{Dummy} + \mu_t$ -----------------IV

TEX = Total export earning in Indian rupees, PAGEXEX = Proportion of agricultural export to total export earning, PTEXEX = proportion of textile export earning to total export earnings.

RESULTS AND DISCUSSIONS :

It can be seen in the Table 1 that model 1 shows that agricultural GDP of India is the function of agricultural export earning, textile export earning and dummy variable. We used OLS methodology in the present model. Results appeared from the model can be concluded as proportion of agricultural export into total export is significant factor that determines the size of AGDP of India. However, the role of textile export earnings in the AGDP of India does not find significant. India's joining as member of WTO does not make any difference with AGDP of India as represented by Dummy variable which is insignificant.

Table 1

Determinates of Trade and its Direction

Dependant	**LAGDP**		**LGDP**		**LEXE**	
Period	**1987-88 to 2005-2006**		**1987-88 to 2005-06**		**1987-88 to 2005-06**	
Model	**II**		**III**		**IV**	
Independent var.	**Coefficient**	**t**	**Coefficient**	**t**	**Coefficient**	**t**
Constant	12.15	260.46	13.29	177.97	10.9	56.23
PAGEXAGDP	4.29	3.74**				
PTEXAGDP	2.66	0.11				
PEXGDP			1.5	2.01**		
PIMGDP			0.99	1.7***		
PAGEXEX					-1.95	-4.21**
PTEXEX					-6.71	-0.74
dummy	-4.2	-.50	0.32	3.45**	1.66	6.9*
AR2	0.84		0.81		0.76	
F	27.87		25.07		20.81	
D/W	2.29		1.24		0.76	
VIF	5.70		2.0		1.14	
N	19		17		19	

Model II explores the relationship between India' GDP and proportion of total export earning, proportion of import spending, and dummy variable. The results of model II are reported in the same Table 1. These results can be understood as proportion of export earning is significant determinant of GDP of India and not only that dummy variable is also significant that shows that WTO membership of India made significant change in the determination of GDP of India.

The proportion of import to GDP is significant at 10 percent level of significance. The model results can be concluded as the export earning and Import spending to total GDP has increased and this change is supported by the dummy variable. Since the joining of WTO by India, structural break has been seen in international trade of India.

Model III find out the relationship in total export earning of India to proportion of agricultural export to GDP and proportion of textile export earnings into to total export earning of India and dummy variable. The results are interesting: one percent rise in proportion of agricultural export; total export is declined by 1.95 percent. It means the agricultural export lost its importance in the regime of WTO membership of India. Same is explained by dummy variable which is negative and significant that point out the adverse impact on agricultural export of India. In the same period, textile export from India has also declined but regression value of this variable is not significant but sign is indicative.

CONCLUSIONS AND POLICY IMPLICATIONS :

Results appeared from the model I can be concluded as proportion of agricultural export into total export is significant factor that determines the size of AGDP of India. However, the role of textile export earnings in the AGDP of India does not find significant. Joining of India as member of WTO does not make any difference with AGDP of India. Model II shows that Proportion of export earning is significant determinant of GDP of India and not only that dummy variable is also significant that shows that WTO membership of India made significant change in the determination of GDP of India.

One percent rise in proportion of agricultural export, total export declined by 1.95 percent. It means the agricultural export lost its importance in the regime of WTO membership of India. Same is explained by dummy variable which is negative and significant, that point out the adverse impact on agricultural export of India. In the same period, textile export from India has also declined but regression value of this variable is not significant but sign is indicative.

The conclusion of the present paper suggests for undertaking pro-active steps to promote our agricultural export in abroad market and at the same time not to bargain with subsidy given to farm sector in India. Otherwise we may lose our competitiveness in export and ultimately the foreign market for our goods. Our stand at negotiations of WTO should be protective for saving Indian farm sector

REFERENCES :

Center for Trade and Development. 2008. High Food Price in India: Trade and Domestic Food and Agriculture Policies Need Compressive Review, Trade Policy Brief (5), CENTAD, New Delhi.

Deodhar S. 2006. WTO Agreements and Indian Agriculture: Retrospection and Prospects, IIMA, Working Paper No.99/11/06.

Kumar N. C and Muraleedharan V.R. (2007) "SPS Regulation and Competitiveness: An Analysis of Indian Spice Exports", South Asia Economic Journal, (8:2): 335-346.

Mathur A. S. and Das S. et.al. 2006. Status of Indian Agriculture: Trend and Prospectus, Economic and Political Weekly, December 2006: 5327-5336.

Mittal S. 2007. OECD Agricultural Trade Reforms: Impact on India's Prices and Producers Welfare, Indian Council for Research on International Economic Relations, Working Paper No.195.

NAAS. 2006. WTO and Indian Agriculture: Implications for Policy and R&D, Policy Paper 38, National Academy of Agricultural Science, New Delhi.

Pattnayak M and Nayak B. P. 2012. Performance of Agriculture in the Changing Structure of Orissa Economy: Issues Revisited, Paper Presented In the 40th Annual Conference of the Indian Econometric Society.

RBI. 2007. Handbook of Statistics on Indian Economy 2006-07, Dept. of Publication, RBI. Mumbai.

International Journal of Applied Management Research,
Vol. 4(No.1), Page : 123 - 135

Indigenous Haats and its Quality Assessment: Evidences from Garo Hills, Meghalaya

Abhigyan Bhattacharjee
Associate Professor
Mridul Barman
Research Scholar,
Department of Management, North-Eastern Hill University, Tura Campus, Tura, Meghalaya. 794002

ABSTRACT :

The quality of haat motivates the basic functionaries of haat system which come through the level of perceived satisfaction availed by the buyers and sellers in the conduct of a regional haat. Buyers and sellers roam from one haat to another haat and they are capable of giving better judgment on the conduct of haats in any region. However, the performance of regional haats and experiences of buyers and sellers on the conduct of operation have a direct impact on them which is derived through the level of satisfaction and performance of the haats, basically the operating, market infrastructure, location along with better communication and transportation are the prime motivators for buyers and sellers in the conduct of regional haats. Hence the intention in this paper is to find out the level of perceived satisfaction obtained by the buyers and sellers on the conduct of regional haat operating in the Garo Hills of Meghalaya. The regional haats is directly affected by the level of satisfactions perceived by the buyers and sellers and that of overall development of haats is an outcome of this level of satisfaction that customers and sellers obtained from a regional haats in Garo Hills of the Meghalaya.

Key words : *Hatts, perceived satisfaction*

INTRODUCTION :

A Haat in the hilly regional area is one of the important ways to connect people physically with each other and also with outsiders in the form of buyers and sellers. A haat in the hilly area is very important for producers whose economic subsistence is based on agricultural products and collection of forest produce. It plays a very important role for the livelihood of hilly people, which fulfills the demand for and supply of goods on a regular basis. The main indispensible functionaries in a haat though basically consumers and sellers, however, in view of participants, they are grouped into consumers, traders, administrators and bystanders as a common criteria of people are available in any indigenous haat in India. Apart from that the population or number of villages would be more in the location of a haat, but the more important factor to run a haat in that locality is the attended number of consumers and sellers. Moreover, the choice of the consumers to visit a particular haat is determined by some other factors viz, nearness to the haat, easy accessibility, availability of products, size of the haat, social and cultural background, per capita income, frequent needs, geographical space, etc. which decide the mobilization of consumers to the haat. The consumers are aware about the market day and participate in the market and do purchase activities according to their choices and according to their level of knowledge. It is only on the special occasion that, the consumers travel distant market centre for meeting the requirement of their social, cultural, religious and administrative needs (Skinner, 1964). Sellers who are the most significant participants forming the central level of the weekly haat are in fact the controllers of the weekly haat marketing system. The gathering of a large number of individual sellers always invites potential customers in a weekly haat. The greater the gathering, the more people are attracted to join the market (Ravi, 2016).

A haat is how much develop in the regional areas is indicated by the provision of participants' level of satisfaction achieved by a haat in a particular locality. The scenario of a hilly area regional market in the NE region is basically base on certain facilities and services available and these facilities are provided by the an organised body which is known as market committee and again which is regulated by the state government or autonomous body of the state. Among them market regulation committee is the main body to take care the operation of the haats. The basic requirements in the haats are the basic infrastructure which needs to run a haat, such as sufficient space, market sheds for temporary sellers, sufficient space for permanent shops and buyer supporting infrastructures such as toilets, water, proper communication space which is the common in a haat. The objective of success in organising a good conduct of regional haat is based on the level of customers' satisfaction which creates a bonding relationship between haat and the participants of the haats. Therefore on the basis of this success, a haat can motivate more participants (customers, shop keepers, etc.) and inflow of variety of products to fulfil the demand of the diverse groups of people in the haat as well as people of the region. This also extends an avenue for the purpose of overall development of the region.

Though issue of satisfaction to participants especially in the hilly region haat is a demand-driven and this is a common phenomenon that takes place in any market. However, there are certain common factors which any local haat has to provide to achieve the satisfaction level of their participants in the haat. The participatory method which is rapidly gaining acceptance as a better measure of success in extension service delivery has been used to measure the buyers and sellers satisfaction (Hall et al., 2000; Birner et al., 2006; Birner and Anderson, 2007; Kokate et al., 2009). However, the question raised in this study is whether or not, the regional hilly area haats able to deliver satisfaction services to those who are participate in the haats of Garo Hills, Meghalaya. The observed dearth of empirical information on the level of satisfaction of participants in Garo Hills and possible effect of certain socio-economic characteristics of customers on their perception of the level of satisfaction` services rendered to them are the thrust of this study.

LITERATURE REVIEW :

One of the main reasons underlying the exploitative markets was the heavy indebtedness of the communities to the zamindari traders. Moreover, due to the geophysical conditions and lack of infrastructure facilities and absence of institutional arrangements including co-operatives, the rural markets were highly localized and hence, the market instruments such as pricing, backward and forward linkages, demand and supply of commodities have always turned to the disadvantage of the communities (Rajagopal, 2005).

Shifting cultivation is extensively practiced by the indigenous people on the hill and slope areas. They also collect minor forest produces, rear animals, involve in hunting and making bamboo products and labour works. The tribal women live their life on par with the males sharing in all the work. Most of the tribal males and females smoke and chew tobacco, betel nut, and betel leave. They live far from the towns and they don't have proper transportation & marketing facilities to their villages. They wholly depend on the weekly markets and their numbers in such markets are more for selling and buying of commodities. Therefore, weekly markets are very important to the lives of tribal people for selling and buying of products (Ravi, 2016). Another study by Borthakur (1993) in Meghalaya which is a tribal state found that periodic markets in Meghalaya operate in two ways namely vertical and horizontal. The researcher also made a comparative study between the periodic markets of Assam and the periodic markets of Meghalaya.

In another study, Rajagopal (2009) opined that shopping malls in India contribute to business more significantly than traditional markets. Shopping malls attract customers providing enough time to make choices. Shopping malls are also recreational means of shopping. However, competition between malls and traditional shopping centers has led mall developers and management to consider alternative methods to build enthusiasm in customers. Though the regulated markets in the country has increased but in the state the number of regulated market is less compared to other states in the country (Bhatia, 1999).

Periodic market of Cherrapunjee in Meghalaya is the main distributor of goods and services to the entire (Jaintia Hills) region. However, this traditional market suffers from multiple problems, so it is incumbent upon the state government to strengthen and improve the traditional market. Therefore, it is also highly recommended that top-down approach should be adopted where the state government should look after the welfare of the tribal market with the full cooperation and co-ordination of local Syiem and the Dorbar authorities (Ryngnga & Ryntathiang, 2012).

From the above reviews, we can contemplate that indigenous market or indigeneous haat play an important role towards the welfare of tribal populace. The present study will try to identify the characteristics of an indigenous haat of garo hills in Meghalaya

Objectives of the Study :

The following objectives have been framed for the present study

1. To explore the perceived determinants of the level of satisfaction of customers on local haats.
2. To explore the perceived determinants of the level of satisfaction of sellers on local haats.

RESEARCH METHODOLOGY :

Study Area :

Garo Hills Region is located in the western part of the state Meghalaya. The region comprises of five districts, seventeen Community Development Blocks and 7154 villages of the state respectively are dominating by the local tribal people excluding the plain belt of the region. It is bordered in the south and west by Bangladesh and north by Assam and east by Khasi Hills. With average daily temperature ranges from 17oC to 27oC, the vegetation of the region is mainly hilly forests with large area of rain forests, and deciduous forest. The agricultural sector forms the base of the overall development thrust of the region with farming as the main occupation of the people in the region. Crops largely grown especially food grains, spices, seasonal vegetables, seasonal fruits and forest products and cash crops are also practiced. As obtainable in other states of the country, regional haats are occupied by all these produced and also manufactured products available in the country.

Sample Size and Sampling technique used :

A two stage Simple random sampling technique was employed in the study. In the first stage, 450 sellers, bifurcating 30 sellers from each regional haat out of the total of 15 haats were randomly selected across the five districts of the region. Opinions were collected from the sellers about the haats' quality and their satisfaction level in conducting their selling businesses in the haats. The second stage also includes 450 buyers opinion bifurcating 30 buyers from each regional haats out of the total 15 haats which were selected to collect their basic information and opinion about the level of satisfaction provided by these haats to them.

Analysis of Data :

Primary data was obtained with the use of interview schedule. The data were analysed using descriptive statistics and through multiple regression analysis. Frequency of the data counts, percentage and means were used to describe the perceived characteristics of buyers as respondents. A five point Likert scale was used to elicit information on the level of satisfaction of regional haats to the respondents which include both buyers and sellers opinion respectively. The respondents both buyers and sellers were required to indicate the extent to which they satisfy or dissatisfy with carefully constructed statements which depicted their perception on the level of satisfaction of regional haats services, availability of products, infrastructures development, prices and communication and transportation easiness to them to participate in the haats.

The scale was constructed as follows: Highly dissatisfy=1, dissatisfy=2, neutral or moderately satisfy=3 satisfy= 4 and highly satisfy =5. A mean score was obtained for each respondent including both buyers and sellers and adopted as a measure of the level of satisfaction of haats' quality and performance in providing services to them (Likert, 1932; Hoover, et al. 2009). The multiple regression analysis using the ordinary Least Square method was employed to investigate the effect of selected perceived characteristics of buyers in a common haat on their perception of the level of satisfaction on the conduct of haat in the region. The choice of this model was based on its proven adequacy to understand the opinion given by the buyers in a Likert scale (the dependent variable) and buyers perceived characteristics in a haat which include certain number of factors count as responsible in giving individual opinion called independent variables or regressor or predictor variables in situation where there is the need to predict the value of relationship between or among the dependent and independent variables. According to Berger (2003), the regression model in its explicit form is given as :

$$Y_i = \beta_0 + \beta_1\chi_{1i} + \beta_2\chi_{2i} + \beta_3\chi_{3i} + \text{.........} + \beta_n\chi_{ni} + e_i$$

Where, Y_i is the Dependent Variable, β_0 is the constant term β_1 to β_3 are coefficient relating to p explanatory variables of interest and e_i is the error term. The measurable variables are given in the form of X_{1i} to X_{ni} be the factors of perceived characteristics of buyers in the conduct of haats as collected from the region. These variables are arranged as :

Y = is the perceived level of satisfaction of the buyers measured by mean scores from a Likert scale.
X_1 = age of buyers measured in years
X_2 = Gender measured as a dummy variable, 1 for male and 2 for female.
X_3 = Education level of buyers measured as an ordinal scale 1 to 5 from primary to degree or more.
X_4 = Frequency of buyers market visits as a dummy variable, 1 for regular and 2 for irregular
X_5 = Annual income of buyers measured in terms of money value.
X_6 = Types of Shops measured in ordinal scale 1 for open shop, 2 for market shed 3 for temporary shop and 4 for permanent shop

X_7 = Time duration of haat visits by buyers measured in hours
X_8 = Types of products purchased by buyers 1 for agricultural products 2 for non-agricultural products and 3 for both agricultural and non-agricultural products
X_9 = Mode of transportations buyers uses to visit haats measured in an ordinal scale.
X_{10} = Sellers opinion about the regional haats measured by means score from a Likert Scale with the similar variables for sellers.

RESULTS AND DISCUSSION :

Characteristics of Visiting Buyers :

Table-1 as provided in (Annexure-I) presents the selected characteristics of buyers visiting the indigenous haats in the study area. The results reveal that the modal age group of the respondent buyers was 30-50 and the percentage share was 90 percent. However, the minimum age of 30 years age was more in the total number of participants in the haats. The majority of the respondents (66.22 percent) were women. The education level for most of the respondents was below higher secondary and most of them were regular visitors (85.78 percent) in the haats. Most of the buyers are in the income group of Rs. 20 thousand to Rs. 40 thousand which includes 78.45 percent of the total respondents in the study area. Data also included the types of shops available in the haats and among them temporary shops including temporary shops inside the market sheds are more which includes more than fifty percent of the total shops in the indigenous haats.

The conduct of indigenous haat and participation of buyers and the level of satisfaction derived is also the impact of the indigenous haats on the buyers that adds to overall performance and quality of the haats. The product-wise buyers for agriculture and non-agriculture products are more compared to buyers for both the categories. The reason is that most of the buyers either come to buy vegetables or to buy grocery items as many of the buyers have sufficient cultivated vegetables in their house and they need only the grocery items.

Customers' level of satisfaction on the conduct of indigenous Haats in Garo Hills :

Table 2
Distribution of Respondents by mean scores on the perceived level of Satisfaction on the conduct of Regional Haats in Garo Hills

Customers' Level of Satisfaction	Frequency	Percentage No. of Respondents
0-1	3	0.67
1.01-2	216	48.00
2.01-3	182	40.44
3.01-4	49	10.89
Total	450	100

Source : Field survey

The perceived level of satisfaction of customers is presented in the Table-2. The opinions of the respondents are arranged on a five point Likert Scale where a respondent can score minimum 10 points to maximum 50 points on any scale of 10 variables. The results reveal that customers perceived level of satisfaction in the conduct of the regional haats in the region is poor. The result shows that only 10.89 percent of the customers perceived level of satisfaction favoured the conduct of haats in the region positively. About half of the customers disagreed that the conduct of regional haats in the region is adequately enough to them while 40.44 percent customers were indifferent.

Table 3

Perceived determinants of the level of satisfaction of Customers on Local Haats in Garo Hills

Statements	Total Respon-dent	SD	D	U	A	SA	Respo-nse Avg.
My opinion is sought on choice of locating the Haat is ideal	450	0 (0.0)	201 (44.7)	100 (22.2)	145 (32.2)	4 (0.9)	2.9
My opinion is sought on choice of availability of products in the Haat	450	2 (0.4)	377 (83.8)	64 (14.2)	7 (1.6)	0 (0.0)	2.2
My opinion is sought on availability of Haat infrastructure	450	206 (45.8)	219 (48.7)	24 (5.3)	1 (0.2)	0 (0.0)	1.6
My opinion is sought on prices for Branded products are not varied from MRP	450	24 (5.3)	171 (38.0)	85 (18.9)	160 (35.6)	10 (2.2)	2.9
My opinion is sought on residential distance of the Haat is too far	450	72 (16.0)	116 (25.8)	82 (18.2)	139 (30.9)	41 (9.1)	2.9
My opinion is sought on haat fulfils necessary requirement for all type of customers	450	275 (61.1)	157 (34.9)	7 (1.6)	11 (2.4)	0 (0.0)	1.5
My opinion is sought on price for local products are varied from haat to haat	450	73 (16.2)	153 (34.0)	72 (16)	118 (26.2)	34 (7.6)	2.7
My opinion is sought on haat suffers from inadequate management	450	121 (26.9)	299 (66.4)	29 (6.4)	1 (0.2)	0 (0.0)	1.8

My opinion is sought on organisation of haat is very important	450	0 (0.0)	6 (1.3)	23 (5.1)	320 (71.1)	101 (22.4)	4.2
My opinion is sought on products' demand more than supply of products in the haat	450	4 (0.9)	23 (5.1)	20 (4.4)	377 (83.8)	26 (5.8)	3.9

Notes : *SD (strongly disagree); D (disagree), U (undecided); A (agree); SA (strongly agree) source: Field survey*

The results in the Table-3 show that about half of the opinion of customers in regard to the place of conduct of haat is adequately not enough. Similarly the choice of products in the haats is not sufficient for all type of customers. To develop the haats more infrastructures is required for sellers and also to the haats. However, the price control for products in the haats varies even for the branded products whose MRP is printed are also priced at different rate. Moreover, 61.1 percent customers' opinion is that haats are not sufficient with variety of products for all type of customers and also there are no sufficient shops with different products for different type of customers. The organisation of haats is required to be improved for smooth conduct of haats in the region as most of the customers' opinion shows that organisation of haats is the most important for the benefit of customers as well as shop keepers in the haats. The distance of haats is manageable for customers as the opinion for distances is a mixed response. Those who stay near the haats did not agree that haat is too far whereas those who stay far, again they agreed that haat is too far at a distance for them.

Even than improvement in rural roads is an important part of infrastructure development as it affects agricultural development and also the development of social services (Satish, 2007). In the study, a good number of customers agreed that supply of products in the haats is less compared to the demand of products in the haats.

Table 4
Perceived determinants of the level of satisfaction of Sellers on Local Haats in Garo Hills

Variables	Total Respon-dent	SD	D	U	A	SA	Sellers Avg. Respo-nse
My opinion is sought on availa-bility of Haat infrastructure	450	142 (31.56)	283 62.89)	25 (5.56)	0 (0.0)	0 (0.0)	1.74
My opinion is sought on prices for Branded products are not varied from MRP	450	2 (0.44)	170 (37.78)	100 (22.22)	168 (37.33)	10 (2.22)	3.03

My opinion is sought on haat fulfils necessary requirement for all type of customers	450	12 (2.67)	404 (89.78)	22 (4.89)	12 (2.67)	0 (0.0)	2.07
My opinion is sought on price for l ocal products are varied from haat to haat	450	73 (16.22)	152 (33.78)	72 (16.00)	118 (26.22)	35 (7.78)	2.75
My opinion is sought on haat suffers from inadequate management	450	44 (9.78)	385 (85.56)	21 (4.67)	0 (0.0)	0 (0.0)	1.95

Notes : *SD (strongly disagree); D (disagree), U (undecided); A (agree); SA (strongly agree) source: Field survey*

A similar type of opinions was also tested with the sellers in all the 15 haats in the region with five important variables for haats and they responded almost in the same manner as the customers responded. 62.89 percent sellers have given opinion that the infrastructures in the haats are not enough for the conduct of haats (Table-4). 85.56 percent of sellers disagreed with the present management of regional haats their expectation is the get better management of the haats and also the price control and availability of variety products by providing the opportunity for opening new shops with new type of products whether permanent or temporary shops in the haats.

Determinants of Customers' Satisfaction on the conduct of Indigenous Haats in Garo Hills :

The determinants of customers' perception of satisfaction and the results are presented through a regression analysis in Table-5. The dependent variable in the regression model as mentioned above was customers' perception of satisfaction on the conduct of regional haats in Garo Hills of Meghalaya. The predictors or independent variables were customers' age, genders, education, frequency of market visits, annual income of customers, type of shops available in the haats, time duration of visit, types of purchase of products, mode of transportation and sellers opinion. The regression analysis was carried on with multiple regression model with the above ten predictors and it produced R2 = 0.315 F (10,439) = 20.188; P<0.000. Although the results of R2 reports that the variables account for only about 32 percent of the observed variations in the customers' perception of satisfaction on the conduct of regional haats, however, the presence of statistically significant predictors make it possible to draw conclusions from the analysis. The predictor variables had shown significant weights and accounted for 32 percent of the variations observed in the customers' perception of the level of satisfaction on the conduct of regional haats in Garo Hills.

Table 5

Results of Regression Analysis to identify determinants of Customers' satisfaction on the conduct of Regional Haats in Garo Hills

Variables	Unstandardized Coefficients B	Std. Error	T	Sig.
(Constant)	1.674	0.107	15.705	0.000
Age of Buyers	-0.004	0.015	-0.239	0.811
Gender of buyers	0.021	0.021	1.000	0.318
Education	-0.047*	0.013	-3.519	0.000
Frequency of Market Visits	-0.002	0.029	-0.057	0.955
Annual Income of Buyers	-0.002	0.009	-0.191	0.848
Type of Shops	0.008	0.010	0.832	0.406
Time Duration of Visit	0.007	0.008	0.881	0.379
Types of Purchase of products	0.014	0.015	0.923	0.356
Mode of transportation of buyers	0.024	0.015	1.593	0.112
Sellers' Opinion(Likert Scale)	0.400*	0.030	13.200	0.000

R_2 = 0.315 F (10,439) = 20.188; P<0.000, 1%*

The results of regression analysis implies that the determinants of customers' satisfaction in the conduct of regional haats, where age of buyers, education level, market visits and annual income were negatively influenced their perception at p< 0.000, which indicates an inverse relationship between the satisfaction of customers and the conduct of regional haats in the area. It results that the higher these four variables the lower the level of satisfaction on the conduct of regional haats in the area. The results also show that the opinion given by the sellers and the buyers (customers) are significant at 1 percent level P-values. The conduct of regional haats in the Garo Hills positively related with the awareness among the customers. The performance in the conduct of regional haats in the area is more when the awareness is less among the customers and vice versa.

Conclusion :

The study concluded that the level of satisfaction in the conduct of indigenous haats in Garo Hills is poor as perceived by the customers as well as different sellers in the haats. The performance to be provided for satisfaction to customers and sellers need a good conduct of the indigenous haats, which is required to improve infrastructures of the haats, management and secured operational activities in order to increase the demand and supply of products as well as gathering of people in the haats of the region. A good conduct of haats can motivate more buyers and sellers which are the basic functionaries of a haat.

REFERENCES :

Bhatia, M.S., (1999), "Rural Infrastructure and Growth in Agriculture", Economic and Political Weekly, 34 (13), March 27-April 2.

Birner, R., and J. R. Anderson. (2007). How to make agricultural extension demand-driven? The case of India's agricultural policy. IFPRI Discussion Paper 00729. Washington, D.C.: International Food Policy Research Institute.

Birner, R., Davis, K., Pender, J., Nkonya, E. Anandayasekeram, P. Ekboir, J., Mbabu, A.Spielman, D. Horna, D., Benin, S., and Cohn.M. (2006). From "best practice" to "best fit": A framework for analyzing pluralistic agricultural advisory services worldwide. DSGD Discussion Paper 37. Washington, D.C.: International Food Policy Research Institute.

Borthakur, Manjula. (1993).The Periodic Market System: A Comparative Study of Tribal and Peasant Economies with Special Reference to North East India: A Thesis Submitted for the Degree of Ph.D in Geography, School of Environment Science, North Eastern Hill University, Shillong.

Hall, A., Clark, N. and Sulaiman, V. R. (2000). Coping with new policy agendas for agricultural research: The role of institutional innovations. ICAR Policy Brief 13. New Delhi: Indian Council of Agricultural Research.

Hoover, J., Martin, P., & Litchfield, R. (2009). Qualitative tools to examine EFNEP curriculum delivery. Journal of Extension [On-line], 47(3) Article 3FEA3. Available at: http://www.joe.org/joe/2009june/a3.php

Kokate, K. D., Kharde, P.B., Patil, S.S., and Deshmukh, B.A. (2009). Farmers-led extension: Experiences and road ahead. Indian Research Journal of Extension Education, 9(2), 8-21.

Likert, R. (1932). A Technique for the Measurement of Attitudes .Archives of Psychology, 22(140), 1-55.

Rajagopal, R. (1993). Indian Rural Marketing, Jaipur, Rawat Publications.

Rajagopal, R. (2005). Rural Marketing System in the North Eastern States: Problems, Diagnosis and Strategy Perspective, Socio Economic Research Reports, Planning Commission, Government of India.

Rajagopal, R. (2009). Growing Shopping Malls and Behavior of Urban Consumers, Journal of Retail and Leisure Property, Vol. 6, Issue 2, 99-118

Ramavath, Ravi (2016). Tribal Weekly Markets: A Case Study of Adilabad District of Telangana, International Journal of Scientific Research, 5(6), 81-84.

Ryngnga, P. & Ryntathiang, B. B. L. (2012). Periodic Market and Rural Development: An Appraisal study of Cherrapunjee of Meghalaya, International Journal of Social Science Tomorrow, 1(9), 1-10.

Saha, Shomik (2014). The Haat of Rural Economy-Rural India's Traditional Supermarkets, Journal of Humanities and Social Sciences, Salesian College Publication, Siliguri, 5(2), 51-58.

Satish P. (2007). Rural Infrastructure and Growth: An Overview, Indian Journal of Agriculture Economy Vol. 62, No. 1, Jan-March Issue, 2007.

Sengupta, Sutapa., Das, Susmita. (2006). Role of Periodic Markets in Rural Development, Study of a few Markets in Meghalaya. In B. Datta Ray & Gurudas Das (Ed.), Dimensions of Rural Development in North East India, Akansha Publishing House, New Delhi.

Skinner, G. William. (1964). Marketing and Social Structure in Rural China, Journal of Asian Studies, 24(3-42), 195-228.

Annexure – I

Table 1
Characteristics of Perceived visiting buyers in the Regional Haats

Variables	Frequency	Percentage %
Age of Buyers :		
?30	206.00	45.78
31-50	199	44.22
>50	45	10.00
Gender of buyers :		
Male	152	33.78
Female	298	66.22
Education :		
?Primary	249	55.33
Primary-Metrics	157	34.89
Metrics-Higher secondary	29	6.44
Higher Secondary-Degree	15	3.33
>Degree	0	0.00
Frequency of Market Visits :		
Regular	386	85.78
Irregular	64	14.22
Annual Income of Buyers :		
?20000	178	39.56
20000-40000	175	38.89
40000-60000	44	9.78
60000-80000	36	8.00
?100000	17	3.78

Type of Shops :		
Open shop(without shed)	58	12.89
Inside the Market shed	152	33.78
Temporary shop	98	21.78
Permanent shop	142	31.56
Time Duration of Visit :		
2-3 hours	191	42.44
3-4 Hours	153	34.00
4-5 Hours	24	5.33
5-6 Hours	55	12.22
above 6 Hours	27	6.00
Types of Purchase of products :		
Agriculture	177	39.33
Non-agriculture	208	46.22
Both	65	14.44
Mode of transportation of buyers :		
Walking	146	32.44
Own Vehicle	239	53.11
hired vehicle	65	14.44
Sellers' opinion (Likert scale)	450	2.31

Source: Primary Data

International Journal of Applied Management Research,
Vol. 4(No.1), Page : 136 - 151

A Study on the Growth and Pattern of Indian Mutual Fund Industry

Joy Das
Assistant Professor, Department of Commerce, Tripura University, Suryamaninagar
Parag Shil
Assistant Professor, Department of Commerce, Assam University, Silchar

ABSTRACT :

In the present study an attempt has been made to find out the growth and pattern in the Indian mutual fund industry after the entry of commercial banks in 1987. The Mutual Fund Industry in India which was established with the introduction of Unit Trust of India in 1963, by the Government of India has operated as the only player till 1987 after which the Government of India amended Banking Regulation Act in 1987 to allow commercial banks to start their own mutual fund in India. The private mutual fund companies could also start their mutual fund business after the economic reforms. Thus, in the present the growth and pattern in the mutual fund industry will be studied to know the status of the Indian mutual fund industry after the entry of commercial banks. To study the growth pattern in Indian mutual fund industry the researcher will be using line charts with annual growth rate for the three different phases used in the study together with the concentration ratios for that 4-firm and 8-firm and also Herfindahl Index (HI) to measure the concentration with the industry and complement the results of concentration ratios.

Key words : *Asset Under Management, Mutual funds, Concentration Ratio, HI Index, market share*

INTRODUCTION :

In today's financial market, mutual funds have created a buzz. Mutual Fund as an avenue of investmenthas been popular in Western countrieslong backand is also putting its mark in developing countries in India (Das & Shil, 2011). It plays a catalyst role to collect the savings from small investors and channelizing it to the capital market(Patel, 2017). Mutual funds are financial intermediaries which collect the savings of investors and invest them in a large and well diversified portfolio of financial assets with a view to reduce risks and to maximize the income and capital appreciation for distribution to the investors on a pro-rata basis(Gordon & Natarajan, 2016).

The Mutual Fund Industry in India was started in India with the establishment of Unit Trust of India in 1963, by the Government of India. UTI was established with the motive of enabling the common investors to participate in the growth of India's capital market by a channel of diversified fund management system to the investors the benefits of higher return, reduced risk, safety and liquidity (Kumar & Krishna, 2016). With the motive of providing a wider scope to small investors, the Government of India amended Banking Regulation Act in 1987 to allow commercial banks to start their own mutual fund in India(Gordon & Natarajan, 2016).

As the household sector has the major share in the aggregate net savings of the economy, banks in their search for mobilising the savings into productive ventures have chosen mutual funds(Srivastava, 2001). The banks were permitted to launch mutual funds as subsidiaries. SBI Mutual Fund was the first non- UTI Mutual Fund established in June 1987 followed by Canbank Mutual Fund (Dec 87), Punjab National Bank Mutual Fund (Aug 89), Indian Bank Mutual Fund (Nov 89), Bank of India (Jun 90), Bank of Baroda Mutual Fund (Oct 92).(Srivastava, 2009, p. 504)

After a slow beginning, the mutual fund industry in India stayedinactive till 1987 mainly due to monopoly nature of the market where UTI was the sole operator in the industry and the nomenclature 'Mutual Fund' had not really gained much importance. However with the entry of five public sector banks and two insurance companies in the mutual fund business since 1987 and with the entry of private mutual fund companies in 1993 the situation has changed drastically and mutual fund as a financial instrument started to become popular, and awareness of investors towards this investment also increased.(Vaid, 2008, p. 122)

So, in this backdrop an attempt has been made to find out the growth and pattern of Indian mutual fund industry after the entry of commercial bank mutual funds.

REVIEW OF LITERATURE :

Mutual funds in India are an important constituentof the Indian financial system today. A large number of studies have been conducted in India and abroad covering different aspects of Mutual funds. The review has also helped the researcher in identifying research gaps.

Sankaran (2008) in his study reveals that Assets Under Management (AUM) has seen a huge growth since 1965 but over 40% of the assets under management in the industry is managed by the top 4 AMCs and among which77.6% of the industry is controlled by the private sector.Pathak (2008) observed that though the AUM has increasedsignificantly but if it is compared to insurance companies it is very low and suggested that Mutual Funds need to develop a wide distribution network, increased use of internet and development of alternative channels to increase its reach and tap investments from all corners and segments. Singh (2006) while investigating the growth in mutual funds found out the growth in Indian mutual fund industry shows a positive trend in terms of resource mobilisation. Private sector mutual funds emerged as a leader in resource mobilisation since 1998-99. Babu(2005)has mentioned the period 1996-98 as the worst in the history of the mutual funds. He has mentioned that Private sector mutual funds were gaining the market share with their increased product offerings.

Srivastava (2009)has identified mismanagement of investment portfolio as the main reason for fall in the value of corpuses of the mutual funds in the year 1997-98. Investors ranked mutual funds very low as an investment optionand not more than 15% of the investing community is reported to be interested in investment in mutual funds schemes. According to Avadhani (2009)investors started to lose confidence in mutual funds after the poor performance of UTI and many scams involving UTI and banks which resulted in the poor performance of mutual funds during 1995 to 1999 and thereafter the performance of public sector mutual funds showed a marked deterioration while the performance of private sector mutual funds revealed a relatively better performance. Machiraju (2007) in his study on resources mobilisation by mutual Funds found that in 1995-96 and 1996-97 the subdued stock market conditions, along with a perceived lack of transparency in the functioning of mutual funds, delayed refunds, poor accountability and lack of efficient service led to the poor performance to many mutual funds schemes resulting in low or even in negative returns, thereby eroding the investors' confidence.

According to Tripathy (2007)the change in mutual fund industry in Indiahas been noticed since the introduction of mutual fund regulation in 1993 and the mutual funds have done better in comparison to bank deposit.

Gordon and Natarajan (2009) have discussed the various reasons why commercial banks need to enter the field of mutual funds. They identified banking reach, investors' confidence and merchant banking experience as the key forces in favour of commercial banks to excel in mutual fund industry.

Among the various schemes offered, schemes of UTI& SBI were in demand inNorth-eastern states of India. (Sikider and Singh, 1996)

Sasidharan and Mathews (2008) have divided the mutual fund industry in India into four phases starting with the establishment of UTI in the first phase followed by the entry of public sector mutual fund in 1987 in the second phase and then the third phase covering 1993-2003, the entry of private sector mutual fund companies. The fourth phase however, starting from 2003 has emphasized on the bi-furcation of UTI.

The survey of above literature points to the fact that though several studies have been on the growth of Mutual Fund Industry in India, only few of thesestudies have comprehensively attempted to focus on the growth and pattern of the mutual fund industry. Indeed, this gap in the available literature on the subject provides the rationale for undertaking the proposed study.

The objective of the proposed study will therefore be to find out the growth and pattern of Indian mutual fund industry since the entry of commercial banks in Indian mutual fund industry.

RESEARCH METHODOLOGY :

Research Design :

The mutual fund industry started in India with the incorporation of Unit Trust of India (UTI) in 1964. UTI was the only company doing mutual fund business in India till 1987. It was in 1987, theGovernment of India amended Banking Regulation Act in 1987 to permit commercial banks to launch mutual funds in India which was followed by the entry of private sector in 1993.(Association of Mutual Funds in India) Thus, for better understanding and analysis the study period has been divided in three phases :

Phase 1 : 1987-1993 - Entry of Public Sector Funds
Phase 2 : 1993-2003 - Entry of Private Sector Funds
Phase 3 : Since February 2003
(Sasidharan & Mathews, 2008; Sharma & Sharma, 2008)

The study is an exploratory one and is mainly based on secondary data. As commercial banks entered the mutual fund industry in 1987, so the study period has been taken as 1987- 2016 to show the growth in the mutual fund industry in India and has been divided into three phases for better understanding. But to show the pattern, the researcher will show the concentration in the mutual fund industry in the third phase of the study period, as in the third phase with the increasing number of players the market and after the bifurcation UTI inti UTI MF the phase has entered the phase of consolidation and growth(Association of Mutual Funds in India).

Data Source :

In the present study the data has been collected from the annual reports of the respective Asset Management Companies (AMCs), Reserve Bank of India website, Securities and Exchange Board of India website, AMFI website and business periodicals.

Tools and Techniques :

To study the growth in the Indian mutual fund industry after the entry of commercial banks the researcher will be using line charts and will be analysed for the three different phases used in the present study.

To analyse the pattern of Indian mutual fund industryAsset Under Management (AUM) held by different mutual fund companies has been taken from the beginning of third and current phase and so the study period is taken as March, 2003- December, 2016. The pattern in the industry will be measured by the concentration ratios for that 4-firm and

8-firm concentration ratios (CR4 and CR8)has been be used. The concentration ratios will measure the percentage market share held by larger firms within the industry.The researcher will also use HerfindahlIndex (HI) to measure the concentration with the industry and complement the results of concentration ratios.(Bikker & Haaf, 2002; Naldi & Flamini, 2014)

$$\text{HI Index} = \Sigma(\text{market share}_n)^2$$

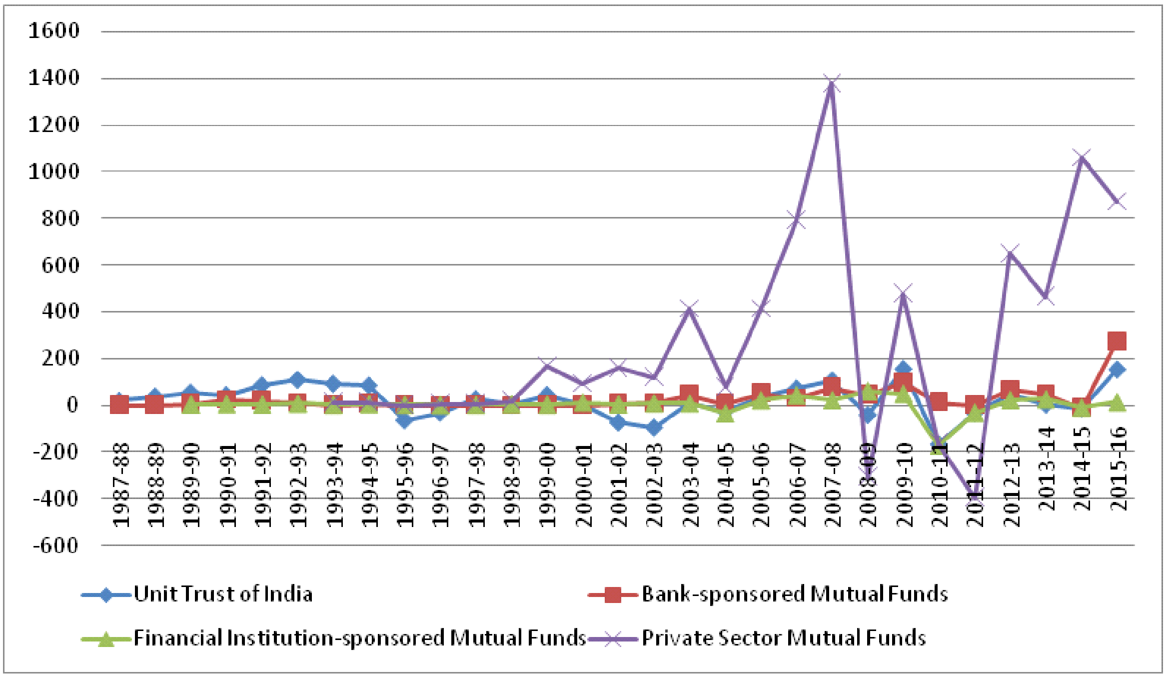
The Remaining paper is organised as follows: Section 2 deals with the Results & Discussion. The paper concludes in Section 3.

RESULTS AND DISCUSSION :

Growth analysis of Indian Mutual Fund Industry :

The Mutual Fund Industry in India has started byestablishing the Unit Trust of India in the year 1963, by the Government of India.With the view to provide a wider choice to small investor, the Government of India amended Banking Regulation Act in 1987 to permit commercial banks to launch mutual funds in India. Subsequently, the year 1993 heralded a new era in the mutual fund industry. This was marked by the entry of private companies in the sector. After the Securities and Exchange Board of India (SEBI) Act was passed in 1992, the SEBI Mutual Fund Regulations came into being in 1996. Since then, the Mutual fund companies have continued to grow exponentially with foreign institutions setting shop in India, through joint ventures and acquisitions.

Figure 2.1.1 : Growth in Mutual Fund Industry in India from 1987-88 to 2015-16 in terms of Net AUM

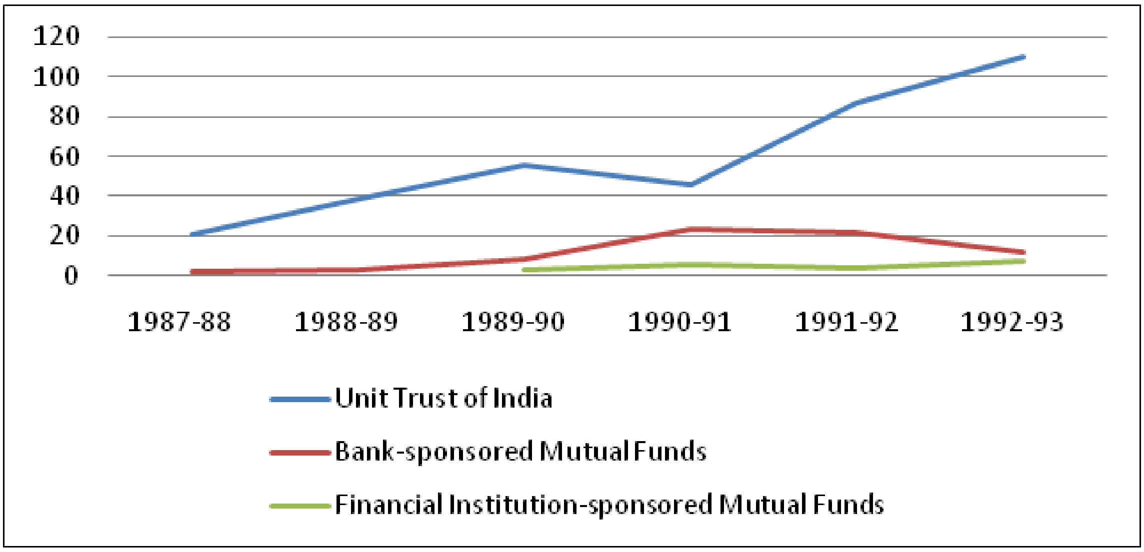


Source : www.sebi.gov.in

From the above figure, it can be seen that during the period 1987-88 to 2015-16, UTI and Commercial Bank mutual funds has shown less growth in net AUM in comparison to Private Sector mutual funds. UTI which was enjoying monopoly in mutual fund business till 1987 has not been able to enjoy the same after the entry of non-UTI mutual funds and has lost considerable amount of business to private sector mutual funds and also to some extend to commercial bank mutual funds.

During the first phase from 1987-1993, which can be marked by the entry of commercial banks and financial institutions in mutual fund industry, shows the dominance of UTI as the market leader.

Figure 2.1.2 : Growth in Phase 1in terms of Net AUM, after the entry of Bank Sponsored Mutual Funds

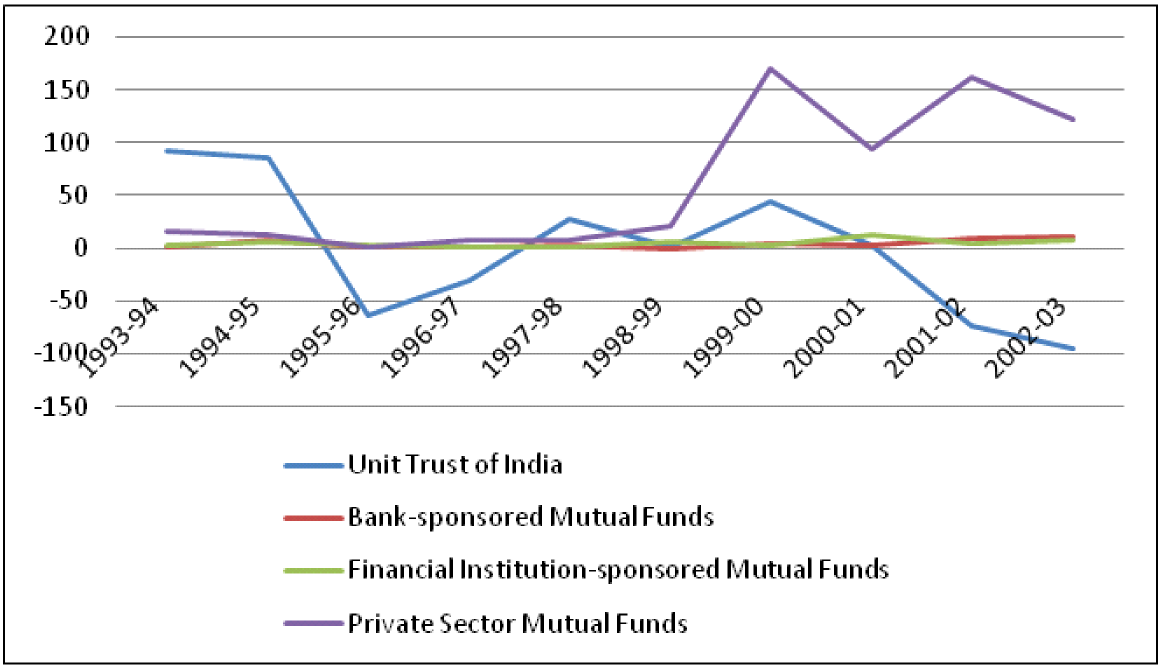


Source : www.sebi.gov.in

From the above figure it can been seen that after the entry of commercial banks and financial institutions UTI's growth rate has dipped down only in 1990-91 with the entry of financial institution mutual funds in 1989-90, apart from that the growth shows an increasing trend for UTI which has sharply increased since 1990-91. Commercial bank mutual funds and financial institution funds has shown some growth after inception by overall UTI continues to enjoy the monopoly.

With the entry of Private sector funds in1993, a new era started in the Indian mutual funds industry, giving investors a wider choice of fund families. Private mutual fund companies were expected to give a tough competition to the existing players. Initially, after the introduction of private mutual funds till 1998-99, there was a head to head competition between the three non-UTI mutual fund and the performance of UTI dipped down.

Figure 2.1.3 : Growth in Phase 2 in terms of Net AUM, after the entry of Private Sector MF

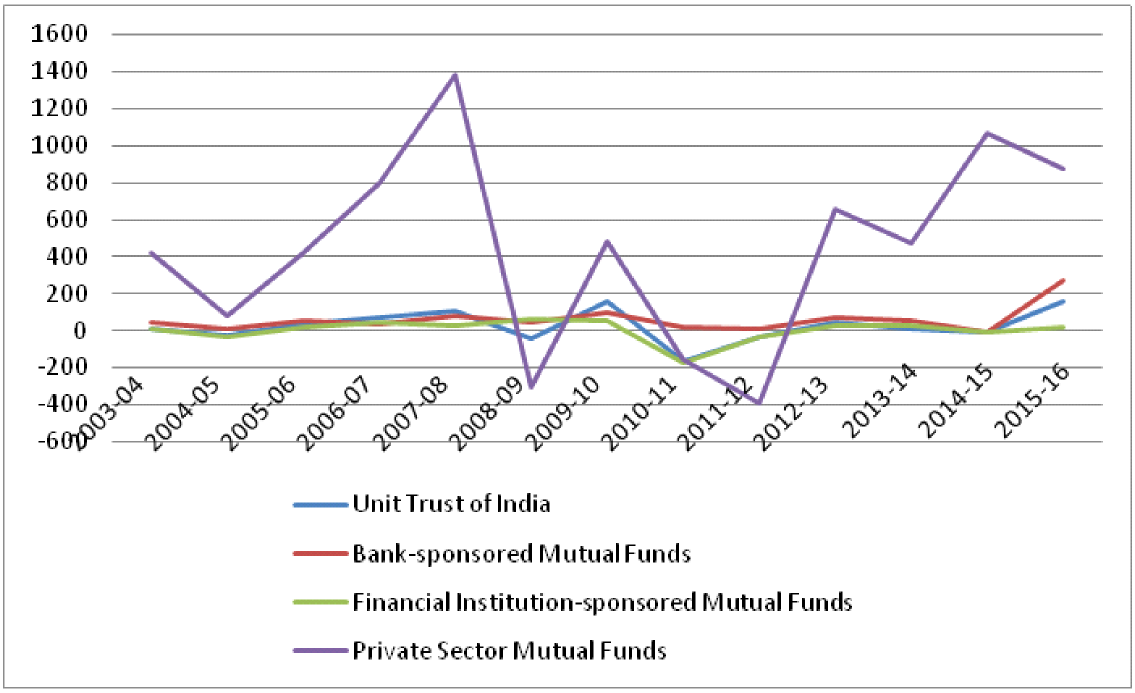


Source : www.sebi.gov.in

But in the second half of the second phase the growth rate of private sector mutual funds took off sharply since 1998-99. Commercial bank mutual funds and financial sector mutual funds continued to keep a steady growth rate at around 5-10%. But during that phase UTI could continue the growth rate maintained in the Phase I, UTI lost business and the growth rate went to negatives.

The fourth phase is the phase of consolidation, growth and expansion of Indian mutual fund industry. The number of mutual fund industry continued to increase with entry of new private mutual fund companies. The total gross AUM also increased considerably. All the players in the industry was try to put a strong grip on the market and were trying to increase market share. This phase also has seen many mergers, takeovers and shutdown of mutual fund companies.

Figure 2.1.4 : Growth in Phase 3 in terms of Net AUM, since 2003



Source : www.sebi.gov.in

The growth rate as can been from the above figure has shown an increase for all the sectors of mutual funds but private sector mutual funds has outperformed the others. UTI and financial institution mutual funds have shown ups and down in their growth rate but commercial bank mutual funds has shown a steady growth. In this phase private players has captured the market and has become market leader in terms of Net AUM.

2.2. Pattern analysis of Indian Mutual Fund Industry :

2.2.1. Concentration Ratio finds out how much majority of market share is concentrated to a few firms. It measures the dominance of few firms upon the entire industry.

Table 2.2.1A.
Four Firm Concentration and Eight Firm Concentration

	CR4	CR8
March'03	53.16164	75.36264
March'04	49.13581	70.80918

March'05	45.54999	68.61116
March'06	44.63098	70.1874
March'07	47.00904	69.39743
March'08	47.28917	69.37034
March'09	49.73552	64.02138
March'10	49.15117	73.25557
March'11	48.34033	74.10856
March'12	46.82693	72.72887
March'13	46.12584	71.83098
March'14	47.19769	73.11946
March'15	49.34115	74.56142
December'16	53.44247	81.13822

Source : Author's own calculation

If CR4 ratio is considered, it is evident for the above table that almost 50% of the market share in the Indian mutual fund industry is held by four big firms. The total number of firms in Indian mutual fund industry as on December, 2016 is 44 (AllBankingSolutions, 2017) but if when the concentration ratio is considered it shows the dominance of few firms.

Now, form the CR8 ratio, it becomes more evident that the mutual firm industry is concentrated in hands of 8 major firms holding almost 80% of the total business in December, 2016. The CR8 ratio kept on increasing since 2009 and from 64% in March, 2009 it became 81% in December, 2016.

Table 2.2.1B
Concentration of Bank Sponsored Mutual Fund and Concentration Public Sector Mutual Fund

Year	CR BSMF	CRPSMF
March'03	8.4745763	31.581312
March'04	8.3251877	27.136611
March'05	9.539711	25.775909
March'06	9.9339357	25.560917
March'07	9.0100419	23.342713
March'08	8.7277296	21.199956
March'09	8.1565454	23.100956
March'10	7.8768711	24.586361
March'11	8.4618785	20.066560
March'12	9.1459772	19.321083

March'13	9.9275383	19.714470
March'14	9.8002423	19.440006
March'15	8.3486907	17.229366
December'16	10.73813	20.270282

Source : Author's own calculation

Now, here in the study report of the AUM concentration in mutual fund industry in India in terms of Commercial Bank mutual funds (hence forth will be referred as BSMF) and Public sector mutual funds (hence forth will be referred as PSMF) it can be seen that BSMF has been struggling to reach 10% of the market share and when we consider all the public sector mutual funds which includes UTI, BSMF and Financial institution mutual funds the market share has continuously being decreasing and as on December, 2016 it has only 20.27% of business concentration. On March, 2003 the CR PSMF was 31.58% and with continuous decline in concentration ratio it stood 20.27% in December, 2016. It clearly shows the dominance of private sector mutual funds in Indian mutual fund industry.

2.2.2. Herfindahl Index (HI)

Herfindahl Index (HI) is an improvement over the CR measure in the sense that it measures the monopoly power in an industry by incorporating all the firms. Here is the data on the AUM concentration of mutual fund companies in India divided into two phase 1993-94 to 2002-03 and 2003-04 to 2016, the phase 1987-88 to 1992-93 has been ignored as the number of firms were less and UTI enjoyed monopoly in the industry.

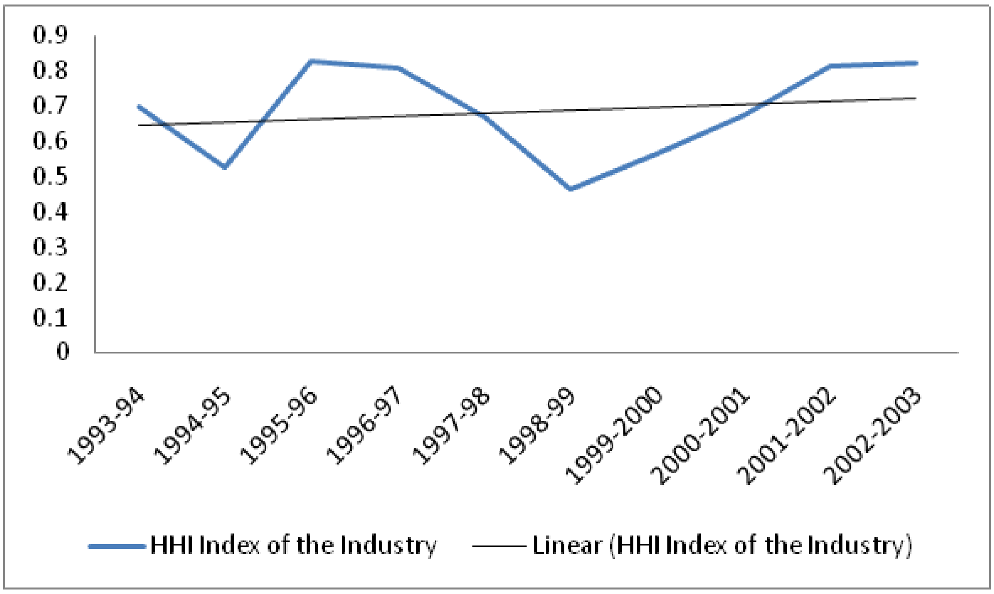
Table2.2.2A
HI Index of the Industry during 1993-94 to 2002-2003

Year	HI Index of the Industry
1993-94	0.69916
1994-95	0.526377
1995-96	0.826248
1996-97	0.808989
1997-98	0.667325
1998-99	0.462248
1999-2000	0.563709
2000-2001	0.672499
2001-2002	0.813209
2002-2003	0.821016

Source : Authors' own calculation

From the table it can be seen that from 1993-94 the concentration of business in few hands has increased considerably in 2002-03. The concentration however reduced in 1998-99 because of various scams and mismanagements of funds in UTI, investors lost confidence in UTI and caused decrease in market share of UTI. But since 1999-2000 an increase in concentration can again be observed with the increasing market share of the private mutual funds. If the trend line of HI index can be seen in Figure 2.2.2A, it can be seen that the trend line moves slightly upward to the right, which signifies an increasing concentration in mutual fund industry during the period 1993-94 to 2002-03.

Figure 2.2.2A: HI index during 1993-94 to 2003-04



Source : Table 2.2.2A

During the period 2003-04 to 2015-16 the concentration has reduced from 0.82 in 2003-04 to 0.69 in 2015-16 as it can be seen from Table 2.2.2B. But 0.69 also signifies a concentrated market where only few firms are enjoying monopoly.

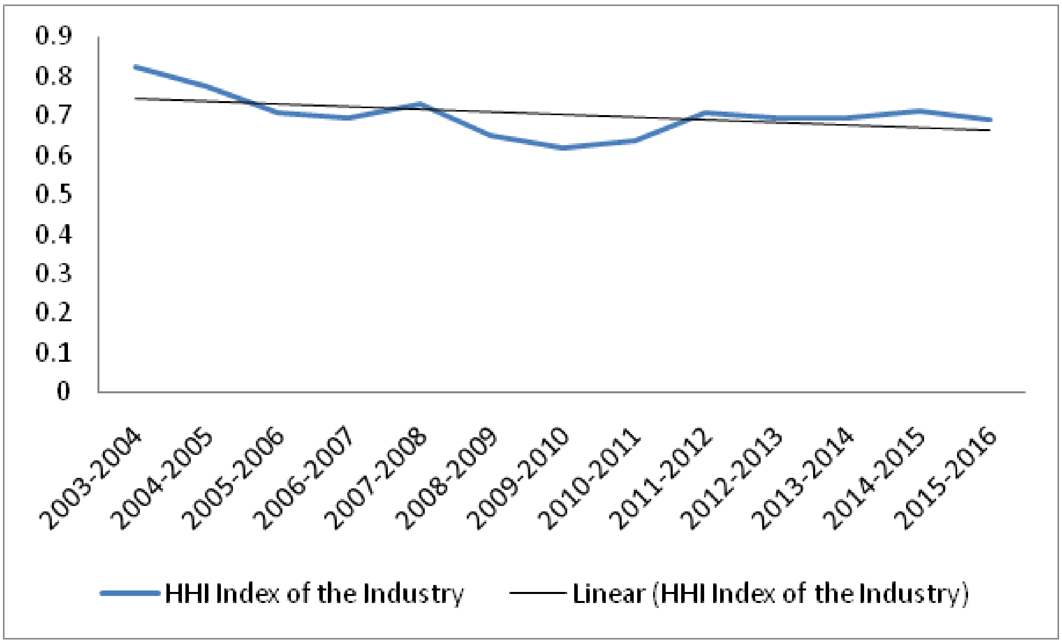
Table 2.2.2 B
HI Index of the Industry after 2003-2004

Year	HI Index of the Industry
2003-2004	0.825155
2004-2005	0.776839

2005-2006	0.708332
2006-2007	0.696796
2007-2008	0.728917
2008-2009	0.649051
2009-2010	0.618785
2010-2011	0.635361
2011-2012	0.708572
2012-2013	0.694294
2013-2014	0.694605
2014-2015	0.710992
2015-2016	0.690060

Source : Authors' own calculation

Figure 2.2.2B : HI index during after 2003-04



Source: Table 2.2.2B

The above figure shows a downward moving trend line which signifies reducing concentration. The concentration during this period has been fluctuating which clearly suggests some gain of business by the smaller firms.

3. Findings :

The mutual fund industry has seen a considerable growth in Net AUM since 1987. The Net AUM increased mainly after the introduction of private sector mutual funds. The commercial bank mutual funds and financial sector mutual funds has not been able to put a mark on the mutual fund industry as expected from them. The market has seen a continuous ups and down in growth rate but overall showed an increase which is evident from the line chart of different phases.

The concentration ratios also show the dominance of few firms in the industry. Nearly 80% of the business is held by only 8 firms and 50% business is held by 4 firms when there are more than 40 mutual fund companies in the industry. The mutual fund industry has always been concentrated in few hands initially during 1987-88 to 1997-98 by UTI and later from 1999-00 the private sectors funds took over major business from UTI and the firm became highly concentrated again. During 2008-09 the HI index has shown a little downfall in value but overall it remained above 65%, which makes the mutual fund industry highly concentrated in few big firms.

4. Conclusion :

The purpose of the study was to report about the growth and pattern in the Indian mutual fund industry after the entry of commercial banks in 1987. The study revealed that there not been any significant change in the pattern of concentration of business in mutual fund industry but it clearly showed a shift of business from the hands of UTI to private sector mutual funds. The commercial bank mutual funds and financial institution mutual funds failed to perform when they had to compete with the private mutual funds. The industry has seen a tremendous growth over the years and is expected to grow further with the flow of new schemes and new entrants in the industry.

The study however suffers from some limitations which cannot be ignored, academicians and other users should consider the limitations before its wider generalisation. Firstly, the study has considered line charts and different averages to show the growth in the mutual fund industry, the use of other statistical tool could have further clarified the growth trend in the industry. Secondly, to show the trend the researcher has used different concentration ratios only there are some other widely accepted factors to show the pattern of an industry. Finally, data used in the study is mainly secondary data, so the limitations of secondary cannot be ignored while applying he results.

BIBLIOGRAPHY :

Agarwal, A. (2000). Mutual Funds-Emerging Trends and Prospects. Finance India, XIV(4), 1271-1275.

AllBankingSolutions. (2017). List of Mutual Funds in India and Latest NAV of Mutual Funds. Retrieved from All Banking Solutions: http://www.allbankingsolutions.com/Links/mfundlink.shtml

Association of Mutual Funds in India. (n.d.). MF History. Retrieved January 16, 2017, from Association of Mutual Funds in India Website: https://www.amfiindia.com/research-information/mf-history

Avadhani, V. A. (2009). Investment Management. Mumbai: Himalaya Publishing House.

Babu, G. R. (2005). Financial Services in India. New Delhi: Concept Publishing House.

Bhatt, R. (1996). Unit Trust of India and Mutual Funds. Navi Mumbai: UTI Institute of Capital Market.

Bikker, J. A., & Haaf, K. (2002). Measures of Competition and Concentration in the Banking Industry: A Review of the Literature. Economic and Financial Modelling.

Das, J., & Shil, P. (2011). Role of Commercial Banks in Indian Mutual Fund Industry. Banijya, 4(1), 80-87.

Gangadhar, V., & Babu, G. R. (2003). Investment Management. New Delhi: Anmol Publications Pvt. Ltd.

Gordon, E., & Natarajan, K. (2016). Financial Market and Services. Mumbai: Himalaya Publishing Hlouse.

Gupta, A. (2001). Mutual Funds in India: A Study of Investment Management. Finanve India, XV(2), 631-637.

Gupta, S. (2011). Indian Mutual Fund Industry: Current State and Future Outlook. Indian Journal of Finance, 5(4), 38-43.

Kumar, G. R., & Krishna, D. (2016). Role of Mutual Fund Industry in Indian Economic Development. International Research Journal of Business and Management.

Machiraju, H. R. (2007). Indian Financial System. Mumbai: Vikas Publishing House Pvt. Ltd.

Naldi, M., & Flamini, M. (2014). The CR4 Index and the Interval Estimation of the Herfindahl-Hirschman Index: An Empirical Comparison. Rome. Retrieved from https://halshs.archives-ouvertes.fr/hal-01008144/document

Patel, A. P. (2017). An Analysis upon the Role of Banking and Non-Banking Financial Companies in Indian Mutual Fund Market. Journal of Advances and Scholarly Researches in Allied Education, 12(2), 60-65.

Pathak, B. V. (2008). The Indian Financial System. New Delhi: Pearson Education.

Roy, A. (2010). Commercial Banking in India: A Beginner's Module. Mumbai: National Stock Exchange of India Ltd. Retrieved from NSE Website: http://www.nseindia.com/content/ncfm/ncfm_CBBM_workbook.pdf

Roy, D., & Gary, E. (2012). Mutual Fund Performance Attribution: 1994-2005. Financial Services Review, 21(1), 259-273.

Sankaran, S. (2008). Indian Mutual Funds Handbooks. New Delhi: Vision Books Pvt. Ltd.

Sasidharan, K., & Mathews, A. (2008). Asset Based Retail Financial Services. In Financial Services & System (pp. 307-326). New Delhi: Tata McGraw-Hill Publishing Company Ltd.

Sharma, O. P., & Sharma, K. (2008, July). Mutual Fund Industry: In Indian Perspective. Pratiyogita Darpan, pp. 72-73.

Sikider, S., & Singh, A. (1996). Investment in Equity and Mutual Funds. In B. Bhatia, & G. Batra, Management of Financial Services. New Delhi: Deep and Deep Publications Pvt. Ltd.

Singh, J. (2008). Mutual Funds: Growth, Performance and Prospects. New Delhi: Deep and Deep Publications Pvt. Ltd.

Srivastava, R. M. (2009). Essentials of Business Finance. Mumbai: Himalaya Publishing House.

Tiwari, R. (2008). How to Invest in Stock Market and Mutual Funds. Delhi: Manoj Publications.

Tripathy, N. P. (1996). Mutual Fund in India: A Financial Service in Capital Market. Finance India, X(1), 85-91.

Tripathy, N. P. (2007). Mutual Funds in India: Emerging Issues. New Delhi: Excel Books.

Vaid, S. (2008). Mutual Funds in India: The Emerging Scenario. In B. S. Bhatia, & G. S. Batra (Eds.), Management of Financial Services (pp. 110-135). New Delhi: Deep & Deep Publications Pvt. Ltd.