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# JOB SATISFACTION AS MEDIATOR IN THE RELATIONSHIP BETWEEN WORK SPIRITUALITY AND PERFORMANCE: A CASE STUDY OF EMPLOYEE'S SHARIA BANKING SECTOR IN SURAKARTA DISTRICT, INDONESIA

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## ABSTRACT

*This study aims to investigate the relationship between works spirituality and performance mediated by job satisfaction. Conducted in sharia bank in Surakarta District, Central Java, Indonesia. The data were collected through surveys to employees with proportional random and simple random sampling involved 175 employees as the respondents. Based on the number of the sample, the test to the sample validity and reliability showed the result was that the sample was valid and reliable. The data analysis was carried out by using Structural Equation Model (SEM). The finding of the study show that: (1) there is a positive and significant relation between relationship work spirituality and job satisfaction, (2) there is a positive and significant relation between relationship work spirituality and performance, (3) there is a positive and significant relation between relationship job satisfaction and performance and (4) there is a positive and significant relation between relationship work spirituality and performance with job satisfaction as mediate.*

## KEYWORDS

Job satisfaction, work spirituality, performance.

## INTRODUCTION

The development of work spirituality has important to human behavior. Presently, work spirituality is developed to enhance the integrity and loyalty of employees (Ashmos and Duchon, 2000). The life of employees is affected significantly by work spirituality (Othman, Abdullah and Ahmad, 2008). Work spirituality has a strong relationship with work behavior like job satisfaction, performance, attitude, work ethics, morality and management behavior (Ali and Ellahi, 2012; Javanmard, 2012; Hutson, 2000). One of the work behavioral is job satisfaction which is how much someone loves his job (Spector, 1999). Judge, Thoresan, Bono, and Patton (2001) explained about the relationship between job satisfaction and performance in direct relation and reciprocity. The knowledge of the researchers, there are inconsistency research that discusses the direct relationship and reciprocity between job satisfaction and performance on a model research (Carmeli, 2003; Bhuian, Menguc and Borsboom, 2005; Othman et al., 2008), but these findings are not significant as researched by Sohi (1996), as Wanous (1974) provides an explanation of the relationship of the theory of intrinsic and extrinsic job satisfaction with performance.

Individual job satisfaction will have an impact for performance in the work, as an attempt to create a company's effectiveness in the facing competition. Job satisfaction and performance can minimize the level of turnover in company (Chawda and Guda, 2010). The issues of spirituality, job satisfaction and employee performance occurred in sharia banking in Indonesia. Phenomena that occur in the company e.g. decreased performance of employees in one of the sharia banking of 6.55% in 2010 due to a change in the management of human resources and has not been able to adapt to the new management system in sharia banking. Employee performance declined from employees who have good value of 13,04% in 2009 to 6.5% in 2010. The performance assessment decreased from 78,26% to 73,91%. Employee performance appraisal with a value of less good increased from 8.7% in 2009 to 19,57% in 2010 (Suryoadi and Ratnawati, 2010). Decrease in performance due to the dissatisfaction of employees in their work and declining work spirituality in the company, so that the research on the relationship between work spirituality and performance mediated by job satisfaction to be important to look at these problems and provide solutions. Based on the background, one research problem is taken about how the model of relationship between work spirituality and performance with job satisfaction as mediated occurred in sharia bank. Additionally, it is not found so far for the model of relationship between work spirituality and performance mediated by job satisfaction of employees using *Structural Equation Model* approach.

## REVIEW OF LITERATURE

Work spirituality is a distinct state that is characterised by cognitive, interpersonal, spiritual and mystical dimensions. Work spirituality involves: (a) engaging work characterised by a profound feeling of well-being, a belief that one is engaged in meaningful work that has a higher purpose, an awareness of alignment between one's values and beliefs and one's work, and a sense of being authentic; (b) a spiritual connection characterised by a sense of connection to something larger than self; (c) a sense of community characterised by a feeling of connectedness to others and common purpose; and (d) a mystical or unitive experience characterised by a positive state of energy or vitality, a sense of perfection, transcendence, and experiences of joy and bliss (Kinjerski and Skrypnik, 2006).

Job satisfaction as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences (Locke, 1976). In measuring job satisfaction in our study, we will focus on the intrinsic and extrinsic job satisfaction. Intrinsic sources of satisfaction depend on the individual characteristics of the person, such as the ability to use initiative, relations with supervisors, or the work that the person actually performs; these are symbolic or qualitative facets of the job. Extrinsic sources of satisfaction are situational and depend on the environment, such as pay, promotion, or job security; these are financial and other material rewards or advantages of a job.

Performance represented behaviors employees engage in while at work which contribute to organizational goals (Campbell, 1990). These behaviors are formally evaluated by an organization as part of an employees responsibilities. Researchers distinguish performance into two aspects: task performance and contextual performance. (Aryee *et al.*, 2004; Borman and Motowidlo, 1993). In our study, we will focus on task performance and contextual performance.

### IMPORTANCE OF THE STUDY

1. This research contributes to the human resource management, particularly related to the use of quantitative models and empirical test on human behaviour for work spirituality, job satisfaction and performance in sharia banking.
2. This research contributes to the future research through the proposed theoretical construction with the limitation that have not been empirically tested yet and contribute to the thoughts for the managerial practices in an company and provides the result of the research for a new discourse for the development of human resource management.
3. This research contributes to the implications for managerial practice, especially potential and the company's ability to improve the quality of human resources in the competition and the progress of the company.

### STATEMENT OF THE PROBLEMS

1. Does work spirituality have a direct relationship with job satisfaction?
2. Does work spirituality have a direct relationship with performance?
3. Does work job satisfaction have a direct relationship with performance?
4. Does work spirituality have an indirect relationship with performance mediated by job satisfaction?

### OBJECTIVES OF THE STUDY

1. To test and analyze the direct relationship between work spirituality and job satisfaction.
2. To test and analyze the direct relationship between work spirituality with performance.
3. To test and analyze the direct relationship between job satisfaction with performance.
4. To test and analyze an indirect relationship between work spirituality towards performance mediated by job satisfaction.

### HYPOTHESIS

#### WORK SPIRITUALITY AND JOB SATISFACTION

East (2005) mentioning a strong correlation between work spirituality and job satisfaction. Yahyazadeh-Jeloudar and Lotfi-Goodarzi (2012) state that work spirituality significantly will influence the job satisfaction that covers the work itself, attitude to supervisor, relationship with co-workers, work environment condition but not significant when being correlated to salary. Work spirituality acts in controlling a clear achievement, brings an effect on and makes a short-term and long-term goal with the capability of achieving the goal, even in a very difficult condition, particularly in job satisfaction. One of the dimensions is framed as the meaning with its indicators goal and organization service (Yahyazadeh-Jeloudar and Lotfi-Goodarzi, 2012) and this finding is supported by Nur (2003), Scott (2009), Chand and Koul (2012).

**H1: Work spirituality has a positive relationship with job satisfaction.**

#### WORK SPIRITUALITY AND PERFORMANCE

Work spirituality will impact the performance through the value of awareness, cognitive, interpersonal, spiritual and mystical dimensions, life essence, gift of love in the employees' life and transcendence in helping other in handling any work matters in workplace. Lynton and Thogersen (2009) saying that work spirituality in praying and productivity can improve performance and job satisfaction (Alexander *et al.*, 1993). This finding is supported by Neck and Milliman (1994), Shaw (1999), Ayranci (2011), Javanmard (2012), Rastgar, Zarei, Davoudi and Farash (2012).

**H2: Work spirituality has a positive relationship with performance.**

#### JOB SATISFACTION AND PERFORMANCE

Brown and Reterson (1993) state that in the intrinsic value of work, job satisfaction is not consistent and has a weak correlation. However, this finding is not in line with the findings of Christen *et al* (2006) observe that the correlation between the job satisfaction and work achievement is for one-direction correlation causing job satisfaction to work achievement or vice versa (Law *et al.*, 2001). Mutual relationship is that when satisfaction is extrinsic, it will address to work performance, but when job satisfaction is intrinsic, the performance will lead to the relationship to job satisfaction. This finding is supported by Carmeli (2003), Bhuian *et al.*, (2005), and Othman *et al.*, (2008), but the finding that not significant by Sohi (1996).

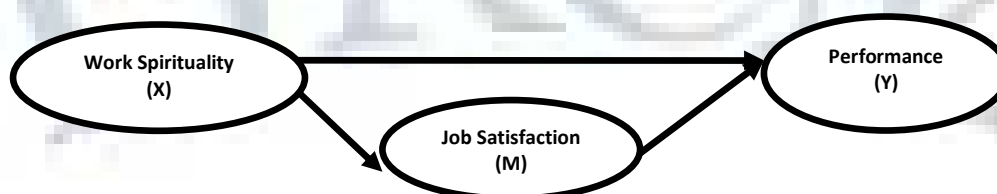
**H3: Job satisfaction has a positive relationship with performance.**

#### JOB SATISFACTION AS MEDIATOR IN RELATIONSHIP BETWEEN WORK SPIRITUALITY AND PERFORMANCE

Development of work spirituality to employees as required by the self-centred behaviour of individual work (Fry, 2003; Madlin, 1986). The behavior of work will be established through the consciousness of work spirituality to achieve life needs of employees. In addition to providing a sense of job satisfaction as an expression of employee behavior, work spirituality is also improving the performance of employees. An Individual performance will enhance with increasing spirituality of someone that is mediated by job satisfaction. Model mediation is a causal model (Ross *et al.*, 2004). The relationship of this mediation is to explain why and how a process of cause and effect that happens (Baron and Kenny, 1986). This mediation models provide an explanation that work spirituality is not related directly with performance with mediated by job satisfaction, as well as job satisfaction and performance of a person based on a feeling of pleasure and sense of self as the embodiment of work spirituality which lead to intuitive abilities will increase (Vaughan, 1989).

**H4: Work spirituality has a positive relationship with performance mediated by job satisfaction.**

FIGURE 1. MODEL OF RESEARCH



Model of the research are:

Model (1) : Work spirituality – Job satisfaction.

Model (2) : Work spirituality – Performance.

Model (3) : Job satisfaction – Performance.

Model (4) : Work spirituality – Job satisfaction – Performance.



## RESEARCH METHODOLOGY

## POPULATION AND SAMPLES

This research is a survey conducted to 320 employees of sharia banking in Surakarta District, Central Java, Indonesia. According to Guilford and Fluchter (1973) the number of sample allowed is 178 employees by referring to Hair *et al.*, (2009) in which the size of 100-200 samples for the technique of maximum likelihood estimation, a technique of taking sample using the method of proportional and simple random sampling. Meanwhile, the data collection was done using observation and the distribution of questionnaires at sharia bank.

## MEASUREMENTS AND TESTING RESEARCH VARIABLES

Work spirituality is a capability of someone to implement and realize the spiritual sources, values and qualities through the ways of improving the daily functions and prosperity (Kinjerski and Skrypnik, 2006). A research using *Spiritual at Work Scale* was developed by Kinjerski and Skrypnik (2006) consisting of 18 items of question with the Likert Scale 1 to 5 including engaging work, sense of community, spiritual connection and mystical experience.

Job satisfaction is about the degree to love job (Spector, 1999). A research using *Job Satisfaction Scale* was developed by Weiss, Dawis, England and Lofquist (1967) covering 18 items of question using Likert Scale 1 to 5 including intrinsic and extrinsic job satisfaction.

Performance is a measure an achievement in a job, including task performance by Wayne *et al.* (1997) and Hochwarter *et al.* (2006) and contextual performance by Witt and Carlson (2006), Van Scotter and Motowidlo (1996) using Likert Scale 1 to 5 is covering 14 items of question using Likert Scale 1 to 5.

## ANALYSIS TECHNIQUE

The technique on the research analysis used *Structural Equation Modelling* (SEM), a statistical technique of *multivariate* by testing a series of causality relationship between variables simultaneously (Hair *et al.*, 2009).

## RESULTS AND DISCUSSION

## RESULTS

The distribution result of the respondents based on the demography included male (56%) and female (44%). Based on the age, the respondents were between 21-30 years old (53%), 31-40 years old (33%) and above 40 years old (4%). Based on the marital status, it includes the married ones (70%) and unmarried ones (30%). Based on work experience, it included those below 5 years (63%), between 6-10 years (16%) and above 10 years (21%). For the educational level, it was dominated by the undergraduates (4%), Senior High School (10%), postgraduates (70%), and diploma (16%). For the employment status, 66% of them were permanent employees and 34% were the contract ones. For the management level, it includes top management (0%), middle management (70%) and lower management (30%).

*Confirmatory Factor Analysis* (CFA) was used to test the construct validity in which each variable was scores above 0,5. The result of data management, loading factor score in each item of questions was higher than 0,5 that shows the validity of the research instruments. The reliability test in this research was measured using the *composite reliability* technique.

The result of the outlier data evaluation showed no single observed data showing that the value of *mahalanobis d-squared* was not more than the value of *chi-square* table ( $\alpha=0.001$ ;  $df=82$ ) at 99,637. This comparison showed no any multivariate outlier indication in the collected research data. It means that the observed data was concentrated at the centroid points. Furthermore, the result of computerized AMOS program showed that the value of multivariate CR was at 1,323 from -2,58 to 2,58 based on the standards. This indicates a normal distribution of the data observed through the research indicators of multivariate data.

TABLE 1: THE TESTING RESULTS OF HYPOTESIS 1, 2 AND 3

Variable Correlation	Estimate	Standard of Estimate (SE)	Critical Ratio (CR)	t Critical	Probability (p)	Remarks
Work Spirituality → Job Satisfaction	1,751	0,753	2,325	1,961	0,020	Significant
Work Spirituality → Performance	1,573	0,563	2,279	1,961	0,005	Significant
Job Satisfaction → Performance	0,491	0,142	3,463	1,961	0,000	Significant

(Source: managed data, 2014)

**Hypothesis 1**, SEM model resulted in the goodness of fit that index value: GFI=0,985, AGFI=0,961, NFI=0,954, RFI=0,567, IFI=1,002, TLI=1,004, RMSEA=0,000, AIC=33,708, ECVI=0,194, and CFI=1, and the model is fit. Results obtained in this study, the value of CR=2,325 with a value of SE=0,753, because the value of CR > ± 1.96 and the coefficient of relationship between work spirituality and job satisfaction was positive ( $\beta_1 = 1,751 > 0$ ) shows that there is a positive and significant relationship between work spirituality and job satisfaction. This hypothesis can be accepted at a significance level  $\alpha=0.05$ .

**Hypothesis 2**, SEM model resulted in the goodness of fit that index value: GFI=0,981, AGFI=0,950, NFI=0,865, RFI=0,746, IFI=0,960, TLI=0,928, RMSEA=0,041, AIC=36,370, ECVI=0,209 and CFI=0,968, and the model is fit. Results obtained in this study, the value of CR=2,279 with a value of SE=0,563, because the value of CR > ± 1.96 and the coefficient of relationship between work spirituality and performance was positive ( $\beta_2 = 1,573 > 0$ ) shows that there is a positive and significant relationship between work spirituality and performance. This hypothesis can be accepted at a significance level  $\alpha=0.05$ .

**Hypothesis 3**, SEM model resulted in the goodness of fit that index value: GFI=0,975, AGFI=0,873, NFI=0,874, RFI=0,592, IFI=0,891, TLI=0,650, RMSEA=0,143, AIC=25,119, ECVI=0,144 and CFI=0,889, and the model is fit. Results obtained in this study, the value of CR=3,463 with a value of SE=0,142, because the value of CR > ± 1.96 and the coefficient of relationship between job satisfaction and performance was positive ( $\beta_3 = 0,491 > 0$ ) shows that there is a positive and significant relationship between job satisfaction and job performance. Thus, the hypothesis can be accepted at a significance level  $\alpha=0.05$ .

TABLE 2: THE TESTING RESULT OF HYPOTESIS 4

Independent Variable	Mediate Variable	Dependent Variable	Direct Coefficient	Indirect Coefficient	Total Coefficient	Remark
Work Spirituality	Job Satisfaction	Performance	1,573	1,604 x 0,112 = 0,1796	1,753	Partial Mediator

(Source: managed data, 2014)

**Hypothesis 4**, SEM model resulted in the goodness of fit that index value GFI=0,965, AGFI=0,929, NFI=0,876, RFI=0,807, IFI=0,959, TLI=0,933, RMSEA=0,050, AIC= 61,748, ECVI=0,355, and CFI=0,957, so the model is fit. Work spirituality is associated positively with performance, both directly and indirectly, while job satisfaction is able to properly mediate the relationship between work spirituality and performance. This is shown from the value of the coefficient of a direct connection to spirituality and performance of 1,573, whereas the value of the coefficient of an indirect relationship between work spirituality and performance of 0,1796. The total coefficients after mediated with the job satisfaction of 0.699, so this relationship can be accepted at a significance level  $\alpha = 0.05$ .

## DISCUSSION

**First**, work spirituality has a positive and significant relationship with job satisfaction, shown between the estimation of the parameter variable is created produces a value of CR=2,325. The value of CR=2,325 higher than significant level of 1,961 at 5%, and this hypothesis is accepted. The research result is supported by Parasuman (1984), Nur (2003), East (2005), Scott (2009), Laila and Amjad (2011) as well as Chand and Koul (2012) that strong relationships between work spirituality and job satisfaction.

The research result is supported by Malik, Danish and Usman (2010) that there is a positive relationship between work spirituality and job satisfaction, with such confidence is sometimes intrapersonal skills, self control and identity are higher compared to interpersonal skills. Yahyazadeh-Jeloudar and Lotfi-Goodarzi (2012) that work spirituality will deal significantly on job satisfaction include the work itself, the attitude to supervision, relationship with colleagues and working environment conditions, but it is not significant when related to salaries or wage level employees. Work spirituality will be instrumental in the self-control to achieve clear results, balancing objectives with the ability to achieve goals in all conditions, especially in job satisfaction. One of the dimensions in the definition of the objectives and services is the charge indicators will exist within the company. Work spirituality will have an effect on interaction and reciprocity of

individual cognition, emotion and behaviour, the tendency of a person to experience positive or negative feelings will affect someone's beliefs and thoughts about the work.

**Secondly**, work spirituality has a positive and significant relationship with performance, an estimation of the parameters indicated variable formed produces a value of  $CR=2,279$ . The value of  $CR=2,279$  higher than significant level of 1,961 at 5%, and this hypothesis is accepted. Work spirituality will effect on performance through values awareness, understanding the meaning of a truth of life, the meaning of life, the gift of love in the life of employees and a sense of transcendence that helps a person in the work place, it works in this case is the sharia banking.

These findings are supported by Lynton Thogersen (2009) and that person's work spirituality has five characteristics: (1) an employee who works hard, (2) the employees love what do, (3) an employee who obtains the energy, the spirit of a work of passion, a sense of curiosity and using values, (4) an employee who has a awareness and (5) an employee who has any respect in the cultured and do it well whereas spirituality in the form of prayer, supplication, the sense of self to advance elements of productivity will improve performance and job satisfaction (Alexander *et al.*, 1993). Employees have spirituality will show higher performance compared to other employees (Isen and Baron, 1991; Shaw, 1999). Joshi (1997) that work spiritual and emotional maturity of a person are related to each other in the process of conformity is associated with improved performance or otherwise. The research result is supported by Isen and Baron (1991), Alexander *et al.* (1993), Neck and Milliman (1994), Joshi (1997), Shaw (1999), Ayranci (2011), Laila and Amjad (2011), Anjum and Ali (2011), Chin, Anatharaman and Tong (2011), Javanmard (2012) and Rastgar *et al.* (2012).

**Thirdly**, job satisfaction has a positive and significant relationship with performance, because an estimation of the parameters indicated variable formed produces a value of  $CR=3,463$ . The value of  $CR=3,463$  higher than significant level of 1,961 at 5%, and this hypothesis is accepted. The dominant dimension is task performance, this shows that job satisfaction is going to help in the task of communication, efficiency and ability of employees in the company.

The research result is supported by Brown and Reterson (1993) that the intrinsic value of work, job satisfaction is inconsistent and has a weak relationship, but this finding is contrary to the findings by Christen *et al.* (2006) that the positive relationship between job satisfaction and performance. The relationship between job satisfaction and work achievement to direct relationships, leading to job satisfaction will influence the ability of the employee's work or accomplishments might otherwise (Law *et al.*, 2001).

**Fourthly**, work spirituality positively and significantly associated indirectly with performance. A positive coefficient indicated that work spirituality will give a positive relationship indirectly to performance with job satisfaction as a mediator. The higher work spirituality of an employee, will have an impact on increasing job satisfaction and performance of the employees. All the knowledge of researchers, this finding has not been researched by further researches before.

Such explanations as in the diagram below:

FIGURE 2: RELATIONSHIP OF MEDIATING: WORK SPIRITUALITY - JOB SATISFACTION - PERFORMANCE



Based on the results of testing, the relationships of variables in the model are obtained, the coefficient of relationship work spirituality and performance (a) was 1,573, the coefficient of relationship work spirituality and job satisfaction (b) was 1,604, the coefficient of relationship job satisfaction and performance (d) was 0,112, and the coefficient of relationship between work spirituality and performance with mediated by job satisfaction (c) was 1,753. The mediation is partial mediation because if (c) and (d) the significant and (a) are also significant, the coefficient of (a) lower (down) than (b) and the independent variable is able to affect directly the dependent variable without variable or involve with mediators (Sheng Wu, 2011; Hair *et al.*, 2009). This idea was perfected by Zhao *et al.* (2009) which does not rely on the test of the total effect of the variable X (work spirituality) to variable Y (performance) on causal models. This type of mediation including the mediation of complementary variables influence there is mediation and direct influence both there and at that point in the same direction. Mediator variable is based that job satisfaction is the psychological conditions of employees resulting from the reflection of a dynamic job (Cohrs *et al.*, 2006).

Variable mediation is the result of multiplication between the coefficients variable spirituality with job satisfaction of 1,604, the coefficients variable job satisfaction with performance of 0,112 and the coefficient directly between spirituality with performance of 1,573 on the model of research and at the point of the same direction. The value of the coefficient in direct and indirect variables were 1,573 and 1,753, thus strengthening the relationships variables after mediated by job satisfaction. Zhao *et al.* (2009) mentioned the complementary indications that give this mediation a framework built in model theory research is complete, so that identification of the mediator variables consistent with hypothesis theory framework, but worth noting for other possibilities in the direct connection.

## FINDINGS

1. Work spirituality has a positive and significant relationship with job satisfaction, can be accepted.
2. Work spirituality has a positive and significant relationship with performance, can be accepted.
3. Job satisfaction has a positive and significant relationship with performance, can be accepted.
4. Work spirituality has a positive and significant relationship with job performance are mediated by job satisfaction, can be accepted.

## RECOMMENDATION AND SUGGESTION

1. For the practical implementation, it is necessary to give understanding for the employees about work spirituality role to improve the relationship between job satisfaction and performance for the capability of work spirituality in controlling and managing work behaviour in company.
2. For the research appropriateness to the standard of statistics, it is essential to ensure the question indicators completeness in the questionnaires to avoid the respondents' hesitation. Additionally, the number of the analyzed samples must be sufficient based on the requirements of the statistical analysis.

## CONCLUSION

1. Work spirituality has a positive and significant relationship with job satisfaction, this hypothesis can be accepted. This finding is supported by Parasuman (1984), Nur (2003), East (2005), Scott (2009), Malik, Danish and Usman (2010), Laila and Amjad (2011), Yahyazadeh-Jeloudar and Lotfi-Goodarzi (2012), Chand and Koul (2012).
2. Work spirituality has a positive and significant relationship with performance, this hypothesis can be accepted. This finding is supported by Isen and Baron (1991), Alexander *et al.* (1993), Neck and Milliman (1994), Joshi (1997), Shaw (1999), Lynton and Thogersen (2009), Ayranci (2011), Laila and Amjad (2011), Anjum and Ali (2011), Chin, Anatharaman and Tong (2011), Javanmard (2012) and Rastgar *et al.* (2012).

3. Job satisfaction has a positive and significant relationship with performance, this hypothesis can be accepted. This finding is supported by Brown and Reterson (1993), (Law *et al.*, 2001) and Christen *et al.* (2006).
4. Work spirituality has a positive and significant relationship with job performance are mediated by job satisfaction, this hypothesis can be accepted. Search all researchers, these findings, has not been examined by the researchers before, thus giving the new findings in the study.

## LIMITATIONS

1. This research is based on a single survey instrument (single self report survey instrument) questionnaire.
2. This study uses the concept of work spirituality is relatively new in the research organization's behavior and condition of the understanding of different respondents may give rise to difficulties in understanding the survey instrument.
3. Research is done on sharia banking employees so that in the process of capturing the response through the questionnaire is experiencing delays due to the flurry of work hours and the limited human resources in the bank's influence on the collection of data, process data and research results of sports.
4. This research using a limited number of samples of employees, it required a larger number of samples.

## SCOPE FOR FUTURE RESEARCH

1. To result in a relationship between independent variables and dependent ones in further research, a moderation variable as the one increasing the relationship of both is necessary.
2. It involves the research respondents that had many activities and limitation in sharia bank. This, as a consequence, brought an effect on data gathering and data management process.
3. Research is done on sharia banking when done on conventional banks or any other industry sector possible results will be different because cultural factors, organization, work ethic, management companies and work environment.

## REFERENCES

1. Alexander, C.N., Swanson, G.C., Rainforth, M.V., Carlisle, T.W., Todd, C.C., Oates, R.M., (1993), "Effects of the transcendental meditation program on stress reduction, health, and employee development: A prospective study in two occupational settings", *Anxiety Stress Coping*, Vol. 6, pp. 245-262.
2. Ali, Shah Taseema and Ellahi, Abida. (2012). "Workplace spirituality, emotional intelligence and job satisfaction: Pakistani manager in focus". *International Conference on Management (ICM 2<sup>nd</sup>) Proceeding*. 11-12 Juni 2012.
3. Anjum, Afifa., and Ali, Huma, (2011), "Effect of emotional intelligence and perceived work environment on performnce of bankers," *International Journal of The Computer, The internet and Management*. Vol. 19, No. 2, pp. 50-54.
4. Aryee, S., Chen, Z.X., and Budhwar, P.S. (2004), "Exchange fairness and employee performance: An examination of the relationship between organizational politics and procedural justice", *Organizational Behavior and Human Decision Processes*, No. 94, pp. 1-14.
5. Ashmos, D.P., and D. Duchon, (2000), "Spirituality at work: A conceptualization and measure," *Journal of Management Inquiry*. Vol. 9, No. 2, pp. 134-44.
6. Ayranci, E., (2011), "Effects of Top Turkish Managers' Emotional and Spiritual Intelligences on their Organizations' Financial Performance", *Business Intelligence Journal*, Vol. 4, No. 1.
7. Baron, Rueben M., and Kenny, David A., (1986), "The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations," *Journal of Personality and Social Psychology*. Vol. 51, No. 6, pp. 1173-1182.
8. Bhuian, S.N., Menguc, B., and Borsboom, R. (2005), "Stressors and job outcomes in sales: a emphasic model versus a linear-quadratic interactive model," *Journal of Business Research*. Vol. 58, pp. 141-150.
9. Borman, W.C. and Motowidlo, S.J., (1993), "Expanding the Criterion Domain to Include Elements of Contextual Performance in N. Schmit and W.C. Borman (Eds.), *Personnel Selection in Organisations*, Jossey-Bass, San Francisco, C.A.
10. Borman, W.C., and Motowidlo, S.J., (1997), "Task performance and contextual performance: the meaning for personal selection research", *Human Performance*, Vol. 10, No.2, pp. 199-209.
11. Brown, S.P., and Peterson, R.A., (1993), "Antecedents and consequences of salesperson job satisfaction: meta anaylisis and assessmentof casual effects," *Journal of Marketing Research*. Vol. 30, No. 1, pp. 63-77.
12. Campbell, J.P, (1990), "Modeling the performance prediction problem in industrial and organizational psychology", Palo Alto.
13. Chand, Piar and Koul, Hemange. (2012), "Workplace spirituality, organizational emotional ownership and job satisfaction as moderators in coping with job stress". *International Conference on Humanities, Economics and Geography*, March 17-18: pp. 225-229.
14. Chawla, V., and Guda, S. (2010). "Individual spirituality at work and its relationship with job satisfaction, propensity to leave and job commitment: An exploratory study among sales professionals". *Journal of Human Values*, Vol. 16, No. 2, pp. 157-167.
15. Cohrs, J. Christopher, Andrea E. Abele, and Dorothea E. Dette, (2006), "Integrating situational and dispositional determinants of job satisfaction: Findings from three samples of professionals". *The Journal of Psychology*. Vol. 140, No. 4, pp. 363-395
16. East, T.J., (2005). "A grounded study on how spirituality in the workplace impacts a person's job satisfaction", (Doctoral dissertation, Capella University, 2005), *Dissertation Abstracts International*. 66 (3). 1070A. (UMI No. 316880).
17. Fry, L.W., (2003). "Toward a theory of spiritual leadership", *The Leadership Quarterly*. Vol. 14, pp. 693-727.
18. Guilford and Flurchter, (1973). "Fundamental Statistics in Psychology Education". New York: McGraw Hill.
19. Hair, J.F., Black, W.C., Babin, B.J., and Anderson, R.E. (2009), "Multivariate data analysis". (7th ed.). Upper Saddle River, NJ: Prentice Hall.
20. Hochwarter, W.A., Witt, L.A., Treadway, D.C., and Ferris, G.R., (2006), "The interaction of social skill and organizational support on job performance", *Journal of Applied Psychology*, Vol. 91, No. 2, pp. 482- 489.
21. Hutson, S., (2000), "Why Religion Matters; The Fate of the Human Spirit in an Age of Disbelief". New York: Harper & Row.
22. Isen, A. and Baron, R., (1991), "Positive affect as a factor in organizational behavior", in LL Cummings and BM Staw (Eds.), *Research in Organizational Behaviour*, pp. 1-53.
23. Javanmard, Habibollah. (2012), "The impact of spirituality on work performance," *Indian Journal of Science and Technology*, Vol. 5, No. 1, pp. 1961-1966.
24. Joshi, M. (1997), "Emotion the term and meaning", *Sunday Review*, January, Vol.5, No. 8.
25. Judge, Timothy A., Thoreson, Carl J., Bono, Joyce E., and Patton, Gregory K., (2001), "The job satisfaction – job performance relationship: A qualitative and quantitative review". *Psychological Bulletin*. Vol. 127, No. 2, pp. 376-407.
26. Kinjerski, V., and Skrypnik, B. J.(2006), "Measuring the intangible: Development of the Spirit at Work Scale". Best paper proceedings of the sixty-fifth annual meeting of the Academy of Management (CD), ISSN 1543-8643, A1-A6.
27. Law, K., Wong, C., and Song, L., (2004), "The construct and criterion validity of emotional intelligence and its potential utility for management studies". *Journal of Applied Psychology*, Vol. 89, No. 3, pp. 483-496
28. Locke, E.A., (1976), "The nature causes and causes of job satisfaction". In Dunnette, M.C. (Ed.). *Handbook of industrial and organisational psychology*. Chicago, IL: Rand McNally.
29. Lynton, N. and Thogersen, K. H. (2009), "Spiritual intelligence leadership in the china laboratory". *Journal of International Business Ethics*, Vol. 2, No. 1.
30. Madlin, N. (1986), "Religion and the Entrepreneurial Psyche". *Venture*. Vol.8, No.16.
31. Malik, Mohammed Ehsan., Danish, Riswan Qaiser., and Usman, Ali. (2010), "Impact of spiritual consciousness on the job performance of banking executives," *Interdisciplinary Journal of Contemporary Research in Business*. Vol. 2, No. 1, pp.142-158.



32. Neck, C and Milliman, J., (1994), "Thought Self-leadership Finding Spiritual Fulfillment in Organizational Life", Journal of Managerial Psychology, Vol. 9, No. 6, pp. 9-16.
33. Nur, Y. A., (2003), "Management by virtues: a comparative study of spirituality in the workplace and its impact on selected organizational outcomes". (Doctoral dissertation, Indiana University, 2003). Dissertation Abstract International, 64 (6), 2168A. (UMI No. 3094142).
34. Othman, Abdul Kadir, Abdullah, Hazman Shah and Ahmad, Jasmine, (2008), "Emotional intelligence, emotional labour and work effectiveness in service organizations: a proposed model", Vision-The Journal of Business Perspective, Vol. 12, No. 1, pp.31-34.
35. Rastgar, Abbas Ali., Zarei, Azim., Davoudi, Seyed Mehdi Mousavi., and Fartash, Kiarash., (2012), "The link between workplace spirituality, organizational citizenship behavior and job performance," APJEM, Vol. 1, No. 6, pp. 51-67.
36. Rose, B.M., Holmbeck, G.N., Coakley, R.M., and Franks, E.A. (2004), "Mediator and moderator effects in developmental and behavioral pediatric research," Developmental and Behavioral Pediatrics. Vol. 25, pp. 58-67.
37. Scott, Ann. (2009), "Spirituality's relationship to job satisfaction," Research Paper Hodges University, pp. 1-13.
38. Shaw, J.D., (1999), "Job satisfaction and turnover intentions: the moderating role positive effect", Journal of Psychology, Vol. 139, pp. 242-244.
39. Sheng Wu, Hsueh. (2011), "How to model mediating and moderating effects", CFDR Workshop Series. Center for Family and Demographic Research.
40. Sohi, R.S. (1996), "The effects of environmental dynamism and heterogeneity on salespeople's role perceptions, performance and job satisfaction," European Journal of Marketing. Vol. 30, No. 7, pp. 49-67.
41. Spector, P.E., (1997), "Job satisfaction". Thousand Oaks, CA: Sage.
42. Suryoadi, Yeni and Ratnawati, Intan. (2011), "The Effect of Training and Compensation Satisfaction towards Employee Performance in PT. Bank Muamalat Indonesia Cabang Semarang". Report of Research, pp. 1-29.
43. Susan Tee Suan Chin, RN. Anantharaman and David Yoon Kin Tong, (2011), "The Roles of Emotional Intelligence and Spiritual Intelligence at the Workplace", Journal of Human Resources Management Research. IBIMA Publishing.
44. Van Scotter, J.R., and Motowidlo, S.J. (1996), "Interpersonal facilitation and job dedication as separate facets of contextual performance", Journal of Applied Psychology. Vol. 81, No. 5, pp. 525-531.
45. Vaughan, F.E., (1989), "Varieties of Intuitive Experience in Agor", WH. (Ed.), Intuition in Organizations, Sage Publications. pp. 40-61.
46. Wanous, J.P., and Lawler, E.E., III. (1974), "Measurement and meaning of job satisfaction," Journal of Applied Psychology, Vol. 56, No. 2, pp. 95-105.
47. Wayne, S.J., Shore, L.M., and Liden, R.C., (1997), "Perceived organizational support and leader-member exchange: A social exchange perspective", Academy of Management Journal, Vol. 40, No. 1, pp. 82-111.
48. Weiss, D.J., Dawis, R.V., England, G.W., and Lofquist, L.H., (1967), "Manual for the Minnesota Satisfaction Questionnaire". Minneapolis: University of Minnesota.
49. Witt, L.A., and Carlson, D.S. (2006), "The work-family interface and job performance: moderating effects of conscientiousness and perceived organizational support," Journal of Occupational Health Psychology, Vol. 11, No. 4, pp. 343-357.
50. Yahyazadeh-Jeloudar, Soleiman dan Lotfi-Goodrasi, Fatemeh, (2012), "What is the relationship between spiritual intelligence and job satisfaction among MA and BA teachers?", International Journal of Business and Sciences. Vol. 3, No. 8, pp. 299-303.
51. Zhao, Xinshu, Lynch, John G., and Chen, Qimei, (2009), "Reconsidering Baron and Kenny: myths and truths about mediator analysis", Journal of Consumer Research, pp. 1-36.

## APPENDIX

TABLE 1: SAMPLE CHARACTERISTICS

No.	Demographic Variables	Explanation (%)
1.	Sex	Male (56%) and female (44%).
2.	Age	Between 21-30 years old (53%), 31-40 years old (33%) and above 40 years old (4%).
3.	Marital Status	The married ones (70%) and unmarried ones (30%).
4.	Work Experiences	Those below 5 years (63%), between 6-10 years (16%) and above 10 years (21%).
5.	Education Level	The undergraduates (4%), Senior High School (10%), postgraduates (70%), and diploma (16%).
6.	Employment Status	66% of them were permanent employees and 34% were the contract ones.
7.	Management Level	Middle management (70%) and lower management (30%).

(Sources: managed data, 2014)

TABLE 2: THE TESTING RESULTS OF GOODNESS OF FIT OF SEM MODEL

No.	Goodness of Fit Index	Model 1	Model 2	Model 3	Model 4	Remarks
1.	Chi-square	7,705	10,370	9,119	25,748	Good
2.	Probability	0,000	0,240	0,010	0,106	Good/Marginal
3.	GFI (Goodness of Fit Index)	0,985	0,981	0,975	0,965	Good
4.	AGFI (Adjusted Goodness of Fit Index)	0,981	0,950	0,864	0,929	Good
5.	NFI (Normed Fit Index)	0,954	0,865	0,873	0,876	Good
6.	RFI (Relative Fit Index)	0,567	0,746	0,592	0,807	Good
7.	IFI (Incremental Fit Index)	1,002	0,960	0,891	0,959	Good
8.	TLI (Tucker Lewis Index)	1,004	0,928	0,650	0,933	Good
9.	CFI (Comparative Fit Index)	1,000	0,968	0,889	0,050	Good
10.	RMSEA (The Root Mean Square Error of Approximation)	0,000	0,041	0,143	0,957	Good/Marginal
11.	AIC (Akaike's Information Criterion)	33,708	36,370	25,119	61,748	Marginal
12.	ECVI (Expected Cross Validation Index)	0,194	0,209	0,144	0,355	Good

(Sources: managed data, 2014)

TABLE 3: ESTIMATES FOR THE STRUCTURAL EQUATION MODELING

Parameter	Model	Estimate	t Value	Hypothesis
Work Spirituality → Job Satisfaction	(1)	1,604	***	Accepted
Work Spirituality → Performance	(2)	0,180	0,005	Accepted
Job Satisfaction → Performance	(3)	0,112	0,140	Accepted
Work Spirituality → Job Satisfaction → Performance	(4)	1,753	0,106	Accepted

(Source: managed data, 2014)

FIGURE 1. MODEL OF RESEARCH (1)

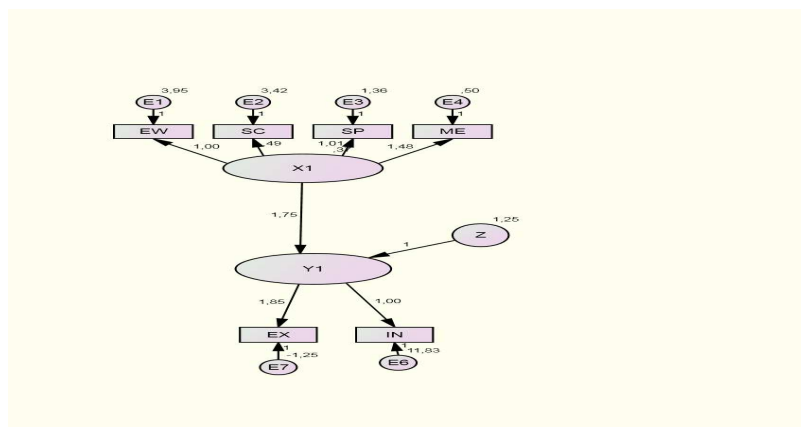


FIGURE 2. MODEL OF RESEARCH (2)

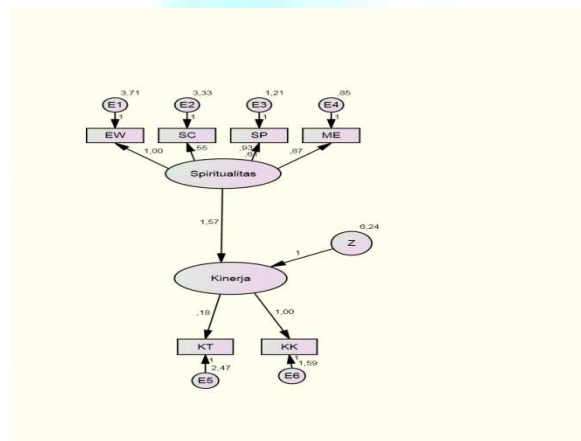


FIGURE 3. MODEL OF RESEARCH (3)

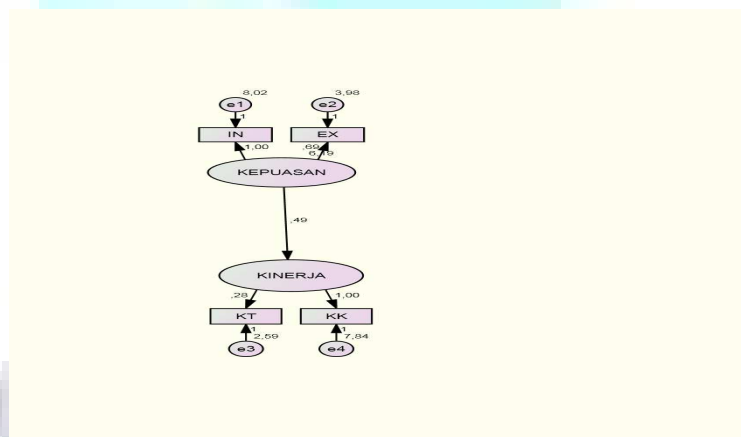
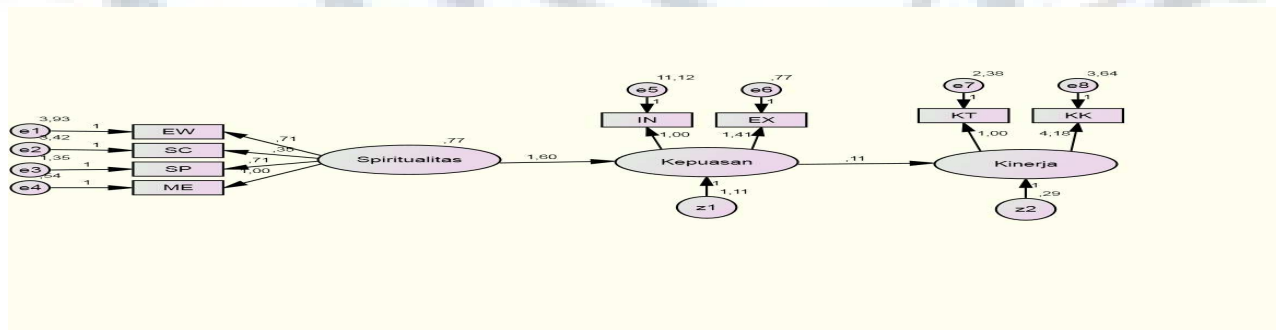


FIGURE 4. MODEL OF RESEARCH (4)



(Source: managed data, 2014)



## WOMEN ENTREPRENEURSHIP AND EMPOWERMENT: AN ANALYSIS FROM THE PERSPECTIVE OF SMALL URBAN INDIA

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### ABSTRACT

*Though entrepreneurship is very old, women entrepreneurship is a recent phenomenon in India. This study has been conducted to explore the issues of women entrepreneurship and empowerment from the perspectives of thriving, evolving and prospering small urban India in this millennium beyond the peripherals of metropolis through an intensive micro-level field study. The methodology of the study was based on the primary data collected through direct interviews with women entrepreneurs by using an interview schedule with structured questionnaire and an attitude scale. The study has been to explore the levels of perceived empowerment of women entrepreneurs as well as to ascertain the relationship between perceived empowerment and socio-demographic and family relational factors. The study also tries to find the causal relationship between the business-organizational and socio-economic factors and empowerment level of women entrepreneurs as also the cumulative effects of all factors on the levels of empowerment of women entrepreneurs. The result points to a poor level of perceived empowerment of women entrepreneurs. The item analysis shows that women entrepreneurs have gotten their recognition and importance only in their families. They have not thought that their business-life has enhanced their status in society. The study also shows that decisional level-in-family, financial management level and social interaction level have caused significant influences on the levels of perceived empowerment of women entrepreneurs.*

### KEYWORDS

Decisional level-in-family, empowerment, financial management level, social interaction level, women entrepreneurship.

### INTRODUCTION

Women entrepreneurship deals both with the position of women in society and with the role of entrepreneurship in the same society. Women entrepreneurship has now achieved a special significance from the perspective of distribution of social power in today's society. Women have not only been exploited and discriminated economically but also subjugated socially, and at the end, they have been politically rendered to a 'powerless social category' in the Indian society. 'Women's issues' are thus perceived to be linked to the 'social issues' and these issues are specially focused on women's unequal access to the productive resources, decision-making bodies, education, employment opportunities, entrepreneurial endeavour and social justice. 'Women in business' has been a recent phenomenon in India. It is needless to say that women's situation and gender roles are largely determined through various institutions and processes of the society. The subordinate positioning of women in society in accordance with the constructed beliefs reveals that 'males were associated with stronger and more positive elements (such as public, culture, light, right etc.) and the females with the weaker and more negative one (such as private, nature, dark etc., the other part of the pair) (Wiesner-Hanks, 2001).

The status of women in India has many facets, which makes one to go for 'generalizations' very difficult. This is mainly due to the existence of considerable variation between regions, between rural and urban areas, between classes and finally, between religions, linguistics, tribal and caste groups. However, in a nutshell, women share a common experience of 'marginalization'. When a woman feels and perceives herself that she can accomplish any kind of work within the society as man can, the woman is said to be empowered. Therefore, it is an internal process of women's life. To be empowered, women must have a clear perception regarding their own values and abilities, and they must be enriched in thoughts and ideas as per Khanum, 2001. According to Kabeer (1999), empowerment entails a process of change, through which a person makes a choice. Choice necessarily implies the possibility of alternatives and the ability to choose one among others.

At this juncture, the interactive inter-relations between entrepreneurship and perceived empowerment of women entrepreneurs draw our attention. The present study has attempted to understand the issues of entrepreneurship of women business owners and their perceptions of empowerment from the perspectives of thriving, evolving and prospering small urban India in this millennium beyond the peripherals of metropolis. The study has tried to connect the micro-level reality of women empowerment with the issues of entrepreneurial activities from the perspective of socio-economic conditionality of women entrepreneurs. It is an intensive micro-level field study of women entrepreneurs, which is exploratory as well as descriptive in nature.

### LITERATURE REVIEW

The individual- women entrepreneur(s) runs the core process of empowerment. They need to take charge of themselves and take steps for self-empowerment as "the process by which the powerless gain greater control over the circumstances of their lives. It includes both control over resources (physical, human, intellectual, financial) and over ideology (beliefs, values and attitudes). It means not only greater extrinsic control but also a growing intrinsic capability- greater self-confidence and an inner transformation of one's consciousness that enables one to overcome external barriers to accessing resources or changing traditional ideology" (Sen and Batliwala, 2000). However, it is not possible for one person to empower another. People can only empower themselves (Korten, 1993).

In a general sense, empowerment can be defined as a process of carrying out more controlling power to face the questions on existing power, and have control over the sources of power. Empowerment is a process and, at the same time, the result of process (Haider and Akhtar, 1999). Pillai (1995) has defined women empowerment as an active, multi-dimensional process that enables women to realize their full identity and power in all spheres of life. Power is not a commodity to be transacted nor can it be given away as aims. Power has to be acquired, and it needs to be exercised, sustained and preserved.

When a woman feels and perceives herself that she can accomplish any kind of work within the society as man can, the woman is said to be empowered. Therefore, it is an internal process of women's life. To be empowered, women must have a clear perception regarding their own values and abilities, and they must be enriched in thoughts and ideas (Khanum, 2001). Empowerment is now increasingly seen as a process by which one can gain greater control over her life. This means control over material assets, intellectual resources and ideology. It involves 'power to, power with and power within'.

With reference to women, the power-relation that has to be involved includes their lives at multiple levels: family, community, market and the state. Importantly, it involves, at the psychological level, women's ability to assert them, because this power-relationship is constructed by the 'gender roles' assigned to women, especially in a culture like India which resists women empowerment (Chandra, 2011).

The word women empowerment essentially means that women have the power or capacity to regulate their day-to-day lives in the social, political and economic terms- a power, which enables them to move from the periphery to the centre stage. Women will have to empower themselves 'from below' in order to compel the society and the government to empower them 'from above' (Bhuyan, 2006).

According to Kabeer (1999), empowerment entails a process of change, through which a person makes a choice. Choice necessarily implies the possibility of alternatives and the ability to choose one among others. The ability to exercise choice can be thought of three inter-related dimensions: resources (pre-conditions), agency (process) and achievements (outcomes).

The status of women in India has been subject to many great changes over the last few millennia. In the present day, when women are showing their capabilities in various walks of life, the entrepreneurial classes of women are playing an increasingly prominent role in various sectors of industrial growth and economic development. Entrepreneurship among women has been gradually changing with the growing sensitivity of the roles, responsibilities and economic status of women in the society in general and family in particular (Singh & Nagaich, 2011).

The more entrepreneurial activities of women, the more of individual wealth in the hands of women entrepreneurs, which results in social awareness and 'social' capital of women. Along with physical and finance capital, the term social capital here is used as the human equivalent of 'nature capital', based on the insight that both 'nature' and 'people' provide some sort of 'raw material' which goes into production processes and ultimately serves accumulation. In this conceptualization, human beings are perceived not only as a labour force, but also as an organisational potential resource, which can and will bring about social change (Dietrich, 2007).

With growing awareness and self-consciousness, women entrepreneurs develop 'individual identity' and 'self-esteem' of their own and become 'self-confident'. By this process, women entrepreneurs expand their identity to larger identities or connect with others. 'Connecting is empowerment'. Connecting with larger groups in the society provide women entrepreneurs a higher degree of empowerment by going beyond the self and serving other individuals, groups and the society, thus discharging her social responsibility.

This is the link between individual empowerment and social empowerment in the society. Such concern for others, called 'extension motivation' (Pareek, 1997), along with internal locus of control is the basis of individual empowerment, and is considered a building block of social empowerment. So, empowerment cannot be reduced to legal rights or economic bargaining power, because it has personal and cultural dimensions.

Therefore, it can now be said that entrepreneurship is not only organizational and economic, but also mental and social in nature. Thus, the reality of perceived empowerment of women entrepreneurs due to entrepreneurial activities are both present and they reinforce each other.

## OBJECTIVES

The specific objectives of the study have been as follows:

- To ascertain perceived empowerment levels of women entrepreneurs.
- To explore the relationship between perceived levels of empowerment of women entrepreneurs and socio-demographic and family relational factors of their life.
- To examine the causal relationship between the business-organizational factors and perceptions of empowerment levels of women entrepreneurs.
- To find how far socio-economic and business conditionalities of women entrepreneurs have been able to influence and effect cumulatively on levels of perception of empowerment of women entrepreneurs.

## METHODOLOGY

The present study was carried out in the Ranaghat municipal town area, a sub-divisional township in the district of Nadia of the state of West Bengal in India in the month of May-June, 2012. Ranaghat railway junction station is an important junction of five railway connections of the Eastern Railways. Ranaghat municipality is 150 years old. The researcher had found 119 business-firms, owned-and-managed by women entrepreneurs themselves, out of 358 women-owned firms. The total business firms were 3041 in the area as per the municipal records.

The study was based on the primary data collected through direct interviews with women entrepreneurs by using an interview schedule with structured questionnaire, including both open and close-ended questions, and an attitude scale of 5-point Likert scale with six items, prepared following the 'Empowerment Scale' of Kabeer (2001), through complete enumeration survey. The questionnaire consisted of objective type questions covering the socio-demographic, business-economic and legal-organizational factors of women entrepreneurial life, and subsequently the variables have been defined for the purpose of the study. The item analysis has been used for more intensive in-depth study of attitudes and opinions of women entrepreneurs towards different dimensions of social life. The data analyses have been done through SPSS.

## RESULTS AND DISCUSSION

The distributions of different socio-demographic, business-economic and legal-organizational variables of women entrepreneurial life have been projected in the Table-1. Women have now been engaged in entrepreneurial endeavour with different ages and educational background. They have been mostly non-trained as well as married, coming mostly from simple families. The families of women entrepreneurs have mostly supported them. However, the decisional level-in-family has been mostly weak for women entrepreneurs. At the family level, the basic unit of society, women have still lesser degree of independence and they are dependent on their male counterparts in taking major decisions in family-matters.

TABLE-1: DESCRIPTIVE STATISTICS AND DISTRIBUTION OF VARIABLES

Variable	Valid N	Mean	SD	CV (%)
Age	119	38.66	7.14	18.47
Education	119	1.61	0.64	39.75
Training	119	0.22	0.42	190.91
Marital Status	119	1.35	0.68	50.37
Family Type	119	1.89	0.31	16.40
Family Support Index	119	3.43	0.89	25.95
Decisional Level in Family	119	2.51	1.40	55.78
Business Years	119	8.80	4.60	52.27
Business Phase	119	2.21	0.96	43.44
Firm-Size	119	0.92	0.74	80.43
Business-type	119	1.82	1.20	65.93
Proprietorship of Business	119	1.13	0.33	29.20
Size & Scale of Business	119	1.71	0.66	38.60
Income Level	119	1.87	0.70	37.43
Financial Management Index	119	2.56	1.39	54.30
Business Networking Index	119	1.82	0.78	42.86
Institutional Interaction Index	119	1.22	1.24	101.64
Social Interaction Index	119	1.01	0.99	98.02
Perceived Empowerment Index	119	21.08	4.71	22.34

SD= Standard Deviation; CV= Co-efficient of Variation

(Source: Primary Data)

There have been almost one-fourth women entrepreneurs, who have been new in business upto five years of experience. However, women entrepreneurs have been mostly in stability phase of business and nearly one-third women have been single-handedly managing their businesses. While nearly sixty-three percent women have been in trading business, the overwhelming eighty-seven percent women have sole ownership, with the majority of medium-sized firms with middle income-group. Women entrepreneurs have been found to be mostly weak in financial management, business networking and social interaction.

The further analyses of interactive dimensions of different variables have revealed so many shades and intricacies of different issues on women entrepreneurship and empowerment.

The overall average empowerment perceptions score has come out, after rounding-off, to 20 by adding the item-scores of the empowerment perception items. It has indicated poor level of perceived empowerment of women entrepreneurs under study. Further, an item-wise analysis has shown that the following have been the items with respect to which the empowerment perception levels of women entrepreneurs have been found weak:

- You think that your business-life has enhanced your social status in society (Item-3).
- Your family-members will support you if you join in politics (Item-5).
- You are afraid to express/discuss your opinions to male entrepreneurs (Item-6).

The following have been the items with respect to which the empowerment levels of women entrepreneurs have been found strong:

- Your family-members are supportive in your business-endeavours (Item-1).
- You can take minor decisions regarding family-matters without consulting your father/husband/brother/son (Item-2).
- Your opinions are taken in a serious manner in family-matters (Item-4).

The overall findings have revealed a ground reality about the perceived empowerment levels of women entrepreneurs. Women entrepreneurs have supports from their family-members in carrying out their businesses. They have been taking minor decisions in family without consulting their male counterparts in family. They have opined that their opinions have been considered seriously in family-matters. All these findings have pointed to the fact that women entrepreneurs have gotten their recognition and importance only in their families - the smallest micro-level units of the society.

But, the contrasting picture of state of empowerment of women entrepreneurs has been revealed in the greater context of social life outside the family-life. They have not thought that their business-life has enhanced their status in society. Not only that, they have been, in general, afraid and shy to express or discuss their opinions to the male entrepreneurs. The most frustrating revelation has been that women entrepreneurs have no support and encouragement from their family-members in their political adventurism. All these factors have indicated a poor level of perceived empowerment of women entrepreneurs.

Item-wise distribution of empowerment data of women entrepreneurs has been presented in the Table-2. It has been interesting to note that none of these distributions, when plotted, has been flat. This has implied that there have been no contradictions in the perceived empowerment levels of women entrepreneurs. It has revealed a truncated women empowerment level in our society. It has signified that women entrepreneurial culture has still been in primitive and in evolving stage in our society.

**TABLE-2: ITEM-WISE FREQUENCY DISTRIBUTION OF PERCEIVED EMPOWERMENT DATA**

Item No.	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
1	54	41	16	5	3
2	47	48	15	6	3
3	16	29	32	23	19
4	39	56	12	9	3
5	5	12	4	11	87
6	7	13	34	36	29

(Source: Primary Data)

The Table-3 has shown that the perceived empowerment levels of women entrepreneurs have been strong for only 31.90% respondents and it has been weak for 68.10% women entrepreneurs.

It has been observed from the Table-3 that perceived empowerment level has been weak for almost two-third women entrepreneurs (68.10%) and it has been strong for only 31.90% respondents.

**TABLE-3: PERCEIVED EMPOWERMENT LEVEL-WISE DISTRIBUTION**

Perceived Empowerment level	No. of Women Entrepreneurs
Weak	81 (68.10)
Strong	38 (31.90)
Total	119 (100)

N.B.: Figures in the parentheses indicate percentages.

(Source: Primary Data)

The analysis of correlation (Table-4) of perceived empowerment levels of women entrepreneurs with respect to different independent variables has revealed that all variables have a bearing, either positive or negative, on empowerment levels of women entrepreneurs except family-type and proprietorship of businesses.

TABLE-4: COEFFICIENTS OF CORRELATION

Independent Variable	r-value
Age	-.219*
Education	.442**
Training	.429**
Marital Status	.234*
Family Type	-.058
Family Support	-.283**
Decisional Level in Family	.489**
Business-years	-.198*
Business Phase	.183
Firm-Size	.270**
Business-type	.290**
Proprietorship of Business	.091
Size & Scale of Business	.241**
Income Level	.239**
Financial Management Index	.692**
Business Networking Index	.506**
Institutional Interaction Index	.691**
Social Interaction Index	.474**

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

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

Dependent Variable: Perceived Empowerment level

(Source: Primary Data)

The factors of education, training, marital status, decisional level-in-family, business phase, firm size, business type, size and scale of businesses, income level, financial management, business networking, institutional interaction and social interaction have been positively associated with perceived empowerment levels of women entrepreneurs. All the above factors have influenced empowerment levels of women entrepreneurs in a directly proportional manner in that women entrepreneur have perceived strong sense of empowerment with rising levels of the above factors.

It has also been revealed that the factors of age, family type, family support and business years have negative correlations with the perceived empowerment of women entrepreneurs. The case of family support to women entrepreneurs has shown a peculiarity in that women entrepreneurs have shown strong sense of empowerment with less support from family. With less family support, women entrepreneurs have to manage and operate businesses on their own way, thus showing strongly empowered business women in social life.

The Table-5 has presented the regression analysis between the dependent/consequent variable- perception levels of empowerment of women entrepreneurs and the independent/predictor variables to depict the causal effect of independent factors on the consequent factor of perceived empowerment levels of women entrepreneurs. The factors of decisional level-in-family, financial management level and social interaction level have caused significant regressional effects on the empowerment level of women entrepreneurs. A woman entrepreneur, who has taken different decisions in her family, has become very conscious about her power-position not only in business environment but also in social life.

Financial management has also been found to be closely and causally tuned to the empowerment of women entrepreneurs. Women entrepreneurs have become more confident with the hands-on experience of tackling the financial aspects of their businesses, which has made them more powerful in life. Social interaction has also been found to cause an effect on perceived empowerment of women entrepreneurs. Interactions in different spheres of social life have made women entrepreneurs' conscious of their relative positions in society and made them feel more empowered in life.

#### MODEL SUMMARY

The  $R^2$  value (Co-efficient of Determination to measure the amount of variability in one variable that is explained by the other) of the Model ( $R^2 = .633$ ) has suggested that the predictor variables jointly contributed 63.30% towards the perceived empowerment of women entrepreneurs. This has meant that all these independent variables have explained upto 63.30% of the total variation embedded with the consequent variable- empowerment level of women entrepreneurs. The F value ( $F = 9.575$ ) has also been found to be significant at 0.01 level of probability, which has indicated the effectiveness of the Model.

TABLE-5: REGRESSION ANALYSIS

Independent Variable	$\beta$ -value	t-value	Sig. t
(Constant)	12.489	3.600**	.000
Age	-.033	-.396	.693
Education	.039	.446	.657
Training	.133	1.324	.188
Marital Status	.075	.936	.352
Family Type	-.058	-.623	.534
Family Support Index	-.066	-.800	.426
Decisional Level in Family	.167	2.021*	.046
Business-years	-.093	-1.110	.270
Business Phase	.119	1.568	.120
Firm-Size	-.035	-.374	.709
Business-type	-.018	-.229	.819
Proprietorship of Business	-.015	-.225	.823
Size & Scale of Business	.058	.603	.548
Income Level	.156	1.357	.178
Financial Management Index	.319	2.295*	.024
Business Networking Index	.095	1.036	.303
Institutional Interaction Index	.012	.079	.937
Social Interaction Index	.169	1.987*	.050

\*\* t is significant at the .01 level.

\* t is significant at the .05 level.

Dependent Variable: Perceived Empowerment level

TABLE-5(CONTD.): MODEL SUMMARY

Model	R <sup>2</sup>	F	Sig.
1	.633	9.575**	.000

\*\* Significant at .01 level

(Source: Primary Data)

## CONCLUSION

The study has showcased a microcosm of intricate relationship between perceived empowerment and entrepreneurship of businesswomen in a representative way from the perspective of small urban India, which is thriving and prospering in this new millennium. Mere activities of women in economic sphere have not ensured a meaningful perception of empowerment by women entrepreneurs. Entrepreneurial economic activities of women have already been playing a significant role at the core level of social life i.e. the family. However, this entrepreneurial role of women, in general, has yet to be a significant determinant in the lives of women entrepreneurs, particularly outside their families. Women entrepreneurs have been found not to discharge their societal role and responsibilities with an empowered mind-set. However, with few significant emerging trends as asserted by a small number of women entrepreneurs, women entrepreneurship has been pointing to an evolving, enriching and meaningful life of women entrepreneurs.

## REFERENCES

1. Bhuyan, Dasarathi. (2006). Empowerment of Indian Women: A Challenge of 21<sup>st</sup> Century. Orissa Review, January.
2. Chandra, Rakesh. (2011). Women Empowerment in India- Milestones & Challenges. University of Lucknow: Institute of Women's Studies.
3. Dietrich, Gabriele. (2007). Loss of Socialist Vision and Options Before the Women's Movement. In Roy Mukherjee, Sanchari (Ed.): Indian Women: Broken Words, Distant Dreams. Kolkata: Levant Books.
4. Haider, R. and Akhtar, R. (1999). "The Role of NGO and Women's Perception of Empowerment". Empowerment, Vol. 6, pp.58-59.
5. Kabeer, Naila. (1999). Resources, Agency, Achievements: Reflections on the Measurement of Women's Empowerment. Development and Change, Vol. 30. Oxford: Blackwell Publishers Ltd.
6. Kabeer, Naila. (2001). "Reflections on the Measurement of Women's Empowerment". In 'Discussing Women's Empowerment- Theory and Practice', Sida Studies (3), Stockholm: Novum Grafiska AB.
7. Khanum, M.S. (2001). "Women with Extra Eyes: The Role of RMP in Women Empowerment in Rural Bangladesh". Empowerment, Vol. 8, pp. 95-96.
8. Korten, David. (1993). Participatory Development as New Paradigm: The Transition of Development Professionalism. London: Zed Books.
9. Pareek, U. (1997). Instruments for Human Resource Development. New Delhi: Tata-McGraw Hill.
10. Pillai, J.K. (1995). Women and Empowerment. New Delhi: Gyan Publishing House.
11. Sen, Gita and Batliwala, Srilatha. (2000). Empowering Women for Reproductive Rights. In Presser, Harriet B. and Sen, Gita (Ed.): Women's Empowerment and Demographic Process: Moving Beyond Cairo. New Delhi: OUP. pp.18.
12. Singh, Rajeev and Nagaich, Promode. (2011). "Women Entrepreneurship: Analytical view with special reference to Jabalpur City". Indian Journal of Commerce & Management Studies, Vol -II, Issue-3, March.
13. Wiesner-Hank, Merry. (2001). Gender in History. Oxford: Blackwell Publishers.



## ERP APPLICATION IN INDIAN INDUSTRIES: AN ANALYSIS WITH RESPECT TO MANUFACTURING UNITS IN PONDICHERRY

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### ABSTRACT

*This study examined the extent of ERP adoption and its benefits in Indian context. The two companies have been selected for this study, and the survey was conducted in Hindustan Computer Limited and Sundaram Fasteners. Primary data was collected through interviews and structured questionnaires were distributed among 79 respondents in both the companies. From the recent literatures we get the impression that many an author expects the introduction and utilization of ERP results in fundamental changes and also it contains many case studies of an organizations and empirical research that have implemented ERP systems successfully. This study found that the companies could not get any benefit from the present intensity of ERP adoption in Human Resource Management, Field Service and Accounting Management. This study concludes that the extent of ERP adoption differ significantly between companies with different activities but benefits from ERP adoption is similar and do not differ by nature of business of the companies in Indian Context.*

### JEL CODE

P42, P49.

### KEYWORDS

ERP, ERP adoption, Functional areas.

### INTRODUCTION

ERP (Enterprise Resource Planning) is a computer-based system that places company's major activity areas under an umbrella. ERP system is a software package of different modules and each module has a specific business process. Companies choose to adopt ERP for many reasons. From a technological perspective, there is a need for a common platform and an integration of several information systems or simply a replacement of an existing IT infrastructure, which enhances single-data entry and information consistency across the system. From an organizational perspective, ERP is attractive as it promises to cut down operating costs, better data visibility and process improvement. From the strategic perspective, it is appealing because of cost reductions gained through more efficient systems, improvements in productivity, decision-making, overall quality and support in business growth. An ERP system is considered as one of the crucial IT innovations of the 1990s.

Enterprise Resource Planning (ERP) (Alexis Leon 2002) is an expanded effort to integrate marketing, financial, manufacturing and human resources in a single system. Standardized record keeping permits information sharing throughout the organization. An ERP system helps the organization in sharing data and knowledge between departments, reducing costs, and improving management effectiveness in business processes. Enterprises, instead of investing lots of money in to small software applications are moving towards ERP solutions which can be more appropriate according to their day to day needs.

### STATEMENT OF THE PROBLEM

The basic idea of implementing an ERP solution is to get tangible business benefits that would improve the performance of the organization and achieve certain business objectives. This could be in terms of inventory reduction, faster time to market, reducing manufacturing and order processing cycle times, etc. It is amazing but true that not a single ERP implementation in India has reached the stability or maturity so far to deliver these business benefits in significant manner. Most of them still seem to be in a half-backed stage where the organizations have been unable to respond to the stringent demands and discipline required by the requires tremendous effort in enforcing change in management coupled with the inability of these firms to respond to that challenge have further compounded their problems. So it has become critical to deliver value out of these implementations in a reasonably short time, so as to justify the large investment involved. This brings us to a very basic question- how do we maximize the return on IT investment? What are the factors in an ERP implementation that could maximize the Return on Investment (ROI)?

### SCOPE OF THE STUDY

Every Company must be competitive and have strategies to survive in the market and protect its shareholders. Those strategies are related to factors such as effort and reduced cost and increase efficiency and productivity, expansion of the business and organizations frontiers, and dealing with the business organizations as a leading and inter connected system. Thus, ERP is directly applied to reduced costs to provide product improvement and services with better quality, to supply include services and convenience to customers and to allow the integration of suppliers and customers operations. In this context the adoption of an ERP System can raise a series of organizational changes, the companies' relationship with buyers, customers and suppliers and also its product and services. Hence studying the subject you have a lot of course for many organizations interestly adopting ERP.

### OBJECTIVES OF THE STUDY

This study is aimed at fulfilling the following objectives

1. To evaluate the extent of ERP adoption in Indian Companies
2. To find out whether there is positive reaction among the Employees about Adoption of ERP in their organization.
3. To elicit whether Adoption of ERP is highly beneficial to the organization or not.

### HYPOTHESIS

For the present study, the following hypotheses have been framed:

1. There is no significant difference in ERP adoption between companies with different activities.
2. There is no significant difference in benefits from ERP adoption between companies with different activities

3. Employees' perception about ERP adoption and ERP benefits differ significantly by their social characteristics.
4. Adoption of ERP in Indian companies is highly extensive in all functional areas
5. Benefits from ERP adoption are not significantly related to the extent of ERP adoption in Indian companies.

## METHODOLOGY

To find out the extent of ERP adoption and its benefits in Indian context, this study uses survey method. Two companies, Hindustan Computer Limited (HCL) and Sundaram Fasteners Limited are selected for the survey as only these two companies in this (Pondicherry) region have permitted the researcher to do the survey. Between the companies, HCL is IT based company and Sundaram Fasteners limited is Non-IT based. The respondents are employees from these two companies at clerical, supervisor and managerial level. A questionnaire with Likert type scale items for measuring the ERP adoption and ERP benefits is prepared for the survey. The questionnaire includes 15 scale items for measuring ERP benefits and 35 scale items for measuring ERP adoption in the selected companies. The questionnaires were distributed to employees of all cadres in both the companies in person by the researchers. The data collected from the survey were analysed using various statistical techniques such as reliability analysis, factor analysis and multiple regression analysis.

## LIMITATIONS OF THE STUDY

- The present study is limited to analyze two organizations due to time constraints also many firms have been lethargic to provide the information in order to preserve management system and other activities.
- The data in the ERP applications is not integrated with other enterprise or division systems and does not include external intelligence.

## REVIEW OF LITERATURE

**Christopher P. Holland et. al. (1999)** this study demonstrates the organizational and technical complexity of ERP implementation in a multinational textile group and identifies the factors that determines the total cost of the system. The case was compiled on the basis of material from two personal interviews with the key informants of the global ERP project. Interview data were supplemented by documentary evidence collected over a three year period starting from the European IT strategy review and through to the live implementation of the project. Documentary evidence included IT and business plans, internal company presentations and briefings, consultancy reports and annual accounts. The firm was also operating in a turbulent market and involved in a series of mergers and acquisitions which had led to massive cultural and structural changes including staff reductions throughout the firm. There was a feeling of unease amongst the employees. Further it adds that in the European context, it was not viable for organization to retain national structures and systems, and the pattern of organizational change outlined. The study concludes that the organization is undergoing a transformation which will reduce overheads and increase customer responsiveness and customer service are various levels throughout the firm.

**De Vaan and Barendrecht (2000)** argued that the introduction and utilization of ERP will result in radical changes. Based on the empirical (Leeuwen, O.C. van and P. Wemmenhove 2001) research they came to the conclusion that ERP does not nearly have such a large impact on the roles and the position of the controller as suggested in literature. In general, introducing ERP causes a gradual evolution rather than a drastic revolution. The study identified that the improvement in efficiency of daily activities, the more explicit focus on customers and the greater speed in providing information are regarded as major advantages of ERP. It is also notifiable that it usually takes a lot of time and money to introduce and utilize ERP.

**G. Colin Ash et. al. (2001)** examined the state of e-business developments within ERP environments worldwide. Data were collected through structured interviews. The findings were analyzed according to an established research framework from Business Process Change. The IT managers were interviewed to obtain a basic insight into each organization's of the use of Internet Technology (web, intranets, extranets, and e-mail). They were questioned about "the benefits and barriers arising from extending their R/3 business processes on to the Internet". Analysis of the findings from interviews of ten overseas SAP sites, highlighted consideration of the environmental conditions and management of e-business change, when implementing e-business projects. The study was an exploratory investigation into the benefits from extending enterprise wide business systems beyond the organization. The findings of the preliminary investigation of local Australian SAP sites confirmed the existence of the three generic business-to-business models: (i) B2B- to support information processing and communication, (ii) B2E – to support knowledge sharing, (iii) B2C- to support customer interaction on demand. This study suggests a rich field for future research study regarding the uses of e-ERP projects.

**Kai Reimers (2002)** conducted a study to identify the crucial ERP implementation process and context variables which warrant closer attention in the study of IT-enabled organizational change in a SAP R/3 user companies in China. The study had adopted an in-depth questionnaire survey and collected information from both IT managers of foreign controlled company and a Chinese Company. It applied statistical tools like Correlation analysis, Product moment correlation coefficient, Spearman correlation, Least-square Regression etc. It concludes that (i) centralized decision making in the steering committee may lead to some delay in the decision making process thus causing schedule and possible budget overruns. (ii) Seniority-base decision making enables senior management to unilaterally change some project parameters. (iii) Modern management system may simply be more compatible with the philosophy underpinning an ERP system which enables decentralized decision making.

**Fiona Fui – Hoon Nah (2003)** covered the management, social and organizational issues involved in ERP implementations. An ERP system is a multi-module application software package system that integrates key business and management process across an enterprise. It serves as a backbone for the enterprise and helps to manage the important aspects of a business, including procurement, order tracking, material management, product planning, manufacturing, human resources, and financial management. The study listed for important attributes of ERP, It facilitates to

- Automate, standardize and integrate an organization's business process
- Share common data and practices across the entire enterprise
- Generate and access information in real-time.

**Morley et. al. (2004)** identified the role and magnitude of ten dimensions of service quality as antecedents of satisfaction and dissatisfaction in a B2B service environment from the perspective of the customer. The results of this study indicated that some dimensions of service quality are associated with satisfaction: some are more aligned with dissatisfaction. The most important dimensions are responsiveness and understanding the customer.

**Ashok Soni (2005)** provided an overview into the future direction of enterprise systems and related applications. The applications will cover areas such as advanced planning and scheduling systems, customer relationship management systems, supplier relationship systems and the impact of technologies.

**V.K. Jain et. al (2013)** evaluated the perception of executives working in the area of supply chain management and ERP towards the role of ERP on improving supply chain effectiveness. The study is conducted on about 20 executives working with the automobile, tyre manufacturing and pharmaceutical firms and found that the ERP implementation positively contributes towards some parameters of supply chain effectiveness.

## ANALYSIS AND INTREPRETATION

In many industries in India, the ERP system is adopted, to change, i.e. modernize, the way the organization operates. An attempt has been made to empirically analyze the employees' perception on the installation of ERP in two leading organizations in Pondicherry. Hindustan Computer Limited (HCL) and Sundaram Fasteners that have adopted ERP system to get an aerial view of the extent of ERP adoption and its benefits in Indian companies.

### INTERNAL CONSISTENCY (RELIABILITY) OF SCALES ITEMS

The internal consistency of scale items in the questionnaire that measures the extent of ERP adoption and its benefits in selected companies (HCL and Sundaram) in Pondicherry region were tested using Reliability Analysis with 'Cronbach Alpha Coefficient'. As this reliability analysis (T.R. Bhatti 2005) with Cronbach Alpha Coefficient is being widely used by many researchers for evaluating the success of the implementation of ERP systems in firms. It measures, how well the items making up the scale 'go together'; and how consistent they are with each other. For scale items measuring certain concept to be consistent

with each others, a Cronbach alpha value between 0.7 and 0.8 is regarded as 'Good', between 0.8 and 0.9 as 'Very good' and value of 0.90 and above is regarded as 'Excellent'.

The presented Tables are the evidence collected through Interviews, Questionnaires.

#### INTERNAL CONSISTENCY OF ITEMS MEASURING ERP ADOPTION

The results of the reliability analysis for scale items measuring the extent of ERP adoption are presented in Table 1

**TABLE 1: ITEM TO TOTAL CORRELATION AND CRONBACH ALPHA COEFFICIENT FOR SCALE MEASURING ERP ADOPTION**

Item No	Scale Items Measuring ERP Adoption	Item to Total Correlation
A1	Accounting management	0.31
A2	Automated workflow	0.55
A3	Barcode / Data collection technique	0.41
A4	Customer relationship management	0.36
A5	To provide best customer service	0.65
A6	To help electronic business	0.44
A7	To provide field service	0.53
A8	In Manufacturing execution system	0.52
A9	To facilitate the product data management	0.43
A10	To make good quality control	0.49
A11	Sales force automation	0.64
A12	Warehouse management	0.70
A13	Accounts payable management	0.29
A14	Accounts receivable management	0.53
A15	To prepare standard budget	0.63
A16	In capacity planning, scheduling & reporting	0.54
A17	To enhance estimating & quoting processes	0.31
A18	General ledger maintenance	0.44
A19	Payroll management	0.30
A20	To make international business easier	0.56
A21	Inventory management	0.56
A22	To prepare item / part master data	0.52
A23	For controlling lot & serial number	0.52
A24	Master item scheduling	0.60
A25	Material planning	0.59
A26	To make order entry easier	0.36
A27	For price fixation	0.57
A28	Preventive maintenance	0.55
A29	To make good product configuration	0.47
A30	For product costing	0.54
A31	For making bill of material	0.51
A32	Purchasing and receipts of goods from other means	0.49
A33	Sales forecasting	0.56
A34	Warranty tracking / service	0.62
A35	To connect various work centres	0.59
<b>Cronbach Alpha Coefficient</b>		<b>0.93</b>

From the Table, it can be observed that the calculated Cronbach alpha coefficient for scale items measuring the extent of ERP adoption is 0.93, indicating all 35 items are 'Excellent' scale measuring the above concept. Also, most of the items in the scale contribute much to the measurement of ERP adoption as the item-to total correlation is well above 0.30 for almost all of the items. So, all items are used in Factor analysis to ascertain the underlying characteristics of ERP adoption in Indian companies.

**TABLE 2: NAME ASSIGNED TO UNDERLYING STRUCTURES OF ERP ADOPTION**

Extracted Factor	Assigned Name
F1	Preventive maintenance and Production costing
F2	Manufacturing Execution System
F3	Human Resource Management
F4	Material Management
F5	Field Service
F6	Accounting Management
F7	Automated Workflow
F8	Inventory and Sales Management
F9	General Functions
F10	Customer Relationship Management

#### INTERNAL CONSISTENCY OF SCALES MEASURING ERP BENEFITS

The results of the reliability analysis for scale items used for measuring ERP benefits are portrayed in Table 3

TABLE 3: ITEM TO TOTAL CORRELATION AND CRONBACH ALPHA COEFFICIENT FOR SCALE MEASURING ERP BENEFITS

Item No	Scale Items Measuring ERP Benefits	Item to Total Correlation
B1	Support in finding strategy	0.52
B2	Improved early recognition / warning system	0.53
B3	Helps for transparency of business processes	0.52
B4	Support of a systematic continuous improvement process	0.55
B5	Improvement of resource efficiency	0.43
B6	Cost reduction	0.48
B7	Linking of strategic and operative management	0.58
B8	Improved planning / budgeting processes	0.42
B9	Systematic performance indicator collection	0.51
B10	Development of non-financial indicators	0.57
B11	Support documentation and reporting process	0.44
B12	Improved personnel management	0.45
B13	Improved measurement of strategy implementation	0.47
B14	Holistic control instrument for management	0.61
B15	Internal / external performance comparison made possible	0.55
<b>Cronbach Alpha Coefficient</b>		<b>0.86</b>

It is seen from the table that the correlations of all items to total sum scale are at remarkable level and calculated Cronbach alpha coefficient is as high as 0.86. This reveals that all 15 items in the scale measuring ERP benefits are 'Very good' scale and highly reliable for measuring the above concept (ERP benefit). Therefore, all 15 items are used further in Factor analysis to uncover the underlying characteristics of benefits from adoption of ERP in Indian companies.

TABLE 4: NAME ASSIGNED TO UNDERLYING STRUCTURES OF ERP BENEFITS

Extracted Factor	Assigned Name
F1	Non-financial Performance Evaluation
F2	Improvement in Performance Efficiency
F3	Improvement in Business Process
F4	Improved Measurement of Strategy Implementation

#### EXTENSIVENESS OF ERP ADOPTION AND FUNCTIONAL AREAS

The extent of adopting ERP in 10 different functional areas has been viewed with the help of mean perception scores of employees in both selected companies.

TABLE 5: LEVEL OF EXTENSIVENESS OF ERP ADOPTION IN FUNCTIONAL AREAS

Functional Areas	Mean	SD	Rank
Preventive maintenance and Production costing	4.13	0.70	6
Manufacturing Execution System	4.13	0.68	7
Human Resource Management	3.61	0.88	10
Material Management	4.17	0.69	3
Field Service	3.90	0.81	9
Accounting Management	4.17	0.63	4
Automated Workflow	4.13	0.66	5
Inventory and Sales Management	4.24	0.61	1
General Functions	4.07	0.59	8
Customer Relationship Management	4.20	0.79	2

From the Table 5, it is understood that the employees have rated 'inventory and sales management' as the functional area in which ERP has been extensively adopted by both companies together (Mean = 4.24; Rank = 1). This is followed by the functional areas – 'Customer Relationship Management' with rank 2 (Mean = 4.20) and 'Material Management' with Rank 3 (Mean = 4.17). Extensiveness in adopting ERP in Accounting Management, Automated Workflow and Preventive Maintenance and Production Costing has been ranked at 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> position respectively. The adoption of ERP has been at low extent in Manufacturing Execution System, General Function and in Field Service and it has been at very low extent in Human Resource Department in selected companies. Hence, it is found from the above interpretation that; Adoption of ERP at high extent in 'Inventory and Sales Management', Customer Relationship Management' and 'Materials Management', at moderate extent in 'Accounting Management', 'Automated Workflow' and in 'Preventive Maintenance and Production Costing' and at low extent in all other functional area.

TABLE 6: COMPARISON OF LEVEL OF EXTENSIVENESS OF ERP ADOPTION IN FUNCTIONAL AREAS BETWEEN TWO SELECTED FIRMS

Functional Areas	HCL	SF	't' Value
Preventive maintenance and Production costing	3.93 (0.76)	4.29 (0.61)	-2.32**
Manufacturing Execution System	3.98 (0.72)	4.24 (0.63)	-1.72*
Human Resource Management	3.62 (0.92)	3.60 (0.86)	0.09
Material Management	3.82 (0.78)	4.44 (0.46)	-4.47***
Field Service	3.82 (0.72)	3.96 (0.88)	-0.71
Accounting Management	3.83 (0.60)	4.43 (0.52)	-4.77***
Automated Workflow	4.09 (0.66)	4.17 (0.67)	-0.52
Inventory and Sales Management	4.20 (0.78)	4.27 (0.46)	-0.56
General Functions	3.83 (0.66)	4.24 (0.45)	-3.28***
Customer Relationship Management	4.12 (0.95)	4.27 (0.65)	-0.83

HCL – Hindustan Computer Limited; SF – Sundaram Fasteners Limited

Degrees of freedom is 77 for all 't' values.

\*Significant at 10% level; \*\*Significant at 5% level; \*\*\*Significant at 1% level.



The results of 't' test showing the significant difference in level of extensiveness of ERP Adoption in 10 functional areas between HCL and SF have been presented in Table 1. It can be observed from the results that the level of extensiveness in ERP adoption is significantly higher in Sundaram Fasteners Limited (Mean Scores are comparatively higher) than that of in Hindustan Computer Limited in the following functional areas – Preventive Maintenance and Production Costing (t value = -2.32,  $p < 0.05$ ), Manufacturing Execution System (t value = -1.72,  $p < 0.10$ ), Materials Management (t value = -4.47,  $p < 0.01$ ), Accounting Management (t value = -4.77,  $p < 0.01$ ) and in General functions (t value = -3.28,  $p < 0.01$ ). Since two firms are distinct in nature of business, that is one is IT firms (HCL) and other one is Non-IT firm, the above difference in various functional areas can be attributed to type of business. In other words, it can be interpreted that the ERP adoption in IT firm is significantly less compared to that of in Non-IT firm.

Extensiveness of the ERP adoption in 10 major functional areas in the selected organizations as has been perceived by the employees is analysed with respect to employees' various social characteristics in order to know whether all employees, irrespective of their personal attributes have given same viewpoint or different viewpoint as this would lead the researcher to arrive at strong conclusion about extensiveness of ERP adoption in these organization.

#### EXTENT OF BENEFITS FROM ERP ADOPTION

The extent of benefits from ERP adoption in the 10 different functional areas have been analysed using the opinion scores of the employees of these organizations.

**TABLE 7: EXTENT OF BENEFITS FROM ERP ADOPTION IN SELECTED COMPANIES**

Benefits From ERP	Mean	SD	Rank
Non-financial Performance Evaluation	3.81	0.61	3
Improvement in Performance Efficiency	3.99	0.65	1
Improvement in Business Process	3.75	0.71	4
Improved Measurement of Strategy Implementation	3.85	0.62	2

Table 7 presents the extent of benefits from ERP adoption in the sample companies. The table discloses that among the four major benefits, 'improvement in performance efficiency' is ranked first with mean score of 3.99 followed by 'improved measurement of strategy implementation' (Mean = 3.85; Rank = 2) and 'Non-financial performance evaluation' (Mean = 3.81, Rank = 3). Improvement in business process is ranked 4 with mean score of 3.75. The above results indicate that the primary benefits from ERP are "Improvement in Performance Efficiency" and next "Improved Measurement of Strategy Implementation". Non-financial performance evaluation and Improvement in business process are considered to be additional benefits from ERP adoption. Comparison of mean perception between employees of two companies, as has been presented in Table 8, reveals that their level of opinion about extent of benefits is almost similar in both companies.

Only in respect of 'Improved measurement of strategy implementation' two employee groups differ significantly in their perception (t value = 1.81,  $p < 0.10$ ). This may be due to the fact that two selected firms are distinct in nature in respect of their activities. With regard to all other benefits as well as to Total Benefits from ERP, the employee groups from both companies have perceived in a similar manner.

**TABLE 8: COMPARISON OF EXTENT OF BENEFITS FROM ERP ADOPTION BETWEEN THE TWO FIRMS**

Benefits From ERP	HCL	SF	't' Value
Non-financial Performance Evaluation	3.84 (0.71)	3.78 (0.52)	0.42
Improvement in Performance Efficiency	4.00 (0.75)	3.99 (0.57)	0.10
Improvement in Business Process	3.81 (0.79)	3.71 (0.64)	0.61
Improved Measurement of Strategy Implementation	3.99 (0.60)	3.74 (0.61)	1.81*
Total Benefits from ERP	3.91 (0.62)	3.80 (0.36)	0.95

Degrees of freedom is 77 for all 't' values.

\*Significant at 10% level.

Therefore, it is found from the above results that the extent of benefits from ERP adoption is same in both the companies irrespective of their distinct nature of business. The extent of benefits from ERP as has been perceived by employee groups with different job status (Clerks, Supervisor and Manager) from selected companies have been compared using one way Analysis of Variance (F test) in order to know whether the responses about extent of benefits is consistent among employees of all job status.

#### RELATIONSHIP BETWEEN "EXTENSIVENESS OF ERP ADOPTION AND ERP BENEFITS"

The effect the Extensiveness of ERP adoption on the extent of benefits from ERP adoption has been analysed. In this regard, multiple regression technique is used. The ERP benefits are treated as dependent variable and 10 functional areas are considered as independent variables.



TABLE 9: REGRESSION RESULTS SHOWING THE EFFECT OF EXTENSIVENESS OF ERP ADOPTION ON 'TOTAL BENEFITS FROM ERP' IN SELECTED COMPANIES

Independent Variable	Model 1	Model 2	Model 3
Intercept	1.1258*** (2.88)	1.0786*** (2.86)	1.1531*** (3.12)
Preventive maintenance and Production costing	-0.1946** (-2.28)	-0.1977** (-2.37)	-0.1958** (-2.35)
Manufacturing Execution System	0.1046 (1.32)	0.0915 (1.19)	0.0922 (1.20)
Human Resource Management	0.0557 (1.12)	0.0487 (1.00)	
Material Management	-0.1074 (-1.18)	-0.1209 (-1.41)	-0.1245 (-1.46)
Field Service	-0.0404 (-0.66)		
Accounting Management	-0.0392 (-0.42)		
Automated Workflow	0.1521** (1.97)	0.1479* (1.94)	0.1517** (1.99)
Inventory and Sales Management	0.4605*** (4.47)	0.4418*** (4.44)	0.4574*** (4.65)
General Functions	0.1392 (1.43)	0.1273 (1.39)	0.1289 (1.41)
Customer Relationship Management	0.1232** (2.01)	0.1277** (2.14)	0.1319** (2.22)
R <sup>2</sup>	0.5088	0.5037	0.4966
Adjusted R <sup>2</sup>	0.4365	0.4470	0.4469
F Value of the Model	7.04***	8.88***	10.01***
Degrees of Freedom	10,68	8,70	7,71

Figures in brackets indicate 't' values for respective beta coefficients

\*Significant at 10% level; \*\*Significant at 5% level; Significant at 1% level.

Regression results indicate the effect of extensiveness of ERP adoption in 10 functional areas on 'total benefits from ERP adoption' and presented in Table 4. From the table it is understood that the model 3 is the best fitted model as the F value, 10.01 ( $p < 0.01$ ) is greater and the difference between  $R^2$  and adjusted  $R^2$  is less than that of the other two models. Hence, the model 3 is considered as final model for interpretation. Observation of the results of the model 3 shows that the coefficients of 'Manufacturing Execution System' and 'General functions' are positive and coefficient of 'Material Management' is negative but all these coefficients are insignificant. On the other hand, the beta coefficients of all the remaining variables in the model 3 are significant at required hypothetical level. But, as far as the sign of coefficients are concerned, it is negative for 'Preventive maintenance and Production costing' and positive for other remaining significant variables. The above results have shown that the overall benefits from ERP adoption decreases significantly with increase in extensiveness of ERP adoption in functional areas such as – 'Preventive maintenance and Production costing' and increases significantly with increase in ERP adoption in functional areas, namely, 'Automated Workflow', 'Inventory and Sales Management' and 'Customer Relationship Management'. Also, the contribution to 'overall benefits' through adoption of ERP in Manufacturing Execution System is positive and that of 'Material Management' is negative when they join together with extensiveness of ERP adoption in other significant functional areas. The results also envisage that the companies could not get any benefits from present intensity of ERP adoption in 'Human Resource Management', 'Field Service' and 'Accounting Management'.

## FINDINGS

1. It is found that ERP has been adopted in 10 major functional areas, namely, Preventive maintenance and Production costing, Manufacturing Execution System, Human Resource Management, Material Management, Field Service, Accounting Management, Automated Workflow, Inventory and Sales Management, General Functions and Customer Relationship Management.
2. It is found that the major benefits from ERP adoption in Indian context are (1) Non-financial Performance Evaluation, (2) Improvement in Performance Efficiency, (3) Improvement in Business Process and (4) Improved Measurement of Strategy Implementation.
3. Adoption of ERP is high in 'Inventory and Sales Management', Customer Relationship Management' and 'Materials Management', moderate in 'Accounting Management', 'Automated Workflow' and in 'Preventive Maintenance and Production Costing' and low in 'Manufacturing Execution System', 'General Functions', 'Field Service' and 'Human Resource Management'.
4. This study found that the ERP adoption in IT firm is less significantly compared to that of Non-IT firm.
5. This study found that the primary benefits from ERP adoption are improvement in performance efficiency and improved measurement of strategy implementation.
6. It is found from the above results that the extent of benefits from ERP adoption is at same level in selected companies irrespective of their distinct nature of business.
7. The overall benefits from ERP adoption in selected companies decreases significantly with increase in extensiveness of ERP adoption in functional area – 'Preventive maintenance and Production costing'.
8. The overall benefits from ERP adoption increases significantly with increase in ERP adoption in functional areas, namely, 'Automated Workflow', 'Inventory and Sales Management' and 'Customer Relationship Management'.
9. The contribution to 'overall benefits' through adoption of ERP in Manufacturing Execution System is positive and that of 'Material Management' is negative when they join together with extensiveness of ERP adoption in other significant functional areas.
10. It is finally found that the companies could not get any benefit from the present intensity of ERP adoption in 'Human Resource Management', 'Field Service' and 'Accounting Management'.

## SUMMARY

This study is aimed at eliciting the extent of ERP adoption and its benefits in Indian context. For the above purpose, the two companies, one in IT sector (Hindustan Computer Limited) and other in Non-IT sector (Sundaram Fasteners Limited) have been selected for the study. The extensiveness of ERP adoption in various functional areas and benefits of ERP adoption have been ascertained through opinion survey from the employees of these companies at clerical, supervisor and managerial level. For the survey, a well defined questionnaire was prepared with Likert type scale items for measuring the extensiveness of ERP adoption and its benefits. The Questionnaire had 15 items for measuring ERP benefits and 35 items for measuring extent of ERP adoption. The questionnaires were distributed to employees of all cadres in both companies in person by the researcher.

The data collected from the survey were tested using reliability analysis to know the reliability of scale items used in the questionnaire. It is found from the analysis that scale items measuring both ERP adoption and ERP benefits are consistent with each other and reliable measures. After ascertaining that the scale items are reliable, the study administered factor analysis on the data to find out underlying dimensions of ERP adoption and ERP benefits in the selected companies. The underlying dimensions that are uncovered from data measuring ERP adoption were given appropriate names and are considered as major functional areas of ERP adoption. Similarly, the underlying dimensions of ERP benefits were identified with suitable name and considered as major benefits from ERP adoption in the selected companies. The mean perception scores of the respondents for each major functional areas and each major benefit are compared by firms as well as by respondents' (employees') job status, job experience, education and age to known consistency of the ERP adoption and ERP benefits. Finally, the relationship between extensiveness of ERP adoption in major functional areas and major benefits have been analysed using Multiple regression technique.

## CONCLUSION

This study concludes that the extent of ERP adoption differ significantly between companies with different activities but benefits from ERP adoption is similar and do not differ by nature of business of the companies in Indian context. All the employees irrespective of their job status, job experience, education and age are consistent in agreeing that the ERP adoption in 10 major functional areas, namely Preventive maintenance and Production costing, Manufacturing Execution System, Human Resource Management, Material Management, Field Service, Accounting Management, Automated Workflow, Inventory and Sales Management, General Functions and Customer Relationship Management has benefited their companies in improving Non-financial Performance Evaluation, Performance Efficiency, Business Process and Measurement of Strategy Implementation. It is further concluded from the study that the extent of ERP adoption in 'Automated Workflow', 'Inventory and Sales Management' and 'Customer Relationship Management' play a significant role in improving the overall efficiency of the companies under study. This study further envisaged that though the extent of ERP adoption is high in 'Human Resource Management', 'Field Service' and 'Accounting Management' it has failed to bring any benefit to the companies under study.

## REFERENCES

1. Alexis Leon (2002), *Enterprise Resource Planning*, TATA McGraw-Hill Publications, New Delhi,
2. Ashok Soni (2005), *Enterprise Systems and Applications: The Future – A panel Discussion*, POMS OM Frontiers: Winds of Change.
3. Bhatti, T.R. (2005), *Critical Success Factors For The implementation of Enterprise Resource Planning (ERP: Empirical Validation)*, *The Second International Conference on Innovation in Information*.
4. Christopher P. Holland and Ben Light (1999), *Global Enterprise Resource Planning Implementation*, *Proceedings of the 32<sup>nd</sup> Hawaii International Conference on System Sciences*.
5. Colin Ash, G. and Janice, M. Burn, (2001), *E-ERP: A Comprehensive Approach to E-Business*, *IRMA International Conference*, pp. 112-116.
6. De Vaan M.J.M. and Barendrecht, R.A (2000), *ERP-wereld verandert ingrijpend*, *Tijdschrift Voor Inkoop & Logistic*, November, Vol. 103, pp. 462-468.
7. Fiona Fui-Hoon Nah, (2003), *Enterprise Resource Planning and its Implementations*, *International Journal of Human-Computer Interaction*, Vol.16, Issue No.1, pp. 1-3.
8. Jain, V.K. and Bhakar, S.S. (2013), *Role of ERP in Improving Supply Chain Effectiveness: A Perpetual Study*, *ICFAI Journal of Supply Chain Management*, Vol. 3, No.2.
9. Kai Reimers, (2002) *Implementing ERP systems in China*, *35th Hawaii International Conference on System Sciences*.
10. Leeuwen, O.C. van and Wemmenhove, P. (2001), *Trends in Finance & Control*, *Maandblad voor Accountancy en Bedrijfsconomie*, Vol. 78, pp. 435-444.
11. Morley and Roy Ph.D., (2004), *Customer based antecedents of satisfaction and dissatisfaction in business to business services*, *The University of Western Ontario (Canada)*, pp. 225.
12. Rosemann. M, (1999), *ERP Software: characteristics and consequences*, *7th European Conference on Information Systems*.

## INFLUENCE OF ADVERTISING IN MEDIA ON THE PERCEPTIONS OF YOUNG INDIAN CONSUMERS WITH SPECIAL REFERENCE TO ORGANIZED FAST FOOD OUTLETS

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### ABSTRACT

*The young Indian consumers are unique in terms of their population size and characteristics. According to Government of India's youth portal, the current percentage of population under 25 years of age in India is 51% and the percentage under 35 years of age is about 66%. The researcher attempts to analyse the influence of advertising in media on the perceptions of Indian youth with special reference to organized fast food outlets. The present study has considered the following media carrying advertisements of organized fast food companies, namely: newspaper, magazine, television, radio, internet, mobile phone, pamphlet/brochure, hoarding and banner. The sample consisted of 320 respondents in the age group of 15 to 24 years living in Mumbai city. Multistage sampling technique was adopted to select the required sample respondents. A structured questionnaire was used for collecting the data. Structural equation modeling was used for analyzing the influence of advertising in media upon the consumer perceptions. Television, newspaper and banner advertisements were found to have significant influence upon the perceptions of youth.*

### KEYWORDS

Advertising media, Consumer perceptions, Fast food, Young consumers, Youth.

### INTRODUCTION

Business organisations all around the world use advertising to disseminate the information about their products and services to their target customers. The ability of advertising and other promotional methods to deliver carefully prepared messages to target audiences has given them a major role in the marketing programs of most organizations (Belch and Belch, 2003). The messages transmitted by the advertisers are sensed, selected and attended by the consumers. Further, these external sources of information are interpreted and given meaning from the consumer's perspective. These are nothing but 'perceptions', the process by which an individual receives, selects, organizes and interprets information to create a meaningful picture of the world (Harrell, 1986). Once an individual selects and attends to a stimulus in the form of advertisement, the perceptual process comes into play thereby organizing, categorizing and interpreting the incoming information. From the marketer's and retailer's point of view, it is important to understand how the target customers interpret the advertisement transmitted by them. It is a challenging task for the marketers to measure or influence consumers' perceptions since these are highly individualistic in nature. Things can get more challenging and daunting when the customers to be focused and targeted are young. Having grown up in an even more media saturated, brand conscious world than their parents, the youth respond to advertising differently and prefer to encounter marketing messages in different places or from different sources (Kherrmouch and Green, 2001). Many companies are recognizing that the most global segment of all the consumer segments is the youth of the world, as they show amazing similarities in tastes, interests, language and attitudes (Parmar, 2002). The multinational organizations realize the fact that one of their major marketing challenges is to tap into the youth segment which shell out huge amounts of money on different products and services. In the Asian region, youth from India deserve special attention due to the enormity of their size. When compared to the previous generation, the contemporary Indian youth are experimentative, daring, financially more secure and more educated with a modern outlook (Nair, 2010). The young consumers are going to be big spenders from now on. Much of the retail boom is already being driven by them. Consumption of items like sports shoes, apparels and cell phones are shooting up because of them (Ramaswamy and Namakumari, 2009). Among the different products and service offerings, fast food has received significant attention and interest from the Indian youth. The fast food sector is gaining acceptance primarily from Indian youth and is becoming part of their lifestyle (Goyal and Singh, 2007). By the year 2016, the Indian fast food market is forecasted to have a value of 18567.7 million U.S. dollars, an increase of 63.9% since 2011 (Marketline, 2012). This indicates huge opportunities for fast food companies of both national and international origins. There is no wonder that the number of organized fast food outlets are increasing rapidly on a pan India basis. In such a case, there is likely to be intense competition among different fast food brands to gain the attention and patronage of young Indian consumers. In order to encounter this competition, the fast food companies resort to advertising to position their products and services in the minds of consumers. This could be the reason why, almost all the organized fast food players frequently telecast colorful advertisements in the television medium while making effective use of other advertising media as well. There is no doubt that these organizations shell out huge amounts of money in coming up with these advertisements in different media. Now, the major question in focus is whether these advertisements are able to capture the attention, interest and thereby influence the perceptions of young consumers in a successful manner. As in several aspects of life, it is the perception that matters in a marketing context in which brand names and company names trigger association and images. Perception is unique to each individual and it is not just objective reality. Different individuals may have their own version of brand description based on their perception (Rameshkumar, 2011). Hence, this study is an attempt to investigate the influence of advertising in media on the perceptions of young Indian consumers with special reference to organized fast food outlets.

### STATEMENT OF PROBLEM

Advertising research has shown that the context surrounding the advertisement has many effects on consumer's perceptions of and reactions to the advertising content (Dahlen and Edenius, 2007). Creative and innovative advertisements may serve the purpose of capturing the attention of its target consumers; but they are still costly. Apart from this, it is quiet a difficult task to gain the attention of young consumers. Youth of the present era very well realize the fact that advertisements are strategies employed by organizations to sell their products and services. Only a handful of advertisements with creative themes manage to enjoy the attention of these youngsters. The present age of globalization also sets up the stage for intense competition among different organizations to gain the market share. Too many advertisements of the same product or service category under different brand names in the same medium result in information overload. Such a situation may result in confusing the customer rather than aiding him/her in the buying decision making process. Different advertising media vehicles carry advertisements sponsored by fast food companies. Only those advertisements with the potential to hook the youth upon their innovative themes

manage to stand apart distinctively from the clutter. An advertisement is considered to be effective when it manages to get the attention of its target consumers and also is successful enough to influence their perceptions towards the concerned products and services. When this influence occurs at the perceptual level of a consumer there is a high probability that he or she will purchase/experience the concerned product or service. The current study attempts to address the research problem pertaining to the extent of influence of advertisements on perceptions of youth.

## LITERATURE REVIEW

Earlier researchers (Pollay et al. 1993) have reported that younger audiences think of advertising as an information source more than do older audiences. Coulter et al. (2001) found that feeling good about an advertisement made the respondents feel good about the advertised offering. It was also revealed that the entertainment aspect of advertising could lead to increased trust in advertisers, manufacturers and retailers. On the other hand, the researchers also indicated that due to its prevelant, intrusive and repetitive nature, advertising might be perceived as a powerful negative force as well. Kim et al. (2010) attempted to investigate the consumer perceptions on web advertisements and motivating factors to purchase from online shopping. They opined that consumer's perceptions of the attributes of web advertisements would tend to influence their intention to purchase from online shopping sites. Dean (1999) found that complete product information was rarely available to consumers especially when viewing advertisements. Product cues in advertising are important to consumers in making inferences, reducing uncertainty and forming product preferences. If there is an abundance of cues, only a few will be fully processed due to the limited capacity of the human processing system. Bacher (2003) was of the opinion that sponsored marketing communications including advertising had the potential to reorganize the way in which the consumer perceives and appreciates the brand. But the same author reported that current practice of marketing communications and advertising simply cannot, has not and will not routinely cause such necessary mental reorganizations. Most of the previous studies on fast food advertising focused upon the influence of the advertisements on children's fast food consumption and the resultant obesity (Andreyeva et al. 2011; Henderson and Kelly, 2005). Apart from this, studies on fast food mainly focused upon consumption patterns and characteristics of fast food consumers (Goyal and Singh (2007); Oyewole (2007)). Studies specific to the perception of fast food advertisements and its influence on youth are lacking. Hence, the current study attempts to address this research gap by focusing upon the influence of fast food advertisements on the perceptions of young Indian consumers.

## RESEARCH METHODOLOGY

### POPULATION AND SAMPLING FRAME

The population for the study comprised of young consumers in the age group of 15-24 years in the city of Mumbai, India. The sampling frame for the present study included youth visiting the organized fast food outlets in the study area. Four brands of fast food outlets were considered namely Mc Donald's, Kentucky Fried Chicken (KFC), Pizza Hut and Dominos. These fast food chains were considered due to their immense popularity among young consumers and the occurrence of high footfalls in their fast food outlets. The sampling frame comprised of total 1974 respondents (total footfall of young consumers visiting all the outlets considered for the study (approximately) in a day as per the information given by the outlet service personnel).

### SAMPLE SIZE AND SAMPLING TECHNIQUE

A sample size of 306 was determined by using the Krejcie and Morgan (1970) sample size table. To be on the safer side, 320 respondents were contacted. Out of 320 responses, 312 were found to be usable. Multistage sampling technique was used to select the required number of sample respondents. In the first stage, the study area was selected as the city of Mumbai by purposive sampling. In the second stage, each of the four organized fast food outlet chains (Mc Donald's, Kentucky Fried Chicken (KFC), Pizza Hut and Domino's) were classified as different strata. Following this, the number of outlets to be considered from each stratum were calculated in proportion to the total number of outlets. Each outlet was selected using lottery method. In the third stage, the number of respondents to be involved in the study were calculated in proportion to the total number of footfalls occurring in all the outlets. Purposive sampling was used to select the respondents coming out of the outlets.

### DATA COLLECTION

The researcher designed a structured questionnaire by adopting items for measuring perceptions from the studies of Oyewole (2007) and Makgosa and Mabalane (2011). Further the researcher sought the opinion of the respondents regarding the influence of advertising in media sources of information using 5 point Likert scales (Very high- 5, High- 4, Neutral - 3, Low - 2, Very low- 1).

### CONTACT METHOD

Intercept method was used to collect the primary data from the respondents coming out of the selected fast food outlets and willing to take part in the survey.

### DATA ANALYSIS

Principal components factor analysis and structural equation modelling was applied to analyse the primary data by using SPSS 18.0. and AMOS.

## RESULTS AND DISCUSSION

### PROFILE OF RESPONDENTS

The respondents comprised of 51.92 % of males and 48.08% of females. The mean age of the respondents was 22 years. 81% of the respondents were college students. 19% of the respondents were employed. The mean monthly household income of the respondents was Rs. 32,245.

### FACTORS UNDERLYING PERCEPTIONS OF YOUTH TOWARDS ORGANISED FAST FOOD OUTLETS

Previous researchers have conducted studies to identify the factors underlying perceptions of respondents towards fast food outlets (Oyewole (2007); Makgosa and Mabalane (2011); Lee and Ulgado (1997); Goyal and Singh (2007)). Results of these studies highlighted the emergence of hygiene, empathy, comfort of facilities, availability, nutritional value, unique experience, price, reliability, social outing, nutritional awareness, food taste, variety, seating space and ambience as factors underlying the perceptions. The present study used principal components factor analysis with varimax rotation to identify the factors underlying the perceptions of respondents. Six resultant factors emerged in the study namely - Hygiene and reliability, Health consciousness, Courteousness, Unique experience, Comfort and Convenience and Price as shown in Table 1.

### INFLUENCE OF ADVERTISING IN VARIOUS MEDIA ON PERCEPTIONS OF YOUTH TOWARDS FAST FOOD OUTLETS

Structural equation modelling was used to study the influence of advertising in various media on perceptions of youth. The undesirable condition of multicollinearity was verified for the independent variables before the conduct of structural equation modelling. Drawing inferences from structural equation modelling might be a problem if the independent variables have high correlations among each other.

TABLE 1: PERCEPTIONS OF RESPONDENTS TOWARDS ORGANISED FAST FOOD OUTLETS: SIX FACTORS SOLUTION

Factors	Reliability (Cronbach's $\alpha$ )
Hygiene and reliability	0.719
Health consciousness	0.726
Courteousness	0.722
Unique experience	0.811
Comfort and Convenience	0.809
Price	0.814

The presence of high correlations among independent variables may lead to inflated squared multiple correlations ( $R^2$ ) in regression analysis. High correlation values lying above 0.8 or 0.9 are to be scanned for detecting the presence of multicollinearity. It was found out that none of the correlation estimates exceeded the value of 0.8 as highlighted in table 2 indicating the absence of multicollinearity within the predictor variables. The advertisements in media sources formed



the exogenous variables (independent variables) namely: Television, newspaper, magazine, internet, pamphlets, hoardings, banners, FM Radio and mobile phones. The perception of youth towards relevant attributes of fast food outlets namely: 'hygiene and reliability', 'health consciousness', 'courteousness', 'unique experience', 'comfort and convenience' and 'price' formed the endogenous variables (dependent variables). Statistical tests for goodness of fit for the models were also carried out by analyzing the values of Chi-square, GFI, AGFI and RMSEA. All these values were found lying within the acceptable range for the relevant models indicating goodness of fit (Table 3).

TABLE 2: BIVARIATE CORRELATIONS AMONG PREDICTOR VARIABLES FOR CHECKING MULTICOLLINEARITY

Independent Variables	Television	Newspaper	Magazines	Internet	Pamphlet	Hoardings	Banners	FM Radio	Mobile phones
Television	1.00	-0.56	-0.78	-0.31	-0.117	0.122	0.153	0.05	0.043
Newspaper	-0.56	1.00	0.761	0.605	0.687	0.242	0.169	0.12	0.395
Magazines	-0.78	0.761	1.00	0.564	0.677	0.173	0.149	0.08	0.286
Internet	-0.31	0.605	0.564	1.00	0.633	0.383	0.315	0.14	0.556
Pamphlets	-0.12	.687	0.677	0.633	1.00	0.241	0.233	0.08	0.310
Hoardings	0.122	0.242	0.173	0.383	0.241	1.00	0.743	0.27	0.368
Banners	0.153	0.169	0.149	0.315	0.233	0.743	1.00	0.29	0.314
FM Radio	0.055	0.116	.085	0.145	0.087	0.275	0.296	1.00	0.312
Mobile phones	0.043	0.395	0.286	0.556	0.310	0.368	0.314	0.31	1.00

TABLE 3: GOODNESS OF FIT STATISTICS FOR THE MODEL

Parameters	Obtained values	Cut-Off values
Chi-Square	40.083(p=0.077)	P > 0.05
GFI	0.967	> 0.90
AGFI	0.918	> 0.90
RMSEA	0.044	< 0.05

Table 4 highlights the standardised regression coefficients ( $\beta$ ) signifying the influence of media advertisements on perceptions. It is observed that **Television advertisements** ( $\beta = 0.142$ , t-value = 3.354,  $p < 0.05$ ) and **Banner advertisements** ( $\beta = 0.225$ , t-value = 3.568,  $p < 0.01$ ) had a significant and positive influence upon the perceptions of youth in terms of 'hygiene and reliability' associated with fast food outlets. This indicates that television advertisements and banners highlighted messages related to hygiene and reliability of organized fast food outlets which influenced the perceptions of youth in a positive direction. The media advertisements explained for a variation of 5.1% ( $R^2$ ) within the dependent variable 'hygiene and reliability'.

TABLE 4: INFLUENCE OF ADVERTISING IN MEDIA ON PERCEPTIONS OF RESPONDENTS TOWARDS ORGANISED FAST FOOD OUTLETS

Independent variables - Advertising in media	Dependent variables -Standardised Coefficients					
	Hygiene & Reliability	Comfort & convenience	Courteousness	Health	Unique experience	Price
Television Advertisements	.142*	.159*	.089	.060	.236**	.040
Newspaper Advertisements	-.002	.159	.047	-.501**	-.142	-.378**
Magazine Advertisements	-.043	-.034	-.108	.091	-.168	.221*
Internet Advertisements	.073	-.055	.061	.040	-.062	.218*
Pamphlet Advertisements	-.044	-.029	.015	-.128	-.029	-.111
Hoardings	-.179	-.235**	-.092	.013	-.014	.138
Banner Advertisements	.225**	.266**	.171	.013	.113	-.196
FM Radio Advertisements	-.004	.092	-.086	.068	-.054	-.018
Mobile phone Advertisements	-.008	.001	-.024	-.016	-.048	.028
$R^2$	0.051	0.083	0.034	0.261	0.215	0.089

\* Significant at 0.05 level, \*\* Significant at 0.01 level, \*\*\* Significant at 0.001 level

**Television advertisements** ( $\beta = 0.159$ , t-value = 3.894,  $p < 0.05$ ) and **Banner advertisements** ( $\beta = 0.266$ , t-value = 4.368,  $p < 0.01$ ) were also found to be significantly and positively influencing the perceptions of youth with respect to 'comfort and convenience' offered in fast food outlets. The predictor variables explained for a variation of 8.3% ( $R^2$ ) within the dependent variable 'comfort and convenience'. Further **television advertisements** ( $\beta = 0.236$ , t-value = 6.321,  $p < 0.01$ ) had a significant and positive influence upon the 'unique experience' offered in fast food outlets. Fast food organizations of both national and international origins aggressively target the young consumers with their colourful advertisements. These advertisements mainly showcase the fast food outlets as a place of ultimate recreation offering a treat comprising of colourful aesthetics, visual images, pleasant music and delicious fast food dishes. **Television advertising** makes effective usage of audio and video messages to such an extent that youth easily perceive the fast food outlets and cafes as destinations of 'unique experience'. The predictor variables explain a variation of 21.5% within the dependent variable.

**Newspaper advertisements** ( $\beta = -0.501$ , t-value = -8.509,  $p < 0.01$ ) had a significant negative influence upon the perception of youngsters with respect to health related aspects of fast food items. This could be implying that newspaper advertisements highlighted minimal contents related to health aspects, nutritional value and calorie contents of fast food. The media sources of information contributed to a variation of 26.1% within the dependent variable 'health consciousness'.

Moreover the perceptions of youngsters towards prices of fast food items are negatively influenced by referring to **newspaper advertisements** ( $\beta = -0.327$ , t-value = -0.022,  $p < 0.01$ ). It appears as if the prices of fast food highlighted in these newspaper advertisements were perceived to be high by the Indian youth. On the other hand magazines and internet had positive significant influence upon perceptions related to price. The advertising sources contributed to a variation of 8.9% within the dependent variable. On the other hand advertisements placed in magazine and internet media significantly and positively influenced the price related perceptions of youth.

Advertising in media such as **FM Radio, mobile phones and pamphlets** were found to have no significant influence upon the perceptions of young consumers. It could also be observed that the predictor variables (advertising in media sources) on the whole contributed to a maximum variation of 26.1% ( $R^2$  Value) within the dependent variable 'health consciousness' followed by variation of 21.5% within the dependent variable 'unique experience'. This indicates that exposure to different media advertisements considered for the present study resulted in maximum variation and influence upon the perceptions of youth related to health and unique experience associated with organised fast food outlets. More and more fast food companies are trying to portray their fast food dishes as healthy options for the consumers owing to the increasing discussion and research activities at the global level relevant to the harmful health effects of fast food consumption.

## MANAGERIAL IMPLICATIONS

Fast food companies may have to use advertising themes focussed upon 'hygiene and reliability of outlets', 'health consciousness of youth', 'courteousness of service personnel', 'unique experience associated with the outlets', 'comfort and convenience of the outlets' and 'prices of fast food dishes'. Organised fast food restaurants can make effective use of television and banner advertisements, since these were found to have significant and positive influence upon perceptions of youth related to 'hygiene and reliability', 'comfort and convenience' and 'unique experience' associated with fast food outlets. Creative and innovative advertisement themes telecasted or displayed through television and banners are bound to gain the interest of youngsters. None of the media vehicles were found to be influencing the perceptions related to 'courteousness of service personnel'. Hence, fast food companies may try to incorporate themes related to this perceptual aspect in their advertisements. The advertisements carried in media vehicles other than television and banners namely newspaper, pamphlets, hoardings, FM radio and mobile phones were found to have either negative or absolutely no significant influence upon the perceptions of youth. Hence fast food companies may take steps to understand the shortcomings (if any) and suitability of these media vehicles to make effective usage of them.

## CONCLUSION, LIMITATIONS AND AVENUES FOR FUTURE RESEARCH

From the present study, it is concluded that advertisements in media possessed significant influence upon the perceptions of youth towards organised fast food outlets. Despite of this influence, the concerned organisations may attempt to come up with advertisements which stand out and attract attention. Only such unique advertising strategies can help in countering the clutter of advertisements in media. The present study was conducted among youth belonging to the city of Mumbai, India. Hence the generalization of results to young consumers belonging to other geographical areas should be done with caution because of vast cultural diversity in these markets. Further studies could be conducted among Indian youth with special focus on service offers other than organised fast food outlets such as education, fitness centres, and beauty parlours/salons to name a few. Such initiatives could benefit the national and international marketers in tailoring their marketing strategies to focus and serve the youth consumer segment in an effective and efficient manner.

## REFERENCES

1. Andreyeva T., Kelly I.R. and Harris J.L. (2011), Exposure to food advertising on television: Associations with children's fast food and soft drink consumption and obesity, *Economics and human biology*, 9, pp221-233
2. Bacher W.M.W (2003), How advertising affects consumers? , *Journal of Advertising research*, 43, pp230-234
3. Belch G.E. and Belch M.E. (2003), Advertising and Promotion: An integrated marketing communications perspective, *Tata McGraw Hill publishing*, 6<sup>th</sup> Edition, p5
4. Coulter R.A., Zaltman G. and Coulter K.S. (2001), Interpreting consumer perceptions of advertising :An application of Zaltman Metaphor Elicitation Technique, *Journal of Advertising*, 30:4, pp 1-21
5. Dahlen M. and Edenius M. (2007), When is advertising advertising? Comparing responses to non-traditional and traditional advertising media, *Journal of Current issues and Research in Advertising*, 29:1, pp 33-42
6. Dean D.H. (1999), Brand endorsement, popularity and event sponsorship as advertising cues affecting consumer pre- purchase attitudes, *Journal of Advertising*, 28:3, PP1-12
7. Goyal A. and Singh N.P. (2007) , Consumer perception about fast food in India: an exploratory study, *British food journal*, Vol.109 , No.2, pp 182-195
8. Harrell .G (1986), Consumer Behaviour, (San Diego: Harcourt Brace Jovanovich), p66
9. Henderson V.R. and Kelly B. (2005) Food advertising in the age of obesity: Content analysis of food advertising on general market and African American television, *Journal of nutritional education behaviour*, 37, pp 191- 196
10. Khermouch .G and Green.J (2001), " Buzz Marketing", *Businessweek*, pp50-56
11. Kim J.U, Jinkim W. and Park S.C. (2010), Consumer perceptions on web advertisements and motivating factors to purchase in the online shopping, *Computers in Human behaviour*, 26, pp 1208-1222
12. Krejcie R.V. and Morgan D.W. (1970), Determining sample size for research, *Educational and Psychological measurement*, pp607-610
13. Lee, M., & Ulgado, F.M. (1997). Consumer evaluations of fast- food services: a crossnational comparison. *The journal of services marketing*, 11(1), 39-52.
14. Makgosa, R. & Mabalane, N. (2011). Fast food purchase behavior in Botswana: An exploratory study. *Indian journal of Marketing*, 27(7), 23-30
15. Marketline (2012), Fast food in India, [www.marketlineinfo.com](http://www.marketlineinfo.com), Informa business
16. Nair, S.R. (2010), Consumer behaviour in Indian perspective: Texts and cases, 2<sup>nd</sup> edition, Himalaya publishing house, Mumbai
17. Oyewole, P. (2007). Fast food marketing and the African American Consumers. *Journal of International Consumer Marketing*, 19(4), 75-108
18. Parmar .A (2002), Global youth united, Marketing News, pp49
19. Pollay, Richard.W and Mittal.B (1993), Here's the beef: Factors, Determinants and segments in the consumer criticism of advertising, *Journal of Marketing*, 57, pp 99-114
20. Ramaswamy V.S. and Namakumari S. (2009) , Marketing Management-Global perspective Indian context, 4<sup>th</sup> edition, pp 292
21. Rameshkumar S. (2011), Consumer behaviour and brands, concepts and cases, Pearson publication, Noida

**NATURE BASED TOURISM AND PROTECTED AREA (PA) MANAGEMENT****U.N. SHUKLA****READER****INSTITUTE OF TOURISM & HOTEL MANAGEMENT****DR. B. R. AMBEDKAR UNIVERSITY****AGRA****ALTAF AHMAD LONE****ASST. PROFESSOR****DEPARTMENT OF TOURISM STUDIES****CENTRAL UNIVERSITY OF KASHMIR****KASHMIR****ABSTRACT**

*This study analyzes the keen behind the involvement of visitors in nature-based tourism and identifies the associated protected area (PA) management regimes, including the social and cultural consequences of it on local communities. Nature-based tourism (NBT), also known as ecotourism, is a faster growing area in the tourism sector. It can prove as a complementary factor of development for both rural and well established urban-based tourism industries as well. The protected area network in India has grown steadily. As of May, 2008, India has 97 NPs covering 38199.47km<sup>2</sup> and 508 WLSs covering 118,236.94 km<sup>2</sup> representing 1.16% and 3.60% respectively of the country's geographical area (National Wildlife Database Cell, 2008). The areas are adopted in-situ and ex-situ conservation strategies for conservation of populations of many endangered species, especially rhino, birds, bears, elephant and tigers etc. and also ecology of the area being maintained, despite high biotic pressures and random disturbances at the sites by mass tourism. However, in spite of being hubs of population conservation and ecological integrity, they also bring about several management challenges. The most difficult assessed challenge facing by PA managers was the anger among locals against the bans on their access for biomass and required revenue from the PA for biodiversity conservation.*

**JEL CODE**

L83

**KEYWORDS**

Management, Nature Based Tourism, Protected area.

**INTRODUCTION**

Protected areas bring tremendous cultural, ecological, spiritual, and scientific benefits to society. They are critical to preserving global biodiversity and stemming the extinction crisis. Today there are more than 100,000 protected areas worldwide comprising about 12 percent of the Earth's surface (Lopoukhine, 2008; Chape, *et al.* 2003). A protected area is "an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means" (IUCN, 1994). Protected areas are hubs of diversity conservation and species habitat protection. They provide the natural environment for healthy outdoor recreational activities and safeguarding of living for the tourists. Visit to such areas not only provide the opportunity to access the nature but also the sense of love and education about the wild species. Protected areas such as national parks and reserves form the front line in the campaign to conserve biodiversity (Chape, *et al.* 2003). India is unique in richness of bio diversity due to diversity of physiographic and climatic conditions. India ranks as the sixth among the 12-mega bio diversity countries of the world. Moreover, out of 18 unique 'biodiversity hot-spots' two are located in India-North-Eastern Himalayas and Western Ghats. (Mandal, 2003). The protected area network in India has grown steadily. As of May 2008, India has 97 NPs covering 38199.47km<sup>2</sup> and 508 WLSs covering 118,236.94 km<sup>2</sup> representing 1.16% and 3.60% respectively of the country's geographical area (NWDC, 2008).

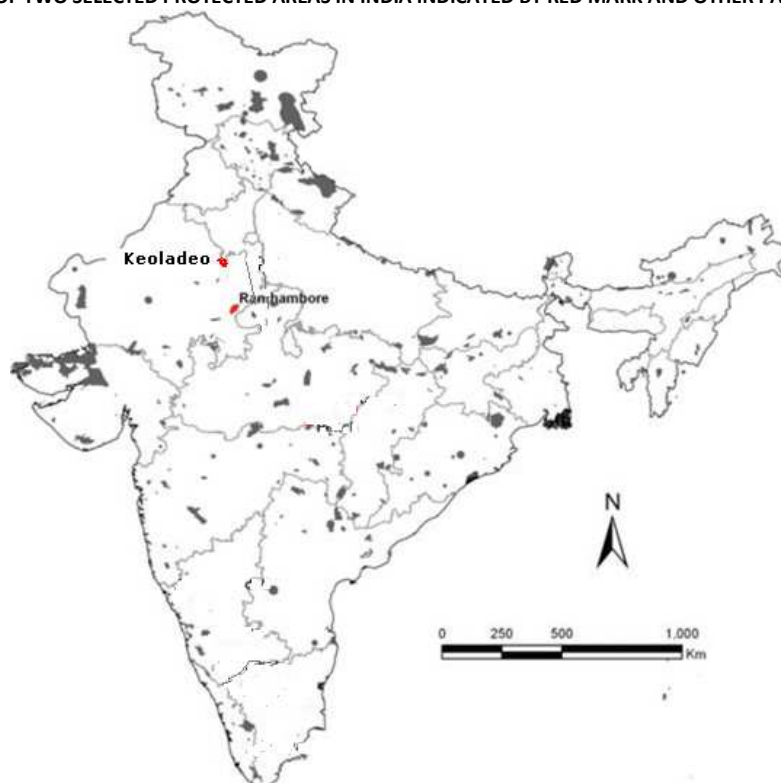
Balmford, *et al.* (2009) find increasing visitors to protected areas (PAs) in 15 of 20 countries, with rapid increases in less-wealthy countries tied to international tourist visitation. India, being an emerging economy with increasing mobility and disposable income also witnesses a great number of nature based tourists. The 28 tiger reserves alone receive >1 million visitors a year (Tiger Task Force, 2005). Yet, India's 590 PAs cover <5% of total land area, are small (average size <300 km<sup>2</sup>), highly fragmented, and surrounded by high densities of people (Rodgers *et al.* 2003; Karanth & DeFries, 2010). Several research findings suggests that nature-based tourism is beneficial for local promotion and protected area management, and provides participation of locals in management and promotes conservation (Mansourian, 2008; Scherl & Emerton, 2008). Other communities in the vicinity of parks have been economically and socially promoted (Shukla & Lone, 2012; Kumar Vijay, 2009; Spiteri & Nepal 2008). Further, some researchers observed no benefits and involvement of locals in PA management strategies (Glasson, 1992 cited by Glasson *et al.* 1995; Fennell, 1999; Bandyopadhyay & Tembo, 2010) and also leakage of tourist benefits occurs outside the local community (Boora, 2005).

The negative impacts of tourism had been identified by many past researchers, either in the form of sensitive ecological or wild species disturbance or the physical environment of the PAs (Croall, 1995; Keefe, 1995; Frederico Neto, 2003). Others find tourism-generated revenues may be insufficient to sustain PA conservation and management efforts (Karanth & DeFries, 2010). Perceptions of management practices also affect people's attitudes (Ormsby and Kaplin, 2005; Allendorf, 2007). For example, conflicts with managers due to resource extraction, strict rules on forest resources use, and access (Heinen and Shrivastava, 2009; Shibia, 2010), rude behavior (Ormsby and Kaplin, 2005), or harassment by park rangers (Infield and Namara, 2001) generate negative attitudes toward protected areas (Macura, *et al.* 2011).

**MATERIAL AND METHODS****STUDY SITES**

We opted the 02 Protected Areas (Keoladeo & Ranthambore National Parks) of Rajasthan state, in India to observe the nature-based tourism and management activities of them (Figure 1). The PAs were chosen as research sites because of their rich wildlife attractions and great rush of tourists, as both of them fall in the India's famous tourist 'Golden Triangle'. Also the ease of accessibility to these areas was taken into concern. The data of visitor arrivals were collected from the forest departments of the study sites. The average tourist numbers for both sites during 2007-08, was 1, 26, 697 (ranging from 94,284 in Keoladeo to 159,110 in Ranthambore). Both PAs fall within the range of great tourism influence from the nearby core tourism centres and distance from these centres is given in (Table 1). The selected PAs differ in history of establishment, size, types of attractions, management practices and wild ecosystem and habitats (Table 1). The collected data depended on the co-operation showed by the authorities to access the maintained records and the permissions to the PAs.

FIGURE I: LOCATION OF TWO SELECTED PROTECTED AREAS IN INDIA INDICATED BY RED MARK AND OTHER PAS ARE IN MARKED GREY



## SURVEYS AND INTERVIEWS

An interview instrument (questionnaire) was designed to collect the relevant information about the tourism activities and management regimes governing nature-based tourism in both PAs. The instrument was designed using a semi-structured format with both open- and closed-ended questions. Further, the instrument was modified into two different designs (one for management and other for private service providers) by altered queries according to need of achievement.

Field visits were made to various locations in the PAs to get a first hand impression of the field situation and requirements and to draw the views of the staff posted at various camps/chowkies and also collect official records on visitors (numbers, domestic vs. foreign, seasonality) and gate fees. Also, semi structured interviews of managers or owners of 103/115 (89%) tourist facilities around 02 PAs were taken from May 2009 to February 2010 period on regular intervals. We visited all facilities within 10 km of the PAs. Questions to facilities covered transportation, relationship with park management, employment, and other opportunities provided to locals.

## RESULTS AND DISCUSSION

### NATURE BASED TOURISM TRENDS

Nature-based tourism in India is comparatively cheaper than European destinations, e.g., tiger watching in the Kanha National Park and in Bandhavgah National Park (both in Madhya Pradesh) either government or private facilities can provide a 10 day visit with ground costs between Aus. \$20 to \$ 100 per day (Valentine, 1983). The comparison of tourist arrivals for (Ranthambore & Keoladeo) were made after collected the official records of them from the respective forest departments for 2002 to 2008 period (Table 1). On comparison of total tourists' arrivals during 2007-08, Keoladeo comparatively witnessed the lesser number (94284) of tourists than Ranthambore (159,110) respectively (Table 1). Furthermore, during (2002-08) period, Keoladeo witnessed the least number of tourists for 2002-03 year (when Siberian cranes went locally extinct in this year, annual growth rate falls -35% against the previous year). The average tourists (67%) for Keoladeo during (2002-08 yrs) are largely domestic. Although, for 2007-08 year, domestic tourists for Keoladeo comprised more than 64% of them and surprisingly Ranthambore witnessed only about 42% domestic visitors for the same period (Table 1).

### TOURISM OPPORTUNITIES AND PERFORMANCE

We interviewed 89% (103/115) hotel, resort and paying guest owners within 10 km range of both selected PAs in India. We found most of the representatives to be co-operative (since only 11% of owners or managers could not be located and 3% declined interviews). Most facilities are privately owned, and often run by individuals (ranging from 95% in Keoladeo to 93% in Ranthambore respectively).

TABLE I: CHARACTERISTICS OF 02 SELECTED PROTECTED AREAS IN INDIA

Protected area	PA size km <sup>2</sup>	Year established as National park	Habitat	Closest tourist centres/cities	Tourist numbers 2007-2008	Annual growth rate for 2002-2008 <sup>a</sup>	Average growth rate for 2002-2008 <sup>b</sup>	Indian tourists 2007-2008
Ranthambore	392	1980	Tropical dry forest, open scrub	Jaipur (145 km)	159,110	14.2%	17.0%	42%
Keoladeo	28.73	1981	dry grassland, woodlands, swamps and wetlands	Agra (50 km) Jaipur (180 km)	94284	2.41%	8.5%	64%

Sources: Tourist arrivals were collected from the forest Departments of selected PAs.

<sup>a</sup>Annual growth rate is calculated as  $\{\ln(2007-2008) - \ln(2002-2003)\} / \text{Number of years} \times 100$ .

<sup>b</sup>Average growth rate is averaged for every year from 2002-2008. For Keoladeo the data was available from 2000-2008. Data for both PAs were available from 2002-2008.

Many of the facilities in both PAs are established after 2000 (Ranthambore 40% and Keoladeo 44%) and almost 96% of resorts and guest houses are located outside the Keoladeo on the northern urban side of the park within 5 km range of park boundaries and large about (98%) facilities in Ranthambore are outside the PA as well. In addition the inside facilities in both PAs are run by the respective forest departments. At both sites, the facilities vary in class of amenities and charges accordingly (i.e; Rs. 60 in Dharamshalas to 40,500 in luxurious Oberio hotel) with an average beds capacity of '33%' ranging from (6-130) beds in Ranthambore (Table 2). Also, large number of facilities has recently grown around both PAs. Both PAs are located in urban areas and therefore, facilities around them have developed very fast for past 10 years and consequently the average tourists' arrivals.



The facilities offer employment between 1 to 150 people, along with the guest house stays, which comparatively provide employment to fewer people. Percentage local of total employees in and around these PAs varied from 86% in Keoladeo to 81% in Ranthambore (Table 2). Most of employees were hesitant to discuss wages and salaries offered, therefore, collected salary range for both PAs was not available. Majority of the locals were posted on low graded jobs (gardening, sweeping, security etc.) and most of the high class posts were occupied by outsiders. The availability of jobs in both PAs is highly seasonal and therefore, the depended income of locals get affected due to seasonal impacts (October to April, peak tourist season in both PAs). The charges of rooms also varied in PAs according to the offered facilities. The price/person/day ranged from Rs 60 in (Dharamshalas) to Rs 40,500 in (Oberio hotel) for Ranthambore and Rs 100 (Guest houses) to Rs 7,500 in (Bagh Palace, Achnera Road) for Keoladeo (Table 2). However, the majority of the accommodation units in and around both areas fall under the range of Rs 500-1500 charges. Many of the hotels/resorts purchase food produces directly from the local markets, but for some expensive hotels the food and drink items are supplied by contractors. In Keoladeo food produces for hotels like "Hotel Ashok- ITDC" and "Hotel Saras RTDC" is supplied by contractors, who in turn make purchases from the city market. Other hotels generally make purchases direct from the city.

TABLE II: CHARACTERISTICS OF TOURIST RESORTS AND GUEST HOUSES IN 02 SELECTED PROTECTED AREAS

Protected area (Queries) <sup>#</sup>	Ranthambore	Keoladeo
Total tourist facilities	61	54
Interviewed (% age)	88%	90%
Private ownership	93%	95%
Distance to PA (range in km)	0-10	0-5
Year established	1930-2009	1976-2008
Resorts built post 2000	40%	44%
Resorts outside PAs	98%	96%
Local employees (range)	81%	86%
Bed capacity (range)	10-130	6-100
Price in Rs (range)	60-40500	100-7500
Bore well use	≈ 95%	≈ 92%
Waste disposal	Burn, recycle	Burn, bury, Recycle
Conflicts with FD (yes)	12%	18%
FD rules fair (yes)	82%	76%
Seen wildlife offences (yes)	37%	8%
FD takes action (yes)	56%	88%
Support FD for emergency (yes)	22%	32%

<sup>#</sup> According to Karant & DeFries, 2010

FD = Forest Department

The facilities rely on local resources, particularly water. Water resources were often underground bore wells; approx. 95% facilities in Ranthambore and approx. 92% in Keoladeo use this form of water source and municipal water supply was found another alternative source of water supply (Table 2). Further, both these PAs are located in areas of acute water shortage and high temperatures zone (40–50°C) in summer months. Also, the ground water of these areas is not pure enough for drinking; therefore, almost all facilities in PAs supplied the distilled water bottles to visitors. In Keoladeo, the severe water scarcity during recent years due to lesser monsoon and lack of any sufficient alternative water resource made the most of migratory birds away of it and proportionally the shortage in tourist arrivals.

Ecotourism can provide resources for environmental conservation and management and an incentive for the conservation and sustainable use of public and private land (Allcock *et al.*, 1994; Eagles, 2002). The changing pattern of land use is one of the common impacts of tourism on destinations. The proper maintenance of land use around the PAs is an important job for nature conservation, with precious habitats and rare species whose long term existence depends on the forms of land use around the existing areas.

Tourism development in the study areas have resulted the change in land use along with the sharp increase in prices around them. The outside industrialists/traders purchase the land from local people and bring outsiders for key posts, which fallout the decline in employment opportunities for the locals (Jabar-Din-Khan (RTD employee), pers. comm., 2012). Few other facilities in both PAs are located inside the highly ecologically sensitive wildlife habitats (personal observations, 2012). Proper planning and management to mitigate these rapid land use changes in areas surrounding these PAs is needed to maintain ecological connectivity and functionality of these landscapes.

Opinions of tourists and private facility owners on the main reasons which are leading the development of tourism in both PAs were collected by asking an appropriate question during the interviews. The found reasons have mentioned below as per the recorded number of frequencies, (1) sightings of tigers in Ranthambore, and migratory birds and pythons in Keoladeo, (2) motivation from nature and desire for change in routine life, (3) opportunities for adventure, stay with wild species, safaris, boating, etc., (4) location/accessibility in urban centers, (5) improvement in accommodations units, (6) increase in income and economic growth of middle class population.

#### TOURISM AND PARK MANAGEMENT

We examined the attitudes of tourist facilities towards the forest department in both PAs to understand their interrelationship. We find minimal conflict between locals and authorities in Keoladeo as comparison to the initial years of its creation as National Park, (ban on entries of surrounding people, cattle and buffalo, which lead to the death of 9 people in police firing, Earle, 1987). Forest department rules were considered fair (ranging between 76% in Keoladeo and 82% of responses in Ranthambore (Table 2). Wildlife offences of lesser impacts such as grazing, fuel wood, and non timber forest product collection, were observed in both PAs. Forest departments in both PAs were found taking action against such reported offences. Locals in both areas are supporting the forest department during emergencies such as fires and trekking out the wildlife culprits by providing the secret information about them (Table 2). In Keoladeo the locals have been made active in eradication of an invasive plant species *Prosopis juliflora* for 2007-2010 to protect the park during the dried seasons. The rules governing entry of people and vehicles vary across the PAs. For example, in Keoladeo private vehicles are allowed to enter the park till the barrier point (1km from main gate). During 2009-10, more than 350 vehicles have entered the park on a typical high season day (December 25, 2009; Forest Deptt. KNP, 2010) and in Ranthambore, routine entered vehicles are regulated by the forest department. The department had divided the park into 8 zones and in each zone 8 vehicles (4 six seater gypsies, 4 twenty or sixteen seater canter) are allowed to enter during each (morning & afternoon) shifts. The tourist road network and zone system in the Ranthambore is meant for the vehicular traffic control, while in Keoladeo the park is divided into the sections/blocks to do the same activity. In Keoladeo, tourists viewed wildlife from cycles /rickshaws / electra-van and boats (08 boats, capacity 50 people), however during the recent water shortage in park, boat journeys have been stopped for all years from 2002-2009 except 2004-2005 when the wetland got sufficient amount of water due to good monsoon (Keoladeo Forest Department, 2009). In Ranthambore the main reason of tourists was to get the glimpse of tigers from the vehicles and therefore, nearly all tourists were participating in "tiger shows". One such incident was noticed during a visit to the park, when a tigress passed through middle of the vehicles on the main road, a great number of visitors were watching her and a considerable amount of flash photography took place (Shukla & Lone, pers. Obs., 2012).

In both PAs tourists visited the religious temples and shrines located inside. On religious days roads inside Ranthambore are clogged with vehicles, people walking on foot and large amounts of garbage (Karanth & DeFries, 2010). Earlier, in Keoladeo a considerable number of devotees were visited the three temples daily. Now, the management reduced the practice for Tuesdays and Saturdays in a week, when the number of devotees touches a maximum. Apart from this,

devotees use the Aghapur road while going for their *parikrama* and some devotees visit the Syed Baba Majaar inside the park. In addition to these, around 300 people come to the park for daily morning walk.

For 2002-2008 periods, the annual average tourism revenue for Keoladeo was Rs 85, 16,577.14, ranges from Rs 44, 16,070 for (2002) to Rs 1, 01, 00,735 for (2005) years (Directorate of KNP, 2009). Major source of revenue collection in Keoladeo (about 95%) is in the form of entrance fees and rest comes from the vehicular charges. However, in Ranthambore the case is completely reverse, where vehicles are found the major of revenue collection. Out of Rs 524/person/trip for a domestic tourist, Rs 330 are the vehicular charges. In both PAs, the tourism revenue can potentially support the conservation and management of parks after implementing it with caution. Entry fees vary in these PAs, for example; Rs 25 for Indian (adult) nationals, Rs 5 (student) and Rs 200 for international visitors in Keoladeo. In Ranthambore the entry charges for all tourists categories were just double than Keoladeo. In both PAs, during interactions the officials, suggested that the entry fee be enhanced for the foreign tourists, while private stakeholders (guides, drivers, hoteliers, travel agents etc.) suggested that the trend should be reverse for the domestic visitors, as they hesitate to pay the high entry and vehicle fees (Rickshaws in Keoladeo), which forced them to stay away. The forest departments in both PAs are managing the revenue generated from the tourism.

## CONCLUSION

Most studies of nature-based tourism conclude that countries fail to collect the full potential income from such visitors (e.g. Brockelman, 1988). The other side of this issue is the tendency for societies to undervalue the worth of national parks and other protected areas (Valentine, 1989). However, less-wealthy countries are experiencing growth in international tourism (Balmford *et al.* 2009). India, being an emerging economy and an increase in income and economic growth of middle class population along with a vast diversity in opportunities of natural protected areas (national parks, biosphere reserves, wetlands, coral reefs and mangroves etc.) support nature based tourism in protected areas.

The annually analysed tourist data for 02 PAs suggests that both the PAs are witnessed the greater sum of (both domestic & international) tourists. The majorities (avg. 67%) of the tourists in Keoladeo national park were domestic, that proves the increasing interest of Indian tourists and great future for the natural tourism in India. Also the management planning and practices in these areas are good enough to control the mass tourism. However, the concept of carrying capacities in both areas has not yet been scientifically determined and all types of managerial functions are controlling by basic management, sometimes with the help of local people.

However, the large amount of revenue made from the all tourism activities is quite enough to direct for the support of conservation and park management, however, the extra efforts in these PAs are required to implement it with caution. The most of the tourism offering facilities are privately owned and newly developed and approx. 97% of them are within 10 km range of the PA boundaries. The very less portion of the total population around the destinations is engaged with the tourism related activities. Even the National Ecotourism Plan has acknowledged the participation of the local community for the development and sustainability of ecotourism (Macura, *et al.* 2011). The availability of jobs in both PAs is highly seasonal and therefore, the depended income of locals get affected due to seasonal impacts (October to April, peak tourist season in both PAs). Sustainable tourism development in these areas is unlikely to occur unless the management local communities work together to make it happen. Like other PAs, the sustainability of these areas are well depended on the issue of local people involvement in management projects. Therefore, in both areas the extra efforts from management are required to take the support of locals for long run sustainability of these areas.

Wildlife habitat and species around the world are facing a crisis. It is estimated that global warming may cause the extinction of 15–37% of species by 2050 (Hundal, 2004). The corresponding natural area management, increase in tourism development, land use changes and local people interest in study PAs require the attention of government authorities, private stakeholders along with the participation of local communities for the welfare of existing wild species and surrounding inhabitants.

## REFERENCES

- Allcock, A., Jones, B., Lane, S. and Grant, J., (1994), "National Ecotourism Strategy". Canberra, ACT: Commonwealth Department of Tourism.
- Allendorf, T. D. (2007), "Residents' attitudes toward three protected areas in southwestern Nepal", *Biological Conservation* Vol. 16, pp. 2087-2102.
- Balmford, A., Beresford J., Green J., Naidoo R., Walpole M., Manica A. (2009), "A global perspective on trends in nature-based tourism", *Plos Biol* Vol., 7, pp. 1-6.
- Bandyopadhyay, S., Tembo G. (2010), "Household consumption and natural resource management around national parks in Zambia", *J Nat Resour Policy Res*, Vol. 2, pp. 39-55.
- Boora, S.S. (2005), "Ecotourism and Environmental Sustainability in India", *Bulletin of the National Institute of Ecology*, Vol. 15, pp. 249-258.
- Brockelman, W. (1988), Nature conservation, 179-237 in A. Arkhabhirama, D. Phantumvanit, J. Elkington and P. Ingkasuwan, eds, *Thailand natural resources profile*, Oxford University Press, Singapore
- Chape, S., S. Blyth, L. Fish, and M. Spalding (eds.). (2003), *United Nation's list of protected areas*, IUCN, Gland Switzerland and UNEP-WCMC, Cambridge, UK.
- Croall, J. (1995), "Preserve or Destroy: Tourism and the Environment", Calouste Gulbenkian Foundation, London.
- Eagles, Paul F.J. (2002), "Trends in Park Tourism: Economics, Finance and Management", *Journal of sustainable tourism*, Vol. 10, No. 2, pp. 132-153
- Earle, S. (1987), "A sanctuary for birds", *The India Magazine*, Vol. 7, pp. 60-69.
- Fennell, D. A. (1999), "Ecotourism: An Introduction", London: Routledge.
- Frederico Neto. (2003), "A new approach to sustainable tourism development: Moving beyond environmental protection", *Natural Resources Forum*, Vol. 27, pp. 212-222
- Glasson, J., Godfrey, K. B. & Goodey, B. (1995), "Towards Visitors Impacts Management: Visitor Impacts, Carrying Capacity and Management Responses in Europe's Historic Towns and Cities", Avebury: Ashgate Publishing Ltd.
- Heinen, J. T., and R. J. Shrivastava. (2009), "An analysis of conservation attitudes and awareness around Kaziranga National Park, Assam, India: implications for conservation and development", *Population & Environment*, Vol. 30, pp. 261-274.
- Hundal, Swardeep S. (2004), "Wildlife Conservation Strategies and Management in India: An Overview", edited by, T.D. Hooper, *Proceedings of the Species at Risk Pathways to Recovery Conference*, Victoria, B.C. Organizing Committee, Victoria, B.C.
- Infield, M., and A. Namara. (2001), "Community attitudes and behaviour towards conservation: an assessment of a community conservation programme around Lake Mburo National Park, Uganda", *Oryx*, Vol. 35, pp. 48-60.
- IUCN. (1994), "Protected Area Management Categories", Gland, WCPA.
- Karanth Krithi K. & DeFries Ruth. (2010), "Nature-based tourism in Indian protected areas: New challenges for park management", *Conservation Letters* 00 (2010), pp. 1-13
- Keefe, J. (1995), "Water fights", *Tourism in Focus*, Vol. 17, pp. 8-9.
- Kumar Vivay. (2009), "Impact assessment of ecotourism on visitors and villagers in Satpuda National Park, Madhya Pradesh", *Journal of Tropical Forestry*, Vol. 25, No. I & II, pp. 62-65.
- Lopoukhine Nikita (Nik). (2008), "Protected Areas — For Life's Sake", Secretariat of the Convention on Biological Diversity (2008). *Protected Areas in Today's World: Their Values and Benefits for the Welfare of the Planet*. Montreal, Technical Series no. 36, i-vii + 96 pages. Pp. 1-3
- Macura Biljana, Zorondo-Rodríguez Francisco, Grau-Satorras Mar, Demps Kathryn, Laval Marie, Garcia Claude A., and Reyes-García Victoria. (2011), "Local Community Attitudes toward Forests Outside Protected Areas in India: Impact of Legal Awareness, Trust, and Participation", *Ecology and Society*, Vol. 16, No. 3, pp. 10.

23. Mandal Maitreyi. (2003): Protected Area Management in India: A Perspective. Pp. 1-8. <http://www.aseandiversity.info/Abstract/52001719.pdf>. Paper submitted for the XII World Forestry Congress at Quebec, Canada, September 21-28, 2003
24. Mansourian Stephanie, Higgins-Zogib Liza, Dudley Nigel and Stolton Sue Poverty and Protected Areas. (2008), "Protected Areas in Today's World: Their Values and Benefits for the Welfare of the Planet", Secretariat of the Convention on Biological Diversity. Technical Series no. 36, 18-28 pages.
25. National Wildlife Database Cell (NWDC). (May, 2008): List of Existing Wildlife Sanctuary, Viewed on Aug 03, 2010 [http://oldwww.wii.gov.in/nwdc/list\\_existing\\_wlcs.pdf](http://oldwww.wii.gov.in/nwdc/list_existing_wlcs.pdf).
26. Ormsby, A., and B. A. Kaplin. (2005), A framework for understanding community resident perceptions of Masoala National Park, Madagascar. Environmental Conservation, Vol. 32, pp. 156-164. Viewed on Aug 10, 2010 <http://dx.doi.org/10.1017/S0376892905002146>
27. Rodgers, A., Hartley D., Bashir S. (2003), Community approaches to conservation: some comparison of Africa and India. Pages 324–382 in V.K. Saberwal & M. Rangarajan, editors. Battles over nature: science and politics of conservation. Permanent Black, New Delhi.
28. Scherl Lea M. and Emerton Lucy. (2008), "Protected Areas. Contributing to Poverty Reduction, Protected Areas in Today's World: Their Values and Benefits for the Welfare of the Planet, Secretariat of the Convention on Biological Diversity. Technical Series no. 36, 4-17 pages.
29. Shibia, M. G. (2010), "Determinants of attitudes and perceptions on resource use and management of Marsabit National Reserve, Kenya", Journal of Human Ecology, Vol. 30, pp. 55-62.
30. Shukla. U.N & Lone. A.A. (2012), Ecotourism and local communities: impacts and opportunities, Sustainable tourism issues and challenges; Macmillan publishers, Chapter 1, pp. 69-83.
31. Spiteri, A., Nepal S.K. (2008), "Evaluating local benefits from conservation in Nepal's Annapurna Conservation Area", Environ Manage, Vol. 42, pp. 391–401.
32. Tiger Task Force. (2005), "The Report of Tiger Task Force: Joining the Dots", Project Tiger, Union Ministry of Forests, Government of India, New Delhi.
33. Valentine, P.S. (1983), "Conservation burning bright: progress in Indian national parks - the state of Madhya Pradesh", Habitat Australia, Vol. 11, No. 3, pp. 8-11
34. Valentine, P.S. (1989), How much is a park worth: economic and social benefits of nature conservation, Proceedings fourth South Pacific conference on nature conservation and protected areas, Port Vila, Vanuatu, 4-12 September, South Pacific Regional Environment Program, Noumea

**PRODUCTION TREND OF MAJOR AGRICULTURAL CROPS IN BANGLADESH****MD. RASHIDUL HASAN****ASST. PROFESSOR****DEPARTMENT OF AGRIBUSINESS & MARKETING****SHER-E BANGLA AGRICULTURAL UNIVERSITY****DHAKA****M. S. RAHMAN****ASST. PROFESSOR****DEPARTMENT OF MANAGEMENT & FINANCE****SHER-E BANGLA AGRICULTURAL UNIVERSITY****DHAKA****D. C. ACHARJEE****ASST. PROFESSOR****DEPARTMENT OF AGRICULTURAL MARKETING & BUSINESS MANAGEMENT****SYLHET AGRICULTURAL UNIVERSITY****SYLHET****ABSTRACT**

The study use secondary data from Bangladesh Bureau of Statistics to capture the production trend of major crops in Bangladesh during 1990-2010. The findings of the study suggested that except pulses and oilseed production of different crops increased during the period. Positive and significant growth of production achieved during 1990-2010 for most of the crops. Among all the crops highest positive growth rate was achieved by Maize (37.9%). Negative production growth rate was found for different pulses and oilseed. Further steps need to be taken to increase the production all the crops to solve the food shortage problem in the country.

**JEL CLASSIFICATION**

Q110

**KEYWORDS**

Trend analysis, production, growth rate.

**INTRODUCTION**

Agriculture is the most prominent sector in Bangladesh. There are four subsectors in agricultural sector. These are crops and horticulture, animal farming, forest and related services and fishing. The growth rate of crops and horticulture, animal farming, forest and related services and fishing were 15.89, 12.13, 9.09 and 10.04 percent respectively (BBS, 2009). But most of the farmers of Bangladesh are poor. As a result they generally rely on subsistence farming. In a subsistence agrarian economy of Bangladesh, domestic food production has an important role to play in the quest for food security (Begum and luc, 2010). The productivity in the agricultural sector is critically important if agricultural production is to increase at a sufficiently rapid rate to meet escalating demands for food (Hayami and Ruttan, 1985; Mellor, 1976). Major food items in Bangladesh are rice, wheat, pulses, potato, vegetables and fish. These food items contribute almost 85% of the total calorie and protein intake. Rice and wheat alone contribute to 71% and 53% of the total per capita calorie and protein intake respectively (BBS, 2008). Bangladesh has pursued for decades a strategic goal of self-sufficiency in cereal production. Whatever progress been made would be difficult to sustain it due to high vulnerability of climatic shocks and the growing pressure of population on scarce natural resources thus, yet food security has not been achieved. Reducing the food insecurity problem at national level requires that the food production system be efficient. To formulate the policy regarding food production it is essential to know the long term trend of production. Keeping this in view the present study was undertaken to know the long term production trend and growth rate of major agricultural crops in Bangladesh.

**METHODOLOGY**

The study employed time series data on the production of various crop during the period of 1990 to 2010 in Bangladesh. The data were elicited from the various issues of BBS (Bangladesh Bureau of Statistics). In order to gain some perspective on the growth rate of production of major agricultural crops time series data for 20 years were used for a trend analysis.

The compound growth rates of production of different crops were worked out by fitting a semi-log trend equation (1) of the following form:

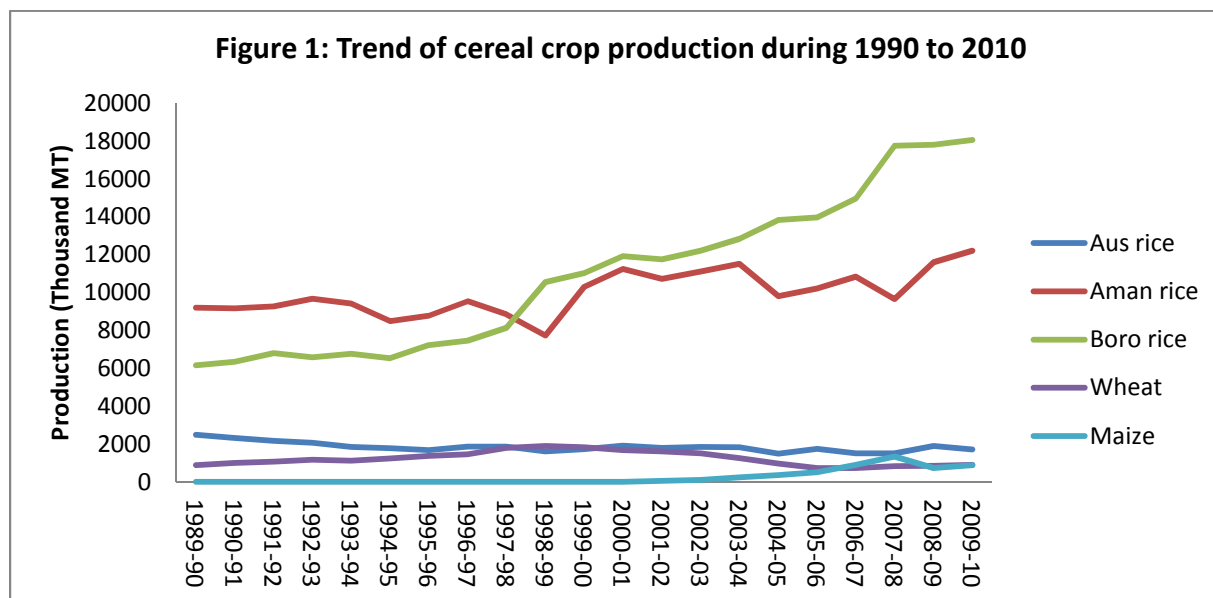
$$y = e^{a+bt} \text{ or } \ln(y) = a + bt \quad [1]$$

Where, Y defines the time series data of production; 't' is the trend term (time) and 'a' is the constant coefficient. The slope coefficient 'b' measures the relative change in Y for a given absolute change in the value of explanatory variable 't'. If we multiply the relative change in Y by 100, we will get percentage change or growth rate in Y for an absolute change in variable 't'.

**RESULT AND DISCUSSION****PRODUCTION OF MAJOR CEREAL CROPS**

Rice, wheat and maize are the major cereal crops in Bangladesh. Because of population and income growth, the demand for cereal foods (especially for rice) is expected to rise by over 1.5% per annum for the next few decades (Hossain *et al.*, 2009). Rice is the main food item in Bangladesh. It is evident from the figure 1 that production of aman and boro rice was increasing year by year while the production of aus rice decreased from 2487 thousand MT to 1709 thousand MT during the study period. The production of wheat was also declined during 1990-2010. Growth rate of wheat production was found to be negative. Among the cereal crops the highest and the most impressive growth occurred in the production of maize due to high yielding varieties and rapid expansion of poultry industries in the country. Aman and boro rice were also registered positive and significant growth rate during 1990-2010 (Table 1).





Source: Various issues of BBS

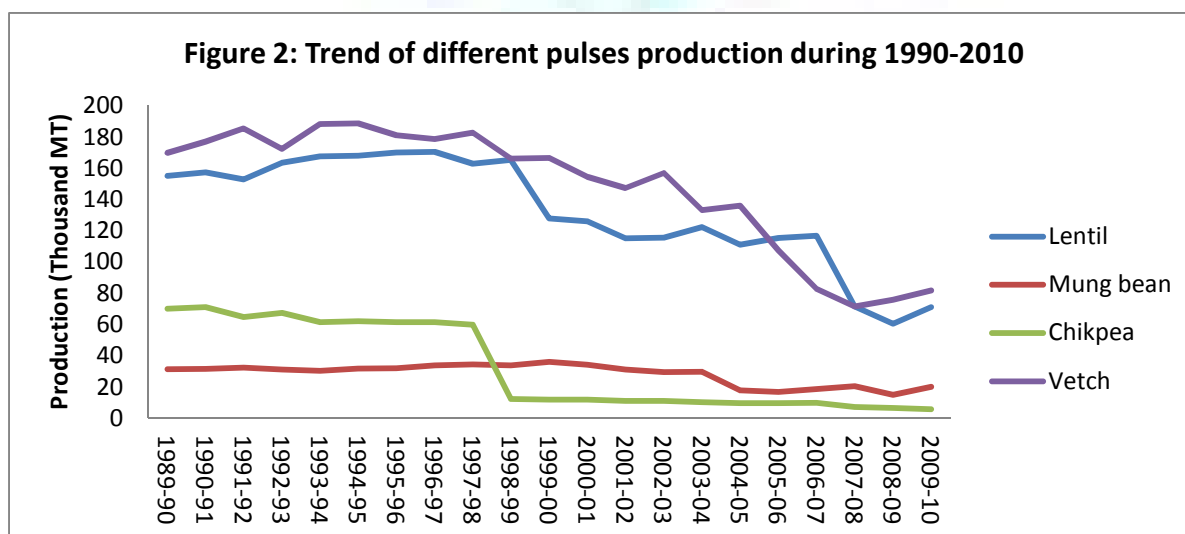
TABLE 1: GROWTH RATE OF PRODUCTION OF DIFFERENT CROPS DURING 1990 TO 2010

Crops name	Growth rate (%)	Crops name	Growth rate (%)
Aus rice	-1.7***	Ginger	2.8**
Aman rice	1.1***	Turmeric	5.9***
Boro rice	6.0***	Pointed gourd	7.6***
Wheat	-1.2 <sup>ns</sup>	Cauliflower	4.5***
Maize	37.9***	Cabbage	5.8***
Lentil	-4.0***	Tomato	3.37***
Mungbean	-3.1***	Brinjal	4.6***
Chikpea	-15.1***	Okra	6.6***
Vetch	-4.5***	Bitter gourd	3.9***
Mustard	-0.8**	Banana	2.1***
Sesame	-3.34***	Pine apple	2.6***
Ground nut	0.01 <sup>ns</sup>	Guava	1.12***
Onion	10.2***	Mango	7.35***
Garlic	7.4***	Jackfruit	2.58***
Chilli	7.2***	--	--

Note : '\*\*\*' and '\*\*' indicate significant at 1% and 5% level respectively, ns = Not significant

#### PRODUCTION OF DIFFERENT PULSES

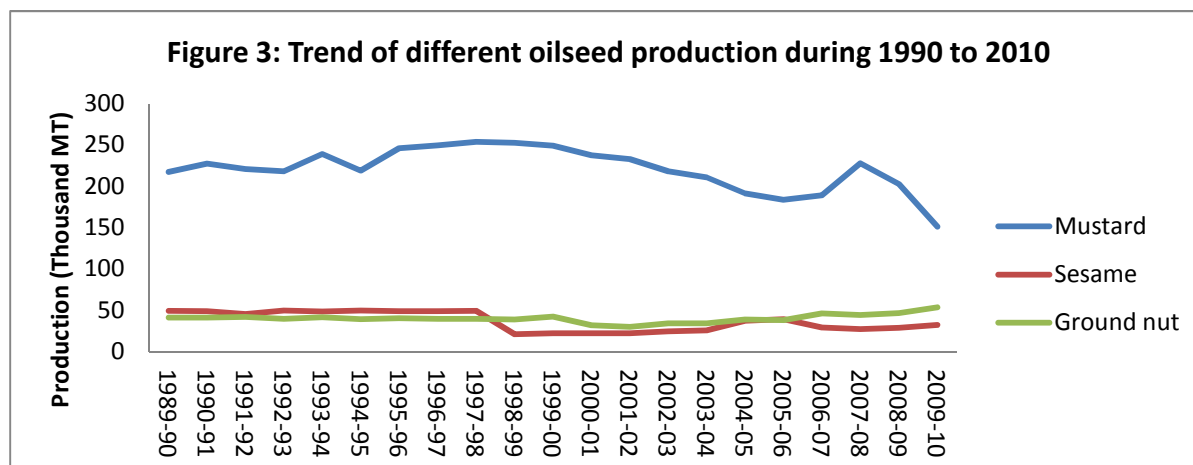
Pulses are the major sources of protein. There are different types of pulses are grown in Bangladesh. It is evident from the figure 2 that production of different pulses was continued decreased from year to year. The production of chickpea was decreased from more than 70 thousand MT to only 5.74 thousand MT in 2010. Similar type of scenario is observed for other types of pulses. Despite the adoption of improved technology of pulses, the production registered negative growth rates during 1990-2010 in Bangladesh (Table 1). This may be due for an uphill battle in terms of profitability over the same period and as such its land coverage continuously fell.



Source: Various issues of BBS

**PRODUCTION OF DIFFERENT OILSEEDS**

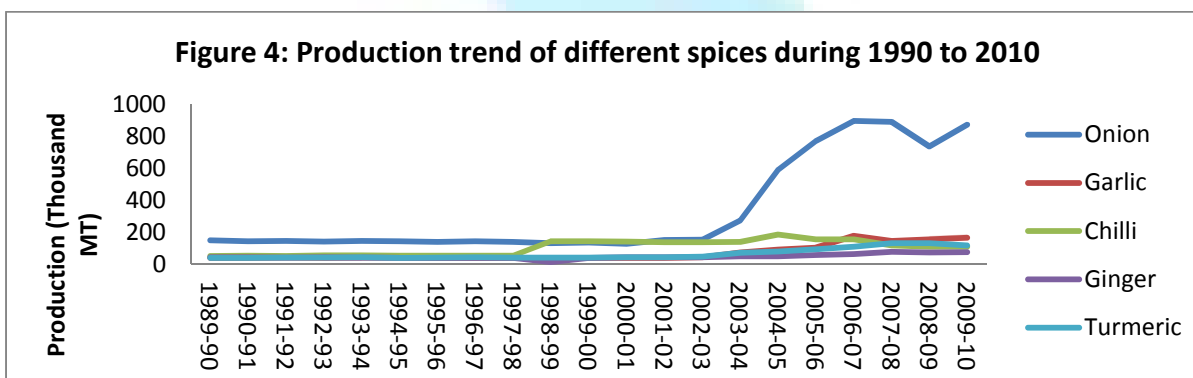
Different oilseeds like mustard, groundnut etc. are grown in Bangladesh although the production of all the oilseeds is decreasing over the period. It is revealed from the following figure that the production of mustard was decreased over the period from about 217 thousand MT to 151 thousand MT. Production of sesame decreased from 49 thousand MT to 32 thousand MT during 1990 to 2010. On the other hand production of groundnut increased to some extent during 1990 to 2010. Growth rate of mustard and sesame was found to be negative while the growth rate of ground nut was positive but not significant.



Source: Various issues of BBS

**PRODUCTION OF DIFFERENT SPICES**

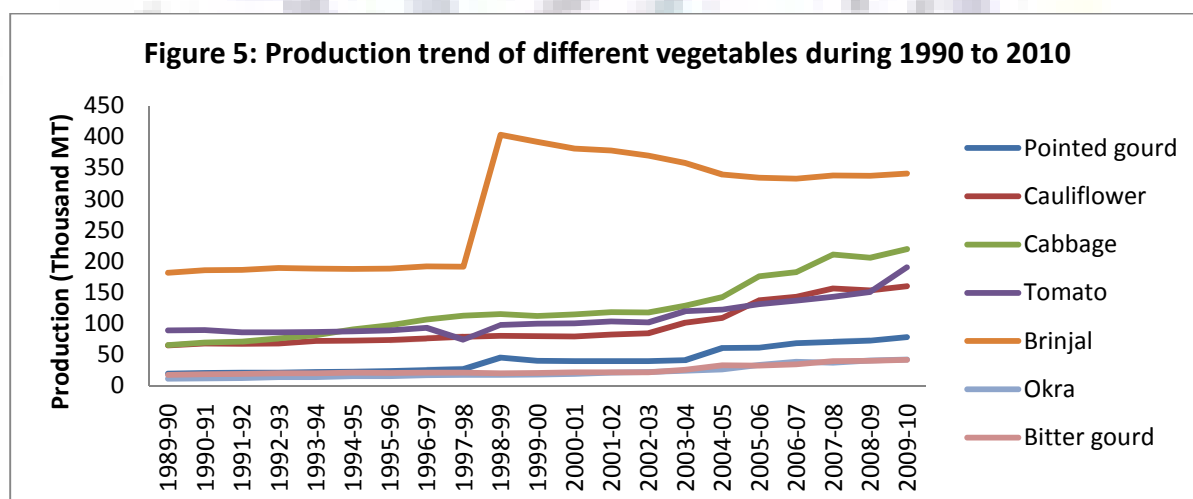
Bangladesh produces different types of spices. It is revealed from the figure 4 that the production of onion was more or less static up to 2002-2003, after that the production was jumped to more than double due to more area coverage and adoption of high yielding varieties. The production of chilies was almost doubled during 1990-2010. The production of garlic was 39 thousand MT in the year 1990 and it was increased up to 164 thousand MT in 2010. Production of other spices also increased from 1990 to 2010. Bangladesh achieved a steady growth in production of all types of spices crops. The highest growth rates were observed for onion followed by garlic and chili (Table 1). This may be due to fiscal incentives government gave to spice producers through concessional credit scheme.



Source: Various issues of BBS

**PRODUCTION TREND OF DIFFERENT VEGETABLES**

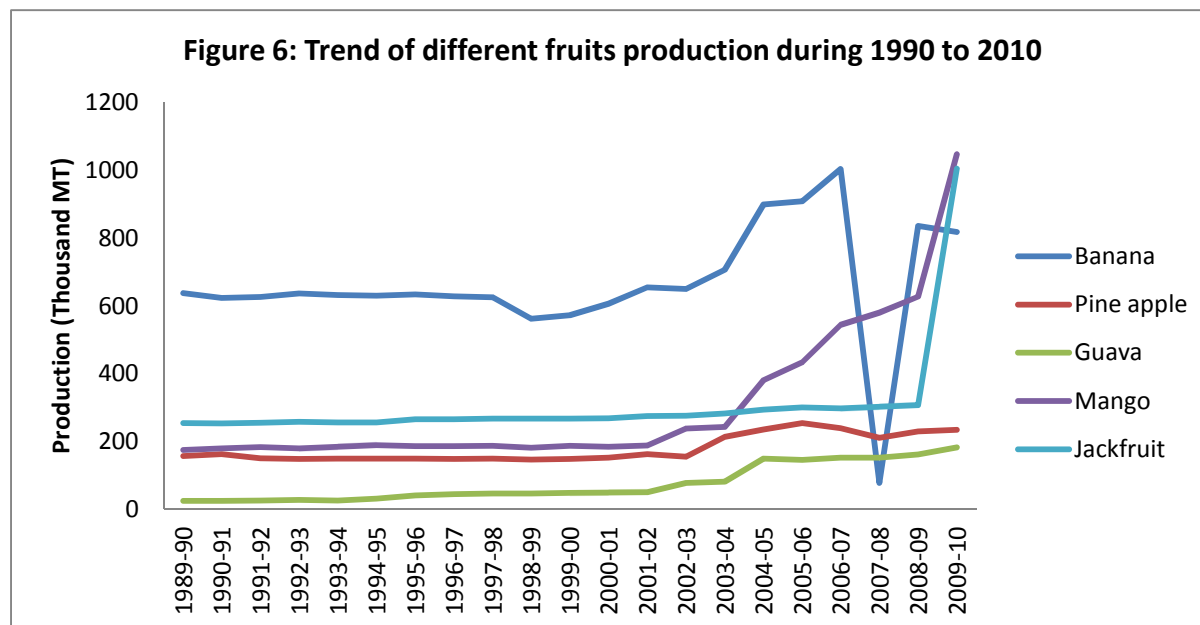
Different types of vegetables are grown in Bangladesh during winter and summer season. Among the vegetables brinjal, cabbage, tomato and cauliflower are the major. Bangladesh has high potential for export vegetables (Hoq *et al.*, 2012). Most vegetables are considered as high value crops in Bangladesh. A plenty of vegetables are exported every year to UK, Europe and Middle East countries for ethnic people. It is clear from the following figure that production of all the major vegetables are increased during 1990 to 2010. Production of brinjal was increased from 181 thousand MT to 341 thousand MT during 1990 to 2010. Production of all other major vegetables also increased up to 2/3 times from 1990 to 2010. Table 1 reveals that the production of major vegetables namely brinjal, cauliflower, cabbage, okra, bitter gourd, tomato and pointed gourd registered highly positive growth rates during 1990-2010.



Source: Various issues of BBS

**PRODUCTION OF DIFFERENT FRUITS**

The land of Bangladesh is suitable for growing different fruits. Banana, mango, pineapple, jackfruit and guava are the major fruits of Bangladesh. Among the different fruits banana is grown all the year round while the other fruits are seasonal. Growth rate of banana production is significantly positive during 1990-2010. Production of banana increased from 637 thousand MT to 818 thousand MT from 1990 to 2010. Production of mango was 187 thousand MT in 2002 and it was increased up to 828 thousand MT in 2009. Growth rate of all the major fruits registered positive and significant growth during 1990-2010. Among all the fruits mango registered highest 7.35% growth in production followed by pineapple (2.60%).



Source: Various issues of BBS

**CONCLUSION**

The study found that different type of cereals and non cereals crops are grown in Bangladesh. Trend analysis suggested that except pulses and few other crops production of all the crops are increasing over the period. This may be due to adoption of HYV varieties and better crop management technologies. Production of pulses decreases over the period due to poor adoption of high yielding varieties. Steps need to be taken to increase the production of pulses and other crops further more to solve the problem of food shortage in the country. Government may introduce credit schemes to support the poor farmers to grow different types of crops.

**REFERENCES**

1. BBS. (2008), "Statistical year book of Bangladesh". Statistical Division, Ministry of planning, Government of the Peoples Republic of Bangladesh, Dhaka.
2. BBS. (2009), "Statistical year book of Bangladesh". Statistical Division, Ministry of planning, Government of the Peoples Republic of Bangladesh, Dhaka.
3. BBS. (2010), "Statistical year book of Bangladesh". Statistical Division, Ministry of planning, Government of the Peoples Republic of Bangladesh, Dhaka.
4. Begum, M. E. A. and Luc D'Haese. (2010), "Supply and demand situations for major crops and food items in Bangladesh". J. Bangladesh Agril. Univ., Vol. 8, No 1, pp. 91-102.
5. Hayami, Y., and Ruttan, V.W. (1985), "Agricultural development: an international perspective". Revised edition, Baltimore and London: The Johns Hopkins University Press.
6. Hoq, M.S., S. K. Raha and N. Sultana. (2012), "Value addition in vegetables production, processing and export from Bangladesh", Bangladesh J. Agril. Res. Vol. 37, No 3, pp. 377-388.
7. Hossain, M., M. Asaduzzaman, M. A. S. Mandal, U, K, Deb and S. Jones. (2009), "Rice technologies: Strategic choices and policy options", BIDS policy brief prepared for the national conference on "Market volatility, vulnerability and food security: strategic issues and policy options" organized by BIDS and DFID, Dhaka.
8. Mellor, J.W. (1976). The New Economics of Growth, Ithaca, NY: Cornell University Press.

**APPRAISAL OF SOCIAL MEDIA AS A STRATEGIC MARKETING TOOL**

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**ABSTRACT**

*In this technology driven era, marketers understand that they need to keep pace with changes taking place or risk being outdated. Social media as a marketing tool is garnering huge attention. In the present scenario it is not possible to devise a marketing strategy without including social networks. Social media has become an essential element in marketing mix in general and promotion mix in particular. It has made it possible for one person to communicate with thousands of other people about the products or services that are available in the market and the companies that are providing it. Social media has magnified consumer to consumer communication in the marketplace. Companies have realised that a properly executed social media marketing campaign can take a company to new heights.*

**KEYWORDS**

Promotion mix, social media, social media marketing.

**INTRODUCTION**

Organisations use integrated marketing communication as a means of communicating with their target market. Integrated marketing communication is an approach used by organisations to achieve their marketing campaign objectives through a well coordinated use of different promotional methods- advertising, personal selling, public relations, publicity, direct marketing, and sales promotion -that are intended to reinforce each other. It leads to a unified customer focused message. However, the methods used to communicate with the customers have undergone a significant change with the rise of social media which can be more appropriately referred to as consumer generated media

Social media is now an integral part of the lives of millions of people by allowing them to connect and communicate with others online. Over the last decade social media forums have grown exponentially. These forums offer marketers inexpensive ways to create and execute marketing campaigns.

**DEFINITION OF SOCIAL MEDIA**

The meaning of the term social media can be derived from the words social which means interaction amongst individuals in a community or group and media which means communication of information or ideas through various channels. Taken together social media refers to a platform for communication which is generated and sustained by interactions among individuals through a specific medium.

Social media is creating sharing and exchanging of ideas information experiences and perspectives among people in virtual communities. Andreas Kaplan and Michael Haenlein define social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content."<sup>[1]</sup>

The Universal McCann report (2008) refers to social media as "online applications, platforms and media which aim to facilitate interaction, collaboration, and the sharing of content".<sup>[2]</sup> In simple words social media enables people with no knowledge of coding to post unique content and share it with the world immediately.

Social media is a broad term which can encompass a wide range of forms such as social networking websites (Facebook, Google plus), video sharing sites (YouTube), photo sharing sites (Instagram, Flickr), business networking sites (LinkedIn), micro-blogging sites (Twitter), company sponsored websites/blogs (P&G's Vocalpoint), social bookmarking sites (Reddit)

**SOCIAL MEDIA'S ROLE IN THE PROMOTION MIX**

Recent years have seen a remarkable increase in the growth and popularity of social media networks. A significant number of people with access to internet participate actively on social networks. According to a new eMarketer report, Worldwide Social Network Users: 2013 Forecast and Comparative Estimates, "the number of social network users in India is expected to cross 100 million users and reach more than 127 million users by end of 2013. The total number of social media users will more than double and reach close to 283 million users by 2017."<sup>[3]</sup>

For businesses social media is an opportunity that transcends the traditional middlemen and helps them connect directly with customers. This is the reason why nearly every business from giants like Starbucks and IBM to the local boutiques are exploring social media marketing. According to Constant Contact's 2011 Small Business Attitudes & outlook survey, 73% of small businesses and organisations have started using social media marketing and 62% of those not using it expect to start marketing through social media within the next 12 months.<sup>[4]</sup> Just like email and websites first empowered businesses, social media is the next marketing wave.

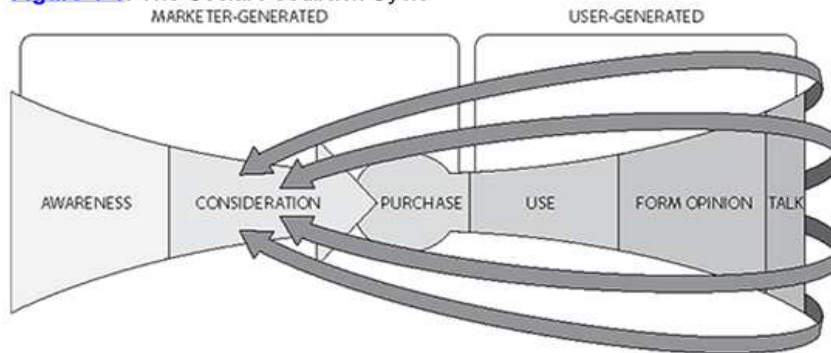
Social media has become synonymous with business marketing. Social media performs two interrelated functions in the marketplace. Firstly, it facilitates interaction between the company and its prospective customers. Social media platforms such as blogs, Facebook, Twitter are used by companies to interact with the customers. It enables the companies to reach a wider consumer base at a very less cost. Social media tools can be used to promote online conversations and create buzz about the company's products or services as a result creating an easily recognizable brand name. It can also be effectively used by companies to understand the needs of the consumer. They can get instant feedback from the consumers about the product and modifications can be made therein. According to CompTIA's social business-trends and opportunity study, 61 % of the respondents feel that social media leads to better communication with the consumers.<sup>[5]</sup> Secondly, social media facilitates interaction of consumers with one another. It is an extension of traditional word of mouth communication but the magnitude with which it is done has amplified. Before the existence of social media an unsatisfied customer could tell ten people but with social media the consumer has the means to tell ten million people in a matter of minutes.

Consumers around the world have adopted new digital technologies and have incorporated it in their day to day life. They are no longer passive recipients of pushed information and are not satisfied with advertising and promotional information as the primary source of learning about new product and services rather



they have become informed participants in the buying process. Social media plays a major role in influencing consumers buying decision in the marketplace. It has an effect on the awareness level of the consumers, acquisition of information by the consumers, their opinions, attitudes and beliefs and also on their purchase and post purchase behaviour communication and evaluation. They want to use social media to share amongst themselves their personal experiences about products, services and brands to provide a more "real" view of their buying experience.

**Figure 1-1: The Social Feedback Cycle**



[6]

The figure shows the classic purchase funnel. The expectation to trial to sharing the actual experience is now a part of every purchase process. People are turning to people like themselves for the information they need to make better purchase decisions.

According to a study on social media usage by The Nielsen Company and AbsolutData, nearly 40 million Indians are using online reviews to inform purchase decisions— 67 percent of Indians who are on the web use online reviews to help them make purchases. Adrian Terron, Vice President, Global communications and Marketing - India Region, The Nielsen Company says, "For the estimated 30 million online Indians who use social media, 78 per cent spend more than 15 minutes during each occasion. The activities performed also cover a wide spectrum that goes beyond status updates, sharing content and being in touch with family and friends, into a host of activities that fulfil other purposes like entertainment, discussions on products and services with other like-minded consumers"<sup>[7]</sup>

### REASONS CONSUMERS HAVE ADOPTED SOCIAL MEDIA

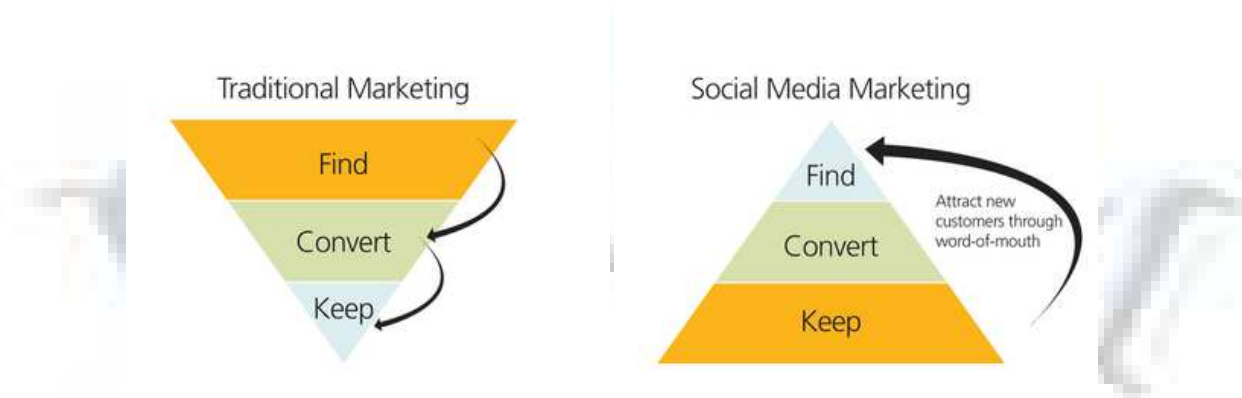
Human beings are social creatures. They have an innate desire to interact and connect with other individuals and belong to a community. It is this desire that has led to the emergence of online forums, blogs, and chat rooms and is the most essential reason that consumers have adopted social media.

Social media has empowered consumers to share and collaborate more effectively and efficiently. Firefox browser is a notable example of a project that has been developed and managed by online communities.

Moreover, there has been a shift of power from the corporate organisations to consumers. Quirky (<http://www.quirky.com>), founded by Ben Kaufman, is an online crowd sourcing company that uses the talent of online consumers to contribute content. The company brings products to the marketplace through interaction between the online global community and Quirky's product design staff. Any person can become an inventor by submitting their ideas. Once an idea is submitted other members of the Quirky community evaluate it and choose their favourites which are eventually designed, manufactured and sold by the company. Inventors who submit ideas that are then created and people who contribute to those ideas share in royalties based on product sales. This approach has worked for the company as the company has been able to raise \$79 million in Series D funding from GE as well as its venture investors Andreessen Horowitz, Norwest Venture Partners, RRE and Kleiner Perkins Caufield & Byers.<sup>[8]</sup>

It is important for companies to understand that consumers are using each other to decide what they should buy, when they should buy it, how they should buy it and from whom they should buy it. This phenomenon is known as groundswell, a social trend in which people use technologies to get the things they need from each other, rather than from traditional institutions like corporations

### TRADITIONAL MARKETING V/S SOCIAL MEDIA MARKETING



Traditionally the aim of marketing was to use the resources that the organisation had in finding new prospects and converting them into customers. Retaining existing customers was at the bottom of the funnel. In the past, the best a company could do after turning a prospect into a customer was to provide superior customer service and hope for these consumers to come back and buy more of the company's product. But social media has changed the game. Social media marketing lays importance on existing customers and reminds them to come back and make a purchase. Word of mouth promotion becomes possible with simultaneously thousands of people by just clicking the like, share and tweet button.

**DRAWBACKS OF SOCIAL MEDIA**

With low entry barriers and numerous tools to utilize, social media offers huge opportunities for organisations to reach customers and create brand awareness. However as a marketing tool it is not entirely risk free.

Organisations followers on the social media platforms are free to post their comments on these platforms which might expose the organisation to negative publicity. Unsatisfied customers or competitors from the same industry are able to post unfavourable or offensive pictures, posts or videos. The organisation also cannot ignore negative feedback.

Hackers also pose threat to business organisations. They may take over a company's page or feed and share forged information which can go viral quickly. Business organisations need to manage the social media platforms efficiently so as to respond immediately and neutralize harmful posts.

**CONCLUSION**

In the recent decade social media has gained huge attention. Due to its easy way of use, speed and reach, social media became the trendsetter in topics that range from environment to politics and technology.

The transition to social media is a n opportunity for marketers to create impactful personalised and relevant marketing messages that are not just effective but more cost efficient and scalable. However, social media should not be seen as a replacement of other promotion mix elements like advertising in a newspaper or on television, attending networking events, or sending direct mail. For a marketing strategy to be effective social media platforms have to be combined with other promotion mix elements.

**REFERENCES**

1. Wikipedia, viewed on 5<sup>th</sup> January 2014 [http://en.wikipedia.org/wiki/Social\\_media](http://en.wikipedia.org/wiki/Social_media)
2. Perdue, D.J (2010), "Social Media Marketing: Gaining a Competitive Advantage by Reaching the Masses", viewed on 12<sup>th</sup> January, 2014 <http://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=1135&context=honors>
3. Social Network Users Statistics India 2013 till 2017 – Maturing growth next five years, viewed on 7<sup>th</sup> January, 2014 <http://socialmediacases.blogspot.in/2013/07/social-network-users-statistics-india.html>
4. Why Social Media Marketing?, viewed on 7<sup>th</sup> January, 2014 [http://www.socialquickstarter.com/content/1-why\\_social\\_media\\_marketing](http://www.socialquickstarter.com/content/1-why_social_media_marketing)
5. Five benefits of Social Media Marketing, viewed on 8<sup>th</sup> January, 2014 <http://revmediamarketing.com/five-benefits-of-social-media-marketing/>
6. Evans, Dave., Mckee, Jake., "Social Media Marketing-the new generation of business engagement." Wiley Publishing, Inc, chapter 1
7. Banka, Dipali (2011): "All about the Social Bandwagon", viewed on 10<sup>th</sup> January, [http://imrbint.com/downloads/Impact\\_feature.pdf](http://imrbint.com/downloads/Impact_feature.pdf)
8. Gannes, Liz (2013): " Quirky raises \$79 M, including \$30 M from GE to make connected home gadgets" viewed on 12<sup>th</sup> January <http://allthingsd.com/20131113/quirky-funding/>
9. Mangold, Glynn. W., Faulds, J. David., (2009), "Social media: the new hybrid element of the promotion mix", Business Horizons, Volume 52, Issue 4
10. Neti, Sisira (2011), "Social media and its role in Marketing", International Journal of enterprise computing and Business Systems, Volume 1, Issue 2

**A BRIEF ANALYSIS OF INDIA-JAPAN BILATERAL TRADE: A TRADE INTENSITY APPROACH****P. SUNDAR RAJ****ASST. PROFESSOR****ECONOMICS WING****DDE****ANNAMALAI UNIVERSITY****ANNAMALAINAGAR****DR. B. AMBROSE****ASST. PROFESSOR****ECONOMICS WING****DDE****ANNAMALAI UNIVERSITY****ANNAMALAINAGAR****ABSTRACT**

*Bilateral trade between India and Japan have maintained over a period of time. But the volume of trade between them is at a low level, relative to the size of their economies. This paper is an attempt to measure strength and nature of bilateral trading relationship between India and Japan. Several statistical indices can be used to measure trade relations between two nations. This paper has used one such index such as trade intensity. Trade intensity indices have been calculated for the period from 2001 to 2011. Both countries' bilateral trade relationship described in terms of intensity indices helps to identify how intensively the countries are trading with each other. Thus, this study found that intensity between two countries is low. However, from the analysis made it is obvious that both countries have much trade potential to reap between them.*

**KEYWORDS**

bilateral trade, trade intensity approach.

**INTRODUCTION**

India and Japan have maintained diplomatic relations and enjoyed cordial relations based on trade and economic and technical cooperation. After the World War II, the focus of Japan's economic relations with India switched from the prewar import of cotton to the import of iron ore. Relations developed steadily as Japan's trade increased with India. Moreover, India and Japan have traditionally enjoyed cordial and friendly relations and the feelings of Indian people towards Japan have been good. Hence the author has shown interest in studying the bilateral trade intensity between these two countries.

**A BRIEF NOTE ON BILATERAL TRADE BETWEEN INDIA - JAPAN**

The proliferation of free trade agreements (FTAs) has been a key trend in the global trade community since the early 1990s. As of 31 July 2010, 474 Regional Trade Agreements (RTAs) <sup>1</sup> have been notified to the World Trade Organization (WTO) and 283 agreements were in force. FTA is the single most important form of RTA. <sup>2</sup> Recently, there has been active persuasion by both India and Japan to conclude free trade agreement between them. Though Japan has been always a promoter of multilateral agreements, of late due to the emergence of different FTAs initiated by the United States, Japan has felt an acute need for its own treaty with different countries to protect its market share in world trade. India, in the process of increasing its market share has been also keen in making FTAs within the Asian region.

According to Barro et al, Economic growth take place when "liberalization of trade through policy induced measures by reducing and then eliminating tariff and non-tariff barriers promotes efficiency of allocation of resources to productive uses, exploitation of scale economies, encourages competition, increases factor productivity and increases trade flows, thereby, promoting economic growth". <sup>3</sup> However, reality seems to be different from theoretical predictions. "In spite of instituting various measures of trade liberalization in many countries, still there remain some country-specific barriers, which impede the growth of world trade." <sup>4</sup> Elizondo and Krugman is of the view that trade flows are adversely affected when infrastructure development are concentrated on only some developed pockets of the country. <sup>5</sup> Further, large government size, <sup>6</sup> weak and inefficient institutions in home country <sup>7</sup> and political lobbying <sup>8</sup> have been identified to constraint trade flows between countries. Based on the above the author tends to believe that decreasing tariff may promote trade between the countries. On this idea the author has made a hypothesis that as tariff decreases, trade intensity tend to increase between India and Japan.

**METHODOLOGY**

This study analyzes the trade relation between India and Japan. Data was collected from UN COMTRADE statistics database for the period from 2001 to 2011. The simple technique called trade intensity index developed by K. Kojima <sup>9</sup> has been used. This trade intensity index has been used to measure the share of one country's trade with other country as a proportion of the latter's share of world trade.

**Trade Intensity:** We can think of the trade intensity index as a uniform export share. In other words, the statistic tells us whether or not a region exports more (as a percentage) to a given destination than the world does on average. It is interpreted in much the same way as an export share. It does not suffer from any 'size' bias, so we can compare the statistic across regions, and over time when exports are growing rapidly.

**Definition:** The trade intensity statistic is the ratio of two export shares. The numerator is the share of the destination of interest in the exports of the region under study. The denominator is the share of the destination of interest in the exports of the world as a whole.

**Range of values:** The value of Trade intensity index ranges from 0 to 1 (0 to 100 when multiplied with 100). If the value is 0, it implies no trade relationship between partner countries. On the other hand, if the value is 1 indicates high trade relations. If import intensity index is more (or less) than 100, it indicates that country India is importing more (or less) from country Japan than might be expected from that country's share in total world trade. In export too, if the value is 0 it implies export link between these two countries is negligible and if the value is nearer to 100 that indicates that performance is significant and if it exceeds 100 it indicates that India is exporting more to country Japan than might be expected from that country's share in world trade.

**Limitations:** The limitation of the study is that the trade intensity indices have limited application for measuring bilateral potential trade between nations.

**MATHEMATICAL DEFINITION**

The Export intensity index between India with respect to Japan ( $XI_{ij}$ ) is shown as follows:

$$XI_{ij} = [X_{ij} / X_i] / [M_j / (M_w - M_i)] * 100 \dots \dots \dots (1)$$

Where:

$XII_{ijt}$  = Export intensity index of trade of India with Japan:

$X_{ij}$  = Exports of India to Japan.

$X_i$  = Total Exports of India.

$M_j$  = Total Imports of Japan.

$M_w$  = Total World Imports.

$M_i$  = Total Imports of India.

$t$  = 2001 to 2011.

Import intensity index ( $MI_{ijt}$ ) can also be measured in the similar way:

$$MI_{ijt} = [M_{ji} / M_i] / [X_j / (X_w - X_i)] * 100 \dots \dots \dots (2)$$

Where:

$MI_{ijt}$  = Import intensity index of trade of India with Japan:

$M_{ji}$  = Imports of India from Japan.

$M_i$  = Total Imports of India.

$X_j$  = Total Exports of Japan.

$X_w$  = Total World Exports.

$X_i$  = Total Exports of India.

$t$  = 2001 to 2011.

The Export Intensity index between Japan with respect to India ( $XII_{jit}$ ) is shown as follows:

$$XII_{jit} = [X_{ji} / X_j] / [M_i / (M_w - M_j)] * 100 \dots \dots \dots (3)$$

Where:

$XII_{jit}$  = Export intensity index of trade Japan with India.

$X_{ji}$  = Exports of Japan to India.

$X_j$  = Total Exports of Japan.

$M_i$  = Total Imports of India.

$M_w$  = Total World imports.

$M_j$  = Total Imports of Japan.

$t$  = 2001 to 2011.

Import intensity index ( $MI_{jit}$ ) can also be measured in the similar way:

$$MI_{jit} = [M_{ji} / M_j] / [X_i / (X_w - X_j)] * 100 \dots \dots \dots (4)$$

Where:

$MI_{jit}$  = Import intensity index of trade of Japan with India.

$M_{ji}$  = Imports of Japan to India.

$M_j$  = Total Imports of Japan.

$X_i$  = Total Exports of India.

$X_w$  = Total World Exports.

$X_j$  = Total Exports of Japan.

$t$  = 2001 to 2011.

In this analysis, if the intensities between two countries are well below 100, the author believes that the two countries have much trade potential to reap between them. Bilateral trade relationships between India and Japan, which is described in terms of import and export intensity indices, helps to identify how intensively the countries are trading with each other.

## RESULT AND CONCLUSION OF THE STUDY

The trends of export intensities and import intensities of both India and Japan are shown in Table 1. Export and import intensities of both India and Japan have declined over the years. India's export intensity with respect to Japan has declined significantly over the years, which may be seen from the fact that export index has declined from 63.38 during 2001 to 38.76 during 2011. One can conclude from such a declining trend that India has not diversified its export basket over the years to Japanese market, and it basically exported the same items, whose demands have been declining over the years. This shows that India's commodity concentration in export is more than in its import from Japan. In the import front also, trade intensity index has been maintained in a steady manner. During 2001, import intensity index was 53.15, which has been maintained throughout the study period except for the year 2005 and 2010. However, import intensity index is much less noticeable compared to the downslide in export intensity index. Steady trend in imports may be credited to the fact that India is also a major importer of goods from Japan, and its importance has been growing in recent years (major imports include machinery, plant-related products, transport equipment, and electronic machinery). India's import intensity has declined during 2005, further this index show ups and downs. It indicates that India's import intensity has not drastically declined continuously from 2005 to 2011.

Japan's export intensity index with respect to India was 52.17 during 2001, which marginally declined to 51.51 during 2011. On the other hand, its import index was 57.17 during 2001 that too radically declined to 37.25 during 2011. These figures clearly indicate that Japan's imports from India have declined much more than its exports to India.

TABLE 1: TRADE INTENSITY INDEX BETWEEN INDIA AND JAPAN, 2001-2011

Year	$XII_{ijt}$	$MI_{ijt}$	$XII_{jit}$	$MI_{jit}$
2001	63.38	53.15	52.17	57.85
2002	69.02	56.93	55.88	63.43
2003	57.02	50.58	49.68	52.57
2004	49.83	47.74	47.41	45.64
2005	49.81	45.16	44.45	46.45
2006	48.31	49.07	48.12	45.53
2007	49.83	51.18	50.26	47.22
2008	42.02	49.88	49.32	39.75
2009	40.62	52.53	52.05	38.71
2010	47.14	45.5	44.88	44.96
2011	38.76	52.16	51.51	37.25

Source: Author's Estimation.

$XII_{ijt}$  = India's Export Intensity Index with respect to Japan;  $MI_{ijt}$  = India's Import Intensity Index with respect to Japan;  $XII_{jit}$  = Japan's Export Index with respect to India;  $MI_{jit}$  = Japan's Import Intensity Index with respect to India;  $i$  = India;  $j$  = Japan;  $t$  = 2001 to 2011.

This may be due to the fact that Japan's import items from India are basically composed of primary and intermediary goods (i.e., Traditionally, Japan has been the second largest destination of Indian exports - such as gems, marine products, iron ore, and cotton yarn), whose demands are inelastic compared to its exports items to India. Japan's both import and export intensities are well below 100, which imply that it is trading much less with India than might be expected



from Japan's share in world trade. This implies Japan has much potential to increase its trade with India. In this study the author concludes that the overall trade intensity whether its export (or) import, the intensity has declined over the period of study. However, the author feels that both India and Japan do have substantial potential to increase their trade between them.

## REFERENCES

1. World Trade Organisation, "Trade in a globalized World", World Trade Report, 2008
2. World Trade Organization, RTA Gateway, 2011
3. Barro, R., and Sala-i-Martin, X. 1995. Economic Growth. New York: McGraw-Hill
4. Kalirajan, K. 1999, Stochastic Varying Coefficients Gravity Model: An Application in Trade Analysis. Journal of Applied Statistics, 26: 185–194
5. Elizondom, R.L., and Krugman, P. 1992. 'Trade Policy and Third World Metropolis'. NBER Working paper No. 4238. Washington, DC: National Bureau of economic Research.
6. Rodrik, D., 1998. "Why Do More Open Countries Have Large Governments?" Journal of Political Economy 106 (5): 758–879
7. Wilson, J.S., Mann, C.L., and Otsuki, T. 2004. "The Potential Benefit of Trade Facilitation : A Global Perspective". World Bank Policy Research Working Paper 3224, February. Washington, DC: The World Bank
8. Gawande, K., and Krishna, P. 2001. The Political Economy of Trade Policy: Empirical Approaches. Working papers, Economics Department. Providence, RI: Brown University.
9. Kojima, K. (1964), "The Pattern of International Trade among Advanced Countries", Hitotsuboshi Journal of Economics, Vol.5(1) June. UN Comtrade statistics database.

## ANNEXURE

**TABLE2: BILATERAL TRADE BETWEEN INDIA AND JAPAN (Unit: US Dollar thousand)**

year	India's export to Japan	Japan's import from World	India's export to world	India's import from Japan	Japan's export to world	India's import from world	World export	World import
2001	1551244	349300362	43878489	1788176	403363609	50671106	6118895777	6312854542
2002	1786977	337608873	50097958	2139663	416715260	57453469	6419966502	6589876543
2003	1709802	383451985	59360659	2333143	471995905	72430524	7470780287	7663653043
2004	1847648	455253850	75904200	2962042	565761077	98981129	9101232948	9417813893
2005	2455239	515866388	100352637	3678528	594940866	140861667	10389054464	10642419338
2006	2804220	579063945	121200606	4743469	646725059	178212440	12042919050	12270185808
2007	3263389	622243336	145898053	5832826	714327036	218645294	13849310780	14080126378
2008	3624209	762533921	181860898	7784411	781412163	315712106	15989372712	16393518947
2009	3215709	551984751	176765036	6688836	580718734	266401553	12327153144	12591039320
2010	4805077	692620567	220408496	8265086	769839386	350029387	15055401572	15325394862
2011	5592608	855380474	301483250	11218263	823183759	462402791	17999547615	18333981514

Sources: ITC calculations based on UN COMTRADE statistics.

**TALENT MANAGEMENT AS A NEVER-ENDING WAR FOR TALENT: AN ANALYSIS**

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**ABSTRACT**

Human capital is a precious and scarce resource and management of it is considered as a tough and crucial job for Human Resource Personnel. Nowadays the organizational environment has become global, complex, dynamic, highly competitive and extremely volatile and due to these factors long run survival of corporate entities became difficult. To overcome such problems, the enterprises have to adopt sound personnel policies and strategies for the smooth operation of the organization as talented employee occupies a key role in the achievement of organizational goals. The organizations have to be global and systematic in managing their human capital with a hope of gaining and sustaining a competitive advantage in future. Globally the Human Resource Professionals recognized the importance of efficient and effective talent management practices for sound and healthy operation of an organization and making more investment into talent development initiatives which currently is a challenge. By considering the human capital as an important component for the Nation's growth, the Indian Government has placed utmost importance for talent management prospects. Talent Management in organizations is not just limited to attracting the best people from the industry but it is a continuous process that involves sourcing, hiring, developing, retaining and promoting them while meeting the organization's requirements simultaneously. On the above backdrop, the present study is undertaken to analyze the talent management practices for the best of the organisations in particular and the nation as a whole.

**KEYWORDS**

Talent management, Global, Human resource, Human capital, recruitment, organization.

**1. INTRODUCTION**

**T**alent management is the additional management processes and opportunities that are made available to people in the organization who are considered to be 'talent'."

Today's global economy has created a more complex and dynamic environment in which most firms must learn to compete effectively to achieve sustainable growth. Despite millions of unemployed workers, there is an acute shortage of talent. Talent management not at all a new concept, but its importance has recognized globally due to the dynamic environmental conditions at present. Talent management is a tailor-made system and every organization has its own talent management system that suits their organization and environment. One of the most critical challenges for any organization is finding, recruiting, and retaining talented individuals. Global business strategy needs alignment of people and talent management strategies.

There is a strategic imperative for organisations to manage talent. Changing demographic patterns mean that more people are approaching retirement than entering the workforce. Younger generations have different needs and are renegotiating the psychological contracts with their employer. They are quick to move if their organization is not meeting their expectations. Retaining and developing key people in the organization will be a critical success factor in the next five years. Senior managers report talent management as a strategic priority, yet over half of line managers are resistant to talent management processes. The strategies that can be used to determine the employee competency level of success include incorporating behavioral based questions that are designed to elicit examples from candidates about their previous work history and how they behaved in the previous job situations. Another significant strategy of ensuring the best fit is through competency-based management which can be described as the organization understanding its needs and who best fits with the organizations and then aiming to deliver the right outcomes by determining the value behaviors. As a selection tool, this strategy helps with recruitment of employees who possess the requisite skills and behavior and to identify the long-term high potential employees.

**1.1 TALENT MANAGEMENT SYSTEM AS A PROCESS**

Talent management is a continuous process and consists of various steps which are as follows:

- ✚ **Establish Development Plans for All Employees:** Targeted career development for all levels of employee incorporating performance assessment, succession management and learning initiatives is essential in managing talent efficiently.
- ✚ **Build a Foundation of Competencies:** Establishing the competencies - the knowledge, skills and behaviours that are used to develop people in an organization is a critical step for the success of any talent management approach; use of these competencies will also enable an organization to build job profiles that can guide career development, training and performance improvement.
- ✚ **Integrate Career Development Planning into Performance Management:** Performance management should be more than an assessment of job performance and it is an opportunity to engage employees in their work and to establish goals. For best results, work plans should contain activities that help employees to develop the skills needed to meet both individual and organizational goals.
- ✚ **Build Internal Talent Pools:** The identification and retention of high performing and high potential public sector employees should continue to be a high priority in today's challenging environment; the private sector suffered considerable loss of capability during and immediately following the Global Financial Crisis when entire business units were abolished with little or no attempt to retain proven or promising staff.
- ✚ **Leverage the Power of Informal Learning:** For most employees, learning on the job from one's peers is the most effective method of learning; creating the appropriate structures and providing the right tools can facilitate this more efficiently and produce greater benefits for the employee and the organization.

Talent management strategies are holistic in nature and aim at supporting such practices which improve the communication of goals and performance expectations across different levels in an organization. For many organizations talent management is a major strategic issue and they view it as a critical factor for providing them with a competitive advantage in the competitive war for talent. Effective management of talent requires a thorough diagnosis of the employee attitudes and also the organizational culture. The tools which help in attracting and retaining the best of talent in an organization are: pay, benefits, learning and development and a proper work environment which can be group centric or individual and the benefits can be tangible or intangible. Talent Management is managing the ability, competency and power of employees within an organization. The concept is not restricted to recruiting the right candidate at the right time but it extends to exploring the hidden and unusual qualities of employees and developing and nurturing them to get the desired results. Hiring the best talent from the industry may be a big concern for the organizations today but retaining them and most importantly, transitioning them according to the culture of the organization and getting the best out of them is a much bigger concern. With a relatively young population and a highly educated workforce, India has much to offer multinational companies that plan to build or expand their operations in the country.

**2. REVIEW OF LITERATURE**

Today's global economy has created a more complex and dynamic environment in which most organizations have to compete effectively to achieve sustainable growth. Workforces around the world have become larger, increasingly diverse, more educated, and more mobile. This global environment has not only changed the way business is conducted, it has also created the need for organizations to manage their workforces in a global context. As a consequence, the notion of a

"global workforce" has received extensive discussion recently. One of the major topics of this discussion has been around talent management. Most of the research in the area of talent management so far has been premised on the idea of talent shortages, reflecting the robust economic conditions at present. Campbell and Roland Smith (2010) define talent management as 'an organization's efforts to attract, develop, and retain skilled and valuable employees'. The goal of talent management is to develop or recruit people with the requisite 'capabilities and commitment needed for current and future organizational success. They add that an organization's talent pool, particularly its managerial talent, is often referred to as 'the leadership pipeline'. The latter is managed through 'various systems and processes to help the organization source, reward, evaluate, develop, and move employees into various functions and roles'. A report of Cornerstone on demand argues that in today's challenging fiscal environment improved talent management is not optional but essential if it is to play its part in enhancing efficiency, reducing operational risks and lowering costs. It also states that a greater focus on managing talent can help public sector employers deliver improved training at a lower cost, better develop and engage their people, and plan more effectively for the leadership and talent needs of the future. Talent management solution integrates the needs of the management, executives and employees into one system and unifies information across all the major HR processes like performance management, recruitment and selection, learning and development, succession planning and career development. According to a survey report of the Economist Intelligence Unit (2006) and Development Dimensions International (DDI), maximum CEO's from across different industries globally spend their major chunk of time in recruiting, performance management, talent management, succession planning, mentoring and retention. Kirkland (2007) opines that the challenges faced by profit and non-profit organizations are enormous and one of the most critical challenges for any organization is finding, recruiting, and retaining talented individuals. Karthikeyan (2007) views that the emphasis has been laid on initiatives that can be put in place to help organization to retain and nurture the talent. Despite the companies allocate great sums of money to talent management systems, many still struggles to fill key positions, limiting their potential for growth in the process. Athey (2008) finds that despite millions of unemployed workers, there is an acute shortage of talent globally. Cliffe (1998) finds that many companies mismanage talent development tasks. Through employee value proposition, management can attract and retain the talent. Globally, fewer and fewer managers and professionals are ready to fill these leadership roles, and companies worldwide find themselves competing for a smaller pool of talent. Murty (2008) found that the current challenge for IT industry is to match its supply and demand position, and retaining the experienced persons in the organizations depends upon a number of factors in addition to pay and perquisites. McCauley & Wakefield (2006) says that businesses must have the ability to identify the most talented individuals, provide them with the necessary training and experience, and retain valuable employees on a long term basis. Heinen & O'Neill (2004) views that managing talent cannot be completed within a quarter or a year, because it involves integrated planning and is not merely the responsibility of the Human Resources Department, but other factors are included in managing talent. Guthridge, Komm, & Lawson (2006) find that nearly half of the executives interviewed expressed concern that the senior leadership of their organizations does not align talent management strategies with business strategies. Gakovic & Yardley (2007) opine that global business strategy needs alignment of people and talent management strategies. Initially, identify the senior business manager with talent specialists. Next steps were to expand the talent pool, beyond a senior business manager level, implement development programs for future leaders according to levels of experience and seniority in an organization, and ensure the company had a customized solution to retain its talent through the employee value proposition. Roer Martin and Mihnea Moldoveanu (2003) define that *Talent = Capacity to learn + capacity to think + capacity to relate + capacity to act* accordingly and the values of the organization. Abbasi & Hollman (2000) point out that one of the issues facing organizations is an ability to foster a workforce that creates organizational capabilities. Many human resource development academicians and practitioners have suggested and used training and development as a means of accomplishing this critical task. Collings & Mellahi (2009) view that in the past year or two there have been numerous examples of organizations downsizing operations and reducing their workforces as a result of global economic and financial conditions. Thus for many organizations there now seems to be a talent surplus with unemployment increasing across many countries and too many qualified people chasing too few jobs. Regardless of economic and workforce conditions, however, organizations large and small, public and private, have come to the realization that in order to gain and sustain a global competitive advantage they must manage their workforces effectively. And to do so they must confront the reality of Global Talent Management (GTM) and its many challenges and develop human resource management activities to meet those challenges. Coy and Ewing (2007) notice that there is considerable evidence that organization worldwide face formidable talent challenges. The ability to attract, develop, and retain a needed supply of critical talent is a challenge facing all organizations. Boudreau (2007), Ramstad (2005), Cappelli (2008), Collings & Mellahi (2009) and Lewis & Heckman (2006) also suggest that organizations face greater competition for talent worldwide and face challenging times in attracting, retaining, and developing people they need. So even though there is currently a global economic slowdown, there are major structural conditions in place to ensure that competition for talent worldwide will continue to be a significant challenge. More specifically, organizations are and will continue to be searching for individuals who can effectively manage through the complex, challenging, changing, and often ambiguous global environment. In other words, most companies worldwide, regardless of size, are confronting and/or will soon confront many GTM challenges, if left unmet, will impact their global business strategies, both in the near term and longer term.

### 3. DATABASE AND METHODOLOGY

Talent management is concerned with delivering business success by understanding what an organization actually means by talent and how it can achieve the long term organizational goals. It aims at ensuring that the organizations value natural talents and understand the obstructions to an effective performance. Nowadays it's a global challenge faced by almost all countries in the world. As human capital is a precious and diversified resource, it's a highly difficult task to manage the talent. However talent management is a major strategic issue for many organizations and considered as a critical factor for providing with a competitive advantage in the competitive war for talent.

#### 3.1 OBJECTIVES OF THE STUDY

In India talent management Practices play a vital role in the economic development of the economy through the development of organizations. Though it is an important concept, very few studies have undertaken in this area. Hence to have a study on the untapped areas of the study, the present study has been undertaken. The objective of the present study is to analyze the significance of Talent Management as a crucial function of HR Professionals in organizations for their sound performance. It also highlights the challenges, benefits, dimensions and perspectives of talent management. On the above backdrop, an attempt has been made to have an in-depth knowledge of the emerging trends of talent management practices in India and study is entitled as '*TALENT MANAGEMENT AS A NEVER-ENDING WAR FOR TALENT: AN ANALYSIS*'. The following are some of the specific objectives of the study:

1. To study the concept and growth of Talent Management
2. To analyze the need of Talent Management
3. To evaluate the benefits of Talent Management
4. To analyze the Perspectives and Operational Dimensions of Talent Management
5. To assess the essential tools of Talent management Strategies.
6. To analyze the trends of Talent Management Practices in India
7. To evaluate the role of TMP in the development of organizations
8. Finally to analyze its role on the overall progress of the economy.

The data pertaining to the study has been analyzed and presented in tabular forms to make the findings meaningful and easily understandable. The present study was based on two sources of data viz., primary data and secondary data. The primary data is the first hand information collected from the employees of various organizations through direct interview method to know the importance of this concept. The secondary data related to present study is mainly collected through secondary sources which include various periodicals, magazines and websites etc.

### 4. ANALYSIS

In recent years, talent management has become a priority issue for organisations worldwide due to a shortage in skilled staff, particularly managers. Talent management strategies facilitate the development of both individuals and organisations by identifying employees with talent and ensuring that they receive the



support they require. A talent management strategy is a well planned and designed that contains a clear statement of what types of jobs and/or what part of the organization a particular talent management approach is concerned with; reflect an understanding of where in the organization or outside it the right kinds of people may be found for these jobs and when they will be required to fill them; and outline the 'development outcomes' which this talent management work is designed to deliver in order to address current and potential future challenges.

Organizations which wish to attract the best of talents and retain employees across all levels must have an integrated approach to talent management. According to Accenture High Performance Report, about 85 percent senior executives view talent management as a major competitive differentiator for attracting and retaining skilled workforce and developing the highly talented leaders. Many Indian organizations have realized that it is the quality of people which they employ, retain and develop will ensure their business profitability and provide them a competitive advantage. Talent management is concerned with delivering business success by understanding what an organization actually means by talent and how it can achieve the long term organizational goals. It aims at ensuring that the organizations value natural talents and understand the obstructions to an effective performance.

#### 4.1 TALENT MANAGEMENT STRATEGIES

Talent management solution integrates the needs of the management, executives and employees into one system and unifies information across all the major HR processes like performance management, recruitment and selection, learning and development, succession planning and career development. According to a survey report of May 2006 from the Economist Intelligence Unit (EIU) and Development Dimensions International (DDI), maximum CEO's from across different industries globally spend their major chunk of time in recruiting, performance management, talent management, succession planning, mentoring and retention. Employers use a range of different approaches within their talent management strategies to develop employees including effective initial recruitment practices, induction programmes, appropriate on the job training, continuing professional development, membership of professional bodies and attainment of career related qualifications. Talent management strategies are holistic in nature and aim at supporting such practices which improve the communication of goals and performance expectations across different levels in an organization. However, for many organizations talent management is a major strategic issue and they view it as a critical factor for providing them with a competitive advantage in the competitive war for talent. These strategies can be categorized into the following heads:

- Developing the existing talent pool
- Maximizing employee satisfaction
- Attracting talent visibility
- Planning in advance for succession
- Acting upon the performance reviewed

*Essentials of successful Talent management strategies:* To ensure that talent management strategies are successful, the following prerequisites are essential:

- Ensure the organization is committed to the long-term development of a talent management strategy.
- Have a clear definition of talent.
- Identify the skills of organization needs to develop in the next five to ten years.
- Link the talent management strategy with wider business objectives.
- Decision regarding the availability of talent management strategy to all or specific targeted groups.
- Involvement of all employees of the organization in the development of talent management strategy.

#### 4.1.2 STRATEGIC CHALLENGES

Talent Management is managing the ability, competency and power of employees within an organization. The concept is not restricted to recruiting the right candidate at the right time but it extends to exploring the hidden and unusual qualities of employees and developing and nurturing them to get the desired results. Hiring the best talent from the industry may be a big concern for the organizations today but retaining them and most importantly, transitioning them according to the culture of the organization and getting the best out of them is a much bigger concern. According to a report from CIPD's 2006 Learning and Development Survey, managing talent is not a very easy job and various factors influence the talent management strategies and policies of an organization. The report highlights some of the major strategic challenges to talent management which are:

- A rise in the trends of globalization in the labor market.
- An increase in the virtual workplaces.
- Diverse workforce in terms of age, race, etc.
- Educated workforce carries independent notions about their style of work and career path.

Effective management of talent requires a thorough diagnosis of the employee attitudes and also the organizational culture. The tools which help in attracting and retaining the best of talent in an organization are pay, benefits, learning and development and a proper work environment which can be group centric or individual and the benefits can be tangible or intangible.

📌 *Pay:* This is the most determining factor for retaining the talent pool in an organization which should be kept competitive. IT and ITES majors like Wipro and Infosys implement *variable pay* for retaining the employees and extracting the best performance from them. Flexible benefits are another effective tool for encouraging high performers.

📌 *Benefits:* Benefits which provide social and futuristic security to the employees can serve as a major tool for retaining the best talent pool in an organization. Many Indian organizations design and develop innovative benefit packages for retaining their talent.

📌 *Learning and Development:* It enables the retention of the most competent and ambitious employees in the organization and at the same time provide a competitive advantage by building the intellectual base in an organization. Many Indian companies are providing ample learning opportunities to its employees for developing their leadership potential and also designing a *Life Cycle Stage Development programme*, which selects the employees with the leadership potential and trains them in accordance with their level in the organization.

📌 *Organizational Culture:* A healthy work environment boosts the morale and spirit of the employee and strengthens the bond of relationship between the management and the employees. Work culture is influenced by the organizational communication system, feedback mechanism and the effective implementation of recognition and rewards. Many Indian organizations have taken innovative initiatives for maximizing employee satisfaction and improving the overall organizational productivity.

Talent Management illustrates managing the ability, competency and power of employees within an organization. The concept is not restricted to recruiting the right candidate at the right time but it extends to exploring the hidden and unusual qualities of your employees and developing and nurturing them to get the desired results. Hiring the best talent from the industry may be a big concern for the organizations today but retaining them and most importantly, transitioning them according to the culture of the organization and getting the best out of them is a much bigger concern. Talent Management is not just limited to attracting the best people from the industry but it is a continuous process that involves sourcing, hiring, developing, retaining and promoting them while meeting the organization's requirements simultaneously. Only hiring an employee does not solve the purpose but getting the things done from him is the main task. Therefore, it can be said that talent management is a full-fledged process that not only controls the entry of an employee but also exit.

#### 4.1.3 STRATEGIC PERSPECTIVES

It is clear that different organisations are seeking to achieve different things from their talent management systems, while all are seeking to achieve some form of talent management. This reflects the strategic objective of the talent management system. This strategic perspective shapes the way in which the talent management system is viewed, implemented, and put into operation, such that the same activity can result in a different action and/or outcome depending on the perspective employed. The HR professionals have to consider various perspectives while formulating talent management strategy. Ashridge has recommended *Six Perspectives* for the implementation of the best talent management system for successful human capital management.



- ❖ *Process Perspective* proposes that it includes all processes needed to optimize people within an organization. This perspective believes that the future success of the company is based on having the right talent and nurturing talent is part of the everyday process of organizational life.
- ❖ *Cultural Perspective* that believes talent management is a mindset and is needed for success. This can be seen where every individual is dependent on their talent for success due to the nature of the market in which they operate, and is typical of organisations where there is a 'free' internal labour market, with assignments being allocated according to how well they performed on their last assignment. Alternatively, this can be an organization where the development of every individual's talent is paramount and appreciated, and allowing people to explore and develop their talent becomes part of the work routine.
- ❖ *Competitive Perspective* which is underpinned by the belief that talent management is about identifying talented people, finding out what they want, and giving it to them – if not, competitors will. This tends to be the default perspective if no other perspective is taken, if only as a retention strategy. It is also seen in the professional services firms where they generally adopt the competitive approach because their business proposition is based on the talents of their people.
- ❖ *Developmental Perspective* that proposes talent management is about accelerated development paths for the highest potential employees, applying the same personal development process to everyone in the organization, but accelerating the process for high potentials. Hence the focus is on developing high potentials or talents more quickly than others.
- ❖ *HR Planning Perspective* claims talent management is about having the right people matched to the right jobs at the right time, and doing the right things. This is often identified with companies currently experiencing rapid growth which to some extent is driving the talent management system, and once they become more stable in terms of size of operations their perspective might change. Succession planning tends to be more prominent in organisations taking this approach.
- ❖ *Change Management Perspective* uses the talent management process as a driver of change in the organization, using the talent management system as part of the wider strategic HR initiative for organizational change. This can either be a means of embedding the talent management system in the organization as part of a broader change process, or it can put additional pressure on the talent management process if there is widespread resistance to the change process.

Table 1 depicts the various perspectives and ways in which they may impact on HR practices are outlined in. An organization may shift its perspective over time in accordance with changes in the organization's strategy, and indeed the development and embeddedness of the talent management system itself. The cultural perspective would be exceedingly difficult to achieve as a starting point when introducing talent management, but may be where an organization would intend to be in a number of years after developing a development or HR planning perspective.

TABLE 1: DIFFERENCES IN OPERATIONALIZATION OF HRM PRACTICES ACCORDING TO TALENT MANAGEMENT PERSPECTIVE

Perspective	Core belief	Recruitment & selection	Retention	Succession Planning	Development Approach
<b>Process</b>	Include all processes to optimize people.	Competence based, Consistent approach.	Good on processes such as work-life Balance & intrinsic factors that make people feel they belong.	Routine review process based on performance review cycle.	PDPs and development reviews as part of performance management. Maybe some individual interventions.
<b>Cultural</b>	Belief that talent is needed for success.	Look for raw talent. Allow introductions from in-house.	Allow people the freedom to demonstrate their talent, and to succeed and fail.	Develop in- house if possible, if not look outside.	Individuals negotiate their own development paths. Coaching & mentoring are standard.
<b>Competitive</b>	Keep talent away from the competition.	Pay the best so you attract the best. Poach the best from the competition.	Good people like to work with good people. Aim to be employer of choice.	Geared towards retention – letting people know what their target jobs are.	Both planned and opportunistic Approaches adopted. Mentors used to build loyalty.
<b>Developmental</b>	Accelerate the development of high potentials.	Ideally only recruit at entry point and then develop.	Clear development paths and schemes to lock high potentials into career paths.	Identified groups will be developed for each level of the organization.	Both planned and opportunistic.
<b>HR Planning</b>	Right people in the right jobs at the right time.	Target areas of shortage across the company. Numbers and quotas approach.	Turnover expected, monitored and accounted for in plans.	Detailed in house Mappings for individuals.	Planned in cycles according to business needs.
<b>Change Management</b>	Use talent Management to instigate change in the organization.	Seek out mavericks and change agents to join the organization.	Projects and assignments keep change agents, but turnover of main stay staff can occur.	Can be a bit Opportunistic initially until change is embedded.	Change agents develop others who align with them and become the next generation of talent.

There are some important factors to be considered while designing and devising Talent Management Strategies which are as under:

- Talent management approaches need to be built around a clear, coherent model of leadership.
- Talent profiles and skills sets must keep pace with public sector change and reform.
- Talent management needs to be aligned with diversity management so that an organization can ensure that talented people from minority groups are identified and developed.
- Processes and systems designed to manage talent must be aligned with capability and audit processes in order to ascertain if talented staff possess the requisite qualities and skills.
- The links between internal talent management processes and national talent management programs must be clarified to enable high-achieving staff to advance from agency- to sector- to cross-sector work.
- The range of development opportunities open to talented staff should be extended by embarking on joint talent management programs with other public sector and private sector partners.
- Talent management processes ought to be better linked with career planning and succession planning.
- Public sector organisations need to develop talent management strategies that reflect their values around inclusivity and public service.

#### 4.2 BENEFITS OF TALENT MANAGEMENT PRACTICES

Talent management can be a discipline as big as the HR function itself or a small bunch of initiatives aimed at people and organization development. Different organizations utilize talent management for their benefits. This is as per the size of the organization and their belief in the practice. It is an evaluation of their strengths and developmental needs of the personnel. This could be utilized for mapping people against the future initiatives of the company and for succession planning. There are more benefits that are wide ranged which are as under:

- *Right Person in the right Job:* Through a proper ascertainment of people skills and strengths, people decisions gain a strategic agenda. The skill or competency mapping allows taking stock of skill inventories lying with the organization. This is especially important both from the perspective of the organization as well as the employee because the right person is deployed in the right position and employee productivity are increased. Also since there is a better alignment between an individual's interests and his job profile, the job satisfaction is increased.
- *Retaining the top talent:* Despite changes in the global economy, attrition remains a major concern of organizations. Retaining top talent is important to leadership and growth in the marketplace. Organisations that fail to retain their top talent are at the risk of losing out to competitors. The focus is now on charting employee retention programs and strategies to recruit, develop, retain and engage quality people. Employee growth in a career has to be taken care of, while succession planning is being performed those who are on the radar need to be kept in loop so that they know their performance is being rewarded.
- *Better Hiring:* The quality of an organization is the quality of workforce it possesses. The best way to have talent at the top is have talent at the bottom. Nowadays talent management programs and trainings, hiring assessments have become an integral aspect of HR processes.
- *Understanding Employees Better:* Employee assessments give deep insights to the management about their employees. Their development needs, career aspirations, strengths and weaknesses, abilities, likes and dislikes. It is easier therefore to determine what motivates whom and this helps a lot Job enrichment process.
- *Better professional development decisions:* When an organization gets to know who its high potential is, it becomes easier to invest in their professional development. Since development calls for investment decisions towards learning, training and development of the individual either for growth, succession planning, performance management etc, an organization remains bothered where to make this investment and talent management just make this easier for them.

#### 4.3 INTEGRATED TALENT MANAGEMENT PROGRAMME (ITMP)

Integrated Talent Management programme encompasses data, process, workflow management, security models, user portals, and reporting and analytics tools across all technology applications required to run state-of-the-art talent management systems characterized by, and producing, high levels of alignment, planning, decision-making and service delivery.

*Essential approaches in achieving optimal talent management outcomes include:*

- Assessing information about an organization's directions, priorities, goals and objectives;
- Evaluating the results of regular employee surveys;
- Collating and considering information on employee demographics; and
- Analyzing departmental scan findings concerning the organization's culture, leadership, management practices, work environment, decision-making and other business processes and practices.

There are several critical factors in developing and implementing an effective ITMP such as;

- Active participation by senior executives;
- Accountability for the ITMP at the line manager level;
- A high level of departmental hr management support; and
- Effective organizational communication of the program.

There is a strategic imperative for organisations to manage talent. Changing demographic patterns mean that more people are approaching retirement than entering the workforce. Younger generations have different needs and are renegotiating the psychological contracts with their employer. They are quick to move if their organization is not meeting their expectations. Retaining and developing key people in the organization will be a critical success factor in the next five years. Senior managers report talent management as a strategic priority, yet over half of line managers are resistant to talent management processes.

#### 4.4 OPERATIONAL DIMENSIONS

While designing a Talent Management System, the organizations have to consider various operational dimensions in order to meet the strategic goal. These dimensions are mainly categorized into three heads viz., defining, developing talent and structures and systems to support talent management. Basically there are 18 dimensions which are common to all the organizations. But their application and approach differs from organization to organization.

FIGURE 1: OPERATIONAL DIMENSIONS OF TALENT MANAGEMENT



- *Defining talent:* Defining talent is how organisations decide to segment their workforce. By using a segmentation strategy for their talent, an organization is not identifying the rest of the workforce as talentless. Talent management is about doing something additional or different with those people who are defined as talent for the purpose of the organization – be it top performers, high potentials, senior managers suitable for director positions, or people suitable for critical roles in the organization.
- *Developing talent:* Promotions, project work, management training schemes and management qualifications were the main development opportunities offered and undertaken in organisations. Secondments, transfers and shadowing opportunities were offered by many organisations, but few managers had personal experience of these development routes. Where the development of high potentials takes place in a highly supportive culture, the risks associated with allocating stretching assignments or role transfers can be significantly mitigated.
- *Structures and systems to support talent management:* Performance management systems provide a good baseline for talent management systems on the basis of performance, although many systems are not geared towards measuring an individual's potential and future capability. The talent decision making process rests between senior managers and line managers, with just under 30 per cent of organisations allowing individuals to contribute to the decision themselves.

#### 4.5 PROSPECTS OF TALENT MANAGEMENT IN INDIA

Many organizations already have identified and applied best practices for talent challenges in India with great success. A study by India's Information Technology Industry Association and NASSCOM reveal that the supply of skilled workers for offshore service and technical work will be exhausted by 2008 if India maintains its 46 percent global share of this sector. India must produce an additional 500,000 graduates to staff, and ultimately manage its growing workforce in the next five years. India is helping to reshape the world's information technology industry and service sectors such as finance and telecom. It is also emerging as a vital R&D partner for multinationals in pharmaceuticals, software, and microelectronics. India will become world's largest export platform as well as the largest domestic market for many products. India's greatest impact on the global economy for the foreseeable future will not be through their products, but rather as sources of skilled labor. While the U.S. still enjoys one of the world's biggest supplies of degree-holding scientists and engineers on a per-capita basis, India is producing millions of graduates in these fields each.

Indian leaders are more sophisticated when it comes to talent management. Only a handful of Chinese organizations can talk about strategic approaches. The disparity also exists in management development, the use of 360° and other multi rater tools, succession planning, and the adoption of leadership development programs. Indian businesses face huge challenges in recruiting, retaining, and developing their workforces. But because India is a former British colony with an established education system, and many Indians are fluent in English and open to international assignments, the cultural divide with the West is a boon to India. India is one of the world's most important suppliers of new talent. Each year, 2.5 million Indians graduate from college, and women are entering the workforce in increasing numbers. Some 300,000 Indians are employed in Business Processing Outsourcing (BPO), where workers remotely handle everything from insurance claims to tax statements for foreign corporations. This workforce is expected to reach 1.5 million by 2010. Organizations need to consider different kinds of management structures to manage young leaders who are progressing quickly.

The management structure in India needs to include training and development. Because outsourcing is viewed as a cost-cutting measure, organizations overlook development needs, and then blame cultural differences for problems that arise. Foreigners often insist on graduates of India's elite schools, but this is a limited talent pool. Foreign executives want to hire from a select few schools, such as the Indian Institutes of Management and the Indian Institutes of Technology. Most outsourcing programs begin with easy, routine tasks that are best assigned to undergraduates. Women are increasingly important to the Indian workforce. Recruiting women to work in call centers can dramatically increase the labor pool. In some industries, the percentage of female workers jumped from 10 percent to 50 percent. But this isn't happening at senior levels of the workforce. The McKinsey Global Institute produced a study contending that only 10-15 percent of Indian graduates in most professional disciplines are suitable for employment by multinationals due to poor training, weak English skills, and other factors. McKinsey also predicted that India will soon have huge labor shortages in fields with specialized skills like engineering.

## 5. CONCLUSION

Globalization has spawned a global competition for talent. Many of the most pressing global challenges facing global firms today are directly related to human capital challenges. Many Human Resource practitioners and HR consultants/ professionals are now recognizing this, especially for multinational enterprises. A talent management strategy will improve organizational performance through better identifying, sourcing, developing, rewarding, motivating and retaining the talent that keeps the firms ahead of competitors. The study enunciated that the factors driving the popularity of talent management today are: *Scarcity of talent, increasing complexity of the role of leadership and increased demands in technology*. A rightly managed talent turns out to be a gold mine. Managements need to realize its worth, extract it, polish it and utilize it. In all business climates, taking measures to retain valued employees saves money, preserves margins leading to better business opportunities. If employees are positive about the talent management practices of the organization, they are more likely to have confidence in the future of their organization. The resultant is a workforce that is more committed and engaged determined to outperform their competitors and ensure a leadership position in the market for their organization.

Given the high level of interest in the concept of talent management over the past decade, it is somewhat paradoxical that it remains relatively poorly defined and lacking in theoretical underpinning. Still the area of talent management is in its infancy and a significant degree of theoretical advancement is required. To achieve success in business, the most important thing is to recognize the talent that can accompany in achieving the organizational goals. The process of talent management is incomplete if management unable to fit the best talent of the industry at the place where he or she should be. Every organization requires the best talent to survive and remain ahead in competition. Talent is the most important factor that drives an organization and takes it to a higher level, and therefore, cannot be compromised at all. It won't be exaggerating saying *talent management as a never-ending war for talent!*

By the study, it is clear that Talent Management System is integrated across all aspects of Human Resource Management. There are clear inter-dependencies between talent management and recruitment, development, diversity, retention and succession planning practices. Best practices for developing Indian talent also came up in every session with due importance of it. Several experts reported successful partnerships with the education systems to provide specialized training to students before they enter the job market. The talent management system can be an effective tool for creating symbiotic relationship between talent and the organization to dramatically accelerate performance improvements. Nurturing and retaining knowledge is a key to the success of any global sourcing venture. Nurturing human capital is not an end in itself, but a route creating better value for all stakeholders - customers, shareholders, vendors and the employees. The successful management of talent today gives organizations a vital edge. This indeed is a challenge to HR and effective talent management is an important feather in the cap of any HR manager. Hence it can be concluded that Talent Management Practices plays a significant role in the acceleration of sound growth of an organization which ultimately leads to the development of the economy as a whole.

## REFERENCES

1. Athey, R. (2008). "It's 2008: Do you know where your talent is? Why acquisition and retention strategies don't work". A Deloitte Research Study, Deloitte Development LLC.
2. Bartlett, C., & Ghoshal, S. (2003, August). What is a global manager? Harvard Business Review.
3. Becker, B., & Huselid, M. A. (2006). Strategic human resource management: Where do we go from here? Journal of Management, 32: 898-925.
4. Becker, B., Huselid, M., & Beatty, R. (2009). The differentiated workforce: transforming talent into strategic impact. Boston: Harvard Business Review Press.
5. Beechler, S., & Woodward, I. C. (2009). The global war for talent. Journal of International Management, 15: 273-285.
6. Boudreau, J., & Ramstad, P. (2005). Talentship, talent segmentation, and sustainability: A new HR decision Science paradigm for a new strategy definition. Human Resource Management, 42: 129-136.
7. Boudreau, J., & Ramstad, P. (2007). Beyond HR: The new science of human capital. Boston, MA: Harvard Business School Publishing.
8. Branham, L. (2005). Planning to become an employer of choice. Journal of Organizational Excellence, 24: 57-68.
9. Budhwar, P., Schuler, R., & Sparrow, P. (2009). International human resource management four-volume set. SAGE Publications Ltd.
10. Cappelli, P. (2008). Talent management for the twenty-first century. Harvard Business Review, March: 74-81.
11. CIPD, "Talent Management Factsheet" (August 2012)
12. Cliffe (1998). Human resource management and Fortune's corporate reputation survey. Employee Responsibilities and Rights Journal, 10: 93-101.
13. Collings, D., & Mellahi, K. (2009). Strategic talent management: A review and research agenda. Human Resource Management Review, 19: 304-313.
14. Collings, D., Scullion, H., & Dowling, P. (2009). Global staffing: A review and thematic research agenda. The International Journal of Human Resource Management, 20: 1251-1269.
15. Cornerstone On Demand, Making the Best of It: Why Tough Times Make Talent Management Essential in the Public Sector, Cornerstone OnDemand, Los Angeles, California, 2011, 7 pp.
16. Corporate Leadership Council, Improving Talent Management Outcomes: 10 Talent management Insights for the Chief Human Resources Officer, Corporate Leadership Council, Washington, DC, 2007, 39 pp.
17. Coy, P., & Ewing, E. (2007). Where are all the workers? Business Week: April 9: 28-31.
18. Daniels, J., Radebaugh, L., & Sullivan, D. (2007). International business: Environment and operations. Upper Saddle River, NJ: Pearson/Prentice-Hall.
19. "Developing an Integrated Talent Management Program: A Human Resource Management Framework", The Government, St John's, Newfoundland and Labrador, 2008, 15 pp.
20. Dr. Eddie Blass (2007) Executive summary on "Talent Management- Maximizing talent for Business Performance"
21. Dr. John Sullivan (2012) Bold and Outrageous HR and Talent Management Practices
22. Executive summary on "Managing and developing Talent in China and India" - www.ddiworld.com/locations
23. Gupta, A., & Govindarajan, V. (2002). Cultivating a global mindset. The Academy of Management Executive, 16: 116-126.
24. Guthridge, M., & Komm, A. (2008). Why multinationals struggle to manage talent. The McKinsey Quarterly, 1-5.
25. Guthridge, M., Komm, A., & Lawson, E. (2008). Making talent management a strategic priority. The McKinsey Quarterly, January: 49-59.

26. Hannon, J., & Milkovich, G. (1996). The effect of human resource reputation signals on share prices: An event study. *Human Resource Management*, 35: 405–424.
27. Henkens, K., Remery, & Schippers, J. (2008). Shortages in an ageing labour market: An analysis of employers' behavior. *International Journal of Human Resources Management*, 19: 1314–1329.
28. *Improving Talent Management Outcomes: 10 Talent Management Insights for the Chief Human Resources Officer*, Corporate Leadership Council, Washington, DC, 2007, 39 pp.
29. *Integrated Talent Management—The Evolution*, Melbourne, 2009, 17pp.
30. Karthikeyan (2007). Employer's attitude, practices and policies towards older workers. *Human Resource Management Journal*, 16: 313–330.
31. Kirkland (2007). The human resource management issues during an acquisition: The target firm's top management team and key managers. *International Journal of Human Resource management*, 17: 1307–1320.
32. Lewis, R., & Heckman, R. (2006). Talent management: A critical review. *Human Resource Management Review*, 16: 139–154.
33. *Making the Best of It: Why Tough Times Make Talent Management Essential in the Public Sector*, Cornerstone On Demand, Los Angeles, California, 2011, 7 pp.
34. Marion Devine and Marcus Powell, 'Talent Management in the Public Sector', *The Ashridge Journal*, Autumn 2008, pp. 19–24.
35. Matthewman, J and Matignon, F. (2005) *Human capital reporting: an internal perspective*. Chartered Institute of Personnel and Development, London.
36. Mc Cauley (2006). Examining the link between skill shortages, training composition and productivity levels in the construction industry: Evidence from Northern Ireland. *International Journal of Human Resource Management*, 17: 265–279.
37. McKinsey & Company (2001) *The war on talent*, McKinsey & Company Inc, USA. Available: [http://autoassembly.mckinsey.com/html/downloads/articles/War\\_For\\_Talent.pdf](http://autoassembly.mckinsey.com/html/downloads/articles/War_For_Talent.pdf) (Accessed 3/10/12)
38. Michael Campbell and Roland Smith, *High-Potential Talent: A View from Inside the Leadership Pipeline*, Center for Creative Leadership, Greensboro, North Carolina, USA, 2010, 29 pp.
39. Roer Martin (2003). Regional strategy and the demise of globalization. *Journal of International Management*, 9: 409–417.
40. Sylvia Vorhauser-Smith "Into India: Talent Management Essentials in a Land of Optimism".
41. Talent Management in the Public Sector, APS Human Capital Matters, Issue 1, February 2013, [humancapitalmatters@apsc.gov.au](mailto:humancapitalmatters@apsc.gov.au)



**A STUDY ON HUMAN RESOURCE ACCOUNTING**

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**ABSTRACT**

Human resource accounting has very high significance not only for the management, but also for analyst and even for employees. It helps management in better utilization, planning management of human resources in the organization while for analyst, Even today, when a good deal of work has been done in this field, it is very much unfortunate that there is not only set pattern or generally accepted method either for valuation of human resource or for their recording in books of accounts or for the disclosure of information by means of different statements. In the present paper conclusions are drawn from literature whose goal was to put information on intangibles into financial and non-financial frameworks. The analysis primarily focuses on two concepts: The human resource management oriented concept called Human Resource Cost Accounting (HRCA) and Human Resources Value Accounting (HRVA) and the strategic management oriented concept called Balanced Scorecard (BSC). Measurement of the investment in human resources will help to evaluate the charges in human resource investment over a period of time. This paper aims at analyzing the application of Human Resource Accounting in large scale industries.

**KEYWORDS**

Human Resource Accounting, Human Capital, Intellectual Capital, Lev and Schwartz model, Human assets, Human Efficiency.

**INTRODUCTION**

Human Resource Accounting is one of the latest concepts adopted by Indian companies in recent times. Most of the enterprises which follow Human Resource Accounting spare a separate section in their annual reports for a detailed account of their human resources. Human asset reporting in India usually includes a profile of human assets, the compensation pattern, training and development, human asset productivity, human asset value, and the total wealth of the organization.

The concept of human resource accounting can be basically examined from two dimensions: (i) the investment in human resources; and (ii) the value of human resources. The expenditure incurred for creating, increasing, and updating the human resource quality is known as investment in human resources. Such investment yields fruitful results like higher productivity and higher income to the organisation. The yield that the investment in human resources generates will be considered as the basis of human resource value. The

**OBJECTIVES**

The objectives of this paper include the followings:

1. Development of the Concept of HRA
2. Concept of HRA
3. Importance in Human Resources
4. Investment in Human Resources
5. Methods of human resource accounting
6. Efficient use of Human Resource
7. Calculating the Market Value of Assets
8. Human Capital.

**METHODOLOGY**

This study carried out by using the secondary data from internet, journals, articles, text books, etc.

**DEVELOPMENT OF THE CONCEPT OF HUMAN RESOURCE ACCOUNTING**

"Human Resource Accounting" is the offshoot of various research studies conducted in the areas of accounting and finance. Human resource is an asset whose value gets appreciated over the period of time provided placed, applied and developed in the right direction. Till the recent past, organizations took few efforts to assign monetary value to human resource in its accounting practice. Behavioural scientists initiated efforts to develop appropriate methodology for finding out the value of human resource to the organization. They were against the conventional accounting practice for its failure to value the human resource of an organization along with physical resources. The traditional concept suggested that expenditure on human resource is treated as a charge against revenue as it does not create any physical asset. At present there is a change in this concept and the expenses incurred on any asset (as human resources) should be treated as capital expenditure as it yields benefits which can be derived for a long period of time and could be measured in monetary terms.

The following are the reasons why Human Resources Accounting has been receiving so much attention in the recent years.

Firstly, there is genuine need for reliable and complete management of human resources. Secondly, a traditional framework of Accounting is in the process to include a much broader set of measurement than was possible in the past. The people are the most important assets of an organization but the value of this asset yet to appear in financial statements. It does not get included in management information systems too. Conventional accounting of human resources took note of all expenses of Human capital formation which does not seem to be correct or meeting the actual needs.

Human Resource Accounting is the measurement of the cost and value of people to the organization. It involves measuring costs incurred by the organizations to recruit, select, hire, train and develop employees and judge their economic value to the organization.

## CONCEPT OF HRA

The concept of human resource accounting can be better understood if one goes through some of the important definitions given by the competent authors in the accounting field.

1. The American Accounting Society Committee on Human Resource Accounting defines it as follows: "Human Resource Accounting is the process of identifying and measuring data about human resources and communicating this information to interested parties." In simple terms, it is an extension of the accounting principles of matching costs and revenues and of organizing data to communicate relevant information in financial terms.
2. Mr. Woodruff Jr. Vice President of R. G. Batty Corporation defines it as follows:  
"Human Resource Accounting is an attempt to identify and report investments made in human resources of an organization that are presently not accounted for in conventional accounting practice. Basically it is an information system that tells the management what changes over time are occurring to the human resources of the business."
3. M.N. Baker defines Human Resource Accounting as follows:  
"Human resource accounting is the term applied by the accountancy profession to quantify the cost and value of employees to their employing organization"
4. Another management consultant Stephen Knauf has defined HRA as: "The measurement of quantification of human organization inputs such as recruitment, training, experience and commitment"

Thus, human resources accounting may be defined as, "a process of accounting which identifies, quantifies and measures human resources for the use of management to cope up with the changes in its quantum and quality so that equilibrium could be achieved in between the required resources and the provided human resources"

## IMPORTANCE OF HUMAN RESOURCE ACCOUNTING

Human Resource Accounting provides useful information to the management, financial analysts and employees as stated below:

1. Human Resource Accounting helps the management in the Employment, locating and utilization of human resources.
2. It helps in deciding the transfers, promotion, training and retraining of human resources.
3. It provides a basis for planning of physical assets vis-à-vis human resources.
4. It assists in evaluating the expenditure incurred for imparting further education and training in employees in terms of the benefits derived by the firm.
5. It helps to identify the causes of high labour turnover at various levels and taking preventive measures to contain it.
6. It helps in locating the real cause for low return on investment, like improper or under-utilization of physical assets or human resource or both.
7. It helps in understanding and assessing the inner strength of an organization and helps the management to steer the company well through most adverse and unfavourable circumstances.
8. It provides valuable information for persons interested in making long term investment in the firm.
9. It helps employees in improving their performance and bargaining power. It makes each of them to understand his contribution towards the betterment of the firm vis-à-vis the expenditure incurred by the firm on him.

There is much debate as to whether the human resources of an organization can be considered as an asset and treated accordingly in the accounting system. There are two schools of thought. One says that human resource is an asset and the other does not agree with this. Now let us see what is an asset? Asset is anything which is owned by the entity to derive service in future and should have legally enforceable claim.

As such there is no guarantee of deriving benefits from the existing human resources in future and has no sales value like other assets. Therefore, legally, human resource is not an asset claims one school of thought. Besides, company law also does not consider it as an asset.

But the other school is of the opinion that the "human resource is an asset". This school of thought puts forth two contentions in favour of its opinion as follows:

1. There is a legal ownership on the "human resource" which could in practice prevent him from joining the other organizations unless properly relieved by complying with some formalities like giving advance notice of resignation, etc.
2. Uncertainty of deriving benefits is a common problem to all assets, not only with the human resources. Deriving future benefit may be a big question mark in other assets too due to many factors. „Obsolescence“ may be the one.
3. Generally, an asset needs maintenance and development support from the organization so as to derive benefits over a long period of time. Similarly, human resources as an asset also is in need of training and development in order to maintain the service potential for the employer.
4. R.L. Woodruff Junior observed that treating people as assets and accounting them is logical and satisfactory to the expectation of the future economic benefits.

The above analysis supports the view that the human resource is an asset as they are valuable resources to an organization and investments in such asset will help organization to improve.

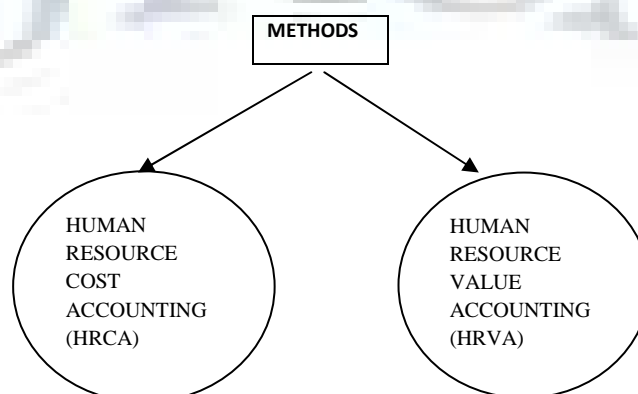
## NOW, WHAT IS AN INVESTMENT?

Any resource pressed into service for producing goods and services is called investments. Thus, investment refers to expenditure on new plant and machinery, capital equipments, physical construction of new buildings together with any change in the stock of goods produced. There are two basic determinants of investment.

- (i) The expected rate of profit which the business hopes to realize from investment, and
- (ii) The rate of interest.

The level of investment is guided by the level of expected profits. Firms will invest, only if it is profitable. Further an important cost associated with investment is the cost of borrowing capital, which is the rate of interest. Of these two, the expected rate of profit is more influential than the rate of interest.

## ASPECTS/METHODS OF HUMAN RESOURCE ACCOUNTING



**HUMAN RESOURCE COST ACCOUNTING****DEFINITION**

- It is the measurement and reporting of the costs incurred to acquire and develop people as organisational resources.

**HRCA INCLUDES accounting for the costs of-**

- personnel activities and functions such as recruitment, selection, placement and training.
- developing people as human assets. Also called 'HUMAN ASSET ACCOUNTING'

**APPROACHES OF HUMAN RESOURCE COST ACCOUNTING**

- Historical Cost Approach
- Replacement Cost Approach
- Opportunity Cost Approach

**HISTORICAL COST APPROACH**

- The actual cost incurred on recruiting, selecting, training, placing and developing the human resources of an Enterprise are capitalised and written off over the expected useful life of human resources.
- Any amount spent on training and developing human resource increases its efficiency, hence capitalised.
- The amortization of human resource assets is done in the same way as that of other physical assets.
- If the asset is liquidated prematurely then its underwritten off amount is charged to revenue account.
- On the other hand, if it has a longer life than expected, its amortization is rescheduled.

**REPLACEMENT COST APPROACH**

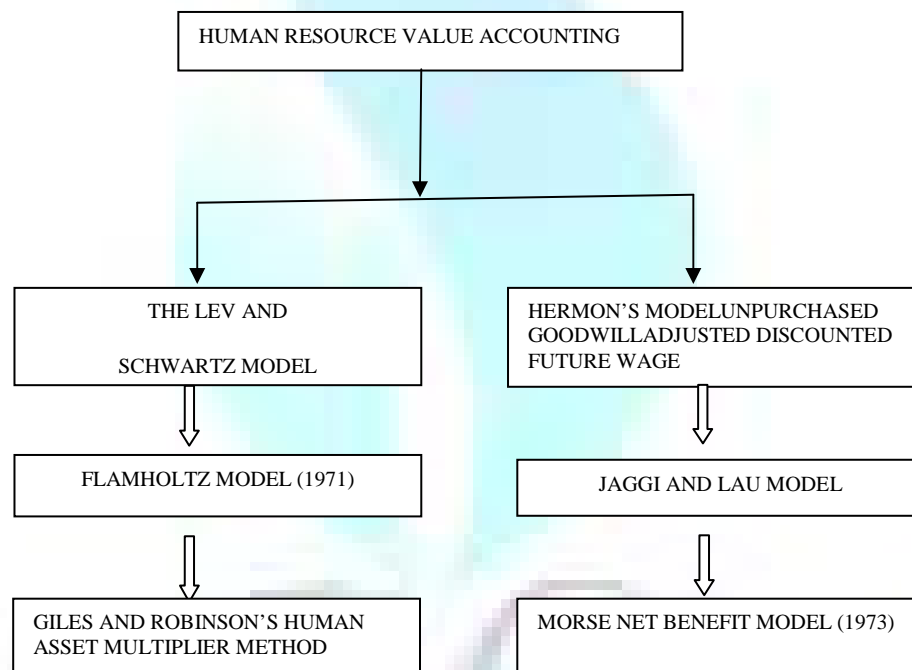
- The cost of replacing employees is used as the measure of company's human resources.
- The human resources of a company are to be valued on the assumption as to what it will cost the concern if existing human resources are required to be replaced with other persons of equivalent experience and talent.
- In this the cost of recruiting, selecting, training, etc. of new employees to reach the level of competence of existing employees are measured.

**OPPORTUNITY COST APPROACH**

- It is based on economic concept of opportunity cost which removes the deficiency in replacement cost approach.
- Measured through a competitive bidding process within the entity.

**STEPS**

- ✓ The entity is divided into investment centres.
- ✓ The investment centre managers bid for scarce employees they need within the entity.
- ✓ The maximum bid price may be obtained by the capitalization of the excess profits generated by the employee.

**1) THE LEV AND SCHWARTZ MODEL**

This model was developed in 1971. It determines the value of human capital embodied in a person of age  $t$  is the present value of his remaining future earning from employment in the form of salaries, wages, etc.

**2) FLAMHOLTZ MODEL (1971)**

This method determined an individual's value to an organisation by the services he is expected to render to the organisation during the period he is likely to remain with the organisation in various position or services states. The present value of human resource may be derived by discounting the realisable value of expected future services at a specified rate.

**Steps to be followed:**

- Estimation of period.
- Identification of position or services.
- Estimation of probable period.
- Calculate the expected services.
- Calculation of present value at a predetermined rate.

**3) GILES AND ROBINSON'S HUMAN ASSET MULTIPLIER METHOD**

This method is developed in 1972 & it was sponsored by ICMA and IPM. The valuation of human resource should be made in the same way as other business assets on a **GOING CONCERN BASIS**.

**4) HERMANSON'S MODEL**

Roger H. Hermanson has suggested two models for the measurement of human resources. These are:-

○ **UNPURCHASED GOODWILL MODEL**

HR is calculated by capitalising earnings in excess of normal earnings for the industry or the group of companies of which the firm is a part.

○ **ADJUSTED DISCOUNTED FUTURE WAGE MODEL**

This model uses compensation as a surrogate measure of a person's value to the firm. **Compensation** means the present value of future stream of wages and salaries to employees of the firm. The discounted future wage stream is adjusted by an "efficiency ratio" which is the weighted average of the ratio of return on investment of the given firm to all the firms in the economy for a specified period, usually five years. The weights are assigned in the reverse order, i.e. 5 to the current year

**5) JAGGI AND LAU MODEL**

The valuation is on a group basis rather than individual basis. **GROUP** means a homogeneous group of employees who may not be necessarily working in the same department. It might be difficult to predict an individual's future period stay and chances of promotion, but on a group basis, it is easier to ascertain the future period of services, chances of promotion and those who are likely to leave the firm during each of the forthcoming period. It assumed that the pattern of movement is likely to remain constant overtime and the probabilities determined for one period can be extended to future periods.

**6) MORSE NET BENEFIT MODEL (1973)**

Calculation is on the basis of the present value of net benefits derived by the organisation from the expected future services of its employees.

**Steps to be followed:**

- ✓ Determination of the gross value of future services.
- ✓ Determination of the cost.
- ✓ Calculation of "net benefit" to the organisation on account of human resources by subtracting (ii) from (i).
- ✓ Calculation of the present value of the net benefits by discounting at predetermined rate of discount.

**7) COMPETITIVE BIDDING MODEL**

Curtis H Johns (1967) have advocated this model considering the value of individual employees in alternative uses compile that the employees have value only when they can be used alternatively or only when they can be put to alternative uses. To assess the value of employees, five proponents of the model have suggested the competitive bidding amongst the managers of profit or investment centre. The highest of the bid price quoted by the divisional manager is used as the value of that employee. In the same manner the value of other employees whose services are required by the other divisions also are ascertained. John's opinion that only when employment in one division depends on employees' talent to another in the employee's career.

**REVIEW OF LITERATURE**

1. To measure human value as a part of the goodwill, HRA was introduced in the accounting literature in the 1960s (Flamholtz, 1985). In 1968 Brummet, Flamholtz & Pyle used the term "human resource accounting" for the first time. In 1973 the American Accounting Association's Committee on Human Resource Accounting defined HRA as "the process of identifying and measuring data about human resources and communicating this information to interested parties. It provides information about human resource costs and values, serves to facilitate decision making, and motivates decision makers to adopt a human resource perspective (Sackmann et al., 1989). Research to examine the way in which human resource variables affect the efficiency of firms could be performed in a number of ways including analyzing the association between different aspects of human resources and firm performance (Bassi & McMurrer, 1998; Boudreau & Ramstad, 1997; Grojer, 1998). Looking at different proposals (Conner, 1991), the resource theory considers human resources in a more explicit way. This theory considers that the competitive position of a firm depends on its specific and not duplicated assets. The most specific (and not duplicated) asset that an enterprise has is its personnel. It takes advantage of their interdependent knowledge. That would explain why some firms are more productive than others. With the same technology, a solid human resource team makes all the difference (Archel, 1995). There are two reasons for including human resources in accounting. First, people are a valuable resource to a firm so long as they perform services that can be quantified. Second, the value of a person as a resource depends on how he is employed. So management style will also influence the human resource value (Ripoll and Labatut, 1994).
2. Research into true human resource accounting began in 1960s by Rensis Likert (Bowers, 1973). Likert defends long-term planning by strong pressure on human resources' qualitative variables, resulting in greater benefits in the long run. Support for the idea of accounting for human resource values can be found much earlier (Sackmann et al., 1989). In 1965, Cronbach & Glaser (1965) and Naylor & Shine (1965) developed models for estimating the financial utility of personnel selection. To embrace both HRA and UA (Utility Analysis), Grojer & Johanson (1996) use the concept Human Resource Costing and Accounting (HRCA). Grojer & Johanson (1996) express the management orientation of HRA even more clearly in the assertion that HRA concerns the management of human resources. Roslender (1997) proposes a societal approach to the subject. He uses the term human worth accounting. Assets from an accounting perspective are normally well, but too narrowly, defined when compared with emerging knowledge-based theories (Grant, 1996; Haanes & Lowendahl, 1997). Because of poor measurement and inadequate reporting, human resources run the risk of being undervalued internally by managers and externally by capital markets (Hanson, 1997). There are many studies suggest a business community with a much more reluctant standpoint (Johanson et al, 1998). One recent survey on the attitudes of members of the European Accounting Association toward HRCA showed that it is becoming more important for accounting research and business practice, at least in East Europe and the Scandinavian countries. An interest in HRCA in Finland started several years ago from a return on investment perspective. Guy Ahonen. Johanson (1999) propose that decision making and learning by investors and managers are influenced when managers hold positive attitudes towards HRCA. The American SEC has declared that there is no evidence of an information interest from a capital market point of view, not even for non financial HRCA information. In a recent literature survey (Johanson et al, 1998) on experience using HRCA and the balance scorecard (BSC) some 2000 articles and books written in seven languages were looked at. When it comes to the BSC, of which HRCA in some organizations is an explicit part, Human Resource Accounting there is no lack of company enthusiasm and good intentions on how to use the BSC in the future - Johanson et al, 1998. Equity investors' necessity for information on human resources has been investigated extensively whereas studies of lenders are missing (Epstein & Freedman, 1994; Eccles & Mavrinac, 1995; Mavrinac & Siesfeld, 1997). One of the techniques showing a greater capacity to stimulate efficiency is based on the idea that an employee who is induced to get to know his job better is more productive and quicker on the job (Asociacion Espanola de Contabilidad y Administracion (AECA) 1994). No party that is referred to human resource is considered in the different balance sheet models, and only in the profit and loss account are the costs most directly related to them, such as salaries and staff welfare expenses (including pensions) (fourth directive of Comunidad Economica Europea 1978).
3. **HUMAN RESOURCE ACCOUNTING (HRA) DISCLOSURE OF BANGLADESHI COMPANIES AND ITS ASSOCIATION WITH CORPORATE CHARACTERISTICS:** Syed Abdulla Al Mamun School of Management Asian Institute of Technology (AIT) Bangkok, Thailand. This study reports the relationship between corporate characteristics and Human Resource Disclosure (HRAD) level in fifty five randomly selected companies of Bangladesh. The relationships were determined using a HRAD Index (HRADI) under a number of hypotheses. The results of the study show that companies averagely disclose 25% of the total HRAD items. In this study, HRAD has been found significantly related with the size of the company, category of the company (financial or non-financial) and profitability. However, HRAD had no influence on the age of companies.
4. **APPLICATION OF HUMAN RESOURCE ACCOUNTING IN HEAVY INDUSTRIES:** Shalini Sharma<sup>1\*</sup> and R.K. Shukla<sup>2</sup>. Since the beginning of globalization of business and services, Human elements are becoming more important input for the success of any corporate enterprise. It helps the management to frame policies for human resources. Human Resource Accounting is a process of identifying and measuring data about human resources. Measurement of the investment in human resources will help to evaluate the charges in human resource investment over a period of time. This paper aims at analyzing the application of Human Resource Accounting in heavy industries covering the period from 2001-2010 with the case study of The Hindustan Copper Limited, a public sector undertaking. The case study helps to analyze that the value of production per employee is increasing or decreasing.



5. **HUMAN RESOURCE COSTING AND ACCOUNTING VERSUS THE BALANCED SCORECARD: A LITERATURE SURVEY OF EXPERIENCE WITH THE CONCEPTS:** 1. Ulf Johanson, Gunilla Eklöv, Mikael Holmgren, Maria Mårtensson. In the present paper conclusions are drawn from literature whose goal was to put information on intangibles into financial and non-financial frameworks. The analysis primarily focuses on two concepts: The human resource management oriented concept called Human Resource Costing and accounting (HRCA) and the strategic management oriented concept called Balanced Scorecard (BSC). Despite numerous articles and books on theoretic views and models to capture intangibles in a tangible way, little is known about the outcome of HRCA and BSC. Theoretical elaboration about possible effects is not rare, but investigations are scarce when it comes to financial attempts and almost non-existent with respect to nonfinancial models. HRCA and BSC have largely been developed and applied to internal managerial purposes, though they appear to be used occasionally for external marketing. The future of HRCA may well be to link it to the BSC. To date, HRCA suffers from not being grounded in business strategy. Linking HRCA to BSC would solve this problem and, conversely, the BSC would have the option to utilise measures that have already been developed within the HRCA framework. This effort of combining HRCA and BSC appears to already exist when reviewing some of the recent literature. The question of standards is presently being pushed. However, is it possible to agree upon a standard? For what purpose and which standard?
6. **HUMAN RESOURCE ACCOUNTING AND INTERNATIONAL DEVELOPMENTS: IMPLICATIONS FOR MEASUREMENT OF HUMAN CAPITAL:** Maria L. Bullen Clayton State University, Kel-Ann Eyler Wesleyan College. Human Resource Accounting (HRA) involves accounting for expenditures related to human resources as assets as opposed to traditional accounting which treats these costs as expenses that reduce profit. Interest and contributions to growth in HRA have been evident in a number of countries. The strong growth of international financial reporting standards (IFRS) is an indication that the environment for international financial accounting is one that potentially encourages the consideration of alternative measurement and reporting standards and lends support to the possibility that future financial reports may include non-traditional measurements such as the value of human resources using HRA methods.
7. **HUMAN RESOURCE ACCOUNTING:** R Parameswaran, K Jothi. Human Resource Accounting is one of the latest concepts adopted by Indian companies in recent times. Most of the enterprises which follow Human Resource Accounting spare a separate section in their annual reports for a detailed account of their human resources. Human asset reporting in India usually includes a profile of human assets, the compensation pattern, training and development, human asset productivity, human asset value, and the total wealth of the organization. The concept of human resource accounting can be basically examined from two dimensions: (i) the investment in human resources; and (ii) the value of human resources. The expenditure incurred for creating, increasing, and updating the human resource quality is known as investment in human resources. Such investment yields fruitful results like higher productivity and higher income to the organisation. The yield that the investment in human resources generates will be considered as the basis of human resource value. The American Accounting Association defines human resource accounting as "measuring data of human resources and communicating the information to the interested parties". It has rightly pointed out that human resource accounting would measure all the data relating to the people of an organization, and this data when reported to either the shareholders, or managers, or government, or any other agency, will be helpful in making the relevant decisions.
8. **AN ANALYTICAL STUDY OF HUMAN RESOURCE ACCOUNTING PRACTICES –AN INDIAN EXPERIENCE:** Mamta Ratti (Professor, Swami Devi Dyal Institute of Management Studies, Barwala, Panchkula, India). Human resource accounting has very high significance not only for the management, but also for analyst and even for employees. It helps management in better utilization, planning management of human resources in the organization while for analyst, Even today, when a good deal of work has been done in this field, it is very much unfortunate that there is not only set pattern or generally accepted method either for valuation of human resource or for their recording in books of accounts or for the disclosure of information by means of different statements. The study focuses on the calculation of the value of human resources at different levels of organization & to determine the human resource efficiency quotient. Fifteen Companies are examined for the measurement of human resource measurement. The present study based on the primary data related to the measurement of human resources. The incorporation of the value of HR is very expensive and not easy to calculate the value of HR and if they calculate it, then the value will not indicate the true position of human resource.
9. **APPLICATION OF HUMAN RESOURCE ACCOUNTING IN HEAVY INDUSTRIES:** Shalini Sharma<sup>1\*</sup> and R.K. Shukla: Since the beginning of globalization of business and services, Human elements are becoming more important input for the success of any corporate enterprise. It helps the management to frame policies for human resources. Human Resource Accounting is a process of identifying and measuring data about human resources. Measurement of the investment in human resources will help to evaluate the charges in human resource investment over a period of time. This paper aims at analyzing the application of Human Resource Accounting in heavy industries covering the period from 2001-2010 with the case study of The Hindustan Copper Limited, a public sector undertaking. The case study helps to analyze that the value of production per employee is increasing or decreasing.

## HUMAN CAPITAL INVESTMENT

### HUMAN CAPITAL STRUCTURE

Just like financial capital structure, which consist of various types of capital, the human capital structure consist of various types of employees employed in an organization. The types of employees may be executives, supervisory, artisans, clerical and skilled-staff or semi-skilled staff. The composition and proportion of various types of employees play an important role in the development of an organization.

People are the greatest asset the only real difference between one organization and the other is the performance of the people. The survival, development and performance of an organization depends heavily upon the quality of manpower. Right from Alfred marshal a century ago, down to the management Guru Peter Drucker, focusing attention knowledge workers and knowledge industries come out clear message that "Knowledge" is the key to development. We are in the knowledge era where the new wealth of matrons is tied directly up with the creation, transformation and capitalization of knowledge.

Knowledge based industries especially in the science and technology based units are expanding faster than many other industries and contribute towards the transformation of a country's economic infrastructure. As there is greater demand for knowledge based products the role of knowledge in achieving competitive advantage has become a very important matter in all sections of management. Knowledge, a primary competitive factor in business, which is non-traditional and intangible, and its accumulation, transformation and valuation lie at the heart of intellectual capital management. A recent study estimates that 50 to 90 percent of the value created by a firm comes from the management of intellectual capital and not from management of traditional physical assets. know-how, capabilities, skills, and expertise of the human members of the organization. It is that knowledge that each individual has and which can be put to productive use.

### HUMAN CAPITAL AND ITS ELEMENTS

The world is shrinking in all major respects, people, goods, capital and information are moving around the to be as never before. Companies are trying to become global players just to survive. Companies like Colgate even proclaim "We want to build a common corporate culture. We want them all to be collators", while trying to bridge the cultural gap between domestic employees and those in global operations for serving business interests.

With the concepts of the liberalization, privatization and globalization being applied all over the countries in the world, the need has arisen to go in for quality products and quality service. Each organization has to compete with one another to improve the quality and device cost reduction measures to exist in the industry. That could be done only with the development of human capital. If Japan and other East Asian countries like Korea and Taiwan have recorded rapid economic growth, it is because of their investment in human capital, which cannot be easily measured and which differs from one to another. Basically, when we talk of human capital it refers to the human knowledge, their inner capabilities and creativity qualities. These are to be tapped from the employees. With all the development of technology it cannot be fully utilized to its full potential without knowledge and skill. The capabilities of the human capital in relation to the needs of the organization should be improved with the creation of a climate in which the flower of human knowledge, skill, capabilities and creativity can bloom. How do we develop our human capital and put it to optimum use is the challenge that the present day corporate sector faces. Technological improvements, business strategies, quality concerns etc., will all have to be implemented through people (human capital only). So it is people who make all the difference. People and their development are quite central to meeting the needs of globalization and liberalization. The human capital available in the organization should

be rightly assessed and should be further developed through motivation training and perception to the needs of the organization. Only then, the organizational goals can be achieved and more so, it can continue to be market contribution in the field of competition. With the arrival of micro-electronic technology, work processes have changed. The computer technology offers greater precision but demands different skills. The owners (personnel) of these new skills are both technically educated and trained on the job.

It is the human capital, which should be rightly invented for the qualitative improvement of human beings who are considered the most valuable asset of an organization. Human capital refers to the basic skill, capabilities, the perception know-how and expertise. Every individual has certain skills and understanding. The education one has undergone should help him to develop knowledge in general. Till one gets basic employment he is not keen on planning his future and there is uncertainty. This is normal most of the cases except one, who makes his planning as to what he should be even when he takes his education.

As one is placed in an organization in some position, he starts to look for elevation. The organization too would tap his basic skill and capabilities and divert them to achieve the goals of the organization and in the process it attempts to develop his basic skill through proper training, motivation and direction. The human capital is rightly put through for the personnel in the organization for effective functioning, right decision making and career development. In all these it creates value to the organization and makes it more stable in the competitive environment.

**The basic elements of human capital are projected as under:**

- ❖ Know-how
- ❖ Education
- ❖ Vocational qualification
- ❖ Work related knowledge
- ❖ Occupational assessments
- ❖ Psychometric assessments
- ❖ Work related competencies
- ❖ Entrepreneurial innovativeness, proactive and reactive abilities.
- ❖ Changeability.

(Source: SMAC, 1998)

**1. Know-how:** This is one of the major elements as it relates to the process of the means to get the end results. It answers the question what is what and how to do it and the functions involved in general.

**2. Education:** This is a basic factor which makes one to understand the various aspects of the job or work allotted. This is also a motivating factor for career advancement.

**3. Vocational qualification:** This element refers to the practical knowledge a person gets through vocational education and training certain sphere of activity.

**4. Work-related knowledge:** It is one's knowledge in the particular field of work which he has gained through such work being allotted to him. His earlier work experience in that particular job or work will be of additional value.

**5. Occupational assessment:** A good analysis of the job will motivate one to study the nature of work or occupation. This will enable one to plan his future career depending upon the value of assessment.

**6. Psychometric approach:** This approach tries to measure the ability, i.e., intelligence in terms of quantity or how much intelligence a person has. In other words, this approach tries to determine and measure qualitatively the factors that make up intelligence. To day Psychometric testing is used to discover usually able youngsters, who may benefit from enriched or alerted learning. Each person score is compared with standardized norms, standards obtained from the scores of a large, representative sample of children of the same age who took the test while it was in the process of preparation. Besides providing standardized norms, test developers must devise techniques to try to ensure that the tests are valid (that they measure the abilities they claim to measure) and reliable that the results are reasonably consistent from one time to another. These are rigorous criteria, but tests can be meaningful and useful only if they are both valid and reliable.

**7. Work related competencies:** This relates to the knowledge one processes with regard to the work he is allotted or involved in. This includes the nature of the job, his or her practical knowledge and experience in that line of activity, the training one has undergone in that line or work, is aptitude towards the work etc.

**8. Entrepreneurial innovativeness, proactive and reactive abilities:** It is the entrepreneurial skill and force with which one involves himself in his work. The aptitude in the particular sphere of activity should motivate him for innovative approach. That should make one to act so when there is some adverse result. Innovativeness is based on the constant bent of mind on research in the work field.

**9. Changeability:** The competitiveness among the enterprises drive them making various changes in the organization. As the organizations look or changes, the employees would be driven for challenging tasks with many changes being made in the organizational structure. It may even result in positional change. One should be capable of adjusting himself to the changing organizational setup and changing situations.

**These are all the elements of human capital. To tap these qualities highly and develop them would be the task of Human resource development.**

## MEASURES TO EVALUATE HUMAN CAPITAL

In an enterprise the following indicators are being applied as measures evaluate the human capital:

- i) Reputation of company employees with head hunters.
- ii) Years of experience in profession.
- iii) Rookie ratio (percentage of employees with less than 2 years experience)
- iv) Employee satisfaction.
- v) Employee participation.
- vi) Proportion of employees making new innovative plans and suggestions.
- vii) Value added per employee.
- viii) Value added per salary rupee.

The accounting and reporting of intellectual capital will face the following problems.

- i) The need for better tools to manage investment in people, skills and technological capabilities.
- ii) The need to be able to measure, over the long run, the returns of investment in people's skills, information bases and the organizational technological capabilities.

## HUMAN CAPITAL INVESTMENT

The Human Capital acts as a building block for the organizational (structural) capital of the firm. So, when the enterprise looks for making the Human Capital more effective and beneficial, it has to focus on the effectiveness of investing in training, research and development outcome and returns to technological infrastructure spending. The investment in human capital should be properly planned keeping in mind the future expansion and development programmes as the organizational goal. Already it is seen that the organization required personnel who have to be rightly used for achieving its long project objectives. So, these personnel need proper motivation and encouragement through job analysis, training and research development. Lines of activities are to be thought about for making the employee to be more innovative. They must conduct themselves so to be a suggestive body to the organization.

**FINDINGS**

- Cost per employee
- Human capital investment ratio.
- The amount of wealth created by each employee.
- The profit created by each employee..
- Methods of calculation of human resource accounting.
- Approaches to determine the human resource value.

**CONCLUSION**

Human Resource Accounting Information of an organization is very important factor to decision makers in the era of knowledge based economy. As a result, each organization takes serious attempt to disclose its HRA information to insiders and outsider decision makers. In fact, it is becoming an integral part of management report. This study initiates to reveal the relationship between corporate attributes and HRAD of listed companies in Bangladesh. Its results shows that company size significantly associated with HRAI, which leads the conclusion that larger companies with higher market value discloses more HRA information than smaller companies. The possible reason for the result could be that large companies in DSE are motivated to disclose more HRA information in their annual report to uphold their market value. In addition, the results also find the financial companies are disclosing HRA information than non financial companies and company's profitability positively influences companies to report the information in their annual report. The importance of people as a productive resource has been ignored by the accounting profession. A team of competent devoted and motivated persons can convert a sick concern into successful one but on the contrary incompetent and unmotivated personnel may squander away the existing resources leading to bankruptcy. Hence, the more valid treatment of human resources development expenditure yielding future benefits is to capitalize such expenditure.

**REFERENCES**

1. Andrikopoulos, A. (2005). Using intellectual capital statements to determine value drivers and priorities for organizational change: a portfolio selection approach. *Knowledge Management Research & Practice* 3 (3), 166.
2. Bhat, V.P. (2000, January 13). India: Towards transparency and uniformity. *Business line*. Chennai, 1.
3. Boedker, C., Mouristan, J. & Guthrie, J. (2008). Enhanced business reporting: international trends and possible policy directions. *Journal of Human Resource Costing & Accounting*, 12 (1), 14.
4. Bras, F. A. & Rodrigues, L.L. (2007). *Accounting for firms' training programs: An exploratory study*, 11 (3), 229.
5. Brummet, R.L., Flamholtz, E.G. & Pyle, W.C. (1968a, April). Human resource measurement: A challenge for accountants. *Accounting Review*, 217- 224.
6. Brummet, R.L., Flamholtz, E.G. & Pyle, W.C. (1968b, March). Accounting for human resources. *Michigan Business Review*, 20-25.
7. Brummet, R.L., Flamholtz, E.G. & Pyle, W.C. (1969, August). Human Resource Accounting: A tool to increase managerial effectiveness. *Management Accounting*, 12-15.
8. Bullen, M.L. (2007). Human resource accounting: A useful tool for measurement and management in organizations. *Leadership and Organizational Management Journal*. 85-103.
9. Das Gupta, N.(1985), "Human Resource Accounting", Sultan Chand & Sons, New Delhi.
10. Human Resource Accounting – A Study Material of Company Secretarial Practices in India.
11. Kothari, C.R.(1990), Research Methodology; Methods and Techniques, Wishwa Prakashan, New Delhi.
12. Mouritsen, J. (1998) Driving growth: economic value added versus intellectual capital. Forthcoming in *Management Accounting Research*.
13. Mouritsen, J. (1999) *Intellectual capital: the logic of an 'economy of creativity'*. Work in progress presented at the EIASM workshop on intangibles in Brussels February, 1999.
14. Naylor, J. C. and Shine, L.C. (1965) A table for determining the increase in mean criterion score obtained by using a selection device. *Journal of Industrial Psychology*, 3, pp 33-42.
15. Neimark, M. K. (1992) *The hidden dimensions of annual reports*. Marcus Wiener, New York, NYO' Connor, M. A. (1998) Rethinking corporate financial disclosure of human resource values for the knowledge based economy. *Journal of Labour and Employment Law*, Vol 1, no 2.
16. OECD (1992) *Technology and the economy. The key relationships*. The Technology/Economy Programme, Paris. Ogan, P. (1988) Assessing the impact of human resource accounting information on managerial decisions: a field experiment. *Personnel Review*, Vol 17, No 3, pp 29-35.
17. Oliver, J. and Flamholtz, E. (1978) Human resource replacement cost numbers, cognitive information processing and personnel decisions. A laboratory experiment. *Journal of Business Finance and Accounting*, Vol5, No 2, pp 137-157.
18. Porwal, L.S. (2001), "Accounting Theory" Tata McGraw Hill Company, New Delhi.
19. Rao, Prabhakar D.(1986), "Human Resource Accounting" Inter India Publication, New Delhi.
20. Sharma, R.K., Gupta Shashi K.(2009), "Management Accounting", Kalyani Publishers, New Delhi.

**DETERMINANTS OF TOBACCO OUTPUT IN ZIMBABWE**

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**ABSTRACT**

*The study attempts to model the determinants of tobacco output in Zimbabwe over the period 1980 to 2012. An Ordinary Least Squares estimation technique is adopted and some necessary statistical and econometric specification tests are performed. The findings reveal that acreage is a positive determinant of tobacco output while the number of growers and the price of a substitute crop (soya beans) have a negative effect on tobacco output. Although these variables are significant, their influence on tobacco output is minimal as depicted by the elasticities estimates which are less than one. Tobacco prices and rainfall have an insignificant effect on output at the 5% level of significance. The study recommends the expansion of acreage and irrigation facilities in order to boost tobacco output.*

**KEYWORDS**

Acreage, Ordinary Least Square (OLS), rainfall level, tobacco output.

**INTRODUCTION**

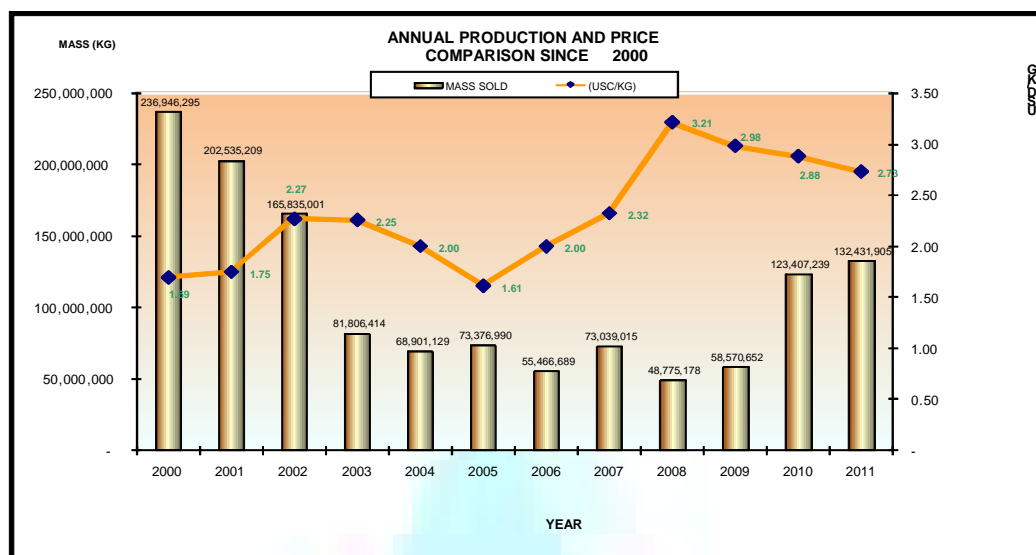
Tobacco is an important commodity in Zimbabwe, employing 30% of the population and about a third of the people employed in the agriculture sector (Leaver, 2004). The crop contributes about 20% of total export revenue, making it the second largest export contributor after minerals that account for 25% of total export revenue (NKC Independent Economist, 2010). Quite recently the number of tobacco growers has increased considerably from 48 000 in 2008 to 56 656 in 2011. A huge number of unregistered growers also exist in the midst of the registered ones (Tobacco Industry and Marketing Board (TIMB), 2012). These growers and their families depend on tobacco farming as a source of income. The crop is generally labour intensive in Zimbabwe, requiring human labour for nursing the seeds, transplanting, weeding, spraying, harvesting and drying.

Having been grown in Zimbabwe for more than 100 years now, tobacco output appears to be sensitive to world commodity price developments due to shocks in both supply and demand. International tobacco prices have been on the rise from US 8 cents per kilo in 1980 to US 65 cents per kilo in 1990. The price further increased to US 1.69 dollars in 2000 and further increased to US 2.27 dollars in 2002 and thereafter the trend reversed and the price fell to US 1.61 dollars as at year 2005. From the year 2006 the price took a positive trend to reach a maximum of US 3.21 dollars in 2008 after which it gradually declined to reach US 2.78 in 2011.

Figure 1 shows annual tobacco output and price comparisons between 2000 and 2011. The data presented in figure 2 depicts a negative correlation between the price of tobacco and the output produced particularly for the periods 2000-2002 and 2008-2011. The same relationship is not so well pronounced over the period 2003-2007, possibly disqualifying the prediction of the Cobb-webb model of agricultural production which envisage output to respond the price changes with a lag. From the figure, in years where the price is increasing output is declining and the reverse holds. Agricultural economic theory predicts a positive relationship between price and quantity produced and supplied. This would therefore suggest that other factors, both exogenous and endogenous could be the significant drivers of tobacco output. For instance, Jerie and Ndabaningi (2011) found that rainfall level, which is an exogenous component, is very important for successful tobacco production.



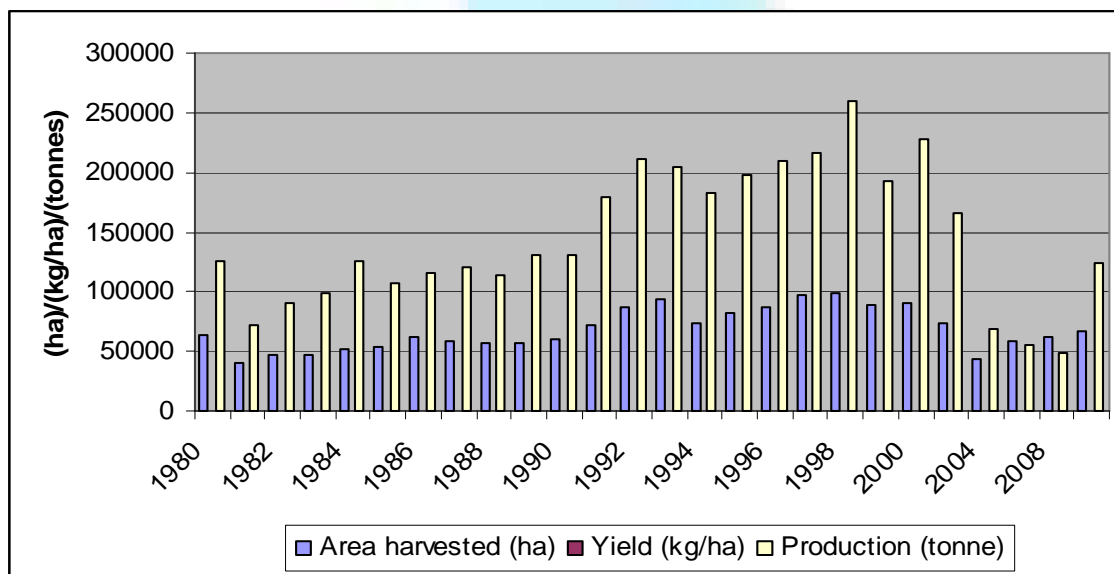
FIGURE 1: ANNUAL OUTPUT AND PRICE COMPARISON 2000-2011



Source: TIMB Annual Statistics (2012)

Figure 2 shows tobacco trends in output and acreage for the period 1980-2010. In the 1980s tobacco yield averaged 2.05kg/ha and this increased to 2.36 kg/ha in the 1990s and thereafter the yield drastically declined to an average 1.65 kg/ha in the new millennium. The area planted took a similar trend to that of yield between 1980 and the year 2000. However, yield drastically declined between 2000 and 2008 as output fell by a larger proportion relative to area under the crop. Some schools of thought attribute the poor performance of tobacco between 2000 and 2008 to the government's Fast Track Land Reform Programme (FTLRP) of 2000 which substantially reversed landholding patterns between the white minority large scale commercial farmers and the majority black indigenous peasant farmers. Consequently, experienced and well resourced white tobacco farmers were replaced by inexperienced and poorly resourced but eager indigenous farmers.

FIGURE 2: TRENDS IN OUTPUT AND HECTARE FROM 1980-2010



Source: TIMB Annual Statistics (2012)

## REVIEW OF LITERATURE

The greatest challenge facing developing countries today is improving agricultural production to eliminate hunger and poverty (Nhemachena, 2003; Parry, 1978; Parry, 1981; Youdeowe, Ezdina and Onazi, 1986). Tobacco production has the potential to meet these two goals through enhancing farmers' incomes and wealth. However, to address this challenge it is important to first of all understand the various factors that influence crop production. Most studies on the determinants of crop production tend to agree that rainfall and acreage [(Igwe and Esonwune (2011), Olujeno (2004), Jerie and Ndabani (2011), Harashima (2008), Mohammad et al (2007)], are strong variables that influence crop output. The World Meteorological Organisation (WMO) report on Zimbabwe (2007) also reports that rainfall is by far the most important variable that affects crop production. This is particularly likely, especially in communal areas of Zimbabwe where rainfall is exceptionally variable in the absence of dam and irrigation facilities. However most of these studies tend to generalise rainfall as the important determinant of crop production, thereby ignoring the "rainfall level" which is particularly important for successful tobacco production. For instance, tobacco requires about 20mm to 30mm of rainfall after every two weeks (Jerie and Ndabani, 2011). This translates to rainfall of between 450mm to 800mm per cropping season. Extreme rainfall variability in the absence of supportive dam and irrigation facilities may result in reduced crop yield.

A compilation of studies by the Food and Agricultural Organisation (FAO) in 2003 regarding tobacco production in most producing countries revealed that in China 40% of variations in tobacco output from 1970 to 1999 were attributed to the total land under cultivation. In the same compilation, a study on Brazil's tobacco industry also shows that tobacco output is influenced by acreage as well as labour costs. The results show that 0.8% of discrepancies in tobacco output are influenced by total land area under cultivation. Mohammad, et al. (2007) in their study for Pakistan found that crop acreage is significantly influenced by the price of the crop and the prices of other competing crops while rainfall and irrigation were found to only have a positive effect on crop output in the short run. Their study used acreage as a proxy for agricultural output, hence implicitly assuming that farmers can increase their output by utilising more land. This is a weak proxy since output and acreage may not be positively correlated as output may depend on a whole array of other factors, both exogenous and endogenous. In trying to model the price elasticity of tobacco output in Zimbabwe, Leaver (2004) highlighted some of the factors that determine tobacco output in Zimbabwe. Using time series data for 1938-2000 and applying the Nerlovian model to verify the supply response of tobacco output, results indicate that current tobacco

output and market prices were positively related to the next season's tobacco at the 1% level of significance. Rainfall and sales quota were both found to have a negative influence on tobacco output. Leaver ignored the effects of acreage on output which is a key factor of production in agriculture. Quite recently, Pfumayaramba (2011) investigates tobacco output response to output itself, tobacco prices, prices of other crops as well as production costs in Zimbabwe using time series data for the period 1980 to 2010. Results show that except for the price of competing crops, own tobacco price and quantity have positive influence on tobacco output whilst production costs and price of other crops are negatively related to tobacco output. These results are consistent to those by Leaver (2004). Both studies did not make an attempt to assess the influence of "the rainfall level" as well as the "number of farmers" on overall tobacco output. The FTLRP brought a substantial increase in the number of farmers participating in tobacco production. These farmers are spread over small farm sizes, a situation found to enhance farmer productivity in some countries due to the popularised inverse farm size-productivity relationship (Berry and Cline 1979, Carter 1984, Cornia 1985)

## SIGNIFICANCE OF THE STUDY

Zimbabwe underwent an economic recession in the last decade to December 2008 such that overall agricultural output was severely depressed. Tobacco, which is one of the country's major income earner and employer was also severely affected. Examining and re-examining the factors that influence tobacco output in an effort to formulate policies that promote increases in tobacco output is key to the successful turnaround of the Zimbabwean economy. Apart from the already established determinants of tobacco output by previous scholars, this study attempts to access the "rainfall level" and two key variables (number of growers and acreage) which were grossly transformed by the FTLRP of the year 2000.

## STATEMENT OF PROBLEM

The Zimbabwean economy is agro-based with tobacco as the major agricultural export crop and employer. Tobacco output is therefore directly linked to GDP and hence economic growth. The tobacco industry experienced a decline in output from 236 000 tonnes in year 2000 to 48 000 tonnes in 2008 (TIMB, 2011). In other periods output has been fluctuating and currently production is below the nation's full potential. This production instability has culminated in a decrease in the country's exports, income and GDP. A decrease in income negatively affects the welfare of the nation since 30% of the population is employed in the tobacco sector. The reduction in income also affects the country's saving and investment levels. Researching on factors that determine tobacco output, which is one of the prime drivers of economic growth in Zimbabwe, is therefore key to addressing an array of economic challenges.

## OBJECTIVES OF THE STUDY

The overall objective of the study is to determine the factors that influence tobacco output in Zimbabwe. Specific objectives are;

- To establish the effect of "rainfall level" on tobacco output.
- To determine if acreage influences output.
- To investigate the relationship between output and the number of growers
- To determine if the price of tobacco influences tobacco output.
- To establish the effect of yield on output
- To establish whether the price of a substitute crop affects tobacco output

## RESEARCH METHODOLOGY

The Ordinary Least Squares (OLS) regression methodology is widely used because it produces estimators which are best, linear, unbiased and efficient (BLUE). It is also relatively easy to compute when compared to other regression methodologies. This methodology is applied on an extended and log-linearised Cobb-

Douglas production function of the form  $Q = AL^\alpha K^\beta$  where L and K are the factors of production representing labour and capital,  $Q$  is output,  $\alpha$  and  $\beta$  are parameters representing the marginal productivities of labour and capital respectively and A is a constant. This conventional production function is modified to incorporate other agricultural factors of production as explained in the Cobb Web and Barnum-Squire models. A log model is estimated after linearising the tobacco production function. The tobacco output function is therefore as follows:

$$LQ_t = \beta_0 + \beta_1 LG_t + \beta_2 LPT_{t-1} + \beta_3 LPS_{t-1} + \beta_4 LA_t + \beta_5 LV_t + \beta_6 R_t + \mu_t \dots (1)$$

Where  $LQ_t$  is the logarithm of total tobacco output in tonnes produced in year t,  $LG_t$  is the logarithm of the total number of tobacco growers in year t,  $LPT_{t-1}$  is the one period lag of the logarithm of tobacco prices,  $LPS_{t-1}$  represents the one-period lagged log of prices of competing crops (Soya beans),  $LA_t$  is the log of acreage in year t,  $LV_t$  is the log of the yield per hectare in year t,  $R_t$  is a dummy variable for rainfall level in year t. The dummy takes the value 0 in years with rainfall below 450 millimetres or above 800 millimetres and 1 in years with rainfall level within the optimal range for tobacco production,  $\beta_0, \beta_1, \dots, \beta_6$  are parameters to be estimated and  $\mu_t$  is a random error term.

Tobacco output is measured by the actual total of flue-cured tobacco output delivered to the auction floors. Because data on actual tobacco output delivered to the auction floors is readily and accurately available, we use delivered tonnage to proxy total tobacco output. This is based on the assumption that all output produced is sold.

Tobacco price is the average price for tobacco offered at the auction floors. To account for both the pre and post dollarisation periods and for uniformity, prices are in American dollars as recorded and provided by the TIMB. The average price of soya beans is used as a proxy for the price of competing crops. The average price is in US dollars after having converted Zimbabwean dollar values into US dollars using the official exchange rate as provided by the Reserve bank of Zimbabwe (RBZ). The prices are valued through indirect quoting due to the inflationary conditions which prevailed before dollarisation in 2009. Soya is grown in similar geographical regions as tobacco. It is also very sensitive to rainfall patterns as it requires neither too much nor too little rain just like tobacco and this authenticates soya bean price as a better proxy for competing crops. Prices are lagged by one period since farmers' output decisions are usually based on prices that prevailed in the previous farming season.

After the FTLRP in year 2000, land holdings were restructured to smaller units. This resulted in an increase in the number of participants in commercial agriculture. To capture the effect of the agrarian transformation on tobacco output, the total number of tobacco registered growers for a particular season is included to be an explanatory variable. Also, to assess this inverse farm size- productivity relationship we take acreage to represent a measure of farm size and regress it against output.

Yield measures the efficiency with which farmers use available resources to produce a given level of output. This is essential as it captures knowledge and technological aspects of production. We take yield to mean total tobacco output per every hectare planted.

## ESTIMATION PROCEDURE

The E-views econometric software is used in our analysis and a general to specific modelling approach is adopted. This approach requires diagnostic tests to be performed in order to ensure the effectiveness of the technique. These tests involve testing for multi-collinearity, stationarity, variable significance, normality and the goodness of fit. These tests are carried out to authenticate the assumptions of the Classical Linear Regression Model (CLRM) as well as to ensure that the

results obtained are BLUE. To detect high collinearity between variables a correlation matrix is first constructed. Secondly to avoid the risk of spurious regression caused by non stationary data, Augmented Dick Fuller unit root tests are carried out to test for stationarity, or the lack of it. Thirdly, non stationary variables are differenced to make them stationary. Fourthly, the tobacco output function is estimated using the OLS method and any insignificant and unimportant variables are dropped, and finally, model diagnostic tests are performed.

The presence of autocorrelation results in an overestimated coefficient of determination and renders the F-test and t-tests invalid (Gujarati, 1995). The Durbin Watson (DW) statistic is used to test for autocorrelation which requires the statistic to have a value around two in the absence of autocorrelation. The t- statistic test is also performed to ensure that exogenous variables are relevant. The inclusion of irrelevant variables inflates the variances of the coefficients. A huge variance reduces the efficiency of estimated parameters. Because the CLRM requires the error term to be normally distributed about the mean (Gujarati, 1995), the Jarque Bera statistic of skewness and kurtosis measures are computed to check for the normality of residuals. The goodness of fit test is also computed to verify if the model is correctly specified. The coefficient of determination ( $R^2$ ) and the F-statistic are used to test for model specification bias.

## RESULTS & DISCUSSION

Table 1 shows minimum variability in most of the variables except for  $LG_t$ ,  $LPT_{t-1}$  and  $LPS_{t-1}$  which have relatively huge standard deviation scores. Most variables are negatively skewed as indicated by the negative values of skewness, implying that higher values of variables were observed at the beginning of the period under consideration except for soya beans prices and the number of growers which are positively skewed.

TABLE 1: SUMMARY OF DESCRIPTIVE STATISTICS

	$LA_t$	$LG_t$	$LPS_{t-1}$	$LPT_{t-1}$	$LQT_t$	$LV_t$	$R_t$
Mean	11.07	8.50	-1.15	-0.11	11.77	7.56	0.73
Median	11.06	7.98	-1.11	0.52	11.74	7.61	1.00
Maximum	11.43	10.94	3.03	1.17	2.47	7.93	1.00
Minimum	10.55	7.04	-4.61	-2.53	10.70	6.67	0.00
Std. Dev.	0.22	1.32	1.17	1.18	0.42	0.31	0.45
Skewness	-0.27	0.48	0.55	-0.77	-0.29	-1.30	-1.02
Kurtosis	2.33	1.70	7.98	2.11	2.55	4.21	2.04
Jarque-Bera	1.03	3.57	35.84	4.33	0.74	11.37	6.99
Probability	0.60	0.17	0.00	0.11	0.69	0.00	0.03
Observations	33	33	33	33	33	33	33

Normality of variables is tested by kurtosis and the Jarque-Bera (JB) statistics which should be close to 3 and 2 respectively to accept the null hypothesis of normality. All variables are normally distributed except for  $LPS_{t-1}$  which has a value of 7.98 for kurtosis and 35.84 for the JB statistic. Despite the failure of  $LPS_{t-1}$  to satisfy the assumption of normality, we can still proceed to include it in the model. Green (2003) postulates that the assumption of normality is often viewed as an unnecessary and possibly inappropriate addition to the regression model. Gujarati (2004) also emphasized that regression analysis can still be carried out regardless of the normality of a variable.

TABLE 2: MULTI-COLLINEARITY TESTS USING PAIR WISE METHOD (CORRELATION MATRIX)

	$LG_t$	$LPT_{t-1}$	$LPS_{t-1}$	$LA_t$	$LV_t$	$R_t$
$LG_t$	1					
$LPT_{t-1}$	0.764687	1				
$LPS_{t-1}$	-0.021583	-0.264396	1			
$LA_t$	0.182486	0.582975	-0.320664	1		
$LV_t$	-0.618429	-0.226929	-0.044868	0.347784	1	
$R_t$	0.275542	0.199792	-0.182219	0.081553	-0.064645	1

The correlation matrix depicts the linear relationships amongst exogenous variables. High collinearity between variable, as depicted by values greater than 0.8, would result in the problem of multi-collinearity in exogenous variables. The results in the matrix have values below 0.8, implying that all the variables can be included in the regression model as potential explanatory variables

TABLE 3: AUGMENTED DICK-FULLER UNIT ROOT TEST RESULTS

Variable	ADF Statistic	Order of Integration
$dLQ_t$	-3.242113***	I (1)
$dLG_t$	-2.922017**	I (1)
$dLPT_{t-1}$	-4.231370***	I (1)
$LPS_{t-1}$	-4.959449***	I (0)
$dLA_t$	-4.079628**	I (1)
$dLV_t$	-4.526110***	I (1)
$R_t$	-4.727048***	I (0)

\*\*\* indicating stationary at 1% (all levels), \*\*stationary at 5% and d indicating change

Unit Root Test results suggest that the stationarity properties of the variables do not warrant the use of co-integration since the variables are not integrated of the same order. Only two variables ( $R_t$  and  $LPS_{t-1}$ ) are stationary in levels while the rest became stationary after first differencing.

TABLE 4: OLS REGRESSION RESULTS

Variable	Coefficient	t-statistic	p-value
C	-0.092978	-1.966931	0.0604
$dLA_t$	0.709920	4.593067	0.0001
$dLPT_{t-1}$	0.060996	0.729945	0.4722
$LPS_{t-1}$	-0.055781	-2.752054	0.0109
$dLV_t$	0.513521	4.272621	0.0002
$dLG_t$	-0.300366	-2.779258	0.0102
$R_t$	-0.078609	1.472435	0.1534
R-squared	0.811080	S.E. of regression	0.124352
Adjusted R-squared	0.765739	F-statistic	17.88847
Durbin Watson stat	1.877130	Prob (F-statistic)	0.000000

Dependant Variable:  $dLQ_t$ , d shows change

A summary of the regression results is given in the table 4. A Durbin Watson (DW) statistic value of 1.877 (which is approximately equal to two) indicates the absence of autocorrelation, a crucial requirement of the CLRM. The coefficient of determination (R-squared) indicates that about 81% of the variations in tobacco output are explained by the combined variation in the exogenous variables in the model. The F-test shows that the overall regression is significant at 1% level of significance as indicated by a low probability value of the F-statistic (0) and the greater value of the F-statistic (17.89). On the basis of these statistical results, we conclude that the model is correctly specified and is of a "good fit".

Total area under tobacco is significant at the 1% level of significance. It positively influences tobacco output as shown by the positive coefficient, conforming to apriori expectations. However considering a coefficient of 0.71 which is less than one, the increase is only marginal. A 10% percent increase in acreage is expected to yield 7.1% increase in tobacco output. This shows that tobacco output is inelastic to changes in acreage. The results are in line with those found by Igwe (2011) which had an elasticity of 0.44.

The estimation found yield to be a significant variable in influencing tobacco output at 1%. Yield is positively related to output, that is, output increases as yield increases. From the results, a percentage increase in yield would culminate into a 0.5% increase in output. The adoption of technology to improve yields has positive although minimal effects on overall tobacco output.

The price of soya (a substitute crop) is significant at the 5% level of significance and is inversely related to tobacco output. An increase in the price of soya would result in a decline in tobacco output. The result also reveals that output is inelastic to relative changes in the price of soya, as indicated by a price elasticity of 0.05. A study by Pfumayaramba (2011) also established tobacco output to be price inelastic and negatively related to output.

The number of growers is negative and significantly related to output at the 5% level of significance. A 1 percent increase in the number of tobacco registered growers would result in a 0.3 percent decline in tobacco output. The negative relationship is not in line with our priori expectations. We conclude that new tobacco farmers are less productive when compared to the former large scale commercial farmers. Their low productivity may be attributed to the lack of the technical knowledge which is essential for successful tobacco farming and possibly the lack of the necessary farming equipment.

The results show no evidence of a significant influence of previous season tobacco prices on current tobacco output. However, Leaver (2004) and Pfumayaramba (2011) found past prices to be significant in influencing output. We attribute the difference in results to the differing time periods considered in the studies as well as data inconsistencies in the new millennium due to the volatile economic environment that was experienced during that time.

Rainfall level has no influence on tobacco output at 10% level of significance as revealed by the results. We conclude that most tobacco farmers tend to supplement low rainfall with irrigation water and that rainfall levels have generally been on the downside with extreme cases in which droughts have occurred.

## SUMMARY AND POLICY RECOMMENDATIONS

The study sought to determine the factors that influence tobacco output in Zimbabwe by employing an OLS methodology on time series data from 1980 to 2012. ADF tests were done to avert the possibility of spurious regression and test results showed that all variables are stationary at 1<sup>st</sup> difference with the exception of the price of soya and rainfall level which were stationary at levels.

Acreage, yield, number of growers and the price of soya are found to be the significant determinants of tobacco output while rainfall level and previous season tobacco prices are insignificant. We conclude that most tobacco farmers tend to supplement low rainfall with irrigation water and that rainfall levels have generally been on the downside with extreme cases in which droughts have occurred. We also conclude that new tobacco farmers are less productive when compared to the former large scale commercial farmers. Their low productivity is attributed to the lack of the technical knowledge which is essential for successful tobacco farming and possibly to the lack of the necessary farming equipment.

Some policy implications can be drawn from the study results. Policy makers should consider incentives that promote land utilisation since tobacco output is positively related to acreage. The setting and enforcement of a "minimum acreage" for farmers to be registered as growers should also be considered. There is need to construct more dams and irrigation facilities in order to counter the adverse effects of droughts and "below optimal" rainfall levels in tobacco farming. Agricultural institutions such as AGRITEX have to be adequately funded in order for them to implement government agricultural policy through the provision of technical and extension services. The smooth functioning of these institutions assists in the timely and proficient delivery of farmer education on the optimum methods of production.

## REFERENCES

1. Alemu, Z.G., Oosthuizen, K. and VanSchalkwyk, H.D. (2003), "Grain-Supply Response in Ethiopia: An Error-Correction Approach," *Agrekon*, Vol. 42, No 4.
2. Barnum, Howard N. and Squire, L. (1979), "An Econometric Application of the Theory of the Farm-Household," *Journal of Development Economics*, Vol. 6, pp. 79-102.
3. Bautista.R.M et al (2002), *Macroeconomic Policy Reforms and Agriculture: Toward Equitable Growth in Zimbabwe*, IFRP Research Report 128, Library of Congress Publications.
4. Berry, R.A. and W.R. Cline (1979), "Agrarian Structure and Productivity in Developing Countries." Baltimore, Johns Hopkins University Press
5. Cafiero, C. (2003), *Agricultural Policies in Developing Countries*, NAPC Working Paper GCP/SYR?006/ITA, Damascus
6. Carter, M.R (1984), "Identification of the Inverse Relationship Between Farm Size and Productivity: An Empirical Analysis of Peasant Agricultural Production" *Oxford Economic Papers*, New Series, Vol. 36, No. 1, pp. 131-145
7. Cornia, G.A. (1985), "Farm Size, Land Yields and the Agricultural Production Function: An Analysis for Fifteen Developing Countries," *World Development* Vol. 13, No.4, pp. 513-534.
8. Food and Agriculture Organization of the United Nations, (2003), "Issues in the Global Tobacco Economy: Selected Case Studies," Rome, FAO Publications.
9. Greene, W.H., (2003), "Econometric Analysis," 5<sup>th</sup> Edition, New Jersey, Prentice Hall.
10. Igwe, K. and Esonwune, C. (2007), "Determinants of Agricultural Output: Implication on Government Funding of Agricultural Sector in Abia State, Nigeria," *Journal of Economics and Sustainable Development*, Vol.2, No. 4.
11. Jerie, S., and Ndabaningi, T. (2011), "The Impact of Rainfall Variability on Rain-Fed Tobacco in Manicaland Province of Zimbabwe," *Journal of Sustainable Development in Africa*, Vol. 13. No. 1, ISSN: 1520-5509
12. Leaver, R. (2004), "Measuring the Supply Response Function of Tobacco in Zimbabwe," *Agrekon*, Vol.43, No. 1, pp. 29-49
13. Mohammad, et al (2007), *Price and Non-Price Factors Affecting Acreage Response of Wheat in Different Agro-Ecological Zones in Punjab: A Co-Integration Analysis*, Pak. J. Agri. Sci., Vol. 44, No.2
14. Mudege, N. (2008), "An Ethnography of Knowledge: The Production of Knowledge in Mupfufuruzi Resettlement Scheme," Zimbabwe, Brill.
15. Nhemachena, M.R. (2007), "Assessment of the Economic Impacts of Climate Change on Agriculture in Zimbabwe: A Ricardian Approach," NPSS 4292 Vol. 1, No. 1.
16. NKC Independent Economists, (2010), "The Role of Burley Tobacco in Selected African Economies and the Expected Impact of a Decline in the Crop's Production, Western Cape.
17. Olujenyo F.O. (2004): "The Determinants of Agricultural Production and Profitability in Akoko Land, Ondo-State, Nigeria," Thesis, Adekunle Ajasin University, Ondo.
18. Parry, M.L. (1978), "Climate change, Agriculture and Settlement," Folkestone, UK, William Dawson and Sons.
19. ... (1981), "Climatic Change and the Agricultural Frontier: A Research Strategy," In: *Climate and History*, pp. 319-336, Cambridge, Cambridge University Press.
20. Pfumayaramba, T. (2011), "Analysis of Flue-cured Tobacco Supply Elasticity in Zimbabwe 1980-2010: An Error Correction Model Approach," AARES Working Paper 55, Melbourne.
21. Reserve Bank Of Zimbabwe, (2009), Annual Publications.



22. Rukuni, M. (1994), *"The Prime Movers of Zimbabwe's Agricultural Revolution. In Zimbabwe Agricultural Revolution,"* (ed.s) Rukuni. M and Eicher C.K, Harare, University of Zimbabwe Press.
23. (2006), *"The Evolution of Agricultural Policy: 1890–1990,"* In: Rukuni, M, Tawonezvi, P, Eicher, CK, Munyuki-Hungwe, M & Matondi, P (eds). *Zimbabwe's Agricultural Revolution Revisited*. Harare, University of Zimbabwe Publications
24. Tobacco Industries and Marketing Board (TIMB) (2012), Annual Statistical Report
25. Townsend, T. (1994): *"Dynamic Acreage Response and Error Correction Model for Maize and Tobacco in Zimbabwe,"* Occasional Paper No. 7 of the International Association of Agricultural Economics.
26. World Meteorological Organisation. (2007), *"Climatology."* Retrieved from [www.wmo.ch/pages/prog](http://www.wmo.ch/pages/prog)
27. Youdewe, P., Ezdinma, F.O.C., and Onazi, O., (1986), *"Introduction to Tropical Agriculture."* England, Longman.
28. Zimbabwe Tobacco Association (2001), Annual Report.



# NATURAL RESOURCE ENDOWMENT AND ECONOMIC GROWTH IN AN OIL EXPORTING COUNTRY: THE CASE OF NIGERIA

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## ABSTRACT

*The question of whether natural resource endowment in a country is necessary or sufficient for economic growth has been an issue of debate since the contribution of Sachs and Warner (1995). Thus, this study examines the long-run impact of natural resource (oil) endowment on economic growth in Nigeria. The result indicates that the variables are inter-related, and that they have long-run relationship. We therefore proceed to estimate the long-run impact of oil resource endowment on economic growth using the fully modified ordinary least square (OLS), because the conventional OLS can yield results that are biased and inconsistent. The result showed that net oil export has a positive and significant impact on economic growth in Nigeria in the long-run. The implication of this is that even though it seems that a resource curse exists in Nigeria now, in the long-run, oil resource "curse" can be converted into resource "blessings". However, when oil resource endowment is measured with oil export, it was observed that although the coefficient had positive relationship with economic growth, it was not statistically significant implying that there is neither a resource "curse" or "blessing" in Nigeria in the long-run. Overall, we conclude that that good governance is necessary to achieve economic growth in the long-run.*

## KEYWORDS

natural resources, economic growth, oil exporting countries.

## 1. OVERVIEW

The question of whether natural resource endowment in a country is necessary or sufficient for economic growth has been an issue of debate for a long time. Writers such as (Lederman & Maloney, 2007) posit that natural resource in a country can be combined with capital and labour to achieve higher economic growth (resource blessing). Thus, it is expected that countries with natural resource endowment should experience higher economic growth than countries with less resource endowment. But, Jean (1876; 1962), and Sachs and Warner (1995; 1997) assert that while access to natural resource through foreign trade is important for a country to achieve higher level of economic growth, possession and production of natural resource is not crucial.

Accordingly, other authors, such as De Long and Williamson (1994); Collier and Hoeffler (2005); Moene and Torvik (2006); and Ross (2012) establish that natural resource endowment can create distortion in the economy. This distortions serve as a channel through which natural resource affect an economy negatively and it is usually manifested through the stimulation of extensive rent seeking behavior among oil producing firms which would lead to corruption and make government undertake worse economic policies; raise the stake in the struggle for control of government; and encourage politicians to put more effort into maintaining political power. It may also lead to over expansion of the size of government arising from revenue generated from export (Willebald, 2010; Alonso & Garcimartin, 2004).

Further, natural resource endowment can stimulate conflict within society as different groups and political parties fight for their share of either the resource or resource "money". It can also destroy a nation's tax system as government's revenue generating interest will be diverted more to income from resource export proceeds. It can as well lead to Dutch Disease Syndrome – a situation in which revenue from natural resource export leads to appreciation of the exchange rate thereby making output of the manufacturing sector less competitive in international markets. These negative effects have been described in the literature as "resource curse" (Sachs & Warner 1995; 1997 & 2001, Gylfason et al. 1999).

Nigeria is richly endowed with huge natural resources (natural gas, tin, ore, coal, oil, limestone niobium, lead, zinc, arable land and water), but depends largely on the oil resource. This is because of the lucrative nature of crude oil coupled with the fact that the country is blessed with huge oil reserve, and also a major producer of oil. Despite this, the country has been experiencing sluggish economic growth and rising unemployment rate as compared to some countries that have less oil reserves.

Available data indicate that the current rates of unemployment of about 21 percent is far higher now than in the period before the oil boom in the early 1970s (WDI, 2011). Several studies have examined the impact of resource endowment on economic growth in Nigeria. However, most of the studies in this area have been theoretical (Mähler, 2010) (Onigbinde 2008). It is against this backdrop that this study empirically examines the impact of resource endowment on economic growth in Nigeria. Specifically, the study examines: (1) if there exists a long-run relationship between oil resource endowment and economic growth in Nigeria (2) if the resource curse exist in Nigeria in the long-run.

Following this introduction, section two treats the empirical literature review, some stylized facts on oil resource is analyzed in section three. Section four treats the theoretical framework and methodology, the empirical result and discussion is treated in section five while section six treats the policy recommendations and conclusion.

## 2. EMPIRICAL LITERATURE REVIEW

The earlier study by Sachs and Warner (1997) establishes that countries with natural resource endowment achieve slower growth than countries that are less endowed during 1970 to 1990 periods. They attributed the reason for this to the Dutch Disease Syndrome, which occurs mostly through exchange rate appreciation and the de-industrialization that follow discoveries and booms in natural resources. According to this view, labour from manufacturing sectors is move towards natural resource and service sectors, this movement will cause the country's manufacturing sector to contract as it diminish long run labor productivity and industrial growth (Sachs & Warner, 1997). Collier and Goderis (2007) explore six different channels by which the resource curse can manifest namely; (a) Dutch Disease effects, (b) institutions' conformation, (c) conflict of interests and political economy, (d) excessive public debt, (e) income inequality and (f) commodity price volatility. Regarding institutional channels, conflict of interests and political economy, author like Van der Ploeg (2007) state that institutions generated by natural resource-abundance come from previous institutional weaknesses, that is when weak institutions exist before the boom of natural resources affects the economy, the effect is negative and vice versa.

On the contrary, Lederman and Maloney (2007) found that economic growth is positively related to natural resource-abundance when they control by export concentration. Thus, the question becomes if natural resource abundance necessarily leads to higher export concentration and what institutions and policies can avoid such an effect. In a more recent paper, Lederman and Xu (2009) explored the relationship between natural resource abundance and export concentration. Goderis (2007) find that the relationship between natural resources and economic growth is positive in the short run but negative in the long run. However, the resource curse can be turned into a possible 'blessing' in the long run if the countries' institutions are sound enough to produce good governance. To measure good governance, the authors use the International Country Risk Guide (ICRG) indexes of quality of institutions. Mehlun, Moene and Torvik (2005) also showed that the natural resource-curse can be avoided if the countries have a good rule of law.

In a different vein, Tornell and Lane (1999) argue that a natural resource-boom in a fragmented society would create a perverse effect through capture of rents: the most powerful interest groups will benefit more from the boom and income distribution would be negatively affected. Van der Ploeg (2007b) shows that natural resource-abundant countries tend to spend their income more rapidly when their societies are more fragmented and their rule of law is weaker. He also suggests that the empirical evidence reflects that countries that enjoy natural resource-abundance have a lower growth rate and a higher inequality. When it comes to Latin America, in particular, Leamer (1999) shows that the abundance of mining resources affects distribution, since the mining sector would demand skilled workers, leaving the unskilled workers (i.e. poor population) out of the benefits of such abundance.

Turning to sub-national evidence, Desai et. al. (2003) find that the voracity effect takes place in regions in Russia that receive *unearned income*, such as transfers from central government or royalties from the exploitation of natural resources. The higher the unearned income streams, the more likely it is that politicians and interest groups adopt rent-seeking behaviors. Such phenomenon creates fiscal and economic dependence on exogenous resources and reduces efforts of collection of regional and local taxes. The author finds that these effects occur more intensively in resource-abundant regions, in comparison to regions that receive other kind of transfers from central government.

The literature presents two different types of unearned income received by regions (Sanguinetti, 2009). First, there exist central government transfers that normally focus in the regions with greater poverty levels. Second, there exist royalties coming from the extraction of natural resources that depend on the location of such resources. Empirical estimates show that income received from natural resources has a direct positive effect on regional growth in Russia, while transfers effects are negative (Desai et. al., 2003). They find that the greater the income from these unearned revenues, the greater the dependence on them; an effect known as "fiscal laziness".

### 3. SOME STYLIZED FACTS ON OIL RESOURCES ENDOWMENT AND RESOURCE CURSE IN NIGERIA

Currently, Nigeria is among the rich oil resource countries with reserve base of over 35 billion barrels. This statistic put Nigeria as the 12<sup>th</sup> oil producer in the world, 8<sup>th</sup> producer among OPEC countries and 1<sup>st</sup> in Africa. Since the discovery of oil in commercial quantity in 1958, Nigeria economy has depended largely on oil owing to its lucrative nature. It has been argued that the over reliance on oil has affected the Nigerian economy in diverse ways. Firstly, owing to the upward trend in the oil production and export, the share of oil in gross domestic product, government revenue, total export and foreign reserve have increased drastically (see table 1).

TABLE 1

Year	Share of oil earnings in GDP	Share of oil earnings in government revenue	Oil earnings in to total export earnings	Foreign reserve in million \$	Oil production in '000 barrels	Oil export in '000 barrels
1970	9.23	26.28	33.39	104.6	395,689.0	383,455.0
1980	28.83	81.09	59.53	5,445.6	760,117.0	656,260.0
1990	37.46	73.28	72.43	34,953.1	660,559.0	548,249.0
2000	47.72	83.50	73.08	1,129,894.4	797,880.0	688,080.0
2005	38.87	85.85	79.00	5,456,456.2	919,285.6	846,179.7
2006	37.61	88.64	75.50	5,425,578.6	813,950.0	656,090.0
2007	36.46	78.08	72.29	6,055,669.0	N/A	N/A
2008	37.44	83.02	72.44	7,025,860.2	N/A	N/A
2009	48.24	78.67	69.34	6,339,615.2	N/A	N/A
2010	40.61	78.92	70.31	N/A	N/A	N/A

Source: Computed from CBN Statistical Bulletin (2011). N/A = Not Available

Available data indicate that the share of oil in Gross Domestic Product (GDP) which stood at 9.23% in 1970 rose drastically to 38.87 in 2005 by 2010 the share of oil in gross domestic product 40.61%. In the same vein, the share of oil revenue in total government revenue rose from 26.28 % in 1970 to 85.85% in 2005 and 78.92% in 2010. The share of oil in total export earnings rose from 33.39 % in 1970 to 70.31% in 2010, also foreign reserve rose very significantly; it rose 104.6 million in 1970 to 6,339,615.2 Million in 2009. Thus the expansion in oil output and export broadens the resource base of the government and if this has been properly managed enormous benefit would have accrued to the Nation.

TABLE 2

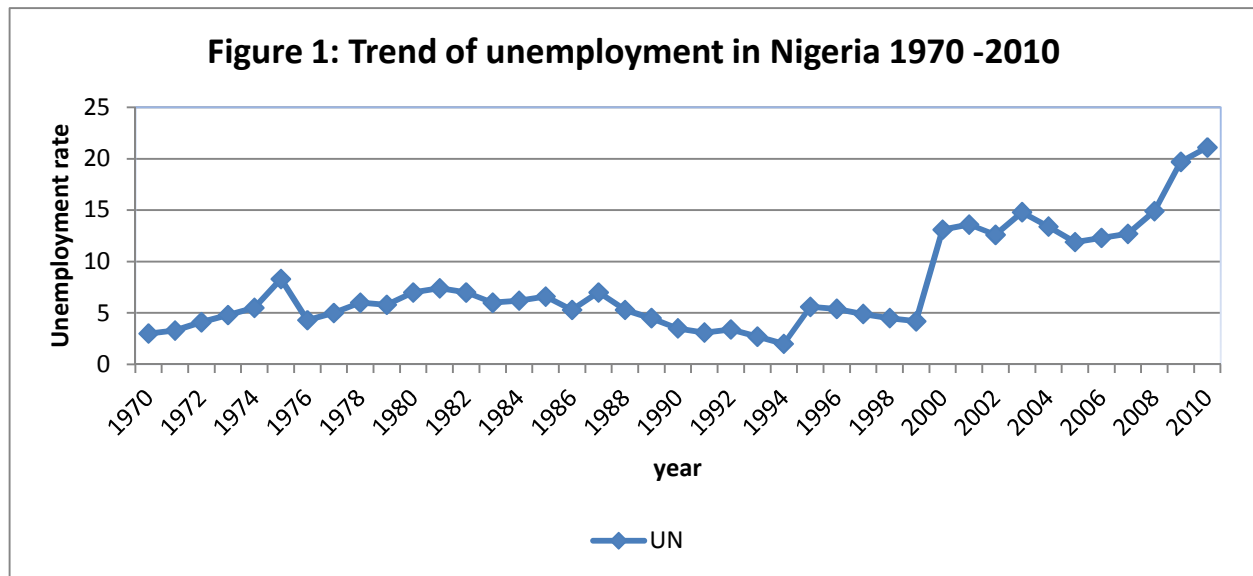
Year	Government Expenditure	Share of manufacturing output in GDP	Share of agricultural output in GDP	GDP growth
1970	903.90	7.17	48.78	25.0
1980	14,968.5	10.40	20.17	4.2
1990	60,268.2	5.50	31.52	8.2
2000	701,059.4	3.67	26.03	3.8
2005	1,822,100	2.83	32.75	6.5
2006	1,938,002.5	2.58	31.99	6.0
2007	2,450,896.70	2.52	32.71	6.4
2008	3,240,818.5	2.41	32.85	5.9
2009	3,456,925.4	2.48	37.20	6.6
2010	N/A	N/A	N/A	N/A

Source: Compiled from CBN Statistical Bulletin (2010 & 2011). N/A = Not Available

Secondly, in spite of the above benefits, oil production and export have had some negative effects on the economy. For instance, after decades of considerable oil production, statistics shows that oil has contributed immensely to the growth of the size of government and governance with a lot of attendant negative characteristics. In Table 2, government expenditure has risen significantly over the years. It grew in nominal term from 903.90 million in 1970 to 3,456,925.4 in 2009 (CBN, 2011). This situation has led to serious misallocation of resources, political instability and corruption in the country, which has manifested itself greatly in areas such as inadequate provision and maintenance of social infrastructure, poor educational funding, and so on.

The oil boom in the 1970s led to the neglect of the non-oil tradable sector (manufacturing and agriculture) i.e. the movement of laborer's from these sector and the appreciated exchange rate during the same period further affected the sector culminating into the Dutch-disease syndrome (see table 2 above). Consequently, unemployment rates in the country have been on the increase because the manufacturing sector, which is the large engine of modern economic growth (because of its ability to create massive employment, create backward and forward linkage and learning by doing), has been made moribund by the neglect of the sector for oil. This situation is also responsible for the ineffective implementation of government policies over the years to resuscitate the non-oil tradable sector because of the overriding emphasis that is laid on the oil sector. Besides, even though the country have been experiencing economic growth of

about 6 percent as shown in table 2 above, (CBN, 2010), available data show that unemployment rates in Nigeria have been increasing over the years. In fact, the current unemployment rate exceeds that of the oil boom in the early 70s (see figure 1 below). This is because of the capital intensive nature of the oil sector.



Furthermore, instead of serving as input such as capital and labour, oil endowment has served as a stimulant for internal conflict in Nigeria (Mähler, 2010). No wonder that the civil and legal (Movement for the Actualization of the Sovereign State of Biafra (MASSOB), Movement of the Survival of the Ogoni People (MOSSOP), Ijaw National Congress (INC), the Militant in Niger Delta and the Armed Boko-Haram in the North) agitations in all parts of the country is evidence to back up this argument as each group fight for either the resource or share of the “oil money”.

#### 4. THEORETICAL FRAMEWORK AND METHODOLOGY

This study is anchored on the augmented Solow growth accounting model by Jorgenson (1966 & 2000). According to the theory, economic growth is determined by three factors; physical, human capital and technological progress. The model tries attempts to reduce empirically the proportion of growth attributed to the unexplained residual named technological progress. In developing the model for this study, we augment the model to include oil resource endowment. Thus, using the Cobb-Douglas Production Function, the relationship is specify as follows:

$$Y = AK^{\alpha}L^{\beta}N^{\theta} \quad (1)$$

From equation 1 above, A = technological progress, Y = output, K = capital, L = number of workers, N = oil resource endowment. B = is a parameter that lies between zero and one. Transforming equation 1 above in linear form yields equation 2

$$\ln Y = \ln A + \alpha \ln K + \beta \ln L + \theta \ln N \quad (2)$$

Taking the log of difference of each variable in equation 2 produces the growth rate of the variable. Thus equation 3 becomes;

$$\frac{\dot{Y}}{Y} = \frac{\dot{A}}{A} + \alpha \frac{\dot{K}}{K} + \beta \frac{\dot{L}}{L} + \theta \frac{\dot{N}}{N} \quad (3)$$

Equation 3 above implies that the growth rate of output equals the rate of technical change plus  $\alpha$  times growth rate of per capital, plus  $\beta$  times the growth rate

of labour input per worker and plus  $\theta$  times the per capita oil resource growth rate. From equation 3 above,  $\frac{\dot{A}}{A}$  = Technological change in the economy. It captures other factors such as improvement in management methods and ways of organizing production that raises the productivity capacity of factories that leads to increase output other than capital, labour and oil resource endowment.

##### 4.1 MODEL SPECIFICATION

Following the theoretical above, we specify a regression model that expresses growth of output per worker as a function of technological progress, growth of per capita, per capita oil resource growth and growth rate of labour input per worker. Thus the model for the study is written as follows;

$$Gy = F(Gk, Gh, Gnr, A) \quad (4)$$

Where;

Gy = Growth of per capita income

Gk = Growth of Physical capita

Gl = Growth of human capita measured with numbers of workers within the working age

Gnr = Growth rate of per capita Natural resource

A = technological change

From the discussion in the theoretical framework above, we Follow the endogenous growth model and assume A (Technological change) is determined within the country by economic factors as follows

$$A = F(INF, FSD, SGEGDP, COR) \quad (5)$$

Where; FSD = Financial sector development measured as broad Money supply divided by gross domestic product, INF = inflation rate, COR = Corruption a proxy for governance, SGEGDP = Share of government expenditure in gross domestic product. Incorporating equation 5 into 4 and expressing in empirical form yields equation 6;

$$Gy = \alpha + \beta_1 Gk + \beta_2 Gh + \beta_3 Gnr + \beta_4 COR + \beta_5 INF + \beta_6 FSD + \beta_7 SGEGDP + e_i \quad (6)$$



Since there are no universal measures of oil resource endowment, we utilized two indicators of oil resource endowment commonly used in the literature namely; oil export and net oil export. Thus equation 7 becomes:

$$Gy = \alpha + \beta_1 Gk + \beta_2 GL + \beta_3 GOILP + \beta_4 COR + \beta_5 INF$$

$$+ \beta_6 FSD + \beta_7 SGE GDP + U_1$$

$$Gy = \alpha + \beta_1 Gk + \beta_2 GL + \beta_3 GNOILP + \beta_4 COR + \beta_5 INF$$

$$+ \beta_6 FSD + \beta_7 SGE GDP + U_2$$

..... (7)

Where; OILP = Oil Production, GNOILE = Net Oil Export. All other variables remain as defined above.  $U_1$  &  $U_2$  = stochastic disturbance term. On Apriori, we expect the coefficient of oil resource endowment to be positive and statistically significant in explaining economic growth (resource blessing), if otherwise, we conclude that there exist "resource curse" however, if the coefficient is either positive or negative but not statistically significant, then there is neither a curse nor a blessing. The coefficient of corruption and inflation is expected to be inversely related to GDP, while the coefficient of financial sector development, physical capital, labour force and government expenditure is expected to be positively related to GDP.

#### 4.2 TIME SERIES PROPERTIES OF THE VARIABLES

Inference from economic variables are based on the assumptions that the variables are stationary (i.e mean reverting), this assumption is often violated in most time series variables. Thus the use of ordinary least square (OLS) can lead to "erroneous" conclusion (Granger & Newbold, 1974). Therefore, there is need to examine whether the variables in our model are stationary. If the variable(s) is/are not stationary, then the variables contain unit root (mean and variance vary over time). In order to examine whether the variables are stationary we employ the Augmented Dickey Fuller (ADF) test by Dickey and Fuller (1979). The test involves the estimation of the following forms of regression equations with intercept and trend (t) in the series.

$$\Delta Y_t = \alpha + \beta \tau + \delta Y_{t-1} + \sum_{t=1}^m \Delta Y_{t-1} + \varepsilon_t$$

..... (8)

Where  $\Delta$  = difference operator,  $\alpha$  represent the drift,  $\tau$  represent deterministic trend and  $m$  is a lag length large enough to ensure that  $\varepsilon$  is a white noise Process. The lag length is based on Schwarz Bayesian Information Criteria (SBIC). In the equation above, the co-efficient of interest is  $\delta$ . If  $\delta$  is equal one (1) i.e.  $\delta = 1$ , the series have unit root, if  $\delta < 1$ , the series does not possess unit root, the possibility of  $\delta > 1$  is ruled out. The estimated ADF-statistic of the variable of interest is compared with the Dickey and Fuller critical values. If the ADF-statistic is significantly more negative than the ADF-critical value then the hypothesis that the variable of interest have unit root is rejected.

If the variables are stationary after taking the first difference, i.e. integrated of order one  $I(1)$ , there is need to examine if co-integration exist among the variables since differencing of the variables takes the variables from long run to short run relationship. The variables are said to be co-integrated if a linear combination of these variables are stationary. If the variables are co-integrated we can say that there exists a long run stable relationship between the variables in the model. That is, any deviation from the equilibrium will get automatically corrected and the variable will revert back to its long run equilibrium level. To test for the possibility of a co-integrating relationship we employed the Johansen multivariate co-integration technique by Johansen 1988; Johansen and Julius (1990). This is because of its superiority over the Engle-Granger (1987) two stage techniques. Once presence of co-integration is established, we estimate the long-run coefficient of the variable. To do this, we employed the fully modified ordinary least square (FM-OLS) technique as propounded by Phillips and Hansen (1990) this technique is superior than the conventional OLS because of its ability to resolve the possible problem of endogeneity in the model as the estimates obtained using the conventional OLS is likely to be dependent on the stochastic disturbance term due to dynamism in the model as a result estimates will be biased and inconsistent. Thus the result obtained from the FM-OLS is more robust and reliable.

#### 4.3 DATA USED AND SOURCE

Data used for this study spans from 1970 to 2010 and they include; economic growth proxy with gross domestic product a rise in GDP represent growth and vice-versa, physical capital is measured with gross fixed capital formation, labour force is measured with labour force participation rate, corruption, financial sector development is measured with broad money supply (M2) divided by gross domestic product, and government expenditure as ratio of government to gross domestic product. Specifically the data on corruption is extracted from the International Financial Statistics and the World Bank data files, data on the indicators of natural resource endowment (oil export and net oil export), gross fixed capital formation are obtained from the Central Bank Nigeria (CBN) statistical bulletin, financial sector development and ratio of government expenditure to GDP are computed from CBN Statistical bulletin and the National Bureau of Statistics respectively.

### 5. EMPIRICAL RESULTS AND INTERPRETATION

As earlier discussed, in order to avoid result that will give erroneous conclusion, we begin our analysis by first examining the time series properties of the variables in the model. This is done using the standard Augmented Dickey Fuller (ADF) test. We include intercept and trend term in carrying out the test. The result is summarized in table 1 below;

TABLE 1: RESULT OF UNIT ROOT TEST (ADF)

Variables	Level	First difference	Order of integration
	Critical Value	Critical Value	
LOGGDP	-1.8322	-5.0049**	I(1)
LOGOILEXP	-1.5430	-5.2651**	I(1)
LOGM2GDP	-2.8022	-4.2923**	I(1)
LOGNETOILEXP	-2.5426	-6.7512**	I(1)
LOGLF	-0.5966	-4.4849**	I(1)
LOGGFCF	-2.5932	-4.3479**	I(1)
LOGCPI	-1.4531	-4.2699**	I(1)
COR	-3.1742	-8.3441**	I(1)
LOGSEGDP	-3.4676	-7.0609**	I(1)
Critical values at 5%	-3.5298		

Note: \*\* denote significant at 5%

The unit root result displayed in table 1 above show that all the variables possess unit root (that is, not stationary) at level. However, after taking their first difference, they all became stationary. This is because the ADF calculated statistics for all the variables is more negative than the ADF-critical value at 5% Thus it can be concluded that the variables are integrated of order 1, that is  $I(1)$ . Thus, we proceed to carrying out co-integration test.

TABLE 2: JOHANSEN CO-INTEGRATION TEST

H0	H1	Trace Statistics	5% critical value	H0	H1	Max Statistics	5% critical value
$n \leq 0$	$n > 0$	309.09**	197.37	$n \leq 0$	$n > 0$	79.92**	58.43
$n \leq 1$	$n > 1$	229.17**	159.52	$n \leq 1$	$n > 1$	66.84**	52.36
$n \leq 2$	$n > 2$	162.33**	125.62	$n \leq 2$	$n > 2$	55.42**	46.23
$n \leq 3$	$n > 3$	106.90**	95.75	$n \leq 3$	$n > 3$	34.61	40.08
$n \leq 4$	$n > 4$	72.29**	69.81	$n \leq 4$	$n > 4$	28.11	33.88
$n \leq 5$	$n > 5$	44.18	47.85	$n \leq 5$	$n > 5$	20.59	27.58
$n \leq 6$	$n > 6$	23.59	29.79	$n \leq 6$	$n > 6$	11.61	21.13
$n \leq 7$	$n > 7$	11.97	15.49	$n \leq 7$	$n > 7$	10.31	14.26
$n \leq 8$	$n > 8$	1.68	3.84	$n \leq 8$	$n > 8$	1.66	3.84

Note:  $n$  represents number of co-integrating vectors. And \*\* denotes rejection of the null hypothesis at the 5% level.

The Johansen multivariate co-integration test by Johansen (1988) and Johansen and Julius (1990) is employed to carry out the co-integration test. We allow for intercept (no trend) in the co-integration equation. The co-integration result shown in table 2 above reveals that the hypothesis of no co-integration,  $H_0$ , among the variables can be rejected. The implication of this is that there exists a long-run relationship between the variables used in the model. It also implies that an Error Correction Model can be estimated using the model. However, since our interest is to examine the long-run relationship among the variables, we did not consider estimating the error correction model.

#### LONG-RUN ESTIMATES

Having shown that a long-run relationship exists between the variables in the model, we proceed to estimate the long-run impact of the regressors on the regressand using FM-OLS. This technique is employed because the conventional OLS result can give result that is not reliable in the long-run (i.e. inconsistent and biased). The result is displayed in table 3 below;

TABLE 3: LONG-RUN RESULT

Variable	Model 1	Model 2
LOGLF	3.7285 (0.0001)*	4.3116 (0.0001)*
LOGGFCF	0.2506 (0.0001)*	0.3527 (0.0000)*
LOGCPI	0.2021 (0.0215)**	0.2139 (0.0214)**
COR	-0.0035 (0.9455)	0.0101 (0.8510)
LOGM2GDP	-0.1622 (0.1005)	-0.2367 (0.0466)*
LOGNETOILEXP	0.1806 (0.0037)*	
SGEGDP	0.0164 (0.0027)*	0.0202 (0.0007)*
LOGOILEXP		0.0331 (0.5380)
C	-5.1053 (0.0261)*	-6.4206 (0.0148)
R-squared	0.99	0.99
S.E of Regression	0.1195	0.1353
Long-run Variance	0.0082	0.0088
Durbin-Watson Stat	1.73	1.659

Note: value in parenthesis represent prob. Value; \* and \*\* represent 5 and 10 percent significant level respectively.

The result in model 1 shows that five of the variables (LF, GFCF, COR, NETOILEXP, SGEXP) conform to our apriori expectation. But only four of these variables are statistically significant in explaining the regressor. Specifically, a 1% increase in labour force participation, gross fixed capital formation, net oil export and government expenditure is expected to increase the growth of the economy by 3.72, .25, .18 and .02% respectively in the long-run, while an increase in corruption is expected to decrease economic growth by 0.35% in the long-run. While two of the variables CPI and financial sector development do not behave well in the long-run, however, only the coefficient of CPI is statistically significant at 5%.

In model two, labour force participation, gross fixed capital formation, government expenditure and oil export have the expected relationship with the regressor in the long-run, however, except for oil export the other three variables are statistically significant in explaining the regressor in the long-run. Specifically 1% increase labour force participation rate is expected to increase economic growth by 4.31%. In the same vein 1% increase in gross fixed capital formation, government expenditure and oil export bring about increase in economic growth by 0.35, 0.02 and 0.03% respectively in the long-run. But the coefficient of natural resource measured with oil export although had it expected sign is not statistical significant in the long-run. The coefficient of the other three (CPI, COR, M2GDP) did not conform to the apriori expectation. However, consumer price index and financial sector development measured with the ratio of broad money supply to gross domestic product are statistically significant at 5% while corruption is not significant.

#### 6. POLICY IMPLICATION AND CONCLUSION

The empirical result displayed above indicates that in the long-run the coefficient of oil resource endowment proxy with net oil export is positive and statistically significant implying that oil resource can be combine with capital and labour to achieve economic growth in Nigeria in the long-run "resource blessing". The implication of this is that even though it seems that a resource curse exist in Nigeria now, in the long-run, oil resource curse can be converted into resource blessings. The possible explanation for this is that in the long-run, owing to increase level of education and exposure of the Nigerian citizens, there will be high demand by the citizens for good governance. The implication of good governance is that effort will be made to ensure that oil proceed is effectively and efficiently utilize and the manufacturing sector will be able to play its role of massive employment, forward and backward linkage and learning by doing. However, when oil resource endowment is measured with oil export, it was observed that although the coefficient had positive relationship with economic growth it was not statistically significant implying that there is neither a resource "curse" or "blessing" in Nigeria in the long-run. The study investigates the long-run impact of oil resource on economic growth in Nigeria. Using co-integration and fully modified Ordinary Least square Techniques, the study reveals that a long run relationship exists between the variables in the model. The result show that the measurement of oil resource matters. Specifically, the result show that of the seven variables in model 1, five conform to our apriori expectation in model 1, while the other two variables did not behave well. In model 2, four of the variables behave well while the other three did not.

## REFERENCES

1. Collier, P. & Goderis, B. (2007), Commodity Prices, Growth and the Natural Resource Curse: Reconciling a Conundrum, the Centre for the Study of African Economies Working Paper Series.
2. Collier, P. & Hoeffler, A. (2002), Greed and Grievance in African Civil Wars, *Quarterly Journal of Economics*
3. De Long, J.B. & Williamson, J.G. (1994), "Natural Resources and Convergence, in the Nineteenth and Twentieth Century's," unpublished paper, Harvard University
4. Dickey, D. & Fuller, W. (1981), Likelihood Ratio Statistics for Autoregressive Time Series with a Unit Root, *Econometrica*, vol.49, <http://dx.doi.org/10.2307/1912517>
5. Gylfason, T. (2000), Resources, Agriculture and Economic Growth in Economies in Transition. *Kyklos*, vol. 53.
6. Jean, A. (1962), *The Six Books of a Commonwealth [Les six livres de la republique]*, Trans. Robert Knolles, ed. K. D. McRae [Cambridge: Harvard University Press].
7. Johansen, S. & Juselius, K. (1990), Maximum Likelihood Estimation and Inferences on Co-Integration with Applications to the Demand for Money, *Oxford Bulletin of Economics and Statistics*, vol. 52, <http://dx.doi.org/10.1111/j.1468-0084.1990.mp52002003.x>
8. Johansen, S. & Juselius, K. (1992), Tests Structural Hypotheses in a Multivariate Co-Integration Analysis of the PP and UIP for UK. *Journal of Econometrics*, vol. 53, [http://dx.doi.org/10.1016/0304-4076\(92\)90086-7](http://dx.doi.org/10.1016/0304-4076(92)90086-7)
9. Leamer, E. Maul, H. Rodriguez, S. & Schott, P. (1999), Does Natural Resource Abundance Increase Latin American Income Inequality? *Journal of Development Economics*, Vol. 59
10. Lederman, D. & Maloney, W. (2007), Trade Structure and Growth, In D. Lederman & W. Maloney (Eds.), *Natural resources: Neither curse or destiny*. Washington, D.C.: Palo Alto, CA: Stanford Economics and Finance, an imprint of Stanford University Press. Madrid, Spain, *unpublished* (available by request to [hwillebald@iecon.ccee.edu.uy](mailto:hwillebald@iecon.ccee.edu.uy)).
11. Mähler, A. (2010), Nigeria: A Prime Example of the Resource Curse? Revisiting the Oil-Violence Link in the Niger Delta.
12. Mehlum H, Moene K, & Torvik R. (2006), Institutions and the Resource Curse. *Economic Journal* 116(508):1–20
13. Pesaran, M., Hashem, M. & Shin, Y. (1998), An Autoregressive Distributed Lag Modeling Approach to Co-Integration Analysis. In *Econometrics and Economic Theory in the 20th Century: The Ragnar Frisch Centennial Symposium*, edited. By Steinar Strom, Cambridge, Massachusetts, Cambridge University Press.
14. Sachs, J. & Warner, A. (2001), "The Curse of Natural Resources". *European Economic Review* 45, pp. 827-838.
15. Sachs, J. D. & Warner, A. M. (1995), Natural Resource Abundance and Economic Growth, NBER Working Paper 5398, National Bureau of Economic Research
16. Sala-i-Martin, X. & Subramanian, A. (2003), 'Addressing the Natural Resource Curse: An Illustration from Nigeria', NBER Working Paper No. 9804.
17. Tornell, A. & Lane, P. R. (1999), The Voracity Effect. *American Economic Review*, 89(1), 22-46.
18. Van der Ploeg, F. & Poelhekke, S. (2010), 'The Pungent Smell of 'Red Herrings': Subsoil Assets, Rents, Volatility and the Resource Curse', *Journal of Environmental Economics and Management*, 60(1), 44-55.
19. Willebald, H. (2010), "Abundance of Natural Resources and Economic Development: Literature Review". *Preliminary Notes PhD Thesis, Departamento de Historia Económica e Instituciones*, Universidad Carlos III,

**CONSUMER BEHAVIOUR WITH REFERENCE TO HOME APPLIANCES IN TIRUVARUR TOWN****R. AYYAPPAN****RESEARCH SCHOLAR****P.G. & RESEARCH DEPARTMENT OF COMMERCE****THIRU.VI.KA. GOVERNMENT ARTS COLLEGE****TIRUVARUR****DR. P.ASOKAN****ASSOCIATE PROFESSOR****P.G. & RESEARCH DEPARTMENT OF COMMERCE****THIRU.VI.KA. GOVERNMENT ARTS COLLEGE****TIRUVARUR****ABSTRACT**

The present study Consumer behaviour – A study with reference to home appliances is aimed analyzing the role of consumers involving pre-purchase activities and making the final decision. Consumer behaviour is the corner stone of marketing strategy. Business units aiming at increasing sales must understand the behaviour of consumers. The study is based on survey method. The primary data were collected from the respondents using an interview schedule. The study was a stupendous task because of large number of households. A sample of 150 respondents possessing Indian made home-appliances covered in the study was selected, by using convenience sampling method. The convenience sampling is one of the non-probability sampling methods. The reason of using this method was the non-availability of the list of universe. The study was conducted in Tiruvarur Town. In a competitive economic system, the success of the business units depends on an accurate knowledge of the consumers. An understanding of consumer behaviour is essential in Marketing planning and programmes and one of the most important keys to successful marketing. The increase in population, the increase in the diversity of population and the ever expanding choices and freedom, and the study of consumer behaviour are must for the marketing function.

**KEYWORDS**

home Appliances, Tiruvarur Town.

**INTRODUCTION**

The study of consumer behaviour is not altogether a recent activity. While it has blossomed in to a much studied science only during the last decades, it finds mention in the earliest treatise **THE WEALTH OF NATIONS** by Adam Smith in 1776. The effects of sociology and psychology and anthropology besides economics, on the behaviour of consumers were recognized and the science of consumer behaviour took root. Marketing and consumer behaviour are so closely related that the study of consumer behaviour can be said to be the first step in refined marketing. Consumer behaviour study and consumer research are important allies of the marketer.

**IMPORTANCE OF THE STUDY**

A purchase is rarely the result of a single motive. Every business man needs to know why consumers purchase certain products or why they do not purchase others. The present study Consumer behaviour – A study with reference to home appliances is aimed analyzing the role of consumers involving pre-purchase activities and making the final decision. Consumer behaviour is the corner stone of marketing strategy. Business units aiming at increasing sales must understand the behaviour of consumers.

**OBJECTIVES OF THE STUDY**

1. To study the general theoretical concepts of consumer behaviour.
2. To study the factors influencing the purchase of home appliances.
3. To study the relationship between income and Brand consciousness.
4. To know the awareness of consumers towards advertising, messages, after sales services and consumer legislation.

**RESEARCH METHODOLOGY**

The study is based on survey method. The primary data were collected from the respondents using an interview schedule. The study was a stupendous task because of large number of households. A sample of 150 respondents possessing Indian made home-appliances covered in the study was selected, by using convenience sampling method. The convenience sampling is one of the non-probability sampling methods. The reason of using this method was the non-availability of the list of universe. The study was conducted in Tiruvarur Town.

**HOME APPLIANCES COVERED**

1. Air - conditioner
2. Grinder
3. Pressure cooker
4. Refrigerator
5. Mixie
6. Washing machine

**LIMITATIONS OF THE STUDY**

1. The study was confined only to Tiruvarur Town
2. Owing to constraints of time and resources more number of home appliances and more information such as brand loyalty, order of purchase could not be included.
3. The findings are drawn only on the basis of information supplied by the respondents.



**FINDINGS**

The results of the study are given below:

**TABLE – 1: BRAND WISE POSSESSION – GRINDER**

Sl. No.	Brand Name	Number of Respondents	Percentage
1.	Lakshmi	67	45
2.	Shantha Tilting V.G	8	5
3.	Maharaja	14	9
4.	A.U.E.	6	4
5.	Butterfly	7	5
6.	HMT	11	8
7.	SPL	3	2
8.	Sowbakya Wet Grinder	29	19
9.	Others	5	3
	<b>Total</b>	<b>150</b>	<b>100</b>

Source: Primary data

It was clear that Lakshmi Wet Grinders are preferred by 45 percent of the respondents. The reason attributed by them is that, the brand offers trouble free performance. Sowbakya Wet Grinder is preferred by 19 percent of the respondents.

**TABLE – 2: BRAND WISE POSSESSION – MIXIE**

Sl.No.	Brand Name	Number of Respondents	Percentage
1.	Maharaja	18	14
2.	Preethi	13	10
3.	Bajaj Mixo Matique	4	3
4.	New Videocon	3	2
5.	Butterfly	9	7
6.	Premier	16	13
7.	Sieco	2	2
8.	Meenu	1	1
9.	Sumeeth	37	29
10.	Star National	21	17
11.	Prestige	2	2
	<b>Total</b>	<b>126</b>	<b>100</b>

Source: Primary data

It was clear that two many brands of Mixies are available in the market. Sumeeth mixie was used by 37 respondents followed by Star National and Maharaja. The reason given by the respondents for using Sumeeth mixie is its Superior quality.

**TABLE – 3: BRAND WISE POSSESSION – PRESSURE COOKER**

Sl.No.	Brand Name	Number of Respondent	Percentage
1.	Prestige	41	28
2.	Maharaja	23	16
3.	Butterfly	36	24
4.	Anandha	4	3
5.	Howkins	12	8
6.	Premier	29	20
7.	Kelvinator	2	1
	<b>Total</b>	<b>147</b>	<b>100</b>

Source: Primary data

As far as Pressure Cooker is concerned prestige was the brand, preferred by 28 percent of the respondents. Butterfly came second with 24 percent followed by premier.

**TABLE – 4: BRAND WISE POSSESSION – REFRIGERATOR**

Sl.No.	Brand Name	Number of Respondents	Percentage
1.	Whirl pool	72	64
2.	Godrej	17	15
3.	L.G.	8	7
4.	Kelvinator	9	6
5.	Videocon	7	8
	<b>Total</b>	<b>113</b>	<b>100</b>

Source: Primary data

Refrigerator, one of the costly home appliances was possessed by 113 out of 150 respondents. Whirl pool was the most familiar brand among the sample population. It was used by 64 percent of them.

**TABLE 5: BRAND WISE POSSESSION - WASHING MACHINE**

Sl.No.	Brand Name	Number of Respondent	Percentage
1.	Hi – Tech	2	7
2.	Whirl pool	9	32
3.	Videocon	8	29
4.	L.G.	7	25
5.	IFB	2	7
	<b>Total</b>	<b>28</b>	<b>100</b>

Source: Primary data

The study revealed that only 28 out of 150 sample respondents were in possession of washing machine. Whirl pool was the most preferred brand by the respondents followed by Videocon and L.G. Utility is the most important factor influencing the purchase of washing machine.

TABLE – 6: BRAND WISE POSSESSION – AIR – CONDITIONER

Sl.No.	Brand Name	Number of Respondents	Percentage
1.	Hi – Tech	5	24
2.	National	3	14
3.	L.G.	2	9
4.	Samsung	5	24
5.	Carrier	6	29
	<b>Total</b>	<b>21</b>	<b>100</b>

Source: Primary data

Air-Conditioner is one of the expensive home-appliances. It was possessed only by 21 respondents. Carrier was the most familiar brand used by 29 percent of the respondents and both the Hi-Tech and Samsung were used by 24 percent of the respondents.

## CONCLUSION

In a competitive economic system, the success of the business units depends on an accurate knowledge of the consumers. An understanding of consumer behaviour is essential in Marketing planning and programmes and one of the most important keys to successful marketing. The increase in population, the increase in the diversity of population and the ever expanding choices and freedom, and the study of consumer behaviour are must for the marketing function.

## REFERENCES

1. Dr. V. Balu, Marketing Reserch and Consumer Behaviour, Sri Venkateswara Publications, Chennai -4.
2. Edward W. Cundiff, Richard R. Still, Norman A.P. Govant Prentice Hall of India (P) Ltd., New Delhi, 1971.
3. M.S. Raju, Dominique xardel, Consumer Behaviour Vikas Publishing House (P) Ltd., 2004.
4. Mamoria C.B. Joshi R.L. Principles and Practice of marketing in India, Kitla Mahal Allahabad, 1978.
5. Peter D. Bennith Harold H. Kassarijian, Consumer Behaviour, Prentice Hall of India (P) Ltd., New Delhi, 1987.
6. R.S. Deshpande – Model Ideal Home for India, United Banked Corporation, Poona 1982.
7. Sherlakar S.A., Marketing management – Himalaya Publishing House, Bombay, 1990.
8. William J. Stanton, Fundamentals of Marketing, Mc Graw Hill, International Book Company, Singapore, 1985.

## SELF HELP GROUP-BANK LINKAGE PROGRAMME AS AN INSTRUMENT OF ECONOMIC UPLIFTMENT OF POOR WOMEN OF ASSAM: A CASE STUDY OF RAHA BLOCK OF NAGAON DISTRICT

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### ABSTRACT

Indian society has always placed a very respectable position to the women. Ensuring gender equality in different socio economic sphere has always remained the top priority of policy makers. Notions of women empowerment and their security can always be observed in the manifestos of all the political parties. Despite this, the present socio economic status of women in India is very miserable. Except the women belonging to the high class group, the entire class of poor women is surviving in the worst possible socio economic condition. In this context the Self Help Group (SHG) -bank linkage programme as launched by NABARD in 1992 can become a very effective tool of uplifting the socio economic status of poor women. There are enough evidences across the globe to show, how the SHG- bank linkage programme through its functioning can provide productive employment opportunity, safe credit facility, saving opportunity and thereby can eradicate poverty. However this programme had started quite late in Assam in compare to other states of the country. Therefore in order to access the success of this particular programme in Assam, an attempt is going to be made to study the pre and post economic condition of women SHG member of Raha block of Nagaon district.

### KEYWORDS

Empowerment, SHGs, Employment.

### I. INTRODUCTION

Most women across the globe rely on the informal work sector for an income. If women were empowered to do more and be more, the possibility for economic growth becomes apparent. Empowering women in developing countries is essential to reduce global poverty since women represent most of the world's poor population. All round development and harmonious growth of a nation would be possible only when women are considered as equal partners in progress with men. Emancipation of women is a pre-requisite for nation's economic development and social upliftment. Poverty is the main obstacle for the improvement of the women. The role of women and the need to empower them are central to human development programmes including poverty alleviation. In spite of various programs relating to poverty alleviation has been started, it was observed that micro credit system through SHGs bank linkage programme plays a very important role for the empowerment of woman in rural areas, especially from the poor families could be benefited. Rapid progress in SHG formation has now turned into an empowerment movement among women across the country. Economic empowerment results in women's ability to influence or make decision, increased self confidence, better status and role in household etc. The empowerment of women through SHGs would give benefit not only to the individual women but also for the family and community as a whole through collective action for development.

Self Help Group (SHG) is a small, autonomous, non political group of people living near each other and sharing common concerns, who come together voluntarily to work jointly for their personal, social and economic development. They agree to save regularly and convert their savings into a Common Fund known as the Group Corpus. The members of the group agree to use this common fund and such other funds that they may receive as a group through a common management. The main objective of SHG formation is to improve poor people's access to microfinance. One of the major causes of persistent poverty in the backward regions of countries like India is that the poor people are not considered as credit worthy and as a result they have extremely limited access to the formal financial services. Micro-finance programmes are important channels for providing small credit to the rural poor in order to alleviate poverty. Micro-financing programmes through Self-Help Groups (SHGs), introduced in several parts of India, have the potential to minimize the problem of inadequate access of the poor to the banking services.

Since women empowerment is critical to the socio-economic progress of the country, investing in women's capacity building and empowering them to exercise their choices is not only valuable itself but is also the surest way to contribute to economic growth and overall development. Empowerment of women has now become a key issue in the Government's Five-Year Plans-by organizing women into SHGs to make the beginning of a major process of empowering women. In the same way, the agenda of SHGs is 'Empowerment' and shift from dormant masses of the rural women to vibrant masses by bringing more income in the hands and control of women so that they can lead a better social life.

In the North- east region of India, the SHG- Bank linkage programme started in 1997-98. Since then the number of SHGs linked to the banks have increased considerably especially during the last few years. The growth rate of SHGs linked to banks has been nearly 200 percent in the North-east from 2001-02 onwards compared to only 50 percent for all India. In north-east India, the state Assam is the leader in the area of the number of SHGs linked to banks and amount of bank loan received. However, the distribution of SHGs over Assam is skewed. Therefore in order to access the success of this particular programme in Assam, an attempt is going to be made to study the SHGs bank linkage programme for the upliftment of poor women of Raha block of Nagaon district.

### II. OBJECTIVES

The main objectives of the study are as follows-

- To know the socio economic status of women SHG members of Raha block of Nagaon district.
- To highlight the impact of SHG-bank linkage programme in economic upliftment of women of Raha block of Nagaon district
- To identify the impact of SHG- BL programme on political knowledge of women SHG members of Raha block of Nagaon district.
- To identify the economic activities undertaken by the group members of SHG.

### III. PROFILE OF THE STUDY AREA

The geographical area selected for study is the Nagaon district of Assam. Nagaon is one of the 29 districts of Assam. As per census 2011, Nagaon had a population of 2,823,768 of which male and female were 1,439,112 and 1,384,656 respectively. Average literacy rate of Nagaon in 2011 were 72.37. If things are looked out at gender wise, male and female literacy rate were 76.51 and 68.07 respectively. Sex Ratio in urban region of Nagaon district is 964 as per 2011 census data. As per 2011 census, 86.91 % population of Nagaon districts lives in rural areas of villages. In rural areas of Nagaon district, sex ratio is 962 females per 1000 males. Literacy rate in rural areas of Nagaon district is 69.96 % as per census data 2011. Gender wise, male and female literacy stood at 74.22 and 65.52 percent respectively. As per HDR of Assam- 2003, the position of Nagaon in HDI ranking is 14 out of 23 districts of the state and its GDI rank is 22 which is very much low. Our study area Raha block is one of the 18 blocks of Nagaon district. Raha is situated at about 22 km west of Nagaon district and it was an important Chowki during the Ahom Days. Raha is a small town situated on National Highway 37 connecting Guwahati and Nagaon. Today, Raha is an important trade centre for agricultural products such as paddy, jute and mustard. An important institution here is the Fishery Training College - the first of its kind in Nagaon.

### IV. STATEMENT OF THE PROBLEM

Nagaon district is one of the most backward district of Assam. It is thickly populated and the overall literacy rate is also significantly low than the national and state average. Further the area is absolutely backward in terms of Industrialization. Therefore the SHGs-BL programme in this particular area has a very high prospect through providing gainful self employment opportunity to the poor especially to the women. SHGs - BL programme although started quite late in Assam in compare to the other parts of the country but in recent years it has taken the momentum. Therefore in order to evaluate the success of this programme in Assam, one of its backward district has been selected as the area of the study.

### V. METHODOLOGY

#### 5.1 SAMPLE AND SAMPLING TECHNIQUE

Out of the seventeen gram panchayats (GPs) of Raha Development Block, Amtola, Ranthali, Chaparmukh, Raha, Hatbor, Amsoi has been purposively selected as the study area. The logic behind this is, out of the selected GPs the first three are comparatively backward in terms of financial and economic infrastructure whereas the rest three are relatively developed in terms of the same. A sample of 24 SHGs, four from each of the six GPs has been randomly selected. Information on 120 women members (that is 5 members from each SHGs) has been collected. Thus the study is based on multi stage sampling.

#### 5.2 METHODS OF DATA COLLECTION

The study is mainly based on primary data. The macro data about the SHGs of the area has been collected from the block officials of Raha development block and the field data on the women members of the selected SHGs has been collected through survey method using personal interview schedule.

#### 5.3 DESIGN OF THE STUDY

The data collected for the selected 24 SHGs are represented and interpreted through statistical tables and Pie charts. The study is essentially a descriptive one. It aims at describing the role played by SHGs - BL programme in women empowerment through providing them financial security.

### VI. FINDINGS AND DISCUSSION

#### 6.1 SOCIO ECONOMIC STATUS OF THE RESPONDENTS

##### ➤ 6.1.1. Distribution of the respondents on the basis of Age Group

Table 1 represents the distribution of the respondents on the basis of age group. This section is included in order to show the impact of SHGs-BL programme on the women of different age group. It is clear from the table that majority (42.50%) of the respondents are from the age group of 30-40, followed by 30% in the age group of 40-50 and 21.67% in the age group of 20-30. However it can be noticed from the table that SHGs -BL programme is not very much popular among the women in the age group of below 20 and above 50. It is a matter of concern that SHGs- BL programme is unable to target the section of senior women, because this section of the women are mostly financially insecure.

TABLE 1: DISTRIBUTION OF THE RESPONDENTS ON THE BASIS OF AGE

Age group	No of respondents	Percentage (%)
Below 20	04	3.33%
20-30	26	21.67%
30-40	51	42.50%
40-50	36	30%
50-60	3	2.50%
Total	120	100

Source: Field Survey by the authors

##### ➤ 6.1.2. Marital status of the women

Married women, many often in the poor are subjected to domestic violence and they are mostly dominated by their husband in terms of financial matters (Dey et.al 2013). In this context SHGs -BL programme can play a greater role in economic empowerment of these women by providing them the opportunity to participate in economic activities. Further this may reduce the frequency of domestic violence against them, because if they could earn, they will be treated as an asset to the family. However, apart from the married women, this programme is also important to the widow and divorced women, because these women in some societies particularly in the poor society are considered as burden to the family. Therefore these women should come out to avail the benefit of this programme.

TABLE 2: MARITAL STATUS OF THE WOMEN

Marital Status	No. of respondents	Percentage
Married	91	75.83
Unmarried	22	18.34
Widow and divorced	7	5.83
Total	120	100

Source: Field survey by the author

From table 2 it appears that SHGs -BL programme is playing a great role towards economic upliftment of married women. Most of the respondents (75.83%) are married and 18.34% of the respondents are yet to get married. However to assess the success of this particular programme among the widow and divorced women a separate study is needed.

##### ➤ 6.1.3. Distribution of the respondents on the basis of Educational attainment

Most probably the most important benefit of SHG-BL programme is that both illiterate and literate women can participate in the programme. The illiterate and mere literate women, who are generally excluded from formal line can take the opportunity of becoming a member of SHG and thereby can become an economic agent.



TABLE 3: EDUCATIONAL ATTAINMENT OF THE RESPONDENTS

Educational Attainment	No of Respondents	Percentage
Illiterate	4	3.33%
Primary	29	24.16%
High school(v to x)	79	65.83%
Higher secondary	8	6.68%
Degree	--	--
<b>Total</b>	<b>120</b>	<b>100</b>

Source: Field Survey by the author

It can be seen from the above table that majority (65.83 %) of the respondents are high school level educated. 3.33% of the respondents are illiterate and 24.16 % have completed just primary level of education. It shows that educational attainment is not a barrier to join SHGs.

## VII. IMPACT OF SHGS-BL PROGRAMME ON ECONOMIC UPLIFTMENT OF THE RESPONDENTS

Since the main objective of this paper is to identify the role played by SHG- BL programme in economic upliftment of poor women, so we will basically judge the effectiveness of this programme under the following heads-

### 7.1 INCOME

Economic upliftment of poor is possible through increasing their income level. Alternatively speaking, income generation is the only way to break the vicious circle of poverty. As an instrument of economic upliftment, the success of SHG –BL programme can be realized only when it can raise the income level of the poor women.

TABLE 4: IMPACT OF SHGS-BL PROGRAMME ON INCOME LEVEL OF THE RESPONDENT

Opinion	No. of Respondents	Percentage
Yes	87	72.5%
Yet to be realized	33	27.5%
<b>Total</b>	<b>120</b>	<b>100</b>

The above table clearly reveals that SHGs have brought much improvement in the income level of the respondents. Majority (72.5%) of the respondents are of the opinion that they have enjoyed increase in their income level after joining SHGs. However 27.5% of respondents revealed that they are waiting to realize the impact of SHG-BL programme on their income level.

### 7.2 SAVING

Income generation schemes are definitely the way to economic upliftment of poor, but it doesn't provide the guarantee of sustainable economic upliftment. SHGs- BL programme as we have seen above, can bring a positive impact on the income level of poor and thereby economic upliftment of them but to have sustainable economic upliftment, it must have a positive impact on the saving level of the respondents. This is because economic upliftment in true sense will occur when increase in income can provide them financial security over time and saving is the only way to ensure this. The impact of the SHG –BL programme on the saving pattern of the women SHG members is shown in Table 5.

TABLE 5: CHANGE IN THE SAVING PATTERN OF RESPONDENTS

PARTICULARS	PRE-SHG		POST-SHG	
	Number	Percentage	Number	Percentage
In the SHG	0	0	120	100
Personal account in Banks	0	0	4	3.33%
No saving	120	100	—	—
<b>Total</b>	<b>120</b>	<b>100</b>	<b>120</b>	<b>100</b>

Note: The 3.33% of the members in post SHGs period are saving both in the group account as well as in their personal saving account.

The table represents the saving behaviour of the respondent both pre SHGs and post SHGs period. It appears from table 5 that none of the respondents had any kind of saving in the pre SHG period. However after joining in SHG, all the respondent members as part of the mandatory saving of the group are saving in the group account of the SHGs. Thus SHGs formation has 100 % positive impact in the saving habit of the respondents. But the mandatory saving of the group members can not actually help in their economic upliftment, this is because the group members save a very marginal amount in the group account. Only 3.33% the members along with saving in mandatory saving of the group, are also saving in their individual bank account. Thus analyzing the saving behaviour of the respondents, it appears that SHGs- BL programme yet has not been able to yield the desired result in sustainable economic upliftment of poor women of the study area.

### 7.3 CREDIT

Economic upliftment of the poor is also possible through providing them cheap and safe credit facilities. It is established by various researches that financial inclusion of the poor will provide them productive employment opportunities and thereby can improve their economic condition. Further institutional credit is the way to protect the financially excluded women from the clutches of village moneylenders, who often exploit the poor by charging exorbitant rates of interest and manipulating their accounts. As a part of the financial inclusion strategy of the country, SHGs- BL programme is playing a major role in institutionalizing rural credit by providing access to cheap and safe credit facilities to the excluded group, as after joining the SHGs, members now can meet their marginal credit requirement from the group account of the SHGs.

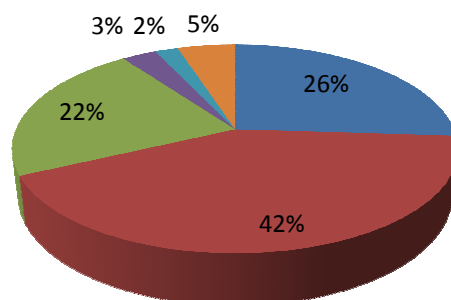
TABLE 6: FREQUENCY OF TAKING LOAN FROM SHG ACCOUNT

No of time taken loan from SHG account	No of Respondent
Once	31
Twice	50
Thrice	27
Four times	4
More than Four	2
None	6
<b>Total</b>	<b>120</b>

Source: Field Survey by the authors.

### Frequency of taking loan from SHGs account

■ Once ■ Twice ■ Thrice ■ Four times ■ More than Four ■ None



Source: Field survey by the authors

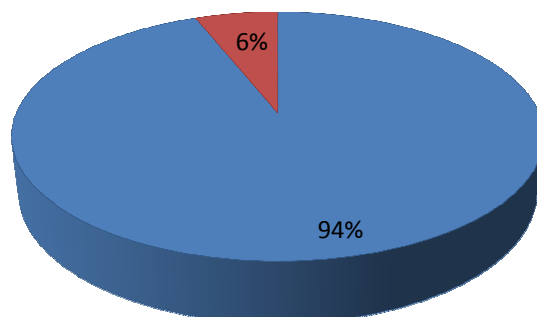
In the above chart we can see that altogether 95% of the members are taking the loan are benefited from SHGs. 42% of the members have taken loan twice while 26% have taken credit only once and 5% of the members have not taken credit yet.

### VIII. IMPACT ON POLITICAL KNOWLEDGE

SHGs-BL programme can definitely improve the political knowledge of the group members. Various formal meetings organized at the block level and informal meetings within the group will help the group members to acquire knowledge about different government scheme and thereby enable them to avail the benefits.

### Impact on Political knowledge

■ Improved ■ Not improved



Source: Field survey by the authors

From the above chart we can easily comment that SHGs- BL programme has radically improved the awareness level of the respondents. As 94% of the respondents are of the opinion that their political knowledge on different government scheme has improved after joining SHGs.

### IX. TYPES OF ECONOMIC ACTIVITIES PERFORMED BY THE RESPONDENTS

SHGs of this particular area are engaged in different types of economic activities. However an important finding is that some women SHGs are engaged in full time business, whereas some others are doing their business seasonally or part time. We observed four types of full time economic activities which are piggery, poultry, weaving and goatery etc. and the part time activities include "Pitha making", toy making etc. The part time SHGs members are generally active in time of festivals like Bihu, Puja etc.

TABLE 6: DISTRIBUTION OF THE SHGS ON THE BASIS OF TYPES OF ECONOMIC ACTIVITIES

Nature of the economic activity	Economic activities	No of SHGs
Full time Business	Weaving	7
	Poultry	4
	Goatery	3
	Piggery	3
	Saree Selling	3
Part time and self employed	Pitha making, Pickle making	4
Both part time and Full time Business	Gift coupon games, Pitha making	16

Source: Field Survey by the authors

In the above table we can see that most of the SHGs are engaged in full time economic activity while only four SHGs are engaged in part time business. The part time groups become active in the time of festivals only, while the full time groups conduct their operation throughout the year. Among the full time groups,

weaving is the most popular activity. However among the 24 SHGs, 16 SHGs are doing both part time and full time business. These groups organize various types of gift coupon games in the time of Bihu, Deepawali etc.

#### X. SUGGESTIONS

- The educated unemployed women should also participate in the programme.
- Senior women should be encouraged to participate in the programme.
- SHGs should extend the area of their business.
- The group members should be made understand that SHGs are not only the means of taking easy loan; rather it is the opportunity to improve their economic condition.
- The group members should collectively utilize the benefits of different government scheme.
- The government should provide proper initiatives for the success of SHGs- BL programme in the prescribed area.

#### XI. CONCLUSION

From the above discussion, it appears that the SHGs-BL programme if implemented and utilize properly, it can change the shape of rural economy of India. But in our study area, the desired benefit of the scheme is yet to realize. Since the programme is able to achieve some sort of success in terms of income generation of the rural poor but it has failed to enhance the income of the respondent to the extent which enable them to think for saving. However, we can not deny the success of this programme in the study specially when we consider the widespread poverty, illiteracy and unemployment among the women of the area.

#### REFERENCES

1. **Bass, P. & Srivastava, P. (2005).** Exploring Possibilities: Microfinance and Rural Credit Access for the Poor in India. **Economic and Political Weekly**.40 (17).
2. **Chandrasekhar, H.M. & Lokesh, M.U. (2009):** Role of SHGs in socio-economic change of vulnerable poor. **International NGO Journal**. 4 (4), 127-131
3. **Dasgupta, R. (2001):** Working and Impact of Rural Self-Help Groups and other Forms of Micro Financing: An Informal Journey through Self-Help Groups. **Indian Journal of Agricultural Economics**. 56(3), 370-386.
4. **Dey.S & Borkakoty .N.(2013):** Shg- Bank linkage programme and Financial security of women\_ A case study of Sapekhati development block of Sivasagar district, published in proceeding volume , **Amguri college journal**
5. **Dhavamani, P. (2010).** Empowerment of Rural Women through Self Help Groups in Sattur Taluk of Virudhunagar District. **Journal for Bloomers of Research**. 2(2), 191-195.
6. **Satish, P. (2000).** Some Issues in the formation of Self Help Groups. **Indian Journal of Agricultural Economics**. 56(3), July- September, Mumbai

**HUMAN RESOURCE MANAGEMENT SCENARIO IN INDIA**

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**ABSTRACT**

*The human resource management is a proactive central strategic management activity which is different from conventional personnel management. So now a day's Human resource is considered as the backbone of any economic enterprise. In recent years the economist has added "Human resource" besides land, capital and technology as the key factor for building and developing the nation. The HRM is a growing concept. Indian economic scenario is undergoing a basic structural change affecting all walks of life. Physical, behavioral and psychological differences among individuals have increased with rapid changes taking place in the management process of the organizations. These have implications in the design of recruitment, selection, training and development, compensation, programme, performance appraisal, employee discipline, promotion and transfers etc., are becoming difficult for implementation due to poor understanding of personnel management by the employees so it represent a new model of HRM has been focused on the HR policies and practices followed in company related to HRP Recruitment, Performance Appraisal, HRA, DA, Labor Welfare Measures. The success of the company is purely based on the Human Resource Policies and Practices.*

**KEYWORDS**

Human Resources management, Human resource, Personnel management, Human Resource Management trends.

**INTRODUCTION**

The origin of the function is a rose in those organizations which introduced 'welfare management' practices and also in those that adopted the principles of 'scientific management. Since 1990 due to liberalized government policies, Indian scenario began to change. Human resource is a relatively modern management term having been coined in the 1960s. Business scenario growing importance of Human Resources Management in both business and public life. The business climate brought in the wake of liberalization, globalization, changing technologies, growth in Knowledge and advances in information technology is offering managers a complex and challenging situation (Davis, 1995). Indian organizations are tending to become competitive to meet globally relevant standards. The growing emphasis on privatization has warranted a new focus in terms of result orientation, long-term strategies, consumer focus, and initiative. The HRM has emerged and evolved as one of the most important areas of organizational Science and practice. It has not been developed in isolation, but rather in the Context of industrial change and economic development. The uniqueness of the Human Resources approach requires a totally different type of attention from managers. The HR has characteristics that provide the greatest challenge as well as opportunity. A company's HR is fragile with delicate relationships, along with unpredictable contributions and permanency is uncertain (Guest, 1991).

Human resource became one of crucial driver for development and change. As the viewpoint of management towards its employees began to change, role and contribution of human resource as a talent pool also become so vital that most of the organizations started to focus their vision and mission statements on the people who work for them. With the boom in the technology sector in 2000, newer and newer ways of attracting, recruiting and managing tenant in the companies also started to emerge.

Human Resource Management as a function of management has come a long way. The traditional version of HRM, Personnel management is a concept that can be appropriately related to the old model of organization, is bureaucratic in character, with less suppleness, and higher degree of centralization and formalization, i.e., adherence to rules and regulation. HRM, on the other hand refers to the overall philosophy about the organization and how people should be managed and is not merely limited to certain specific functions. HRM focuses on congruence and commitment instead of compliance and control. The scope of HRM is indeed, very vast and wide. It includes all activities starting from manpower planning till employee leaves the organization. This study painstakingly attempts to bestow the concept of, Objectives of HRM and trends along with the Challenges in HRM.

**OBJECTIVES OF HRM**

The primary objective of HRM is to ensure the availability of right people for right jobs so as the organizational goals are achieves effectively. This primary objective can further be divided into the following sub-objectives:

- To help the organization to attain its goals effectively and efficiently by providing competent and motivated employees.
- To utilize the available human resources effectively.
- To increase to the fullest the employee's job satisfaction and self- actualization.
- To develop and maintain the quality of work life which makes employment in the organization a desirable personal and social situation.
- To help to maintain ethical policies and behavior inside and outside the organization.
- To establish and maintain cordial relations between employees and management.
- To reconcile individual/ group goals with organizational goals.

**HUMAN RESOURCE MANAGEMENT TRENDS**

In organizations, it is important to determine both current and future organizational requirements for both core employees and the contingent workforce in terms of their skills/technical abilities, competencies, flexibility etc. The analysis requires consideration of the internal and external factors that can have an effect on the resourcing, development, motivation and retention of employees and other workers. The external factors are those largely out-with the control of the organization and include issues such as the economic climate, current and future trends of the labor market e.g. skills, education level, government investment into industries etc. On the Emerging Trends of Human Resource Management (With Special Focus on Information Technology Industry) other hand internal influences are broadly within the control of the organization to predict, determine and monitor, for example the organizational culture underpinned by management behaviors (or style), environmental climate and the approach to ethical and corporate social responsibilities. In order to know the business



environment in which any organization operates three major trends should be considered: Demographics – It is the characteristics of a population/workforce, for example, age, gender or social class. This type of trend may have an effect in relation to pension offerings, insurance packages etc.

Diversity – It refers to the variation within the population/workplace. Changes in society now mean that a larger proportion of organizations are made up of "baby boomers" or older employees in comparison to thirty years ago. Advocates of "workplace diversity" simply advocate an employee base that is a mirror reflection of the make-up of society insofar as race, gender, sexual orientation, etc. Skills and qualifications – As industries move from manual to more managerial professions, so does the need for more highly skilled graduates. If the market is "tight" (i.e. not enough staff for the jobs), employers will have to compete for employees by offering financial rewards, community investment, etc.

### EMERGING HR TREND IN INDIA

A look at the trends in managing people in this dynamic industry reflects that Attracting, Managing, Nurturing talent and Retaining people has emerged to be the single most critical issue in lieu of the enormous opportunities spun off by the market. The new avatar of talent is the knowledge professional that is innovative, business survey, quick on the uptake, has an instinctive ability to network, and possessing unbridled ambition. They are propelled by an urge to experiment, scan new avenues that can spur their creativity. The knowledge professional will gravitate to an organization that is flexible, has strong values, a robust performance ethic and provides challenging work on latest technology. This has led to companies proactively taking measures on three fronts. First, companies create an organizational ambience where talent can bloom. Second, they put in place systems that help unleash their potential and third, they build a reward and recognition mechanism that provides value for people.

### EMERGING CHALLENGES IN HUMAN RESOURCE MANAGEMENT

The propagation of technology and changes in the business environment has increased the importance of human resources in the modern world. The major challenges facing human resources arise from this altitude of human resource activities to a core strategic function.

#### MAINTAINING PRODUCTIVE ORGANIZATION

There is a challenging task of maintaining a productive organization. Here, efforts may be made to take into account the emerging dimension related to the imbalanced age structure of the human resources in the future. This necessitates adherence to a designed strategy for renewal of manpower in a phased manner. The future age distribution of workforce can be assessed using a "manpower renewal forecast model". Based on this diagnosis of potential manpower problems, young blood may be inducted into the workforce where imbalanced age composition is likely to occur.

#### MANAGING TEAMS

Team building—activities aimed at improving the internal work and relationship processes of teams—requires attention to both task and interpersonal relationships. In team building, organizations apply the principles of group dynamics to select complementary members, support more consistency, and manage stages of group development, and establish constructive norms that promote high performance. Membership in teams is based on proficiency in areas that are necessary for job achievement. Self-assurance is the key to team members' pledge to a common goal, shared responsibility, and group effort. Trust is built on six interdependent factors: the honesty of the members; open communication; mutual admiration and support; justice and impartiality; capability and hard work; and reward for joint effort. In addition, clear goals are a requirement for effective teamwork.

#### MANAGING DIVERSITY

Managing diversity means planning and implementing organizational systems and practices to manage people so that the potential advantages of diversity are maximized while its potential disadvantages are minimized. The dimensions of workplace diversity include age, ethnicity, gender, physical abilities, race, sexual orientation, educational background, geographic location, income, marital status, religious beliefs, parental status, and experience.

Diversity is going to be important issues for the H.R. manager as number of young workers in the work force is increasing, more women are joining the workforce, increasing mobility, common international careers and international experience is becoming a pre-requisite for managerial positions. Employees now prefer high paying jobs in multinationals and other private sector concerns. The percentage of old employees is growing due to improved medical and health care. With the growth of trade unions, employees have become more conscious of their right in the workplace. New workforce comprise worker, which have a desire of higher degree of participation and avenues for self-fulfillment. Proportion of professional and technical employee will increase in relation to blue color workers. Human resources will be treated as assets, which will appear in balance sheets of business organization in future.

#### ADAPTATION OF TECHNOLOGICAL CHANGES

There is a challenging task of adapting workplace to rapid technological changes which influence the nature of work and generate obsolescence. Accordingly, the human resource managers will be required to perform the following tasks:

- Maintain human resource competence through training and development programmes
- Ensure a fit between technology and people for its optimal utilization through job design
- Arrange alternative careers through training of employees displaced by technology
- Update the new entrants to the workforce with the technology used at the job through a closer relationship between business and educational institutions; &
- Increase the productivity of non-manufacturing jobs.

#### MANAGING GLOBALIZATION

Globalization requires organizations to move people, ideas, products and information around the world to meet local needs. It is one of the most theatrical challenges facing as they enter the twenty-first century that is how to compete against foreign firms, both domestically and abroad. Lots of companies are already being forced to think globally, something that doesn't come easily to firms long accustomed to doing business in a large and expanding domestic market with negligible foreign competition. Feeble response to international competition may be resulting in upwards layoffs every year. Human resources can play a critical role in a business's ability to compete head-to-head with foreign producer's. New and important ingredients must be added to the mix when making strategy: volatile political situations, contentious global trade issues, fluctuating exchange rates and unfamiliar cultures.

#### MANAGING CHANGE

Many organizations face an unpredictable environment in which change is almost constant. If they are to survive and prosper, they need to adapt to change quickly and effectively. Human resources are almost always at the heart of an effective response system.

Change takes the shape of organizational restructuring, mergers and acquisitions, right sizing, implementing outsourcing, providing telecommuting opportunities for employees. Focused change intervention increases productivity, improves organizational communications, improves process efficiency, improve quality, and raises employee morale.

The challenges related to change for human resource management include:

- helping employees overcome resistance to change by convincing them about the bigger picture
- provide leadership for the change processes
- ensuring stability of systems and processes during the change process
- Equipping employees to deal with the changed realities.

#### CHANGING WORKFORCE PROFILE

Over the period of time Indian labor force has changed drastically, earlier it was employees who used to do such work which is job demand and expectation based now the new HR employees has come up with more skills and higher expectations. To understand such Workforce The HR department needs to move towards a more inclusive corporate culture and develop a deep understanding which includes demographics, skill sets, personality traits and employee perspectives on the organization and culture. Now organizations are hiring more young groups than matured ones with the changing profile of employees their expectations have also changed they expect better compensation and working facilities therefore these are challenge before HR department to have realistic job preview so as to avoid unrealistic expectation and design a suitable retention strategy and develop quality of work life

**PROGRESS IN TECHNOLOGY**

Several significant changes take place in technology almost every day. In order to make use of the latest technology, the appointment of right types of persons is needed. "Information age" relates to computer-mediated information and networking. One of the implications of the increase in information and the ease, with which it can be accessed, is a radical change in the role of middle level managers in managing human resource.

**CONCLUSION**

The early part of the century saw a concern for improved efficiency through careful design of work. During the middle part of the century emphasis shifted to the employee's productivity. Recent decades have focused on increased concern for the quality of working life, total quality management and worker's participation in management. These three phases may be termed as welfare, development and empowerment.

Management of human resources is not the only task of personnel department. It is important activity of every manager. Every manager in the organization is responsible for the recruitment, selection, development and maintenance of human resources of the people at work. The HRM department simply assists them or guides them by training various policies and programme.

Thus, Human Resource Management should be linked with strategic goals and objectives in order to improve business performance and develop organizational cultures that foster innovation and flexibility. The goals and objectives should be based on 3 H's of Heart, Head and Hand i.e., we should feel by Heart, think by Head and implement by Hand.

**REFERENCES**

1. Ahuja.K.K(1998)Personnel Management, fourth revised edition, Kalyani Publishers, New Delhi
2. Ashwathapa K. (2005) 'Human Resource Management' Tata Mc Graw Hills, Fifth edition
3. Beardwell and Len Holde, (1996), Human Resource Management, Machmillian India Ltd., New Delhi
4. David A. Decenzo and Stephen P. Robbin (1986), Personnel / HumanResource Management, Third Edition, Prentice Hall of India Private Limited, New Delhi.
5. Gary Dessler(1999), Human Resource manage, Seventh Edition, Prentice-Hall of India Private Limited, New Delhi,
6. Geroge. T. Milkovich and John. W Bowdren (2000), Human ResourceManagement, Fifth Edition, All India Traveller Book Seller, New Delhi.
7. Mamoria C.B and Gankar S.B (2005) 'Personnel Management' Himalaya Publishing House, Twenty Fifth editions.
8. Pareek, U and T.V.Rao, 1981, "Designing and Managing Human Resource Systems", Oxford and IBH Publishing Co., New Delhi.
9. Rao, T.V. and Abraham, E.A., "A Survey of HRD Practices in Indian Industry, in Rao, T.V. and Pereira, D.F., Recent Experiences in HRD, New Delhi, Oxford & IBH, 1985.

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